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Francis Bacon

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Francis Bacon was a legendary English philosopher, scientist, lawyer, author, statesman, jurist and father of the scientific methods. He was one of the most influential personalities in natural philosophy and was also a key thinker to develop new scientific methodologies. He served both as Attorney General as well as Lord Chancellor of England. Leaving apart the disgraceful ending of his political career, throughout his life, Bacon continued to be quite an influential politician because of his work, specifically as philosophical advocate and practitioner of the scientific method and pioneer in the scientific revolution. He has been known as the “Father of Empiricism”. Francis Bacon’s work led and popularized inductive methodologies for scientific inquiry. These methodologies are also often denoted as Baconian method. The rhetorical and theoretical composition for science faced a new turn as a result of the Bacon’s appeal for a planned procedure of investigating all things natural, most of which still encircle ideas of proper methodology even today.

Francis Bacon was born on January 22, 1561 at York House near the Strand in London. He was born to Sir Nicholas Bacon and his second wife Anne (Cooke) Bacon. His mother was the daughter of great humanist Anthony Cooke. It is believed that junior Bacon received education at home only, in the starting years of his life due to bad health. He received tuitions from John Walsall who was a graduate of Oxford with a strong bending towards Puritanism. On April 5, 1573, Bacon gained admission in Trinity College, Cambridge at the age of 12. He lived there for three years with his older brother, Anthony under the personal guardianship of Dr John Whitgift, future Archbishop of Canterbury.

Young Bacon was taught mainly in Latin followed by the medieval curriculum. He went on to get education from the University of Poitiers. At the Cambridge, he met Queen Elizabeth, who was influenced by his exceptionally smart intellect called him "the young Lord Keeper". Bacon’s studies guarded him to the belief that the methods and results of science as practiced then were completely wrong. His high opinion for

Aristotle conflicted with his strong disliking of Aristotelian philosophy. He took the Aristotelian philosophy as unprofitable, argumentative and incorrect in its objective. He and his brother, Anthony entered de societate magistrorum at Gray's Inn on 27th June, 1576. After some months, Bacon went abroad with Sir Amias Paulet, the English ambassador at Paris. His brother continued studying at home only.

In France, the state of government and society under Henry III gave Bacon valuable political instructions. Following three years, Bacon visited Blois, Poitiers, Tours, Italy and Spain. He studied languages, statecraft, and civil law while accomplishing routine diplomatic tasks. He also delivered diplomatic letters to England for Walsingham, Burghley, and Leicester and for the queen as well. In 1579, Bacon's father died suddenly inducing him to return to England. Sir Nicholas arranged a nice amount of money to buy an estate for his youngest son but died before the same. Francis got only a fifth of that sum of money thereafter. As Bacon had taken loan, he went bankrupt. He, then, in 1579, accommodated his residence in law at Gray's Inn.

The three chief goals of Bacon were to uncover truth, to serve his country, and to serve his church. Bacon looked further to these by attempting to get a prestigious post. He also applied for a post in the court through his uncle; Lord Burghley in 1580 which he believed would allow him to pursue a life of learning but his application was rejected. Following two years, he worked at Gray's Inn, only to be admitted as an outer barrister in 1582. He took his seat in the parliament for Melcombe in Dorset in 1584 and afterwards for Taunton in 1586. This was the time when Bacon started writing on the condition of church parties and also on the topic of philosophical reform in the lost tract, *Temporis Partus Maximus*.

Even after working for long, Bacon did not succeed in acquiring the position he desired for that would lead him great success. He exhibited signs of sympathy to Puritanism by attending the sermons of the Puritan chaplain of Gray's Inn. He also accompanied his mother to the chapel to hear Walter Travers. As a result, his earliest surviving track got published which criticized the English church's suppression of the Puritan clergy. In the year 1586, Bacon openly disapproved the

execution of queen of Scots, Mary. Due to his increasing progress at the bar, Bacon contacted his uncle for help. The same year, he became Benchman and was chosen as a reader in 1587. He delivered his first lecture in Lent the very next year. Bacon accepted the valuable appointment of reversion to the Clerkship of the Star Chamber in 1589, though he took to office formally only in 1608.

Francis Bacon acquainted with Robert Devereux who was 2nd Earl of Essex and favorite of Queen Elizabeth and by 1591, became the earl's confidential adviser. The following year, Bacon was authorized to write a tract in response to the Jesuit Robert Parson's anti-government polemic, which he gave the headline as "Certain Observations Made Upon A Libel", recognizing England with the ideals of democratic Athens opposite of the belligerence of Spain. In February 1593, Queen Elizabeth called parliament to investigate a Roman Catholic plot against her. His opposition to a bill that would impose triple allowance in half of the normal time was repelled by a lot of people. He was blamed as a popularity seeker by the opponents and was expelled by the royal court for some time.

Year 1594 and 1595 did not bring much of good news for Bacon as he meted with failure. First, in 1594, he failed to bag the Attorney-Generalship seat that had gone vacant. Next in 1595, he failed to save the lesser office of Solicitor-General. Even Lord Essex also could not use much of his power and influence on both the occasions. In 1596, Bacon was appointed as the Queen's Counsel. During this phase, Bacon's financial position remained dubious. The effort of his friends to find him a public office also seemed to go in vain as they couldn't find any. Also, his strategy for recovering his lost position by marrying a rich and young widow Lady Elizabeth Hatton failed, when she broke off with him and married a wealthier man. As such, in 1598, Bacon was arrested for debt.

However, slowly but steadily, his image in the eyes of Queen improved, as he grabbed himself a place in the standing of the learned counsels, though without any salary, commission or warranty. He further raised his image in the Queen's eye by making a clever move by detaching ties with Robert Devereux, 2nd Earl of Essex as he was executed in 1601 for treason. Also,

Bacon with the team was asked to investigate all the charges against Essex. Bacon was a member of the legal team at Essex's treason trial led by Attorney General, Sir Edward Coke. Post execution, Bacon was appointed to write the official government account of the trial by the Queen. These accounts were published as 'A Declaration of the Practices and Treasons'. However, the first draft presented by the Bacon was edited by the Queen and her ministers up to a great extent. On April 9 1629, Francis Bacon died at Arundel mansion at Highgate outside London due to severe pneumonia. John Aubrey gave a brief description on the account of his death. It is said they were experimenting some scientific method by using snow for preserving meat. Bacon went to poor lady's home at the Highgate hill. He brought fowl from there after asking woman to clean the same. Then he stuffed fowl with lots of snow but developed dangerous disease, pneumonia. During the process, he felt so ill that he was unable to get well again. Rather he went to the Earle of Arundel's house at Highgate where he was put into a damp cloth. Due to the cold, he died of suffocation. At Bacon's funeral, 30 great minds praised him a lot, which were later published as a collection in Latin.

**THE ESSAYS OR
COUNSELS,
CIVIL AND MORAL,

OF FRANCIS Ld.
VERULAM VISCOUNT ST.
ALBANS**

Francis Bacon

TO
THE RIGHT HONORABLE
MY VERY GOOD LORD
THE DUKE OF BUCKINGHAM
HIS GRACE, LORD
HIGH ADMIRAL OF ENGLAND
EXCELLENT LORD:

SALOMON saies; A good Name is as a precious oyntment; And I assure my selfe, such wil your Graces Name bee, with Posteritie. For your Fortune, and Merit both, have been Eminent. And you have planted Things, that are like to last. I doe now publish my Essayes; which, of all my other workes, have beene most Currant: For that, as it seemes, they come home, to Mens Businesse, and Bosomes. I have enlarged them, both in Number, and Weight; So that they are indeed a New Worke. I thought it therefore agreeable, to my Affection, and Obligation to your Grace, to prefix your Name before them, both in English, and in Latine. For I doe conceive, that the Latine Volume of them, (being in the Universall Language) may last, as long as Bookes last. My Instauration, I dedicated to the King: My Historie of Henry the Seventh, (which I have now also translated into Latine) and

my Portions of Naturall History, to
the Prince: And these I dedicate to
your Grace; Being of the best Fruits,
that by the good Encrease, which
God gives to my Pen and Labours, I
could yeeld. God leade your Grace by
the Hand. Your Graces most Obligated
and faithfull Servant,

FR. ST. ALBAN

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Of Truth

WHAT is truth? said jesting Pilate, and would not stay for an answer. Certainly there be, that delight in giddiness, and count it a bondage to fix a belief; affecting free-will in thinking, as well as in acting. And though the sects of philosophers of that kind be gone, yet there remain certain discoursing wits, which are of the same veins, though there be not so much blood in them, as was in those of the ancients. But it is not only the difficulty and labor, which men take in finding out of truth, nor again, that when it is found, it imposeth upon men's thoughts, that doth bring lies in favor; but a natural, though corrupt love, of the lie itself. One of the later school of the Grecians, examineth the matter, and is at a stand, to think what should be in it, that men should love lies; where neither they make for pleasure, as with poets, nor for advantage, as with the merchant; but for the lie's sake. But I cannot tell; this same truth, is a naked, and open day-light, that doth not show the masks, and mummeries, and triumphs, of the world, half so stately and daintily as candle-lights. Truth may perhaps come to the price of a pearl, that showeth best by day; but it will not rise to the price of a

diamond, or carbuncle, that showeth best in varied lights. A mixture of a lie doth ever add pleasure. Doth any man doubt, that if there were taken out of men's minds, vain opinions, flattering hopes, false valuations, imaginations as one would, and the like, but it would leave the minds, of a number of men, poor shrunken things, full of melancholy and indisposition, and unpleasing to themselves?

One of the fathers, in great severity, called poesy vinum daemonum, because it fireth the imagination; and yet, it is but with the shadow of a lie. But it is not the lie that passeth through the mind, but the lie that sinketh in, and settleth in it, that doth the hurt; such as we spake of before. But howsoever these things are thus in men's depraved judgments, and affections, yet truth, which only doth judge itself, teacheth that the inquiry of truth, which is the love-making, or wooing of it, the knowledge of truth, which is the presence of it, and the belief of truth, which is the enjoying of it, is the sovereign good of human nature. The first creature of God, in the works of the days, was the light of the sense; the last, was the light of reason; and his sabbath work ever since, is the illumination of his Spirit. First he breathed light, upon the face

of the matter or chaos; then he breathed light, into the face of man; and still he breatheth and inspireth light, into the face of his chosen. The poet, that beautified the sect, that was otherwise inferior to the rest, saith yet excellently well: It is a pleasure, to stand upon the shore, and to see ships tossed upon the sea; a pleasure, to stand in the window of a castle, and to see a battle, and the adventures thereof below: but no pleasure is comparable to the standing upon the vantage ground of truth (a hill not to be commanded, and where the air is always clear and serene), and to see the errors, and wanderings, and mists, and tempests, in the vale below; so always that this prospect be with pity, and not with swelling, or pride. Certainly, it is heaven upon earth, to have a man's mind move in charity, rest in providence, and turn upon the poles of truth.

To pass from theological, and philosophical truth, to the truth of civil business; it will be acknowledged, even by those that practise it not, that clear, and round dealing, is the honor of man's nature; and that mixture of falsehoods, is like alloy in coin of gold and silver, which may make the metal work the better, but it embaseth it. For these winding, and crooked courses, are the

goings of the serpent; which goeth basely upon the belly, and not upon the feet. There is no vice, that doth so cover a man with shame, as to be found false and perfidious. And therefore Montaigne saith prettily, when he inquired the reason, why the word of the lie should be such a disgrace, and such an odious charge? Saith he, If it be well weighed, to say that a man lieth, is as much to say, as that he is brave towards God, and a coward towards men. For a lie faces God, and shrinks from man. Surely the wickedness of falsehood, and breach of faith, cannot possibly be so highly expressed, as in that it shall be the last peal, to call the judgments of God upon the generations of men; it being foretold, that when Christ cometh, he shall not find faith upon the earth.

Of Death

MEN fear death, as children fear to go in the dark; and as that natural fear in children, is increased with tales, so is the other. Certainly, the contemplation of death, as the wages of sin, and passage to another world, is holy and religious; but the fear of it, as a tribute due unto nature, is weak. Yet in religious meditations, there is sometimes mixture of vanity, and of superstition. You shall read, in some of the friars' books of mortification, that a man should think with himself, what the pain is, if he have but his finger's end pressed, or tortured, and thereby imagine, what the pains of death are, when the whole body is corrupted, and dissolved; when many times death passeth, with less pain than the torture of a limb; for the most vital parts, are not the quickest of sense. And by him that spake only as a philosopher, and natural man, it was well said, *Pompa mortis magis terret, quam mors ipsa*. Groans, and convulsions, and a discolored face, and friends weeping, and blacks, and obsequies, and the like, show death terrible. It is worthy the observing, that there is no passion in the mind of man, so weak, but it mates, and masters, the fear of death; and

therefore, death is no such terrible enemy, when a man hath so many attendants about him, that can win the combat of him. Revenge triumphs over death; love slights it; honor aspireth to it; grief flieth to it; fear preoccupateth it; nay, we read, after Otho the emperor had slain himself, pity (which is the tenderest of affections) provoked many to die, out of mere compassion to their sovereign, and as the truest sort of followers. Nay, Seneca adds niceness and satiety: *Cogita quamdiu eadem feceris; mori velle, non tantum fortis aut miser, sed etiam fastidiosus potest*. A man would die, though he were neither valiant, nor miserable, only upon a weariness to do the same thing so oft, over and over. It is no less worthy, to observe, how little alteration in good spirits, the approaches of death make; for they appear to be the same men, till the last instant. Augustus Caesar died in a compliment; *Livia, conjugii nostri memor, vive et vale*. Tiberius in dissimulation; as Tacitus saith of him, *Jam Tiberium vires et corpus, non dissimulatio, deserebant*. Vespasian in a jest, sitting upon the stool; *Ut puto deus fio*. Galba with a sentence; *Feri, si ex re sit populi Romani*; holding forth his neck. Septimius Severus in despatch; *Adeste si quid mihi restat agendum*.

And the like. Certainly the Stoics bestowed too much cost upon death, and by their great preparations, made it appear more fearful. Better saith he, *qui finem vitae extremum inter munera ponat naturae*. It is as natural to die, as to be born; and to a little infant, perhaps, the one is as painful, as the other. He that dies in an earnest pursuit, is like one that is wounded in hot blood; who, for the time, scarce feels the hurt; and therefore a mind fixed, and bent upon somewhat that is good, doth avert the dolours of death. But, above all, believe it, the sweetest canticle is', *Nunc dimittis*; when a man hath obtained worthy ends, and expectations. Death hath this also; that it openeth the gate to good fame, and extinguisheth envy.—*Extinctus amabitur idem*.

Of Unity In Religion

RELIGION being the chief band of human society, it is a happy thing, when itself is well contained within the true band of unity. The quarrels, and divisions about religion, were evils unknown to the heathen. The reason was, because the religion of the heathen, consisted rather in rites and ceremonies, than in any constant belief. For you may imagine, what kind of faith theirs was, when the chief doctors, and fathers of their church, were the poets. But the true God hath this attribute, that he is a jealous God; and therefore, his worship and religion, will endure no mixture, nor partner. We shall therefore speak a few words, concerning the unity of the church; what are the fruits thereof; what the bounds; and what the means.

The fruits of unity (next unto the well pleasing of God, which is all in all) are two: the one, towards those that are without the church, the other, towards those that are within. For the former; it is certain, that heresies, and schisms, are of all others the greatest scandals; yea, more than corruption of manners. For as in the natural body, a wound, or solution of continuity, is worse than a corrupt

humor; so in the spiritual. So that nothing, doth so much keep men out of the church, and drive men out of the church, as breach of unity. And therefore, whensoever it cometh to that pass, that one saith, Ecce in deserto, another saith, Ecce in penetralibus; that is, when some men seek Christ, in the conventicles of heretics, and others, in an outward face of a church, that voice had need continually to sound in men's ears, Nolite exire,—Go not out. The doctor of the Gentiles (the propriety of whose vocation, drew him to have a special care of those without) saith, if an heathen come in, and hear you speak with several tongues, will he not say that you are mad? And certainly it is little better, when atheists, and profane persons, do hear of so many discordant, and contrary opinions in religion; it doth avert them from the church, and maketh them, to sit down in the chair of the scorers. It is but a light thing, to be vouched in so serious a matter, but yet it expresseth well the deformity. There is a master of scoffing, that in his catalogue of books of a feigned library, sets down this title of a book, The Morris-Dance of Heretics. For indeed, every sect of them, hath a diverse posture, or cringe by themselves, which cannot but move derision in worldlings, and depraved

politics, who are apt to condemn holy things.

As for the fruit towards those that are within; it is peace; which containeth infinite blessings. It establisheth faith; it kindleth charity; the outward peace of the church, distilleth into peace of conscience; and it turneth the labors of writing, and reading of controversies, into treaties of mortification and devotion.

Concerning the bounds of unity; the true placing of them, importeth exceedingly. There appear to be two extremes. For to certain zealants, all speech of pacification is odious. Is it peace, Jehu,? What hast thou to do with peace? turn thee behind me. Peace is not the matter, but following, and party. Contrariwise, certain Laodiceans, and lukewarm persons, think they may accommodate points of religion, by middle way, and taking part of both, and witty reconcilements; as if they would make an arbitrament between God and man. Both these extremes are to be avoided; which will be done, if the league of Christians, penned by our Savior himself, were in two cross clauses thereof, soundly and plainly expounded: He that is not with us, is against us; and again, He that is not against us, is with us; that is, if the points fundamental and of

substance in religion, were truly discerned and distinguished, from points not merely of faith, but of opinion, order, or good intention. This is a thing may seem to many a matter trivial, and done already. But if it were done less partially, it would be embraced more generally.

Of this I may give only this advice, according to my small model. Men ought to take heed, of rending God's church, by two kinds of controversies. The one is, when the matter of the point controverted, is too small and light, not worth the heat and strife about it, kindled only by contradiction. For, as it is noted, by one of the fathers, Christ's coat indeed had no seam, but the church's vesture was of divers colors; whereupon he saith, *In veste varietas sit, scissura non sit*; they be two things, unity and uniformity. The other is, when the matter of the point controverted, is great, but it is driven to an over-great subtilty, and obscurity; so that it becometh a thing rather ingenious, than substantial. A man that is of judgment and understanding, shall sometimes hear ignorant men differ, and know well within himself, that those which so differ, mean one thing, and yet they themselves would never agree. And if it come so to pass, in that distance of

judgment, which is between man and man, shall we not think that God above, that knows the heart, doth not discern that frail men, in some of their contradictions, intend the same thing; and accepteth of both? The nature of such controversies is excellently expressed, by St. Paul, in the warning and precept, that he giveth concerning the same, *Devita profanas vocum novitates, et oppositiones falsi nominis scientiae*. Men create oppositions, which are not; and put them into new terms, so fixed, as whereas the meaning ought to govern the term, the term in effect governeth the meaning. There be also two false peaces, or unities: the one, when the peace is grounded, but upon an implicit ignorance; for all colors will agree in the dark: the other, when it is pieced up, upon a direct admission of contraries, in fundamental points. For truth and falsehood, in such things, are like the iron and clay, in the toes of Nebuchadnezzar's image; they may cleave, but they will not incorporate.

Concerning the means of procuring unity; men must beware, that in the procuring, or reuniting, of religious unity, they do not dissolve and deface the laws of charity, and of human society. There be two swords amongst Christians, the spiritual and

temporal; and both have their due office and place, in the maintenance of religion. But we may not take up the third sword, which is Mahomet's sword, or like unto it; that is, to propagate religion by wars, or by sanguinary persecutions to force consciences; except it be in cases of overt scandal, blasphemy, or intermixture of practice against the state; much less to nourish seditions; to authorize conspiracies and rebellions; to put the sword into the people's hands; and the like; tending to the subversion of all government, which is the ordinance of God. For this is but to dash the first table against the second; and so to consider men as Christians, as we forget that they are men. Lucretius the poet, when he beheld the act of Agamemnon, that could endure the sacrificing of his own daughter, exclaimed: *Tantum Religio potuit suadere malorum.*

What would he have said, if he had known of the massacre in France, or the powder treason of England? He would have been seven times more Epicure, and atheist, than he was. For as the temporal sword is to be drawn with great circumspection in cases of religion; so it is a thing monstrous to put it into the hands of the common people. Let that be left unto the

Anabaptists, and other furies. It was great blasphemy, when the devil said, I will ascend, and be like the highest; but it is greater blasphemy, to personate God, and bring him in saying, I will descend, and be like the prince of darkness; and what is it better, to make the cause of religion to descend, to the cruel and execrable actions of murdering princes, butchery of people, and subversion of states and governments? Surely this is to bring down the Holy Ghost, instead of the likeness of a dove, in the shape of a vulture or raven; and set, out of the bark of a Christian church, a flag of a bark of pirates, and assassins. Therefore it is most necessary, that the church, by doctrine and decree, princes by their sword, and all learnings, both Christian and moral, as by their Mercury rod, do damn and send to hell for ever, those facts and opinions tending to the support of the same; as hath been already in good part done. Surely in counsels concerning religion, that counsel of the apostle would be prefixed, *Ira hominis non implet justitiam Dei*. And it was a notable observation of a wise father, and no less ingenuously confessed; that those which held and persuaded pressure of consciences, were commonly interested therein., themselves, for their own ends.

Of Revenge

REVENGE is a kind of wild justice; which the more man's nature runs to, the more ought law to weed it out. For as for the first wrong, it doth but offend the law; but the revenge of that wrong, putteth the law out of office. Certainly, in taking revenge, a man is but even with his enemy; but in passing it over, he is superior; for it is a prince's part to pardon. And Solomon, I am sure, saith, It is the glory of a man, to pass by an offence. That which is past is gone, and irrevocable; and wise men have enough to do, with things present and to come; therefore they do but trifle with themselves, that labor in past matters. There is no man doth a wrong, for the wrong's sake; but thereby to purchase himself profit, or pleasure, or honor, or the like. Therefore why should I be angry with a man, for loving himself better than me? And if any man should do wrong, merely out of ill-nature, why, yet it is but like the thorn or briar, which prick and scratch, because they can do no other. The most tolerable sort of revenge, is for those wrongs which there is no law to remedy; but then let a man take heed, the revenge be such as there is no law to punish; else a man's enemy is still before

hand, and it is two for one. Some, when they take revenge, are desirous, the party should know, whence it cometh. This is the more generous. For the delight seemeth to be, not so much in doing the hurt, as in making the party repent. But base and crafty cowards, are like the arrow that flieth in the dark. Cosmus, duke of Florence, had a desperate saying against perfidious or neglecting friends, as if those wrongs were unpardonable; You shall read (saith he) that we are commanded to forgive our enemies; but you never read, that we are commanded to forgive our friends. But yet the spirit of Job was in a better tune: Shall we (saith he) take good at God's hands, and not be content to take evil also? And so of friends in a proportion. This is certain, that a man that studieth revenge, keeps his own wounds green, which otherwise would heal, and do well. Public revenges are for the most part fortunate; as that for the death of Caesar; for the death of Pertinax; for the death of Henry the Third of France; and many more. But in private revenges, it is not so. Nay rather, vindictive persons live the life of witches; who, as they are mischievous, so end they infortunate.

Of Adversity

IT WAS an high speech of Seneca (after the manner of the Stoics), that the good things, which belong to prosperity, are to be wished; but the good things, that belong to adversity, are to be admired. *Bona rerum secundarum optabilia; adversarum mirabilia.* Certainly if miracles be the command over nature, they appear most in adversity. It is yet a higher speech of his, than the other (much too high for a heathen), It is true greatness, to have in one the frailty of a man, and the security of a God. *Vere magnum habere fragilitatem hominis, securitatem Dei.* This would have done better in poesy, where transcendences are more allowed. And the poets indeed have been busy with it; for it is in effect the thing, which figured in that strange fiction of the ancient poets, which seemeth not to be without mystery; nay, and to have some approach to the state of a Christian; that Hercules, when he went to unbind Prometheus (by whom human nature is represented), sailed the length of the great ocean, in an earthen pot or pitcher; lively describing Christian resolution, that saileth in the frail bark of the flesh, through the waves of the world. But to speak in a mean. The virtue of

prosperity, is temperance; the virtue of adversity, is fortitude; which in morals is the more heroical virtue. Prosperity is the blessing of the Old Testament; adversity is the blessing of the New; which carrieth the greater benediction, and the clearer revelation of God's favor. Yet even in the Old Testament, if you listen to David's harp, you shall hear as many hearse-like airs as carols; and the pencil of the Holy Ghost hath labored more in describing the afflictions of Job, than the felicities of Solomon. Prosperity is not without many fears and distastes; and adversity is not without comforts and hopes. We see in needle-works and embroideries, it is more pleasing to have a lively work, upon a sad and solemn ground, than to have a dark and melancholy work, upon a lightsome ground: judge therefore of the pleasure of the heart, by the pleasure of the eye. Certainly virtue is like precious odors, most fragrant when they are incensed, or crushed: for prosperity doth best discover vice, but adversity doth best discover virtue.

Of Simulation And Dissimulation

DISSIMULATION is but a faint kind of policy, or wisdom; for it asketh a strong wit, and a strong heart, to know when to tell truth, and to do it. Therefore it is the weaker sort of politics, that are the great dissemblers.

Tacitus saith, Livia sorted well with the arts of her husband, and dissimulation of her son; attributing arts or policy to Augustus, and dissimulation to Tiberius. And again, when Mucianus encourageth Vespasian, to take arms against Vitellius, he saith, We rise not against the piercing judgment of Augustus, nor the extreme caution or closeness of Tiberius. These properties, of arts or policy, and dissimulation or closeness, are indeed habits and faculties several, and to be distinguished. For if a man have that penetration of judgment, as he can discern what things are to be laid open, and what to be secreted, and what to be showed at half lights, and to whom and when (which indeed are arts of state, and arts of life, as Tacitus well calleth them), to him, a habit of dissimulation is a hinderance and a poorness. But if a man cannot

obtain to that judgment, then it is left to him generally, to be close, and a dissembler. For where a man cannot choose, or vary in particulars, there it is good to take the safest, and wariest way, in general; like the going softly, by one that cannot well see. Certainly the ablest men that ever were, have had all an openness, and frankness, of dealing; and a name of certainty and veracity; but then they were like horses well managed; for they could tell passing well, when to stop or turn; and at such times, when they thought the case indeed required dissimulation, if then they used it, it came to pass that the former opinion, spread abroad, of their good faith and clearness of dealing, made them almost invisible.

There be three degrees of this hiding and veiling of a man's self. The first, closeness, reservation, and secrecy; when a man leaveth himself without observation, or without hold to be taken, what he is. The second, dissimulation, in the negative; when a man lets fall signs and arguments, that he is not, that he is. And the third, simulation, in the affirmative; when a man industriously and expressly feigns and pretends to be, that he is not.

For the first of these, secrecy; it is indeed the virtue of a confessor. And

assuredly, the secret man heareth many confessions. For who will open himself, to a blab or a babbler? But if a man be thought secret, it inviteth discovery; as the more close air sucketh in the more open; and as in confession, the revealing is not for worldly use, but for the ease of a man's heart, so secret men come to the knowledge of many things in that kind; while men rather discharge their minds, than impart their minds. In few words, mysteries are due to secrecy. Besides (to say truth) nakedness is uncomely, as well in mind as body; and it addeth no small reverence, to men's manners and actions, if they be not altogether open. As for talkers and futile persons, they are commonly vain and credulous withal. For he that talketh what he knoweth, will also talk what he knoweth not. Therefore set it down, that an habit of secrecy, is both politic and moral. And in this part, it is good that a man's face give his tongue leave to speak. For the discovery of a man's self, by the tracts of his countenance, is a great weakness and betraying; by how much it is many times more marked, and believed, than a man's words.

For the second, which is dissimulation; it followeth many times upon secrecy, by a necessity; so

that he that will be secret, must be a dissembler in some degree. For men are too cunning, to suffer a man to keep an indifferent carriage between both, and to be secret, without swaying the balance on either side. They will so beset a man with questions, and draw him on, and pick it out of him, that, without an absurd silence, he must show an inclination one way; or if he do not, they will gather as much by his silence, as by his speech. As for equivocations, or oraculous speeches, they cannot hold out long. So that no man can be secret, except he give himself a little scope of dissimulation; which is, as it were, but the skirts or train of secrecy.

But for the third degree, which is simulation, and false profession; that I hold more culpable, and less politic; except it be in great and rare matters. And therefore a general custom of simulation (which is this last degree) is a vice, using either of a natural falseness or fearfulness, or of a mind that hath some main faults, which because a man must needs disguise, it maketh him practise simulation in other things, lest his hand should be out of use.

The great advantages of simulation and dissimulation are three. First, to lay asleep opposition, and to surprise.

For where a man's intentions are published, it is an alarum, to call up all that are against them. The second is, to reserve to a man's self a fair retreat. For if a man engage himself by a manifest declaration, he must go through or take a fall. The third is, the better to discover the mind of another. For to him that opens himself, men will hardly show themselves adverse; but will fair let him go on, and turn their freedom of speech, to freedom of thought. And therefore it is a good shrewd proverb of the Spaniard, Tell a lie and find a troth. As if there were no way of discovery, but by simulation. There be also three disadvantages, to set it even. The first, that simulation and dissimulation commonly carry with them a show of fearfulness, which in any business, doth spoil the feathers, of round flying up to the mark. The second, that it puzzleth and perplexeth the conceits of many, that perhaps would otherwise co-operate with him; and makes a man walk almost alone, to his own ends. The third and greatest is, that it depriveth a man of one of the most principal instruments for action; which is trust and belief. The best composition and temperature, is to have openness in fame and opinion; secrecy in habit; dissimulation in seasonable use; and a power to feign, if there be no

remedy.

Of Parents And Children

THE joys of parents are secret; and so are their griefs and fears. They cannot utter the one; nor they will not utter the other. Children sweeten labors; but they make misfortunes more bitter. They increase the cares of life; but they mitigate the remembrance of death. The perpetuity by generation is common to beasts; but memory, merit, and noble works, are proper to men. And surely a man shall see the noblest works and foundations have proceeded from childless men; which have sought to express the images of their minds, where those of their bodies have failed. So the care of posterity is most in them, that have no posterity. They that are the first raisers of their houses, are most indulgent towards their children; beholding them as the continuance, not only of their kind, but of their work; and so both children and creatures.

The difference in affection, of parents towards their several children, is many times unequal; and sometimes unworthy; especially in the mothers; as Solomon saith, A wise son rejoiceth the father, but an ungracious son shames the mother. A man shall

see, where there is a house full of children, one or two of the eldest respected, and the youngest made wantons; but in the midst, some that are as it were forgotten, who many times, nevertheless, prove the best. The illiberality of parents, in allowance towards their children, is an harmful error; makes them base; acquaints them with shifts; makes them sort with mean company; and makes them surfeit more when they come to plenty. And therefore the proof is best, when men keep their authority towards the children, but not their purse. Men have a foolish manner (both parents and schoolmasters and servants) in creating and breeding an emulation between brothers, during childhood, which many times sorteth to discord when they are men, and disturbeth families. The Italians make little difference between children, and nephews or near kinsfolks; but so they be of the lump, they care not though they pass not through their own body. And, to say truth, in nature it is much a like matter; insomuch that we see a nephew sometimes resembleth an uncle, or a kinsman, more than his own parent; as the blood happens. Let parents choose betimes, the vocations and courses they mean their children should take; for then they are most

flexible; and let them not too much apply themselves to the disposition of their children, as thinking they will take best to that, which they have most mind to. It is true, that if the affection or aptness of the children be extraordinary, then it is good not to cross it; but generally the precept is good, optimum elige, suave et facile illud faciet consuetudo. Younger brothers are commonly fortunate, but seldom or never where the elder are disinherited.

Of Marriage And Single Life

HE THAT hath wife and children hath given hostages to fortune; for they are impediments to great enterprises, either of virtue or mischief. Certainly the best works, and of greatest merit for the public, have proceeded from the unmarried or childless men; which both in affection and means, have married and endowed the public. Yet it were great reason that those that have children, should have greatest care of future times; unto which they know they must transmit their dearest pledges. Some there are, who though they lead a single life, yet their thoughts do end with themselves, and account future times impertinences. Nay, there are some other, that account wife and children, but as bills of charges. Nay more, there are some foolish rich covetous men, that take a pride, in having no children, because they may be thought so much the richer. For perhaps they have heard some talk, Such an one is a great rich man, and another except to it, Yea, but he hath a great charge of children; as if it were an abatement to his riches. But the most ordinary cause of a single life, is liberty, especially in

certain self-pleasing and humorous minds, which are so sensible of every restraint, as they will go near to think their girdles and garters, to be bonds and shackles. Unmarried men are best friends, best masters, best servants; but not always best subjects; for they are light to run away; and almost all fugitives, are of that condition. A single life doth well with churchmen; for charity will hardly water the ground, where it must first fill a pool. It is indifferent for judges and magistrates; for if they be facile and corrupt, you shall have a servant, five times worse than a wife. For soldiers, I find the generals commonly in their hortatives, put men in mind of their wives and children; and I think the despising of marriage amongst the Turks, maketh the vulgar soldier more base. Certainly wife and children are a kind of discipline of humanity; and single men, though they may be many times more charitable, because their means are less exhaust, yet, on the other side, they are more cruel and hardhearted (good to make severe inquisitors), because their tenderness is not so oft called upon. Grave natures, led by custom, and therefore constant, are commonly loving husbands, as was said of Ulysses, *vetulam suam praetulit immortalitati*. Chaste women are often proud and

froward, as presuming upon the merit of their chastity. It is one of the best bonds, both of chastity and obedience, in the wife, if she think her husband wise; which she will never do, if she find him jealous. Wives are young men's mistresses; companions for middle age; and old men's nurses. So as a man may have a quarrel to marry, when he will. But yet he was reputed one of the wise men, that made answer to the question, when a man should marry, —A young man not yet, an elder man not at all. It is often seen that bad husbands, have very good wives; whether it be, that it raiseth the price of their husband's kindness, when it comes; or that the wives take a pride in their patience. But this never fails, if the bad husbands were of their own choosing, against their friends' consent; for then they will be sure to make good their own folly.

Of Envy

THERE be none of the affections, which have been noted to fascinate or bewitch, but love and envy. They both have vehement wishes; they frame themselves readily into imaginations and suggestions; and they come easily into the eye, especially upon the present of the objects; which are the points that conduce to fascination, if any such thing there be. We see likewise, the Scripture calleth envy an evil eye; and the astrologers, call the evil influences of the stars, evil aspects; so that still there seemeth to be acknowledged, in the act of envy, an ejaculation or irradiation of the eye. Nay, some have been so curious, as to note, that the times when the stroke or percussion of an envious eye doth most hurt, are when the party envied is beheld in glory or triumph; for that sets an edge upon envy: and besides, at such times the spirits of the person envied, do come forth most into the outward parts, and so meet the blow.

But leaving these curiosities (though not unworthy to be thought on, in fit place), we will handle, what persons are apt to envy others; what persons are most subject to be envied

themselves; and what is the difference between public and private envy.

A man that hath no virtue in himself, ever envieth virtue in others. For men's minds, will either feed upon their own good, or upon others' evil; and who wanteth the one, will prey upon the other; and whoso is out of hope, to attain to another's virtue, will seek to come at even hand, by depressing another's fortune.

A man that is busy, and inquisitive, is commonly envious. For to know much of other men's matters, cannot be because all that ado may concern his own estate; therefore it must needs be, that he taketh a kind of play-pleasure, in looking upon the fortunes of others. Neither can he, that mindeth but his own business, find much matter for envy. For envy is a gadding passion, and walketh the streets, and doth not keep home: *Non est curiosus, quin idem sit malevolus.*

Men of noble birth, are noted to be envious towards new men, when they rise. For the distance is altered, and it is like a deceit of the eye, that when others come on, they think themselves, go back.

Deformed persons, and eunuchs, and old men, and bastards, are envious. For he that cannot possibly mend his

own case, will do what he can, to impair another's; except these defects light upon a very brave, and heroical nature, which thinketh to make his natural wants part of his honor; in that it should be said, that an eunuch, or a lame man, did such great matters; affecting the honor of a miracle; as it was in Narses the eunuch, and Agesilaus and Tamberlanes, that were lame men.

The same is the case of men, that rise after calamities and misfortunes. For they are as men fallen out with the times; and think other men's harms, a redemption of their own sufferings.

They that desire to excel in too many matters, out of levity and vain glory, are ever envious. For they cannot want work; it being impossible, but many, in some one of those things, should surpass them. Which was the character of Adrian the Emperor; that mortally envied poets, and painters, and artificers, in works wherein he had a vein to excel.

Lastly, near kinsfolks, and fellows in office, and those that have been bred together, are more apt to envy their equals, when they are raised. For it doth upbraid unto them their own fortunes, and pointeth at them, and cometh oftener into their remembrance, and incurreth likewise

more into the note of others; and envy ever redoubleth from speech and fame. Cain's envy was the more vile and malignant, towards his brother Abel, because when his sacrifice was better accepted, there was no body to look on. Thus much for those, that are apt to envy.

Concerning those that are more or less subject to envy: First, persons of eminent virtue, when they are advanced, are less envied. For their fortune seemeth, but due unto them; and no man envieth the payment of a debt, but rewards and liberality rather. Again, envy is ever joined with the comparing of a man's self; and where there is no comparison, no envy; and therefore kings are not envied, but by kings. Nevertheless it is to be noted, that unworthy persons are most envied, at their first coming in, and afterwards overcome it better; whereas contrariwise, persons of worth and merit are most envied, when their fortune continueth long. For by that time, though their virtue be the same, yet it hath not the same lustre; for fresh men grow up that darken it.

Persons of noble blood, are less envied in their rising. For it seemeth but right done to their birth. Besides, there seemeth not much added to their fortune; and envy is as the

sunbeams, that beat hotter upon a bank, or steep rising ground, than upon a flat. And for the same reason, those that are advanced by degrees, are less envied than those that are advanced suddenly and per saltum.

Those that have joined with their honor great travels, cares, or perils, are less subject to envy. For men think that they earn their honors hardly, and pity them sometimes; and pity ever healeth envy. Wherefore you shall observe, that the more deep and sober sort of politic persons, in their greataess, are ever bemoaning themselves, what a life they lead; chanting a quanta patimur! Not that they feel it so, but only to abate the edge of envy. But this is to be understood, of business that is laid upon men, and not such, as they call unto themselves. For nothing increaseth envy more, than an unnecessary and ambitious engrossing of business. And nothing doth extinguish envy more, than for a great person to preserve all other inferior officers, in their full lights and pre-eminences of their places. For by that means, there be so many screens between him and envy.

Above all, those are most subject to envy, which carry the greatness of their fortunes, in an insolent and proud manner; being never well, but

while they are showing how great they are, either by outward pomp, or by triumphing over all opposition or competition; whereas wise men will rather do sacrifice to envy, in suffering themselves sometimes of purpose to be crossed, and overborne in things that do not much concern them. Notwithstanding, so much is true, that the carriage of greatness, in a plain and open manner (so it be without arrogancy and vain glory) doth draw less envy, than if it be in a more crafty and cunning fashion. For in that course, a man doth but disavow fortune; and seemeth to be conscious of his own want in worth; and doth but teach others, to envy him.

Lastly, to conclude this part; as we said in the beginning, that the act of envy had somewhat in it of witchcraft, so there is no other cure of envy, but the cure of witchcraft; and that is, to remove the lot (as they call it) and to lay it upon another. For which purpose, the wiser sort of great persons, bring in ever upon the stage somebody upon whom to derive the envy, that would come upon themselves; sometimes upon ministers and servants; sometimes upon colleagues and associates; and the like; and for that turn there are never wanting, some persons of

violent and undertaking natures, who, so they may have power and business, will take it at any cost.

Now, to speak of public envy. There is yet some good in public envy, whereas in private, there is none. For public envy, is as an ostracism, that eclipseth men, when they grow too great. And therefore it is a bridle also to great ones, to keep them within bounds.

This envy, being in the Latin word *invidia*, goeth in the modern language, by the name of discontentment; of which we shall speak, in handling sedition. It is a disease, in a state, like to infection. For as infection spreadeth upon that which is sound, and tainteth it; so when envy is gotten once into a state, it traduceth even the best actions thereof, and turneth them into an ill odor. And therefore there is little won, by intermingling of plausible actions. For that doth argue but a weakness, and fear of envy, which hurteth so much the more, as it is likewise usual in infections; which if you fear them, you call them upon you.

This public envy, seemeth to beat chiefly upon principal officers or ministers, rather than upon kings, and estates themselves. But this is a sure

rule, that if the envy upon the minister be great, when the cause of it in him is small; or if the envy be general, in a manner upon all the ministers of an estate; then the envy (though hidden) is truly upon the state itself. And so much of public envy or discontentment, and the difference thereof from private envy, which was handled in the first place.

We will add this in general, touching the affection of envy; that of all other affections, it is the most importune and continual. For of other affections, there is occasion given, but now and then; and therefore it was well said, *Invidia festos dies non agit*: for it is ever working upon some or other. And it is also noted, that love and envy do make a man pine, which other affections do not, because they are not so continual. It is also the vilest affection, and the most depraved; for which cause it is the proper attribute of the devil, who is called, the envious man, that soweth tares amongst the wheat by night; as it always cometh to pass, that envy worketh subtilly, and in the dark, and to the prejudice of good things, such as is the wheat.

Of Love

THE stage is more beholding to love, than the life of man. For as to the stage, love is ever matter of comedies, and now and then of tragedies; but in life it doth much mischief; sometimes like a siren, sometimes like a fury. You may observe, that amongst all the great and worthy persons (whereof the memory remaineth, either ancient or recent) there is not one, that hath been transported to the mad degree of love: which shows that great spirits, and great business, do keep out this weak passion. You must except, nevertheless, Marcus Antonius, the half partner of the empire of Rome, and Appius Claudius, the decemvir and lawgiver; whereof the former was indeed a voluptuous man, and inordinate; but the latter was an austere and wise man: and therefore it seems (though rarely) that love can find entrance, not only into an open heart, but also into a heart well fortified, if watch be not well kept. It is a poor saying of Epicurus, *Satis magnum alter alteri theatrum sumus*; as if man, made for the contemplation of heaven, and all noble objects, should do nothing but kneel before a little idol, and make himself a subject, though not of the mouth (as

beasts are), yet of the eye; which was given him for higher purposes. It is a strange thing, to note the excess of this passion, and how it braves the nature, and value of things, by this; that the speaking in a perpetual hyperbole, is comely in nothing but in love. Neither is it merely in the phrase; for whereas it hath been well said, that the arch-flatterer, with whom all the petty flatterers have intelligence, is a man's self; certainly the lover is more. For there was never proud man thought so absurdly well of himself, as the lover doth of the person loved; and therefore it was well said, That it is impossible to love, and to be wise. Neither doth this weakness appear to others only, and not to the party loved; but to the loved most of all, except the love be reciproque. For it is a true rule, that love is ever rewarded, either with the reciproque, or with an inward and secret contempt. By how much the more, men ought to beware of this passion, which loseth not only other things, but itself! As for the other losses, the poet's relation doth well figure them: that he that preferred Helena, quitted the gifts of Juno and Pallas. For whosoever esteemeth too much of amorous affection, quitteth both riches and wisdom. This passion hath his floods, in very times of weakness; which are great prosperity,

and great adversity; though this latter hath been less observed: both which times kindle love, and make it more fervent, and therefore show it to be the child of folly. They do best, who if they cannot but admit love, yet make it keep quarters; and sever it wholly from their serious affairs, and actions, of life; for if it check once with business, it troubleth men's fortunes, and maketh men, that they can no ways be true to their own ends. I know not how, but martial men are given to love: I think, it is but as they are given to wine; for perils commonly ask to be paid in pleasures. There is in man's nature, a secret inclination and motion, towards love of others, which if it be not spent upon some one or a few, doth naturally spread itself towards many, and maketh men become humane and charitable; as it is seen sometime in friars. Nuptial love maketh mankind; friendly love perfecteth it; but wanton love corrupteth, and embaseth it.

Of Great Place

MEN in great place are thrice servants: servants of the sovereign or state; servants of fame; and servants of business. So as they have no freedom; neither in their persons, nor in their actions, nor in their times. It is a strange desire, to seek power and to lose liberty: or to seek power over others, and to lose power over a man's self. The rising unto place is laborious; and by pains, men come to greater pains; and it is sometimes base; and by indignities, men come to dignities. The standing is slippery, and the regress is either a downfall, or at least an eclipse, which is a melancholy thing. Cum non sis qui fueris, non esse cur velis vivere. Nay, retire men cannot when they would, neither will they, when it were reason; but are impatient of privateness, even in age and sickness, which require the shadow; like old townsmen, that will be still sitting at their street door, though thereby they offer age to scorn. Certainly great persons had need to borrow other men's opinions, to think themselves happy; for if they judge by their own feeling, they cannot find it; but if they think with themselves, what other men think of them, and that other men would fain be, as they are,

then they are happy, as it were, by report; when perhaps they find the contrary within. For they are the first, that find their own griefs, though they be the last, that find their own faults. Certainly men in great fortunes are strangers to themselves, and while they are in the puzzle of business, they have no time to tend their health, either of body or mind. Illi mors gravis incubat, qui notus nimis omnibus, ignotus moritur sibi. In place, there is license to do good, and evil; whereof the latter is a curse: for in evil, the best condition is not to win; the second, not to can. But power to do good, is the true and lawful end of aspiring. For good thoughts (though God accept them) yet, towards men, are little better than good dreams, except they be put in act; and that cannot be, without power and place, as the vantage, and commanding ground. Merit and good works, is the end of man's motion; and conscience of the same is the accomplishment of man's rest. For if a man can be partaker of God's theatre, he shall likewise be partaker of God's rest. Et conversus Deus, ut aspiceret opera quae fecerunt manus suae, vidit quod omnia essent bona nimis; and then the sabbath. In the discharge of thy place, set before thee the best examples; for imitation is a globe of precepts. And after a time,

set before thee thine own example; and examine thyself strictly, whether thou didst not best at first. Neglect not also the examples, of those that have carried themselves ill, in the same place; not to set off thyself, by taxing their memory, but to direct thyself, what to avoid. Reform therefore, without bravery, or scandal of former times and persons; but yet set it down to thyself, as well to create good precedents, as to follow them. Reduce things to the first institution, and observe wherein, and how, they have degenerate; but yet ask counsel of both times; of the ancient time, what is best; and of the latter time, what is fittest. Seek to make thy course regular, that men may know beforehand, what they may expect; but be not too positive and peremptory; and express thyself well, when thou digressest from thy rule. Preserve the right of thy place; but stir not questions of jurisdiction; and rather assume thy right, in silence and de facto, than voice it with claims, and challenges. Preserve likewise the rights of inferior places; and think it more honor, to direct in chief, than to be busy in all. Embrace and invite helps, and advices, touching the execution of thy place; and do not drive away such, as bring thee information, as meddlers; but accept of them in good part. The

vices of authority are chiefly four: delays, corruption, roughness, and facility. For delays: give easy access; keep times appointed; go through with that which is in hand, and interlace not business, but of necessity. For corruption: do not only bind thine own hands, or thy servants' hands, from taking, but bind the hands of suitors also, from offering. For integrity used doth the one; but integrity professed, and with a manifest detestation of bribery, doth the other. And avoid not only the fault, but the suspicion. Whosoever is found variable, and changeth manifestly without manifest cause, giveth suspicion of corruption. Therefore always, when thou changest thine opinion or course, profess it plainly, and declare it, together with the reasons that move thee to change; and do not think to steal it. A servant or a favorite, if he be inward, and no other apparent cause of esteem, is commonly thought, but a by-way to close corruption. For roughness: it is a needless cause of discontent: severity breedeth fear, but roughness breedeth hate. Even reproofs from authority, ought to be grave, and not taunting. As for facility: it is worse than bribery. For bribes come but now and then; but if importunity, or idle respects, lead a man, he shall never

be without. As Solomon saith, To respect persons is not good; for such a man will transgress for a piece of bread. It is most true, that was anciently spoken, A place showeth the man. And it showeth some to the better, and some to the worse. *Omnium consensu capax imperii, nisi imperasset*, saith Tacitus of Galba; but of Vespasian he saith, *Solus imperantium, Vespasianus mutatus in melius*; though the one was meant of sufficiency, the other of manners, and affection. It is an assured sign of a worthy and generous spirit, whom honor amends. For honor is, or should be, the place of virtue; and as in nature, things move violently to their place, and calmly in their place, so virtue in ambition is violent, in authority settled and calm. All rising to great place is by a winding star; and if there be factions, it is good to side a man's self, whilst he is in the rising, and to balance himself when he is placed. Use the memory of thy predecessor, fairly and tenderly; for if thou dost not, it is a debt will sure be paid when thou art gone. If thou have colleagues, respect them, and rather call them, when they look not for it, than exclude them, when they have reason to look to be called. Be not too sensible, or too remembering, of thy place in conversation, and private answers to suitors; but let it rather be

said, When he sits in place, he is another man.

Of Boldness

IT IS a trivial grammar-school text, but yet worthy a wise man's consideration. Question was asked of Demosthenes, what was the chief part of an orator? he answered, action; what next? action; what next again? action. He said it, that knew it best, and had, by nature, himself no advantage in that he commended. A strange thing, that that part of an orator, which is but superficial, and rather the virtue of a player, should be placed so high, above those other noble parts, of invention, elocution, and the rest; nay, almost alone, as if it were all in all. But the reason is plain. There is in human nature generally, more of the fool than of the wise; and therefore those faculties, by which the foolish part of men's minds is taken, are most potent. Wonderful like is the case of boldness in civil business: what first? boldness; what second and third? boldness. And yet boldness is a child of ignorance and baseness, far inferior to other parts. But nevertheless it doth fascinate, and bind hand and foot, those that are either shallow in judgment, or weak in courage, which are the greatest part; yea and prevaieth with wise men at weak times. Therefore we see it hath done wonders, in popular

states; but with senates, and princes less; and more ever upon the first entrance of bold persons into action, than soon after; for boldness is an ill keeper of promise. Surely, as there are mountebanks for the natural body, so are there mountebanks for the politic body; men that undertake great cures, and perhaps have been lucky, in two or three experiments, but want the grounds of science, and therefore cannot hold out. Nay, you shall see a bold fellow many times do Mahomet's miracle. Mahomet made the people believe that he would call an hill to him, and from the top of it offer up his prayers, for the observers of his law. The people assembled; Mahomet called the hill to come to him, again and again; and when the hill stood still, he was never a whit abashed, but said, If the hill will not come to Mahomet, Mahomet will go to the hill. So these men, when they have promised great matters, and failed most shamefully, yet (if they have the perfection of boldness) they will but slight it over, and make a turn, and no more ado. Certainly to men of great judgment, bold persons are a sport to behold; nay, and to the vulgar also, boldness has somewhat of the ridiculous. For if absurdity be the subject of laughter, doubt you not but great boldness is seldom without some absurdity. Especially it is a

sport to see, when a bold fellow is out of countenance; for that puts his face into a most shrunken, and wooden posture; as needs it must; for in bashfulness, the spirits do a little go and come; but with bold men, upon like occasion, they stand at a stay; like a stale at chess, where it is no mate, but yet the game cannot stir. But this last were fitter for a satire than for a serious observation. This is well to be weighed; that boldness is ever blind; for it seeth not danger, and inconveniences. Therefore it is ill in counsel, good in execution; so that the right use of bold persons is, that they never command in chief, but be seconds, and under the direction of others. For in counsel, it is good to see dangers; and in execution, not to see them, except they be very great.

Of Goodness and Goodness Of Nature

I TAKE goodness in this sense, the affecting of the weal of men, which is that the Grecians call philanthropia; and the word humanity (as it is used) is a little too light to express it. Goodness I call the habit, and goodness of nature, the inclination. This of all virtues, and dignities of the mind, is the greatest; being the character of the Deity: and without it, man is a busy, mischievous, wretched thing; no better than a kind of vermin. Goodness answers to the theological virtue, charity, and admits no excess, but error. The desire of power in excess, caused the angels to fall; the desire of knowledge in excess, caused man to fall: but in charity there is no excess; neither can angel, nor man, come in danger by it. The inclination to goodness, is imprinted deeply in the nature of man; insomuch, that if it issue not towards men, it will take unto other living creatures; as it is seen in the Turks, a cruel people, who nevertheless are kind to beasts, and give alms, to dogs and birds; insomuch, as Busbechius reporteth, a Christian boy, in Constantinople, had like to have been stoned, for gagging

in a waggishness a long-billed fowl. Errors indeed in this virtue of goodness, or charity, may be committed. The Italians have an ungracious proverb, Tanto buon che val niente: so good, that he is good for nothing. And one of the doctors of Italy, Nicholas Machiavel, had the confidence to put in writing, almost in plain terms, That the Christian faith, had given up good men, in prey to those that are tyrannical and unjust. Which he spake, because indeed there was never law, or sect, or opinion, did so much magnify goodness, as the Christian religion doth. Therefore, to avoid the scandal and the danger both, it is good, to take knowledge of the errors of an habit so excellent. Seek the good of other men, but be not in bondage to their faces or fancies; for that is but facility, or softness; which taketh an honest mind prisoner. Neither give thou AEsop's cock a gem, who would be better pleased, and happier, if he had had a barley-corn. The example of God, teacheth the lesson truly: He sendeth his rain, and maketh his sun to shine, upon the just and unjust; but he doth not rain wealth, nor shine honor and virtues, upon men equally. Common benefits, are to be communicate with all; but peculiar benefits, with choice. And beware how in making the portraiture, thou

breakest the pattern. For divinity, maketh the love of ourselves the pattern; the love of our neighbors, but the portraiture. Sell all thou hast, and give it to the poor, and follow me: but, sell not all thou hast, except thou come and follow me; that is, except thou have a vocation, wherein thou mayest do as much good, with little means as with great; for otherwise, in feeding the streams, thou driest the fountain. Neither is there only a habit of goodness, directed by right reason; but there is in some men, even in nature, a disposition towards it; as on the other side, there is a natural malignity. For there be, that in their nature do not affect the good of others. The lighter sort of malignity, turneth but to a crassness, or frowardness, or aptness to oppose, or difficulties, or the like; but the deeper sort, to envy and mere mischief. Such men, in other men's calamities, are, as it were, in season, and are ever on the loading part: not so good as the dogs, that licked Lazarus' sores; but like flies, that are still buzzing upon any thing that is raw; misanthropi, that make it their practice, to bring men to the bough, and yet never a tree for the purpose in their gardens, as Timon had. Such dispositions, are the very errors of human nature; and yet they are the fittest timber, to make great politics of; like to knee timber, that is

good for ships, that are ordained to be tossed; but not for building houses, that shall stand firm. The parts and signs of goodness, are many. If a man be gracious and courteous to strangers, it shows he is a citizen of the world, and that his heart is no island, cut off from other lands, but a continent, that joins to them. If he be compassionate towards the afflictions of others, it shows that his heart is like the noble tree, that is wounded itself, when it gives the balm. If he easily pardons, and remits offences, it shows that his mind is planted above injuries; so that he cannot be shot. If he be thankful for small benefits, it shows that he weighs men's minds, and not their trash. But above all, if he have St. Paul's perfection, that he would wish to be anathema from Christ, for the salvation of his brethren, it shows much of a divine nature, and a kind of conformity with Christ himself,

Of Nobility

WE WILL speak of nobility, first as a portion of an estate, then as a condition of particular persons. A monarchy, where there is no nobility at all, is ever a pure and absolute tyranny; as that of the Turks. For nobility attempers sovereignty, and draws the eyes of the people, somewhat aside from the line royal. But for democracies, they need it not; and they are commonly more quiet, and less subject to sedition, than where there are stirps of nobles. For men's eyes are upon the business, and not upon the persons; or if upon the persons, it is for the business' sake, as fittest, and not for flags and pedigree. We see the Switzers last well, notwithstanding their diversity of religion, and of cantons. For utility is their bond, and not respects. The united provinces of the Low Countries, in their government, excel; for where there is an equality, the consultations are more indifferent, and the payments and tributes, more cheerful. A great and potent nobility, addeth majesty to a monarch, but diminisheth power; and putteth life and spirit into the people, but presseth their fortune. It is well, when nobles are not too great for sovereignty nor for justice; and yet

maintained in that height, as the insolency of inferiors may be broken upon them, before it come on too fast upon the majesty of kings. A numerous nobility causeth poverty, and inconvenience in a state; for it is a surcharge of expense; and besides, it being of necessity, that many of the nobility fall, in time, to be weak in fortune, it maketh a kind of disproportion, between honor and means.

As for nobility in particular persons; it is a reverend thing, to see an ancient castle or building, not in decay; or to see a fair timber tree, sound and perfect. How much more, to behold an ancient noble family, which has stood against the waves and weathers of time! For new nobility is but the act of power, but ancient nobility is the act of time. Those that are first raised to nobility, are commonly more virtuous, but less innocent, than their descendants; for there is rarely any rising, but by a commixture of good and evil arts. But it is reason, the memory of their virtues remain to their posterity, and their faults die with themselves. Nobility of birth commonly abateth industry; and he that is not industrious, envieth him that is. Besides, noble persons cannot go much higher; and he that standeth at a

stay, when others rise, can hardly avoid motions of envy. On the other side, nobility extinguisheth the passive envy from others, towards them; because they are in possession of honor. Certainly, kings that have able men of their nobility, shall find ease in employing them, and a better slide into their business; for people naturally bend to them, as born in some sort to command.

Of Seditious And Troubles

SHEPHERDS of people, had need know the calendars of tempests in state; which are commonly greatest, when things grow to equality; as natural tempests are greatest about the Equinoctia. And as there are certain hollow blasts of wind, and secret swellings of seas before a tempest, so are there in states:

*Ille etiam caecos instar
Saepe monet, fraude*

Libels and licentious discourses against the state, when they are frequent and open; and in like sort, false news often running up and down, to the disadvantage of the state, and hastily embraced; are amongst the signs of troubles. Virgil, giving the pedigree of Fame, saith, she was sister to the Giants:

Illam Terra parens, irra irritata
deorum, Extremam (ut perhibent)
Coeo Enceladoque sororem
Progenit.

As if fames were the relics of seditious past; but they are no less, indeed, the preludes of seditious to come. Howsoever he noteth it right, that seditious tumults, and seditious

fames, differ no more but as brother and sister, masculine and feminine; especially if it come to that, that the best actions of a state, and the most plausible, and which ought to give greatest contentment, are taken in ill sense, and traduced: for that shows the envy great, as Tacitus saith; *conflata magna invidia, seu bene seu male gesta premunt*. Neither doth it follow, that because these fames are a sign of troubles, that the suppressing of them with too much severity, should be a remedy of troubles. For the despising of them, many times checks them best; and the going about to stop them, doth but make a wonder long-lived. Also that kind of obedience, which Tacitus speaketh of, is to be held suspected: *Erant in officio, sed tamen qui mallent mandata imperantium interpretari quam exequi*; disputing, excusing, cavilling upon mandates and directions, is a kind of shaking off the yoke, and assay of disobedience; especially if in those disputings, they which are for the direction, speak fearfully and tenderly, and those that are against it, audaciously.

Also, as Machiavel noteth well, when princes, that ought to be common parents, make themselves as a party, and lean to a side, it is as a boat, that is overthrown by uneven weight on

the one side; as was well seen, in the time of Henry the Third of France; for first, himself entered league for the extirpation of the Protestants; and presently after, the same league was turned upon himself. For when the authority of princes, is made but an accessory to a cause, and that there be other bands, that tie faster than the band of sovereignty, kings begin to be put almost out of possession.

Also, when discords, and quarrels, and factions are carried openly and audaciously, it is a sign the reverence of government is lost. For the motions of the greatest persons in a government, ought to be as the motions of the planets under primum mobile; according to the old opinion: which is, that every of them, is carried swiftly by the highest motion, and softly in their own motion. And therefore, when great ones in their own particular motion, move violently, and, as Tacitus expresseth it well, *liberius quam ut imperantium meminissent*; it is a sign the orbs are out of frame. For reverence is that, wherewith princes are girt from God; who threateneth the dissolving thereof; *Solvam cingula regum*.

So when any of the four pillars of government, are mainly shaken, or weakened (which are religion, justice, counsel, and treasure), men

had need to pray for fair weather. But let us pass from this part of predictions (concerning which, nevertheless, more light may be taken from that which followeth); and let us speak first, of the materials of seditions; then of the motives of them; and thirdly of the remedies.

Concerning the materials of seditions. It is a thing well to be considered; for the surest way to prevent seditions (if the times do bear it) is to take away the matter of them. For if there be fuel prepared, it is hard to tell, whence the spark shall come, that shall set it on fire. The matter of seditions is of two kinds: much poverty, and much discontentment. It is certain, so many overthrown estates, so many votes for troubles. Lucan noteth well the state of Rome before the Civil War,

*Hinc usura vorax, r
Hinc concussa fides*

This same multis utile bellum, is an assured and infallible sign, of a state disposed to seditions and troubles. And if this poverty and broken estate in the better sort, be joined with a want and necessity in the mean people, the danger is imminent and great. For the rebellions of the belly are the worst. As for discontentments,

they are, in the politic body, like to humors in the natural, which are apt to gather a preternatural heat, and to inflame. And let no prince measure the danger of them by this, whether they be just or unjust: for that were to imagine people, to be too reasonable; who do often spurn at their own good: nor yet by this, whether the griefs whereupon they rise, be in fact great or small: for they are the most dangerous discontentments, where the fear is greater than the feeling. *Dolendi modus, timendi non item.* Besides, in great oppressions, the same things that provoke the patience, do withal mate the courage; but in fears it is not so. Neither let any prince, or state, be secure concerning discontentments, because they have been often, or have been long, and yet no peril hath ensued: for as it is true, that every vapor or fume doth not turn into a storm; so it is nevertheless true, that storms, though they blow over divers times, yet may fall at last; and, as the Spanish proverb noteth well, The cord breaketh at the last by the weakest pull.

The causes and motives of seditions are, innovation in religion; taxes; alteration of laws and customs; breaking of privileges; general oppression; advancement of

unworthy persons; strangers; dearths; disbanded soldiers; factions grown desperate; and what soever, in offending people, joineth and knitteth them in a common cause.

For the remedies; there may be some general preservatives, whereof we will speak: as for the just cure, it must answer to the particular disease; and so be left to counsel, rather than rule.

The first remedy or prevention is to remove, by all means possible, that material cause of sedition whereof we spake; which is, want and poverty in the estate. To which purpose serveth the opening, and well-balancing of trade; the cherishing of manufactures; the banishing of idleness; the repressing of waste, and excess, by sumptuary laws; the improvement and husbanding of the soil; the regulating of prices of things vendible; the moderating of taxes and tributes; and the like. Generally, it is to be foreseen that the population of a kingdom (especially if it be not mown down by wars) do not exceed the stock of the kingdom, which should maintain them. Neither is the population to be reckoned only by number; for a smaller number, that spend more and earn less, do wear out an estate sooner, than a greater number that live lower, and gather

more. Therefore the multiplying of nobility, and other degrees of quality, in an over proportion to the common people, doth speedily bring a state to necessity; and so doth likewise an overgrown clergy; for they bring nothing to the stock; and in like manner, when more are bred scholars, than preferments can take off.

It is likewise to be remembered, that forasmuch as the increase of any estate must be upon the foreigner (for whatsoever is somewhere gotten, is somewhere lost), there be but three things, which one nation selleth unto another; the commodity as nature yieldeth it; the manufacture; and the vecture, or carriage. So that if these three wheels go, wealth will flow as in a spring tide. And it cometh many times to pass, that materiam superabit opus; that the work and carriage is more worth than the material, and enricheth a state more; as is notably seen in the Low-Countrymen, who have the best mines above ground, in the world.

Above all things, good policy is to be used, that the treasure and moneys, in a state, be not gathered into few hands. For otherwise a state may have a great stock, and yet starve. And money is like muck, not good except it be spread. This is done,

chiefly by suppressing, or at least keeping a strait hand, upon the devouring trades of usury, ingrossing great pasturages, and the like.

For removing discontentments, or at least the danger of them; there is in every state (as we know) two portions of subjects; the noblesse and the commonalty. When one of these is discontent, the danger is not great; for common people are of slow motion, if they be not excited by the greater sort; and the greater sort are of small strength, except the multitude be apt, and ready to move of themselves. Then is the danger, when the greater sort, do but wait for the troubling of the waters amongst the meaner, that then they may declare themselves. The poets feign, that the rest of the gods would have bound Jupiter; which he hearing of, by the counsel of Pallas, sent for Briareus, with his hundred hands, to come in to his aid. An emblem, no doubt, to show how safe it is for monarchs, to make sure of the good will of common people. To give moderate liberty for griefs and discontentments to evaporate (so it be without too great insolency or bravery), is a safe way. For he that turneth the humors back, and maketh the wound bleed inwards, endangereth malign ulcers, and

pernicious imposthumations.

The part of Epimetheus mought well become Prometheus, in the case of discontentments: for there is not a better provision against them. Epimetheus, when griefs and evils flew abroad, at last shut the lid, and kept hope in the bottom of the vessel. Certainly, the politic and artificial nourishing, and entertaining of hopes, and carrying men from hopes to hopes, is one of the best antidotes against the poison of discontentments. And it is a certain sign of a wise government and proceeding, when it can hold men's hearts by hopes, when it cannot by satisfaction; and when it can handle things, in such manner, as no evil shall appear so peremptory, but that it hath some outlet of hope; which is the less hard to do, because both particular persons and factions, are apt enough to flatter themselves, or at least to brave that, which they believe not.

Also the foresight and prevention, that there be no likely or fit head, whereunto discontented persons may resort, and under whom they may join, is a known, but an excellent point of caution. I understand a fit head, to be one that hath greatness and reputation; that hath confidence with the discontented party, and upon

whom they turn their eyes; and that is thought discontented, in his own particular: which kind of persons, are either to be won, and reconciled to the state, and that in a fast and true manner; or to be fronted with some other, of the same party, that may oppose them, and so divide the reputation. Generally, the dividing and breaking, of all factions and combinations that are adverse to the state, and setting them at distance, or at least distrust, amongst themselves, is not one of the worst remedies. For it is a desperate case, if those that hold with the proceeding of the state, be full of discord and faction, and those that are against it, be entire and united.

I have noted, that some witty and sharp speeches, which have fallen from princes, have given fire to seditions. Caesar did himself infinite hurt in that speech, *Sylla nescivit literas, non potuit dictare*; for it did utterly cut off that hope, which men had entertained, that he would at one time or other give over his dictatorship. Galba undid himself by that speech, *legi a se militem, non emi*; for it put the soldiers out of hope of the donative. Probus likewise, by that speech, *Si vixero, non opus erit amplius Romano imperio militibus*; a speech of great despair for the

soldiers. And many the like. Surely princes had need, in tender matters and ticklish times, to beware what they say; especially in these short speeches, which fly abroad like darts, and are thought to be shot out of their secret intentions. For as for large discourses, they are flat things, and not so much noted.

Lastly, let princes, against all events, not be without some great person, one or rather more, of military valor, near unto them, for the repressing of seditions in their beginnings. For without that, there useth to be more trepidation in court upon the first breaking out of troubles, than were fit. And the state runneth the danger of that which Tacitus saith; *Atque is habitus animorum fuit, ut pessimum facinus auderent pauci, plures vellent, omnes paterentur.* But let such military persons be assured, and well reputed of, rather than factious and popular; holding also good correspondence with the other great men in the state; or else the remedy, is worse than the disease.

Of Atheism

I HAD rather believe all the fables in the Legend, and the Talmud, and the Alcoran, than that this universal frame is without a mind. And therefore, God never wrought miracle, to convince atheism, because his ordinary works convince it. It is true, that a little philosophy inclineth man's mind to atheism; but depth in philosophy bringeth men's minds about to religion. For while the mind of man looketh upon second causes scattered, it may sometimes rest in them, and go no further; but when it beholdeth the chain of them, confederate and linked together, it must needs fly to Providence and Deity. Nay, even that school which is most accused of atheism doth most demonstrate religion; that is, the school of Leucippus and Democritus and Epicurus. For it is a thousand times more credible, that four mutable elements, and one immutable fifth essence, duly and eternally placed, need no God, than that an army of infinite small portions, or seeds unplaced, should have produced this order and beauty, without a divine marshal. The Scripture saith, The fool hath said in his heart, there is no God; it is not said, The fool hath thought in his

heart; so as he rather saith it, by rote to himself, as that he would have, than that he can thoroughly believe it, or be persuaded of it. For none deny, there is a God, but those, for whom it maketh that there were no God. It appeareth in nothing more, that atheism is rather in the lip, than in the heart of man, than by this; that atheists will ever be talking of that their opinion, as if they fainted in it, within themselves, and would be glad to be strengthened, by the consent of others. Nay more, you shall have atheists strive to get disciples, as it fareth with other sects. And, which is most of all, you shall have of them, that will suffer for atheism, and not recant; whereas if they did truly think, that there were no such thing as God, why should they trouble themselves? Epicurus is charged, that he did but dissemble for his credit's sake, when he affirmed there were blessed natures, but such as enjoyed themselves, without having respect to the government of the world. Wherein they say he did temporize; though in secret, he thought there was no God. But certainly he is traduced; for his words are noble and divine: Non deos vulgi negare profanum; sed vulgi opiniones diis applicare profanum. Plato could have said no more. And although he had the confidence, to deny the

administration, he had not the power, to deny the nature. The Indians of the West, have names for their particular gods, though they have no name for God: as if the heathens should have had the names Jupiter, Apollo, Mars, etc., but not the word Deus; which shows that even those barbarous people have the notion, though they have not the latitude and extent of it. So that against atheists, the very savages take part, with the very subtlest philosophers. The contemplative atheist is rare: a Diagoras, a Bion, a Lucian perhaps, and some others; and yet they seem to be more than they are; for that all that impugn a received religion, or superstition, are by the adverse part branded with the name of atheists. But the great atheists, indeed are hypocrites; which are ever handling holy things, but without feeling; so as they must needs be cauterized in the end. The causes of atheism are: divisions in religion, if they be many; for any one main division, addeth zeal to both sides; but many divisions introduce atheism. Another is, scandal of priests; when it is come to that which St. Bernard saith, *non est jam dicere, ut populus sic sacerdos; quia nec sic populus ut sacerdos*. A third is, custom of profane scoffing in holy matters; which doth, by little and little, deface the reverence of

religion. And lastly, learned times, specially with peace and prosperity; for troubles and adversities do more bow men's minds to religion. They that deny a God, destroy man's nobility; for certainly man is of kin to the beasts, by his body; and, if he be not of kin to God, by his spirit, he is a base and ignoble creature. It destroys likewise magnanimity, and the raising of human nature; for take an example of a dog, and mark what a generosity and courage he will put on, when he finds himself maintained by a man; who to him is instead of a God, or *melior natura*; which courage is manifestly such, as that creature, without that confidence of a better nature than his own, could never attain. So man, when he resteth and assureth himself, upon divine protection and favor, gathered a force and faith, which human nature in itself could not obtain. Therefore, as atheism is in all respects hateful, so in this, that it depriveth human nature of the means to exalt itself, above human frailty. As it is in particular persons, so it is in nations. Never was there such a state for magnanimity as Rome. Of this state hear what Cicero saith: *Quam volumus licet, patres conscripti, nos amemus, tamen nec numero Hispanos, nec robore Gallos, nec calliditate Poenos, nec artibus Graecos, nec denique hoc ipso hujus*

gentis et terrae domestico nativoque
sensu Italos ipsos et Latinos; sed
pietate, ac religione, atque hac una
sapientia, quod deorum immortalium
numine omnia regi gubernarique
perspeximus, omnes gentes
nationesque superavimus.

Of Superstition

IT WERE better to have no opinion of God at all, than such an opinion, as is unworthy of him. For the one is unbelief, the other is contumely; and certainly superstition is the reproach of the Deity. Plutarch saith well to that purpose: Surely (saith he) I had rather a great deal, men should say, there was no such man at all, as Plutarch, than that they should say, that there was one Plutarch, that would eat his children as soon as they were born; as the poets speak of Saturn. And as the contumely is greater towards God, so the danger is greater towards men. Atheism leaves a man to sense, to philosophy, to natural piety, to laws, to reputation; all which may be guides to an outward moral virtue, though religion were not; but superstition dismounts all these, and erecteth an absolute monarchy, in the minds of men. Therefore theism did never perturb states; for it makes men wary of themselves, as looking no further: and we see the times inclined to atheism (as the time of Augustus Caesar) were civil times. But superstition hath been the confusion of many states, and bringeth in a new primum mobile, that ravisheth all the spheres of government. The master of

superstition, is the people; and in all superstition, wise men follow fools; and arguments are fitted to practice, in a reversed order. It was gravely said by some of the prelates in the Council of Trent, where the doctrine of the Schoolmen bare great sway, that the Schoolmen were like astronomers, which did feign eccentrics and epicycles, and such engines of orbs, to save the phenomena; though they knew there were no such things; and in like manner, that the Schoolmen had framed a number of subtle and intricate axioms, and theorems, to save the practice of the church. The causes of superstition are: pleasing and sensual rites and ceremonies; excess of outward and pharisaical holiness; overgreat reverence of traditions, which cannot but load the church; the stratagems of prelates, for their own ambition and lucre; the favoring too much of good intentions, which openeth the gate to conceits and novelties; the taking an aim at divine matters, by human, which cannot but breed mixture of imaginations: and, lastly, barbarous times, especially joined with calamities and disasters. Superstition, without a veil, is a deformed thing; for, as it addeth deformity to an ape, to be so like a man, so the similitude of superstition to religion, makes it

the more deformed. And as wholesome meat corrupteth to little worms, so good forms and orders corrupt, into a number of petty observances. There is a superstition in avoiding superstition, when men think to do best, if they go furthest from the superstition, formerly received; therefore care would be had that (as it fareth in ill purgings) the good be not taken away with the bad; which commonly is done, when the people is the reformer.

Of Travel

TRAVEL, in the younger sort, is a part of education, in the elder, a part of experience. He that travelleth into a country, before he hath some entrance into the language, goeth to school, and not to travel. That young men travel under some tutor, or grave servant, I allow well; so that he be such a one that hath the language, and hath been in the country before; whereby he may be able to tell them what things are worthy to be seen, in the country where they go; what acquaintances they are to seek; what exercises, or discipline, the place yieldeth. For else, young men shall go hooded, and look abroad little. It is a strange thing, that in sea voyages, where there is nothing to be seen, but sky and sea, men should make diaries; but in land-travel, wherein so much is to be observed, for the most part they omit it; as if chance were fitter to be registered, than observation. Let diaries, therefore, be brought in use. The things to be seen and observed are: the courts of princes, especially when they give audience to ambassadors; the courts of justice, while they sit and hear causes; and so of consistories ecclesiastic; the churches and monasteries, with the monuments

which are therein extant; the walls and fortifications of cities, and towns, and so the heavens and harbors; antiquities and ruins; libraries; colleges, disputations, and lectures, where any are; shipping and navies; houses and gardens of state and pleasure, near great cities; armories; arsenals; magazines; exchanges; burses; warehouses; exercises of horsemanship, fencing, training of soldiers, and the like; comedies, such whereunto the better sort of persons do resort; treasuries of jewels and robes; cabinets and rarities; and, to conclude, whatsoever is memorable, in the places where they go. After all which, the tutors, or servants, ought to make diligent inquiry. As for triumphs, masks, feasts, weddings, funerals, capital executions, and such shows, men need not to be put in mind of them; yet are they not to be neglected. If you will have a young man to put his travel into a little room, and in short time to gather much, this you must do. First, as was said, he must have some entrance into the language before he goeth. Then he must have such a servant, or tutor, as knoweth the country, as was likewise said. Let him carry with him also, some card or book, describing the country where he travelleth; which will be a good key to his inquiry. Let him keep also a diary.

Let him not stay long, in one city or town; more or less as the place deserveth, but not long; nay, when he stayeth in one city or town, let him change his lodging from one end and part of the town, to another; which is a great adamant of acquaintance. Let him sequester himself, from the company of his countrymen, and diet in such places, where there is good company of the nation where he travelleth. Let him, upon his removes from one place to another, procure recommendation to some person of quality, residing in the place whither he removeth; that he may use his favor, in those things he desireth to see or know. Thus he may abridge his travel, with much profit. As for the acquaintance, which is to be sought in travel; that which is most of all profitable, is acquaintance with the secretaries and employed men of ambassadors: for so in travelling in one country, he shall suck the experience of many. Let him also see, and visit, eminent persons in all kinds, which are of great name abroad; that he may be able to tell, how the life agreeth with the fame. For quarrels, they are with care and discretion to be avoided. They are commonly for mistresses, healths, place, and words. And let a man beware, how he keepeth company with cholerick and quarrelsome

persons; for they will engage him into their own quarrels. When a traveller returneth home, let him not leave the countries, where he hath travelled, altogether behind him; but maintain a correspondence by letters, with those of his acquaintance, which are of most worth. And let his travel appear rather in his discourse, than his apparel or gesture; and in his discourse, let him be rather advised in his answers, than forward to tell stories; and let it appear that he doth not change his country manners, for those of foreign parts; but only prick in some flowers, of that he hath learned abroad, into the customs of his own country.

Of Empire

IT IS a miserable state of mind, to have few things to desire, and many things to fear; and yet that commonly is the case of kings; who, being at the highest, want matter of desire, which makes their minds more languishing; and have many representations of perils and shadows, which makes their minds the less clear. And this is one reason also, of that effect which the Scripture speaketh of, That the king's heart is inscrutable. For multitude of jealousies, and lack of some predominant desire, that should marshal and put in order all the rest, maketh any man's heart, hard to find or sound. Hence it comes likewise, that princes many times make themselves desires, and set their hearts upon toys; sometimes upon a building; sometimes upon erecting of an order; sometimes upon the advancing of a person; sometimes upon obtaining excellency in some art, or feat of the hand; as Nero for playing on the harp, Domitian for certainty of the hand with the arrow, Commodus for playing at fence, Caracalla for driving chariots, and the like. This seemeth incredible, unto those that know not the principle, that the mind of man, is more cheered and refreshed by profiting in small things,

than by standing at a stay, in great. We see also that kings that have been fortunate conquerors, in their first years, it being not possible for them to go forward infinitely, but that they must have some check, or arrest in their fortunes, turn in their latter years to be superstitious, and melancholy; as did Alexander the Great; Diocletian; and in our memory, Charles the Fifth; and others: for he that is used to go forward, and findeth a stop, falleth out of his own favor, and is not the thing he was.

To speak now of the true temper of empire, it is a thing rare and hard to keep; for both temper, and distemper, consist of contraries. But it is one thing, to mingle contraries, another to interchange them. The answer of Apollonius to Vespasian, is full of excellent instruction. Vespasian asked him, What was Nero's overthrow? He answered, Nero could touch and tune the harp well; but in government, sometimes he used to wind the pins too high, sometimes to let them down too low. And certain it is, that nothing destroyeth authority so much, as the unequal and untimely interchange of power pressed too far, and relaxed too much.

This is true, that the wisdom of all these latter times, in princes' affairs,

is rather fine deliveries, and shiftings of dangers and mischiefs, when they are near, than solid and grounded courses to keep them aloof. But this is but to try masteries with fortune. And let men beware, how they neglect and suffer matter of trouble to be prepared; for no man can forbid the spark, nor tell whence it may come. The difficulties in princes' business are many and great; but the greatest difficulty, is often in their own mind. For it is common with princes (saith Tacitus) to will contradictories, *Sunt plerumque regum voluntates vehementes, et inter se contrariae*. For it is the solecism of power, to think to command the end, and yet not to endure the mean.

Kings have to deal with their neighbors, their wives, their children, their prelates or clergy, their nobles, their second-nobles or gentlemen, their merchants, their commons, and their men of war; and from all these arise dangers, if care and circumspection be not used.

First for their neighbors; there can no general rule be given (for occasions are so variable), save one, which ever holdeth, which is, that princes do keep due sentinel, that none of their neighbors do ever grow so (by increase of territory, by embracing of trade, by approaches, or the like), as

they become more able to annoy them, than they were. And this is generally the work of standing counsels, to foresee and to hinder it. During that triumvirate of kings, King Henry the Eighth of England, Francis the First King of France, and Charles the Fifth Emperor, there was such a watch kept, that none of the three could win a palm of ground, but the other two would straightways balance it, either by confederation, or, if need were, by a war; and would not in any wise take up peace at interest. And the like was done by that league (which Guicciardini saith was the security of Italy) made between Ferdinando King of Naples, Lorenzius Medici, and Ludovicus Sforza, potentates, the one of Florence, the other of Milan. Neither is the opinion of some of the Schoolmen, to be received, that a war cannot justly be made, but upon a precedent injury or provocation. For there is no question, but a just fear of an imminent danger, though there be no blow given, is a lawful cause of a war.

For their wives; there are cruel examples of them. Livia is infamed, for the poisoning of her husband; Roxalana, Solyman's wife, was the destruction of that renowned prince, Sultan Mustapha, and otherwise

troubled his house and succession; Edward the Second of England, his queen, had the principal hand in the deposing and murder of her husband. This kind of danger, is then to be feared chiefly, when the wives have plots, for the raising of their own children; or else that they be advoutresses.

For their children; the tragedies likewise of dangers from them, have been many. And generally, the entering of fathers into suspicion of their children, hath been ever unfortunate. The destruction of Mustapha (that we named before) was so fatal to Solyman's line, as the succession of the Turks, from Solyman until this day, is suspected to be untrue, and of strange blood; for that Selymus the Second, was thought to be suppositious. The destruction of Crispus, a young prince of rare towardness, by Constantinus the Great, his father, was in like manner fatal to his house; for both Constantinus and Constance, his sons, died violent deaths; and Constantius, his other son, did little better; who died indeed of sickness, but after that Julianus had taken arms against him. The destruction of Demetrius, son to Philip the Second of Macedon, turned upon the father, who died of repentance. And many

like examples there are; but few or none, where the fathers had good by such distrust; except it were, where the sons were up in open arms against them; as was Selymus the First against Bajazet; and the three sons of Henry the Second, King of England.

For their prelates; when they are proud and great, there is also danger from them; as it was in the times of Anselmus, and Thomas Becket, Archbishops of Canterbury; who, with their croziers, did almost try it with the king's sword; and yet they had to deal with stout and haughty kings, William Rufus, Henry the First, and Henry the Second. The danger is not from that state, but where it hath a dependence of foreign authority; or where the churchmen come in and are elected, not by the collation of the king, or particular patrons, but by the people.

For their nobles; to keep them at a distance, it is not amiss; but to depress them, may make a king more absolute, but less safe; and less able to perform, any thing that he desires. I have noted it, in my History of King Henry the Seventh of England, who depressed his nobility; whereupon it came to pass, that his times were full of difficulties and troubles; for the nobility, though they continued loyal unto him, yet did they not co-operate

with him in his business. So that in effect, he was fain to do all things himself.

For their second-nobles; there is not much danger from them, being a body dispersed. They may sometimes discourse high, but that doth little hurt; besides, they are a counterpoise to the higher nobility, that they grow not too potent; and, lastly, being the most immediate in authority, with the common people, they do best temper popular commotions.

For their merchants; they are vena porta; and if they flourish not, a kingdom may have good limbs, but will have empty veins, and nourish little. Taxes and imposts upon them, do seldom good to the king's revenue; for that that he wins in the hundred, he leaseth in the shire; the particular rates being increased, but the total bulk of trading, rather decreased.

For their commons; there is little danger from them, except it be, where they have great and potent heads; or where you meddle with the point of religion, or their customs, or means of life.

For their men of war; it is a dangerous state, where they live and remain in a body, and are used to donatives; whereof we see examples in the janizaries, and pretorian bands

of Rome; but trainings of men, and arming them in several places, and under several commanders, and without donatives, are things of defence, and no danger.

Princes are like to heavenly bodies, which cause good or evil times; and which have much veneration, but no rest. All precepts concerning kings, are in effect comprehended in those two remembrances: *memento quod es homo*; and *memento quod es Deus*, or *vice Dei*; the one bridleth their power, and the other their will.

Of Counsel

THE greatest trust, between man and man, is the trust of giving counsel. For in other confidences, men commit the parts of life; their lands, their goods, their children, their credit, some particular affair; but to such as they make their counsellors, they commit the whole: by how much the more, they are obliged to all faith and integrity. The wisest princes need not think it any diminution to their greatness, or derogation to their sufficiency, to rely upon counsel. God himself is not without, but hath made it one of the great names of his blessed Son: The Counsellor. Solomon hath pronounced, that in counsel is stability. Things will have their first, or second agitation: if they be not tossed upon the arguments of counsel, they will be tossed upon the waves of fortune; and be full of inconstancy, doing and undoing, like the reeling of a drunken man. Solomon's son found the force of counsel, as his father saw the necessity of it. For the beloved kingdom of God, was first rent, and broken, by ill counsel; upon which counsel, there are set for our instruction, the two marks whereby bad counsel is for ever best discerned; that it was young counsel,

for the person; and violent counsel,
for the matter.

The ancient times, do set forth in figure, both the incorporation, and inseparable conjunction, of counsel with kings, and the wise and politic use of counsel by kings: the one, in that they say Jupiter did marry Metis, which signifieth counsel; whereby they intend that Sovereignty, is married to Counsel: the other in that which followeth, which was thus: They say, after Jupiter was married to Metis, she conceived by him, and was with child, but Jupiter suffered her not to stay, till she brought forth, but eat her up; whereby he became himself with child, and was delivered of Pallas armed, out of his head. Which monstrous fable containeth a secret of empire; how kings are to make use of their counsel of state. That first, they ought to refer matters unto them, which is the first begetting, or impregnation; but when they are elaborate, moulded, and shaped in the womb of their counsel, and grow ripe, and ready to be brought forth, that then they suffer not their counsel to go through with the resolution and direction, as if it depended on them; but take the matter back into their own hands, and make it appear to the world, that the decrees and final directions (which,

because they come forth, with prudence and power, are resembled to Pallas armed) proceeded from themselves; and not only from their authority, but (the more to add reputation to themselves) from their head and device.

Let us now speak of the inconveniences of counsel, and of the remedies. The inconveniences that have been noted, in calling and using counsel, are three. First, the revealing of affairs, whereby they become less secret. Secondly, the weakening of the authority of princes, as if they were less of themselves. Thirdly, the danger of being unfaithfully counselled, and more for the good of them that counsel, than of him that is counselled. For which inconveniences, the doctrine of Italy, and practice of France, in some kings' times, hath introduced cabinet counsels; a remedy worse than the disease.

As to secrecy; princes are not bound to communicate all matters, with all counsellors; but may extract and select. Neither is it necessary, that he that consulteth what he should do, should declare what he will do. But let princes beware, that the unsecreting of their affairs, comes not from themselves. And as for cabinet counsels, it may be their motto,

plenus rimarum sum: one futile person, that maketh it his glory to tell, will do more hurt than many, that know it their duty to conceal. It is true there be some affairs, which require extreme secrecy, which will hardly go beyond one or two persons, besides the king: neither are those counsels unprosperous; for, besides the secrecy, they conunonly go on constantly, in one spirit of direction, without distraction. But then it must be a prudent king, such as is able to grind with a handmill; and those inward counsellors had need also be wise men, and especially true and trusty to the king's ends; as it was with King Henry the Seventh of England, who, in his great business, imparted himself to none, except it were to Morton and Fox.

For weakening of authority; the fable showeth the remedy. Nay, the majesty of kings, is rather exalted than diminished, when they are in the chair of counsel; neither was there ever prince, bereaved of his dependences, by his counsel, except where there hath been, either an over-greatness in one counsellor, or an over-strict combination in divers; which are things soon found, and holpen.

For the last inconvenience, that men will counsel, with an eye to

themselves; certainly, non inveniet fidem super terram is meant, of the nature of times, and not of all particular persons. There be, that are in nature faithful, and sincere, and plain, and direct; not crafty and involved; let princes, above all, draw to themselves such natures. Besides, counsellors are not commonly so united, but that one counsellor, keepeth sentinel over another; so that if any do counsel out of faction or private ends, it commonly comes to the king's ear. But the best remedy is, if princes know their counsellors, as well as their counsellors know them:

Principis est virtus maxima nosse suos.

And on the other side, counsellors should not be too speculative into their sovereign's person. The true composition of a counsellor, is rather to be skilful in their master's business, than in his nature; for then he is like to advise him, and not feed his humor. It is of singular use to princes, if they take the opinions of their counsel, both separately and together. For private opinion is more free; but opinion before others, is more reverent. In private, men are more bold in their own humors; and in consort, men are more obnoxious to others' humors; therefore it is good to take both; and of the inferior sort,

rather in private, to preserve freedom; of the greater, rather in consort, to preserve respect. It is in vain for princes, to take counsel concerning matters, if they take no counsel likewise concerning persons; for all matters are as dead images; and the life of the execution of affairs, resteth in the good choice of persons. Neither is it enough, to consult concerning persons secundum genera, as in an idea, or mathematical description, what the kind and character of the person should be; for the greatest errors are committed, and the most judgment is shown, in the choice of individuals. It was truly said, *optimi consilarii mortui*: books will speak plain, when counsellors blanch. Therefore it is good to be conversant in them, specially the books of such as themselves have been actors upon the stage.

The counsels at this day, in most places, are but familiar meetings, where matters are rather talked on, than debated. And they run too swift, to the order, or act, of counsel. It were better that in causes of weight, the matter were propounded one day, and not spoken to till the next day; in *nocte consilium*. So was it done in the Commission of Union, between England and Scotland; which was a grave and orderly assembly. I

commend set days for petitions; for both it gives the sudtors more certainty for their attendance, and it frees the meetings for matters of estate, that they may hoc agere. In choice of committees; for ripening business for the counsel, it is better to choose indifferent persons, than to make an indifferency, by putting in those, that are strong on both sides. I commend also standing commissions; as for trade, for treasure, for war, for suits, for some provinces; for where there be divers particular counsels, and but one counsel of estate (as it is in Spain), they are, in effect, no more than standing commissions: save that they have greater authority. Let such as are to inform counsels, out of their particular professions (as lawyers, seamen, mintmen, and the like) be first heard before committees; and then, as occasion serves, before the counsel. And let them not come in multitudes, or in a tribunitious manner; for that is to clamor counsels, not to inform them. A long table and a square table, or seats about the walls, seem things of form, but are things of substance; for at a long table a few at the upper end, in effect, sway all the business; but in the other form, there is more use of the counsellors' opinions, that sit lower. A king, when he presides in counsel, let him beware how he

opens his own inclination too much,
in that which he propoundeth; for
else counsellors will but take the
wind of him, and instead of giving
free counsel, sing him a song of
placebo.

Of Delays

FORTUNE is like the market; where many times if you can stay a little, the price will fall. Again, it is sometimes like Sibylla's offer; which at first, offereth the commodity at full, then consumeth part and part, and still holdeth up the price. For occasion (as it is in the common verse) turneth a bald noddle, after she hath presented her locks in front, and no hold taken; or at least turneth the handle of the bottle, first to be received, and after the belly, which is hard to clasp. There is surely no greater wisdom, than well to time the beginnings, and onsets, of things. Dangers are no more light, if they once seem light; and more dangers have deceived men, than forced them. Nay, it were better, to meet some dangers half way, though they come nothing near, than to keep too long a watch upon their approaches; for if a man watch too long, it is odds he will fall asleep. On the other side, to be deceived with too long shadows (as some have been, when the moon was low, and shone on their enemies' back), and so to shoot off before the time; or to teach dangers to come on, by over early buckling towards them; is another extreme. The ripeness, or unripeness, of the occasion (as we

said) must ever be well weighed; and generally it is good, to commit the beginnings of all great actions to Argus, with his hundred eyes, and the ends to Briareus, with his hundred hands; first to watch, and then to speed. For the helmet of Pluto, which maketh the politic man go invisible, is secrecy in the counsel, and celerity in the execution. For when things are once come to the execution, there is no secrecy, comparable to celerity; like the motion of a bullet in the air, which flieth so swift, as it outruns the eye.

Of Cunning

WE TAKE cunning for a sinister or crooked wisdom. And certainly there is a great difference, between a cunning man, and a wise man; not only in point of honesty, but in point of ability. There be, that can pack the cards, and yet cannot play well; so there are some that are good in canvasses and factions, that are otherwise weak men. Again, it is one thing to understand persons, and another thing to understand matters; for many are perfect in men's humors, that are not greatly capable of the real part of business; which is the constitution of one that hath studied men, more than books. Such men are fitter for practice, than for counsel; and they are good, but in their own alley: turn them to new men, and they have lost their aim; so as the old rule, to know a fool from a wise man, *Mitte ambos nudos ad ignotos, et videbis*, doth scarce hold for them. And because these cunning men, are like haberdashers of small wares, it is not amiss to set forth their shop.

It is a point of cunning, to wait upon him with whom you speak, with your eye; as the Jesuits give it in precept: for there be many wise men, that have secret hearts, and transparent

countenances. Yet this would be done with a demure abasing of your eye, sometimes, as the Jesuits also do use.

Another is, that when you have anything to obtain, of present despatch, you entertain and amuse the party, with whom you deal, with some other discourse; that he be not too much awake to make objections. I knew a counsellor and secretary, that never came to Queen Elizabeth of England, with bills to sign, but he would always first put her into some discourse of estate, that she mought the less mind the bills.

The like surprise may be made by moving things, when the party is in haste, and cannot stay to consider advisedly of that is moved.

If a man would cross a business, that he doubts some other would handsomely and effectually move, let him pretend to wish it well, and move it himself in such sort as may foil it.

The breaking off, in the midst of that one was about to say, as if he took himself up, breeds a greater appetite in him with whom you confer, to know more.

And because it works better, when anything seemeth to be gotten from you by question, than if you offer it of yourself, you may lay a bait for a

question, by showing another visage, and countenance, than you are wont; to the end to give occasion, for the party to ask, what the matter is of the change? As Nehemias did; And I had not before that time, been sad before the king.

In things that are tender and unpleasing, it is good to break the ice, by some whose words are of less weight, and to reserve the more weighty voice, to come in as by chance, so that he may be asked the question upon the other's speech: as Narcissus did, relating to Claudius the marriage of Messalina and Silius.

In things that a man would not be seen in himself, it is a point of cunning, to borrow the name of the world; as to say, The world says, or There is a speech abroad.

I knew one that, when he wrote a letter, he would put that, which was most material, in the postscript, as if it had been a by-matter.

I knew another that, when he came to have speech, he would pass over that, that he intended most; and go forth, and come back again, and speak of it as of a thing, that he had almost forgot.

Some procure themselves, to be surprised, at such times as it is like

the party that they work upon, will suddenly come upon them; and to be found with a letter in their hand, or doing somewhat which they are not accustomed; to the end, they may be apposed of those things, which of themselves they are desirous to utter.

It is a point of cunning, to let fall those words in a man's own name, which he would have another man learn, and use, and thereupon take advantage. I knew two, that were competitors for the secretary's place in Queen Elizabeth's time, and yet kept good quarter between themselves; and would confer, one with another, upon the business; and the one of them said, That to be a secretary, in the declination of a monarchy, was a ticklish thing, and that he did not affect it: the other straight caught up those words, and discoursed with divers of his friends, that he had no reason to desire to be secretary, in the declination of a monarchy. The first man took hold of it, and found means it was told the Queen; who, hearing of a declination of a monarchy, took it so ill, as she would never after hear of the other's suit.

There is a cunning, which we in England call, the turning of the cat in the pan; which is, when that which a man says to another, he lays it as if

another had said it to him. And to say truth, it is not easy, when such a matter passed between two, to make it appear from which of them it first moved and began.

It is a way that some men have, to glance and dart at others, by justifying themselves by negatives; as to say, This I do not; as Tigellinus did towards Burrhus, *Se non diversas spes, sed incolumitatem imperatoris simpliciter spectare.*

Some have in readiness so many tales and stories, as there is nothing they would insinuate, but they can wrap it into a tale; which serveth both to keep themselves more in guard, and to make others carry it with more pleasure. It is a good point of cunning, for a man to shape the answer he would have, in his own words and propositions; for it makes the other party stick the less.

It is strange how long some men will lie in wait to speak somewhat they desire to say; and how far about they will fetch; and how many other matters they will beat over, to come near it. It is a thing of great patience, but yet of much use.

A sudden, bold, and unexpected question doth many times surprise a man, and lay him open. Like to him that, having changed his name, and

walking in Paul's, another suddenly came behind him, and called him by his true name, whereat straightways he looked back.

But these small wares, and petty points, of cunning, are infinite; and it were a good deed to make a list of them; for that nothing doth more hurt in a state, than that cunning men pass for wise.

But certainly some there are that know the resorts and falls of business, that cannot sink into the main of it; like a house that hath convenient stairs and entries, but never a fair room. Therefore, you shall see them find out pretty looses in the conclusion, but are no ways able to examine or debate matters. And yet commonly they take advantage of their inability, and would be thought wits of direction. Some build rather upon the abusing of others, and (as we now say) putting tricks upon them, than upon soundness of their own proceedings. But Solomon saith, *Prudens advertit ad gressus suos; stultus divertit ad dolos.*

Of Wisdom For A Man's Self

AN ANT is a wise creature for itself, but it is a shrewd thing, in an orchard or garden. And certainly, men that are great lovers of themselves, waste the public. Divide with reason; between selflove and society; and be so true to thyself, as thou be not false to others; specially to thy king and country. It is a poor centre of a man's actions, himself. It is right earth. For that only stands fast upon his own centre; whereas all things, that have affinity with the heavens, move upon the centre of another, which they benefit. The referring of all to a man's self, is more tolerable in a sovereign prince; because themselves are not only themselves, but their good and evil is at the peril of the public fortune. But it is a desperate evil, in a servant to a prince, or a citizen in a republic. For whatsoever affairs pass such a man's hands, he crooketh them to his own ends; which must needs be often eccentric to the ends of his master, or state. Therefore, let princes, or states, choose such servants, as have not this mark; except they mean their service should be made but the accessory. That which maketh the effect more

pernicious, is that all proportion is lost. It were disproportion enough, for the servant's good to be preferred before the master's; but yet it is a greater extreme, when a little good of the servant, shall carry things against a great good of the master's. And yet that is the case of bad officers, treasurers, ambassadors, generals, and other false and corrupt servants; which set a bias upon their bowl, of their own petty ends and envies, to the overthrow of their master's great and important affairs. And for the most part, the good such servants receive, is after the model of their own fortune; but the hurt they sell for that good, is after the model of their master's fortune. And certainly it is the nature of extreme self-lovers, as they will set an house on fire, and it were but to roast their eggs; and yet these men many times hold credit with their masters, because their study is but to please them, and profit themselves; and for either respect, they will abandon the good of their affairs.

Wisdom for a man's self is, in many branches thereof, a depraved thing. It is the wisdom of rats, that will be sure to leave a house, somewhat before it fall. It is the wisdom of the fox, that thrusts out the badger, who digged and made room for him. It is

the wisdom of crocodiles, that shed tears when they would devour. But that which is specially to be noted is, that those which (as Cicero says of Pompey) are sui amantes, sine rivali, are many times unfortunate. And whereas they have, all their times, sacrificed to themselves, they become in the end, themselves sacrifices to the inconstancy of fortune, whose wings they thought, by their self-wisdom, to have pinioned.

Of Innovations

AS THE births of living creatures, at first are illshapen, so are all innovations, which are the births of time. Yet notwithstanding, as those that first bring honor into their family, are commonly more worthy than most that succeed, so the first precedent (if it be good) is seldom attained by imitation. For ill, to man's nature, as it stands perverted, hath a natural motion, strongest in continuance; but good, as a forced motion, strongest at first. Surely every medicine is an innovation; and he that will not apply new remedies, must expect new evils; for time is the greatest innovator; and if time of course alter things to the worse, and wisdom and counsel shall not alter them to the better, what shall be the end? It is true, that what is settled by custom, though it be not good, yet at least it is fit; and those things which have long gone together, are, as it were, confederate within themselves; whereas new things piece not so well; but though they help by their utility, yet they trouble by their inconformity. Besides, they are like strangers; more admired, and less favored. All this is true, if time stood still; which contrariwise moveth so round, that a froward retention of

custom, is as turbulent a thing as an innovation; and they that reverence too much old times, are but a scorn to the new. It were good, therefore, that men in their innovations would follow the example of time itself; which indeed innovateth greatly, but quietly, by degrees scarce to be perceived. For otherwise, whatsoever is new is unlooked for; and ever it mends some, and pairs others; and he that is holpen, takes it for a fortune, and thanks the time; and he that is hurt, for a wrong, and imputeth it to the author. It is good also, not to try experiments in states, except the necessity be urgent, or the utility evident; and well to beware, that it be the reformation, that draweth on the change, and not the desire of change, that pretendeth the reformation. And lastly, that the novelty, though it be not rejected, yet be held for a suspect; and, as the Scripture saith, that we make a stand upon the ancient way, and then look about us, and discover what is the straight and right way, and so to walk in it.

Of Dispatch

AFFECTED dispatch is one of the most dangerous things to business that can be. It is like that, which the physicians call predigestion, or hasty digestion; which is sure to fill the body full of crudities, and secret seeds of diseases. Therefore measure not dispatch, by the times of sitting, but by the advancement of the business. And as in races it is not the large stride or high lift that makes the speed; so in business, the keeping close to the matter, and not taking of it too much at once, procureth dispatch. It is the care of some, only to come off speedily for the time; or to contrive some false periods of business, because they may seem men of dispatch. But it is one thing, to abbreviate by contracting, another by cutting off. And business so handled, at several sittings or meetings, goeth commonly backward and forward in an unsteady manner. I knew a wise man that had it for a byword, when he saw men hasten to a conclusion, Stay a little, that we may make an end the sooner.

On the other side, true dispatch is a rich thing. For time is the measure of business, as money is of wares; and business is bought at a dear hand,

where there is small dispatch. The Spartans and Spaniards have been noted to be of small dispatch; Mi venga la muerte de Spagna; Let my death come from Spain; for then it will be sure to be long in coming.

Give good hearing to those, that give the first information in business; and rather direct them in the beginning, than interrupt them in the continuance of their speeches; for he that is put out of his own order, will go forward and backward, and be more tedious, while he waits upon his memory, than he could have been, if he had gone on in his own course. But sometimes it is seen, that the moderator is more troublesome, than the actor.

Iterations are commonly loss of time. But there is no such gain of time, as to iterate often the state of the question; for it chaseth away many a frivolous speech, as it is coming forth. Long and curious speeches, are as fit for dispatch, as a robe or mantle, with a long train, is for race. Prefaces and passages, and excusations, and other speeches of reference to the person, are great wastes of time; and though they seem to proceed of modesty, they are bravery. Yet beware of being too material, when there is any impediment or obstruction in men's

wills; for pre-occupation of mind ever requireth preface of speech; like a fomentation to make the unguent enter.

Above all things, order, and distribution, and singling out of parts, is the life of dispatch; so as the distribution be not too subtle: for he that doth not divide, will never enter well into business; and he that divideth too much, will never come out of it clearly. To choose time, is to save time; and an unseasonable motion, is but beating the air. There be three parts of business; the preparation, the debate or examination, and the perfection. Whereof, if you look for dispatch, let the middle only be the work of many, and the first and last the work of few. The proceeding upon somewhat conceived in writing, doth for the most part facilitate dispatch: for though it should be wholly rejected, yet that negative is more pregnant of direction, than an indefinite; as ashes are more generative than dust.

Of Seeming Wise

IT HATH been an opinion, that the French are wiser than they seem, and the Spaniards seem wiser than they are. But howsoever it be between nations, certainly it is so between man and man. For as the Apostle saith of godliness, Having a show of godliness, but denying the power thereof; so certainly there are, in point of wisdom and sufficiently, that do nothing or little very solemnly: magno conatu nugas. It is a ridiculous thing, and fit for a satire to persons of judgment, to see what shifts these formalists have, and what prospectives to make superficies to seem body, that hath depth and bulk. Some are so close and reserved, as they will not show their wares, but by a dark light; and seem always to keep back somewhat; and when they know within themselves, they speak of that they do not well know, would nevertheless seem to others, to know of that which they may not well speak. Some help themselves with countenance and gesture, and are wise by signs; as Cicero saith of Piso, that when he answered him, he fetched one of his brows up to his forehead, and bent the other down to his chin; Respondes, altero ad frontem sublato, altero ad mentum

depresso supercilio, crudelitatem tibi non placere. Some think to bear it by speaking a great word, and being peremptory; and go on, and take by admittance, that which they cannot make good. Some, whatsoever is beyond their reach, will seem to despise, or make light of it, as impertinent or curious; and so would have their ignorance seem judgment. Some are never without a difference, and commonly by amusing men with a subtilty, blanch the matter; of whom A. Gellius saith, *Hominem delirum, qui verborum minutiis rerum frangit pondera*. Of which kind also, Plato, in his Protagoras, bringeth in Prodius in scorn, and maketh him make a speech, that consisteth of distinction from the beginning to the end. Generally, such men in all deliberations find ease to be of the negative side, and affect a credit to object and foretell difficulties; for when propositions are denied, there is an end of them; but if they be allowed, it requireth a new work; which false point of wisdom is the bane of business. To conclude, there is no decaying merchant, or inward beggar, hath so many tricks to uphold the credit of their wealth, as these empty persons have, to maintain the credit of their sufficiency. Seeming wise men may make shift to get opinion; but let no man choose them

for employment; for certainly you were better take for business, a man somewhat absurd, than over-formal.

Of Friendship

IT HAD been hard for him that spake it to have put more truth and untruth together in few words, than in that speech, Whatsoever is delighted in solitude, is either a wild beast or a god. For it is most true, that a natural and secret hatred, and aversation towards society, in any man, hath somewhat of the savage beast; but it is most untrue, that it should have any character at all, of the divine nature; except it proceed, not out of a pleasure in solitude, but out of a love and desire to sequester a man's self, for a higher conversation: such as is found to have been falsely and feignedly in some of the heathen; as Epimenides the Candian, Numa the Roman, Empedocles the Sicilian, and Apollonius of Tyana; and truly and really, in divers of the ancient hermits and holy fathers of the church. But little do men perceive what solitude is, and how far it extendeth. For a crowd is not company; and faces are but a gallery of pictures; and talk but a tinkling cymbal, where there is no love. The Latin adage meeteth with it a little: *Magna civitas, magna solitudo*; because in a great town friends are scattered; so that there is not that fellowship, for the most part, which is in less neighborhoods. But

we may go further, and affirm most truly, that it is a mere and miserable solitude to want true friends; without which the world is but a wilderness; and even in this sense also of solitude, whosoever in the frame of his nature and affections, is unfit for friendship, he taketh it of the beast, and not from humanity.

A principal fruit of friendship, is the ease and discharge of the fulness and swellings of the heart, which passions of all kinds do cause and induce. We know diseases of stoppings, and suffocations, are the most dangerous in the body; and it is not much otherwise in the mind; you may take sarza to open the liver, steel to open the spleen, flowers of sulphur for the lungs, castoreum for the brain; but no receipt openeth the heart, but a true friend; to whom you may impart griefs, joys, fears, hopes, suspicions, counsels, and whatsoever lieth upon the heart to oppress it, in a kind of civil shrift or confession.

It is a strange thing to observe, how high a rate great kings and monarchs do set upon this fruit of friendship, whereof we speak: so great, as they purchase it, many times, at the hazard of their own safety and greatness. For princes, in regard of the distance of their fortune from that of their subjects and servants, cannot gather

this fruit, except (to make themselves capable thereof) they raise some persons to be, as it were, companions and almost equals to themselves, which many times sorteth to inconvenience. The modern languages give unto such persons the name of favorites, or privadoes; as if it were matter of grace, or conversation. But the Roman name attaineth the true use and cause thereof, naming them *participes curarum*; for it is that which tieth the knot. And we see plainly that this hath been done, not by weak and passionate princes only, but by the wisest and most politic that ever reigned; who have oftentimes joined to themselves some of their servants; whom both themselves have called friends, and allowed other likewise to call them in the same manner; using the word which is received between private men.

L. Sylla, when he commanded Rome, raised Pompey (after surnamed the Great) to that height, that Pompey vaunted himself for Sylla's overmatch. For when he had carried the consulship for a friend of his, against the pursuit of Sylla, and that Sylla did a little resent thereat, and began to speak great, Pompey turned upon him again, and in effect bade him be quiet; for that more men

adored the sun rising, than the sun setting. With Julius Caesar, Decimus Brutus had obtained that interest as he set him down in his testament, for heir in remainder, after his nephew. And this was the man that had power with him, to draw him forth to his death. For when Caesar would have discharged the senate, in regard of some ill presages, and specially a dream of Calpurnia; this man lifted him gently by the arm out of his chair, telling him he hoped he would not dismiss the senate, till his wife had dreamt a better dream. And it seemeth his favor was so great, as Antonius, in a letter which is recited verbatim in one of Cicero's Philippics, calleth him venefica, witch; as if he had enchanted Caesar. Augustus raised Agrippa (though of mean birth) to that height, as when he consulted with Maecenas, about the marriage of his daughter Julia, Maecenas took the liberty to tell him, that he must either marry his daughter to Agrippa, or take away his life; there was no third way, he had made him so great. With Tiberius Caesar, Sejanus had ascended to that height, as they two were termed, and reckoned, as a pair of friends. Tiberius in a letter to him saith, Haec pro amicitia nostra non occultavi; and the whole senate dedicated an altar to Friendship, as to a goddess, in respect

of the great dearness of friendship, between them two. The like, or more, was between Septimius Severus and Plautianus. For he forced his eldest son to marry the daughter of Plautianus; and would often maintain Plautianus, in doing affronts to his son; and did write also in a letter to the senate, by these words: I love the man so well, as I wish he may overlive me. Now if these princes had been as a Trajan, or a Marcus Aurelius, a man might have thought that this had proceeded of an abundant goodness of nature; but being men so wise, of such strength and severity of mind, and so extreme lovers of themselves, as all these were, it proveth most plainly that they found their own felicity (though as great as ever happened to mortal men) but as an half piece, except they mought have a friend, to make it entire; and yet, which is more, they were princes that had wives, sons, nephews; and yet all these could not supply the comfort of friendship.

It is not to be forgotten, what Comineus observeth of his first master, Duke Charles the Hardy, namely, that he would communicate his secrets with none; and least of all, those secrets which troubled him most. Whereupon he goeth on, and saith that towards his latter time, that

closeness did impair, and a little perish his understanding. Surely Comineus mought have made the same judgment also, if it had pleased him, of his second master, Lewis the Eleventh, whose closeness was indeed his tormentor. The parable of Pythagoras is dark, but true; Cor ne edito; Eat not the heart. Certainly, if a man would give it a hard phrase, those that want friends, to open themselves unto, are carnibals of their own hearts. But one thing is most admirable (wherewith I will conclude this first fruit of friendship), which is, that this communicating of a man's self to his friend, works two contrary effects; for it redoubleth joys, and cutteth griefs in halves. For there is no man, that imparteth his joys to his friend, but he joyeth the more; and no man that imparteth his griefs to his friend, but he grieveth the less. So that it is in truth, of operation upon a man's mind, of like virtue as the alchemists use to attribute to their stone, for man's body; that it worketh all contrary effects, but still to the good and benefit of nature. But yet without praying in aid of alchemists, there is a manifest image of this, in the ordinary course of nature. For in bodies, union strengtheneth and cherisheth any natural action; and on the other side, weakeneth and dulleth

any violent impression: and even so it is of minds.

The second fruit of friendship, is healthful and sovereign for the understanding, as the first is for the affections. For friendship maketh indeed a fair day in the affections, from storm and tempests; but it maketh daylight in the understanding, out of darkness, and confusion of thoughts. Neither is this to be understood only of faithful counsel, which a man receiveth from his friend; but before you come to that, certain it is, that whosoever hath his mind fraught with many thoughts, his wits and understanding do clarify and break up, in the communicating and discoursing with another; he tosseth his thoughts more easily; he marshalleth them more orderly, he seeth how they look when they are turned into words: finally, he waxeth wiser than himself; and that more by an hour's discourse, than by a day's meditation. It was well said by Themistocles, to the king of Persia, That speech was like cloth of Arras, opened and put abroad; whereby the imagery doth appear in figure; whereas in thoughts they lie but as in packs. Neither is this second fruit of friendship, in opening the understanding, restrained only to such friends as are able to give a man

counsel; (they indeed are best;) but even without that, a man learneth of himself, and bringeth his own thoughts to light, and whetteth his wits as against a stone, which itself cuts not. In a word, a man were better relate himself to a statua, or picture, than to suffer his thoughts to pass in smother.

Add now, to make this second fruit of friendship complete, that other point, which lieth more open, and falleth within vulgar observation; which is faithful counsel from a friend. Heraclitus saith well in one of his enigmas, Dry light is ever the best. And certain it is, that the light that a man receiveth by counsel from another, is drier and purer, than that which cometh from his own understanding and judgment; which is ever infused, and drenched, in his affections and customs. So as there is as much difference between the counsel, that a friend giveth, and that a man giveth himself, as there is between the counsel of a friend, and of a flatterer. For there is no such flatterer as is a man's self; and there is no such remedy against flattery of a man's self, as the liberty of a friend. Counsel is of two sorts: the one concerning manners, the other concerning business. For the first, the best preservative to keep the mind in

health, is the faithful admonition of a friend. The calling of a man's self to a strict account, is a medicine, sometime too piercing and corrosive. Reading good books of morality, is a little flat and dead. Observing our faults in others, is sometimes improper for our case. But the best receipt (best, I say, to work, and best to take) is the admonition of a friend. It is a strange thing to behold, what gross errors and extreme absurdities many (especially of the greater sort) do commit, for want of a friend to tell them of them; to the great damage both of their fame and fortune: for, as St. James saith, they are as men that look sometimes into a glass, and presently forget their own shape and favor. As for business, a man may think, if he win, that two eyes see no more than one; or that a gamester seeth always more than a looker-on; or that a man in anger, is as wise as he that hath said over the four and twenty letters; or that a musket may be shot off as well upon the arm, as upon a rest; and such other fond and high imaginations, to think himself all in all. But when all is done, the help of good counsel, is that which setteth business straight. And if any man think that he will take counsel, but it shall be by pieces; asking counsel in one business, of one man, and in another business, of another

man; it is well (that is to say, better, perhaps, than if he asked none at all); but he runneth two dangers: one, that he shall not be faithfully counselled; for it is a rare thing, except it be from a perfect and entire friend, to have counsel given, but such as shall be bowed and crooked to some ends, which he hath, that giveth it. The other, that he shall have counsel given, hurtful and unsafe (though with good meaning), and mixed partly of mischief and partly of remedy; even as if you would call a physician, that is thought good for the cure of the disease you complain of, but is unacquainted with your body; and therefore may put you in way for a present cure, but overthroweth your health in some other kind; and so cure the disease, and kill the patient. But a friend that is wholly acquainted with a man's estate, will beware, by furthering any present business, how he dasheth upon other inconvenience. And therefore rest not upon scattered counsels; they will rather distract and mislead, than settle and direct.

After these two noble fruits of friendship (peace in the affections, and support of the judgment), followeth the last fruit; which is like the pomegranate, full of many kernels; I mean aid, and bearing a part, in all actions and occasions.

Here the best way to represent to life the manifold use of friendship, is to cast and see how many things there are, which a man cannot do himself; and then it will appear, that it was a sparing speech of the ancients, to say, that a friend is another himself; for that a friend is far more than himself. Men have their time, and die many times, in desire of some things which they principally take to heart; the bestowing of a child, the finishing of a work, or the like. If a man have a true friend, he may rest almost secure that the care of those things will continue after him. So that a man hath, as it were, two lives in his desires. A man hath a body, and that body is confined to a place; but where friendship is, all offices of life are as it were granted to him, and his deputy. For he may exercise them by his friend. How many things are there which a man cannot, with any face or comeliness, say or do himself? A man can scarce allege his own merits with modesty, much less extol them; a man cannot sometimes brook to supplicate or beg; and a number of the like. But all these things are graceful, in a friend's mouth, which are blushing in a man's own. So again, a man's person hath many proper relations, which he cannot put off. A man cannot speak to his son but as a father; to his wife but as a

husband; to his enemy but upon terms: whereas a friend may speak as the case requires, and not as it sorteth with the person. But to enumerate these things were endless; I have given the rule, where a man cannot fitly play his own part; if he have not a friend, he may quit the stage.

Of Expense

RICHES are for spending, and spending for honor and good actions. Therefore extraordinary expense must be limited by the worth of the occasion; for voluntary undoing, may be as well for a man's country, as for the kingdom of heaven. But ordinary expense, ought to be limited by a man's estate; and governed with such regard, as it be within his compass; and not subject to deceit and abuse of servants; and ordered to the best show, that the bills may be less than the estimation abroad. Certainly, if a man will keep but of even hand, his ordinary expenses ought to be but to the half of his receipts; and if he think to wax rich, but to the third part. It is no baseness, for the greatest to descend and look into their own estate. Some forbear it, not upon negligence alone, but doubting to bring themselves into melancholy, in respect they shall find it broken. But wounds cannot be cured without searching. He that cannot look into his own estate at all, had need both choose well those whom he employeth, and change them often; for new are more timorous and less subtle. He that can look into his estate but seldom, it behooveth him to turn all to certainties. A man had

need, if he be plentiful in some kind of expense, to be as saving again in some other. As if he be plentiful in diet, to be saving in apparel; if he be plentiful in the hall, to be saving in the stable; and the like. For he that is plentiful in expenses of all kinds, will hardly be preserved from decay. In clearing of a man's estate, he may as well hurt himself in being too sudden, as in letting it run on too long. For hasty selling, is commonly as disadvantageable as interest. Besides, he that clears at once will relapse; for finding himself out of straits, he will revert to his custom: but he that cleareth by degrees, induceth a habit of frugality, and gaineth as well upon his mind, as upon his estate. Certainly, who hath a state to repair, may not despise small things; and commonly it is less dishonorable, to abridge petty charges, than to stoop to petty gettings. A man ought warily to begin charges which once begun will continue; but in matters that return not, he may be more magnificent.

Of the True Greatness Of Kingdoms And Estates

THE speech of Themistocles the Athenian, which was haughty and arrogant, in taking so much to himself, had been a grave and wise observation and censure, applied at large to others. Desired at a feast to touch a lute, he said, He could not fiddle, but yet he could make a small town, a great city. These words (holpen a little with a metaphor) may express two differing abilities, in those that deal in business of estate. For if a true survey be taken of counsellors and statesmen, there may be found (though rarely) those which can make a small state great, and yet cannot fiddle; as on the other side, there will be found a great many, that can fiddle very cunningly, but yet are so far from being able to make a small state great, as their gift lieth the other way; to bring a great and flourishing estate, to ruin and decay. And certainly whose degenerate arts and shifts, whereby many counsellors and governors gain both favor with their masters, and estimation with the vulgar, deserve no better name than fiddling; being things rather pleasing for the time, and graceful to themselves only, than tending to the

weal and advancement of the state which they serve. There are also (no doubt) counsellors and governors which may be held sufficient (*negotiis pares*), able to manage affairs, and to keep them from precipices and manifest inconveniences; which nevertheless are far from the ability to raise and amplify an estate in power, means, and fortune. But be the workmen what they may be, let us speak of the work; that is, the true greatness of kingdoms and estates, and the means thereof. An argument fit for great and mighty princes to have in their hand; to the end that neither by over-measuring their forces, they leese themselves in vain enterprises; nor on the other side, by undervaluing them, they descend to fearful and pusillanimous counsels.

The greatness of an estate, in bulk and territory, doth fall under measure; and the greatness of finances and revenue, doth fall under computation. The population may appear by musters; and the number and greatness of cities and towns by cards and maps. But yet there is not any thing amongst civil affairs more subject to error, than the right valuation and true judgment concerning the power and forces of an estate. The kingdom of heaven is

compared, not to any great kernel or nut, but to a grain of mustard-seed: which is one of the least grains, but hath in it a property and spirit hastily to get up and spread. So are there states, great in territory, and yet not apt to enlarge or command; and some that have but a small dimension of stem, and yet apt to be the foundations of great monarchies.

Walled towns, stored arsenals and armories, goodly races of horse, chariots of war, elephants, ordnance, artillery, and the like; all this is but a sheep in a lion's skin, except the breed and disposition of the people, be stout and warlike. Nay, number (itself) in armies importeth not much, where the people is of weak courage; for (as Virgil saith) It never troubles a wolf, how many the sheep be. The army of the Persians, in the plains of Arbela, was such a vast sea of people, as it did somewhat astonish the commanders in Alexander's army; who came to him therefore, and wished him to set upon them by night; and he answered, He would not pilfer the victory. And the defeat was easy. When Tigranes the Armenian, being encamped upon a hill with four hundred thousand men, discovered the army of the Romans, being not above fourteen thousand, marching towards him, he made himself merry

with it, and said, Yonder men are too many for an embassy, and too few for a fight. But before the sun set, he found them enow to give him the chase with infinite slaughter. Many are the examples of the great odds, between number and courage; so that a man may truly make a judgment, that the principal point of greatness in any state, is to have a race of military men. Neither is money the sinews of war (as it is trivially said), where the sinews of men's arms, in base and effeminate people, are failing. For Solon said well to Croesus (when in ostentation he showed him his gold), Sir, if any other come, that hath better iron, than you, he will be master of all this gold. Therefore let any prince or state think solely of his forces, except his militia of natives be of good and valiant soldiers. And let princes, on the other side, that have subjects of martial disposition, know their own strength; unless they be otherwise wanting unto themselves. As for mercenary forces (which is the help in this case), all examples show, that whatsoever estate or prince doth rest upon them, he may spread his feathers for a time, but he will mew them soon after.

The blessing of Judah and Issachar will never meet; that the same people, or nation, should be both the lion's

whelp and the ass between burthens; neither will it be, that a people overlaid with taxes, should ever become valiant and martial. It is true that taxes levied by consent of the estate, do abate men's courage less: as it hath been seen notably, in the excises of the Low Countries; and, in some degree, in the subsidies of England. For you must note, that we speak now of the heart, and not of the purse. So that although the same tribute and tax, laid by consent or by imposing, be all one to the purse, yet it works diversely upon the courage. So that you may conclude, that no people overcharged with tribute, is fit for empire.

Let states that aim at greatness, take heed how their nobility and gentlemen do multiply too fast. For that maketh the common subject, grow to be a peasant and base swain, driven out of heart, and in effect but the gentleman's laborer. Even as you may see in coppice woods; if you leave your staddles too thick, you shall never have clean underwood, but shrubs and bushes. So in countries, if the gentlemen be too many, the commons will be base; and you will bring it to that, that not the hundred poll, will be fit for an helmet; especially as to the infantry, which is the nerve of an army; and so

there will be great population, and little strength. This which I speak of, hath been nowhere better seen, than by comparing of England and France; whereof England, though far less in territory and population, hath been (nevertheless) an overmatch; in regard the middle people of England make good soldiers, which the peasants of France do not. And herein the device of king Henry the Seventh (whereof I have spoken largely in the History of his Life) was profound and admirable; in making farms and houses of husbandry of a standard; that is, maintained with such a proportion of land unto them, as may breed a subject to live in convenient plenty and no servile condition; and to keep the plough in the hands of the owners, and not mere hirelings. And thus indeed you shall attain to Virgil's character which he gives to ancient Italy:

Terra potens armis atque ubere glebae.

Neither is that state (which, for any thing I know, is almost peculiar to England, and hardly to be found anywhere else, except it be perhaps in Poland) to be passed over; I mean the state of free servants, and attendants upon noblemen and gentlemen; which are no ways inferior unto the yeomanry for arms. And therefore

out of all questions, the splendor and magnificence, and great retinues and hospitality, of noblemen and gentlemen, received into custom, doth much conduce unto martial greatness. Whereas, contrariwise, the close and reserved living of noblemen and gentlemen, causeth a penury of military forces.

By all means it is to be procured, that the trunk of Nebuchadnezzar's tree of monarchy, be great enough to bear the branches and the boughs; that is, that the natural subjects of the crown or state, bear a sufficient proportion to the stranger subjects, that they govern. Therefore all states that are liberal of naturalization towards strangers, are fit for empire. For to think that an handful of people can, with the greatest courage and policy in the world, embrace too large extent of dominion, it may hold for a time, but it will fail suddenly. The Spartans were a nice people in point of naturalization; whereby, while they kept their compass, they stood firm; but when they did spread, and their boughs were becomen too great for their stem, they became a windfall, upon the sudden. Never any state was in this point so open to receive strangers into their body, as were the Romans. Therefore it sorted with them accordingly; for they grew to

the greatest monarchy. Their manner was to grant naturalization (which they called *jus civitatis*), and to grant it in the highest degree; that is, not only *jus commercii*, *jus connubii*, *jus haereditatis*; but also *jus suffragii*, and *jus honorum*. And this not to singular persons alone, but likewise to whole families; yea to cities, and sometimes to nations. Add to this their custom of plantation of colonies; whereby the Roman plant was removed into the soil of other nations. And putting both constitutions together, you will say that it was not the Romans that spread upon the world, but it was the world that spread upon the Romans; and that was the sure way of greatness. I have marvelled, sometimes, at Spain, how they clasp and contain so large dominions, with so few natural Spaniards; but sure the whole compass of Spain, is a very great body of a tree; far above Rome and Sparta at the first. And besides, though they have not had that usage, to naturalize liberally, yet they have that which is next to it; that is, to employ, almost indifferently, all nations in their militia of ordinary soldiers; yea, and sometimes in their highest commands. Nay, it seemeth at this instant they are sensible, of this want of natives; as by the Pragmatical Sanction, now published,

appeareth.

It is certain that sedentary, and within-door arts, and delicate manufactures (that require rather the finger than the arm), have, in their nature, a contrariety to a military disposition. And generally, all warlike people are a little idle, and love danger better than travail. Neither must they be too much broken of it, if they shall be preserved in vigor. Therefore it was great advantage, in the ancient states of Sparta, Athens, Rome, and others, that they had the use of slaves, which commonly did rid those manufactures. But that is abolished, in greatest part, by the Christian law. That which cometh nearest to it, is to leave those arts chiefly to strangers (which, for that purpose, are the more easily to be received), and to contain the principal bulk of the vulgar natives, within those three kinds,—tillers of the ground; free servants; and handicraftsmen of strong and manly arts, as smiths, masons, carpenters, etc.; not reckoning professed soldiers.

But above all, for empire and greatness, it importeth most, that a nation do profess arms, as their principal honor, study, and occupation. For the things which we formerly have spoken of, are but

habilitations towards arms; and what is habilitation without intention and act? Romulus, after his death (as they report or feign), sent a present to the Romans, that above all, they should intend arms; and then they should prove the greatest empire of the world. The fabric of the state of Sparta was wholly (though not wisely) framed and composed, to that scope and end. The Persians and Macedonians had it for a flash. The Gauls, Germans, Goths, Saxons, Normans, and others, had it for a time. The Turks have it at this day, though in great declination. Of Christian Europe, they that have it are, in effect, only the Spaniards. But it is so plain, that every man profiteth in that, he most intendeth, that it needeth not to be stood upon. It is enough to point at it; that no nation which doth not directly profess arms, may look to have greatness fall into their mouths. And on the other side, it is a most certain oracle of time, that those states that continue long in that profession (as the Romans and Turks principally have done) do wonders. And those that have professed arms but for an age, have, notwithstanding, commonly attained that greatness, in that age, which maintained them long after, when their profession and exercise of arms hath grown to decay.

Incident to this point is, for a state to have those laws or customs, which may reach forth unto them just occasions (as may be pretended) of war. For there is that justice, imprinted in the nature of men, that they enter not upon wars (whereof so many calamities do ensue) but upon some, at the least specious, grounds and quarrels. The Turk hath at hand, for cause of war, the propagation of his law or sect; a quarrel that he may always command. The Romans, though they esteemed the extending the limits of their empire, to be great honor to their generals, when it was done, yet they never rested upon that alone, to begin a war. First, therefore, let nations that pretend to greatness have this; that they be sensible of wrongs, either upon borderers, merchants, or politic ministers; and that they sit not too long upon a provocation. Secondly, let them be prest, and ready to give aids and succors, to their confederates; as it ever was with the Romans; insomuch, as if the confederate had leagues defensive, with divers other states, and, upon invasion offered, did implore their aids severally, yet the Romans would ever be the foremost, and leave it to none other to have the honor. As for the wars which were anciently made, on the behalf of a kind of party, or tacit

conformity of estate, I do not see how they may be well justified: as when the Romans made a war, for the liberty of Grecia; or when the Lacedaemonians and Athenians, made wars to set up or pull down democracies and oligarchies; or when wars were made by foreigners, under the pretence of justice or protection, to deliver the subjects of others, from tyranny and oppression; and the like. Let it suffice, that no estate expect to be great, that is not awake upon any just occasion of arming.

No body can be healthful without exercise, neither natural body nor politic; and certainly to a kingdom or estate, a just and honorable war, is the true exercise. A civil war, indeed, is like the heat of a fever; but a foreign war is like the heat of exercise, and serveth to keep the body in health; for in a slothful peace, both courages will effeminate, and manners corrupt. But howsoever it be for happiness, without all question, for greatness, it maketh to be still for the most part in arms; and the strength of a veteran army (though it be a chargeable business) always on foot, is that which commonly giveth the law, or at least the reputation, amongst all neighbor states; as may well be seen in Spain, which hath had, in one part or other,

a veteran army almost continually, now by the space of six score years.

To be master of the sea, is an abridgment of a monarchy. Cicero, writing to Atticus of Pompey his preparation against Caesar, saith, Consilium Pompeii plane Themistocleum est; putat enim, qui mari potitur, eum rerum potiri. And, without doubt, Pompey had tired out Caesar, if upon vain confidence, he had not left that way. We see the great effects of battles by sea. The battle of Actium, decided the empire of the world. The battle of Lepanto, arrested the greatness of the Turk. There be many examples, where sea-fights have been final to the war; but this is when princes or states have set up their rest, upon the battles. But thus much is certain, that he that commands the sea, is at great liberty, and may take as much, and as little, of the war as he will. Whereas those that be strongest by land, are many times nevertheless in great straits. Surely, at this day, with us of Europe, the vantage of strength at sea (which is one of the principal dowries of this kingdom of Great Britain) is great; both because most of the kingdoms of Europe, are not merely inland, but girt with the sea most part of their compass; and because the wealth of both Indies seems in great part, but

an accessory to the command of the seas.

The wars of latter ages seem to be made in the dark, in respect of the glory, and honor, which reflected upon men from the wars, in ancient time. There be now, for martial encouragement, some degrees and orders of chivalry; which nevertheless are conferred promiscuously, upon soldiers and no soldiers; and some remembrance perhaps, upon the scutcheon; and some hospitals for maimed soldiers; and such like things. But in ancient times, the trophies erected upon the place of the victory; the funeral laudatives and monuments for those that died in the wars; the crowns and garlands personal; the style of emperor, which the great kings of the world after borrowed; the triumphs of the generals, upon their return; the great donatives and largesses, upon the disbanding of the armies; were things able to inflame all men's courages. But above all, that of the triumph, amongst the Romans, was not pageants or gaudery, but one of the wisest and noblest institutions, that ever was. For it contained three things: honor to the general; riches to the treasury out of the spoils; and donatives to the army. But that honor, perhaps were not fit for monarchies;

except it be in the person of the monarch himself, or his sons; as it came to pass in the times of the Roman emperors, who did improprie the actual triumphs to themselves, and their sons, for such wars as they did achieve in person; and left only, for wars achieved by subjects, some triumphal garments and ensigns to the general.

To conclude: no man can by care taking (as the Scripture saith) add a cubit to his stature, in this little model of a man's body; but in the great frame of kingdoms and commonwealths, it is in the power of princes or estates, to add amplitude and greatness to their kingdoms; for by introducing such ordinances, constitutions, and customs, as we have now touched, they may sow greatness to their posterity and succession. But these things are commonly not observed, but left to take their chance.

Of Regiment Of Health

THERE is a wisdom in this; beyond the rules of physic: a man's own observation, what he finds good of, and what he finds hurt of, is the best physic to preserve health. But it is a safer conclusion to say, This agreeth not well with me, therefore, I will not continue it; than this, I find no offence of this, therefore I may use it. For strength of nature in youth, passeth over many excesses, which are owing a man till his age. Discern of the coming on of years, and think not to do the same things still; for age will not be defied. Beware of sudden change, in any great point of diet, and, if necessity enforce it, fit the rest to it. For it is a secret both in nature and state, that it is safer to change many things, than one. Examine thy customs of diet, sleep, exercise, apparel, and the like; and try, in any thing thou shalt judge hurtful, to discontinue it, by little and little; but so, as if thou dost find any inconvenience by the change, thou come back to it again: for it is hard to distinguish that which is generally held good and wholesome, from that which is good particularly, and fit for thine own body. To be free-minded and cheerfully disposed, at hours of meat, and of sleep, and of exercise, is

one of the best precepts of long lasting. As for the passions, and studies of the mind; avoid envy, anxious fears; anger fretting inwards; subtle and knotty inquisitions; joys and exhilarations in excess; sadness not communicated. Entertain hopes; mirth rather than joy; variety of delights, rather than surfeit of them; wonder and admiration, and therefore novelties; studies that fill the mind with splendid and illustrious objects, as histories, fables, and contemplations of nature. If you fly physic in health altogether, it will be too strange for your body, when you shall need it. If you make it too familiar, it will work no extraordinary effect, when sickness cometh. I commend rather some diet for certain seasons, than frequent use of physic, except it be grown into a custom. For those diets alter the body more, and trouble it less. Despise no new accident in your body, but ask opinion of it. In sickness, respect health principally; and in health, action. For those that put their bodies to endure in health, may in most sicknesses, which are not very sharp, be cured only with diet, and tendering. Celsus could never have spoken it as a physician, had he not been a wise man withal, when he giveth it for one of the great precepts of health and lasting, that a man do

vary, and interchange contraries, but with an inclination to the more benign extreme: use fasting and full eating, but rather full eating; watching and sleep, but rather sleep; sitting and exercise, but rather exercise; and the like. So shall nature be cherished, and yet taught masteries. Physicians are, some of them, so pleasing and conformable to the humor of the patient, as they press not the true cure of the disease; and some other are so regular, in proceeding according to art for the disease, as they respect not sufficiently the condition of the patient. Take one of a middle temper; or if it may not be found in one man, combine two of either sort; and forget not to call as well, the best acquainted with your body, as the best reputed of for his faculty.

Of Suspicion

SUSPICIONS amongst thoughts, are like bats amongst birds, they ever fly by twilight. Certainly they are to be repressed, or at least well guarded: for they cloud the mind; they leese friends; and they check with business, whereby business cannot go on currently and constantly. They dispose kings to tyranny, husbands to jealousy, wise men to irresolution and melancholy. They are defects, not in the heart, but in the brain; for they take place in the stoutest natures; as in the example of Henry the Seventh of England. There was not a more suspicious man, nor a more stout. And in such a composition they do small hurt. For commonly they are not admitted, but with examination, whether they be likely or no. But in fearful natures they gain ground too fast. There is nothing makes a man suspect much, more than to know little; and therefore men should remedy suspicion, by procuring to know more, and not to keep their suspicions in smother. What would men have? Do they think, those they employ and deal with, are saints? Do they not think, they will have their own ends, and be truer to themselves, than to them? Therefore there is no better

way, to moderate suspicions, than to account upon such suspicions as true, and yet to bridle them as false. For so far a man ought to make use of suspicions, as to provide, as if that should be true, that he suspects, yet it may do him no hurt. Suspicions that the mind of itself gathers, are but buzzes; but suspicions that are artificially nourished, and put into men's heads, by the tales and whisperings of others, have stings. Certainly, the best mean, to clear the way in this same wood of suspicions, is frankly to communicate them with the party, that he suspects; for thereby he shall be sure to know more of the truth of them, than he did before; and withal shall make that party more circumspect, not to give further cause of suspicion. But this would not be done to men of base natures; for they, if they find themselves once suspected, will never be true. The Italian says, *Sospetto licentia fede*; as if suspicion, did give a passport to faith; but it ought, rather, to kindle it to discharge itself.

Of Discourse

SOME, in their discourse, desire rather commendation of wit, in being able to hold all arguments, than of judgment, in discerning what is true; as if it were a praise, to know what might be said, and not, what should be thought. Some have certain common places, and themes, wherein they are good and want variety; which kind of poverty is for the most part tedious, and when it is once perceived, ridiculous. The honorablest part of talk, is to give the occasion; and again to moderate, and pass to somewhat else; for then a man leads the dance. It is good, in discourse and speech of conversation, to vary and intermingle speech of the present occasion, with arguments, tales with reasons, asking of questions, with telling of opinions, and jest with earnest: for it is a dull thing to tire, and, as we say now, to jade, any thing too far. As for jest, there be certain things, which ought to be privileged from it; namely, religion, matters of state, great persons, any man's present business of importance, and any case that deserveth pity. Yet there be some, that think their wits have been asleep, except they dart out somewhat that is piquant, and to the quick. That is a

vein which would be bridled:

Parce, puer, stimulis, et fortius utere
loris.

And generally, men ought to find the difference, between saltness and bitterness. Certainly, he that hath a satirical vein, as he maketh others afraid of his wit, so he had need be afraid of others' memory. He that questioneth much, shall learn much, and content much; but especially, if he apply his questions to the skill of the persons whom he asketh; for he shall give them occasion, to please themselves in speaking, and himself shall continually gather knowledge. But let his questions not be troublesome; for that is fit for a poser. And let him be sure to leave other men, their turns to speak. Nay, if there be any, that would reign and take up all the time, let him find means to take them off, and to bring others on; as musicians use to do, with those that dance too long galliards. If you dissemble, sometimes, your knowledge of that you are thought to know, you shall be thought, another time, to know that you know not. Speech of a man's self ought to be seldom, and well chosen. I knew one, was wont to say in scorn, He must needs be a wise man, he speaks so much of himself: and there is but one case, wherein a man may

commend himself with good grace; and that is in commending virtue in another; especially if it be such a virtue, whereunto himself pretendeth. Speech of touch towards others, should be sparingly used; for discourse ought to be as a field, without coming home to any man. I knew two noblemen, of the west part of England, whereof the one was given to scoff, but kept ever royal cheer in his house; the other would ask, of those that had been at the other's table, Tell truly, was there never a flout or dry blow given? To which the guest would answer, Such and such a thing passed. The lord would say, I thought, he would mar a good dinner. Discretion of speech, is more than eloquence; and to speak agreeably to him, with whom we deal, is more than to speak in good words, or in good order. A good continued speech, without a good speech of interlocution, shows slowness: and a good reply or second speech, without a good settled speech, sheweth shallowness and weakness. As we see in beasts, that those that are weakest in the course, are yet nimblest in the turn; as it is betwixt the greyhound and the hare. To use too many circumstances, ere one come to the matter, is wearisome; to use none at all, is blunt.

Of Plantations

PLANTATIONS are amongst ancient, primitive, and heroical works. When the world was young, it begat more children; but now it is old, it begets fewer: for I may justly account new plantations, to be the children of former kingdoms. I like a plantation in a pure soil; that is, where people are not displanted, to the end, to plant in others. For else it is rather an extirpation, than a plantation. Planting of countries, is like planting of woods; for you must make account to leese almost twenty years' profit, and expect your recompense in the end. For the principal thing, that hath been the destruction of most plantations, hath been the base and hasty drawing of profit, in the first years. It is true, speedy profit is not to be neglected, as far as may stand with the good of the plantation, but no further. It is a shameful and unblest thing, to take the scum of people, and wicked condemned men, to be the people with whom you plant; and not only so, but it spoileth the plantation; for they will ever live like rogues, and not fall to work, but be lazy, and do mischief, and spend victuals, and be quickly weary, and then certify over to their country, to the discredit of the

plantation. The people wherewith you plant ought to be gardeners, ploughmen, laborers, smiths, carpenters, joiners, fishermen, fowlers, with some few apothecaries, surgeons, cooks, and bakers. In a country of plantation, first look about, what kind of victual the country yields of itself to hand; as chestnuts, walnuts, pineapples, olives, dates, plums, cherries, wild honey, and the like; and make use of them. Then consider what victual or esculent things there are, which grow speedily, and within the year; as parsnips, carrots, turnips, onions, radish, artichokes of Hierusalem, maize, and the like. For wheat, barley, and oats, they ask too much labor; but with pease and beans you may begin, both because they ask less labor, and because they serve for meat, as well as for bread. And of rice, likewise cometh a great increase, and it is a kind of meat. Above all, there ought to be brought store of biscuit, oat-meal, flour, meal, and the like, in the beginning, till bread may be had. For beasts, or birds, take chiefly such as are least subject to diseases, and multiply fastest; as swine, goats, cocks, hens, turkeys, geese, house-doves, and the like. The victual in plantations, ought to be expended almost as in a besieged town; that is, with certain

allowance. And let the main part of the ground, employed to gardens or corn, be to a common stock; and to be laid in, and stored up, and then delivered out in proportion; besides some spots of ground, that any particular person will manure for his own private. Consider likewise what commodities, the soil where the plantation is, doth naturally yield, that they may some way help to defray the charge of the plantation (so it be not, as was said, to the untimely prejudice of the main business), as it hath fared with tobacco in Virginia. Wood commonly aboundeth but too much; and therefore timber is fit to be one. If there be iron ore, and streams whereupon to set the mills, iron is a brave commodity where wood aboundeth. Making of bay-salt, if the climate be proper for it, would be put in experience. Growing silk likewise, if any be, is a likely commodity. Pitch and tar, where store of firs and pines are, will not fail. So drugs and sweet woods, where they are, cannot but yield great profit. Soap-ashes likewise, and other things that may be thought of. But moil not too much under ground; for the hope of mines is very uncertain, and useth to make the planters lazy, in other things. For government; let it be in the hands of one, assisted with some counsel; and

let them have commission to exercise martial laws, with some limitation. And above all, let men make that profit, of being in the wilderness, as they have God always, and his service, before their eyes. Let not the government of the plantation, depend upon too many counsellors, and undertakers, in the country that planteth, but upon a temperate number; and let those be rather noblemen and gentlemen, than merchants; for they look ever to the present gain. Let there be freedom from custom, till the plantation be of strength; and not only freedom from custom, but freedom to carry their commodities, where they may make their best of them, except there be some special cause of caution. Cram not in people, by sending too fast company after company; but rather harken how they waste, and send supplies proportionably; but so, as the number may live well in the plantation, and not by surcharge be in penury. It hath been a great endangering to the health of some plantations, that they have built along the sea and rivers, in marish and unwholesome grounds. Therefore, though you begin there, to avoid carriage and like discommodities, yet build still rather upwards from the streams, than along. It concerneth likewise the health of the plantation,

that they have good store of salt with them, that they may use it in their victuals, when it shall be necessary. If you plant where savages are, do not only entertain them, with trifles and gingles, but use them justly and graciously, with sufficient guard nevertheless; and do not win their favor, by helping them to invade their enemies, but for their defence it is not amiss; and send oft of them, over to the country that plants, that they may see a better condition than their own, and commend it when they return. When the plantation grows to strength, then it is time to plant with women, as well as with men; that the plantation may spread into generations, and not be ever pieced from without. It is the sinfulness thing in the world, to forsake or destitute a plantation once in forwardness; for besides the dishonor, it is the guiltiness of blood of many commiserable persons.

Of Riches

I CANNOT call riches better than the baggage of virtue. The Roman word is better, impedimenta. For as the baggage is to an army, so is riches to virtue. It cannot be spared, nor left behind, but it hindereth the march; yea, and the care of it, sometimes loseth or disturbeth the victory. Of great riches there is no real use, except it be in the distribution; the rest is but conceit. So saith Solomon, Where much is, there are many to consume it; and what hath the owner, but the sight of it with his eyes? The personal fruition in any man, cannot reach to feel great riches: there is a custody of them; or a power of dole, and donative of them; or a fame of them; but no solid use to the owner. Do you not see what feigned prices, are set upon little stones and rarities? and what works of ostentation are undertaken, because there might seem to be some use of great riches? But then you will say, they may be of use, to buy men out of dangers or troubles. As Solomon saith, Riches are as a strong hold, in the imagination of the rich man. But this is excellently expressed, that it is in imagination, and not always in fact. For certainly great riches, have sold more men, than they have bought out.

Seek not proud riches, but such as thou mayest get justly, use soberly, distribute cheerfully, and leave contentedly. Yet have no abstract nor friarly contempt of them. But distinguish, as Cicero saith well of Rabirius Posthumus, *In studio rei amplificandae apparebat, non avaritiae praedam, sed instrumentum bonitati quaeri.* Harken also to Solomon, and beware of hasty gathering of riches; *Qui festinat ad divitias, non erit insons.* The poets feign, that when Plutus (which is Riches) is sent from Jupiter, he limps and goes slowly; but when he is sent from Pluto, he runs, and is swift of foot. Meaning that riches gotten by good means, and just labor, pace slowly; but when they come by the death of others (as by the course of inheritance, testaments, and the like), they come tumbling upon a man. But it mought be applied likewise to Pluto, taking him for the devil. For when riches come from the devil (as by fraud and oppression, and unjust means), they come upon speed. The ways to enrich are many, and most of them foul. Parsimony is one of the best, and yet is not innocent; for it withholdeth men from works of liberality and charity. The improvement of the ground, is the most natural obtaining of riches; for it is our great mother's blessing, the

earth's; but it is slow. And yet where men of great wealth do stoop to husbandry, it multiplieth riches exceedingly. I knew a nobleman in England, that had the greatest audits of any man in my time; a great grazier, a great sheep-master, a great timber man, a great collier, a great corn-master, a great lead-man, and so of iron, and a number of the like points of husbandry. So as the earth seemed a sea to him, in respect of the perpetual importation. It was truly observed by one, that himself came very hardly, to a little riches, and very easily, to great riches. For when a man's stock is come to that, that he can expect the prime of markets, and overcome those bargains, which for their greatness are few men's money, and be partner in the industries of younger men, he cannot but increase mainly. The gains of ordinary trades and vocations are honest; and furthered by two things chiefly: by diligence, and by a good name, for good and fair dealing. But the gains of bargains, are of a more doubtful nature; when men shall wait upon others' necessity, broke by servants and instruments to draw them on, put off others cunningly, that would be better chapmen, and the like practices, which are crafty and naught. As for the chopping of bargains, when a man buys not to

hold but to sell over again, that commonly grindeth double, both upon the seller, and upon the buyer. Sharings do greatly enrich, if the hands be well chosen, that are trusted. Usury is the certainest means of gain, though one of the worst; as that whereby a man doth eat his bread, in sudore vultus alieni; and besides, doth plough upon Sundays. But yet certain though it be, it hath flaws; for that the scriveners and brokers do value unsound men, to serve their own turn. The fortune in being the first, in an invention or in a privilege, doth cause sometimes a wonderful overgrowth in riches; as it was with the first sugar man, in the Canaries. Therefore if a man can play the true logician, to have as well judgment, as invention, he may do great matters; especially if the times be fit. He that resteth upon gains certain, shall hardly grow to great riches; and he that puts all upon adventures, doth oftentimes break and come to poverty: it is good, therefore, to guard adventures with certainties, that may uphold losses. Monopolies, and coemption of wares for re-sale, where they are not restrained, are great means to enrich; especially if the party have intelligence, what things are like to come into request, and so store himself beforehand. Riches gotten by

service, though it be of the best rise, yet when they are gotten by flattery, feeding humors, and other servile conditions, they may be placed amongst the worst. As for fishing for testaments and executorships (as Tacitus saith of Seneca, *testamenta et orbos tamquam indagine capi*), it is yet worse; by how much men submit themselves to meaner persons, than in service. Believe not much, them that seem to despise riches; for they despise them, that despair of them; and none worse, when they come to them. Be not penny-wise; riches have wings, and sometimes they fly away of themselves, sometimes they must be set flying, to bring in more. Men leave their riches, either to their kindred, or to the public; and moderate portions, prosper best in both. A great state left to an heir, is as a lure to all the birds of prey round about, to seize on him, if he be not the better stablished in years and judgment. Likewise glorious gifts and foundations, are like sacrifices without salt; and but the painted sepulchres of alms, which soon will putrefy, and corrupt inwardly. Therefore measure not thine advancements, by quantity, but frame them by measure: and defer not charities till death; for, certainly, if a man weigh it rightly, he that doth so, is rather liberal of another man's, than

of his own.

Of Prophecies

I MEAN not to speak of divine prophecies; nor of heathen oracles; nor of natural predictions; but only of prophecies that have been of certain memory, and from hidden causes. Saith the Pythonissa to Saul, Tomorrow thou and thy son shall be with me. Homer hath these verses:

At domus Aeneae cunctis
dominabitur oris, Et nati natorum, et
qui nascentur ab illis.

A prophecy, as it seems, of the Roman empire. Seneca the tragedian hath these verses:

—*Venient annis*
Saecula seris, quibus
Vincula rerum laxet
Pateat Tellus, Tiphys
Detegat orbes; nec
Ultima Thule:

a prophecy of the discovery of America. The daughter of Polycrates, dreamed that Jupiter bathed her father, and Apollo anointed him; and it came to pass, that he was crucified in an open place, where the sun made his body run with sweat, and the rain washed it. Philip of Macedon dreamed, he sealed up his wife's belly; whereby he did expound it, that

his wife should be barren; but Aristander the soothsayer, told him his wife was with child, because men do not use to seal vessels, that are empty. A phantasm that appeared to M. Brutus, in his tent, said to him, *Philippis iterum me videbis*. Tiberius said to Galba, *Tu quoque, Galba, degustabis imperium*. In Vespasian's time, there went a prophecy in the East, that those that should come forth of Judea, should reign over the world: which though it may be was meant of our Savior; yet Tacitus expounds it of Vespasian. Domitian dreamed, the night before he was slain, that a golden head was growing, out of the nape of his neck: and indeed, the succession that followed him for many years, made golden times. Henry the Sixth of England, said of Henry the Seventh, when he was a lad, and gave him water, This is the lad that shall enjoy the crown, for which we strive. When I was in France, I heard from one Dr. Pena, that the Queen Mother, who was given to curious arts, caused the King her husband's nativity to be calculated, under a false name; and the astrologer gave a judgment, that he should be killed in a duel; at which the Queen laughed, thinking her husband to be above challenges and duels: but he was slain upon a course at tilt, the splinters of the staff

of Montgomery going in at his
beaver. The trivial prophecy, which I
heard when I was a child, and Queen
Elizabeth was in the flower of her
years, was,

When hempe is spur

England's done:

whereby it was generally conceived,
that after the princes had reigned,
which had the principal letters of that
word hempe (which were Henry,
Edward, Mary, Philip, and
Elizabeth), England should come to
utter confusion; which, thanks be to
God, is verified only in the change of
the name; for that the King's style, is
now no more of England but of
Britain. There was also another
prophecy, before the year of '88,
which I do not well understand.

*There shall be seen
Between the Baugh
The black fleet of N
When that that is co
England build hous
For after wars shall*

It was generally conceived to be
meant, of the Spanish fleet that came
in '88: for that the king of Spain's
surname, as they say, is Norway. The
prediction of Regiomontanus,

Octogesimus octavu

was thought likewise accomplished in the sending of that great fleet, being the greatest in strength, though not in number, of all that ever swam upon the sea. As for Cleon's dream, I think it was a jest. It was, that he was devoured of a long dragon; and it was expounded of a maker of sausages, that troubled him exceedingly. There are numbers of the like kind; especially if you include dreams, and predictions of astrology. But I have set down these few only, of certain credit, for example. My judgment is, that they ought all to be despised; and ought to serve but for winter talk by the fireside. Though when I say despised, I mean it as for belief; for otherwise, the spreading, or publishing, of them, is in no sort to be despised. For they have done much mischief; and I see many severe laws made, to suppress them. That that hath given them grace, and some credit, consisteth in three things. First, that men mark when they hit, and never mark when they miss; as they do generally also of dreams. The second is, that probable conjectures, or obscure traditions, many times turn themselves into prophecies; while the nature of man, which coveteth divination, thinks it

no peril to foretell that which indeed they do but collect. As that of Seneca's verse. For so much was then subject to demonstration, that the globe of the earth had great parts beyond the Atlantic, which mought be probably conceived not to be all sea: and adding thereto the tradition in Plato's Timaeus, and his Atlanticus, it mought encourage one to turn it to a prediction. The third and last (which is the great one) is, that almost all of them, being infinite in number, have been impostures, and by idle and crafty brains merely contrived and feigned, after the event past.

Of Ambition

AMBITION is like choler; which is an humor that maketh men active, earnest, full of alacrity, and stirring, if it be not stopped. But if it be stopped, and cannot have his way, it becometh adust, and thereby malign and venomous. So ambitious men, if they find the way open for their rising, and still get forward, they are rather busy than dangerous; but if they be checked in their desires, they become secretly discontent, and look upon men and matters with an evil eye, and are best pleased, when things go backward; which is the worst property in a servant of a prince, or state. Therefore it is good for princes, if they use ambitious men, to handle it, so as they be still progressive and not retrograde; which, because it cannot be without inconvenience, it is good not to use such natures at all. For if they rise not with their service, they will take order, to make their service fall with them. But since we have said, it were good not to use men of ambitious natures, except it be upon necessity, it is fit we speak, in what cases they are of necessity. Good commanders in the wars must be taken, be they never so ambitious; for the use of their service, dispenseth with the rest;

and to take a soldier without ambition, is to pull off his spurs. There is also great use of ambitious men, in being screens to princes in matters of danger and envy; for no man will take that part, except he be like a seeled dove, that mounts and mounts, because he cannot see about him. There is use also of ambitious men, in pulling down the greatness of any subject that overtops; as Tiberius used Marco, in the pulling down of Sejanus. Since, therefore, they must be used in such cases, there resteth to speak, how they are to be bridled, that they may be less dangerous. There is less danger of them, if they be of mean birth, than if they be noble; and if they be rather harsh of nature, than gracious and popular: and if they be rather new raised, than grown cunning, and fortified, in their greatness. It is counted by some, a weakness in princes, to have favorites; but it is, of all others, the best remedy against ambitious great-ones. For when the way of pleasuring, and displeasuring, lieth by the favorite, it is impossible any other should be overgreat. Another means to curb them, is to balance them by others, as proud as they. But then there must be some middle counsellors, to keep things steady; for without that ballast, the ship will roll too much. At the least, a prince may

animate and inure some meaner persons, to be as it were scourges, to ambitions men. As for the having of them obnoxious to ruin; if they be of fearful natures, it may do well; but if they be stout and daring, it may precipitate their designs, and prove dangerous. As for the pulling of them down, if the affairs require it, and that it may not be done with safety suddenly, the only way is the interchange, continually, of favors and disgraces; whereby they may not know what to expect, and be, as it were, in a wood. Of ambitions, it is less harmful, the ambition to prevail in great things, than that other, to appear in every thing; for that breeds confusion, and mars business. But yet it is less danger, to have an ambitious man stirring in business, than great in dependences. He that seeketh to be eminent amongst able men, hath a great task; but that is ever good for the public. But he, that plots to be the only figure amongst ciphers, is the decay of a whole age. Honor hath three things in it: the vantage ground to do good; the approach to kings and principal persons; and the raising of a man's own fortunes. He that hath the best of these intentions, when he aspireth, is an honest man; and that prince, that can discern of these intentions in another that aspireth, is a wise prince. Generally, let princes

and states choose such ministers, as are more sensible of duty than of using; and such as love business rather upon conscience, than upon bravery, and let them discern a busy nature, from a willing mind.

Of Masques And Triumphs

THESE things are but toys, to come amongst such serious observations. But yet, since princes will have such things, it is better they should be graced with elegancy, than daubed with cost. Dancing to song, is a thing of great state and pleasure. I understand it, that the song be in quire, placed aloft, and accompanied with some broken music; and the ditty fitted to the device. Acting in song, especially in dialogues, hath an extreme good grace; I say acting, not dancing (for that is a mean and vulgar thing); and the voices of the dialogue would be strong and manly (a base and a tenor; no treble); and the ditty high and tragical; not nice or dainty. Several quires, placed one over against another, and taking the voice by catches, anthem-wise, give great pleasure. Turning dances into figure, is a childish curiosity. And generally let it be noted, that those things which I here set down, are such as do naturally take the sense, and not respect petty wonderments. It is true, the alterations of scenes, so it be quietly and without noise, are things of great beauty and pleasure; for they feed and relieve the eye, before it be full of the same object. Let the scenes abound with light, specially colored

and varied; and let the masquers, or any other, that are to come down from the scene, have some motions upon the scene itself, before their coming down; for it draws the eye strangely, and makes it, with great pleasure, to desire to see, that it cannot perfectly discern. Let the songs be loud and cheerful, and not chirpings or pulings. Let the music likewise be sharp and loud, and well placed. The colors that show best by candle-light are white, carnation, and a kind of sea-water-green; and oes, or spangs, as they are of no great cost, so they are of most glory. As for rich embroidery, it is lost and not discerned. Let the suits of the masquers be graceful, and such as become the person, when the vizors are off; not after examples of known attires; Turke, soldiers, mariners', and the like. Let anti-masques not be long; they have been commonly of fools, satyrs, baboons, wild-men, antics, beasts, sprites, witches, Ethiops, pigmies, turquets, nymphs, rustics, Cupids, statuas moving, and the like. As for angels, it is not comical enough, to put them in anti-masques; and anything that is hideous, as devils, giants, is on the other side as unfit. But chiefly, let the music of them be recreative, and with some strange changes. Some sweet odors suddenly coming forth, without

any drops falling, are, in such a company as there is steam and heat, things of great pleasure and refreshment. Double masques, one of men, another of ladies, addeth state and variety. But all is nothing except the room be kept clear and neat.

For jousts, and tourneys, and barriers; the glories of them are chiefly in the chariots, wherein the challengers make their entry; especially if they be drawn with strange beasts: as lions, bears, camels, and the like; or in the devices of their entrance; or in the bravery of their liveries; or in the goodly furniture of their horses and armor. But enough of these toys.

Of Nature In Men

NATURE is often hidden; sometimes overcome; seldom extinguished. Force, maketh nature more violent in the return; doctrine and discourse, maketh nature less importune; but custom only doth alter and subdue nature. He that seeketh victory over his nature, let him not set himself too great, nor too small tasks; for the first will make him dejected by often failings; and the second will make him a small proceeder, though by often prevailings. And at the first let him practise with helps, as swimmers do with bladders or rushes; but after a time let him practise with disadvantages, as dancers do with thick shoes. For it breeds great perfection, if the practice be harder than the use. Where nature is mighty, and therefore the victory hard, the degrees had need be, first to stay and arrest nature in time; like to him that would say over the four and twenty letters when he was angry; then to go less in quantity; as if one should, in forbearing wine, come from drinking healths, to a draught at a meal; and lastly, to discontinue altogether. But if a man have the fortitude, and resolution, to enfranchise himself at once, that is the best:

*Optimus ille animi v
Vincula qui rupit, d*

Neither is the ancient rule amiss, to bend nature, as a wand, to a contrary extreme, whereby to set it right, understanding it, where the contrary extreme is no vice. Let not a man force a habit upon himself, with a perpetual continuance, but with some intermission. For both the pause reinforceth the new onset; and if a man that is not perfect, be ever in practice, he shall as well practise his errors, as his abilities, and induce one habit of both; and there is no means to help this, but by seasonable intermissions. But let not a man trust his victory over his nature, too far; for nature will lay buried a great time, and yet revive, upon the occasion or temptation. Like as it was with AEsop's damsel, turned from a cat to a woman, who sat very demutely at the board's end, till a mouse ran before her. Therefore, let a man either avoid the occasion altogether; or put himself often to it, that he may be little moved with it. A man's nature is best perceived in privateness, for there is no affectation; in passion, for that putteth a man out of his precepts; and in a new case or experiment, for there custom leaveth him. They are happy

men, whose natures sort with their vocations; otherwise they may say, *multum incola fuit anima mea*; when they converse in those things, they do not affect. In studies, whatsoever a man commandeth upon himself, let him set hours for it; but whatsoever is agreeable to his nature, let him take no care for any set times; for his thoughts will fly to it, of themselves; so as the spaces of other business, or studies, will suffice. A man's nature, runs either to herbs or weeds; therefore let him seasonably water the one, and destroy the other.

Of Custom And Education

MEN'S thoughts, are much according to their inclination; their discourse and speeches, according to their learning and infused opinions; but their deeds, are after as they have been accustomed. And therefore, as Machiavel well noteth (though in an evil-favored instance), there is no trusting to the force of nature, nor to the bravery of words, except it be corroborate by custom. His instance is, that for the achieving of a desperate conspiracy, a man should not rest upon the fierceness of any man's nature, or his resolute undertakings; but take such an one, as hath had his hands formerly in blood. But Machiavel knew not of a Friar Clement, nor a Ravillac, nor a Jaureguy, nor a Baltazar Gerard; yet his rule holdeth still, that nature, nor the engagement of words, are not so forcible, as custom. Only superstition is now so well advanced, that men of the first blood, are as firm as butchers by occupation; and votary resolution, is made equipollent to custom, even in matter of blood. In other things, the predominancy of custom is everywhere visible; insomuch as a man would wonder, to hear men profess, protest, engage, give great words, and then do, just as they have

done before; as if they were dead images, and engines moved only by the wheels of custom. We see also the reign or tyranny of custom, what it is. The Indians (I mean the sect of their wise men) lay themselves quietly upon a stock of wood, and so sacrifice themselves by fire. Nay, the wives strive to be burned, with the corpses of their husbands. The lads of Sparta, of ancient time, were wont to be scourged upon the altar of Diana, without so much as queching. I remember, in the beginning of Queen Elizabeth's time of England, an Irish rebel condemned, put up a petition to the deputy, that he might be hanged in a withe, and not in an halter; because it had been so used, with former rebels. There be monks in Russia, for penance, that will sit a whole night in a vessel of water, till they be engaged with hard ice. Many examples may be put of the force of custom, both upon mind and body. Therefore, since custom is the principal magistrate of man's life, let men by all means endeavor, to obtain good customs. Certainly custom is most perfect, when it beginneth in young years: this we call education; which is, in effect, but an early custom. So we see, in languages, the tongue is more pliant to all expressions and sounds, the joints are more supple, to all feats of activity

and motions, in youth than afterwards. For it is true, that late learners cannot so well take the ply; except it be in some minds, that have not suffered themselves to fix, but have kept themselves open, and prepared to receive continual amendment, which is exceeding rare. But if the force of custom simple and separate, be great, the force of custom copulate and conjoined and collegiate, is far greater. For there example teacheth, company comforteth, emulation quickeneth, glory raiseth: so as in such places the force of custom is in his exaltation. Certainly the great multiplication of virtues upon human nature, resteth upon societies well ordained and disciplined. For commonwealths, and good governments, do nourish virtue grown but do not much mend the deeds. But the misery is, that the most effectual means, are now applied to the ends, least to be desired.

Of Fortune

IT CANNOT be denied, but outward accidents conduce much to fortune; favor, opportunity, death of others, occasion fitting virtue. But chiefly, the mould of a man's fortune is in his own hands. *Faber quisque fortunae suae*, saith the poet. And the most frequent of external causes is, that the folly of one man, is the fortune of another. For no man prospers so suddenly, as by others' errors. *Serpens nisi serpentem comederit non fit draco*. Overt and apparent virtues, bring forth praise; but there be secret and hidden virtues, that bring forth fortune; certain deliveries of a man's self, which have no name. The Spanish name, *desemboltura*, partly expresseth them; when there be not stonds nor restiveness in a man's nature; but that the wheels of his mind, keep way with the wheels of his fortune. For so Livy (after he had described Cato Major in these words, *In illo viro tantum robur corporis et animi fuit, ut quocunque loco natus esset, fortunam sibi facturus videretur*) falleth upon that, that he had versatile ingenium. Therefore if a man look sharply and attentively, he shall see Fortune: for though she be blind, yet she is not invisible. The way of fortune, is like the Milken

Way in the sky; which is a meeting or knot of a number of small stars; not seen asunder, but giving light together. So are there a number of little, and scarce discerned virtues, or rather faculties and customs, that make men fortunate. The Italians note some of them, such as a man would little think. When they speak of one that cannot do amiss, they will throw in, into his other conditions, that he hath Poco di matto. And certainly there be not two more fortunate properties, than to have a little of the fool, and not too much of the honest. Therefore extreme lovers of their country or masters, were never fortunate, neither can they be. For when a man placeth his thoughts without himself, he goeth not his own way. An hasty fortune maketh an enterpriser and remover (the French hath it better, *entreprenant*, or *remuant*); but the exercised fortune maketh the able man. Fortune is to be honored and respected, and it be but for her daughters, Confidence and Reputation. For those two, Felicity breedeth; the first within a man's self, the latter in others towards him. All wise men, to decline the envy of their own virtues, use to ascribe them to Providence and Fortune; for so they may the better assume them: and, besides, it is greatness in a man, to be the care of the higher powers. So

Caesar said to the pilot in the tempest, *Caesarem portas, et fortunam ejus*. So Sylla chose the name of Felix, and not of Magnus. And it hath been noted, that those who ascribe openly too much to their own wisdom and policy, end infortunate. It is written that Timotheus the Athenian, after he had, in the account he gave to the state of his government, often interlaced this speech, and in this, Fortune had no part, never prospered in anything, he undertook afterwards. Certainly there be, whose fortunes are like Homer's verses, that have a slide and easiness more than the verses of other poets; as Plutarch saith of Timoleon's fortune, in respect of that of Agesilaus or Epaminondas. And that this should be, no doubt it is much, in a man's self.

Of Usury

MANY have made witty invectives against usury. They say that it is a pity, the devil should have God's part, which is the tithe. That the usurer is the greatest Sabbath-breaker, because his plough goeth every Sunday. That the usurer is the drone, that Virgil speaketh of;

Ignavum fucos pecu

That the usurer breaketh the first law, that was made for mankind after the fall, which was, in sudore vultus tui comedes panem tuum; not, in sudore vultus alieni. That usurers should have orange-tawny bonnets, because they do judaize. That it is against nature for money to beget money; and the like. I say this only, that usury is a concessum propter duritiem cordis; for since there must be borrowing and lending, and men are so hard of heart, as they will not lend freely, usury must be permitted. Some others, have made suspicious and cunning propositions of banks, discovery of men's estates, and other inventions. But few have spoken of usury usefully. It is good to set before us, the incommodities and commodities of usury, that the good, may be either weighed out or culled

out; and warily to provide, that while we make forth to that which is better, we meet not with that which is worse.

The discommodities of usury are, First, that it makes fewer merchants. For were it not for this lazy trade of usury, money would not be still, but would in great part be employed upon merchandizing; which is the vena porta of wealth in a state. The second, that it makes poor merchants. For, as a farmer cannot husband his ground so well, if he sit at a great rent; so the merchant cannot drive his trade so well, if he sit at great usury. The third is incident to the other two; and that is the decay of customs of kings or states, which ebb or flow, with merchandizing. The fourth, that it bringeth the treasure of a realm, or state, into a few hands. For the usurer being at certainties, and others at uncertainties, at the end of the game, most of the money will be in the box; and ever a state flourisheth, when wealth is more equally spread. The fifth, that it beats down the price of land; for the employment of money, is chiefly either merchandizing or purchasing; and usury waylays both. The sixth, that it doth dull and damp all industries, improvements, and new inventions, wherein money would be stirring, if it were not for this slug. The last, that it is the canker

and ruin of many men's estates; which, in process of time, breeds a public poverty.

On the other side, the commodities of usury are, first, that howsoever usury in some respect hindereth merchandizing, yet in some other it advanceth it; for it is certain that the greatest part of trade is driven by young merchants, upon borrowing at interest; so as if the usurer either call in, or keep back, his money, there will ensue, presently, a great stand of trade. The second is, that were it not for this easy borrowing upon interest, men's necessities would draw upon them a most sudden undoing; in that they would be forced to sell their means (be it lands or goods) far under foot; and so, whereas usury doth but gnaw upon them, bad markets would swallow them quite up. As for mortgaging or pawning, it will little mend the matter: for either men will not take pawns without use; or if they do, they will look precisely for the forfeiture. I remember a cruel moneyed man in the country, that would say, The devil take this usury, it keeps us from forfeitures, of mortgages and bonds. The third and last is, that it is a vanity to conceive, that there would be ordinary borrowing without profit; and it is impossible to conceive, the number

of inconveniences that will ensue, if borrowing be cramped. Therefore to speak of the abolishing of usury is idle. All states have ever had it, in one kind or rate, or other. So as that opinion must be sent to Utopia.

To speak now of the reformation, and reiglement, of usury; how the discommodities of it may be best avoided, and the commodities retained. It appears, by the balance of commodities and discommodities of usury, two things are to be reconciled. The one, that the tooth of usury be grinded, that it bite not too much; the other, that there be left open a means, to invite moneyed men to lend to the merchants, for the continuing and quickening of trade. This cannot be done, except you introduce two several sorts of usury, a less and a greater. For if you reduce usury to one low rate, it will ease the common borrower, but the merchant will be to seek for money. And it is to be noted, that the trade of merchandize, being the most lucrative, may bear usury at a good rate; other contracts not so.

To serve both intentions, the way would be briefly thus. That there be two rates of usury: the one free, and general for all; the other under license only, to certain persons, and in certain places of merchandizing.

First, therefore, let usury in general, be reduced to five in the hundred; and let that rate be proclaimed, to be free and current; and let the state shut itself out, to take any penalty for the same. This will preserve borrowing, from any general stop or dryness. This will ease infinite borrowers in the country. This will, in good part, raise the price of land, because land purchased at sixteen years' purchase will yield six in the hundred, and somewhat more; whereas this rate of interest, yields but five. This by like reason will encourage, and edge, industrious and profitable improvements; because many will rather venture in that kind, than take five in the hundred, especially having been used to greater profit. Secondly, let there be certain persons licensed, to lend to known merchants, upon usury at a higher rate; and let it be with the cautions following. Let the rate be, even with the merchant himself, somewhat more easy than that he used formerly to pay; for by that means, all borrowers, shall have some ease by this reformation, be he merchant, or whosoever. Let it be no bank or common stock, but every man be master of his own money. Not that I altogether mislike banks, but they will hardly be brooked, in regard of certain suspicions. Let the state be answered some small matter

for the license, and the rest left to the lender; for if the abatement be but small, it will no whit discourage the lender. For he, for example, that took before ten or nine in the hundred, will sooner descend to eight in the hundred than give over his trade of usury, and go from certain gains, to gains of hazard. Let these licensed lenders be in number indefinite, but restrained to certain principal cities and towns of merchandizing; for then they will be hardly able to color other men's moneys in the country: so as the license of nine will not suck away the current rate of five; for no man will send his moneys far off, nor put them into unknown hands.

If it be objected that this doth in a sort authorize usury, which before, was in some places but permissive; the answer is, that it is better to mitigate usury, by declaration, than to suffer it to rage, by connivance.

Of Youth And Age

A MAN that is young in years, may be old in hours, if he have lost no time. But that happeneth rarely. Generally, youth is like the first cogitations, not so wise as the second. For there is a youth in thoughts, as well as in ages. And yet the invention of young men, is more lively than that of old; and imaginations stream into their minds better, and, as it were, more divinely. Natures that have much heat, and great and violent desires and perturbations, are not ripe for action, till they have passed the meridian of their years; as it was with Julius Caesar and Septimius Severus. Of the latter, of whom it is said, *Juventutem egit erroribus, imo furoribus, plenam*. And yet he was the ablest emperor, almost, of all the list. But reposed natures may do well in youth. As it is seen in Augustus Caesar, Cosmus Duke of Florence, Gaston de Foix, and others. On the other side, heat and vivacity in age, is an excellent composition for business. Young men are fitter to invent, than to judge; fitter for execution, than for counsel; and fitter for new projects, than for settled business. For the experience of age, in things that fall within the compass of it, directeth them; but in

new things, abuseth them.

The errors of young men, are the ruin of business; but the errors of aged men, amount but to this, that more might have been done, or sooner. Young men, in the conduct and manage of actions, embrace more than they can hold; stir more than they can quiet; fly to the end, without consideration of the means and degrees; pursue some few principles, which they have chanced upon absurdly; care not to innovate, which draws unknown inconveniences; use extreme remedies at first; and, that which doubleth all errors, will not acknowledge or retract them; like an unready horse, that will neither stop nor turn. Men of age object too much, consult too long, adventure too little, repent too soon, and seldom drive business home to the full period, but content themselves with a mediocrity of success. Certainly it is good to compound employments of both; for that will be good for the present, because the virtues of either age, may correct the defects of both; and good for succession, that young men may be learners, while men in age are actors; and, lastly, good for extern accidents, because authority followeth old men, and favor and popularity, youth. But for the moral part, perhaps youth will have the pre-

eminence, as age hath for the politic. A certain rabbin, upon the text, Your young men shall see visions, and your old men shall dream dreams, inferreth that young men, are admitted nearer to God than old, because vision, is a clearer revelation, than a dream. And certainly, the more a man drinketh of the world, the more it intoxicateth; and age doth profit rather in the powers of understanding, than in the virtues of the will and affections. There be some, have an over-early ripeness in their years, which fadeth betimes. These are, first, such as have brittle wits, the edge whereof is soon turned; such as was Hermogenes the rhetorician, whose books are exceeding subtle; who afterwards waxed stupid. A second sort, is of those that have some natural dispositions which have better grace in youth, than in age; such as is a fluent and luxuriant speech; which becomes youth well, but not age: so Tully saith of Hortensius, *Idem manebat, neque idem decebat*. The third is of such, as take too high a strain at the first, and are magnanimous, more than tract of years can uphold. As was Scipio Africanus, of whom Livy saith in effect, *Ultima primis cedebant*.

Of Beauty

VIRTUE is like a rich stone, best plain set; and surely virtue is best, in a body that is comely, though not of delicate features; and that hath rather dignity of presence, than beauty of aspect. Neither is it almost seen, that very beautiful persons are otherwise of great virtue; as if nature were rather busy, not to err, than in labor to produce excellency. And therefore they prove accomplished, but not of great spirit; and study rather behavior, than virtue. But this holds not always: for Augustus Caesar, Titus Vespasianus, Philip le Belle of France, Edward the Fourth of England, Alcibiades of Athens, Ismael the Sophy of Persia, were all high and great spirits; and yet the most beautiful men of their times. In beauty, that of favor, is more than that of color; and that of decent and gracious motion, more than that of favor. That is the best part of beauty, which a picture cannot express; no, nor the first sight of the life. There is no excellent beauty, that hath not some strangeness in the proportion. A man cannot tell whether Apelles, or Albert Durer, were the more trifler; whereof the one, would make a personage by geometrical proportions; the other, by taking the

best parts out of divers faces, to make one excellent. Such personages, I think, would please nobody, but the painter that made them. Not but I think a painter may make a better face than ever was; but he must do it by a kind of felicity (as a musician that maketh an excellent air in music), and not by rule. A man shall see faces, that if you examine them part by part, you shall find never a good; and yet altogether do well. If it be true that the principal part of beauty is in decent motion, certainly it is no marvel, though persons in years seem many times more amiable; pulchrorum autumnus pulcher; for no youth can be comely but by pardon, and considering the youth, as to make up the comeliness. Beauty is as summer fruits, which are easy to corrupt, and cannot last; and for the most part it makes a dissolute youth, and an age a little out of countenance; but yet certainly again, if it light well, it maketh virtue shine, and vices blush.

Of Deformity

DEFORMED persons are commonly even with nature; for as nature hath done ill by them, so do they by nature; being for the most part (as the Scripture saith) void of natural affection; and so they have their revenge of nature. Certainly there is a consent, between the body and the mind; and where nature erreth in the one, she ventureth in the other. *Ubi peccat in uno, periclitatur in altero.* But because there is, in man, an election touching the frame of his mind, and a necessity in the frame of his body, the stars of natural inclination are sometimes obscured, by the sun of discipline and virtue. Therefore it is good to consider of deformity, not as a sign, which is more deceivable; but as a cause, which seldom faileth of the effect. Whosoever hath anything fixed in his person, that doth induce contempt, hath also a perpetual spur in himself, to rescue and deliver himself from scorn. Therefore all deformed persons, are extreme bold. First, as in their own defence, as being exposed to scorn; but in process of time, by a general habit. Also it stirreth in them industry, and especially of this kind, to watch and observe the weakness of others, that they may have somewhat

to repay. Again, in their superiors, it quencheth jealousy towards them, as persons that they think they may, at pleasure, despise: and it layeth their competitors and emulators asleep; as never believing they should be in possibility of advancement, till they see them in possession. So that upon the matter, in a great wit, deformity is an advantage to rising. Kings in ancient times (and at this present in some countries) were wont to put great trust in eunuchs; because they that are envious towards all are more obnoxious and officious, towards one. But yet their trust towards them, hath rather been as to good spials, and good whisperers, than good magistrates and officers. And much like is the reason of deformed persons. Still the ground is, they will, if they be of spirit, seek to free themselves from scorn; which must be either by virtue or malice; and therefore let it not be marvelled, if sometimes they prove excellent persons; as was Agesilaus, Zanger the son of Solyman, AEsop, Gasca, President of Peru; and Socrates may go likewise amongst them; with others.

Of Building

HOUSES are built to live in, and not to look on; therefore let use be preferred before uniformity, except where both may be had. Leave the goodly fabrics of houses, for beauty only, to the enchanted palaces of the poets; who build them with small cost. He that builds a fair house, upon an ill seat, committeth himself to prison. Neither do I reckon it an ill seat, only where the air is unwholesome; but likewise where the air is unequal; as you shall see many fine seats set upon a knap of ground, environed with higher hills round about it; whereby the heat of the sun is pent in, and the wind gathereth as in troughs; so as you shall have, and that suddenly, as great diversity of heat and cold as if you dwelt in several places. Neither is it ill air only that maketh an ill seat, but ill ways, ill markets; and, if you will consult with Momus, ill neighbors. I speak not of many more; want of water; want of wood, shade, and shelter; want of fruitfulness, and mixture of grounds of several natures; want of prospect; want of level grounds; want of places at some near distance for sports of hunting, hawking, and races; too near the sea, too remote; having the commodity of

navigable rivers, or the discommodity of their overflowing; too far off from great cities, which may hinder business, or too near them, which lurcheth all provisions, and maketh everything dear; where a man hath a great living laid together, and where he is scant: all which, as it is impossible perhaps to find together, so it is good to know them, and think of them, that a man may take as many as he can; and if he have several dwellings, that he sort them so that what he wanteth in the one, he may find in the other. Lucullus answered Pompey well; who, when he saw his stately galleries, and rooms so large and lightsome, in one of his houses, said, Surely an excellent place for summer, but how do you in winter? Lucullus answered, Why, do you not think me as wise as some fowl are, that ever change their abode towards the winter?

To pass from the seat, to the house itself; we will do as Cicero doth in the orator's art; who writes books *De Oratore*, and a book he entitles *Orator*; whereof the former, delivers the precepts of the art, and the latter, the perfection. We will therefore describe a princely palace, making a brief model thereof. For it is strange to see, now in Europe, such huge buildings as the Vatican and Escorial

and some others be, and yet scarce a very fair room in them.

First, therefore, I say you cannot have a perfect palace except you have two several sides; a side for the banquet, as it is spoken of in the book of Hester, and a side for the household; the one for feasts and triumphs, and the other for dwelling. I understand both these sides to be not only returns, but parts of the front; and to be uniform without, though severally partitioned within; and to be on both sides of a great and stately tower, in the midst of the front, that, as it were, joineth them together on either hand. I would have on the side of the banquet, in front, one only goodly room above stairs, of some forty foot high; and under it a room for a dressing, or preparing place, at times of triumphs. On the other side, which is the household side, I wish it divided at the first, into a hall and a chapel (with a partition between); both of good state and bigness; and those not to go all the length, but to have at the further end, a winter and a summer parlor, both fair. And under these rooms, a fair and large cellar, sunk under ground; and likewise some privy kitchens, with butteries and pantries, and the like. As for the tower, I would have it two stories, of eighteen foot high apiece, above the

two wings; and a goodly leads upon the top, railed with statuas interposed; and the same tower to be divided into rooms, as shall be thought fit. The stairs likewise to the upper rooms, let them be upon a fair open newel, and finely railed in, with images of wood, cast into a brass color; and a very fair landing-place at the top. But this to be, if you do not point any of the lower rooms, for a dining place of servants. For otherwise, you shall have the servants' dinner after your own: for the steam of it, will come up as in a tunnel. And so much for the front. Only I understand the height of the first stairs to be sixteen foot, which is the height of the lower room.

Beyond this front, is there to be a fair court, but three sides of it, of a far lower building than the front. And in all the four corners of that court, fair staircases, cast into turrets, on the outside, and not within the row of buildings themselves. But those towers, are not to be of the height of the front, but rather proportionable to the lower building. Let the court not be paved, for that striketh up a great heat in summer, and much cold in winter. But only some side alleys, with a cross, and the quarters to graze, being kept shorn, but not too near shorn. The row of return on the

banquet side, let it be all stately galleries: in which galleries let there be three, or five, fine cupolas in the length of it, placed at equal distance; and fine colored windows of several works. On the household side, chambers of presence and ordinary entertainments, with some bed-chambers; and let all three sides be a double house, without thorough lights on the sides, that you may have rooms from the sun, both for forenoon and afternoon. Cast it also, that you may have rooms, both for summer and winter; shady for summer, and warm for winter. You shall have sometimes fair houses so full of glass, that one cannot tell where to become, to be out of the sun or cold. For inbowed windows, I hold them of good use (in cities, indeed, upright do better, in respect of the uniformity towards the street); for they be pretty retiring places for conference; and besides, they keep both the wind and sun off; for that which would strike almost through the room, doth scarce pass the window. But let them be but few, four in the court, on the sides only.

Beyond this court, let there be an inward court, of the same square and height; which is to be environed with the garden on all sides; and in the inside, cloistered on all sides, upon

decent and beautiful arches, as high as the first story. On the under story, towards the garden, let it be turned to a grotto, or a place of shade, or estivation. And only have opening and windows towards the garden; and be level upon the floor, no whit sunken under ground, to avoid all dampishness. And let there be a fountain, or some fair work of statuas, in the midst of this court; and to be paved as the other court was. These buildings to be for privy lodgings on both sides; and the end for privy galleries. Whereof you must foresee that one of them be for an infirmary, if the prince or any special person should be sick, with chambers, bed-chamber, antecamera, and recamera joining to it. This upon the second story. Upon the ground story, a fair gallery, open, upon pillars; and upon the third story likewise, an open gallery, upon pillars, to take the prospect and freshness of the garden. At both corners of the further side, by way of return, let there be two delicate or rich cabinets, daintily paved, richly hanged, glazed with crystalline glass, and a rich cupola in the midst; and all other elegancy that may be thought upon. In the upper gallery too, I wish that there may be, if the place will yield it, some fountains running in divers places from the wall, with

some fine avoidances. And thus much for the model of the palace; save that you must have, before you come to the front, three courts. A green court plain, with a wall about it; a second court of the same, but more garnished, with little turrets, or rather embellishments, upon the wall; and a third court, to make a square with the front, but not to be built, nor yet enclosed with a naked wall, but enclosed with terraces, leaded aloft, and fairly garnished, on the three sides; and cloistered on the inside, with pillars, and not with arches below. As for offices, let them stand at distance, with some low galleries, to pass from them to the palace itself.

Of Gardens

GOD Almighty first planted a garden. And indeed it is the purest of human pleasures. It is the greatest refreshment to the spirits of man; without which, buildings and palaces are but gross handiworks; and a man shall ever see, that when ages grow to civility and elegancy, men come to build stately sooner than to garden finely; as if gardening were the greater perfection. I do hold it, in the royal ordering of gardens, there ought to be gardens, for all the months in the year; in which severally things of beauty may be then in season. For December, and January, and the latter part of November, you must take such things as are green all winter: holly; ivy; bays; juniper; cypress-trees; yew; pine-apple-trees; fir-trees; rosemary; lavender; periwinkle, the white, the purple, and the blue; germander; flags; orangetrees; lemon-trees; and myrtles, if they be stoved; and sweet marjoram, warm set. There followeth, for the latter part of January and February, the mezereon-tree, which then blossoms; crocus vernus, both the yellow and the grey; primroses, anemones; the early tulippa; hyacinthus orientalis; chamairis; fritellaria. For March, there come violets, specially the

single blue, which are the earliest; the yellow daffodil; the daisy; the almond-tree in blossom; the peach-tree in blossom; the cornelian-tree in blossom; sweet-briar. In April follow the double white violet; the wallflower; the stock-gilliflower; the cowslip; flowerdelices, and lilies of all natures; rosemary-flowers; the tulippa; the double peony; the pale daffodil; the French honeysuckle; the cherry-tree in blossom; the damson and plum-trees in blossom; the white thorn in leaf; the lilac-tree. In May and June come pinks of all sorts, specially the blushpink; roses of all kinds, except the musk, which comes later; honeysuckles; strawberries; bugloss; columbine; the French marigold, flos Africanus; cherry-tree in fruit; ribes; figs in fruit; rasps; vineflowers; lavender in flowers; the sweet satyrian, with the white flower; herba muscaria; lilium convallium; the apple-tree in blossom. In July come gilliflowers of all varieties; musk-roses; the lime-tree in blossom; early pears and plums in fruit; jennetings, codlins. In August come plums of all sorts in fruit; pears; apricocks; berberries; filberds; musk-melons; monks-hoods, of all colors. In September come grapes; apples; poppies of all colors; peaches; melocotones; nectarines; cornelians; wardens; quinces. In October and the

beginning of November come services; medlars; bullaces; roses cut or removed to come late; hollyhocks; and such like. These particulars are for the climate of London; but my meaning is perceived, that you may have ver perpetuum, as the place affords.

And because the breath of flowers is far sweeter in the air (where it comes and goes like the warbling of music) than in the hand, therefore nothing is more fit for that delight, than to know what be the flowers and plants that do best perfume the air. Roses, damask and red, are fast flowers of their smells; so that you may walk by a whole row of them, and find nothing of their sweetness; yea though it be in a morning's dew. Bays likewise yield no smell as they grow. Rosemary little; nor sweet marjoram. That which above all others yields the sweetest smell in the air is the violet, specially the white double violet, which comes twice a year; about the middle of April, and about Bartholomew-tide. Next to that is the musk-rose. Then the strawberry-leaves dying, which yield a most excellent cordial smell. Then the flower of vines; it is a little dust, like the dust of a bent, which grows upon the cluster in the first coming forth. Then sweet-briar. Then wall-flowers,

which are very delightful to be set under a parlor or lower chamber window. Then pinks and gilliflowers, especially the matted pink and clove gilliflower. Then the flowers of the lime-tree. Then the honeysuckles, so they be somewhat afar off. Of beanflowers I speak not, because they are field flowers. But those which perfume the air most delightfully, not passed by as the rest, but being trodden upon and crushed, are three; that is, burnet, wildthyme, and watermints. Therefore you are to set whole alleys of them, to have the pleasure when you walk or tread.

For gardens (speaking of those which are indeed princelike, as we have done of buildings), the contents ought not well to be under thirty acres of ground; and to be divided into three parts; a green in the entrance; a heath or desert in the going forth; and the main garden in the midst; besides alleys on both sides. And I like well that four acres of ground be assigned to the green; six to the heath; four and four to either side; and twelve to the main garden. The green hath two pleasures: the one, because nothing is more pleasant to the eye than green grass kept finely shorn; the other, because it will give you a fair alley in the midst, by which you may go in front upon a stately hedge, which is

to enclose the garden. But because the alley will be long, and, in great heat of the year or day, you ought not to buy the shade in the garden, by going in the sun through the green, therefore you are, of either side the green, to plant a covert alley upon carpenter's work, about twelve foot in height, by which you may go in shade into the garden. As for the making of knots or figures, with divers colored earths, that they may lie under the windows of the house on that side which the garden stands, they be but toys; you may see as good sights, many times, in tarts. The garden is best to be square, encompassed on all the four sides with a stately arched hedge. The arches to be upon pillars of carpenter's work, of some ten foot high, and six foot broad; and the spaces between of the same dimension with the breadth of the arch. Over the arches let there be an entire hedge of some four foot high, framed also upon carpenter's work; and upon the upper hedge, over every arch, a little turret, with a belly, enough to receive a cage of birds: and over every space between the arches some other little figure, with broad plates of round colored glass gilt, for the sun to play upon. But this hedge I intend to be raised upon a bank, not steep, but gently slope, of some six

foot, set all with flowers. Also I understand, that this square of the garden, should not be the whole breadth of the ground, but to leave on either side, ground enough for diversity of side alleys; unto which the two covert alleys of the green, may deliver you. But there must be no alleys with hedges, at either end of this great enclosure; not at the hither end, for letting your prospect upon this fair hedge from the green; nor at the further end, for letting your prospect from the hedge, through the arches upon the heath.

For the ordering of the ground, within the great hedge, I leave it to variety of device; advising nevertheless, that whatsoever form you cast it into, first, it be not too busy, or full of work. Wherein I, for my part, do not like images cut out in juniper or other garden stuff; they be for children. Little low hedges, round, like welts, with some pretty pyramids, I like well; and in some places, fair columns upon frames of carpenter's work. I would also have the alleys, spacious and fair. You may have closer alleys, upon the side grounds, but none in the main garden. I wish also, in the very middle, a fair mount, with three ascents, and alleys, enough for four to walk abreast; which I would have to be perfect circles,

without any bulwarks or embossments; and the whole mount to be thirty foot high; and some fine banqueting-house, with some chimneys neatly cast, and without too much glass.

For fountains, they are a great beauty and refreshment; but pools mar all, and make the garden unwholesome, and full of flies and frogs. Fountains I intend to be of two natures: the one that sprinkleth or spouteth water; the other a fair receipt of water, of some thirty or forty foot square, but without fish, or slime, or mud. For the first, the ornaments of images gilt, or of marble, which are in use, do well: but the main matter is so to convey the water, as it never stay, either in the bowls or in the cistern; that the water be never by rest discolored, green or red or the like; or gather any mossiness or putrefaction. Besides that, it is to be cleansed every day by the hand. Also some steps up to it, and some fine pavement about it, doth well. As for the other kind of fountain, which we may call a bathing pool, it may admit much curiosity and beauty; wherewith we will not trouble ourselves: as, that the bottom be finely paved, and with images; the sides likewise; and withal embellished with colored glass, and

such things of lustre; encompassed also with fine rails of low statuas. But the main point is the same which we mentioned in the former kind of fountain; which is, that the water be in perpetual motion, fed by a water higher than the pool, and delivered into it by fair spouts, and then discharged away under ground, by some equality of bores, that it stay little. And for fine devices, of arching water without spilling, and making it rise in several forms (of feathers, drinking glasses, canopies, and the like), they be pretty things to look on, but nothing to health and sweetness.

For the heath, which was the third part of our plot, I wish it to be framed, as much as may be, to a natural wildness. Trees I would have none in it, but some thickets made only of sweet-briar and honeysuckle, and some wild vine amongst; and the ground set with violets, strawberries, and primroses. For these are sweet, and prosper in the shade. And these to be in the heath, here and there, not in any order. I like also little heaps, in the nature of mole-hills (such as are in wild heaths), to be set, some with wild thyme; some with pinks; some with germander, that gives a good flower to the eye; some with periwinkle; some with violets; some with strawberries; some with

cowslips; some with daisies; some with red roses; some with liliū convallium; some with sweet-williams red; some with bear's-foot; and the like low flowers, being withal sweet and sightly. Part of which heaps, are to be with standards of little bushes pricked upon their top, and part without. The standards to be roses; juniper; holly; berberries (but here and there, because of the smell of their blossoms); red currants; gooseberries; rosemary; bays; sweetbriar; and such like. But these standards to be kept with cutting, that they grow not out of course.

For the side grounds, you are to fill them with variety of alleys, private, to give a full shade, some of them, wheresoever the sun be. You are to frame some of them, likewise, for shelter, that when the wind blows sharp you may walk as in a gallery. And those alleys must be likewise hedged at both ends, to keep out the wind; and these closer alleys must be ever finely gravelled, and no grass, because of going wet. In many of these alleys, likewise, you are to set fruit-trees of all sorts; as well upon the walls, as in ranges. And this would be generally observed, that the borders wherein you plant your fruit-trees, be fair and large, and low, and not steep; and set with fine flowers,

but thin and sparingly, lest they deceive the trees. At the end of both the side grounds, I would have a mount of some pretty height, leaving the wall of the enclosure breast high, to look abroad into the fields.

For the main garden, I do not deny, but there should be some fair alleys ranged on both sides, with fruit-trees; and some pretty tufts of fruittrees, and arbors with seats, set in some decent order; but these to be by no means set too thick; but to leave the main garden so as it be not close, but the air open and free. For as for shade, I would have you rest upon the alleys of the side grounds, there to walk, if you be disposed, in the heat of the year or day; but to make account, that the main garden is for the more temperate parts of the year; and in the heat of summer, for the morning and the evening, or overcast days.

For aviaries, I like them not, except they be of that largeness as they may be turfed, and have living plants and bushes set in them; that the birds may have more scope, and natural nesting, and that no foulness appear in the floor of the aviary. So I have made a platform of a princely garden, partly by precept, partly by drawing, not a model, but some general lines of it; and in this I have spared for no cost.

But it is nothing for great princes,
that for the most part taking advice
with workmen, with no less cost set
their things together; and sometimes
add statuas and such things for state
and magnificence, but nothing to the
true pleasure of a garden.

Of Negotiating

IT IS generally better to deal by speech than by letter; and by the mediation of a third than by a man's self. Letters are good, when a man would draw an answer by letter back again; or when it may serve for a man's justification afterwards to produce his own letter; or where it may be danger to be interrupted, or heard by pieces. To deal in person is good, when a man's face breedeth regard, as commonly with inferiors; or in tender cases, where a man's eye, upon the countenance of him with whom he speaketh, may give him a direction how far to go; and generally, where a man will reserve to himself liberty, either to disavow or to expound. In choice of instruments, it is better to choose men of a plainer sort, that are like to do that, that is committed to them, and to report back again faithfully the success, than those that are cunning, to contrive, out of other men's business, somewhat to grace themselves, and will help the matter in report for satisfaction's sake. Use also such persons as affect the business, wherein they are employed; for that quickeneth much; and such, as are fit for the matter; as bold men for expostulation, fair-spoken men

for persuasion, crafty men for inquiry and observation, forward, and absurd men, for business that doth not well bear out itself. Use also such as have been lucky, and prevailed before, in things wherein you have employed them; for that breeds confidence, and they will strive to maintain their prescription. It is better to sound a person, with whom one deals afar off, than to fall upon the point at first; except you mean to surprise him by some short question. It is better dealing with men in appetite, than with those that are where they would be. If a man deal with another upon conditions, the start or first performance is all; which a man cannot reasonably demand, except either the nature of the thing be such, which must go before; or else a man can persuade the other party, that he shall still need him in some other thing; or else that he be counted the honestest man. All practice is to discover, or to work. Men discover themselves in trust, in passion, at unawares, and of necessity, when they would have somewhat done, and cannot find an apt pretext. If you would work any man, you must either know his nature and fashions, and so lead him; or his ends, and so persuade him; or his weakness and disadvantages, and so awe him; or those that have interest in him, and so

govern him. In dealing with cunning persons, we must ever consider their ends, to interpret their speeches; and it is good to say little to them, and that which they least look for. In all negotiations of difficulty, a man may not look to sow and reap at once; but must prepare business, and so ripen it by degrees.

Of Followers And Friends

COSTLY followers are not to be liked; lest while a man maketh his train longer, he make his wings shorter. I reckon to be costly, not them alone which charge the purse, but which are wearisome, and importune in suits. Ordinary followers ought to challenge no higher conditions, than countenance, recommendation, and protection from wrongs. Factionous followers are worse to be liked, which follow not upon affection to him, with whom they range themselves, but upon discontentment conceived against some other; whereupon commonly ensueth that ill intelligence, that we many times see between great personages. Likewise glorious followers, who make themselves as trumpets of the commendation of those they follow, are full of inconvenience; for they taint business through want of secrecy; and they export honor from a man, and make him a return in envy. There is a kind of followers likewise, which are dangerous, being indeed espials; which inquire the secrets of the house, and bear tales of them, to others. Yet such men, many times, are in great favor; for they are officious, and commonly exchange

tales. The following by certain estates of men, answerable to that, which a great person himself professeth (as of soldiers, to him that hath been employed in the wars, and the like), hath ever been a thing civil, and well taken, even in monarchies; so it be without too much pomp or popularity. But the most honorable kind of following, is to be followed as one, that apprehendeth to advance virtue, and desert, in all sorts of persons. And yet, where there is no eminent odds in sufficiency, it is better to take with the more passable, than with the more able. And besides, to speak truth, in base times, active men are of more use than virtuous. It is true that in government, it is good to use men of one rank equally: for to countenance some extraordinarily, is to make them insolent, and the rest discontent; because they may claim a due. But contrariwise, in favor, to use men with much difference and election is good; for it maketh the persons preferred more thankful, and the rest more officious: because all is of favor. It is good discretion, not to make too much of any man at the first; because one cannot hold out that proportion. To be governed (as we call it) by one is not safe; for it shows softness, and gives a freedom, to scandal and disreputation; for those, that would not censure or

speake ill of a man immediately, will talk more boldly of those that are so great with them, and thereby wound their honor. Yet to be distracted with many is worse; for it makes men to be of the last impression, and full of change. To take advice of some few friends, is ever honorable; for lookers-on many times see more than gamesters; and the vale best discovereth the hill. There is little friendship in the world, and least of all between equals, which was wont to be magnified. That that is, is between superior and inferior, whose fortunes may comprehend the one the other.

Of Suitors

MANY ill matters and projects are undertaken; and private suits do putrefy the public good. Many good matters, are undertaken with bad minds; I mean not only corrupt minds, but crafty minds, that intend not performance. Some embrace suits, which never mean to deal effectually in them; but if they see there may be life in the matter, by some other mean, they will be content to win a thank, or take a second reward, or at least to make use, in the meantime, of the suitor's hopes. Some take hold of suits, only for an occasion to cross some other; or to make an information, whereof they could not otherwise have apt pretext; without care what become of the suit, when that turn is served; or, generally, to make other men's business a kind of entertainment, to bring in their own. Nay, some undertake suits, with a full purpose to let them fall; to the end to gratify the adverse party, or competitor. Surely there is in some sort a right in every suit; either a right of equity, if it be a suit of controversy; or a right of desert, if it be a suit of petition. If affection lead a man to favor the wrong side in justice, let him rather use his countenance to compound the

matter, than to carry it. If affection lead a man to favor the less worthy in desert, let him do it, without depraving or disabling the better deserver. In suits which a man doth not well understand, it is good to refer them to some friend of trust and judgment, that may report, whether he may deal in them with honor: but let him choose well his referendaries, for else he may be led by the nose. Suitors are so distasted with delays and abuses, that plain dealing, in denying to deal in suits at first, and reporting the success barely, and in challenging no more thanks than one hath deserved, is grown not only honorable, but also gracious. In suits of favor, the first coming ought to take little place: so far forth, consideration may be had of his trust, that if intelligence of the matter could not otherwise have been had, but by him, advantage be not taken of the note, but the party left to his other means; and in some sort recompensed, for his discovery. To be ignorant of the value of a suit, is simplicity; as well as to be ignorant of the right thereof, is want of conscience. Secrecy in suits, is a great mean of obtaining; for voicing them to be in forwardness, may discourage some kind of suitors, but doth quicken and awake others. But timing of the suit is the principal.

Timing, I say, not only in respect of the person that should grant it, but in respect of those, which are like to cross it. Let a man, in the choice of his mean, rather choose the fittest mean, than the greatest mean; and rather them that deal in certain things, than those that are general. The reparation of a denial, is sometimes equal to the first grant; if a man show himself neither dejected nor discontented. *Iniquum petas ut aequum feras* is a good rule, where a man hath strength of favor: but otherwise, a man were better rise in his suit; for he, that would have ventured at first to have lost the suitor, will not in the conclusion lose both the suitor, and his own former favor. Nothing is thought so easy a request to a great person, as his letter; and yet, if it be not in a good cause, it is so much out of his reputation. There are no worse instruments, than these general contrivers of suits; for they are but a kind of poison, and infection, to public proceedings.

Of Studies

STUDIES serve for delight, for ornament, and for ability. Their chief use for delight, is in privateness and retiring; for ornament, is in discourse; and for ability, is in the judgment, and disposition of business. For expert men can execute, and perhaps judge of particulars, one by one; but the general counsels, and the plots and marshalling of affairs, come best, from those that are learned. To spend too much time in studies is sloth; to use them too much for ornament, is affectation; to make judgment wholly by their rules, is the humor of a scholar. They perfect nature, and are perfected by experience: for natural abilities are like natural plants, that need proyning, by study; and studies themselves, do give forth directions too much at large, except they be bounded in by experience. Crafty men contemn studies, simple men admire them, and wise men use them; for they teach not their own use; but that is a wisdom without them, and above them, won by observation. Read not to contradict and confute; nor to believe and take for granted; nor to find talk and discourse; but to weigh and consider. Some books are to be tasted, others to be swallowed, and some few to be chewed and

digested; that is, some books are to be read only in parts; others to be read, but not curiously; and some few to be read wholly, and with diligence and attention. Some books also may be read by deputy, and extracts made of them by others; but that would be only in the less important arguments, and the meaner sort of books, else distilled books are like common distilled waters, flashy things. Reading maketh a full man; conference a ready man; and writing an exact man. And therefore, if a man write little, he had need have a great memory; if he confer little, he had need have a present wit: and if he read little, he had need have much cunning, to seem to know, that he doth not. Histories make men wise; poets witty; the mathematics subtile; natural philosophy deep; moral grave; logic and rhetoric able to contend. Abeunt studia in mores. Nay, there is no stand or impediment in the wit, but may be wrought out by fit studies; like as diseases of the body, may have appropriate exercises. Bowling is good for the stone and reins; shooting for the lungs and breast; gentle walking for the stomach; riding for the head; and the like. So if a man's wit be wandering, let him study the mathematics; for in demonstrations, if his wit be called away never so

little, he must begin again. If his wit be not apt to distinguish or find differences, let him study the Schoolmen; for they are cymini sectores. If he be not apt to beat over matters, and to call up one thing to prove and illustrate another, let him study 197 the lawyers' cases. So every defect of the mind, may have a special receipt.

Of Faction

MANY have an opinion not wise, that for a prince to govern his estate, or for a great person to govern his proceedings, according to the respect of factions, is a principal part of policy; whereas contrariwise, the chiefest wisdom, is either in ordering those things which are general, and wherein men of several factions do nevertheless agree; or in dealing with correspondence to particular persons, one by one. But I say not that the considerations of factions, is to be neglected. Mean men, in their rising, must adhere; but great men, that have strength in themselves, were better to maintain themselves indifferent, and neutral. Yet even in beginners, to adhere so moderately, as he be a man of the one faction, which is most passable with the other, commonly giveth best way. The lower and weaker faction, is the firmer in conjunction; and it is often seen, that a few that are stiff, do tire out a greater number, that are more moderate. When one of the factions is extinguished, the remaining subdivideth; as the faction between Lucullus, and the rest of the nobles of the senate (which they called Optimates) held out awhile, against the faction of Pompey and Caesar;

but when the senate's authority was pulled down, Caesar and Pompey soon after brake. The faction or party of Antonius and Octavianus Caesar, against Brutus and Cassius, held out likewise for a time; but when Brutus and Cassius were overthrown, then soon after, Antonius and Octavianus brake and subdivided. These examples are of wars, but the same holdeth in private factions. And therefore, those that are seconds in factions, do many times, when the faction subdivideth, prove principals; but many times also, they prove ciphers and cashiered; for many a man's strength is in opposition; and when that faileth, he groweth out of use. It is commonly seen, that men, once placed, take in with the contrary faction, to that by which they enter: thinking belike, that they have the first sure, and now are ready for a new purchase. The traitor in faction, lightly goeth away with it; for when matters have stuck long in balancing, the winning of some one man casteth them, and he getteth all the thanks. The even carriage between two factions, proceedeth not always of moderation, but of a trueness to a man's self, with end to make use of both. Certainly in Italy, they hold it a little suspect in popes, when they have often in their mouth Padre commune: and take it to be a sign of

one, that meaneth to refer all to the greatness of his own house. Kings had need beware, how they side themselves, and make themselves as of a faction or party; for leagues within the state, are ever pernicious to monarchies: for they raise an obligation, paramount to obligation of sovereignty, and make the king *tanquam unus ex nobis*; as was to be seen in the League of France. When factions are carried too high and too violently, it is a sign of weakness in princes; and much to the prejudice, both of their authority and business. The motions of factions under kings ought to be, like the motions (as the astronomers speak) of the inferior orbs, which may have their proper motions, but yet still are quietly carried, by the higher motion of *primum mobile*.

Of Ceremonies, And Respects

HE THAT is only real, had need have exceeding great parts of virtue; as the stone had need to be rich, that is set without foil. But if a man mark it well, it is, in praise and commendation of men, as it is in gettings and gains: for the proverb is true, That light gains make heavy purses; for light gains come thick, whereas great, come but now and then. So it is true, that small matters win great commendation, because they are continually in use and in note: whereas the occasion of any great virtue, cometh but on festivals. Therefore it doth much add to a man's reputation, and is (as Queen Isabella said) like perpetual letters commendatory, to have good forms. To attain them, it almost sufficeth not to despise them; for so shall a man observe them in others; and let him trust himself with the rest. For if he labor too much to express them, he shall lose their grace; which is to be natural and unaffected. Some men's behavior is like a verse, wherein every syllable is measured; how can a man comprehend great matters, that breaketh his mind too much, to small observations? Not to use ceremonies

at all, is to teach others not to use them again; and so diminisheth respect to himself; especially they be not to be omitted, to strangers and formal natures; but the dwelling upon them, and exalting them above the moon, is not only tedious, but doth diminish the faith and credit of him that speaks. And certainly, there is a kind of conveying, of effectual and imprinting passages amongst compliments, which is of singular use, if a man can hit upon it. Amongst a man's peers, a man shall be sure of familiarity; and therefore it is good, a little to keep state. Amongst a man's inferiors one shall be sure of reverence; and therefore it is good, a little to be familiar. He that is too much in anything, so that he giveth another occasion of satiety, maketh himself cheap. To apply one's self to others, is good; so it be with demonstration, that a man doth it upon regard, and not upon facility. It is a good precept generally, in seconding another, yet to add somewhat of one's own: as if you will grant his opinion, let it be with some distinction; if you will follow his motion, let it be with condition; if you allow his counsel, let it be with alleging further reason. Men had need beware, how they be too perfect in compliments; for be they never so sufficient otherwise, their enviers will

be sure to give them that attribute, to the disadvantage of their greater virtues. It is loss also in business, to be too full of respects, or to be curious, in observing times and opportunities. Solomon saith, He that considereth the wind, shall not sow, and he that looketh to the clouds, shall not reap. A wise man will make more opportunities, than he finds. Men's behavior should be, like their apparel, not too strait or point device, but free for exercise or motion.

Of Praise

PRAISE is the reflection of virtue; but it is as the glass or body, which giveth the reflection. If it be from the common people, it is commonly false and naught; and rather followeth vain persons, than virtuous. For the common people understand not many excellent virtues. The lowest virtues draw praise from them; the middle virtues work in them astonishment or admiration; but of the highest virtues, they have no sense of perceiving at all. But shows, and species virtutibus similes, serve best with them. Certainly fame is like a river, that beareth up things light and swoln, and drowns things weighty and solid. But if persons of quality and judgment concur, then it is (as the Scripture saith) *nomen bonum instar unguenti fragrantis*. It fireth all round about, and will not easily away. For the odors of ointments are more durable, than those of flowers. There be so many false points of praise, that a man may justly hold it a suspect. Some praises proceed merely of flattery; and if he be an ordinary flatterer, he will have certain common attributes, which may serve every man; if he be a cunning flatterer, he will follow the archflatterer, which is a man's self;

and wherein a man thinketh best of himself, therein the flatterer will uphold him most: but if he be an impudent flatterer, look wherein a man is conscious to himself, that he is most defective, and is most out of countenance in himself, that will the flatterer entitle him to perforce, *spretā conscientia*. Some praises come of good wishes and respects, which is a form due, in civility, to kings and great persons, *laudando praecipere*, when by telling men what they are, they represent to them, what they should be. Some men are praised maliciously, to their hurt, thereby to stir envy and jealousy towards them: *pessimum genus inimicorum laudantium*; insomuch as it was a proverb, amongst the Grecians, that he that was praised to his hurt, should have a push rise upon his nose; as we say, that a blister will rise upon one's tongue, that tells a lie. Certainly moderate praise, used with opportunity, and not vulgar, is that which doth the good. Solomon saith, He that praiseth his friend aloud, rising early, it shall be to him no better than a curse. Too much magnifying of man or matter, doth irritate contradiction, and procure envy and scorn. To praise a man's self, cannot be decent, except it be in rare cases; but to praise a man's office or profession, he may do it with good

grace, and with a kind of magnanimity. The cardinals of Rome, which are theologues, and friars, and Schoolmen, have a phrase of notable contempt and scorn towards civil business: for they call all temporal business of wars, embassages, judicature, and other employments, sbirrerie, which is under-sheriffries; as if they were but matters, for under-sheriffs and catchpoles: though many times those under-sheriffries do more good, than their high speculations. St. Paul, when he boasts of himself, he doth oft interlace, I speak like a fool; but speaking of his calling, he saith, magnificabo apostolatum meum.

Of Vain-glory

IT WAS prettily devised of AEsop, The fly sat upon the axle-tree of the chariot wheel, and said, What a dust do I raise! So are there some vain persons, that whatsoever goeth alone, or moveth upon greater means, if they have never so little hand in it, they think it is they that carry it. They that are glorious, must needs be factious; for all bravery stands upon comparisons. They must needs be violent, to make good their own vaunts. Neither can they be secret, and therefore not effectual; but according to the French proverb, *Beaucoup de bruit, peu de fruit*; Much bruit little fruit. Yet certainly, there is use of this quality in civil affairs. Where there is an opinion and fame to be created, either of virtue or greatness, these men are good trumpeters. Again, as Titus Livius noteth, in the case of Antiochus and the AEtolians, There are sometimes great effects, of cross lies; as if a man, that negotiates between two princes, to draw them to join in a war against the third, doth extol the forces of either of them, above measure, the one to the other: and sometimes he that deals between man and man, raiseth his own credit with both, by pretending greater interest than he

hath in either. And in these and the like kinds, it often falls out, that somewhat is produced of nothing; for lies are sufficient to breed opinion, and opinion brings on substance. In militar commanders and soldiers, vain-glory is an essential point; for as iron sharpens iron, so by glory, one courage sharpeneth another. In cases of great enterprise upon charge and adventure, a composition of glorious natures, doth put life into business; and those that are of solid and sober natures, have more of the ballast, than of the sail. In fame of learning, the flight will be slow without some feathers of ostentation. Qui de contemnenda gloria libros scribunt, nomen, suum inscribunt. Socrates, Aristotle, Galen, were men full of ostentation. Certainly vain-glory helpeth to perpetuate a man's memory; and virtue was never so beholding to human nature, as it received his due at the second hand. Neither had the fame of Cicero, Seneca, Plinius Secundus, borne her age so well, if it had not been joined with some vanity in themselves; like unto varnish, that makes ceilings not only shine but last. But all this while, when I speak of vain-glory, I mean not of that property, that Tacitus doth attribute to Mucianus; Omnium quae dixerat feceratque arte quadam ostentator: for that proceeds not of

vanity, but of natural magnanimity and discretion; and in some persons, is not only comely, but gracious. For excusations, cessions, modesty itself well governed, are but arts of ostentation. And amongst those arts, there is none better than that which Plinius Secundus speaketh of, which is to be liberal of praise and commendation to others, in that, wherein a man's self hath any perfection. For saith Pliny, very wittily, In commending another, you do yourself right; for he that you commend, is either superior to you in that you commend, or inferior. If he be inferior, if he be to be commended, you much more; if he be superior, if he be not to be commended, you much less. Glorious men are the scorn of wise men, the admiration of fools, the idols of parasites, and the slaves of their own vaunts.

Of Honor And Reputation

THE winning of honor, is but the revealing of a man's virtue and worth, without disadvantage. For some in their actions, do woo and effect honor and reputation, which sort of men, are commonly much talked of, but inwardly little admired. And some, contrariwise, darken their virtue in the show of it; so as they be undervalued in opinion. If a man perform that, which hath not been attempted before; or attempted and given over; or hath been achieved, but not with so good circumstance; he shall purchase more honor, than by effecting a matter of greater difficulty or virtue, wherein he is but a follower. If a man so temper his actions, as in some one of them he doth content every faction, or combination of people, the music will be the fuller. A man is an ill husband of his honor, that entereth into any action, the failing wherein may disgrace him, more than the carrying of it through, can honor him. Honor that is gained and broken upon another, hath the quickest reflection, like diamonds cut with facets. And therefore, let a man contend to excel any competitors of his in honor, in outshooting them, if he can, in their own bow. Discreet followers and

servants, help much to reputation. Omnis fama a domesticis emanat. Envy, which is the canker of honor, is best extinguished by declaring a man's self in his ends, rather to seek merit than fame; and by attributing a man's successes, rather to divine Providence and felicity, than to his own virtue or policy.

The true marshalling of the degrees of sovereign honor, are these: In the first place are conditores imperiorum, founders of states and commonwealths; such as were Romulus, Cyrus, Caesar, Ottoman, Ismael. In the second place are legislatores, lawgivers; which are also called second founders, or perpetui principes, because they govern by their ordinances after they are gone; such were Lycurgus, Solon, Justinian, Eadgar, Alphonsus of Castile, the Wise, that made the Siete Partidas. In the third place are liberatores, or salvatores, such as compound the long miseries of civil wars, or deliver their countries from servitude of strangers or tyrants; as Augustus Caesar, Vespasianus, Aurelianus, Theodoricus, King Henry the Seventh of England, King Henry the Fourth of France. In the fourth place are propagatores or propugnatores imperii; such as in honorable wars enlarge their

territories, or make noble defence against invaders. And in the last place are *patres patriae*; which reign justly, and make the times good wherein they live. Both which last kinds need no examples, they are in such number. Degrees of honor, in subjects, are, first *participes curarum*, those upon whom, princes do discharge the greatest weight of their affairs; their right hands, as we call them. The next are *duces belli*, great leaders in war; such as are princes' lieutenants, and do them notable services in the wars. The third are *gratiosi*, favorites; such as exceed not this scantling, to be solace to the sovereign, and harmless to the people. And the fourth, *negotiis pares*; such as have great places under princes, and execute their places, with sufficiency. There is an honor, likewise, which may be ranked amongst the greatest, which happeneth rarely; that is, of such as sacrifice themselves to death or danger for the good of their country; as was M. Regulus, and the two Decii.

Of Judicature

JUDGES ought to remember, that their office is *jus dicere*, and not *jus dare*; to interpret law, and not to make law, or give law. Else will it be like the authority, claimed by the Church of Rome, which under pretext of exposition of Scripture, doth not stick to add and alter; and to pronounce that which they do not find; and by show of antiquity, to introduce novelty. Judges ought to be more learned, than witty, more reverend, than plausible, and more advised, than confident. Above all things, integrity is their portion and proper virtue. Cursed (saith the law) is he that removeth the landmark. The mislayer of a mere-stone is to blame. But it is the unjust judge, that is the capital remover of landmarks, when he defineth amiss, of lands and property. One foul sentence doth more hurt, than many foul examples. For these do but corrupt the stream, the other corrupteth the fountain. So with Solomon, *Fons turbatus, et vena corrupta, est justus cadens in causa sua coram adversario*. The office of judges may have reference unto the parties that use, unto the advocates that plead, unto the clerks and ministers of justice underneath them, and to the sovereign or state above

them.

First, for the causes or parties that sue. There be (saith the Scripture) that turn judgment, into wormwood; and surely there be also, that turn it into vinegar; for injustice maketh it bitter, and delays make it sour. The principal duty of a judge, is to suppress force and fraud; whereof force is the more pernicious, when it is open, and fraud, when it is close and disguised. Add thereto contentious suits, which ought to be spewed out, as the surfeit of courts. A judge ought to prepare his way to a just sentence, as God useth to prepare his way, by raising valleys and taking down hills: so when there appeareth on either side an high hand, violent prosecution, cunning advantages taken, combination, power, great counsel, then is the virtue of a judge seen, to make inequality equal; that he may plant his judgment as upon an even ground. Qui fortiter emungit, elicit sanguinem; and where the wine-press is hard wrought, it yields a harsh wine, that tastes of the grape-stone. Judges must beware of hard constructions, and strained inferences; for there is no worse torture, than the torture of laws. Specially in case of laws penal, they ought to have care, that that which was meant for terror, be not turned

into rigor; and that they bring not upon the people, that shower whereof the Scripture speaketh, Pluet super eos laqueos; for penal laws pressed, are a shower of snares upon the people. Therefore let penal laws, if they have been sleepers of long, or if they be grown unfit for the present time, be by wise judges confined in the execution: *Judicis officium est, ut res, ita tempora rerum, etc.* In causes of life and death, judges ought (as far as the law permitteth) in justice to remember mercy; and to cast a severe eye upon the example, but a merciful eye upon the person.

Secondly, for the advocates and counsel that plead. Patience and gravity of hearing, is an essential part of justice; and an overspeaking judge is no well-tuned cymbal. It is no grace to a judge, first to find that, which he might have heard in due time from the bar; or to show quickness of conceit, in cutting off evidence or counsel too short; or to prevent information by questions, though pertinent. The parts of a judge in hearing, are four: to direct the evidence; to moderate length, repetition, or impertinency of speech; to recapitulate, select, and collate the material points, of that which hath been said; and to give the rule or sentence. Whatsoever is above these

is too much; and proceedeth either of glory, and willingness to speak, or of impatience to hear, or of shortness of memory, or of want of a staid and equal attention. It is a strange thing to see, that the boldness of advocates should prevail with judges; whereas they should imitate God, in whose seat they sit; who represseth the presumptuous, and giveth grace to the modest. But it is more strange, that judges should have noted favorites; which cannot but cause multiplication of fees, and suspicion of by-ways. There is due from the judge to the advocate, some commendation and gracing, where causes are well handled and fair pleaded; especially towards the side which obtaineth not; for that upholds in the client, the reputation of his counsel, and beats down in him the conceit of his cause. There is likewise due to the public, a civil reprehension of advocates, where there appeareth cunning counsel, gross neglect, slight information, indiscreet pressing, or an overbold defence. And let not the counsel at the bar, chop with the judge, nor wind himself into the handling of the cause anew, after the judge hath declared his sentence; but, on the other side, let not the judge meet the cause half way, nor give occasion to the party, to say his counsel or proofs were not heard.

Thirdly, for that that concerns clerks and ministers. The place of justice is an hallowed place; and therefore not only the bench, but the foot-place; and precincts and purprise thereof, ought to be preserved without scandal and corruption. For certainly grapes (as the Scripture saith) will not be gathered of thorns or thistles; either can justice yield her fruit with sweetness, amongst the briars and brambles of catching and polling clerks, and ministers. The attendance of courts, is subject to four bad instruments. First, certain persons that are sowers of suits; which make the court swell, and the country pine. The second sort is of those, that engage courts in quarrels of jurisdiction, and are not truly amici curiae, but parasiti curiae, in puffing a court up beyond her bounds, for their own scraps and advantage. The third sort, is of those that may be accounted the left hands of courts; persons that are full of nimble and sinister tricks and shifts, whereby they pervert the plain and direct courses of courts, and bring justice into oblique lines and labyrinths. And the fourth, is the poller and exacter of fees; which justifies the common resemblance of the courts of justice, to the bush whereunto, while the sheep flies for defence in weather, he

is sure to lose part of his fleece. On the other side, an ancient clerk, skilful in precedents, wary in proceeding, and understanding in the business of the court, is an excellent finger of a court; and doth many times point the way to the judge himself.

Fourthly, for that which may concern the sovereign and estate. Judges ought above all to remember the conclusion of the Roman Twelve Tables; *Salus populi suprema lex*; and to know that laws, except they be in order to that end, are but things captious, and oracles not well inspired. Therefore it is an happy thing in a state, when kings and states do often consult with judges; and again, when judges do often consult with the king and state: the one, when there is matter of law, intervenient in business of state; the other, when there is some consideration of state, intervenient in matter of law. For many times the things deduced to judgment may be *meum* and *tuum*, when the reason and consequence thereof may trench to point of estate: I call matter of estate, not only the parts of sovereignty, but whatsoever introduceth any great alteration, or dangerous precedent; or concerneth manifestly any great portion of people. And let no man weakly

conceive, that just laws and true policy have any antipathy; for they are like the spirits and sinews, that one moves with the other. Let judges also remember, that Solomon's throne was supported by lions on both sides: let them be lions, but yet lions under the throne; being circumspect that they do not check or oppose any points of sovereignty. Let not judges also be ignorant of their own right, as to think there is not left to them, as a principal part of their office, a wise use and application of laws. For they may remember, what the apostle saith of a greater law than theirs; *Nos scimus quia lex bona est, modo quis ea utatur legitime.*

Of Anger

TO SEEK to extinguish anger utterly, is but a bravery of the Stoics. We have better oracles: Be angry, but sin not. Let not the sun go down upon your anger. Anger must be limited and confined, both in race and in time. We will first speak how the natural inclination and habit to be angry, may be attempted and calmed. Secondly, how the particular motions of anger may be repressed, or at least refrained from doing mischief. Thirdly, how to raise anger, or appease anger in another.

For the first; there is no other way but to meditate, and ruminate well upon the effects of anger, how it troubles man's life. And the best time to do this, is to look back upon anger, when the fit is thoroughly over. Seneca saith well, That anger is like ruin, which breaks itself upon that it falls. The Scripture exhorteth us to possess our souls in patience. Whosoever is out of patience, is out of possession of his soul. Men must not turn bees;

... animasque in vulnere ponunt.

Anger is certainly a kind of baseness; as it appears well in the weakness of those subjects in whom it reigns; children, women, old folks, sick

folks. Only men must beware, that they carry their anger rather with scorn, than with fear; so that they may seem rather to be above the injury, than below it; which is a thing easily done, if a man will give law to himself in it.

For the second point; the causes and motives of anger, are chiefly three. First, to be too sensible of hurt; for no man is angry, that feels not himself hurt; and therefore tender and delicate persons must needs be oft angry; they have so many things to trouble them, which more robust natures have little sense of. The next is, the apprehension and construction of the injury offered, to be, in the circumstances thereof, full of contempt: for contempt is that, which putteth an edge upon anger, as much or more than the hurt itself. And therefore, when men are ingenious in picking out circumstances of contempt, they do kindle their anger much. Lastly, opinion of the touch of a man's reputation, doth multiply and sharpen anger. Wherein the remedy is, that a man should have, as Consalvo was wont to say, *telam honoris crassiozem*. But in all refrainings of anger, it is the best remedy to win time; and to make a man's self believe, that the opportunity of his revenge is not yet

come, but that he foresees a time for it; and so to still himself in the meantime, and reserve it.

To contain anger from mischief, though it take hold of a man, there be two things, whereof you must have special caution. The one, of extreme bitterness of words, especially if they be aculeate and proper; for cummunia maledicta are nothing so much; and again, that in anger a man reveal no secrets; for that, makes him not fit for society. The other, that you do not peremptorily break off, in any business, in a fit of anger; but howsoever you show bitterness, do not act anything, that is not revocable.

For raising and appeasing anger in another; it is done chiefly by choosing of times, when men are frowardest and worst disposed, to incense them. Again, by gathering (as was touched before) all that you can find out, to aggravate the contempt. And the two remedies are by the contraries. The former to take good times, when first to relate to a man an angry business; for the first impression is much; and the other is, to sever, as much as may be, the construction of the injury from the point of contempt; imputing it to misunderstanding, fear, passion, or what you will.

Of Vicissitude Of Things

SOLOMON saith, There is no new thing upon the earth. So that as Plato had an imagination, That all knowledge was but remembrance; so Solomon giveth his sentence, That all novelty is but oblivion. Whereby you may see, that the river of Lethe runneth as well above ground as below. There is an abstruse astrologer that saith, If it were not for two things that are constant (the one is, that the fixed stars ever stand a like distance one from another, and never come nearer together, nor go further asunder; the other, that the diurnal motion perpetually keepeth time), no individual would last one moment. Certain it is, that the matter is in a perpetual flux, and never at a stay. The great winding-sheets, that bury all things in oblivion, are two; deluges and earthquakes. As for conflagrations and great droughts, they do not merely dispeople and destroy. Phaeton's car went but a day. And the three years' drought in the time of Elias, was but particular, and left people alive. As for the great burnings by lightnings, which are often in the West Indies, they are but narrow. But in the other two destructions, by deluge and earthquake, it is further to be noted,

that the remnant of people which hap to be reserved, are commonly ignorant and mountainous people, that can give no account of the time past; so that the oblivion is all one, as if none had been left. If you consider well of the people of the West Indies, it is very probable that they are a newer or a younger people, than the people of the Old World. And it is much more likely, that the destruction that hath heretofore been there, was not by earthquakes (as the Egyptian priest told Solon concerning the island of Atlantis, that it was swallowed by an earthquake), but rather that it was desolated by a particular deluge. For earthquakes are seldom in those parts. But on the other side, they have such pouring rivers, as the rivers of Asia and Africk and Europe, are but brooks to them. Their Andes, likewise, or mountains, are far higher than those with us; whereby it seems, that the remnants of generation of men, were in such a particular deluge saved. As for the observation that Machiavel hath, that the jealousy of sects, doth much extinguish the memory of things; traducing Gregory the Great, that he did what in him lay, to extinguish all heathen antiquities; I do not find that those zeals do any great effects, nor last long; as it appeared in the succession of

Sabinian, who did revive the former antiquities.

The vicissitude of mutations in the superior globe, are no fit matter for this present argument. It may be, Plato's great year, if the world should last so long, would have some effect; not in renewing the state of like individuals (for that is the fume of those, that conceive the celestial bodies have more accurate influences upon these things below, than indeed they have), but in gross. Comets, out of question, have likewise power and effect, over the gross and mass of things; but they are rather gazed upon, and waited upon in their journey, than wisely observed in their effects; specially in, their respective effects; that is, what kind of comet, for magnitude, color, version of the beams, placing in the reign of heaven, or lasting, produceth what kind of effects.

There is a toy which I have heard, and I would not have it given over, but waited upon a little. They say it is observed in the Low Countries (I know not in what part) that every five and thirty years, the same kind and suit of years and weathers come about again; as great frosts, great wet, great droughts, warm winters, summers with little heat, and the like; and they call it the Prime. It is a thing

I do the rather mention, because, computing backwards, I have found some concurrence.

But to leave these points of nature, and to come to men. The greatest vicissitude of things amongst men, is the vicissitude of sects and religions. For those orbs rule in men's minds most. The true religion is built upon the rock; the rest are tossed, upon the waves of time. To speak, therefore, of the causes of new sects; and to give some counsel concerning them, as far as the weakness of human judgment can give stay, to so great revolutions. When the religion formerly received, is rent by discords; and when the holiness of the professors of religion, is decayed and full of scandal; and withal the times be stupid, ignorant, and barbarous; you may doubt the springing up of a new sect; if then also, there should arise any extravagant and strange spirit, to make himself author thereof. All which points held, when Mahomet published his law. If a new sect have not two properties, fear it not; for it will not spread. The one is the supplanting, or the opposing, of authority established; for nothing is more popular than that. The other is the giving license to pleasures, and a voluptuous life. For as for speculative heresies (such as were in ancient

times the Arians, and now the Armenians), though they work mightily upon men's wits, yet they do not produce any great alterations in states; except it be by the help of civil occasions. There be three manner of plantations of new sects. By the power of signs and miracles; by the eloquence, and wisdom, of speech and persuasion; and by the sword. For martyrdoms, I reckon them amongst miracles; because they seem to exceed the strength of human nature: and I may do the like, of superlative and admirable holiness of life. Surely there is no better way, to stop the rising of new sects and schisms, than to reform abuses; to compound the smaller differences; to proceed mildly, and not with sanguinary persecutions; and rather to take off the principal authors by winning and advancing them, than to enrage them by violence and bitterness.

The changes and vicissitude in wars are many; but chiefly in three things; in the seats or stages of the war; in the weapons; and in the manner of the conduct. Wars, in ancient time, seemed more to move from east to west; for the Persians, Assyrians, Arabians, Tartars (which were the invaders) were all eastern people. It is true, the Gauls were western; but we

read but of two incursions of theirs: the one to Gallo-Grecia, the other to Rome. But east and west have no certain points of heaven; and no more have the wars, either from the east or west, any certainty of observation. But north and south are fixed; and it hath seldom or never been seen that the far southern people have invaded the northern, but contrariwise. Whereby it is manifest that the northern tract of the world, is in nature the more martial region: be it in respect of the stars of that hemisphere; or of the great continents that are upon the north, whereas the south part, for aught that is known, is almost all sea; or (which is most apparent) of the cold of the northern parts, which is that which, without aid of discipline, doth make the bodies hardest, and the courages warmest.

Upon the breaking and shivering of a great state and empire, you may be sure to have wars. For great empires, while they stand, do enervate and destroy the forces of the natives which they have subdued, resting upon their own protecting forces; and then when they fail also, all goes to ruin, and they become a prey. So was it in the decay of the Roman empire; and likewise in the empire of Almaigne, after Charles the Great,

every bird taking a feather; and were not unlike to befall to Spain, if it should break. The great accessions and unions of kingdoms, do likewise stir up wars; for when a state grows to an over-power, it is like a great flood, that will be sure to overflow. As it hath been seen in the states of Rome, Turkey, Spain, and others. Look when the world hath fewest barbarous peoples, but such as commonly will not marry or generate, except they know means to live (as it is almost everywhere at this day, except Tartary), there is no danger of inundations of people; but when there be great shoals of people, which go on to populate, without foreseeing means of life and sustentation, it is of necessity that once in an age or two, they discharge a portion of their people upon other nations; which the ancient northern people were wont to do by lot; casting lots what part should stay at home, and what should seek their fortunes. When a warlike state grows soft and effeminate, they may be sure of a war. For commonly such states are grown rich in the time of their degenerating; and so the prey inviteth, and their decay in valor, encourageth a war.

As for the weapons, it hardly falleth under rule and observation: yet we

see even they, have returns and vicissitudes. For certain it is, that ordnance was known in the city of the Oxidrakes in India; and was that, which the Macedonians called thunder and lightning, and magic. And it is well known that the use of ordnance, hath been in China above two thousand years. The conditions of weapons, and their improvement, are; First, the fetching afar off; for that outruns the danger; as it is seen in ordnance and muskets. Secondly, the strength of the percussion; wherein likewise ordnance do exceed all arietations and ancient inventions. The third is, the commodious use of them; as that they may serve in all weathers; that the carriage may be light and manageable; and the like.

For the conduct of the war: at the first, men rested extremely upon number: they did put the wars likewise upon main force and valor; pointing days for pitched fields, and so trying it out upon an even match and they were more ignorant in ranging and arraying their battles. After, they grew to rest upon number rather competent, than vast; they grew to advantages of place, cunning diversions, and the like: and they grew more skilful in the ordering of their battles.

In the youth of a state, arms do

flourish; in the middle age of a state, learning; and then both of them together for a time; in the declining age of a state, mechanical arts and merchandize. Learning hath his infancy, when it is but beginning and almost childish; then his youth, when it is luxuriant and juvenile; then his strength of years, when it is solid and reduced; and lastly, his old age, when it waxeth dry and exhaust. But it is not good to look too long upon these turning wheels of vicissitude, lest we become giddy. As for the philology of them, that is but a circle of tales, and therefore not fit for this writing.

Of Fame

THE poets make Fame a monster. They describe her in part finely and elegantly, and in part gravely and sententiously. They say, look how many feathers she hath, so many eyes she hath underneath; so many tongues; so many voices; she pricks up so many ears.

This is a flourish. There follow excellent parables; as that, she gathereth strength in going; that she goeth upon the ground, and yet hideth her head in the clouds; that in the daytime she sitteth in a watch tower, and flieth most by night; that she mingleth things done, with things not done; and that she is a terror to great cities. But that which passeth all the rest is: They do recount that the Earth, mother of the giants that made war against Jupiter, and were by him destroyed, thereupon in an anger brought forth Fame. For certain it is, that rebels, figured by the giants, and seditious fames and libels, are but brothers and sisters, masculine and feminine. But now, if a man can tame this monster, and bring her to feed at the hand, and govern her, and with her fly other ravening fowl and kill them, it is somewhat worth. But we are infected with the style of the

poets. To speak now in a sad and serious manner: There is not, in all the politics, a place less handled and more worthy to be handled, than this of fame. We will therefore speak of these points: What are false fames; and what are true fames; and how they may be best discerned; how fames may be sown, and raised; how they may be spread, and multiplied; and how they may be checked, and laid dead. And other things concerning the nature of fame. Fame is of that force, as there is scarcely any great action, wherein it hath not a great part; especially in the war. Mucianus undid Vitellius, by a fame that he scattered, that Vitellius had in purpose to remove the legions of Syria into Germany, and the legions of Germany into Syria; whereupon the legions of Syria were infinitely inflamed. Julius Caesar took Pompey unprovided, and laid asleep his industry and preparations, by a fame that he cunningly gave out: Caesar's own soldiers loved him not, and being wearied with the wars, and laden with the spoils of Gaul, would forsake him, as soon as he came into Italy. Livia settled all things for the succession of her son Tiberius, by continual giving out, that her husband Augustus was upon recovery and amendment, and it is an usual thing with the pashas, to conceal the death

of the Great Turk from the janizaries and men of war, to save the sacking of Constantinople and other towns, as their manner is. Themistocles made Xerxes, king of Persia, post apace out of Grecia, by giving out, that the Grecians had a purpose to break his bridge of ships, which he had made athwart Hellespont. There be a thousand such like examples; and the more they are, the less they need to be repeated; because a man meeteth with them everywhere. Therefore let all wise governors have as great a watch and care over fames, as they have of the actions and designs themselves.

[This essay was not finished]

A Glossary Of Archaic Words And Phrases

Abridgment: miniaturization

Absurd: stupid, unbecomingly

Abuse: cheat, deceive

Aculeate: stinging

Adamant: loadstone

Adust: scorched

Advoutress: adulteress

Affect: like, desire

Antic: clown

Appose: question

*Arietation: battering
ram*

Audit: revenue

Avoidance: secret

Battle: battalion

Bestow: settle in life

Blanch: flatter, evade

Brave: boastful

Bravery: boast, ostentatious

Broke: deal in broken

Broken: shine by comparison

Broken music: part

Cabinet: secret

Calendar: weather journal

Card: chart, map

Care not to: are recommended

Cast: plan

Cat: cate, cake

*Charge and adventure
risk*

Check with: interfere
Chop: bandy words
Civil: peaceful
Close: secret, secre
Collect: infer
Compound: compro
Consent: agreemen
Curious: elaborate
Custom: import dut
Deceive: rob
Derive: divert
Difficileness: moros
Discover: reveal
Donative: money gi
Doubt: fear
Equipollent: equally
Espial: spy
Estate: state
Facility: of easy per
Fair: rather
Fame: rumor
Favor: feature
Flashy: insipid
Foot-pace: lobby
Foreseen: guarded
Froward: stubborn
Futile: babbling
Globe: complete bo
Glorious: showy, bc
Humorous: capricio
Hundred poll: hund
Impertinent: irrelev
Implicit: entangled
In a mean: in moder
In smother: suppres
Indifferent: imparti

Intend: attend to
Knap: knoll
Leese: lose
Let: hinder
Loose: shot
Lot: spell
Lurch: intercept
Make: profit, get
Manage: train
Mate: conquer
Material: business-
like

Mere-
stone: boundary stone
Muniting: fortifying
Nerve: sinew
Obnoxious: subserv
Oes: round spangle.
Pair: impair
Pardon: allowance
Passable: mediocre
Pine-apple-
tree: pine

Plantation: colony
Platform: plan
Plausible: praisewo
Point device: excess
Politic: politician
Poll: extort
Poser: examiner
Practice: plotting
Preoccupate: anticip
Prest: prepared
Prick: plant
Proper: personal
Prospective: stereos

Proyne: prune
Purprise: enclosure
Push: pimple
Quarrel: pretext
Quech: flinch
Reason: principle
Recamera: retiring-
room
Return: reaction
Return: wing running
Rise: dignity
Round: straight
Save: account for
Scantling: measure
Seel: blind
Shrewd: mischievous
Sort: associate
Spial: spy
Staddle: sapling
Steal: do secretly
Stirp: family
Stond: stop, stand
Stoved: hot-housed
Style: title
Success: outcome
Sumptuary law: law
extravagance
Superior globe: the
Temper: proportion
Tendering: nursing
Tract: line, trait
Travel: travail, labor
Treaties: treatises
Trench to: touch
Trivial: common
Turquet: Turkish door

Under foot: below v

Unready: untrained

Usury: interest

Value: certify

Virtuous: able

Votary: vowed

Wanton: spoiled

Wood: maze

Work: manage, utili

IDEAL COMMONWEALTHS

PLUTARCH'S LYCURGUS

MORE'S UTOPIA

BACON'S NEW ATLANTIS

CAMPANELLA'S CITY OF THE SUN

AND A FRAGMENT OF

HALL'S MUNDUS ALTER ET IDEM

WITH AN INTRODUCTION BY HENRY MORLEY

LL.D., PROFESSOR OF ENGLISH LITERATURE AT
UNIVERSITY COLLEGE, LONDON

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INTRODUCTION.

Plato in his "Republic" argues that it is the aim of Individual Man as of the State to be wise, brave and temperate. In a State, he says, there are three

orders, the Guardians, the Auxiliaries, the Producers. Wisdom should be the special virtue of the Guardians; Courage of the Auxiliaries; and Temperance of all. These three virtues belong respectively to the Individual Man, Wisdom to his Rational part; Courage to his Spirited; and Temperance to his Appetitive: while in the State as in the Man it is Injustice that disturbs their harmony.

Because the character of Man appears in the State unchanged, but in a larger form, Plato represented Socrates as studying the ideal man himself through an Ideal Commonwealth.

In another of his dialogues, "Critias," of which we have only the beginning, Socrates wishes that he could see how such a commonwealth would work, if it were set moving. Critias undertakes to tell him. For he has received tradition of events that happened more than nine thousand years ago, when the Athenians themselves were such ideal citizens. Critias has received this tradition, he says, from a ninety-year-old grandfather, whose father, Dropides, was the friend of Solon. Solon, lawgiver and poet, had heard it from the priests of the goddess Neïth or Athene at Sais, and had begun to shape it into a heroic poem.

This was the tradition:—Nine thousand years before the time of Solon, the goddess Athene, who was worshipped also in Sais, had given to her Athenians a healthy climate, a fertile soil, and temperate people strong in wisdom and courage. Their Republic was like that which Socrates imagined, and it had to bear the shock of a great invasion by the people of the vast island Atlantis. This island, larger than all Libya and Asia put together, was once in the sea westward beyond the Atlantic waves,—thus America was dreamed of long before it was discovered. Atlantis had ten kings, descended from ten sons of Poseidon (Neptune), who was the god magnificently worshipped by its people. Vast power and dominion, that extended through all Libya as far as Egypt, and over a part of Europe, caused the Atlantid kings to grow ambitious and unjust. Then they entered the Mediterranean and fell upon Athens with enormous force. But in the little band of citizens, temperate, brave, and wise, there were forces of Reason able to resist and overcome brute strength. Now, however, gone are the Atlantids, gone are the old virtues of Athens. Earthquakes and deluges laid waste the world. The

whole great island of Atlantis, with its people and its wealth, sank to the bottom of the ocean. The ideal warriors of Athens, in one day and night, were swallowed by an earthquake, and were to be seen no more.

Plato, a philosopher with the soul of a poet, died in the year 347 before Christ. Plutarch was writing at the close of the first century after Christ, and in his parallel Lives of Greeks and Romans, the most famous of his many writings, he took occasion to paint an Ideal Commonwealth as the conception of Lycurgus, the half mythical or all mythical Solon of Sparta. To Plutarch's Life of Lycurgus, as well as to Plato, Thomas More and others have been indebted for some part of the shaping of their philosophic dreams.

The discovery of the New World at the end of the fifteenth century followed hard upon the diffusion of the new invention of printing, and came at a time when the fall of Constantinople by scattering Greek scholars, who became teachers in Italy, France and elsewhere, spread the study of Greek, and caused Plato to live again. Little had been heard of him through the Arabs, who cared little for his poetic method. But with the revival of learning he had become a force in Europe, a strong aid to the Reformers.

Sir Thomas More's Utopia was written in the years 1515-16, when its author's age was about thirty-seven. He was a young man of twenty when Columbus first touched the continent named after the Florentine Amerigo Vespucci, who made his voyages to it in the years 1499-1503. More wrote his Utopia when imaginations of men were stirred by the sudden enlargement of their conceptions of the world, and Amerigo Vespucci's account of his voyages, first printed in 1507, was fresh in every scholar's mind. He imagined a traveller, Raphael Hythloday—whose name is from Greek words that mean "Knowing in Trifles"—who had sailed with Vespucci on his three last voyages, but had not returned from the last voyage until, after separation from his comrades, he had wandered into some farther discovery of his own. Thus he had found, somewhere in those parts, the island of Utopia. Its name is from Greek words meaning Nowhere. More had gone on an embassy to Brussels with Cuthbert Tunstal when he wrote his philosophical satire upon European, and more particularly English, statecraft, in the form of an Ideal Commonwealth described by Hythloday as he had found it in Utopia. It was printed at Louvain in the latter part of the year 1516, under the editorship of

Erasmus, and that enlightened young secretary to the municipality of Antwerp, Peter Giles, or Ægidius, who is introduced into the story. "Utopia" was not printed in England in the reign of Henry VIII., and could not be, for its satire was too direct to be misunderstood, even when it mocked English policy with ironical praise for doing exactly what it failed to do. More was a wit and a philosopher, but at the same time so practical and earnest that Erasmus tells of a burgomaster at Antwerp who fastened upon the parable of Utopia with such goodwill that he learnt it by heart. And in 1517 Erasmus advised a correspondent to send for Utopia, if he had not yet read it, and if he wished to see the true source of all political evils.

Francis Bacon's "New Atlantis," first written in Latin, was published in 1629, three years after its author's death. Bacon placed his Ideal Commonwealth in those seas where a great Austral continent was even then supposed to be, but had not been discovered. As the old Atlantis implied a foreboding of the American continent, so the New Atlantis implied foreboding of the Australian. Bacon in his philosophy sought through experimental science the dominion of men over things, "for Nature is only governed by obeying her." In his Ideal World of the New Atlantis, Science is made the civilizer who binds man to man, and is his leader to the love of God.

Thomas Campanella was Bacon's contemporary, a man only seven years younger; and an Italian who suffered for his ardour in the cause of science. He was born in Calabria in 1568, and died in 1639. He entered the Dominican order when a boy, but had a free and eager appetite for knowledge. He urged, like Bacon, that Nature should be studied through her own works, not through books; he attacked, like Bacon, the dead faith in Aristotle, that instead of following his energetic spirit of research, lapsed into blind idolatry. Campanella strenuously urged that men should reform all sciences by following Nature and the books of God. He had been stirring in this way for ten years, when there arose in Calabria a conspiracy against the Spanish rule. Campanella, who was an Italian patriot was seized and sent to Naples. The Spanish inquisition joined in attack on him. He was accused of books he had not written and of opinions he did not hold; he was seven times put to the question and suffered, with firmness of mind, the most cruel tortures. The Pope interceded in vain for him with the King of Spain. He suffered imprisonment for twenty-seven years, during which time he wrote

much, and one piece of his prison work was his ideal of "The City of the Sun."

Released at last from his prison, Campanella went to Rome, where he was defended by Pope Urban VIII. against continued violence of attack. But he was compelled at last to leave Rome, and made his escape as a servant in the livery of the French ambassador. In Paris, Richelieu became Campanella's friend; the King of France gave him a pension of three thousand livres; the Sorbonne vouched for the orthodoxy of his writings. He died in Paris, at the age of seventy-one, in the Convent of the Dominicans.

Of Campanella's "Civitas Solis," which has not hitherto been translated into English, the translation here given, with one or two omissions of detail which can well be spared, has been made for me by my old pupil and friend, Mr. Thomas W. Halliday.

In the works (published in 1776) of the witty Dr. William King, who played much with the subject of cookery, is a fragment found among his remaining papers, and given by his editors as an original piece in the manner of Rabelais. It seems never to have been observed that this is only a translation of that part of Joseph Hall's "Mundus Alter es Idem," which deals with the kitchen side of life. The fragment will be found at the end of this volume, preceded by a short description of the other parts of Hall's World which is other than ours, and yet the same.

H.M.

March 1885.

PLUTARCH'S LIFE OF LYCURGUS.

LIFE OF LYCURGUS.

Of Lycurgus the lawgiver we have nothing to relate that is certain and uncontroverted. For there are different accounts of his birth, his travels, his death, and especially of the laws and form of government which he established. But least of all are the times agreed upon in which this great man lived. For some say he flourished at the same time with Iphitus, and joined with him in settling the cessation of arms during the Olympic games. Among these is Aristotle the philosopher, who alleges for proof an Olympic quoit, on which was preserved the inscription of Lycurgus's name. But others who, with Eratosthenes and Apollodorus, compute the time by the succession of the Spartan kings, place him much earlier than the first Olympiad. Timæus, however, supposes that, as there were two Lycurguses in Sparta at different times, the actions of both are ascribed to one, on account of his particular renown; and that the more ancient of them lived not long after Homer: nay, some say he had seen him. Xenophon too confirms the opinion of his antiquity, when he makes him contemporary with the Heraclidæ. It is true, the latest of the Lacedæmonian kings were of the lineage of the Heraclidæ; but Xenophon there seems to speak of the first and more immediate descendants of Hercules. As the history of those times is thus involved, in relating the circumstances of Lycurgus's life, we shall endeavour to select such as are least controverted, and follow authors of the greatest credit.

Simonides the poet, tells us, that Prytanis, not Eunomus, was father to Lycurgus. But most writers give us the genealogy of Lycurgus and Eunomus in a different manner; for, according to them, Sous was the son of Patrocles, and grandson of Aristodemus, Eurytion the son of Sous, Prytanis of Eurytion, and Eunomus of Prytanis; to this Eunomus was born Polydectes, by a former wife, and by a second, named Dianassa, Lycurgus. Eutychidas, however, says Lycurgus was the sixth from Patrocles, and the eleventh from Hercules. The

most distinguished of his ancestors was Sous, under whom the Lacedæmonians made the Helotes their slaves, and gained an extensive tract of land from the Arcadians. Of this Sous it is related, that, being besieged by the Clitorians in a difficult post where there was no water, he agreed to give up all his conquests, provided that himself and all his army should drink of the neighbouring spring. When these conditions were sworn to, he assembled his forces, and offered his kingdom to the man that would forbear drinking; not one of them, however, would deny himself, but they all drank. Then Sous went down to the spring himself, and having only sprinkled his face in sight of the enemy, he marched off, and still held the country, because all had not drank. Yet, though he was highly honoured for this, the family had not their name from him, but from his son, were called Eurytionidæ; and this, because Eurytion seems to be the first who relaxed the strictness of kingly government, inclining to the interest of the people, and ingratiating himself with them. Upon this relaxation their encroachments increased, and the succeeding kings, either becoming odious, treating them with greater rigour, or else giving way through weakness or in hopes of favour, for a long time anarchy and confusion prevailed in Sparta; by which one of its kings, the father of Lycurgus, lost his life. For while he was endeavouring to part some persons who were concerned in a fray, he received a wound by a kitchen knife, of which he died, leaving the kingdom to his eldest son Polydectes.

But he too dying soon after, the general voice gave it for Lycurgus to ascend the throne; and he actually did so, till it appeared that his brother's widow was pregnant. As soon as he perceived this, he declared that the kingdom belonged to her issue, provided it were male, and he kept the administration in his hands only as his guardian. This he did with the title of Prodicos, which the Lacedæmonians give to the guardians of infant kings. Soon after, the queen made him a private overture, that she would destroy her child, upon condition that he would marry her when king of Sparta. Though he detested her wickedness, he said nothing against the proposal, but pretending to approve it, charged her not to take any drugs to procure an abortion, lest she should endanger her own health or life; for he would take care that the child, as soon as born, should be destroyed. Thus he artfully drew on the woman to her full time, and, when he heard she was in labour, he sent persons to attend and watch her delivery, with orders, if it were a girl, to give it to the women,

but if a boy, to bring it to him, in whatever business he might be engaged. It happened that he was at supper with the magistrates when she was delivered of a boy, and his servants, who were present, carried the child to him. When he received it, he is reported to have said to the company, "Spartans, see here your new-born king." He then laid him down upon the chair of state, and named him Charilaus, because of the joy and admiration of his magnanimity and justice testified by all present. Thus the reign of Lycurgus lasted only eight months. But the citizens had a great veneration for him on other accounts, and there were more that paid him their attentions, and were ready to execute his commands, out of regard to his virtues, than those that obeyed him as a guardian to the king, and director of the administration. There were not, however, wanting those that envied him, and opposed his advancement, as too high for so young a man; particularly the relations and friends of the queen-mother, who seemed to have been treated with contempt. Her brother Leonidas, one day boldly attacked him with virulent language, and scrupled not to tell him that he was well assured he would soon be king; thus preparing suspicions, and matter of accusation against Lycurgus, in case any accident should befall the king. Insinuations of the same kind were likewise spread by the queen-mother. Moved with this ill-treatment, and fearing some dark design, he determined to get clear of all suspicion, by travelling into other countries, till his nephew should be grown up, and have a son to succeed him in the kingdom.

He set sail, therefore, and landed in Crete. There having observed the forms of government, and conversed with the most illustrious personages, he was struck with admiration of some of their laws, and resolved at his return to make use of them in Sparta. Some others he rejected. Among the friends he gained in Crete was Thales, with whom he had interest enough to persuade him to go and settle at Sparta. Thales was famed for his wisdom and political abilities: he was withal a lyric poet, who under colour of exercising his art, performed as great things as the most excellent lawgivers. For his odes were so many persuasives to obedience and unanimity, as by means of melody and numbers they had great grace and power, they softened insensibly the manners of the audience, drew them off from the animosities which then prevailed, and united them in zeal for excellence and virtue. So that, in some measure, he prepared the way for Lycurgus towards the instruction of the

Spartans. From Crete Lycurgus passed to Asia, desirous, as is said, to compare the Ionian expense and luxury with the Cretan frugality and hard diet, so as to judge what effect each had on their several manners and governments; just as physicians compare bodies that are weak and sickly with the healthy and robust. There also, probably, he met with Homer's poems, which were preserved by the posterity of Cleophylus. Observing that many moral sentences and much political knowledge were intermixed with his stories, which had an irresistible charm, he collected them into one body, and transcribed them with pleasure, in order to take them home with him. For his glorious poetry was not yet fully known in Greece; only some particular pieces were in a few hands, as they happened to be dispersed. Lycurgus was the first that made them generally known. The Egyptians likewise suppose that he visited them; and as of all their institutions he was most pleased with their distinguishing the military men from the rest of the people, he took the same method at Sparta, and, by separating from these the mechanics and artificers, he rendered the constitution more noble and more of a piece. This assertion of the Egyptians is confirmed by some of the Greek writers. But we know of no one, except Aristocrates, son of Hipparchus, and a Spartan, who has affirmed that he went to Libya and Spain, and in his Indian excursions conversed with the Gymnosophists.

The Lacedæmonians found the want of Lycurgus when absent, and sent many embassies to entreat him to return. For they perceived that their kings had barely the title and outward appendages of royalty, but in nothing else differed from the multitude; whereas Lycurgus had abilities from nature to guide the measures of government, and powers of persuasion, that drew the hearts of men to him. The kings, however, were consulted about his return, and they hoped that in his presence they should experience less insolence amongst the people. Returning then to a city thus disposed, he immediately applied himself to alter the whole frame of the constitution; sensible that a partial change, and the introducing of some new laws, would be of no sort of advantage; but, as in the case of a body diseased and full of bad humours, whose temperament is to be corrected and new formed by medicines, it was necessary to begin a new regimen. With these sentiments he went to Delphi, and when he had offered and consulted the god, he returned with that celebrated oracle, in which the priestess called him "Beloved of the gods, and

rather a god than a man." As to his request that he might enact good laws, she told him, Apollo had heard his request, and promised that the constitution he should establish would be the most excellent in the world. Thus encouraged, he applied to the nobility, and desired them to put their hands to the work; addressing himself privately at first to his friends, and afterwards by degrees, trying the disposition of others, and preparing them to concur in the business. When matters were ripe, he ordered thirty of the principal citizens to appear armed in the market-place by break of day, to strike terror into such as might desire to oppose him. Hermippus has given us the names of twenty of the most eminent of them; but he that had the greatest share in the whole enterprise, and gave Lycurgus the best assistance in the establishing of his laws, was called Arithmiades. Upon the first alarm, king Charilaus, apprehending it to be a design against his person, took refuge in the Chalcioicos. But he was soon satisfied, and accepted of their oath. Nay, so far from being obstinate, he joined in the undertaking. Indeed, he was so remarkable for the gentleness of his disposition, that Archelaus, his partner in the throne, is reported to have said to some that were praising the young king, "Yes, Charilaus is a good man to be sure, who cannot find in his heart to punish the bad." Among the many new institutions of Lycurgus, the first and most important was that of a senate; which sharing, as Plato says, in the power of the kings, too imperious and unrestrained before, and having equal authority with them, was the means of keeping them within the bounds of moderation, and highly contributed to the preservation of the state. For before it had been veering and unsettled, sometimes inclining to arbitrary power, and sometimes towards a pure democracy; but this establishment of a senate, an intermediate body, like ballast, kept it in a just equilibrium, and put it in a safe posture: the twenty-eight senators adhering to the kings, whenever they saw the people too encroaching, and, on the other hand, supporting the people, when the kings attempted to make themselves absolute. This, according to Aristotle, was the number of senators fixed upon, because two of the thirty associates of Lycurgus deserted the business through fear. But Sphærus tells us there were only twenty-eight at first entrusted with the design. Something, perhaps, there is in its being a perfect number, formed of seven multiplied by four, and withal the first number, after six, that is equal to all its parts. But I rather think, just so many senators were created, that, together with the two kings, the whole body might consist of thirty members.

He had this institution so much at heart, that he obtained from Delphi an oracle in its behalf, called *rhetra*, or the decree. This was couched in very ancient and uncommon terms, which interpreted, ran thus: "When you have built a temple to the Syllanian Jupiter, and the Syllanian Minerva, divided the people into tribes and classes, and established a senate of thirty persons, including the two kings, you shall occasionally summon the people to an assembly between Babyce and Cnacion, and they shall have the determining voice." Babyce and Cnacion are now called Oenus. But Aristotle thinks, by Cnacion is meant the river, and by Babyce the bridge. Between these they held their assemblies, having neither halls, nor any kind of building for that purpose. These things he thought of no advantage to their councils, but rather a disservice; as they distracted the attention, and turned it upon trifles, on observing the statues and pictures, the splendid roofs, and every other theatrical ornament. The people thus assembled had no right to propose any subject of debate, and were only authorized to ratify or reject what might be proposed to them by the senate and the kings. But because, in process of time, the people, by additions or retrenchments, changed the terms, and perverted the sense of the decrees, the kings Polydorus and Theopompus inserted in the *rhetra* this clause: "If the people attempt to corrupt any law, the senate and chiefs shall retire:" that is, they shall dissolve the assembly, and annul the alterations. And they found means to persuade the Spartans that this too was ordered by Apollo; as we learn from these verses of Tyrtæus:

Ye sons of Sparta,
who at Phœbus' shrine
Your humble vows
prefer, attentive hear
The god's decision.
O'er your beauteous
lands
Two guardian kings, a
senate, and the voice
Of the concurring
people, lasting laws
Shall with joint power
establish.

Though the government was thus tempered by Lycurgus, yet soon after it degenerated into an oligarchy, whose power was exercised with such wantonness and violence, that it wanted indeed a bridle, as Plato expresses it. This curb they found in the authority of the Ephori, about a hundred and thirty years after Lycurgus. Elatus was the first invested with this dignity, in the reign of Theopompus; who, when his wife upbraided him, that he would leave the regal power to his children less than he received it, replied, "Nay but greater, because more lasting." And, in fact, the prerogative, so stripped of all extravagant pretensions, no longer occasioned either envy or danger to its possessors. By these means they escaped the miseries which befell the Messenian and Argive kings, who would not in the least relax the severity of their power in favour of the people. Indeed, from nothing more does the wisdom and foresight of Lycurgus appear, than from the disorderly governments, and the bad understanding that subsisted between the kings and people of Messena and Argos, neighbouring states, and related in blood to Sparta. For, as at first they were in all respects equal to her, and possessed of a better country, and yet preserved no lasting happiness, but, through the insolence of the kings and disobedience of the people, were harassed with perpetual troubles, they made it very evident that it was really a felicity more than human, a blessing from heaven to the Spartans, to have a legislator who knew so well how to frame and temper their government. But this was an event of a later date.

A second and bolder political enterprise of Lycurgus was a new division of the lands. For he found a prodigious inequality, the city overcharged with many indigent persons, who had no land, and the wealth centred in the hands of a few. Determined, therefore, to root out the evils of insolence, envy, avarice, and luxury, and those distempers of a state still more inveterate and fatal, I mean poverty and riches, he persuaded them to cancel all former divisions of land, and to make new ones, in such a manner that they might be perfectly equal in their possessions and way of living. Hence, if they were ambitious of distinction they might seek it in virtue, as no other difference was left between them but that which arises from the dishonour of base actions and the praise of good ones. His proposal was put in practice. He made nine thousand lots for the territory of Sparta, which he distributed among so many citizens, and thirty thousand for the inhabitants of the rest of

Laconia. But some say he made only six thousand shares for the city, and that Polydorus added three thousand afterwards; others, that Polydorus doubled the number appointed by Lycurgus, which were only four thousand five hundred. Each lot was capable of producing (one year with another) seventy bushels of grain for each man, and twelve for each woman, besides a quantity of wine and oil in proportion. Such a provision they thought sufficient for health and a good habit of body, and they wanted nothing more. A story goes of our legislator, that some time after returning from a journey through the fields just reaped, and seeing the shocks standing parallel and equal, he smiled, and said to some that were by, "How like is Laconia to an estate newly divided among many brothers!"

After this, he attempted to divide also the movables, in order to take away all appearance of inequality; but he soon perceived that they could not bear to have their goods directly taken from them, and therefore took another method, counterworking their avarice by a stratagem. First he stopped the currency of the gold and silver coin, and ordered that they should make use of iron money only, then to a great quantity and weight of this he assigned but a small value; so that to lay up ten *minæ*, a whole room was required, and to remove it, nothing less than a yoke of oxen. When this became current, many kinds of injustice ceased in Lacedæmon. Who would steal or take a bribe, who would defraud or rob, when he could not conceal the booty; when he could neither be dignified by the possession of it, nor if cut in pieces be served by its use? For we are told that when hot, they quenched it in vinegar, to make it brittle and unmalleable, and consequently unfit for any other service. In the next place, he excluded unprofitable and superfluous arts: indeed, if he had not done this, most of them would have fallen of themselves, when the new money took place, as the manufactures could not be disposed of. Their iron coin would not pass in the rest of Greece, but was ridiculed and despised; so that the Spartans had no means of purchasing any foreign or curious wares; nor did any merchant-ship unlade in their harbours. There were not even to be found in all their country either sophists, wandering fortune-tellers, keepers of infamous houses, or dealers in gold and silver trinkets, because there was no money. Thus luxury, losing by degrees the means that cherished and supported it, died away of itself: even they who had great possessions, had no advantage from them, since they could not be

displayed in public, but must lie useless, in unregarded repositories. Hence it was, that excellent workmanship was shown in their useful and necessary furniture, as beds, chairs, and tables; and the Lacedæmonian cup called *cothon*, as Critias informs us, was highly valued, particularly in campaigns: for the water, which must then of necessity be drank, though it would often otherwise offend the sight, had its muddiness concealed by the colour of the cup, and the thick part stopping at the shelving brim, it came clearer to the lips. Of these improvements the lawgiver was the cause; for the workmen having no more employment in matters of mere curiosity, showed the excellence of their art in necessary things.

Desirous to complete the conquest of luxury, and exterminate the love of riches, he introduced a third institution, which was wisely enough and ingeniously contrived. This was the use of public tables, where all were to eat in common of the same meat, and such kinds of it as were appointed by law. At the same time they were forbidden to eat at home, upon expensive couches and tables, to call in the assistance of butchers and cooks, or to fatten like voracious animals in private. For so not only their manners would be corrupted, but their bodies disordered; abandoned to all manner of sensuality and dissoluteness, they would require long sleep, warm baths, and the same indulgence as in perpetual sickness. To effect this was certainly very great; but it was greater still, to secure riches from rapine and from envy, as Theophrastus expresses it, or rather by their eating in common, and by the frugality of their table, to take from riches their very being. For what use or enjoyment of them, what peculiar display of magnificence could there be, where the poor man went to the same refreshment with the rich? Hence the observation, that it was only at Sparta where Plutus (according to the proverb) was kept blind, and like an image, destitute of life or motion. It must further be observed, that they had not the privilege to eat at home, and so to come without appetite to the public repast: they made a point of it to observe any one that did not eat and drink with them, and to reproach him as an intemperate and effeminate person that was sick of the common diet.

The rich, therefore (we are told), were more offended with this regulation than with any other, and, rising in a body, they loudly expressed their indignation: nay, they proceeded so far as to assault Lycurgus with stones, so that he was forced to fly from the assembly and take refuge in a temple.

Unhappily, however, before he reached it, a young man named Alcander, hasty in his resentments, though not otherwise ill-tempered, came up with him, and, upon his turning round, struck out one of his eyes with a stick. Lycurgus then stopped short, and, without giving way to passion, showed the people his eye beat out, and his face streaming with blood. They were so struck with shame and sorrow at the sight, that they surrendered Alcander to him, and conducted him home with the utmost expressions of regret. Lycurgus thanked them for their care of his person, and dismissed them all except Alcander. He took him into his house, but showed no ill treatment either by word or action; only ordering him to wait upon him, instead of his usual servants and attendants. The youth, who was of an ingenuous disposition, without murmuring, did as he was commanded. Living in this manner with Lycurgus, and having an opportunity to observe the mildness and goodness of his heart, his strict temperance and indefatigable industry, he told his friends that Lycurgus was not that proud and severe man he might have been taken for, but, above all others, gentle and engaging in his behaviour. This, then, was the chastisement, and this punishment he suffered, of a wild and headstrong young man to become a very modest and prudent citizen. In memory of his misfortune, Lycurgus built a temple to Minerva Optiletis, so called by him from a term which the Dorians use for the eye. Yet Dioscorides, who wrote a treatise concerning the Lacedæmonian government, and others, relate that his eye was hurt, but not put out, and that he built the temple in gratitude to the goddess for his cure. However, the Spartans never carried staves to their assemblies afterwards.

The public repasts were called by the Cretans Andria; but the Lacedæmonians styled them Phiditia, either from their tendency to friendship and mutual benevolence, *phiditia* being used instead of *philitia*; or else from their teaching frugality and parsimony, which the word *pheido* signifies. But it is not all impossible that the first letter might by some means or other be added, and so *phiditia* take place of *editia*, which barely signifies eating. There were fifteen persons to a table, or a few more or less. Each of them was obliged to bring in monthly a bushel of meal, eight gallons of wine, five pounds of cheese, two pounds and a half of figs, and a little money to buy flesh and fish. If any of them happened to offer a sacrifice of first fruits, or to kill venison, he sent a part of it to the public table: for after a sacrifice or

hunting, he was at liberty to sup at home: but the rest were to appear at the usual place. For a long time this eating in common was observed with great exactness: so that when king Agis returned from a successful expedition against the Athenians, and from a desire to sup with his wife, requested to have his portion at home, the Polemarchs refused to send it: nay, when, through resentment, he neglected, the day following, to offer the sacrifice usual on occasion of victory, they set a fine upon him. Children also were introduced at these public tables, as so many schools of sobriety. There they heard discourses concerning government, and were instructed in the most liberal breeding. There they were allowed to jest without scurrility, and were not to take it ill when the raillery was returned. For it was reckoned worthy of a Lacedæmonian to bear a jest: but if any one's patience failed, he had only to desire them to be quiet, and they left off immediately. When they first entered, the oldest man present pointed to the door, and said, "Not a word spoken in this company goes out there." The admitting of any man to a particular table was under the following regulation. Each member of that small society took a little ball of soft bread in his hand. This he was to drop, without saying a word, into a vessel called *caddos*, which the waiter carried upon his head. In case he approved of the candidate, he did it without altering the figure, if not, he first pressed it flat in his hand; for a flatted ball was considered as a negative. And if but one such was found, the person was not admitted, as they thought it proper that the whole company should be satisfied with each other. He who thus rejected, was said to have no luck in the *caddos*. The dish that was in the highest esteem amongst them was the black broth. The old men were so fond of it that they ranged themselves on one side and eat it, leaving the meat to the young people. It is related of a king of Pontus, that he purchased a Lacedæmonian cook, for the sake of this broth. But when he came to taste it he strongly expressed his dislike; and the cook made answer, "Sir, to make this broth relish, it is necessary first to bathe in the Eurotas." After they had drank moderately, they went home without lights. Indeed, they were forbidden to walk with a light either on this or any other occasion, that they might accustom themselves to march in the darkest night boldly and resolutely. Such was the order of their public repasts.

Lycurgus left none of his laws in writing; it was ordered in one of the *Rhetraë* that none should be written. For what he thought most conducive to the virtue

and happiness of a city, was principles interwoven with the manners and breeding of the people. These would remain immovable, as founded in inclination, and be the strongest and most lasting tie; and the habits which education produced in the youth, would answer in each the purpose of a lawgiver. As for smaller matters, contracts about property, and whatever occasionally varied, it was better not to reduce these to a written form and unalterable method, but to suffer them to change with the times, and to admit of additions or retrenchments at the pleasure of persons so well educated. For he resolved the whole business of legislation into the bringing up of youth. And this, as we have observed, was the reason why one of his ordinances forbade them to have any written laws.

Another ordinance levelled against magnificence and expense, directed that the ceilings of houses should be wrought with no tool but the axe and the doors with nothing but the saw. For, as Epaminondas is reported to have said afterwards, of his table, "Treason lurks not under such a dinner," so Lycurgus perceived before him, that such a house admits of no luxury and needless splendour. Indeed, no man could be so absurd as to bring into a dwelling so homely and simple, bedsteads with silver feet, purple coverlets, golden cups, and a train of expense that follows these: but all would necessarily have the bed suitable to the room, the coverlet of the bed and the rest of their utensils and furniture to that. From this plain sort of dwellings, proceeded the question of Leotychidas the elder to his host, when he supped at Corinth, and saw the ceiling of the room very splendid and curiously wrought, "Whether trees grew square in his country."

A third ordinance of Lycurgus was, that they should not often make war against the same enemy, lest, by being frequently put upon defending themselves, they too should become able warriors in their turn. And this they most blamed king Agesilaus for afterwards, that by frequent and continued incursions into Boeotia, he taught the Thebans to make head against the Lacedæmonians. This made Antalcidas say, when he saw him wounded, "The Thebans pay you well for making them good soldiers who neither were willing nor able to fight you before." These ordinances he called *Rhetraë*, as if they had been oracles and decrees of the Deity himself.

As for the education of youth, which he looked upon as the greatest and most

glorious work of a lawgiver, he began with it at the very source, taking into consideration their conception and birth, by regulating the marriages. For he did not (as Aristotle says) desist from his attempt to bring the women under sober rules. They had, indeed, assumed great liberty and power on account of the frequent expeditions of their husbands, during which they were left sole mistresses at home, and so gained an undue deference and improper titles; but notwithstanding this he took all possible care of them. He ordered the virgins to exercise themselves in running, wrestling, and throwing quoits and darts; that their bodies being strong and vigorous, the children afterwards produced from them might be the same; and that, thus fortified by exercise, they might the better support the pangs of child-birth, and be delivered with safety. In order to take away the excessive tenderness and delicacy of the sex, the consequence of a recluse life, he accustomed the virgins occasionally to be seen naked as well as the young men, and to dance and sing in their presence on certain festivals. There they sometimes indulged in a little raillery upon those that had misbehaved themselves, and sometimes they sung encomiums on such as deserved them, thus exciting in the young men a useful emulation and love of glory. For he who was praised for his bravery and celebrated among the virgins, went away perfectly happy: while their satirical glances thrown out in sport, were no less cutting than serious admonitions; especially as the kings and senate went with the other citizens to see all that passed. As for the virgins appearing naked, there was nothing disgraceful in it, because everything was conducted with modesty, and without one indecent word or action. Nay, it caused a simplicity of manners and an emulation for the best habit of body; their ideas too were naturally enlarged, while they were not excluded from their share of bravery and honour. Hence they were furnished with sentiments and language, such as Gorgo the wife of Leonidas is said to have made use of. When a woman of another country said to her, "You of Lacedæmon are the only women in the world that rule the men;" she answered, "We are the only women that bring forth men."

These public dances and other exercises of the young maidens naked, in sight of the young men, were, moreover, incentives to marriage: and, to use Plato's expression, drew them almost as necessarily by the attractions of love, as a geometrical conclusion follows from the premises. To encourage it still more, some marks of infamy were set upon those that continued bachelors. For they

were not permitted to see these exercises of the naked virgins; and the magistrates commanded them to march naked round the market-place in the winter, and to sing a song composed against themselves, which expressed how justly they were punished for their disobedience to the laws. They were also deprived of that honour and respect which the younger people paid to the old; so that nobody found fault with what was said to Dercyllidas, though an eminent commander. It seems, when he came one day into company, a young man, instead of rising up and giving place, told him, "You have no child to give place to me, when I am old."

In their marriages, the bridegroom carried off the bride by violence; and she was never chosen in a tender age, but when she had arrived at full maturity. Then the woman that had the direction of the wedding, cut the bride's hair close to the skin, dressed her in man's clothes, laid her upon a mattress, and left her in the dark. The bridegroom, neither oppressed with wine nor enervated with luxury, but perfectly sober, as having always supped at the common table, went in privately, untied her girdle, and carried her to another bed. Having stayed there a short time, he modestly retired to his usual apartment, to sleep with the other young men; and observed the same conduct afterwards, spending the day with his companions, and reposing himself with them in the night, nor even visiting his bride but with great caution and apprehensions of being discovered by the rest of the family; the bride at the same time exerted all her art to contrive convenient opportunities for their private meetings. And this they did not for a short time only, but some of them even had children before they had an interview with their wives in the daytime. This kind of commerce not only exercised their temperance and chastity, but kept their bodies fruitful, and the first ardour of their love fresh and unabated; for as they were not satiated like those that are always with their wives, there still was place for unextinguished desire. When he had thus established a proper regard to modesty and decorum with respect to marriage, he was equally studious to drive from that state the vain and womanish passion of jealousy; by making it quite as reputable to have children in common with persons of merit, as to avoid all offensive freedom in their own behaviour to their wives. He laughed at those who revenge with wars and bloodshed the communication of a married woman's favours; and allowed, that if a man in years should have a young wife, he might introduce to her

some handsome and honest young man, whom he most approved of, and when she had a child of this generous race, bring it up as his own. On the other hand, he allowed, that if a man of character should entertain a passion for a married woman on account of her modesty and the beauty of her children, he might treat with her husband for admission to her company, that so planting in a beauty-bearing soil, he might produce excellent children, the congenial offspring of excellent parents. For, in the first place, Lycurgus considered children, not so much the property of their parents as of the state; and therefore he would not have them begot by ordinary persons, but by the best men in it. In the next place, he observed the vanity and absurdity of other nations, where people study to have their horses and dogs of the finest breed they can procure either by interest or money; and yet keep their wives shut up, that they may have children by none but themselves, though they may happen to be doting, decrepit, or infirm. As if children, when sprung from a bad stock, and consequently good for nothing, were no detriment to those whom they belong to, and who have the trouble of bringing them up, nor any advantage, when well descended and of a generous disposition. These regulations tending to secure a healthy offspring, and consequently beneficial to the state, were so far from encouraging that licentiousness of the women which prevailed afterwards, that adultery was not known amongst them. A saying, upon this subject of Geradas, an ancient Spartan, is thus related. A stranger had asked him, "What punishment their law appointed for adulterers?" He answered, "My friend, there are no adulterers in our country." The other replied, "But what if there should be one?" "Why then," says Geradas, "he must forfeit a bull so large that he might drink of the Eurotas from the top of Mount Taygetus." When the stranger expressed his surprise at this, and said, "How can such a bull be found?" Geradas answered with a smile, "How can an adulterer be found in Sparta?" This is the account we have of their marriages.

It was not left to the father to rear what children he pleased, but he was obliged to carry the child to a place called Lesche, to be examined by the most ancient men of the tribe, who were assembled there. If it was strong and well-proportioned, they gave orders for its education, and assigned it one of the nine thousand shares of land; but if it was weakly and deformed, they ordered it to be thrown into the place called Apothetæ, which is a deep cavern

near the mountain Taygetus; concluding that its life could be no advantage either to itself or to the public, since nature had not given it at first any strength or goodness of constitution. For the same reason the women did not wash their new-born infants with water, but with wine, thus making some trial of their habit of body; imagining that sickly and epileptic children sink and die under the experiment, while healthy became more vigorous and hardy. Great care and art was also exerted by the nurses; for, as they never swathed the infants, their limbs had a freer turn, and their countenances a more liberal air; besides, they used them to any sort of meat, to have no terrors in the dark, nor to be afraid of being alone, and to leave all ill humour and unmanly crying. Hence people of other countries purchased Lacedæmonian nurses for their children; and Alcibiades the Athenian is said to have been nursed by Amicla, a Spartan. But if he was fortunate in a nurse, he was not so in a preceptor: for Zopyrus, appointed to that office by Pericles, was, as Plato tells us, no better qualified than a common slave. The Spartan children were not in that manner, under tutors purchased or hired with money, nor were the parents at liberty to educate them as they pleased: but as soon as they were seven years old, Lycurgus ordered them to be enrolled in companies, where they were all kept under the same order and discipline, and had their exercises and recreations in common. He who showed the most conduct and courage amongst them, was made captain of the company. The rest kept their eyes upon him, obeyed his orders, and bore with patience the punishment he inflicted: so that their whole education was an exercise of obedience. The old men were present at their diversions, and often suggested some occasion of dispute or quarrel, that they might observe with exactness the spirit of each, and their firmness in battle.

As for learning, they had just what was absolutely necessary. All the rest of their education was calculated to make them subject to command, to endure labour, to fight and conquer. They added, therefore, to their discipline, as they advance in age; cutting their hair very close, making them go barefoot, and play, for the most part, quite naked. At twelve years of age, their under garment was taken away, and but one upper one a year allowed them. Hence they were necessarily dirty in their persons, and not indulged the great favour of baths, and oils, except on some particular days of the year. They slept in companies, on beds made of the tops of reeds, which they gathered with their

own hands, without knives, and brought from the banks of the Eurotas. In winter they were permitted to add a little thistle-down, as that seemed to have some warmth in it.

At this age, the most distinguished amongst them became the favourite companions of the elder; and the old men attended more constantly their places of exercise, observing their trials of strength and wit, not slightly and in a cursory manner, but as their fathers, guardians, and governors: so that there was neither time nor place where persons were wanting to instruct and chastise them. One of the best and ablest men of the city was, moreover, appointed inspector of the youth: and he gave the command of each company to the discreetest and most spirited of those called Irens. An Iren was one that had been two years out of the class of boys: a Melliren one of the oldest lads. This Iren, then, a youth twenty years old, gives orders to those under his command in their little battles, and has them to serve him at his house. He sends the oldest of them to fetch wood, and the younger to gather pot-herbs: these they steal where they can find them, either slyly getting into gardens, or else craftily and warily creeping to the common tables. But if any one be caught, he is severely flogged for negligence or want of dexterity. They steal, too, whatever victuals they possibly can, ingeniously contriving to do it when persons are asleep, or keep but indifferent watch. If they are discovered, they are punished not only with whipping, but with hunger. Indeed, their supper is but slender at all times, that, to fence against want, they may be forced to exercise their courage and address. This is the first intention of their spare diet: a subordinate one is, to make them grow tall. For when the animal spirits are not too much oppressed by a great quantity of food, which stretches itself out in breadth and thickness, they mount upwards by their natural lightness, and the body easily and freely shoots up in height. This also contributes to make them handsome; for thin and slender habits yield more freely to nature, which then gives a fine proportion to the limbs; whilst the heavy and gross resist her by their weight. So women that take physic during their pregnancy, have slighter children indeed, but of a finer and more delicate turn, because the suppleness of the matter more readily obeys the plastic power. However, these are speculations which we shall leave to others.

The boys steal with so much caution, that one of them having conveyed a

young fox under his garment, suffered the creature to tear out his bowels with his teeth and claws, choosing rather to die than to be detected. Nor does this appear incredible, if we consider what their young men can endure to this day; for we have seen many of them expire under the lash at the altar of Diana Orthia.

The Iren, reposing himself after supper, used to order one of the boys to sing a song; to another he put some question which required a judicious answer: for example, "Who was the best man in the city?" or "What he thought of such an action?" This accustomed them from their childhood to judge of the virtues, to enter into the affairs of their countrymen. For if one of them was asked, "Who is a good citizen, or who an infamous one," and hesitated in his answer, he was considered a boy of slow parts, and of a soul that would not aspire to honour. The answer was likewise to have a reason assigned for it, and proof conceived in few words. He whose account of the matter was wrong, by way of punishment had his thumb bit by the Iren. The old men and magistrates often attended these little trials, to see whether the Iren exercised his authority in a rational and proper manner. He was permitted, indeed, to inflict the penalties; but when the boys were gone, he was to be chastised himself, if he had punished them either with too much severity or remissness.

The adopters of favourites also shared both in the honour and disgrace of their boys: and one of them is said to have been mulcted by the magistrates, because the boy whom he had taken into his affections let some ungenerous word or cry escape him as he was fighting. This love was so honourable and in so much esteem, that the virgins too had their lovers amongst the most virtuous matrons. A competition of affection caused no misunderstanding, but rather a mutual friendship between those that had fixed their regards upon the same youth, and an united endeavour to make him as accomplished as possible.

The boys were also taught to use sharp repartee, seasoned with humour, and whatever they said was to be concise and pithy. For Lycurgus, as we have observed, fixed but a small value on a considerable quantity of his iron money; but, on the contrary, the worth of speech was to consist in its being comprised in a few plain words, pregnant with a great deal of sense: and he contrived that by long silence they might learn to be sententious and acute in

their replies. As debauchery often causes weakness and sterility in the body, so the intemperance of the tongue makes conversation empty and insipid. King Agis, therefore, when a certain Athenian laughed at the Lacedæmonian short swords, and said, "The jugglers would swallow them with ease upon the stage," answered in his laconic way, "And yet we can reach our enemies' hearts with them." Indeed, to me there seems to be something in this concise manner of speaking which immediately reaches the object aimed at, and forcibly strikes the mind of the hearer. Lycurgus himself was short and sententious in his discourse, if we may judge by some of his answers which are recorded; that, for instance, concerning the constitution. When one advised him to establish a popular government in Lacedæmon, "Go," said he, "and first make a trial of it in thy own family." That again, concerning sacrifices to the Deity, when he was asked why he appointed them so trifling and of so little value, "That we might never be in want," said he, "of something to offer him." Once more, when they inquired of him, what sort of martial exercises he allowed of, he answered, "All, except those in which you stretch out your hands." Several such like replies of his are said to be taken from the letters which he wrote to his countrymen: as to their question, "How shall we best guard against the invasion of an enemy?"—"By continuing poor, and not desiring in your possessions to be one above another." And to the question, whether they should enclose Sparta with walls, "That city is well fortified, which has a wall of men instead of brick." Whether these and some other letters ascribed to him are genuine or not, is no easy matter to determine. However, that they hated long speeches, the following apophthegms are a farther proof. King Leonidas said to one who discoursed at an improper time about affairs of some concern, "My friend, you should not talk so much to the purpose, of what it is not to the purpose to talk of." Charilaus, the nephew of Lycurgus, being asked why his uncle had made so few laws, answered, "To men of few words, few laws are sufficient." Some people finding fault with Hecatæus the sophist, because, when admitted to one of the public repasts, he said nothing all the time, Archidamidas replied, "He that knows how to speak, knows also when to speak."

The manner of their repartees, which, as I said, were seasoned with humour, may be gathered from these instances. When a troublesome fellow was pestering Demaratus with impertinent questions, and this in particular several

times repeated, "Who is the best man in Sparta?" He answered, "He that is least like you." To some who were commending the Eleans for managing the Olympic games with so much justice and propriety, Agis said, "What great matter is it, if the Eleans do justice once in five years?" When a stranger was professing his regard for Theopompus, and saying that his own countrymen called him Philolacon (a lover of the Lacedæmonians), the king answered him, "My good friend, it were much better, if they called you Philopolites" (a lover of your own countrymen). Plistonax, the son of Pausanias, replied to an orator of Athens, who said the Lacedæmonians had no learning. "True, for we are the only people of Greece that have learned no ill of you." To one who asked what number of men there was in Sparta, Archidamidas said, "Enough to keep bad men at a distance."

Even when they indulged a vein of pleasantry, one might perceive that they would not use one unnecessary word, nor let an expression escape them that had not some sense worth attending to. For one being asked to go and hear a person who imitated the nightingale to perfection, answered, "I have heard the nightingale herself." Another said, upon reading this epitaph,

Victims of Mars, at
Selinus they fell,
Who quench'd the
rage of tyranny—

"And they deserved to fall, for, instead of *quenching* it, they should have let it *burn out*." A young man answered one that promised him some game-cocks that would stand their death, "Give me those that will be the death of others." Another seeing some people carried into the country in litters, said, "May I never sit in any place where I cannot rise before the aged!" This was the manner of their apophthegms: so that it has been justly enough observed that the term *lakonizein* (to act the Lacedæmonian) is to be referred rather to the exercises of the mind, than those of the body.

Nor were poetry and music less cultivated among them, than a concise dignity of expression. Their songs had a spirit, which could rouse the soul, and impel it in an enthusiastic manner to action. The language was plain and manly, the subject serious and moral. For they consisted chiefly of the praises of heroes that had died for Sparta, or else of expressions of detestation for

such wretches as had declined the glorious opportunity, and rather chose to drag on life in misery and contempt. Nor did they forget to express an ambition for glory suitable to their respective ages. Of this it may not be amiss to give an instance. There were three choirs on their festivals, corresponding with the three ages of man. The old men began,

Once in battle bold we
shone;

the young men answered,

Try us: our vigour is
not gone;

and the boys concluded,

The palm remains for
us alone.

Indeed, if we consider with some attention such of the Lacedæmonian poems as are still extant, and get into those airs which were played upon the flute when they marched to battle, we must agree that Terpander and Pindar have very fitly joined valour and music together. The former thus speaks of Lacedæmon,

There gleams the youth's bright falchion: there the
muse
Lifts her sweet voice: there awful Justice opes
Her wide pavilion.

And Pindar sings,

There in grave council
sits the sage;
There burns the
youth's resistless rage
To hurl the quiv'ring
lance;
The Muse with glory
crowns their arms,

And Melody exerts
her charms,
And Pleasure leads the
dance.

Thus we are informed, not only of their warlike turn, but their skill in music.
For as the Spartan poet says,

To swell the bold
notes of the lyre,
Becomes the warrior's
lofty fire.

And the king always offered sacrifice to the muses before a battle, putting his troops in mind, I suppose, of their early education and of the judgment that would be passed upon them; as well as that those divinities might teach them to despise danger, while they performed some exploit fit for them to celebrate.

On these occasions they relaxed the severity of their discipline, permitting their men to be curious in dressing their hair, and elegant in their arms and apparel, while they expressed their alacrity, like horses full of fire and neighing for the race. They let their hair, therefore, grow from their youth, but took more particular care, when they expected an action, to have it well combed and shining; remembering a saying of Lycurgus, that "a large head of hair made the handsome more graceful, and the ugly more terrible." The exercises, too, of the young men, during the campaigns, were more moderate, their diet not so hard, and their whole treatment more indulgent: so that they were the only people in the world with whom military discipline wore, in time of war, a gentler face than usual. When the army was drawn up, and the enemy near, the king sacrificed a goat, and commanded them all to set garlands upon their heads, and the musicians to play Castro's march, while himself began the pæan, which was the signal to advance. It was at once a solemn and dreadful sight to see them measuring their steps to the sound of music, and without the least disorder in their ranks or tumult of spirits, moving forward cheerfully and composedly, with harmony, to battle. Neither fear nor rashness was likely to approve men so disposed, possessed as they were of a firm presence of mind, with courage and confidence of success, as

under the conduct of heaven. When the king advanced against the enemy, he had always with him some one that had been crowned in the public games of Greece. And they tell us, that a Lacedæmonian, when large sums were offered him on condition that he would not enter the Olympic lists, refused them, having with much difficulty thrown his antagonist, one put this question to him, "Spartan, what will you get by this victory?" He answered with a smile, "I shall have the honour to fight foremost in the ranks before my prince." When they had routed the enemy, they continued the pursuit till they were assured of the victory: after that they immediately desisted; deeming it neither generous nor worthy of a Grecian to destroy those who made no farther resistance. This was not only a proof of magnanimity, but of great service to their cause. For when their adversaries found that they killed such as stood it out, but spared the fugitives, they concluded it was better to fly than to meet their fate upon the spot.

Hippias the sophist tells us, that Lycurgus himself was a man of great personal valour, and an experienced commander. Philostephanus also ascribes to him the first division of cavalry into troops of fifty, who were drawn up in a square body. But Demetrius the Phalerean says, that he never had any military employment, and that there was the profoundest peace imaginable when he established the constitution of Sparta. His providing for a cessation of arms during the Olympic games is likewise a mark of the humane and peaceable man. Some, however, acquaint us, and among the rest Hermippus, that Lucurgus at first had no communication with Iphitus; but coming that way, and happening to be a spectator, he heard behind him a human voice (as he thought) which expressed some wonder and displeasure that he did not put his countrymen upon resorting to so great an assembly. He turned round immediately, to discover whence the voice came, and as there was no man to be seen, concluded it was from heaven. He joined Iphitus, therefore; and ordering, along with him, the ceremonies of the festival, rendered it more magnificent and lasting.

The discipline of the Lacedæmonians continued after they were arrived at years of maturity. For no man was at liberty to live as he pleased; the city being like one great camp, where all had their stated allowance, and knew their public charge, each man concluding that he was born, not for himself, but for his country. Hence, if they had no particular orders, they employed

themselves in inspecting the boys, and teaching them something useful, or in learning of those that were older than themselves. One of the greatest privileges that Lycurgus procured his countrymen, was the enjoyment of leisure, the consequence of his forbidding them to exercise any mechanic trade. It was not worth their while to take great pains to raise a fortune, since riches there were of no account: and the Helotes, who tilled the ground, were answerable for the produce above-mentioned. To this purpose we have a story of a Lacedæmonian, who, happening to be at Athens while the court sat, was informed of a man who was fined for idleness; and when the poor fellow was returning home in great dejection, attended by his condoling friends, he desired the company to show him the person that was condemned for keeping up his dignity. So much beneath them they reckoned all attention to mechanics arts, and all desire of riches!

Lawsuits were banished from Lacedæmon with money. The Spartans knew neither riches nor poverty, but possessed an equal competency, and had a cheap and easy way of supplying their few wants. Hence, when they were not engaged in war, their time was taken up with dancing, feasting, hunting, or meeting to exercise, or converse. They went not to market under thirty years of age, all their necessary concerns being managed by their relations and adopters. Nor was it reckoned a credit to the old to be seen sauntering in the market-place; it was deemed more suitable for them to pass great part of the day in the schools of exercise, or places of conversation. Their discourse seldom turned upon money, or business, or trade, but upon the praise of the excellent, or the contempt of the worthless; and the last was expressed with that pleasantry and humour, which conveyed instruction and correction without seeming to intend it. Nor was Lycurgus himself immoderately severe in his manner; but, as Sosibius tells us, he dedicated a little statue to the god of laughter in each hall. He considered facetiousness as a seasoning of their hard exercise and diet, and therefore ordered it to take place on all proper occasions, in their common entertainments and parties of pleasure.

Upon the whole, he taught his citizens to think nothing more disagreeable than to live by (or for) themselves. Like bees, they acted with one impulse for the public good, and always assembled about their prince. They were possessed with a thirst of honour, an enthusiasm bordering upon insanity, and had not a wish but for their country. These sentiments are confirmed by some

of their aphorisms. When Pædaretus lost his election for one of the "three hundred," he went away "rejoicing that there were three hundred better men than himself found in the city." Pisistratidas going with some others, ambassador to the king of Persia's lieutenants, was asked whether they came with a public commission, or on their own account, to which he answered, "If successful, for the public; if unsuccessful, for ourselves." Agrileonis, the mother of Brasidas, asking some Amphipolitans that waited upon her at her house, whether Brasidas died honourably and as became a Spartan? they greatly extolled his merit, and said there was not such a man left in Sparta; whereupon she replied, "Say not so, my friends; for Brasidas was indeed a man of honour, but Lacedæmon can boast of many better men than he."

The senate, as I said before, consisted at first of those that were assistants to Lycurgus in his great enterprise. Afterwards, to fill up any vacancy that might happen, he ordered the most worthy men to be selected, of those that were full threescore years old. This was the most respectable dispute in the world, and the contest was truly glorious; for it was not who should be swiftest among the swift, or strongest of the strong, but who was the wisest and best among the good and wise. He who had the preference was to bear this mark of superior excellence through life, this great authority, which put into his hands the lives and honour of the citizens, and every other important affair. The manner of the election was this: when the people were assembled, some persons appointed for the purpose were shut up in a room near the place; where they could neither see nor be seen, and only hear the shouts of the constituents: for by them they decided this and most other affairs. Each candidate walked silently through the assembly, one after another according to lot. Those that were shut up had writing tables, in which they set down in different columns the number and loudness of the shouts, without knowing who they were for; only they marked them as first, second, third, and so on, according to the number of the competitors. He that had the most and loudest acclamations, was declared duly elected. Then he was crowned with a garland, and went round to give thanks to the gods: a number of young men followed, striving which should extol him most, and the women celebrated his virtues in their songs, and blessed his worthy life and conduct. Each of his relations offered him a repast, and their address on the occasion was, "Sparta honours you with this collation." When he had finished the procession, he

went to the common table, and lived as before. Only two portions were set before him, one of which he carried away: and as all the women related to him attended at the gates of the public hall, he called her for whom he had the greatest esteem, and presented her with the portion, saying at the same time, "That which I received as a mark of honour, I give to you." Then she was conducted home with great applause by the rest of the women.

Lycurgus likewise made good regulations with respect to burials. In the first place, to take away all superstition, he ordered the dead to be buried in the city, and even permitted their monuments to be erected near the temples; accustoming the youth to such sights from their infancy, that they might have no uneasiness from them, nor any horror for death, as if people were polluted with the touch of a dead body, or with treading upon a grave. In the next place, he suffered nothing to be buried with the corpse, except the red cloth and the olive leaves in which it was wrapped. Nor would he suffer the relations to inscribe any names upon the tombs, except of those men that fell in battle, or those women who died in some sacred office. He fixed eleven days for the time of mourning: on the twelfth they were to put an end to it, after offering sacrifice to Ceres. No part of life was left vacant and unimproved, but even with their necessary actions he interwove the praise of virtue and the contempt of vice: and he so filled the city with living examples, that it was next to impossible, for persons who had these from their infancy before their eyes, not to be drawn and formed to honour.

For the same reason he would not permit all that desired to go abroad and see other countries, lest they should contract foreign manners, gain traces of a life of little discipline, and of a different form of government. He forbid strangers too to resort to Sparta, who could not assign a good reason for their coming; not, as Thucydides says, out of fear they should imitate the constitution of that city, and make improvements in virtue, but lest they should teach his own people some evil. For along with foreigners come new subjects of discourse; new discourse produces new opinions; and from these there necessarily spring new passions and desires, which, like discords in music, would disturb the established government. He, therefore, thought it more expedient for the city to keep out of it corrupt customs and manners, than even to prevent the introduction of a pestilence.

Thus far, then, we can perceive no vestiges of a disregard to right and wrong, which is the fault some people find with the laws of Lycurgus, allowing them well enough calculated to produce valour, but not to promote justice. Perhaps it was the Cryptia, as they called it, or ambuscade, if that was really one of this lawgiver's institutions, as Aristotle says it was, which gave Plato so bad an impression both of Lycurgus and his laws. The governors of the youth ordered the shrewdest of them from time to time to disperse themselves in the country, provided only with daggers and some necessary provisions. In the daytime they hid themselves, and rested in the most private places they could find, but at night they sallied out into the roads, and killed all the Helotes they could meet with. Nay, sometimes by day, they fell upon them in the fields, and murdered the ablest and strongest of them. Thucydides relates in his history of the Peloponnesian war, that the Spartans selected such of them as were distinguished for their courage, to the number of two thousand or more, declared them free, crowned them with garlands, and conducted them to the temples of the gods; but soon after they all disappeared; and no one could, either then or since, give account in what manner they were destroyed. Aristotle particularly says, that the Ephori, as soon as they were invested in their office, declared war against the Helotes, that they might be massacred under pretence of law. In other respects they treated them with great inhumanity: sometimes they made them drink till they were intoxicated, and in that condition led them into the public halls, to show the young men what drunkenness was. They ordered them too to sing mean songs, and to dance ridiculous dances, but not to meddle with any that were genteel and graceful. Thus they tell us, that when the Thebans afterwards invaded Laconia, and took a great number of the Helotes prisoners, they ordered them to sing the odes of Terpander, Aleman, or Spondon the Lacedæmonian, but they excused themselves, alleging that it was forbidden by their masters. Those who say that a freeman in Sparta was most a freeman, and a slave most a slave, seem well to have considered the difference of states. But in my opinion, it was in after-times that these cruelties took place among the Lacedæmonians, chiefly after the great earthquake, when, as history informs us, the Helotes, joining the Messenians, attacked them, did infinite damage to the country, and brought the city to the greatest extremity. I can never ascribe to Lycurgus so abominable an act as that of the ambuscade. I would judge in this case by the mildness and justice which appeared in the rest of his conduct, to which also

the gods gave their sanction.

When his principal institutions had taken root in the manners of the people, and the government was come to such maturity as to be able to support and preserve itself, then, as Plato says of the Deity, that he rejoiced when he had created the world, and given it its first motion; so Lycurgus was charmed with the beauty and greatness of his political establishment, when he saw it exemplified in fact, and move on in due order. He was next desirous to make it immortal, so far as human wisdom could effect it, and to deliver it down unchanged to the latest times. For this purpose he assembled all the people, and told them the provisions he had already made for the state were indeed sufficient for virtue and happiness, but the greatest and most important matter was still behind, which he could not disclose to them till he had consulted the oracle; that they must therefore inviolably observe his laws, without altering anything in them, till he returned from Delphi; and then he would acquaint them with the pleasure of Apollo. When they had all promised to do so, and desired him to set forward, he took an oath of the kings and senators, and afterwards of all the citizens, that they would abide by the present establishment till Lycurgus came back. He then took his journey to Delphi.

When he arrived there, he offered sacrifice to the gods, and consulted the oracle, whether his laws were sufficient to promote virtue, and secure the happiness of the state. Apollo answered, that the laws were excellent, and that the city which kept to the constitution he had established, would be the most glorious in the world. This oracle Lycurgus took down in writing, and sent it to Sparta. He then offered another sacrifice, and embraced his friends and his son, determined never to release his citizens from their oath, but voluntarily there to put a period to his life; while he was yet of an age when life was not a burden, when death was not desirable, and while he was not unhappy in any one circumstance. He, therefore, destroyed himself by abstaining from food, persuaded that the very death of lawgivers should have its use, and their exit, so far from being insignificant, have its share of virtue, and be considered as a great action. To him, indeed, whose performances were so illustrious, the conclusion of life was the crown of happiness, and his death was left guardian of those invaluable blessings he had procured his countrymen through life, as they had taken an oath not to depart from his establishment till his return. Nor was he deceived in his expectations. Sparta continued

superior to the rest of Greece, both in its government at home and reputation abroad, so long as it retained the institution of Lycurgus: and this it did during the space of five hundred years, and the reign of fourteen successive kings, down to Agis the son of Archidamus. As for the appointment of the Ephori, it was so far from weakening the constitution, that it gave it additional vigour, and though it seemed to be established in favour of the people, it strengthened the aristocracy.

But in the reign of Agis money found its way into Sparta, and with money came its inseparable attendant—avarice. This was by means of Lysander; who, though himself incapable of being corrupted by money, filled his country with the love of it, and with luxury too. He brought both gold and silver from the wars, and thereby broke through the laws of Lycurgus. While these were in force, Sparta was not so much under the political regulations of a commonwealth, as the strict rules of a philosophic life; and as the poets feign of Hercules, that only with a club and lion's skin he travelled over the world, clearing it of lawless ruffians and cruel tyrants; so the Lacedæmonians with a piece of parchment and coarse coat kept Greece in a voluntary obedience, destroyed usurpation and tyranny in the states, put an end to wars, and laid seditions asleep, very often without either shield or lance, and only by sending one ambassador; to whose directions all parties concerned immediately submitted. Thus bees, when their prince appears, compose their quarrels and unite in one swarm. So much did justice and good government prevail in that state, that I am surprised at those who say the Lacedæmonians knew indeed how to obey, but not how to govern: and on this occasion quote the saying of king Theopompus, who, when one told him that Sparta was preserved by the good administration of its kings, replied, "Nay, rather by the obedience of their subjects." It is certain that people will not continue pliant to those who know not how to command; but it is the part of a good governor to teach obedience. He who knows how to lead well, is sure to be well followed: and as it is by the art of horsemanship that a horse is made gentle and tractable, so it is by the abilities of him that fills the throne that the people become ductile and submissive. Such was the conduct of the Lacedæmonians, that people did not only endure, but even desired to be their subjects. They asked not of them either ships, money or troops, but only a Spartan general. When they had received him, they treated him with the

greatest honour and respect; so Gylippus was revered by the Sicilians, Brasidas by the Chalcidians, Lysander, Callicratidas, and Agesilaus by all the people of Asia. These, and such as these, wherever they came, were called moderators and reformers, both of the magistrates and people, and Sparta itself was considered as a school of discipline, where the beauty of life and political order were taught in the utmost perfection. Hence Stratonicus seems facetiously enough to have said, that he would order "the Athenians to have the conduct of mysteries and processions; the Eleans to preside in games, as their particular province; and the Lacedæmonians to be beaten, if the other did amiss." This was spoken in jest: but Antisthenes, one of the scholars of Socrates, said (more seriously) of the Thebans, when he saw them pluming themselves upon their success at Leuctra, "They were just like so many school-boys rejoicing that they had beaten their master."

It was not, however, the principal design of Lycurgus that his city should govern many others, but he considered its happiness like that of a private man, as flowing from virtue and self-consistency: he therefore so ordered and disposed it, that by the freedom and sobriety of its inhabitants, and their having a sufficiency within themselves, its continuance might be the more secure. Plato, Diogenes, Zeno, and other writers upon government, have taken Lycurgus for their model: and these have attained great praise, though they left only an idea of something excellent. Yet he who, not in idea and in words, but in fact produced a most inimitable form of government, and by showing a whole city of philosophers, confounded those who imagine that the so much talked of strictness of a philosophic life is impracticable; he, I say, stands in the rank of glory far beyond the founders of all the other Grecian states. Therefore Aristotle is of opinion, that the honours paid him in Lacedæmon were far beneath his merit. Yet those honours were very great; for he has a temple there, and they offer him a yearly sacrifice, as a god. It is also said, that when his remains were brought home, his tomb was struck with lightning: a seal of divinity which no other man, however eminent, has had, except Euripides, who died and was buried at Arethusa in Macedonia. This was matter of great satisfaction and triumph to the friends of Euripides, that the same thing should befall him after death, which had formerly happened to the most venerable of men, and the most favoured of heaven. Some say, Lycurgus died at Cirrha; but Apollonothemis will have it, that he was

brought to Elis and died there; and Timæus and Aristoxenus write, that he ended his days in Crete; nay, Aristoxenus adds, that the Cretans show his tomb at Pergamia, near the high road. We are told, he left an only son named Antiorus: and as he died without issue, the family was extinct. His friends and relations observed his anniversary, which subsisted for many ages, and the days on which they met for that purpose they called Lycurgidæ. Aristocrates, the son of Hipparchus, relates, that the friends of Lycurgus, with whom he sojourned, and at last died in Crete, burned his body, and, at his request, threw his ashes into the sea. Thus he guarded against the possibility of his remains being brought back to Sparta by the Lacedæmonians, lest they should then think themselves released from their oath, on the pretence that he was returned, and make innovations in the government. This is what we had to say of Lycurgus.

SIR THOMAS MORE'S UTOPIA.

UTOPIA.

BOOK I.

Henry the Eighth, the unconquered King of England, a prince adorned with all the virtues that become a great monarch, having some differences of no small consequence with Charles the most serene prince of Castile, sent me into Flanders, as his ambassador, for treating and composing matters between them. I was colleague and companion to that incomparable man Cuthbert Tonsal, whom the king with such universal applause lately made Master of the Rolls; but of whom I will say nothing; not because I fear that the testimony of a friend will be suspected, but rather because his learning and virtues are too great for me to do them justice, and so well known, that they need not my commendations unless I would, according to the proverb, "Show the sun with a lanthorn." Those that were appointed by the prince to treat with us met us at Bruges, according to agreement; they were all worthy men. The Margrave of Bruges was their head, and the chief man among them; but he that was esteemed the wisest, and that spoke for the rest, was George Temse, the Provost of Casselsee; both art and nature had concurred to make him eloquent: he was very learned in the law; and as he had a great capacity, so by a long practice in affairs he was very dextrous at unravelling them. After we had several times met without coming to an agreement, they went to Brussels for some days to know the prince's pleasure. And since our business would admit it, I went to Antwerp. While I was there, among many that visited me, there was one that was more acceptable to me than any other, Peter Giles, born at Antwerp, who is a man of great honour, and of a good rank in his town, though less than he deserves; for I do not know if there be anywhere to be found a more learned and a better bred young man: for as he

is both a very worthy and a very knowing person, so he is so civil to all men, so particularly kind to his friends, and so full of candour and affection, that there is not perhaps above one or two anywhere to be found that is in all respects so perfect a friend. He is extraordinarily modest, there is no artifice in him; and yet no man has more of a prudent simplicity: his conversation was so pleasant and so innocently cheerful, that his company in a great measure lessened any longings to go back to my country, and to my wife and children, which an absence of four months had quickened very much. One day as I was returning home from Mass at St. Mary's, which is the chief church, and the most frequented of any in Antwerp, I saw him by accident talking with a stranger, who seemed past the flower of his age; his face was tanned, he had a long beard, and his cloak was hanging carelessly about him, so that by his looks and habit I concluded he was a seaman. As soon as Peter saw me, he came and saluted me; and as I was returning his civility, he took me aside, and pointing to him with whom he had been discoursing, he said, "Do you see that man? I was just thinking to bring him to you." I answered, "He should have been very welcome on your account." "And on his own too," replied he, "if you knew the man, for there is none alive that can give so copious an account of unknown nations and countries as he can do; which I know you very much desire." Then said I, "I did not guess amiss, for at first sight I took him for a seaman." "But you are much mistaken," said he, "for he has not sailed as a seaman, but as a traveller, or rather a philosopher. This Raphael, who from his family carries the name of Hythloday, is not ignorant of the Latin tongue, but is eminently learned in the Greek, having applied himself more particularly to that than to the former, because he had given himself much to philosophy, in which he knew that the Romans have left us nothing that is valuable, except what is to be found in Seneca and Cicero. He is a Portuguese by birth, and was so desirous of seeing the world, that he divided his estate among his brothers, run the same hazard as Americus Vesputius, and bore a share in three of his four voyages, that are now published; only he did not return with him in his last, but obtained leave of him almost by force, that he might be one of those twenty-four who were left at the farthest place at which they touched, in their last voyage to New Castile. The leaving him thus did not a little gratify one that was more fond of travelling than of returning home, to be buried in his own country; for he used often to say, that the way to heaven was the same from all places; and he

that had no grave, had the heaven still over him. Yet this disposition of mind had cost him dear, if God had not been very gracious to him; for after he, with five Castilians, had travelled over many countries, at last, by strange good fortune, he got to Ceylon, and from thence to Calicut, where he very happily found some Portuguese ships; and, beyond all men's expectations, returned to his native country." When Peter had said this to me, I thanked him for his kindness, in intending to give me the acquaintance of a man whose conversation he knew would be so acceptable; and upon that Raphael and I embraced each other. After those civilities were past which are usual with strangers upon their first meeting, we all went to my house, and entering into the garden, sat down on a green bank, and entertained one another in discourse. He told us, that when Vesputius had sailed away, he and his companions that stayed behind in New Castile, by degrees insinuated themselves into the affections of the people of the country, meeting often with them, and treating them gently: and at last they not only lived among them without danger, but conversed familiarly with them; and got so far into the heart of a prince, whose name and country I have forgot, that he both furnished them plentifully with all things necessary, and also with the conveniences of travelling; both boats when they went by water, and waggons when they travelled over land: he sent with them a very faithful guide, who was to introduce and recommend them to such other princes as they had a mind to see: and after many days' journey, they came to towns, and cities, and to commonwealths, that were both happily governed and well peopled. Under the equator, and as far on both sides of it as the sun moves, there lay vast deserts that were parched with the perpetual heat of the sun; the soil was withered, all things looked dismally, and all places were either quite uninhabited, or abounded with wild beasts and serpents, and some few men, that were neither less wild nor less cruel than the beasts themselves. But as they went farther, a new scene opened, all things grew milder, the air less burning, the soil more verdant, and even the beasts were less wild: and at last there were nations, towns, and cities, that had not only mutual commerce among themselves, and with their neighbours, but traded both by sea and land, to very remote countries. There they found the conveniences of seeing many countries on all hands, for no ship went any voyage into which he and his companions were not very welcome. The first vessels that they saw were flat-bottomed, their sails were made of reeds and wicker woven close

together, only some were of leather; but afterwards they found ships made with round keels, and canvas sails, and in all respects like our ships; and the seamen understood both astronomy and navigation. He got wonderfully into their favour, by showing them the use of the needle, of which till then they were utterly ignorant. They sailed before with great caution, and only in summer-time, but now they count all seasons alike, trusting wholly to the loadstone, in which they are perhaps more secure than safe; so that there is reason to fear that this discovery, which was thought would prove so much to their advantage, may by their imprudence become an occasion of much mischief to them. But it were too long to dwell on all that he told us he had observed in every place; it would be too great a digression from our present purpose: whatever is necessary to be told, concerning those wise and prudent institutions which he observed among civilized nations, may perhaps be related by us on a more proper occasion. We asked him many questions concerning all these things, to which he answered very willingly; only we made no inquiries after monsters, than which nothing is more common; for everywhere one may hear of ravenous dogs and wolves, and cruel men-eaters; but it is not so easy to find states that are well and wisely governed.

As he told us of many things that were amiss in those new-discovered countries, so he reckoned up not a few things from which patterns might be taken for correcting the errors of these nations among whom we live; of which an account may be given, as I have already promised, at some other time; for at present I intend only to relate those particulars that he told us of the manners and laws of the Utopians: but I will begin with the occasion that led us to speak of that commonwealth. After Raphael had discoursed with great judgment on the many errors that were both among us and these nations; had treated of the wise institutions both here and there, and had spoken as distinctly of the customs and government of every nation through which he had passed, as if he had spent his whole life in it; Peter being struck with admiration, said, "I wonder, Raphael, how it comes that you enter into no king's service, for I am sure there are none to whom you would not be very acceptable: for your learning and knowledge, both of men and things, is such, that you would not only entertain them very pleasantly, but be of great use to them, by the examples you could set before them, and the advices you could give them; and by this means you would both serve your own interest,

and be of great use to all your friends."—"As for my friends," answered he, "I need not be much concerned, having already done for them all that was incumbent on me; for when I was not only in good health, but fresh and young, I distributed that among my kindred and friends which other people do not part with till they are old and sick; when they then unwillingly give that which they can enjoy no longer themselves. I think my friends ought to rest contented with this, and not to expect that for their sakes I should enslave myself to any king whatsoever."—"Soft and fair," said Peter, "I do not mean that you should be a slave to any king, but only that you should assist them, and be useful to them."—"The change of the word," said he, "does not alter the matter."—"But term it as you will," replied Peter, "I do not see any other way in which you can be so useful, both in private to your friends, and to the public, and by which you can make your own condition happier."—"Happier!" answered Raphael, "is that to be compassed in a way so abhorrent to my genius? Now I live as I will, to which I believe few courtiers can pretend. And there are so many that court the favour of great men, that there will be no great loss if they are not troubled either with me or with others of my temper." Upon this, said I, "I perceive, Raphael, that you neither desire wealth nor greatness; and indeed I value and admire such a man much more than I do any of the great men in the world. Yet I think you would do what would well become so generous and philosophical a soul as yours is, if you would apply your time and thoughts to public affairs, even though you may happen to find it a little uneasy to yourself: and this you can never do with so much advantage, as by being taken into the counsel of some great prince, and putting him on noble and worthy actions, which I know you would do if you were in such a post; for the springs both of good and evil flow from the prince, over a whole nation, as from a lasting fountain. So much learning as you have, even without practice in affairs, or so great a practice as you have had, without any other learning, would render you a very fit counsellor to any king whatsoever."—"You are doubly mistaken," said he, "Mr. More, both in your opinion of me, and in the judgment you make of things: for as I have not that capacity that you fancy I have; so, if I had it, the public would not be one jot the better, when I had sacrificed my quiet to it. For most princes apply themselves more to affairs of war than to the useful arts of peace; and in these I neither have any knowledge, nor do I much desire it: they are generally more set on acquiring new kingdoms, right or

wrong, than on governing well those they possess. And among the ministers of princes, there are none that are not so wise as to need no assistance, or at least that do not think themselves so wise, that they imagine they need none; and if they court any, it is only those for whom the prince has much personal favour, whom by their fawnings and flatteries they endeavour to fix to their own interests: and indeed Nature has so made us, that we all love to be flattered, and to please ourselves with our own notions. The old crow loves his young, and the ape her cubs. Now if in such a Court, made up of persons who envy all others, and only admire themselves, a person should but propose anything that he had either read in history, or observed in his travels, the rest would think that the reputation of their wisdom would sink, and that their interest would be much depressed, if they could not run it down: and if all other things failed, then they would fly to this, that such or such things pleased our ancestors, and it were well for us if we could but match them. They would set up their rest on such an answer, as a sufficient confutation of all that could be said; as if it were a great misfortune, that any should be found wiser than his ancestors; but though they willingly let go all the good things that were among those of former ages, yet if better things are proposed they cover themselves obstinately with this excuse of reverence to past times. I have met with these proud, morose, and absurd judgments of things in many places, particularly once in England."—"Was you ever there?" said I.—"Yes, I was," answered he, "and stayed some months there, not long after the rebellion in the west was suppressed with a great slaughter of the poor people that were engaged in it.

"I was then much obliged to that reverend prelate, John Morton, Archbishop of Canterbury, Cardinal, and Chancellor of England: a man," said he, "Peter (for Mr. More knows well what he was), that was not less venerable for his wisdom and virtues, than for the high character he bore. He was of a middle stature, not broken with age; his looks begot reverence rather than fear; his conversation was easy, but serious and grave; he sometimes took pleasure to try the force of those that came as suitors to him upon business, by speaking sharply, though decently to them, and by that he discovered their spirit and presence of mind, with which he was much delighted, when it did not grow up to impudence, as bearing a great resemblance to his own temper; and he looked on such persons as the fittest men for affairs. He spoke both

gracefully and weightily; he was eminently skilled in the law, had a vast understanding, and a prodigious memory; and those excellent talents with which Nature had furnished him, were improved by study and experience. When I was in England the king depended much on his counsels, and the government seemed to be chiefly supported by him; for from his youth he had been all along practised in affairs; and having passed through many traverses of fortune, he had with great cost acquired a vast stock of wisdom, which is not soon lost when it is purchased so dear. One day when I was dining with him there happened to be at table one of the English lawyers, who took occasion to run out in a high commendation of the severe execution of justice upon thieves, who, as he said, were then hanged so fast, that there were sometimes twenty on one gibbet; and upon that he said he could not wonder enough how it came to pass, that since so few escaped, there were yet so many thieves left who were still robbing in all places. Upon this, I who took the boldness to speak freely before the Cardinal, said, there was no reason to wonder at the matter, since this way of punishing thieves was neither just in itself nor good for the public; for as the severity was too great, so the remedy was not effectual; simple theft not being so great a crime that it ought to cost a man his life, no punishment how severe soever being able to restrain those from robbing who can find out no other way of livelihood. 'In this,' said I, 'not only you in England, but a great part of the world imitate some ill masters that are readier to chastise their scholars than to teach them. There are dreadful punishments enacted against thieves, but it were much better to make such good provisions by which every man might be put in a method how to live, and so be preserved from the fatal necessity of stealing and of dying for it.'—'There has been care enough taken for that,' said he, 'there are many handicrafts, and there is husbandry, by which they may make a shift to live unless they have a greater mind to follow ill courses.'—'That will not serve your turn,' said I, 'for many lose their limbs in civil or foreign wars, as lately in the Cornish rebellion, and some time ago in your wars with France, who being thus mutilated in the service of their king and country, can no more follow their old trades, and are too old to learn new ones: but since wars are only accidental things, and have intervals, let us consider those things that fall out every day. There is a great number of noblemen among you, that are themselves as idle as drones, that subsist on other men's labour, on the labour of their tenants, whom, to raise their revenues, they pare to the

quick. This indeed is the only instance of their frugality, for in all other things they are prodigal, even to the beggaring of themselves: but besides this, they carry about with them a great number of idle fellows, who never learned any art by which they may gain their living; and these, as soon as either their lord dies, or they themselves fall sick, are turned out of doors; for your lords are readier to feed idle people, than to take care of the sick; and often the heir is not able to keep together so great a family as his predecessor did. Now when the stomachs of those that are thus turned out of doors, grow keen, they rob no less keenly; and what else can they do? for when, by wandering about, they have worn out both their health and their clothes, and are tattered, and look ghastly, men of quality will not entertain them, and poor men dare not do it; knowing that one who has been bred up in idleness and pleasure, and who was used to walk about with his sword and buckler, despising all the neighbourhood with an insolent scorn, as far below him, is not fit for the spade and mattock: nor will he serve a poor man for so small a hire, and in so low a diet as he can afford to give him.' To this he answered, 'This sort of men ought to be particularly cherished, for in them consists the force of the armies for which we have occasion; since their birth inspires them with a nobler sense of honour, than is to be found among tradesmen or ploughmen.'—'You may as well say,' replied I, 'that you must cherish thieves on the account of wars, for you will never want the one, as long as you have the other; and as robbers prove sometimes gallant soldiers, so soldiers often prove brave robbers; so near an alliance there is between those two sorts of life. But this bad custom, so common among you, of keeping many servants, is not peculiar to this nation. In France there is yet a more pestiferous sort of people, for the whole country is full of soldiers, still kept up in time of peace; if such a state of a nation can be called a peace: and these are kept in pay upon the same account that you plead for those idle retainers about noblemen; this being a maxim of those pretended statesmen that it is necessary for the public safety, to have a good body of veteran soldiers ever in readiness. They think raw men are not to be depended on, and they sometimes seek occasions for making war, that they may train up their soldiers in the art of cutting throats; or as Sallust observed, for keeping their hands in use, that they may not grow dull by too long an intermission. But France has learned to its cost, how dangerous it is to feed such beasts. The fate of the Romans, Carthaginians, and Syrians, and many other nations and

cities, which were both overturned and quite ruined by those standing armies, should make others wiser: and the folly of this maxim of the French, appears plainly even from this, that their trained soldiers often find your raw men prove too hard for them; of which I will not say much, lest you may think I flatter the English. Every day's experience shows, that the mechanics in the towns, or the clowns in the country, are not afraid of fighting with those idle gentlemen, if they are not disabled by some misfortune in their body, or dispirited by extreme want, so that you need not fear that those well-shaped and strong men (for it is only such that noblemen love to keep about them, till they spoil them) who now grow feeble with ease, and are softened with their effeminate manner of life, would be less fit for action if they were well bred and well employed. And it seems very unreasonable, that for the prospect of a war, which you need never have but when you please, you should maintain so many idle men, as will always disturb you in time of peace, which is ever to be more considered than war. But I do not think that this necessity of stealing arises only from hence; there is another cause of it more peculiar to England.'—'What is that?' said the Cardinal.—'The increase of pasture,' said I, 'by which your sheep, which are naturally mild, and easily kept in order, may be said now to devour men, and unpeople, not only villages, but towns; for wherever it is found that the sheep of any soil yield a softer and richer wool than ordinary, there the nobility and gentry, and even those holy men the abbots, not contented with the old rents which their farms yielded, nor thinking it enough that they, living at their ease, do no good to the public, resolve to do it hurt instead of good. They stop the course of agriculture, destroying houses and towns, reserving only the churches, and enclose grounds that they may lodge their sheep in them. As if forests and parks had swallowed up too little of the land, those worthy countrymen turn the best inhabited places in solitudes; for when an insatiable wretch, who is a plague to his country, resolves to inclose many thousand acres of ground, the owners, as well as tenants, are turned out of their possessions, by tricks, or by main force, or being wearied out with ill usage, they are forced to sell them. By which means those miserable people, both men and women, married and unmarried, old and young, with their poor but numerous families (since country business requires many hands), are all forced to change their seats, not knowing whither to go; and they must sell almost for nothing their household stuff, which could not bring them much money, even though they

might stay for a buyer. When that little money is at an end, for it will be soon spent; what is left for them to do, but either to steal and so to be hanged (God knows how justly), or to go about and beg? And if they do this, they are put in prison as idle vagabonds; while they would willingly work, but can find none that will hire them; for there is no more occasion for country labour, to which they have been bred, when there is no arable ground left. One shepherd can look after a flock, which will stock an extent of ground that would require many hands, if it were to be ploughed and reaped. This likewise in many places raises the price of corn. The price of wool is also so risen, that the poor people who were wont to make cloth are no more able to buy it; and this likewise makes many of them idle. For since the increase of pasture, God has punished the avarice of the owners, by a rot among the sheep, which has destroyed vast numbers of them; to us it might have seemed more just had it fell on the owners themselves. But suppose the sheep should increase ever so much, their price is not like to fall; since though they cannot be called a monopoly, because they are not engrossed by one person, yet they are in so few hands, and these are so rich, that as they are not pressed to sell them sooner than they have a mind to it, so they never do it till they have raised the price as high as possible. And on the same account it is, that the other kinds of cattle are so dear, because many villages being pulled down, and all country labour being much neglected, there are none who make it their business to breed them. The rich do not breed cattle as they do sheep, but buy them lean, and at low prices; and after they have fattened them on their grounds, sell them again at high rates. And I do not think that all the inconveniences this will produce are yet observed; for as they sell the cattle dear, so if they are consumed faster than the breeding countries from which they are brought can afford them, then the stock must decrease, and this must needs end in great scarcity; and by these means this your island, which seemed as to this particular the happiest in the world, will suffer much by the cursed avarice of a few persons; besides this, the rising of corn makes all people lessen their families as much as they can; and what can those who are dismissed by them do, but either beg or rob? And to this last, a man of a great mind is much sooner drawn than to the former. Luxury likewise breaks in apace upon you, to set forward your poverty and misery; there is an excessive vanity in apparel, and great cost in diet; and that not only in noblemen's families, but even among tradesmen, among the farmers themselves, and

among all ranks of persons. You have also many infamous houses, and besides those that are known, the taverns and alehouses are no better; add to these, dice, cards, tables, foot-ball, tennis, and quoits, in which money runs fast away; and those that are initiated into them, must in the conclusion betake themselves to robbing for a supply. Banish these plagues, and give orders that those who have dispeopled so much soil, may either rebuild the villages they have pulled down, or let out their grounds to such as will do it: restrain those engrossings of the rich, that are as bad almost as monopolies; leave fewer occasions to idleness; let agriculture be set up again, and the manufacture of the wool be regulated, that so there may be work found for those companies of idle people whom want forces to be thieves, or who now being idle vagabonds, or useless servants, will certainly grow thieves at last. If you do not find a remedy to these evils, it is a vain thing to boast of your severity in punishing theft, which though it may have the appearance of justice, yet in itself is neither just nor convenient. For if you suffer your people to be ill educated, and their manners to be corrupted from their infancy, and then punish them for those crimes to which their first education disposed them, what else is to be concluded from this, but that you first make thieves and then punish them?"

"While I was talking thus, the counsellor who was present had prepared an answer, and had resolved to resume all I had said, according to the formality of a debate, in which things are generally repeated more faithfully than they are answered; as if the chief trial to be made were of men's memories. 'You have talked prettily for a stranger,' said he, 'having heard of many things among us which you have not been able to consider well; but I will make the whole matter plain to you, and will first repeat in order all that you have said, then I will show how much your ignorance of our affairs has misled you, and will in the last place answer all your arguments. And that I may begin where I promised, there were four things——' 'Hold your peace,' said the Cardinal, 'this will take up too much time; therefore we will at present ease you of the trouble of answering, and reserve it to our next meeting, which shall be tomorrow, if Raphael's affairs and yours can admit of it. But, Raphael,' said he to me, 'I would gladly know upon what reason it is that you think theft ought not to be punished by death? Would you give way to it? Or do you propose any other punishment that will be more useful to the public? For since death

does not restrain theft, if men thought their lives would be safe, what fear or force could restrain ill men? On the contrary, they would look on the mitigation of the punishment as an invitation to commit more crimes.' I answered, 'It seems to me a very unjust thing to take away a man's life for a little money; for nothing in the world can be of equal value with a man's life: and if it is said, that it is not for the money that one suffers, but for his breaking the law, I must say, extreme justice is an extreme injury; for we ought not to approve of these terrible laws that make the smallest offences capital, nor of that opinion of the Stoics, that makes all crimes equal, as if there were no difference to be made between the killing a man and the taking his purse, between which, if we examine things impartially, there is no likeness nor proportion. God has commanded us not to kill, and shall we kill so easily for a little money? But if one shall say, that by that law we are only forbid to kill any, except when the laws of the land allow of it; upon the same grounds, laws may be made in some cases to allow of adultery and perjury: for God having taken from us the right of disposing, either of our own or of other people's lives, if it is pretended that the mutual consent of man in making laws can authorize man-slaughter in cases in which God has given us no example, that it frees people from the obligation of the divine law, and so makes murder a lawful action; what is this, but to give a preference to human laws before the divine? And if this is once admitted, by the same rule men may in all other things put what restrictions they please upon the laws of God. If by the Mosaical law, though it was rough and severe, as being a yoke laid on an obstinate and servile nation, men were only fined, and not put to death for theft, we cannot imagine that in this new law of mercy, in which God treats us with the tenderness of a father, He has given us a greater license to cruelty than He did to the Jews. Upon these reasons it is, that I think putting thieves to death is not lawful; and it is plain and obvious that it is absurd, and of ill consequence to the commonwealth, that a thief and a murderer should be equally punished; for if a robber sees that his danger is the same, if he is convicted of theft as if he were guilty of murder, this will naturally incite him to kill the person whom otherwise he would only have robbed, since if the punishment is the same, there is more security, and less danger of discovery, when he that can best make it is put out of the way; so that terrifying thieves too much, provokes them to cruelty.

"But as to the question, what more convenient way of punishment can be found? I think it is much more easier to find out that, than to invent anything that is worse; why should we doubt but the way that was so long in use among the old Romans, who understood so well the arts of government, was very proper for their punishment? They condemned such as they found guilty of great crimes, to work their whole lives in quarries, or to dig in mines with chains about them. But the method that I liked best, was that which I observed in my travels in Persia, among the Polylerits, who are a considerable and well-governed people. They pay a yearly tribute to the King of Persia; but in all other respects they are a free nation, and governed by their own laws. They lie far from the sea, and are environed with hills; and being contented with the productions of their own country, which is very fruitful, they have little commerce with any other nation; and as they, according to the genius of their country, have no inclination to enlarge their borders; so their mountains, and the pension they pay to the Persian, secure them from all invasions. Thus they have no wars among them: they live rather conveniently than with splendour, and may be rather called a happy nation, than either eminent or famous; for I do not think that they are known so much as by name to any but their next neighbours. Those that are found guilty of theft among them, are bound to make restitution to the owner, and not as it is in other places, to the prince, for they reckon that the prince has no more right to the stolen goods than the thief; but if that which was stolen is no more in being, then the goods of the thieves are estimated, and restitution being made out of them, the remainder is given to their wives and children: and they themselves are condemned to serve in the public works, but are neither imprisoned, nor chained, unless there happened to be some extraordinary circumstances in their crimes. They go about loose and free, working for the public. If they are idle or backward to work, they are whipped; but if they work hard, they are well used and treated without any mark of reproach, only the lists of them are called always at night, and then they are shut up. They suffer no other uneasiness, but this of constant labour; for as they work for the public, so they are well entertained out of the public stock, which is done differently in different places. In some places, whatever is bestowed on them, is raised by a charitable contribution; and though this way may seem uncertain, yet so merciful are the inclinations of that people, that they are plentifully supplied by it; but in other places, public revenues

are set aside for them; or there is a constant tax of a poll-money raised for their maintenance. In some places they are set to no public work, but every private man that has occasion to hire workmen, goes to the market-places and hires them of the public, a little lower than he would do a freeman: if they go lazily about their task, he may quicken them with the whip. By this means there is always some piece of work or other to be done by them; and beside their livelihood, they earn somewhat still to the public. They all wear a peculiar habit, of one certain colour, and their hair is cropped a little above their ears, and a piece of one of their ears is cut off. Their friends are allowed to give them either meat, drink, or clothes, so they are of their proper colour; but it is death, both to the giver and taker, if they give them money; nor is it less penal for any freeman to take money from them, upon any account whatsoever: and it is also death for any of these slaves (so they are called) to handle arms. Those of every division of the country are distinguished by a peculiar mark; which it is capital for them to lay aside, to go out of their bounds, or to talk with a slave of another jurisdiction; and the very attempt of an escape is no less penal than an escape itself; it is death for any other slave to be accessory to it; and if a freeman engages in it he is condemned to slavery. Those that discover it are rewarded; if freemen, in money; and if slaves, with liberty, together with a pardon for being accessory to it; that so they might find their account, rather in repenting of their engaging in such a design, than in persisting in it.

"These are their laws and rules in relation to robbery; and it is obvious that they are as advantageous as they are mild and gentle; since vice is not only destroyed, and men preserved, but they treated in such a manner as to make them see the necessity of being honest, and of employing the rest of their lives in repairing the injuries they have formerly done to society. Nor is there any hazard of their falling back to their old customs: and so little do travellers apprehend mischief from them, that they generally make use of them for guides, from one jurisdiction to another; for there is nothing left them by which they can rob, or be the better for it, since as they are disarmed, so the very having of money is a sufficient conviction: and as they are certainly punished if discovered, so they cannot hope to escape; for their habit being in all the parts of it different from what is commonly worn, they cannot fly away, unless they would go naked, and even then their cropped ear would

betray them. The only danger to be feared from them, is their conspiring against the government: but those of one division and neighbourhood can do nothing to any purpose, unless a general conspiracy were laid amongst all the slaves of the several jurisdictions, which cannot be done, since they cannot meet or talk together; nor will any venture on a design where the concealment would be so dangerous, and the discovery so profitable. None are quite hopeless of recovering their freedom, since by their obedience and patience, and by giving good grounds to believe that they will change their manner of life for the future, they may expect at last to obtain their liberty: and some are every year restored to it, upon the good character that is given of them.— When I had related all this, I added, that I did not see why such a method might not be followed with more advantage, than could ever be expected from that severe justice which the counsellor magnified so much. To this he answered, that it could never take place in England, without endangering the whole nation. As he said this, he shook his head, made some grimaces, and held his peace, while all the company seemed of his opinion, except the Cardinal, who said that it was not easy to form a judgment of its success, since it was a method that never yet had been tried. 'But if,' said he, 'when the sentence of death was passed upon a thief, the prince would reprieve him for a while, and make the experiment upon him, denying him the privilege of a sanctuary; and then if it had a good effect upon him, it might take place; and if it did not succeed, the worst would be, to execute the sentence on the condemned persons at last. And I do not see,' added he, 'why it would be either unjust, inconvenient, or at all dangerous, to admit of such a delay: in my opinion, the vagabonds ought to be treated in the same manner; against whom, though we have made many laws, yet we have not been able to gain our end.' When the Cardinal had done, they all commended the motion, though they had despised it when it came from me; but more particularly commended what related to the vagabonds, because it was his own observation.

"I do not know whether it be worth while to tell what followed, for it was very ridiculous; but I shall venture at it, for as it is not foreign to this matter, so some good use may be made of it. There was a jester standing by, that counterfeited the fool so naturally, that he seemed to be really one. The jests which he offered were so cold and dull, that we laughed more at him than at

them; yet sometimes he said, as it were by chance, things that were not unpleasant; so as to justify the old proverb, 'That he who throws the dice often, will sometimes have a lucky hit.' When one of the company had said, that I had taken care of the thieves, and the Cardinal had taken care of the vagabonds, so that there remained nothing but that some public provision might be made for the poor, whom sickness or old age had disabled from labour. 'Leave that to me,' said the fool, 'and I shall take care of them; for there is no sort of people whose sight I abhor more, having been so often vexed with them, and with their sad complaints; but as dolefully soever as they have told their tale, they could never prevail so far as to draw one penny from me: for either I had no mind to give them anything, or when I had a mind to do it, I had nothing to give them: and they now know me so well, that they will not lose their labour, but let me pass without giving me any trouble, because they hope for nothing, no more in faith than if I were a priest: but I would have a law made, for sending all these beggars to monasteries, the men to the Benedictines to be made lay-brothers, and the women to be nuns.' The Cardinal smiled, and approved of it in jest; but the rest liked it in earnest. There was a divine present, who though he was a grave morose man, yet he was so pleased with this reflection that was made on the priests and the monks, that he began to play with the fool, and said to him, 'This will not deliver you from all beggars, except you take care of us friars.'—'That is done already,' answered the fool, 'for the Cardinal has provided for you, by what he proposed for restraining vagabonds, and setting them to work, for I know no vagabonds like you.' This was well entertained by the whole company, who looking at the Cardinal, perceived that he was not ill pleased at it; only the friar himself was vexed, as may be easily imagined, and fell into such a passion, that he could not forbear railing at the fool, and calling him knave, slanderer, back-biter, and son of perdition, and then cited some dreadful threatenings out of the Scriptures against him. Now the jester thought he was in his element, and laid about him freely. 'Good friar,' said he, 'be not angry, for it is written, "In patience possess your soul."'—The friar answered (for I shall give you his own words), 'I am not angry, you hangman; at least I do not sin in it, for the Psalmist says, "Be ye angry, and sin not."'—Upon this the Cardinal admonished him gently, and wished him to govern his passions. 'No, my lord,' said he, 'I speak not but from a good zeal, which I ought to have; for holy men have had a good zeal, as it is said, "The zeal of thy house hath eaten

me up;" and we sing in our church, that those who mocked Elisha as he went up to the house of God, felt the effects of his zeal; which that mocker, that rogue, that scoundrel, will perhaps feel.'—"You do this perhaps with a good intention," said the Cardinal; 'but in my opinion, it were wiser in you, and perhaps better for you, not to engage in so ridiculous a contest with a fool.'—"No, my lord," answered he, 'that were not wisely done; for Solomon, the wisest of men, said, "Answer a fool according to his folly;" which I now do, and show him the ditch into which he will fall, if he is not aware of it; for if the many mockers of Elisha, who was but one bald man, felt the effect of his zeal, what will become of one mocker of so many friars, among whom there are so many bald men? We have likewise a Bull, by which all that jeer us are excommunicated.'—When the Cardinal saw that there was no end of this matter, he made a sign to the fool to withdraw, turned the discourse another way; and soon after rose from the table, and dismissing us, went to hear causes.

"Thus, Mr. More, I have run out into a tedious story, of the length of which I had been ashamed, if, as you earnestly begged it of me, I had not observed you to hearken to it, as if you had no mind to lose any part of it. I might have contracted it, but I resolved to give it you at large, that you might observe how those that despised what I had proposed, no sooner perceived that the Cardinal did not dislike it, but presently approved of it, fawned so on him, and flattered him to such a degree, that they in good earnest applauded those things that he only liked in jest. And from hence you may gather, how little courtiers would value either me or my counsels."

To this I answered, "You have done me a great kindness in this relation; for as everything has been related by you, both wisely and pleasantly, so you have made me imagine that I was in my own country, and grown young again, by recalling that good Cardinal to my thoughts, in whose family I was bred from my childhood: and though you are upon other accounts very dear to me, yet you are the dearer, because you honour his memory so much; but after all this I cannot change my opinion; for I still think that if you could overcome that aversion which you have to the Courts of Princes, you might, by the advice which it is in your power to give, do a great deal of good to mankind; and this is the chief design that every good man ought to propose to himself in living: for your friend Plato thinks that nations will be happy,

when either philosophers become kings, or kings become philosophers; it is no wonder if we are so far from that happiness, while philosophers will not think it their duty to assist kings with their councils."—"They are not so base-minded," said he, "but that they would willingly do it; many of them have already done it by their books, if those that are in power would but hearken to their good advice. But Plato judged right, that except kings themselves became philosophers, they who from their childhood are corrupted with false notions, would never fall in entirely with the councils of philosophers, and this he himself found to be true in the person of Dionysius.

"Do not you think, that if I were about any king, proposing good laws to him, and endeavouring to root out all the cursed seeds of evil that I found in him, I should either be turned out of his Court, or at least be laughed at for my pains? For instance, what could it signify if I were about the King of France, and were called into his cabinet-council, where several wise men, in his hearing, were proposing many expedients; as by what arts and practices Milan may be kept; and Naples, that had so oft slipped out of their hands, recovered; how the Venetians, and after them the rest of Italy, may be subdued; and then how Flanders, Brabant, and all Burgundy, and some other kingdoms which he has swallowed already in his designs, may be added to his empire. One proposes a league with the Venetians, to be kept as long as he finds his account in it, and that he ought to communicate councils with them, and give them some share of the spoil, till his success makes him need or fear them less, and then it will be easily taken out of their hands. Another proposes the hiring the Germans, and the securing the Switzers by pensions. Another proposes the gaining the Emperor by money, which is omnipotent with him. Another proposes a peace with the King of Arragon, and in order to cement it, the yielding up the King of Navarre's pretensions. Another thinks the Prince of Castile is to be wrought on, by the hope of an alliance; and that some of his courtiers are to be gained to the French faction by pensions. The hardest point of all is what to do with England: a treaty of peace is to be set on foot, and if their alliance is not to be depended on, yet it is to be made as firm as possible; and they are to be called friends, but suspected as enemies: therefore the Scots are to be kept in readiness, to be let loose upon England on every occasion: and some banished nobleman is to be supported underhand (for by the league it cannot be done avowedly) who has a

pretension to the crown, by which means that suspected prince may be kept in awe. Now when things are in so great a fermentation, and so many gallant men are joining councils, how to carry on the war, if so mean a man as I should stand up, and wish them to change all their councils, to let Italy alone, and stay at home, since the kingdom of France was indeed greater than could be well governed by one man; that therefore he ought not to think of adding others to it: and if after this, I should propose to them the resolutions of the Achorians, a people that lie on the south-east of Utopia, who long ago engaged in war, in order to add to the dominions of their prince another kingdom, to which he had some pretensions by an ancient alliance. This they conquered, but found that the trouble of keeping it was equal to that by which it was gained; that the conquered people were always either in rebellion or exposed to foreign invasions, while they were obliged to be incessantly at war, either for or against them, and consequently could never disband their army; that in the meantime they were oppressed with taxes, their money went out of the kingdom, their blood was spilt for the glory of their king, without procuring the least advantage to the people, who received not the smallest benefit from it even in time of peace; and that their manners being corrupted by a long war, robbery and murders everywhere abounded, and their laws fell into contempt; while their king, distracted with the care of two kingdoms, was the less able to apply his mind to the interests of either. When they saw this, and that there would be no end to these evils, they by joint councils made an humble address to their king, desiring him to choose which of the two kingdoms he had the greatest mind to keep, since he could not hold both; for they were too great a people to be governed by a divided king, since no man would willingly have a groom that should be in common between him and another. Upon which the good prince was forced to quit his new kingdom to one of his friends (who was not long after dethroned), and to be contented with his old one. To this I would add, that after all those warlike attempts, the vast confusions, and the consumption both of treasure and of people that must follow them; perhaps upon some misfortune, they might be forced to throw up all at last; therefore it seemed much more eligible that the king should improve his ancient kingdom all he could, and make it flourish as much as possible; that he should love his people, and be beloved of them; that he should live among them, govern them gently, and let other kingdoms alone, since that which had fallen to his share was big enough, if not too big for

him. Pray how do you think would such a speech as this be heard?"—"I confess," said I, "I think not very well."

"But what," said he, "if I should sort with another kind of ministers, whose chief contrivances and consultations were, by what art the prince's treasures might be increased. Where one proposes raising the value of specie when the king's debts are large, and lowering it when his revenues were to come in, that so he might both pay much with a little, and in a little receive a great deal: another proposes a pretence of a war, that money might be raised in order to carry it on, and that a peace be concluded as soon as that was done; and this with such appearances of religion as might work on the people, and make them impute it to the piety of their prince, and to his tenderness for the lives of his subjects. A third offers some old musty laws, that have been antiquated by a long disuse; and which, as they had been forgotten by all the subjects, so they had been also broken by them; and proposes the levying the penalties of these laws, that as it would bring in a vast treasure, so there might be a very good pretence for it, since it would look like the executing a law, and the doing of justice. A fourth proposes the prohibiting of many things under severe penalties, especially such as were against the interest of the people, and then the dispensing with these prohibitions upon great compositions, to those who might find their advantage in breaking them. This would serve two ends, both of them acceptable to many; for as those whose avarice led them to transgress would be severely fined, so the selling licenses dear would look as if a prince were tender of his people, and would not easily, or at low rates, dispense with anything that might be against the public good. Another proposes that the judges must be made sure, that they may declare always in favour of the prerogative, that they must be often sent for to Court, that the king may hear them argue those points in which he is concerned; since how unjust soever any of his pretensions may be, yet still some one or other of them, either out of contradiction to others, or the pride of singularity, or to make their court, would find out some pretence or other to give the king a fair colour to carry the point: for if the judges but differ in opinion, the clearest thing in the world is made by that means disputable, and truth being once brought in question, the king may then take advantage to expound the law for his own profit; while the judges that stand out will be brought over, either out of fear or modesty; and they being thus gained, all of

them may be sent to the bench to give sentence boldly, as the king would have it: for fair pretences will never be wanting when sentence is to be given in the prince's favour. It will either be said that equity lies of his side, or some words in the law will be found sounding that way, or some forced sense will be put on them; and when all other things fail, the king's undoubted prerogative will be pretended, as that which is above all law; and to which a religious judge ought to have a special regard. Thus all consent to that maxim of Crassus, that a prince cannot have treasure enough, since he must maintain his armies out of it: that a king, even though he would, can do nothing unjustly; that all property is in him, not excepting the very persons of his subjects: and that no man has any other property, but that which the king out of his goodness thinks fit to leave him. And they think it is the prince's interest, that there be as little of this left as may be, as if it were his advantage that his people should have neither riches nor liberty; since these things make them less easy and less willing to submit to a cruel and unjust government; whereas necessity and poverty blunts them, makes them patient, beats them down, and breaks that height of spirit, that might otherwise dispose them to rebel. Now what if after all these propositions were made, I should rise up and assert, that such councils were both unbecoming a king, and mischievous to him: and that not only his honour but his safety consisted more in his people's wealth, than in his own; if I should show that they choose a king for their own sake, and not for his; that by his care and endeavours they may be both easy and safe; and that therefore a prince ought to take more care of his people's happiness than of his own, as a shepherd is to take more care of his flock than of himself. It is also certain, that they are much mistaken that think the poverty of a nation is a means of the public safety. Who quarrel more than beggars? Who does more earnestly long for a change, than he that is uneasy in his present circumstances? And who run to create confusions with so desperate a boldness, as those who have nothing to lose, hope to gain by them? If a king should fall under such contempt or envy, that he could not keep his subjects in their duty, but by oppression and ill usage, and by rendering them poor and miserable, it were certainly better for him to quit his kingdom, than to retain it by such methods, as makes him while he keeps the name of authority, lose the majesty due to it. Nor is it so becoming the dignity of a king to reign over beggars, as over rich and happy subjects. And therefore Fabricius, a man of a noble and exalted temper, said, he would

rather govern rich men, than be rich himself; since for one man to abound in wealth and pleasure, when all about him are mourning and groaning, is to be a gaoler and not a king. He is an unskilful physician, that cannot cure one disease without casting his patient into another: so he that can find no other way for correcting the errors of his people, but by taking from them the conveniences of life, shows that he knows not what it is to govern a free nation. He himself ought rather to shake off his sloth, or to lay down his pride; for the contempt or hatred that his people have for him, takes its rise from the vices in himself. Let him live upon what belongs to him, without wronging others, and accommodate his expense to his revenue. Let him punish crimes, and by his wise conduct let him endeavour to prevent them, rather than be severe when he has suffered them to be too common: let him not rashly revive laws that are abrogated by disuse, especially if they have been long forgotten, and never wanted; and let him never take any penalty for the breach of them, to which a judge would not give way in a private man, but would look on him as a crafty and unjust person for pretending to it. To these things I would add, that law among the Macarians, a people that lie not far from Utopia, by which their king, on the day on which he begins to reign, is tied by an oath confirmed by solemn sacrifices, never to have at once above a thousand pounds of gold in his treasures, or so much silver as is equal to that in value. This law, they tell us, was made by an excellent king, who had more regard to the riches of his country than to his own wealth; and therefore provided against the heaping up of so much treasure, as might impoverish the people. He thought that moderate sum might be sufficient for any accident; if either the king had occasion for it against rebels, or the kingdom against the invasion of an enemy; but that it was not enough to encourage a prince to invade other men's rights, a circumstance that was the chief cause of his making that law. He also thought that it was a good provision for that free circulation of money, so necessary for the course of commerce and exchange: and when a king must distribute all those extraordinary accessions that increase treasure beyond the due pitch, it makes him less disposed to oppress his subjects. Such a king as this will be the terror of ill men, and will be beloved by all the good.

"If, I say, I should talk of these or such like things, to men that had taken their bias another way, how deaf would they be to all I could say?"—"No doubt,

very deaf," answered I; and no wonder, for one is never to offer at propositions or advice that we are certain will not be entertained. Discourses so much out of the road could not avail anything, nor have any effect on men whose minds were prepossessed with different sentiments. This philosophical way of speculation is not unpleasant among friends in a free conversation, but there is no room for it in the Courts of Princes where great affairs are carried on by authority."—"That is what I was saying," replied he, "that there is no room for philosophy in the Courts of Princes."—"Yes, there is," said I, "but not for this speculative philosophy that makes everything to be alike fitting at all times: but there is another philosophy that is more pliable, that knows its proper scene, accommodates itself to it, and teaches a man with propriety and decency to act that part which has fallen to his share. If when one of Plautus's comedies is upon the stage and a company of servants are acting their parts, you should come out in the garb of a philosopher, and repeat out of 'Octavia' a discourse of Seneca's to Nero, would it not be better for you to say nothing than by mixing things of such different natures to make an impertinent tragedy-comedy? For you spoil and corrupt the play that is in hand when you mix with it things of an opposite nature, even though they are much better. Therefore go through with the play that is acting the best you can, and do not confound it because another that is pleasanter comes into your thoughts. It is even so in a commonwealth, and in the councils of princes; if ill opinions cannot be quite rooted out, and you cannot cure some received vice according to your wishes, you must not therefore abandon the commonwealth, for the same reasons you should not forsake the ship in a storm because you cannot command the winds. You are not obliged to assault people with discourses that are out of their road, when you see that their received notions must prevent your making an impression upon them. You ought rather to cast about and to manage things with all the dexterity in your power, so that if you are not able to make them go well they may be as little ill as possible; for except all men were good everything cannot be right, and that is a blessing that I do not at present hope to see. According to your arguments," answered he, "all that I could be able to do would be to preserve myself from being mad while I endeavoured to cure the madness of others; for if I speak truth, I must repeat what I have said to you; and as for lying, whether a philosopher can do it or not, I cannot tell, I am sure I cannot do it. But though these discourses may be uneasy and ungrateful to them, I do not see why they

should seem foolish or extravagant: indeed if I should either propose such things as Plato has contrived in his commonwealth, or as the Utopians practise in theirs, though they might seem better, as certainly they are, yet they are so different from our establishment, which is founded on property, there being no such thing among them, that I could not expect that it would have any effect on them; but such discourses as mine, which only call past evils to mind and give warning of what may follow, have nothing in them that is so absurd that they may not be used at any time, for they can only be unpleasant to those who are resolved to run headlong the contrary way; and if we must let alone everything as absurd or extravagant which by reason of the wicked lives of many may seem uncouth, we must, even among Christians, give over pressing the greatest part of those things that Christ hath taught us, though He has commanded us not to conceal them, but to proclaim on the house-tops that which He taught in secret. The greatest parts of His precepts are more opposite to the lives of the men of this age than any part of my discourse has been; but the preachers seemed to have learned that craft to which you advise me, for they observing that the world would not willingly suit their lives to the rules that Christ has given, have fitted His doctrine as if it had been a leaden rule, to their lives, that so some way or other they might agree with one another. But I see no other effect of this compliance except it be that men become more secure in their wickedness by it. And this is all the success that I can have in a Court, for I must always differ from the rest, and then I shall signify nothing; or if I agree with them, I shall then only help forward their madness. I do not comprehend what you mean by your casting about, or by the bending and handling things so dexterously, that if they go not well they may go as little ill as may be; for in Courts they will not bear with a man's holding his peace or conniving at what others do. A man must barefacedly approve of the worst counsels, and consent to the blackest designs: so that he would pass for a spy, or possibly for a traitor, that did but coldly approve of such wicked practices: and therefore when a man is engaged in such a society, he will be so far from being able to mend matters by his casting about, as you call it, that he will find no occasions of doing any good: the ill company will sooner corrupt him, than be the better for him: or if notwithstanding all their ill company, he still remains steady and innocent, yet their follies and knavery will be imputed to him; and by mixing counsels with them, he must bear his share of all the blame that belongs wholly to

others.

"It was no ill simile by which Plato set forth the unreasonableness of a philosopher's meddling with government. If a man, says he, was to see a great company run out every day into the rain, and take delight in being wet; if he knew that it would be to no purpose for him to go and persuade them to return to their houses, in order to avoid the storm, and that all that could be expected by his going to speak to them would be that he himself should be as wet as they, it would be best for him to keep within doors; and since he had not influence enough to correct other people's folly, to take care to preserve himself.

"Though to speak plainly my real sentiments, I must freely own, that as long as there is any property, and while money is the standard of all other things, I cannot think that a nation can be governed either justly or happily: not justly, because the best things will fall to the share of the worst men; nor happily, because all things will be divided among a few (and even these are not in all respects happy), the rest being left to be absolutely miserable. Therefore when I reflect on the wise and good constitution of the Utopians, among whom all things are so well governed, and with so few laws; where virtue hath its due reward, and yet there is such an equality, that every man lives in plenty; when I compare with them so many other nations that are still making new laws, and yet can never bring their constitution to a right regulation, where notwithstanding every one has his property; yet all the laws that they can invent have not the power either to obtain or preserve it, or even to enable men certainly to distinguish what is their own from what is another's; of which the many lawsuits that every day break out, and are eternally depending, give too plain a demonstration; when, I say, I balance all these things in my thoughts, I grow more favourable to Plato, and do not wonder that he resolved not to make any laws for such as would not submit to a community of all things: for so wise a man could not but foresee that the setting all upon a level was the only way to make a nation happy, which cannot be obtained so long as there is property: for when every man draws to himself all that he can compass, by one title or another, it must needs follow, that how plentiful soever a nation may be, yet a few dividing the wealth of it among themselves, the rest must fall into indigence. So that there will be two sorts of people among them, who deserve that their fortunes should be

interchanged; the former useless, but wicked and ravenous; and the latter, who by their constant industry serve the public more than themselves, sincere and modest men. From whence I am persuaded, that till property is taken away there can be no equitable or just distribution of things, nor can the world be happily governed: for as long as that is maintained, the greatest and the far best part of mankind will be still oppressed with a load of cares and anxieties. I confess without taking it quite away, those pressures that lie on a great part of mankind may be made lighter; but they can never be quite removed. For if laws were made to determine at how great an extent in soil, and at how much money every man must stop, to limit the prince that he might not grow too great, and to restrain the people that they might not become too insolent, and that none might factiously aspire to public employments; which ought neither to be sold, nor made burthensome by a great expense; since otherwise those that serve in them would be tempted to reimburse themselves by cheats and violence, and it would become necessary to find out rich men for undergoing those employments which ought rather to be trusted to the wise. These laws, I say, might have such effects, as good diet and care might have on a sick man, whose recovery is desperate: they might allay and mitigate the disease, but it could never be quite healed, nor the body politic be brought again to a good habit, as long as property remains; and it will fall out as in a complication of diseases, that by applying a remedy to one sore, you will provoke another; and that which removes the one ill symptom produces others, while the strengthening one part of the body weakens the rest."—"On the contrary," answered I, "it seems to me that men cannot live conveniently, where all things are common: how can there be any plenty, where every man will excuse himself from labour? For as the hope of gain doth not excite him, so the confidence that he has in other men's industry may make him slothful: if people come to be pinched with want, and yet cannot dispose of anything as their own; what can follow upon this but perpetual sedition and bloodshed, especially when the reverence and authority due to magistrates falls to the ground? For I cannot imagine how that can be kept up among those that are in all things equal to one another."—"I do not wonder," said he, "that it appears so to you, since you have no notion, or at least no right one, of such a constitution: but if you had been in Utopia with me, and had seen their laws and rules, as I did, for the space of five years, in which I lived among them; and during which time I

was so delighted with them, that indeed I should never have left them, if it had not been to make the discovery of that new world to the Europeans; you would then confess that you had never seen a people so well constituted as they,"—"You will not easily persuade me," said Peter, "that any nation in that new world is better governed than those among us. For as our understandings are not worse than theirs, so our government, if I mistake not, being more ancient, a long practice has helped us to find out many conveniences of life: and some happy chances have discovered other things to us, which no man's understanding could ever have invented."—"As for the antiquity, either of their government, or of ours," said he, "you cannot pass a true judgment of it, unless you had read their histories; for if they are to be believed, they had towns among them before these parts were so much as inhabited. And as for those discoveries, that have been either hit on by chance, or made by ingenious men, these might have happened there as well as here. I do not deny but we are more ingenious than they are, but they exceed us much in industry and application. They knew little concerning us before our arrival among them; they call us all by a general name of the nations that lie beyond the Equinoctial Line; for their Chronicle mentions a shipwreck that was made on their coast 1,200 years ago; and that some Romans and Egyptians that were in the ship, getting safe ashore, spent the rest of their days amongst them; and such was their ingenuity, that from this single opportunity they drew the advantage of learning from those unlooked-for guests, and acquired all the useful arts that were then among the Romans, and which were known to these shipwrecked men: and by the hints that they gave them, they themselves found out even some of those arts which they could not fully explain; so happily did they improve that accident, of having some of our people cast upon their shore. But if such an accident has at any time brought any from thence into Europe, we have been so far from improving it, that we do not so much as remember it; as in after-times perhaps it will be forgot by our people that I was ever there. For though they from one such accident made themselves masters of all the good inventions that were among us; yet I believe it would be long before we should learn or put in practice any of the good institutions that are among them. And this is the true cause of their being better governed, and living happier than we, though we come not short of them in point of understanding or outward advantages."—Upon this I said to him, "I earnestly beg you would describe that island very particularly to us.

Be not too short, but set out in order all things relating to their soil, their rivers, their towns, their people, their manners, constitution, laws, and, in a word, all that you imagine we desire to know. And you may well imagine that we desire to know everything concerning them, of which we are hitherto ignorant."—"I will do it very willingly," said he, "for I have digested the whole matter carefully; but it will take up some time,"—"Let us go then," said I, "first and dine, and then we shall have leisure enough." He consented. We went in and dined, and after dinner came back, and sat down in the same place. I ordered my servants to take care that none might come and interrupt us. And both Peter and I desired Raphael to be as good as his word. When he saw that we were very intent upon it, he paused a little to recollect himself, and began in this manner.

BOOK II.

The island of Utopia is in the middle two hundred miles broad, and holds almost at the same breadth over a great part of it; but it grows narrower towards both ends. Its figure is not unlike a crescent: between its horns, the sea comes in eleven miles broad, and spreads itself into a great bay, which is environed with land to the compass of about five hundred miles, and is well secured from winds. In this bay there is no great current, the whole coast is, as it were, one continued harbour, which gives all that live in the island great convenience for mutual commerce; but the entry into the bay, occasioned by rocks on the one hand, and shallows on the other, is very dangerous. In the middle of it there is one single rock which appears above water, and may therefore be easily avoided, and on the top of it there is a tower in which a garrison is kept, the other rocks lie under water, and are very dangerous. The channel is known only to the natives, so that if any stranger should enter into the bay, without one of their pilots, he would run great danger of shipwreck; for even they themselves could not pass it safe, if some marks that are on the coast did not direct their way; and if these should be but a little shifted, any fleet that might come against them, how great soever it were, would be certainly lost. On the other side of the island there are likewise many harbours; and the coast is so fortified, both by nature and art, that a small

number of men can hinder the descent of a great army. But they report (and there remains good marks of it to make it credible) that this was no island at first, but a part of the continent. Utopus that conquered it (whose name it still carries, for Abraxa was its first name) brought the rude and uncivilized inhabitants into such a good government, and to that measure of politeness, that they now far excel all the rest of mankind; having soon subdued them, he designed to separate them from the continent, and to bring the sea quite round them. To accomplish this, he ordered a deep channel to be dug fifteen miles long; and that the natives might not think he treated them like slaves, he not only forced the inhabitants, but also his own soldiers, to labour in carrying it on. As he set a vast number of men to work, he beyond all men's expectations brought it to a speedy conclusion. And his neighbours who at first laughed at the folly of the undertaking, no sooner saw it brought to perfection, than they were struck with admiration and terror.

There are fifty-four cities in the island, all large and well built: the manners, customs, and laws of which are the same, and they are all contrived as near in the same manner as the ground on which they stand will allow. The nearest lie at least twenty-four miles distance from one another, and the most remote are not so far distant, but that a man can go on foot in one day from it, to that which lies next it. Every city sends three of their wisest senators once a year to Amaurot, to consult about their common concerns; for that is chief town of the island, being situated near the centre of it, so that it is the most convenient place for their assemblies. The jurisdiction of every city extends at least twenty miles: and where the towns lie wider, they have much more ground: no town desires to enlarge its bounds, for the people consider themselves rather as tenants than landlords. They have built over all the country, farmhouses for husbandmen, which are well contrived, and are furnished with all things necessary for country labour. Inhabitants are sent by turns from the cities to dwell in them; no country family has fewer than forty men and women in it, besides two slaves. There is a master and a mistress set over every family; and over thirty families there is a magistrate. Every year twenty of this family come back to the town, after they have stayed two years in the country; and in their room there are other twenty sent from the town, that they may learn country work from those that have been already one year in the country, as they must teach those that come to them the next from the

town. By this means such as dwell in those country farms are never ignorant of agriculture, and so commit no errors, which might otherwise be fatal, and bring them under a scarcity of corn. But though there is every year such a shifting of the husbandmen, to prevent any man being forced against his will to follow that hard course of life too long; yet many among them take such pleasure in it, that they desire leave to continue in it many years. These husbandmen till the ground, breed cattle, hew wood, and convey it to the towns, either by land or water, as is most convenient. They breed an infinite multitude of chickens in a very curious manner; for the hens do not sit and hatch them, but vast number of eggs are laid in a gentle and equal heat, in order to be hatched, and they are no sooner out of the shell, and able to stir about, but they seem to consider those that feed them as their mothers, and follow them as other chickens do the hen that hatched them. They breed very few horses, but those they have are full of mettle, and are kept only for exercising their youth in the art of sitting and riding them; for they do not put them to any work, either of ploughing or carriage, in which they employ oxen; for though their horses are stronger, yet they find oxen can hold out longer; and as they are not subject to so many diseases, so they are kept upon a less charge, and with less trouble; and even when they are so worn out, that they are no more fit for labour, they are good meat at last. They sow no corn, but that which is to be their bread; for they drink either wine, cyder, or perry, and often water, sometimes boiled with honey or liquorice, with which they abound; and though they know exactly how much corn will serve every town, and all that tract of country which belongs to it, yet they sow much more, and breed more cattle than are necessary for their consumption; and they give that overplus of which they make no use to their neighbours. When they want anything in the country which it does not produce, they fetch that from the town, without carrying anything in exchange for it. And the magistrates of the town take care to see it given them; for they meet generally in the town once a month, upon a festival day. When the time of harvest comes, the magistrates in the country send to those in the towns, and let them know how many hands they will need for reaping the harvest; and the number they call for being sent to them, they commonly despatch it all in one day.

OF THEIR TOWNS, PARTICULARLY OF AMAUROT.

He that knows one of their towns, knows them all, they are so like one

another, except where the situation makes some difference. I shall therefore describe one of them; and none is so proper as Amaurot; for as none is more eminent, all the rest yielding in precedence to this, because it is the seat of their supreme council; so there was none of them better known to me, I having lived five years altogether in it.

It lies upon the side of a hill, or rather a rising ground: its figure is almost square, for from the one side of it, which shoots up almost to the top of the hill, it runs down in a descent for two miles to the river Anider; but it is a little broader the other way that runs along by the bank of that river. The Anider rises about eighty miles above Amaurot in a small spring at first; but other brooks falling into it, of which two are more considerable than the rest. As it runs by Amaurot, it is grown half a mile broad; but it still grows larger and larger, till after sixty miles course below it, it is lost in the ocean, between the town and the sea, and for some miles above the town, it ebbs and flows every six hours, with a strong current. The tide comes up for about thirty miles so full, that there is nothing but salt water in the river, the fresh water being driven back with its force; and above that, for some miles, the water is brackish; but a little higher, as it runs by the town, it is quite fresh; and when the tide ebbs, it continues fresh all along to the sea. There is a bridge cast over the river, not of timber, but of fair stone, consisting of many stately arches; it lies at that part of the town which is farthest from the sea, so that ships without any hindrance lie all along the side of the town. There is likewise another river that runs by it, which though it is not great, yet it runs pleasantly, for it rises out of the same hill on which the town stands, and so runs down through it, and falls into the Anider. The inhabitants have fortified the fountain-head of this river, which springs a little without the towns; that so if they should happen to be besieged, the enemy might not be able to stop or divert the course of the water, nor poison it; from thence it is carried in earthen pipes to the lower streets; and for those places of the town to which the water of that small river cannot be conveyed, they have great cisterns for receiving the rain-water, which supplies the want of the other. The town is compassed with a high and thick wall, in which there are many towers and forts; there is also a broad and deep dry ditch, set thick with thorns, cast round three sides of the town, and the river is instead of a ditch on the fourth side. The streets are very convenient for all carriage, and are well sheltered

from the winds. Their buildings are good, and are so uniform, that a whole side of a street looks like one house. The streets are twenty feet broad; there lie gardens behind all their houses; these are large but enclosed with buildings, that on all hands face the streets; so that every house has both a door to the street, and a back door to the garden. Their doors have all two leaves, which, as they are easily opened, so they shut of their own accord; and there being no property among them, every man may freely enter into any house whatsoever. At every ten years end they shift their houses by lots. They cultivate their gardens with great care, so that they have both vines, fruits, herbs, and flowers in them; and all is so well ordered, and so finely kept, that I never saw gardens anywhere that were both so fruitful and so beautiful as theirs. And this humour of ordering their gardens so well, is not only kept up by the pleasure they find in it, but also by an emulation between the inhabitants of the several streets, who vie with each other; and there is indeed nothing belonging to the whole town that is both more useful and more pleasant. So that he who founded the town, seems to have taken care of nothing more than of their gardens; for they say, the whole scheme of the town was designed at first by Utopus, but he left all that belonged to the ornament and improvement of it, to be added by those that should come after him, that being too much for one man to bring to perfection. Their records, that contain the history of their town and state, are preserved with an exact care, and run backwards 1,760 years. From these it appears that their houses were at first low and mean, like cottages, made of any sort of timber, and were built with mud walls and thatched with straw. But now their houses are three stories high: the fronts of them are faced either with stone, plastering, or brick; and between the facings of their walls they throw in their rubbish. Their roofs are flat, and on them they lay a sort of plaster, which costs very little, and yet is so tempered that it is not apt to take fire, and yet resists the weather more than lead. They have great quantities of glass among them, with which they glaze their windows. They use also in their windows a thin linen cloth, that is so oiled or gummed that it both keeps out the wind and gives free admission to the light.

OF THEIR MAGISTRATES.

Thirty families choose every year a magistrate, who was anciently called the Syphogrant, but is now called the Philarch; and over every ten Syphogrants,

with the families subject to them, there is another magistrate, who was anciently called the Tranibor, but of late the Archphilarch. All the Syphogrants, who are in number 200, choose the Prince out of a list of four, who are named by the people of the four divisions of the city; but they take an oath before they proceed to an election, that they will choose him whom they think most fit for the office. They give their voices secretly, so that it is not known for whom every one gives his suffrage. The Prince is for life, unless he is removed upon suspicion of some design to enslave the people. The Tranibors are new chosen every year, but yet they are for the most part continued. All their other magistrates are only annual. The Tranibors meet every third day, and oftener if necessary, and consult with the Prince, either concerning the affairs of the state in general, or such private differences as may arise sometimes among the people; though that falls out but seldom. There are always two Syphogrants called into the council-chamber, and these are changed every day. It is a fundamental rule of their government, that no conclusion can be made in anything that relates to the public, till it has been first debated three several days in their council. It is death for any to meet and consult concerning the state, unless it be either in their ordinary council, or in the assembly of the whole body of the people.

These things have been so provided among them, that the Prince and the Tranibors may not conspire together to change the government, and enslave the people; and therefore when anything of great importance is set on foot, it is sent to the Syphogrants; who after they have communicated it to the families that belong to their divisions, and have considered it among themselves, make report to the senate; and upon great occasions, the matter is referred to the council of the whole island. One rule observed in their council, is, never to debate a thing on the same day in which it is first proposed; for that is always referred to the next meeting, that so men may not rashly, and in the heat of discourse, engage themselves too soon, which might bias them so much, that instead of consulting the good of the public, they might rather study to support their first opinions, and by a perverse and preposterous sort of shame, hazard their country rather than endanger their own reputation, or venture the being suspected to have wanted foresight in the expedients that they at first proposed. And therefore to prevent this, they take care that they may rather be deliberate than sudden in their motions.

OF THEIR TRADES, AND MANNER OF LIFE.

Agriculture is that which is so universally understood among them, that no person, either man or woman, is ignorant of it; they are instructed in it from their childhood, partly by what they learn at school, and partly by practice; they being led out often into the fields, about the town, where they not only see others at work, but are likewise exercised in it themselves. Besides agriculture, which is so common to them all, every man has some peculiar trade to which he applies himself, such as the manufacture of wool, or flax, masonry, smith's work, or carpenter's work; for there is no sort of trade that is in great esteem among them. Throughout the island they wear the same sort of clothes without any other distinction, except what is necessary to distinguish the two sexes, and the married and unmarried. The fashion never alters; and as it is neither disagreeable nor uneasy, so it is suited to the climate, and calculated both for their summers and winters. Every family makes their own clothes; but all among them, women as well men, learn one or other of the trades formerly mentioned. Women, for the most part, deal in wool and flax, which suit best with their weakness, leaving the ruder trades to the men. The same trade generally passes down from father to son, inclinations often following descent; but if any man's genius lies another way, he is by adoption translated into a family that deals in the trade to which he is inclined: and when that is to be done, care is taken not only by his father, but by the magistrate, that he may be put to a discreet and good man. And if after a person has learned one trade, he desires to acquire another, that is also allowed, and is managed in the same manner as the former. When he has learned both, he follows that which he likes best, unless the public has more occasion for the other.

The chief, and almost the only business of the Syphogrants, is to take care that no man may live idle, but that every one may follow his trade diligently: yet they do not wear themselves out with perpetual toil, from morning to night, as if they were beasts of burden, which as it is indeed a heavy slavery, so it is everywhere the common course of life amongst all mechanics except the Utopians; but they dividing the day and night into twenty-four hours, appoint six of these for work; three of which are before dinner; and three after. They then sup, and at eight o'clock, counting from noon, go to bed and sleep eight hours. The rest of their time besides that taken up in work, eating

and sleeping, is left to every man's discretion; yet they are not to abuse that interval to luxury and idleness, but must employ it in some proper exercise according to their various inclinations, which is for the most part reading. It is ordinary to have public lectures every morning before daybreak; at which none are obliged to appear but those who are marked out for literature; yet a great many, both men and women of all ranks, go to hear lectures of one sort or other, according to their inclinations. But if others, that are not made for contemplation, choose rather to employ themselves at that time in their trades, as many of them do, they are not hindered, but are rather commended, as men that take care to serve their country. After supper, they spend an hour in some diversion, in summer in their gardens, and in winter in the halls where they eat; where they entertain each other, either with music or discourse. They do not so much as know dice, or any such foolish and mischievous games: they have, however, two sorts of games not unlike our chess; the one is between several numbers, in which one number, as it were, consumes another: the other resembles a battle between the virtues and the vices, in which the enmity in the vices among themselves, and their agreement against virtue, is not unpleasantly represented; together with the special oppositions between the particular virtues and vices; as also the methods by which vice either openly assaults or secretly undermines virtue; and virtue on the other hand resists it. But the time appointed for labour is to be narrowly examined, otherwise you may imagine, that since there are only six hours appointed for work, they may fall under a scarcity of necessary provisions. But it is so far from being true, that this time is not sufficient for supplying them with plenty of all things, either necessary or convenient; that it is rather too much; and this you will easily apprehend, if you consider how great a part of all other nations is quite idle. First, women generally do little, who are the half of mankind; and if some few women are diligent, their husbands are idle: then consider the great company of idle priests, and of those that are called religious men; add to these all rich men, chiefly those that have estates in land, who are called noblemen and gentlemen, together with their families, made up of idle persons, that are kept more for show than use; add to these, all those strong and lusty beggars, that go about pretending some disease, in excuse for their begging; and upon the whole account you will find that the number of those by whose labours mankind is supplied, is much less than you perhaps imagined. Then consider how few of those that

work are employed in labours that are of real service; for we who measure all things by money, give rise to many trades that are both vain and superfluous, and serve only to support riot and luxury. For if those who work were employed only in such things as the conveniences of life require, there would be such an abundance of them, that the prices of them would so sink, that tradesmen could not be maintained by their gains; if all those who labour about useless things, were set to more profitable employments, and if all they that languish out their lives in sloth and idleness, every one of whom consumes as much as any two of the men that are at work, were forced to labour, you may easily imagine that a small proportion of time would serve for doing all that is either necessary, profitable, or pleasant to mankind, especially while pleasure is kept within its due bounds. This appears very plainly in Utopia, for there, in a great city, and in all the territory that lies round it, you can scarce find five hundred, either men or women, by their age and strength, are capable of labour, that are not engaged in it; even the Syphogrants, though excused by the law, yet do not excuse themselves, but work, that by their examples they may excite the industry of the rest of the people. The like exemption is allowed to those, who being recommended to the people by the priests, are by the secret suffrages of the Syphogrants privileged from labour, that they may apply themselves wholly to study; and if any of these fall short of those hopes that they seemed at first to give, they are obliged to return to work. And sometimes a mechanic, that so employs his leisure hours, as to make a considerable advancement in learning, is eased from being a tradesman, and ranked among their learned men. Out of these they choose their ambassadors, their priests, their Tranibors, and the Prince himself; anciently called their Barzenes, but is called of late their Ademus.

And thus from the great numbers among them that are neither suffered to be idle, nor to be employed in any fruitless labour, you may easily make the estimate how much may be done in those few hours in which they are obliged to labour. But besides all that has been already said, it is to be considered that the needful arts among them are managed with less labour than anywhere else. The building or the repairing of houses among us employ many hands, because often a thriftless heir suffers a house that his father built to fall into decay, so that his successor must, at a great cost, repair that which he might have kept up with a small charge: it frequently happens, that the same house

which one person built at a vast expense, is neglected by another, who thinks he has a more delicate sense of the beauties of architecture; and he suffering it to fall to ruin, builds another at no less charge. But among the Utopians, all things are so regulated that men very seldom build upon a new piece of ground; and are not only very quick in repairing their houses, but show their foresight in preventing their decay: so that their buildings are preserved very long, with but little labour; and thus the builders to whom that care belongs are often without employment, except the hewing of timber, and the squaring of stones, that the materials may be in readiness for raising a building very suddenly, when there is any occasion for it. As to their clothes, observe how little work is spent in them: while they are at labour, they are clothed with leather and skins, cast carelessly about them, which will last seven years; and when they appear in public they put on an upper garment, which hides the other; and these are all of one colour, and that is the natural colour of the wool. As they need less woollen cloth than is used anywhere else, so that which they make use of is much less costly. They use linen cloth more; but that is prepared with less labour, and they value cloth only by the whiteness of the linen, or the cleanness of the wool, without much regard to the fineness of the thread: while in other places, four or five upper garments of woollen cloth, of different colours, and as many vests of silk, will scarce serve one man; and while those that are nicer think ten too few, every man there is content with one, which very often serves him two years. Nor is there anything that can tempt a man to desire more; for if he had them, he would neither be the warmer, nor would he make one jot the better appearance for it. And thus, since they are all employed in some useful labour, and since they content themselves with fewer things, it falls out that there is a great abundance of all things among them: so that it frequently happens, that for want of other work, vast numbers are sent out to mend the highways. But when no public undertaking is to be performed, the hours of working are lessened. The magistrates never engage the people in unnecessary labour, since the chief end of the constitution is to regulate labour by the necessities of the public, and to allow all the people as much time as is necessary for the improvement of their minds, in which they think the happiness of life consists.

OF THEIR TRAFFIC.

But it is now time to explain to you the mutual intercourse of this people, their commerce, and the rules by which all things are distributed among them.

As their cities are composed of families, so their families are made up of those that are nearly related to one another. Their women, when they grow up, are married out; but all the males, both children and grandchildren, live still in the same house, in great obedience to their common parent, unless age has weakened his understanding; and in that case, he that is next to him in age comes in his room. But lest any city should become either too great, or by any accident be dispeopled, provision is made that none of their cities may contain above six thousand families, besides those of the country round it. No family may have less than ten, and more than sixteen persons in it; but there can be no determined number for the children under age. This rule is easily observed, by removing some of the children of a more fruitful couple to any other family that does not abound so much in them. By the same rule, they supply cities that do not increase so fast, from others that breed faster; and if there is any increase over the whole island, then they draw out a number of their citizens out of the several towns, and send them over to the neighbouring continent; where, if they find that the inhabitants have more soil than they can well cultivate, they fix a colony, taking the inhabitants into their society, if they are willing to live with them; and where they do that of their own accord, they quickly enter into their method of life, and conform to their rules, and this proves a happiness to both nations: for according to their constitution, such care is taken of the soil, that it becomes fruitful enough for both, though it might be otherwise too narrow and barren for any one of them. But if the natives refuse to conform themselves to their laws, they drive them out of those bounds which they mark out for themselves, and use force if they resist. For they account it a very just cause of war, for a nation to hinder others from possessing a part of that soil, of which they make no use, but which is suffered to lie idle and uncultivated; since every man has by the law of Nature a right to such a waste portion of the earth as is necessary for his subsistence. If an accident has so lessened the number of the inhabitants of any of their towns, that it cannot be made up from the other towns of the island, without diminishing them too much, which is said to have fallen out but twice since they were first a people, when great numbers were carried off

by the plague; the loss is then supplied by recalling as many as are wanted from their colonies; for they will abandon these, rather than suffer the towns in the island to sink too low.

But to return to their manner of living in society, the oldest man of every family, as has been already said, is its governor. Wives serve their husbands, and children their parents, and always the younger serves the elder. Every city is divided into four equal parts, and in the middle of each there is a market-place: what is brought thither, and manufactured by the several families, is carried from thence to houses appointed for that purpose, in which all things of a sort are laid by themselves; and thither every father goes and takes whatsoever he or his family stand in need of, without either paying for it, or leaving anything in exchange. There is no reason for giving a denial to any person, since there is such plenty of everything among them; and there is no danger of a man's asking for more than he needs; they have no inducements to do this, since they are sure that they shall always be supplied. It is the fear of want that makes any of the whole race of animals either greedy or ravenous; but besides fear, there is in man a pride that makes him fancy it a particular glory to excel others in pomp and excess. But by the laws of the Utopians, there is no room for this. Near these markets there are others for all sorts of provisions, where there are not only herbs, fruits, and bread, but also fish, fowl, and cattle. There are also, without their towns, places appointed near some running water, for killing their beasts, and for washing away their filth; which is done by their slaves: for they suffer none of their citizens to kill their cattle, because they think that pity and good-nature, which are among the best of those affections that are born with us, are much impaired by the butchering of animals: nor do they suffer anything that is foul or unclean to be brought within their towns, lest the air should be infected by ill smells which might prejudice their health. In every street there are great halls that lie at an equal distance from each other, distinguished by particular names. The Syphogrants dwell in those that are set over thirty families, fifteen lying on one side of it, and as many on the other. In these halls they all meet and have their repasts. The stewards of every one of them come to the market-place at an appointed hour; and according to the number of those that belong to the hall, they carry home provisions. But they take more care of their sick than of any others: these are lodged and provided for in public

hospitals: they have belonging to every town four hospitals, that are built without their walls, and are so large that they may pass for little towns: by this means, if they had ever such a number of sick persons, they could lodge them conveniently, and at such a distance, that such of them as are sick of infectious diseases may be kept so far from the rest that there can be no danger of contagion. The hospitals are furnished and stored with all things that are convenient for the ease and recovery of the sick; and those that are put in them are looked after with such tender and watchful care, and are so constantly attended by their skilful physicians, that as none is sent to them against their will, so there is scarce one in a whole town that, if he should fall ill, would not choose rather to go thither than lie sick at home.

After the steward of the hospitals has taken for the sick whatsoever the physician prescribes, then the best things that are left in the market are distributed equally among the halls, in proportion to their numbers, only, in the first place, they serve the Prince, the chief priest, the Tranibors, the ambassadors, and strangers, if there are any, which indeed falls out but seldom, and for whom there are houses well furnished, particularly appointed for their reception when they come among them. At the hours of dinner and supper, the whole Syphogranty being called together by sound of trumpet, they meet and eat together, except only such as are in the hospitals, or lie sick at home. Yet after the halls are served, no man is hindered to carry provisions home from the market-place; for they know that none does that but for some good reason; for though any that will may eat at home, yet none does it willingly, since it is both ridiculous and foolish for any to give themselves the trouble to make ready an ill dinner at home, when there is a much more plentiful one made ready for him so near hand. All the uneasy and sordid services about these halls are performed by their slaves; but the dressing and cooking their meat, and the ordering their tables, belong only to the women, all those of every family taking it by turns. They sit at three or more tables, according to their number; the men sit towards the wall, and the women sit on the other side, that if any of them should be taken suddenly ill, which is no uncommon case amongst women with child, she may, without disturbing the rest, rise and go to the nurse's room, who are there with the sucking children; where there is always clean water at hand, and cradles in which they may lay the young children, if there is occasion for it, and a fire that they may shift

and dress them before it. Every child is nursed by its own mother, if death or sickness does not intervene; and in that case the Syphogrants' wives find out a nurse quickly, which is no hard matter; for any one that can do it, offers herself cheerfully; for as they are much inclined to that piece of mercy, so the child whom they nurse considers the nurse as its mother. All the children under five years old sit among the nurses, the rest of the younger sort of both sexes, till they are fit for marriage, either serve those that sit at table; or if they are not strong enough for that, stand by them in great silence, and eat what is given them; nor have they any other formality of dining. In the middle of the first table, which stands across the upper end of the hall, sit the Syphogrant and his wife; for that is the chief and most conspicuous place; next to him sit two of the most ancient, for there go always four to a mess. If there is a temple within that Syphogranty, the priest and his wife sit with the Syphogrant above all the rest: next them there is a mixture of old and young, who are so placed, that as the young are set near others, so they are mixed with the more ancient; which they say was appointed on this account, that the gravity of the old people, and the reverence that is due to them, might restrain the younger from all indecent words and gestures. Dishes are not served up to the whole table at first, but the best are first set before the old, whose seats are distinguished from the young, and after them all the rest are served alike. The old men distribute to the younger any curious meats that happen to be set before them, if there is not such an abundance of them that the whole company may be served alike.

Thus old men are honoured with a particular respect; yet all the rest fare as well as they. Both dinner and supper are begun with some lecture of morality that is read to them; but it is so short, that it is not tedious nor uneasy to them to hear it: from hence the old men take occasion to entertain those about them, with some useful and pleasant enlargements; but they do not engross the whole discourse so to themselves, during their meals, that the younger may not put in for a share: on the contrary, they engage them to talk, that so they may in that free way of conversation find out the force of every one's spirit, and observe his temper. They despatch their dinners quickly, but sit long at supper; because they go to work after the one, and are to sleep after the other, during which they think the stomach carries on the concoction more vigorously. They never sup without music; and there is always fruit

served up after meat; while they are at table, some burn perfumes, and sprinkle about fragrant ointments and sweet waters: in short, they want nothing that may cheer up their spirits: they give themselves a large allowance that way, and indulge themselves in all such pleasures as are attended with no inconvenience. Thus do those that are in the towns live together; but in the country, where they live at great distance, every one eats at home, and no family wants any necessary sort of provision, for it is from them that provisions are sent unto those that live in the towns.

OF THE TRAVELLING OF THE UTOPIANS.

If any man has a mind to visit his friends that live in some other town, or desires to travel and see the rest of the country, he obtains leave very easily from the Syphogrant and Tranibors, when there is no particular occasion for him at home: such as travel, carry with them a passport from the Prince, which both certifies the license that is granted for travelling, and limits the time of their return. They are furnished with a waggon and a slave, who drives the oxen, and looks after them: but unless there are women in the company, the waggon is sent back at the end of the journey as a needless encumbrance: while they are on the road, they carry no provisions with them; yet they want nothing, but are everywhere treated as if they were at home. If they stay in any place longer than a night, every one follows his proper occupation, and is very well used by those of his own trade: but if any man goes out of the city to which he belongs, without leave, and is found rambling without a passport, he is severely treated, he is punished as a fugitive, and sent home disgracefully; and if he falls again into the like fault, is condemned to slavery. If any man has a mind to travel only over the precinct of his own city, he may freely do it, with his father's permission and his wife's consent; but when he comes into any of the country houses, if he expects to be entertained by them, he must labour with them and conform to their rules: and if he does this, he may freely go over the whole precinct; being thus as useful to the city to which he belongs, as if he were still within it. Thus you see that there are no idle persons among them, nor pretences of excusing any from labour. There are no taverns, no alehouses nor stews among them; nor any other occasions of corrupting each other, of getting into corners, or forming themselves into parties: all men live in full view, so that all are obliged, both to perform their ordinary task, and to employ themselves well

in their spare hours. And it is certain that a people thus ordered must live in great abundance of all things; and these being equally distributed among them, no man can want, or be obliged to beg.

In their great council at Amaurot, to which there are three sent from every town once a year, they examine what towns abound in provisions, and what are under any scarcity, that so the one may be furnished from the other; and this is done freely, without any sort of exchange; for according to their plenty or scarcity, they supply, or are supplied from one another; so that indeed the whole island is, as it were, one family. When they have thus taken care of their whole country, and laid up stores for two years, which they do to prevent the ill consequences of an unfavourable season, they order an exportation of the overplus, both of corn, honey, wool, flax, wood, wax, tallow, leather, and cattle; which they send out commonly in great quantities to other nations. They order a seventh part of all these goods to be freely given to the poor of the countries to which they send them, and sell the rest at moderate rates. And by this exchange, they not only bring back those few things that they need at home (for indeed they scarce need anything but iron), but likewise a great deal of gold and silver; and by their driving this trade so long, it is not to be imagined how vast a treasure they have got among them: so that now they do not much care whether they sell off their merchandise for money in hand, or upon trust. A great part of their treasure is now in bonds; but in all their contracts no private man stands bound, but the writing runs in the name of the town; and the towns that owe them money, raise it from those private hands that owe it to them, lay it up in their public chamber, or enjoy the profit of it till the Utopians call for it; and they choose rather to let the greatest part of it lie in their hands who make advantage by it, than to call for it themselves: but if they see that any of their other neighbours stand more in need of it, then they call it in and lend it to them: whenever they are engaged in war, which is the only occasion in which their treasure can be usefully employed, they make use of it themselves. In great extremities or sudden accidents they employ it in hiring foreign troops, whom they more willingly expose to danger than their own people: they give them great pay, knowing well that this will work even on their enemies, that it will engage them either to betray their own side, or at least to desert it, and that it is the best means of raising mutual jealousies among them: for this end they have an incredible

treasure; but they do not keep it as a treasure, but in such a manner as I am almost afraid to tell, lest you think it so extravagant, as to be hardly credible. This I have the more reason to apprehend, because if I had not seen it myself, I could not have been easily persuaded to have believed it upon any man's report.

It is certain that all things appear incredible to us, in proportion as they differ from own customs. But one who can judge aright, will not wonder to find, that since their constitution differs so much from ours, their value of gold and silver should be measured by a very different standard; for since they have no use for money among themselves, but keep it as a provision against events which seldom happen, and between which there are generally long intervening intervals; they value it no farther than it deserves, that is, in proportion to its use. So that it is plain, they must prefer iron either to gold or silver: for men can no more live without iron, than without fire or water; but Nature has marked out no use for the other metals, so essential as not easily to be dispensed with. The folly of men has enhanced the value of gold and silver, because of their scarcity. Whereas, on the contrary, it is their opinion that Nature, as an indulgent parent, has freely given us all the best things in great abundance, such as water and earth, but has laid up and hid from us the things that are vain and useless.

If these metals were laid up in any tower in the kingdom, it would raise a jealousy of the Prince and Senate, and give birth to that foolish mistrust into which the people are apt to fall, a jealousy of their intending to sacrifice the interest of the public to their own private advantage. If they should work it into vessels, or any sort of plate, they fear that the people might grow too fond of it, and so be unwilling to let the plate be run down, if a war made it necessary to employ it in paying their soldiers. To prevent all these inconveniences, they have fallen upon an expedient, which as it agrees with their other policy, so is it very different from ours, and will scarce gain belief among us, who value gold so much, and lay it up so carefully. They eat and drink out of vessels of earth, or glass, which make an agreeable appearance though formed of brittle materials: while they make their chamber-pots and close-stools of gold and silver; and that not only in their public halls, but in their private houses: of the same metals they likewise make chains and fetters for their slaves; to some of which, as a badge of infamy, they hang an ear-

ring of gold, and make others wear a chain or a coronet of the same metal; and thus they take care, by all possible means, to render gold and silver of no esteem. And from hence it is, that while other nations part with their gold and silver, as unwillingly as if one tore out their bowels, those of Utopia would look on their giving in all they possess of those (metals, when there were any use for them) but as the parting with a trifle, or as we would esteem the loss of a penny. They find pearls on their coast; and diamonds and carbuncles on their rocks; they do not look after them, but if they find them by chance, they polish them, and with them they adorn their children, who are delighted with them, and glory in them during their childhood; but when they grow to years, and see that none but children use such baubles, they of their own accord, without being bid by their parents, lay them aside; and would be as much ashamed to use them afterwards, as children among us, when they come to years, are of their puppets and other toys.

I never saw a clearer instance of the opposite impressions that different customs make on people, than I observed in the ambassadors of the Anemolians, who came to Amaurot when I was there. As they came to treat of affairs of great consequence, the deputies from several towns met together to wait for their coming. The ambassadors of the nations that lie near Utopia, knowing their customs, and that fine clothes are in no esteem among them, that silk is despised, and gold is a badge of infamy, use to come very modestly clothed; but the Anemolians lying more remote, and having had little commerce with them, understanding that they were coarsely clothed, and all in the same manner, took it for granted that they had none of those fine things among them of which they made no use; and they being a vain-glorious rather than a wise people, resolved to set themselves out with so much pomp, that they should look like gods, and strike the eyes of the poor Utopians with their splendour. Thus three ambassadors made their entry with an hundred attendants, all clad in garments of different colours, and the greater part in silk; the ambassadors themselves, who were of the nobility of their country, were in cloth of gold, and adorned with massy chains, ear-rings and rings of gold: their caps were covered with bracelets set full of pearls and other gems: in a word, they were set out with all those things that, among the Utopians, were either the badges of slavery, the marks of infamy, or the playthings of children. It was not unpleasant to see, on the one side, how they

looked big, when they compared their rich habits with the plain clothes of the Utopians, who were come out in great numbers to see them make their entry: and, on the other, to observe how much they were mistaken in the impression which they hoped this pomp would have made on them. It appeared so ridiculous a show to all that had never stirred out of their country, and had not seen the customs of other nations, that though they paid some reverence to those that were the most meanly clad, as if they had been the ambassadors, yet when they saw the ambassadors themselves, so full of gold and chains, they looked upon them as slaves, and forbore to treat them with reverence. You might have seen the children, who were grown big enough to despise their playthings, and who had thrown away their jewels, call to their mothers, push them gently, and cry out, "See that great fool that wears pearls and gems, as if he were yet a child." While their mothers very innocently replied, "Hold your peace, this I believe is one of the ambassador's fools." Others censured the fashion of their chains, and observed that they were of no use; for they were too slight to bind their slaves, who could easily break them; and besides hung so loose about them, that they thought it easy to throw them away, and so get from them. But after the ambassadors had stayed a day among them, and saw so vast a quantity of gold in their houses, which was as much despised by them as it was esteemed in other nations, and beheld more gold and silver in the chains and fetters of one slave than all their ornaments amounted to, their plumes fell, and they were ashamed of all that glory for which they had formerly valued themselves, and accordingly laid it aside; a resolution that they immediately took, when on their engaging in some free discourse with the Utopians, they discovered their sense of such things and their other customs. The Utopians wonder how any man should be so much taken with the glaring doubtful lustre of a jewel or a stone, that can look up to a star, or to the sun himself; or how any should value himself because his cloth is made of a finer thread: for how fine soever that thread may be, it was once no better than the fleece of a sheep, and that sheep was a sheep still for all its wearing it. They wonder much to hear that gold which in itself is so useless a thing, should be everywhere so much esteemed, that even men for whom it was made, and by whom it has its value, should yet be thought of less value than this metal. That a man of lead, who has no more sense than a log of wood, and is as bad as he is foolish, should have many wise and good men to serve him, only because he has a great heap of that metal; and that if it

should happen that by some accident or trick of law (which sometimes produces as great changes as chance itself) all this wealth should pass from the master to the meanest varlet of his whole family, he himself would very soon become one of his servants, as if he were a thing that belonged to his wealth, and so were bound to follow its fortune. But they much more admire and detest the folly of those who when they see a rich man, though they neither owe him anything, nor are in any sort dependent on his bounty, yet merely because he is rich give him little less than divine honours; even though they know him to be so covetous and base-minded, that notwithstanding all his wealth, he will not part with one farthing of it to them as long as he lives.

These and such like notions has that people imbibed, partly from their education, being bred in a country whose customs and laws are opposite to all such foolish maxims, and partly from their learning and studies; for though there are but few in any town that are so wholly excused from labour as to give themselves entirely up to their studies, these being only such persons as discover from their childhood an extraordinary capacity and disposition for letters; yet their children, and a great part of the nation, both men and women, are taught to spend those hours in which they are not obliged to work in reading: and this they do through the whole progress of life. They have all their learning in their own tongue, which is both a copious and pleasant language, and in which a man can fully express his mind. It runs over a great tract of many countries, but it is not equally pure in all places. They had never so much as heard of the names of any of those philosophers that are so famous in these parts of the world, before we went among them; and yet they had made the same discoveries as the Greeks, both in music, logic, arithmetic, and geometry. But as they are almost in everything equal to the ancient philosophers, so they far exceed our modern logicians; for they have never yet fallen upon the barbarous niceties that our youth are forced to learn in those trifling logical schools that are among us; they are so far from minding chimeras, and fantastical images made in the mind, that none of them could comprehend what we meant when we talked to them of a man in the abstract, as common to all men in particular (so that though we spoke of him as a thing that we could point at with our fingers, yet none of them could perceive him), and yet distinct from every one, as if he were some monstrous

Colossus or giant. Yet for all this ignorance of these empty notions, they knew astronomy, and were perfectly acquainted with the motions of the heavenly bodies, and have many instruments, well contrived and divided, by which they very accurately compute the course and positions of the sun, moon, and stars. But for the cheat, of divining by the stars by their oppositions or conjunctions, it has not so much as entered into their thoughts. They have a particular sagacity, founded upon much observation, in judging of the weather, by which they know when they may look for rain, wind, or other alterations in the air; but as to the philosophy of these things, the causes of the saltness of the sea, of its ebbing and flowing, and of the original and nature both of the heavens and the earth; they dispute of them, partly as our ancient philosophers have done, and partly upon some new hypothesis, in which, as they differ from them, so they do not in all things agree among themselves.

As to moral philosophy, they have the same disputes among them as we have here: they examine what are properly good both for the body and the mind, and whether any outward thing can be called truly good, or if that term belong only to the endowments of the soul. They inquire likewise into the nature of virtue and pleasure; but their chief dispute is concerning the happiness of a man, and wherein it consists? Whether in some one thing, or in a great many? They seem, indeed, more inclinable to that opinion that places, if not the whole, yet the chief part of a man's happiness in pleasure; and, what may seem more strange, they make use of arguments even from religion, notwithstanding its severity and roughness, for the support of that opinion so indulgent to pleasure; for they never dispute concerning happiness without fetching some arguments from the principles of religion, as well as from natural reason, since without the former they reckon that all our inquiries after happiness must be but conjectural and defective.

These are their religious principles, that the soul of man is immortal, and that God of His goodness has designed that it should be happy; and that He has therefore appointed rewards for good and virtuous actions, and punishments for vice, to be distributed after this life. Though these principles of religion are conveyed down among them by tradition, they think that even reason itself determines a man to believe and acknowledge them, and freely confess that if these were taken away no man would be so insensible as not to seek

after pleasure by all possible means, lawful or unlawful; using only this caution, that a lesser pleasure might not stand in the way of a greater, and that no pleasure ought to be pursued that should draw a great deal of pain after it; for they think it the maddest thing in the world to pursue virtue, that is a sour and difficult thing; and not only to renounce the pleasures of life, but willingly to undergo much pain and trouble, if a man has no prospect of a reward. And what reward can there be for one that has passed his whole life, not only without pleasure, but in pain, if there is nothing to be expected after death? Yet they do not place happiness in all sorts of pleasures, but only in those that in themselves are good and honest. There is a party among them who place happiness in bare virtue; others think that our natures are conducted by virtue to happiness, as that which is the chief good of man. They define virtue thus, that it is a living according to Nature, and think that we are made by God for that end; they believe that a man then follows the dictates of Nature when he pursues or avoids things according to the direction of reason; they say that the first dictate of reason is the kindling in us a love and reverence for the Divine Majesty, to whom we owe both all that we have, and all that we can ever hope for. In the next place, reason directs us to keep our minds as free from passion and as cheerful as we can, and that we should consider ourselves as bound by the ties of good-nature and humanity to use our utmost endeavours to help forward the happiness of all other persons; for there never was any man such a morose and severe pursuer of virtue, such an enemy to pleasure, that though he set hard rules for men to undergo much pain, many watchings, and other rigours, yet did not at the same time advise them to do all they could, in order to relieve and ease the miserable, and who did not represent gentleness and good-nature as amiable dispositions. And from thence they infer that if a man ought to advance the welfare and comfort of the rest of mankind, there being no virtue more proper and peculiar to our nature, than to ease the miseries of others, to free from trouble and anxiety, in furnishing them with the comforts of life, in which pleasure consists, Nature much more vigorously leads them to do all this for himself. A life of pleasure is either a real evil, and in that case we ought not to assist others in their pursuit of it, but on the contrary, to keep them from it all we can, as from that which is most hurtful and deadly; or if it is a good thing, so that we not only may, but ought to help others to it, why then ought not a man to begin with himself? Since no man can be more bound to look after the good of another

than after his own; for Nature cannot direct us to be good and kind to others, and yet at the same time to be unmerciful and cruel to ourselves. Thus, as they define virtue to be living according to Nature, so they imagine that Nature prompts all people on to seek after pleasure, as the end of all they do. They also observe that in order to our supporting the pleasures of life, Nature inclines us to enter into society; for there is no man so much raised above the rest of mankind as to be the only favourite of Nature, who, on the contrary, seems to have placed on a level all those that belong to the same species. Upon this they infer that no man ought to seek his own conveniences so eagerly as to prejudice others; and therefore they think that not only all agreements between private persons ought to be observed; but likewise that all those laws ought to be kept, which either a good prince has published in due form, or to which a people, that is neither oppressed with tyranny nor circumvented by fraud, has consented, for distributing those conveniences of life which afford us all our pleasures.

They think it is an evidence of true wisdom for a man to pursue his own advantages, as far as the laws allow it. They account it piety to prefer the public good to one's private concerns; but they think it unjust for a man to seek for pleasure, by snatching another man's pleasures from him. And on the contrary, they think it a sign of a gentle and good soul, for a man to dispense with his own advantage for the good of others; and that by this means a good man finds as much pleasure one way, as he parts with another; for as he may expect the like from others when he may come to need it, so if that should fail him, yet the sense of a good action, and the reflections that he makes on the love and gratitude of those whom he has so obliged, gives the mind more pleasure than the body could have found in that from which it had restrained itself. They are also persuaded that God will make up the loss of those small pleasures, with a vast and endless joy, of which religion easily convinces a good soul.

Thus upon an inquiry into the whole matter, they reckon that all our actions, and even all our virtues, terminate in pleasure, as in our chief end and greatest happiness; and they call every motion or state, either of body or mind, in which Nature teaches us to delight, a pleasure. Thus they cautiously limit pleasure only to those appetites to which Nature leads us; for they say that Nature leads us only to those delights to which reason as well as sense carries

us, and by which we neither injure any other person, nor lose the possession of greater pleasures, and of such as draw no troubles after them; but they look upon those delights which men by a foolish, though common, mistake call pleasure, as if they could change as easily the nature of things as the use of words; as things that greatly obstruct their real happiness, instead of advancing it, because they so entirely possess the minds of those that are once captivated by them with a false notion of pleasure, that there is no room left for pleasures of a truer or purer kind.

There are many things that in themselves have nothing that is truly delightful; on the contrary, they have a good deal of bitterness in them; and yet from our perverse appetites after forbidden objects, are not only ranked among the pleasures, but are made even the greatest designs of life. Among those who pursue these sophisticated pleasures, they reckon such as I mentioned before, who think themselves really the better for having fine clothes; in which they think they are doubly mistaken, both in the opinion that they have of their clothes, and in that they have of themselves; for if you consider the use of clothes, why should a fine thread be thought better than a coarse one? And yet these men, as if they had some real advantages beyond others, and did not owe them wholly to their mistakes, look big, seem to fancy themselves to be more valuable, and imagine that a respect is due to them for the sake of a rich garment, to which they would not have pretended if they had been more meanly clothed; and even resent it as an affront, if that respect is not paid them. It is also a great folly to be taken with outward marks of respect, which signify nothing: for what true or real pleasure can one man find in another's standing bare, or making legs to him? Will the bending another man's knees give ease to yours? And will the head's being bare cure the madness of yours? And yet it is wonderful to see how this false notion of pleasure bewitches many who delight themselves with the fancy of their nobility, and are pleased with this conceit, that they are descended from ancestors, who have been held for some successions rich, and who have had great possessions; for this is all that makes nobility at present; yet they do not think themselves a whit the less noble, though their immediate parents have left none of this wealth to them, or though they themselves have squandered it away. The Utopians have no better opinion of those who are much taken with gems and precious stones, and who account it a degree of happiness, next to a divine one, if they

can purchase one that is very extraordinary; especially if it be of that sort of stones that is then in greatest request; for the same sort is not at all times universally of the same value; nor will men buy it unless it be dismounted and taken out of the gold; the jeweller is then made to give good security, and required solemnly to swear that the stone is true, that by such an exact caution a false one might not be bought instead of a true: though if you were to examine it, your eye could find no difference between the counterfeit and that which is true; so that they are all one to you as much as if you were blind. Or can it be thought that they who heap up an useless mass of wealth, not for any use that it is to bring them, but merely to please themselves with the contemplation of it, enjoy any true pleasure in it? The delight they find is only a false shadow of joy. Those are no better whose error is somewhat different from the former, and who hide it, out of their fear of losing it; for what other name can fit the hiding it in the earth, or rather the restoring it to it again, it being thus cut off from being useful, either to its owner or to the rest of mankind? And yet the owner having hid it carefully, is glad, because he thinks he is now sure of it. If it should be stole, the owner, though he might live perhaps ten years after the theft, of which he knew nothing, would find no difference between his having or losing it; for both ways it was equally useless to him.

Among those foolish pursuers of pleasure, they reckon all that delight in hunting, in fowling, or gaming: of whose madness they have only heard, for they have no such things among them. But they have asked us, what sort of pleasure is it that men can find in throwing the dice? For if there were any pleasure in it, they think the doing of it so often should give one a surfeit of it: and what pleasure can one find in hearing the barking and howling of dogs, which seem rather odious than pleasant sounds? Nor can they comprehend the pleasure of seeing dogs run after a hare, more than of seeing one dog run after another; for if the seeing them run is that which gives the pleasure, you have the same entertainment to the eye on both these occasions; since that is the same in both cases: but if the pleasure lies in seeing the hare killed and torn by the dogs, this ought rather to stir pity, that a weak, harmless and fearful hare should be devoured by strong, fierce, and cruel dogs. Therefore all this business of hunting is, among the Utopians, turned over to their butchers; and those, as has been already said, are all slaves; and

they look on hunting as one of the basest parts of a butcher's work: for they account it both more profitable and more decent to kill those beasts that are more necessary and useful to mankind; whereas the killing and tearing of so small and miserable an animal can only attract the huntsman with a false show of pleasure, from which he can reap but small advantage. They look on the desire of the bloodshed, even of beasts, as a mark of a mind that is already corrupted with cruelty, or that at least by the frequent returns of so brutal a pleasure must degenerate into it.

Thus, though the rabble of mankind look upon these, and on innumerable other things of the same nature, as pleasures; the Utopians, on the contrary, observing that there is nothing in them truly pleasant, conclude that they are not to be reckoned among pleasures: for though these things may create some tickling in the senses (which seems to be a true notion of pleasure), yet they imagine that this does not arise from the thing itself, but from a depraved custom, which may so vitiate a man's taste, that bitter things may pass for sweet; as women with child think pitch or tallow taste sweeter than honey; but as a man's sense when corrupted, either by a disease or some ill habit, does not change the nature of other things, so neither can it change the nature of pleasure.

They reckon up several sorts of pleasures, which they call true ones: some belong to the body and others to the mind. The pleasures of the mind lie in knowledge, and in that delight which the contemplation of truth carries with it; to which they add the joyful reflections on a well-spent life, and the assured hopes of a future happiness. They divide the pleasures of the body into two sorts; the one is that which gives our senses some real delight, and is performed, either by recruiting nature, and supplying those parts which feed the internal heat of life by eating and drinking; or when nature is eased of any surcharge that oppresses it; when we are relieved from sudden pain, or that which arises from satisfying the appetite which Nature has wisely given to lead us to the propagation of the species. There is another kind of pleasure that arises neither from our receiving what the body requires, nor its being relieved when overcharged, and yet by a secret, unseen virtue affects the senses, raises the passions, and strikes the mind with generous impressions; this is the pleasure that arises from music. Another kind of bodily pleasure is that which results from an undisturbed and vigorous constitution of body,

when life and active spirits seem to actuate every part. This lively health, when entirely free from all mixture of pain, of itself gives an inward pleasure, independent of all external objects of delight; and though this pleasure does not so powerfully affect us, nor act so strongly on the senses as some of the others, yet it may be esteemed as the greatest of all pleasures, and almost all the Utopians reckon it the foundation and basis of all the other joys of life; since this alone makes the state of life easy and desirable; and when this is wanting, a man is really capable of no other pleasure. They look upon freedom from pain, if it does not rise from perfect health, to be a state of stupidity rather than of pleasure. This subject has been very narrowly canvassed among them; and it has been debated whether a firm and entire health could be called a pleasure or not? Some have thought that there was no pleasure but what was excited by some sensible motion in the body. But this opinion has been long ago excluded from among them, so that now they almost universally agree that health is the greatest of all bodily pleasures; and that as there is a pain in sickness, which is as opposite in its nature to pleasure as sickness itself is to health; so they hold, that health is accompanied with pleasure: and if any should say that sickness is not really pain, but that it only carries pain along with it, they look upon that as a fetch of subtilty, that does not much alter the matter. It is all one, in their opinion, whether it be said that health is in itself a pleasure, or that it begets a pleasure, as fire gives heat; so it be granted, that all those whose health is entire have a true pleasure in the enjoyment of it: and they reason thus—what is the pleasure of eating, but that a man's health which had been weakened, does, with the assistance of food, drive away hunger, and so recruiting itself recovers its former vigour? And being thus refreshed, it finds a pleasure in that conflict; and if the conflict is pleasure, the victory must yet breed a greater pleasure, except we fancy that it becomes stupid as soon as it has obtained that which it pursued, and so neither knows nor rejoices in its own welfare. If it is said that health cannot be felt, they absolutely deny it; for what man is in health that does not perceive it when he is awake? Is there any man that is so dull and stupid as not to acknowledge that he feels a delight in health? And what is delight but another name for pleasure?

But of all pleasures, they esteem those to be most valuable that lie in the mind; the chief of which arises out of true virtue, and the witness of a good

conscience. They account health the chief pleasure that belongs to the body; for they think that the pleasure of eating and drinking, and all the other delights of sense, are only so far desirable as they give or maintain health. But they are not pleasant in themselves, otherwise than as they resist those impressions that our natural infirmities are still making upon us: for as a wise man desires rather to avoid diseases than to take physic; and to be freed from pain, rather than to find ease by remedies; so it is more desirable not to need this sort of pleasure, than to be obliged to indulge it. If any man imagines that there is a real happiness in these enjoyments, he must then confess that he would be the happiest of all men if he were to lead his life in perpetual hunger, thirst, and itching, and by consequence in perpetual eating, drinking, and scratching himself; which any one may easily see would be not only a base, but a miserable state of a life. These are indeed the lowest of pleasures, and the least pure; for we can never relish them, but when they are mixed with the contrary pains. The pain of hunger must give us the pleasure of eating; and here the pain out-balances the pleasure; and as the pain is more vehement, so it lasts much longer; for as it begins before the pleasure, so it does not cease but with the pleasure that extinguishes it, and both expire together. They think, therefore, none of those pleasures are to be valued any further than as they are necessary; yet they rejoice in them, and with due gratitude acknowledge the tenderness of the great Author of Nature, who has planted in us appetites, by which those things that are necessary for our preservation are likewise made pleasant to us. For how miserable a thing would life be, if those daily diseases of hunger and thirst were to be carried off by such bitter drugs as we must use for those diseases that return seldomer upon us? And thus these pleasant as well as proper gifts of Nature maintain the strength and the sprightliness of our bodies.

They also entertain themselves with the other delights let in at their eyes, their ears, and their nostrils, as the pleasant relishes and seasonings of life, which Nature seems to have marked out peculiarly for man; since no other sort of animals contemplates the figure and beauty of the universe; nor is delighted with smells, any farther than as they distinguish meats by them; not do they apprehend the concords or discords of sound; yet in all pleasures whatsoever they take care that a lesser joy does not hinder a greater, and that pleasure may never breed pain, which they think always follows dishonest

pleasures. But they think it madness for a man to wear out the beauty of his face, or the force of his natural strength; to corrupt the sprightliness of his body by sloth and laziness, or to waste it by fasting; that it is madness to weaken the strength of his constitution, and reject the other delights of life; unless by renouncing his own satisfaction, he can either serve the public or promote the happiness of others, for which he expects a greater recompense from God. So that they look on such a course of life as the mark of a mind that is both cruel to itself, and ungrateful to the Author of Nature, as if we would not be beholden to Him for His favours, and therefore rejects all His blessings; as one who should afflict himself for the empty shadow of virtue; or for no better end than to render himself capable of bearing those misfortunes which possibly will never happen.

This is their notion of virtue and of pleasure; they think that no man's reason can carry him to a truer idea of them, unless some discovery from Heaven should inspire him with sublimer notions. I have not now the leisure to examine whether they think right or wrong in this matter: nor do I judge it necessary, for I have only undertaken to give you an account of their constitution, but not to defend all their principles. I am sure, that whatsoever may be said of their notions, there is not in the whole world either a better people or a happier government: their bodies are vigorous and lively; and though they are but of a middle stature, and have neither the fruitfulest soil nor the purest air in the world, yet they fortify themselves so well by their temperate course of life, against the unhealthiness of their air, and by their industry they so cultivate their soil, that there is nowhere to be seen a greater increase both of corn and cattle, nor are there anywhere healthier men, and freer from diseases: for one may there see reduced to practice, not only all the art that the husbandman employs in manuring and improving an ill soil, but whole woods plucked up by the roots, and in other places new ones planted, where there were none before. Their principal motive for this is the convenience of carriage, that their timber may be either near their towns, or growing on the banks of the sea, or of some rivers, so as to be floated to them; for it is a harder work to carry wood at any distance over land, than corn. The people are industrious, apt to learn, as well as cheerful and pleasant; and none can endure more labour, when it is necessary; but except in that case they love their ease. They are unwearied pursuers of knowledge;

for when we had given them some hints of the learning and discipline of the Greeks, concerning whom we only instructed them (for we know that there was nothing among the Romans, except their historians and their poets, that they would value much), it was strange to see how eagerly they were set on learning that language. We began to read a little of it to them, rather in compliance with their importunity, than out of any hopes of their reaping from it any great advantage. But after a very short trial, we found they made such progress, that we saw our labour was like to be more successful than we could have expected. They learned to write their characters, and to pronounce their language so exactly, had so quick an apprehension, they remembered it so faithfully, and became so ready and correct in the use of it, that it would have looked like a miracle if the greater part of those whom we taught had not been men both of extraordinary capacity and of a fit age for instruction. They were for the greatest part chosen from among their learned men, by their chief council, though some studied it of their own accord. In three years' time they became masters of the whole language, so that they read the best of the Greek authors very exactly. I am indeed apt to think that they learned that language the more easily, from its having some relation to their own. I believe that they were a colony of the Greeks; for though their language comes nearer the Persian, yet they retain many names, both for their towns and magistrates, that are of Greek derivation. I happened to carry a great many books with me, instead of merchandise, when I sailed my fourth voyage; for I was so far from thinking of soon coming back, that I rather thought never to have returned at all, and I gave them all my books, among which were many of Plato's and some of Aristotle's works. I had also Theophrastus on Plants, which, to my great regret, was imperfect; for having laid it carelessly by, while we were at sea, a monkey had seized upon it, and in many places torn out the leaves. They have no books of grammar but Lascares, for I did not carry Theodorus with me; nor have they any dictionaries but Hesichius and Dioscorides. They esteem Plutarch highly, and were much taken with Lucian's wit, and with his pleasant way of writing. As for the poets, they have Aristophanes, Homer, Euripides, and Sophocles of Aldus's edition; and for historians Thucydides, Herodotus and Herodian. One of my companions, Thricius Apinatus, happened to carry with him some of Hippocrates's works, and Galen's Microtechne, which they hold in great estimation; for though there is no nation in the world that needs physic so

little as they do, yet there is not any that honours it so much: they reckon the knowledge of it one of the pleasantest and most profitable parts of philosophy, by which, as they search into the secrets of Nature, so they not only find this study highly agreeable, but think that such inquiries are very acceptable to the Author of Nature; and imagine that as He, like the inventors of curious engines amongst mankind, has exposed this great machine of the universe to the view of the only creatures capable of contemplating it, so an exact and curious observer, who admires His workmanship, is much more acceptable to Him than one of the herd, who like a beast incapable of reason, looks on this glorious scene with the eyes of a dull and unconcerned spectator.

The minds of the Utopians when fenced with a love for learning, are very ingenious in discovering all such arts as are necessary to carry it to perfection. Two things they owe to us, the manufacture of paper, and the art of printing: yet they are not so entirely indebted to us for these discoveries, but that a great part of the invention was their own. We showed them some books printed by Aldus, we explained to them the way of making paper, and the mystery of printing; but as we had never practised these arts, we described them in a crude and superficial manner. They seized the hints we gave them, and though at first they could not arrive at perfection, yet by making many essays they at last found out and corrected all their errors, and conquered every difficulty. Before this they only wrote on parchment, on reeds, or on the barks of trees; but now they have established the manufactures of paper, and set up printing-presses, so that if they had but a good number of Greek authors they would be quickly supplied with many copies of them: at present, though they have no more than those I have mentioned, yet by several impressions they have multiplied them into many thousands. If any man was to go among them that had some extraordinary talent, or that by much travelling had observed the customs of many nations (which made us to be so well received), he would receive a hearty welcome; for they are very desirous to know the state of the whole world. Very few go among them on the account of traffic, for what can a man carry to them but iron, or gold, or silver, which merchants desire rather to export than import to a strange country: and as for their exportation, they think it better to manage that themselves than to leave it to foreigners, for by this means, as they

understand the state of the neighbouring countries better, so they keep up the art of navigation, which cannot be maintained but by much practice.

OF THEIR SLAVES, AND OF THEIR MARRIAGES.

They do not make slaves of prisoners of war, except those that are taken in battle; nor of the sons of their slaves, nor of those of other nations: the slaves among them are only such as are condemned to that state of life for the commission of some crime, or, which is more common, such as their merchants find condemned to die in those parts to which they trade, whom they sometimes redeem at low rates; and in other places have them for nothing. They are kept at perpetual labour, and are always chained, but with this difference, that their own natives are treated much worse than others; they are considered as more profligate than the rest, and since they could not be restrained by the advantages of so excellent an education, are judged worthy of harder usage. Another sort of slaves are the poor of the neighbouring countries, who offer of their own accord to come and serve them; they treat these better, and use them in all other respects as well as their own countrymen, except their imposing more labour upon them, which is no hard task to those that have been accustomed to it; and if any of these have a mind to go back to their own country, which indeed falls out but seldom, as they do not force them to stay, so they do not send them away empty-handed.

I have already told you with what care they look after their sick, so that nothing is left undone that can contribute either to their ease or health: and for those who are taken with fixed and incurable diseases, they use all possible ways to cherish them, and to make their lives as comfortable as possible. They visit them often, and take great pains to make their time pass off easily: but when any is taken with a torturing and lingering pain, so that there is no hope, either of recovery or ease, the priests and magistrates come and exhort them, that since they are now unable to go on with the business of life, are become a burden to themselves and to all about them, and they have really outlived themselves, they should no longer nourish such a rooted distemper, but choose rather to die, since they cannot live but in much misery: being assured, that if they thus deliver themselves from torture, or are willing that others should do it, they shall be happy after death. Since by their acting thus, they lose none of the pleasures, but only the troubles of life; they think they

behave not only reasonably, but in a manner consistent with religion and piety; because they follow the advice given them by their priests, who are the expounders of the will of God. Such as are wrought on by these persuasions, either starve themselves of their own accord, or take opium, and by that means die without pain. But no man is forced on this way of ending his life; and if they cannot be persuaded to it, this does not induce them to fail in their attendance and care of them; but as they believe that a voluntary death, when it is chosen upon such an authority, is very honourable, so if any man takes away his own life, without the approbation of the priests and the Senate, they give him none of the honours of a decent funeral, but throw his body into a ditch.

Their women are not married before eighteen, nor their men before two-and-twenty, and if any of them run into forbidden embraces before marriage they are severely punished, and the privilege of marriage is denied them, unless they can obtain a special warrant from the Prince. Such disorders cast a great reproach upon the master and mistress of the family in which they happen, for it is supposed that they have failed in their duty. The reason of punishing this so severely is, because they think that if they were not strictly restrained from all vagrant appetites, very few would engage in a state in which they venture the quiet of their whole lives, by being confined to one person, and are obliged to endure all the inconveniences with which it is accompanied. In choosing their wives they use a method that would appear to us very absurd and ridiculous, but it is constantly observed among them, and is accounted perfectly consistent with wisdom. Before marriage some grave matron presents the bride naked, whether she is a virgin or a widow, to the bridegroom; and after that some grave man presents the bridegroom naked to the bride. We indeed both laughed at this, and condemned it as very indecent. But they, on the other hand, wondered at the folly of the men of all other nations, who, if they are but to buy a horse of a small value, are so cautious that they will see every part of him, and take off both his saddle and all his other tackle, that there may be no secret ulcer hid under any of them; and that yet in the choice of a wife, on which depends the happiness or unhappiness of the rest of his life, a man should venture upon trust, and only see about a hand's-breadth of the face, all the rest of the body being covered, under which there may lie hid what may be contagious, as well as loathsome. All men are

not so wise as to choose a woman only for her good qualities; and even wise men consider the body as that which adds not a little to the mind: and it is certain there may be some such deformity covered with the clothes as may totally alienate a man from his wife when it is too late to part with her. If such a thing is discovered after marriage, a man has no remedy but patience. They therefore think it is reasonable that there should be good provision made against such mischievous frauds.

There was so much the more reason for them to make a regulation in this matter, because they are the only people of those parts that neither allow of polygamy, nor of divorces, except in the case of adultery, or insufferable perverseness; for in these cases the Senate dissolves the marriage, and grants the injured person leave to marry again; but the guilty are made infamous, and are never allowed the privilege of a second marriage. None are suffered to put away their wives against their wills, from any great calamity that may have fallen on their persons; for they look on it as the height of cruelty and treachery to abandon either of the married persons when they need most the tender care of their comfort, and that chiefly in the case of old age, which as it carries many diseases along with it, so it is a disease of itself. But it frequently falls out that when a married couple do not well agree, they by mutual consent separate, and find out other persons with whom they hope they may live more happily. Yet this is not done without obtaining leave of the Senate, which never admits of a divorce, but upon a strict inquiry made, both by the senators and their wives, into the grounds upon which it is desired; and even when they are satisfied concerning the reasons of it, they go on but slowly, for they imagine that too great easiness in granting leave for new marriages would very much shake the kindness of married people. They punish severely those that defile the marriage-bed. If both parties are married they are divorced, and the injured persons may marry one another, or whom they please; but the adulterer and the adulteress are condemned to slavery. Yet if either of the injured persons cannot shake off the love of the married person, they may live with them still in that state, but they must follow them to that labour to which the slaves are condemned; and sometimes the repentance of the condemned, together with the unshaken kindness of the innocent and injured person, has prevailed so far with the Prince that he has taken off the sentence; but those that relapse after they are once pardoned are

punished with death.

Their law does not determine the punishment for other crimes; but that is left to the Senate, to temper it according to the circumstances of the fact. Husbands have power to correct their wives, and parents to chastise their children, unless the fault is so great that a public punishment is thought necessary for striking terror into others. For the most part, slavery is the punishment even of the greatest crimes; for as that is no less terrible to the criminals themselves than death, so they think the preserving them in a state of servitude is more for the interest of the commonwealth than killing them; since as their labour is a greater benefit to the public than their death could be, so the sight of their misery is a more lasting terror to other men than that which would be given by their death. If their slaves rebel, and will not bear their yoke, and submit to the labour that is enjoined them, they are treated as wild beasts that cannot be kept in order, neither by a prison, nor by their chains; and are at last put to death. But those who bear their punishment patiently, and are so much wrought on by that pressure that lies so hard on them that it appears they are really more troubled for the crimes they have committed than for the miseries they suffer, are not out of hope but that at last either the Prince will, by his prerogative, or the people by their intercession, restore them again to their liberty, or at least very much mitigate their slavery. He that tempts a married woman to adultery, is no less severely punished than he that commits it; for they believe that a deliberate design to commit a crime, is equal to the fact itself: since its not taking effect does not make the person that miscarried in his attempt at all the less guilty.

They take great pleasure in fools, and as it is thought a base and unbecoming thing to use them ill, so they do not think it amiss for people to divert themselves with their folly: and, in their opinion, this is a great advantage to the fools themselves: for if men were so sullen and severe as not at all to please themselves with their ridiculous behaviour and foolish sayings, which is all that they can do to recommend themselves to others, it could not be expected that they would be so well provided for, nor so tenderly used as they must otherwise be. If any man should reproach another for his being misshaped or imperfect in any part of his body, it would not at all be thought a reflection on the person so treated, but it would be accounted scandalous in him that had upbraided another with what he could not help. It is thought a

sign of a sluggish and sordid mind not to preserve carefully one's natural beauty; but it is likewise infamous among them to use paint. They all see that no beauty recommends a wife so much to her husband as the probity of her life, and her obedience: for as some few are caught and held only by beauty, so all are attracted by the other excellences which charm all the world.

As they fright men from committing crimes by punishments, so they invite them to the love of virtue by public honours: therefore they erect statues to the memories of such worthy men as have deserved well of their country, and set these in their market-places, both to perpetuate the remembrance of their actions, and to be an incitement to their posterity to follow their example.

If any man aspires to any office, he is sure never to compass it: they all live easily together, for none of the magistrates are either insolent or cruel to the people: they affect rather to be called fathers, and by being really so, they well deserve the name; and the people pay them all the marks of honour the more freely, because none are exacted from them. The Prince himself has no distinction, either of garments, or of a crown; but is only distinguished by a sheaf of corn carried before him; as the high priest is also known by his being preceded by a person carrying a wax light.

They have but few laws, and such is their constitution that they need not many. They very much condemn other nations, whose laws, together with the commentaries on them, swell up to so many volumes; for they think it an unreasonable thing to oblige men to obey a body of laws that are both of such a bulk, and so dark as not to be read and understood by every one of the subjects.

They have no lawyers among them, for they consider them as a sort of people whose profession it is to disguise matters, and to wrest the laws; and therefore they think it is much better that every man should plead his own cause, and trust it to the judge, as in other places the client trusts it to a counsellor. By this means they both cut off many delays, and find out truth more certainly: for after the parties have laid open the merits of the cause, without those artifices which lawyers are apt to suggest, the judge examines the whole matter, and supports the simplicity of such well-meaning persons, whom otherwise crafty men would be sure to run down: and thus they avoid those evils which appear very remarkably among all those nations that labour

under a vast load of laws. Every one of them is skilled in their law, for as it is a very short study, so the plainest meaning of which words are capable is always the sense of their laws. And they argue thus: all laws are promulgated for this end, that every man may know his duty; and therefore the plainest and most obvious sense of the words is that which ought to be put upon them; since a more refined exposition cannot be easily comprehended, and would only serve to make the laws become useless to the greater part of mankind, and especially to those who need most the direction of them: for it is all one, not to make a law at all, or to couch it in such terms that without a quick apprehension, and much study, a man cannot find out the true meaning of it; since the generality of mankind are both so dull, and so much employed in their several trades, that they have neither the leisure nor the capacity requisite for such an inquiry.

Some of their neighbours, who are masters of their own liberties, having long ago, by the assistance of the Utopians, shaken off the yoke of tyranny, and being much taken with those virtues which they observe among them, have come to desire that they would send magistrates to govern them; some changing them every year, and others every five years. At the end of their government they bring them back to Utopia, with great expressions of honour and esteem, and carry away others to govern in their stead. In this they seem to have fallen upon a very good expedient for their own happiness and safety; for since the good or ill condition of a nation depends so much upon their magistrates, they could not have made a better choice than by pitching on men whom no advantages can bias; for wealth is of no use to them, since they must so soon go back to their own country; and they being strangers among them, are not engaged in any of their heats or animosities; and it is certain that when public judicatories are swayed, either by avarice or partial affections, there must follow a dissolution of justice, the chief sinew of society.

The Utopians call those nations that come and ask magistrates from them, neighbours; but those to whom they have been of more particular service, friends. And as all other nations are perpetually either making leagues or breaking them, they never enter into an alliance with any state. They think leagues are useless things, and believe that if the common ties of humanity do not knit men together, the faith of promises will have no great effect; and

they are the more confirmed in this by what they see among the nations round about them, who are no strict observers of leagues and treaties. We know how religiously they are observed in Europe, more particularly where the Christian doctrine is received, among whom they are sacred and inviolable. Which is partly owing to the justice and goodness of the princes themselves, and partly to the reverence they pay to the popes; who as they are most religious observers of their own promises, so they exhort all other princes to perform theirs; and when fainter methods do not prevail, they compel them to it by the severity of the pastoral censure, and think that it would be the most indecent thing possible if men who are particularly distinguished by the title of the faithful, should not religiously keep the faith of their treaties. But in that new-found world, which is not more distant from us in situation than the people are in their manners and course of life, there is no trusting to leagues, even though they were made with all the pomp of the most sacred ceremonies; on the contrary, they are on this account the sooner broken, some slight pretence being found in the words of the treaties, which are purposely couched in such ambiguous terms that they can never be so strictly bound but they will always find some loophole to escape at; and thus they break both their leagues and their faith. And this is done with such impudence, that those very men who value themselves on having suggested these expedients to their princes, would with a haughty scorn declaim against such craft, or to speak plainer, such fraud and deceit, if they found private men make use of it in their bargains, and would readily say that they deserved to be hanged.

By this means it is, that all sort of justice passes in the world for a low-spirited and vulgar virtue, far below the dignity of royal greatness. Or at least, there are set up two sorts of justice; the one is mean, and creeps on the ground, and therefore becomes none but the lower part of mankind, and so must be kept in severely by many restraints that it may not break out beyond the bounds that are set to it. The other is the peculiar virtue of princes, which as it is more majestic than that which becomes the rabble, so takes a freer compass; and thus lawful and unlawful are only measured by pleasure and interest. These practices of the princes that lie about Utopia, who make so little account of their faith, seem to be the reasons that determine them to engage in no confederacies; perhaps they would change their mind if they lived among us; but yet though treaties were more religiously observed, they

would still dislike the custom of making them; since the world has taken up a false maxim upon it, as if there were no tie of Nature uniting one nation to another, only separated perhaps by a mountain or a river, and that all were born in a state of hostility, and so might lawfully do all that mischief to their neighbours against which there is no provision made by treaties; and that when treaties are made, they do not cut off the enmity, or restrain the license of preying upon each other, if by the unskilfulness of wording them there are not effectual provisoes made against them. They, on the other hand, judge that no man is to be esteemed our enemy that has never injured us; and that the partnership of the human nature is instead of a league. And that kindness and good-nature unite men more effectually and with greater strength than any agreements whatsoever; since thereby the engagements of men's hearts become stronger than the bond and obligation of words.

OF THEIR MILITARY DISCIPLINE.

They detest war as a very brutal thing; and which, to the reproach of human nature, is more practised by men than by any sort of beasts. They, in opposition to the sentiments of almost all other nations, think that there is nothing more inglorious than that glory that is gained by war. And therefore though they accustom themselves daily to military exercises and the discipline of war, in which not only their men but their women likewise are trained up, that in cases of necessity they may not be quite useless; yet they do not rashly engage in war, unless it be either to defend themselves, or their friends, from any unjust aggressors; or out of good-nature or in compassion assist an oppressed nation in shaking off the yoke of tyranny. They indeed help their friends, not only in defensive, but also in offensive wars; but they never do that unless they had been consulted before the breach was made, and being satisfied with the grounds on which they went, they had found that all demands of reparation were rejected, so that a war was unavoidable. This they think to be not only just, when one neighbour makes an inroad on another, by public order, and carry away the spoils; but when the merchants of one country are oppressed in another, either under pretence of some unjust laws, or by the perverse wresting of good ones. This they count a juster cause of war than the other, because those injuries are done under some colour of laws. This was the only ground of that war in which they engaged with the Nephelogeates against the Aleopolitanes, a little before our time; for the

merchants of the former having, as they thought, met with great injustice among the latter, which, whether it was in itself right or wrong, drew on a terrible war, in which many of their neighbours were engaged; and their keenness in carrying it on being supported by their strength in maintaining it, it not only shook some very flourishing states, and very much afflicted others, but after a series of much mischief ended in the entire conquest and slavery of the Aleopolitanes, who though before the war they were in all respects much superior to the Nephelotes, were yet subdued; but though the Utopians had assisted them in the war, yet they pretended to no share of the spoil.

But though they so vigorously assist their friends in obtaining reparation for the injuries they have received in affairs of this nature, yet if any such frauds was committed against themselves, provided no violence was done to their persons, they would only on their being refused satisfaction forbear trading with such a people. This is not because they consider their neighbours more than their own citizens; but since their neighbours trade every one upon his own stock, fraud is a more sensible injury to them than it is to the Utopians, among whom the public in such a case only suffers. As they expect nothing in return for the merchandises they export but that in which they so much abound, and is of little use to them, the loss does not much affect them; they think therefore it would be too severe to revenge a loss attended with so little inconvenience either to their lives, or their subsistence, with the death of many persons; but if any of their people is either killed or wounded wrongfully, whether it be done by public authority or only by private men, as soon as they hear of it they send ambassadors, and demand that the guilty persons may be delivered up to them; and if that is denied, they declare war; but if it be complied with, the offenders are condemned either to death or slavery.

They would be both troubled and ashamed of a bloody victory over their enemies, and think it would be as foolish a purchase as to buy the most valuable goods at too high a rate. And in no victory do they glory so much as in that which is gained by dexterity and good conduct, without bloodshed. In such cases they appoint public triumphs, and erect trophies to the honour of those who have succeeded; for then do they reckon that a man acts suitably to his nature when he conquers his enemy in such a way as that no other

creature but a man could be capable of, and that is by the strength of his understanding. Bears, lions, boars, wolves, and dogs, and all other animals employ their bodily force one against another, in which as many of them are superior to men, both in strength and fierceness, so they are all subdued by his reason and understanding.

The only design of the Utopians in war is to obtain that by force, which if it had been granted them in time would have prevented the war; or if that cannot be done, to take so severe a revenge on those that have injured them that they may be terrified from doing the like for the time to come. By these ends they measure all their designs, and manage them so that it is visible that the appetite of fame or vain-glory does not work so much on them as a just care of their own security.

As soon as they declare war, they take care to have a great many schedules, that are sealed with their common seal, affixed in the most conspicuous places of their enemies' country. This is carried secretly, and done in many places all at once. In these they promise great rewards to such as shall kill the prince, and lesser in proportion to such as shall kill any other persons, who are those on whom, next to the prince himself, they cast the chief balance of the war. And they double the sum to him that, instead of killing the person so marked out, shall take him alive and put him in their hands. They offer not only indemnity, but rewards, to such of the persons themselves that are so marked, if they will act against their countrymen: by this means those that are named in their schedules become not only distrustful of their fellow-citizens, but are jealous of one another, and are much distracted by fear and danger; for it has often fallen out that many of them, and even the Prince himself, have been betrayed by those in whom they have trusted most: for the rewards that the Utopians offer are so unmeasurably great, that there is no sort of crime to which men cannot be drawn by them. They consider the risk that those run who undertake such services, and offer a recompense proportioned to the danger; not only a vast deal of gold, but great revenues in lands, that lie among other nations that are their friends, where they may go and enjoy them very securely; and they observe the promises they make of this kind most religiously. They very much approve of this way of corrupting their enemies, though it appears to others to be base and cruel; but they look on it as a wise course, to make an end of what would be otherwise a long war, without so

much as hazarding one battle to decide it. They think it likewise an act of mercy and love to mankind to prevent the great slaughter of those that must otherwise be killed in the progress of the war, both on their own side and on that of their enemies, by the death of a few that are most guilty; and that in so doing they are kind even to their enemies, and pity them no less than their own people, as knowing that the greater part of them do not engage in the war of their own accord, but are driven into it by the passions of their prince.

If this method does not succeed with them, then they sow seeds of contention among their enemies, and animate the prince's brother, or some of the nobility, to aspire to the crown. If they cannot disunite them by domestic broils, then they engage their neighbours against them, and make them set on foot some old pretensions, which are never wanting to princes when they have occasion for them. These they plentifully supply with money, though but very sparingly with any auxiliary troops: for they are so tender of their own people, that they would not willingly exchange one of them, even with the prince of their enemies' country.

But as they keep their gold and silver only for such an occasion, so when that offers itself they easily part with it, since it would be no inconvenience to them though they should reserve nothing of it to themselves. For besides the wealth that they have among them at home, they have a vast treasure abroad, many nations round about them being deep in their debt: so that they hire soldiers from all places for carrying on their wars, but chiefly from the Zapolets, who live five hundred miles east of Utopia. They are a rude, wild, and fierce nation, who delight in the woods and rocks, among which they were born and bred up. They are hardened both against heat, cold and labour, and know nothing of the delicacies of life. They do not apply themselves to agriculture, nor do they care either for their houses or their clothes. Cattle is all that they look after; and for the greatest part they live either by hunting, or upon rapine; and are made, as it were, only for war. They watch all opportunities of engaging in it, and very readily embrace such as are offered them. Great numbers of them will frequently go out, and offer themselves for a very low pay, to serve any that will employ them: they know none of the arts of life, but those that lead to the taking it away; they serve those that hire them, both with much courage and great fidelity; but will not engage to serve for any determined time, and agree upon such terms, that the next day they

may go over to the enemies of those whom they serve, if they offer them a greater encouragement: and will perhaps return to them the day after that, upon a higher advance of their pay. There are few wars in which they make not a considerable part of the armies of both sides: so it often falls out that they who are related, and were hired in the same country, and so have lived long and familiarly together, forgetting both their relations and former friendship, kill one another upon no other consideration than that of being hired to it for a little money, by princes of different interests; and such a regard have they for money, that they are easily wrought on by the difference of one penny a day to change sides. So entirely does their avarice influence them; and yet this money, which they value so highly, is of little use to them; for what they purchase thus with their blood, they quickly waste on luxury, which among them is but of a poor and miserable form.

This nation serves the Utopians against all people whatsoever, for they pay higher than any other. The Utopians hold this for a maxim, that as they seek out the best sort of men for their own use at home, so they make use of this worst sort of men for the consumption of war, and therefore they hire them with the offers of vast rewards, to expose themselves to all sorts of hazards, out of which the greater part never returns to claim their promises. Yet they make them good most religiously to such as escape. This animates them to adventure again, whenever there is occasion for it; for the Utopians are not at all troubled how many of these happen to be killed, and reckon it a service done to mankind if they could be a means to deliver the world from such a lewd and vicious sort of people, that seem to have run together as to the drain of human nature. Next to these they are served in their wars with those upon whose account they undertake them, and with the auxiliary troops of their other friends, to whom they join a few of their own people, and send some men of eminent and approved virtue to command in chief. There are two sent with him, who during his command are but private men, but the first is to succeed him if he should happen to be either killed or taken; and in case of the like misfortune to him, the third comes in his place; and thus they provide against ill events, that such accidents as may befall their generals may not endanger their armies. When they draw out troops of their own people, they take such out of every city as freely offer themselves, for none are forced to go against their wills, since they think that if any man is pressed that wants

courage, he will not only act faintly, but by his cowardice dishearten others. But if an invasion is made on their country they make use of such men, if they have good bodies, though they are not brave; and either put them aboard their ships or place them on the walls of their towns, that being so posted they may find no opportunity of flying away; and thus either shame, the heat of action, or the impossibility of flying, bears down their cowardice; they often make a virtue of necessity and behave themselves well, because nothing else is left them. But as they force no man to go into any foreign war against his will, so they do not hinder those women who are willing to go along with their husbands; on the contrary, they encourage and praise them, and they stand often next their husbands in the front of the army. They also place together those who are related, parents and children, kindred, and those that are mutually allied, near one another; that those whom Nature has inspired with the greatest zeal for assisting one another, may be the nearest and readiest to do it; and it is matter of great reproach if husband or wife survive one another, or if a child survives his parents, and therefore when they come to be engaged in action they continue to fight to the last man, if their enemies stand before them. And as they use all prudent methods to avoid the endangering their own men, and if it is possible let all the action and danger fall upon the troops that they hire, so if it becomes necessary for themselves to engage, they then charge with as much courage as they avoided it before with prudence: nor is it a fierce charge at first, but it increases by degrees; and as they continue in action, they grow more obstinate and press harder upon the enemy, insomuch that they will much sooner die than give ground; for the certainty that their children will be well looked after when they are dead, frees them from all that anxiety concerning them which often masters men of great courage; and thus they are animated by a noble and invincible resolution. Their skill in military affairs increases their courage; and the wise sentiments which, according to the laws of their country are instilled into them in their education, give additional vigour to their minds: for as they do not undervalue life so as prodigally to throw it away, they are not so indecently fond of it as to preserve it by base and unbecoming methods. In the greatest heat of action, the bravest of their youth, who have devoted themselves to that service, single out the general of their enemies, set on him either openly or by ambuscade, pursue him everywhere, and when spent and wearied out, are relieved by others, who never give over the pursuit; either

attacking him with close weapons when they can get near him, or with those which wound at a distance, when others get in between them; so that unless he secures himself by flight, they seldom fail at last to kill or to take him prisoner. When they have obtained a victory, they kill as few as possible, and are much more bent on taking many prisoners than on killing those that fly before them; nor do they ever let their men so loose in the pursuit of their enemies, as not to retain an entire body still in order; so that if they have been forced to engage the last of their battalions before they could gain the day, they will rather let their enemies all escape than pursue them, when their own army is in disorder; remembering well what has often fallen out to themselves, that when the main body of their army has been quite defeated and broken, when their enemies imagining the victory obtained, have let themselves loose into an irregular pursuit, a few of them that lay for a reserve, waiting a fit opportunity, have fallen on them in their chase, and when straggling in disorder and apprehensive of no danger, but counting the day their own, have turned the whole action, and wresting out of their hands a victory that seemed certain and undoubted, while the vanquished have suddenly become victorious.

It is hard to tell whether they are more dexterous in laying or avoiding ambushes. They sometimes seem to fly when it is far from their thoughts; and when they intend to give ground, they do it so that it is very hard to find out their design. If they see they are ill posted, or are like to be overpowered by numbers, they then either march off in the night with great silence, or by some stratagem delude their enemies: if they retire in the daytime, they do it in such order, that it is no less dangerous to fall upon them in a retreat than in a march. They fortify their camps with a deep and large trench, and throw up the earth that is dug out of it for a wall; nor do they employ only their slaves in this, but the whole army works at it, except those that are then upon the guard; so that when so many hands are at work, a great line and a strong fortification is finished in so short a time that it is scarce credible. Their armour is very strong for defence, and yet is not so heavy as to make them uneasy in their marches; they can even swim with it. All that are trained up to war, practise swimming. Both horse and foot make great use of arrows, and are very expert. They have no swords, but fight with a pole-axe that is both sharp and heavy, by which they thrust or strike down an enemy. They are

very good at finding out warlike machines, and disguise them so well, that the enemy does not perceive them till he feels the use of them; so that he cannot prepare such a defence as would render them useless; the chief consideration had in the making them, is that they may be easily carried and managed.

If they agree to a truce, they observe it so religiously that no provocations will make them break it. They never lay their enemies' country waste, nor burn their corn, and even in their marches they take all possible care that neither horse nor foot may tread it down, for they do not know but that they may have use for it themselves. They hurt no man whom they find disarmed, unless he is a spy. When a town is surrendered to them, they take it into their protection: and when they carry a place by storm, they never plunder it, but put those only to the sword that opposed the rendering of it up, and make the rest of the garrison slaves, but for the other inhabitants, they do them no hurt; and if any of them had advised a surrender, they give them good rewards out of the estates of those that they condemn, and distribute the rest among their auxiliary troops, but they themselves take no share of the spoil.

When a war is ended, they do not oblige their friends to reimburse their expenses; but they obtain them of the conquered, either in money, which they keep for the next occasion, or in lands, out of which a constant revenue is to be paid them; by many increases, the revenue which they draw out from several countries on such occasions, is now risen to above 700,000 ducats a year. They send some of their own people to receive these revenues, who have orders to live magnificently, and like princes, by which means they consume much of it upon the place; and either bring over the rest to Utopia, or lend it to that nation in which it lies. This they most commonly do, unless some great occasion, which falls out but very seldom, should oblige them to call for it all. It is out of these lands that they assign rewards to such as they encourage to adventure on desperate attempts. If any prince that engages in war with them is making preparations for invading their country, they prevent him, and make his country the seat of the war; for they do not willingly suffer any war to break in upon their island; and if that should happen, they would only defend themselves by their own people, but would not call for auxiliary troops to their assistance.

OF THE RELIGIONS OF THE UTOPIANS.

There are several sorts of religions, not only in different parts of the island, but even in every town; some worshipping the sun, others the moon, or one of the planets; some worship such men as have been eminent in former times for virtue, or glory, not only as ordinary deities, but as the supreme God: yet the greater and wiser sort of them worship none of these, but adore one eternal, invisible, infinite, and incomprehensible Deity; as a Being that is far above all our apprehensions, that is spread over the whole universe, not by His bulk, but by His power and virtue; Him they call the Father of All, and acknowledge that the beginnings, the increase, the progress, the vicissitudes, and the end of all things come only from Him; nor do they offer divine honours to any but to Him alone. And indeed, though they differ concerning other things, yet all agree in this, that they think there is one supreme Being that made and governs the world, whom they call in the language of their country Mithras. They differ in this, that one thinks the God whom he worships is this supreme Being, and another thinks that his idol is that God; but they all agree in one principle, that whoever is this supreme Being, He is also that great Essence to whose glory and majesty all honours are ascribed by the consent of all nations.

By degrees, they fall off from the various superstitions that are among them, and grow up to that one religion that is the best and most in request; and there is no doubt to be made but that all the others had vanished long ago, if some of those who advised them to lay aside their superstitions had not met with some unhappy accident, which being considered as inflicted by Heaven, made them afraid that the God whose worship had like to have been abandoned, had interposed, and revenged themselves on those who despised their authority.

After they had heard from us an account of the doctrine, the course of life, and the miracles of Christ, and of the wonderful constancy of so many martyrs, whose blood, so willingly offered up by them, was the chief occasion of spreading their religion over a vast number of nations; it is not to be imagined how inclined they were to receive it. I shall not determine whether this proceeded from any secret inspiration of God, or whether it was because it seemed so favourable to that community of goods, which is an

opinion so particular as well as so dear to them; since they perceived that Christ and His followers lived by that rule, and that it was still kept up in some communities among the sincerest sort of Christians. From whichever of these motives it might be, true it is that many of them came over to our religion, and were initiated into it by baptism. But as two of our number were dead, so none of the four that survived were in priest's orders; we therefore could only baptize them; so that to our great regret they could not partake of the other sacraments, that can only be administered by priests; but they are instructed concerning them, and long most vehemently for them. They have had great disputes among themselves, whether one chosen by them to be a priest would not be thereby qualified to do all the things that belong to that character, even though he had no authority derived from the Pope; and they seemed to be resolved to choose some for that employment, but they had not done it when I left them.

Those among them that have not received our religion, do not fright any from it, and use none ill that goes over to it; so that all the while I was there, one man was only punished on this occasion. He being newly baptized, did, notwithstanding all that we could say to the contrary, dispute publicly concerning the Christian religion with more zeal than discretion; and with so much heat, that he not only preferred our worship to theirs, but condemned all their rites as profane; and cried out against all that adhered to them, as impious and sacrilegious persons, that were to be damned to everlasting burnings. Upon his having frequently preached in this manner, he was seized, and after trial he was condemned to banishment, not for having disparaged their religion, but for his inflaming the people to sedition: for this is one of their most ancient laws, that no man ought to be punished for his religion. At the first constitution of their government, Utopus having understood that before his coming among them the old inhabitants had been engaged in great quarrels concerning religion, by which they were so divided among themselves, that he found it an easy thing to conquer them, since instead of uniting their forces against him, every different party in religion fought by themselves; after he had subdued them, he made a law that every man might be of what religion he pleased, and might endeavour to draw others to it by the force of argument, and by amicable and modest ways, but without bitterness against those of other opinions; but that he ought to use no other

force but that of persuasion, and was neither to mix with it reproaches nor violence; and such as did otherwise were to be condemned to banishment or slavery.

This law was made by Utopus, not only for preserving the public peace, which he saw suffered much by daily contentions and irreconcilable heats, but because he thought the interest of religion itself required it. He judged it not fit to determine anything rashly, and seemed to doubt whether those different forms of religion might not all come from God, who might inspire men in a different manner, and be pleased with this variety; he therefore thought it indecent and foolish for any man to threaten and terrify another to make him believe what did not appear to him to be true. And supposing that only one religion was really true, and the rest false, he imagined that the native force of truth would at last break forth and shine bright, if supported only by the strength of argument, and attended to with a gentle and unprejudiced mind; while, on the other hand, if such debates were carried on with violence and tumults, as the most wicked are always the most obstinate, so the best and most holy religion might be choked with superstition, as corn is with briars and thorns; he therefore left men wholly to their liberty, that they might be free to believe as they should see cause; only he made a solemn and severe law against such as should so far degenerate from the dignity of human nature as to think that our souls died with our bodies, or that the world was governed by chance, without a wise overruling Providence: for they all formerly believed that there was a state of rewards and punishments to the good and bad after this life; and they now look on those that think otherwise as scarce fit to be counted men, since they degrade so noble a being as the soul, and reckon it no better than a beast's: thus they are far from looking on such men as fit for human society, or to be citizens of a well-ordered commonwealth; since a man of such principles must needs, as oft as he dares do it, despise all their laws and customs: for there is no doubt to be made that a man who is afraid of nothing but the law, and apprehends nothing after death, will not scruple to break through all the laws of his country, either by fraud or force, when by this means he may satisfy his appetites. They never raise any that hold these maxims, either to honours or offices, nor employ them in any public trust, but despise them, as men of base and sordid minds: yet they do not punish them, because they lay this down as a maxim that a

man cannot make himself believe anything he pleases; nor do they drive any to dissemble their thoughts by threatenings, so that men are not tempted to lie or disguise their opinions; which being a sort of fraud, is abhorred by the Utopians. They take care indeed to prevent their disputing in defence of these opinions, especially before the common people; but they suffer, and even encourage them to dispute concerning them in private with their priests and other grave men, being confident that they will be cured of those mad opinions by having reason laid before them. There are many among them that run far to the other extreme, though it is neither thought an ill nor unreasonable opinion, and therefore is not at all discouraged. They think that the souls of beasts are immortal, though far inferior to the dignity of the human soul, and not capable of so great a happiness. They are almost all of them very firmly persuaded that good men will be infinitely happy in another state; so that though they are compassionate to all that are sick, yet they lament no man's death, except they see him loth to depart with life; for they look on this as a very ill presage, as if the soul, conscious to itself of guilt, and quite hopeless, was afraid to leave the body, from some secret hints of approaching misery. They think that such a man's appearance before God cannot be acceptable to Him, who, being called on, does not go out cheerfully, but is backward and unwilling, and is, as it were, dragged to it. They are struck with horror when they see any die in this manner, and carry them out in silence and with sorrow, and praying God that He would be merciful to the errors of the departed soul, they lay the body in the ground; but when any die cheerfully, and full of hope, they do not mourn for them, but sing hymns when they carry out their bodies, and commending their souls very earnestly to God: their whole behaviour is then rather grave than sad, they burn the body, and set up a pillar where the pile was made, with an inscription to the honour of the deceased. When they come from the funeral, they discourse of his good life and worthy actions, but speak of nothing oftener and with more pleasure than of his serenity at the hour of death. They think such respect paid to the memory of good men is both the greatest incitement to engage others to follow their example, and the most acceptable worship that can be offered them; for they believe that though by the imperfection of human sight they are invisible to us, yet they are present among us, and hear those discourses that pass concerning themselves. They believe it inconsistent, with the happiness of departed souls not to be at

liberty to be where they will, and do not imagine them capable of the ingratitude of not desiring to see those friends with whom they lived on earth in the strictest bonds of love and kindness: besides they are persuaded that good men after death have these affections and all other good dispositions increased rather than diminished, and therefore conclude that they are still among the living, and observe all they say or do. From hence they engage in all their affairs with the greater confidence of success, as trusting to their protection; while this opinion of the presence of their ancestors is a restraint that prevents their engaging in ill designs.

They despise and laugh at auguries, and the other vain and superstitious ways of divination, so much observed among other nations; but have great reverence for such miracles as cannot flow from any of the powers of Nature, and look on them as effects and indications of the presence of the supreme Being, of which they say many instances have occurred among them; and that sometimes their public prayers, which upon great and dangerous occasions they have solemnly put up to God, with assured confidence of being heard, have been answered in a miraculous manner.

They think the contemplating God in His works, and the adoring Him for them, is a very acceptable piece of worship to Him.

There are many among them, that upon a motive of religion neglect learning, and apply themselves to no sort of study; nor do they allow themselves any leisure time, but are perpetually employed, believing that by the good things that a man does he secures to himself that happiness that comes after death. Some of these visit the sick; others mend highways, cleanse ditches, repair bridges, or dig turf, gravel, or stones. Others fell and cleave timber, and bring wood, corn, and other necessities on carts into their towns. Nor do these only serve the public, but they serve even private men, more than the slaves themselves do; for if there is anywhere a rough, hard, and sordid piece of work to be done, from which many are frightened by the labour and loathsomeness of it, if not the despair of accomplishing it, they cheerfully, and of their own accord, take that to their share; and by that means, as they ease others very much, so they afflict themselves, and spend their whole life in hard labour; and yet they do not value themselves upon this, nor lessen other people's credit to raise their own; but by their stooping to such servile

employments, they are so far from being despised, that they are so much the more esteemed by the whole nation.

Of these there are two sorts; some live unmarried and chaste, and abstain from eating any sort of flesh; and thus weaning themselves from all the pleasures of the present life, which they account hurtful, they pursue, even by the hardest and painfulest methods possible, that blessedness which they hope for hereafter; and the nearer they approach to it, they are the more cheerful and earnest in their endeavours after it. Another sort of them is less willing to put themselves to much toil, and therefore prefer a married state to a single one; and as they do not deny themselves the pleasure of it, so they think the begetting of children is a debt which they owe to human nature and to their country; nor do they avoid any pleasure that does not hinder labour, and therefore eat flesh so much the more willingly, as they find that by this means they are the more able to work; the Utopians look upon these as the wiser sect, but they esteem the others as the most holy. They would indeed laugh at any man, who from the principles of reason would prefer an unmarried state to a married, or a life of labour to an easy life; but they reverence and admire such as do it from the motives of religion. There is nothing in which they are more cautious than in giving their opinion positively concerning any sort of religion. The men that lead those severe lives are called in the language of their country Brutheskass, which answers to those we call religious orders.

Their priests are men of eminent piety, and therefore they are but few, for there are only thirteen in every town, one for every temple; but when they go to war, seven of these go out with their forces, and seven others are chosen to supply their room in their absence; but these enter again upon their employment when they return; and those who served in their absence attend upon the high-priest, till vacancies fall by death; for there is one set over all the rest. They are chosen by the people as the other magistrates are, by suffrages given in secret, for preventing of factions; and when they are chosen they are consecrated by the college of priests. The care of all sacred things, the worship of God, and an inspection into the manners of the people, are committed to them. It is a reproach to a man to be sent for by any of them, or for them to speak to him in secret, for that always gives some suspicion. All that is incumbent on them is only to exhort and admonish the

people; for the power of correcting and punishing ill men belongs wholly to the Prince and to the other magistrates. The severest thing that the priest does, is the excluding those that are desperately wicked from joining in their worship. There is not any sort of punishment more dreaded by them than this, for as it loads them with infamy, so it fills them with secret horrors, such is their reverence to their religion; nor will their bodies be long exempted from their share of trouble; for if they do not very quickly satisfy the priests of the truth of their repentance, they are seized on by the Senate, and punished for their impiety. The education of youth belongs to the priests, yet they do not take so much care of instructing them in letters as in forming their minds and manners aright; they use all possible methods to infuse very early into the tender and flexible minds of children such opinions as are both good in themselves and will be useful to their country. For when deep impressions of these things are made at that age, they follow men through the whole course of their lives, and conduce much to preserve the peace of the government, which suffers by nothing more than by vices that rise out of ill opinions. The wives of their priests are the most extraordinary women of the whole country; sometimes the women themselves are made priests, though that falls out but seldom, nor are any but ancient widows chosen into that order.

None of the magistrates have greater honour paid them than is paid the priests; and if they should happen to commit any crime, they would not be questioned for it. Their punishment is left to God, and to their own consciences; for they do not think it lawful to lay hands on any man, how wicked soever he is, that has been in a peculiar manner dedicated to God; nor do they find any great inconvenience in this, both because they have so few priests, and because these are chosen with much caution, so that it must be a very unusual thing to find one who merely out of regard to his virtue, and for his being esteemed a singularly good man, was raised up to so great a dignity, degenerate into corruption and vice. And if such a thing should fall out, for man is a changeable creature, yet there being few priests, and these having no authority but what rises out of the respect that is paid them, nothing of great consequence to the public can proceed from the indemnity that the priests enjoy.

They have indeed very few of them, lest greater numbers sharing in the same honour might make the dignity of that order which they esteem so highly to

sink in its reputation. They also think it difficult to find out many of such an exalted pitch of goodness, as to be equal to that dignity which demands the exercise of more than ordinary virtues. Nor are the priests in greater veneration among them than they are among their neighbouring nations, as you may imagine by that which I think gives occasion for it.

When the Utopians engage in battle, the priests who accompany them to the war, apparelled in their sacred vestments, kneel down during the action, in a place not far from the field; and lifting up their hands to heaven, pray, first for peace, and then for victory to their own side, and particularly that it may be gained without the effusion of much blood on either side; and when the victory turns to their side, they run in among their own men to restrain their fury; and if any of their enemies see them, or call to them, they are preserved by that means; and such as can come so near them as to touch their garments, have not only their lives, but their fortunes secured to them; it is upon this account that all the nations roundabout consider them so much, and treat them with such reverence, that they have been often no less able to preserve their own people from the fury of their enemies, than to save their enemies from their rage; for it has sometimes fallen out, that when their armies have been in disorder, and forced to fly, so that their enemies were running upon the slaughter and spoil, the priests by interposing have separated them from one another, and stopped the effusion of more blood; so that by their mediation a peace has been concluded on very reasonable terms; nor is there any nation about them so fierce, cruel, or barbarous as not to look upon their persons as sacred and inviolable.

The first and the last day of the month, and of the year, is a festival. They measure their months by the course of the moon, and their years by the course of the sun. The first days are called in their language the Cynemernes, and the last the Trapemernes; which answers in our language to the festival that begins, or ends the season.

They have magnificent temples, that are not only nobly built, but extremely spacious; which is the more necessary, as they have so few of them; they are a little dark within, which proceeds not from any error in the architecture, but is done with design; for their priests think that too much light dissipates the thoughts, and that a more moderate degree of it both recollects the mind and

raises devotion. Though there are many different forms of religion among them, yet all these, how various soever, agree in the main point, which is the worshipping the Divine Essence; and therefore there is nothing to be seen or heard in their temples in which the several persuasions among them may not agree; for every sect performs those rites that are peculiar to it, in their private houses, nor is there anything in the public worship that contradicts the particular ways of those different sects. There are no images for God in their temples, so that every one may represent Him to his thoughts, according to the way of his religion; nor do they call this one God by any other name but that of Mithras, which is the common name by which they all express the Divine Essence, whatsoever otherwise they think it to be; nor are there any prayers among them but such as every one of them may use without prejudice to his own opinion.

They meet in their temples on the evening of the festival that concludes a season: and not having yet broke their fast, they thank God for their good success during that year or month, which is then at an end; and the next day being that which begins the new season, they meet early in their temples, to pray for the happy progress of all their affairs during that period upon which they then enter. In the festival which concludes the period, before they go to the temple, both wives and children fall on their knees before their husbands or parents, and confess everything in which they have either erred or failed in their duty, and beg pardon for it. Thus all little discontents in families are removed, that they may offer up their devotions with a pure and serene mind; for they hold it a great impiety to enter upon them with disturbed thoughts, or with a consciousness of their bearing hatred or anger in their hearts to any person whatsoever; and think that they should become liable to severe punishments if they presumed to offer sacrifices without cleansing their hearts, and reconciling all their differences. In the temples, the two sexes are separated, the men go to the right hand, and the women to the left; and the males and females all place themselves before the head and master or mistress of that family to which they belong; so that those who have the government of them at home may see their deportment in public; and they intermingle them so, that the younger and the older may be set by one another; for if the younger sort were all set together, they would perhaps trifle away that time too much in which they ought to beget in themselves that

religious dread of the supreme Being, which is the greatest and almost the only incitement to virtue.

They offer up no living creature in sacrifice, nor do they think it suitable to the divine Being, from whose bounty it is that these creatures have derived their lives, to take pleasure in their deaths, or the offering up their blood. They burn incense and other sweet odours, and have a great number of wax lights during their worship; not out of any imagination that such oblations can add anything to the divine Nature, which even prayers cannot do; but as it is a harmless and pure way of worshipping God, so they think those sweet savours and lights, together with some other ceremonies, by a secret and unaccountable virtue, elevate men's souls, and inflame them with greater energy and cheerfulness during the divine worship.

All the people appear in the temples in white garments, but the priest's vestments are parti-coloured, and both the work and colours are wonderful. They are made of no rich materials, for they are neither embroidered nor set with precious stones, but are composed of the plumes of several birds, laid together with so much art and so neatly, that the true value of them is far beyond the costliest materials. They say that in the ordering and placing those plumes some dark mysteries are represented, which pass down among their priests in a secret tradition concerning them; and that they are as hieroglyphics, putting them in mind of the blessings that they have received from God, and of their duties both to Him and to their neighbours. As soon as the priest appears in those ornaments, they all fall prostrate on the ground, with so much reverence and so deep a silence that such as look on cannot but be struck with it, as if it were the effect of the appearance of a Deity. After they have been for some time in this posture, they all stand up, upon a sign given by the priest, and sing hymns to the honour of God, some musical instruments playing all the while. These are quite of another form than those used among us: but as many of them are much sweeter than ours, so others are made use of by us. Yet in one thing they very much exceed us; all their music, both vocal and instrumental, is adapted to imitate and express the passions, and is so happily suited to every occasion, that whether the subject of the hymn be cheerful or formed to soothe or trouble the mind, or to express grief or remorse, the music takes the impression of whatever is represented, affects and kindles the passions, and works the sentiments deep

into the hearts of the hearers. When this is done, both priests and people offer up very solemn prayers to God in a set form of words; and these are so composed, that whatsoever is pronounced by the whole assembly may be likewise applied by every man in particular to his own condition; in these they acknowledge God to be the author and governor of the world, and the fountain of all the good they receive, and therefore offer up to Him their thanksgiving; and in particular bless Him for His goodness in ordering it so, that they are born under the happiest government in the world, and are of a religion which they hope is the truest of all others: but if they are mistaken, and if there is either a better government or a religion more acceptable to God, they implore His goodness to let them know it, vowing that they resolve to follow Him whithersoever He leads them. But if their government is the best, and their religion the truest, then they pray that He may fortify them in it, and bring all the world both to the same rules of life, and to the same opinions concerning himself; unless, according to the unsearchableness of His mind, He is pleased with a variety of religions. Then they pray that God may give them an easy passage at last to himself; not presuming to set limits to Him, how early or late it should be; but if it may be wished for, without derogating from His supreme authority, they desire to be quickly delivered, and to be taken to himself, though by the most terrible kind of death, rather than to be detained long from seeing Him by the most prosperous course of life. When this prayer is ended, they all fall down again upon the ground, and after a little while they rise up, go home to dinner, and spend the rest of the day in diversion or military exercises.

Thus have I described to you, as particularly as I could, the constitution of that commonwealth, which I do not only think the best in the world, but indeed the only commonwealth that truly deserves that name. In all other places it is visible, that while people talk of a commonwealth, every man only seeks his own wealth; but there, where no man has any property, all men zealously pursue the good of the public: and, indeed, it is no wonder to see men act so differently; for in other commonwealths, every man knows that unless he provides for himself, how flourishing soever the commonwealth may be, he must die of hunger; so that he sees the necessity of preferring his own concerns to the public; but in Utopia, where every man has a right to everything, they all know that if care is taken to keep the public stores full, no

private man can want anything; for among them there is no unequal distribution, so that no man is poor, none in necessity; and though no man has anything, yet they are all rich; for what can make a man so rich as to lead a serene and cheerful life, free from anxieties; neither apprehending want himself, nor vexed with the endless complaints of his wife? He is not afraid of the misery of his children, nor is he contriving how to raise a portion for his daughters, but is secure in this, that both he and his wife, his children and grandchildren, to as many generations as he can fancy, will all live both plentifully and happily; since among them there is no less care taken of those who were once engaged in labour, but grow afterwards unable to follow it, than there is elsewhere of these that continue still employed. I would gladly hear any man compare the justice that is among them with that of all other nations; among whom, may I perish, if I see anything that looks either like justice or equity: for what justice is there in this, that a nobleman, a goldsmith, a banker, or any other man, that either does nothing at all, or at best is employed in things that are of no use to the public, should live in great luxury and splendour, upon what is so ill acquired; and a mean man, a carter, a smith, or a ploughman, that works harder even than the beasts themselves, and is employed in labours so necessary, that no commonwealth could hold out a year without them, can only earn so poor a livelihood, and must lead so miserable a life, that the condition of the beasts is much better than theirs? For as the beasts do not work so constantly, so they feed almost as well, and with more pleasure; and have no anxiety about what is to come, whilst these men are depressed by a barren and fruitless employment, and tormented with the apprehensions of want in their old age; since that which they get by their daily labour does but maintain them at present, and is consumed as fast as it comes in, there is no overplus left to lay up for old age.

Is not that government both unjust and ungrateful, that is so prodigal of its favours to those that are called gentlemen, or goldsmiths, or such others who are idle, or live either by flattery, or by contriving the arts of vain pleasure; and on the other hand, takes no care of those of a meaner sort, such as ploughmen, colliers, and smiths, without whom it could not subsist? But after the public has reaped all the advantage of their service, and they come to be oppressed with age, sickness, and want, all their labours and the good they have done is forgotten; and all the recompense given them is that they are left

to die in great misery. The richer sort are often endeavouring to bring the hire of labourers lower, not only by their fraudulent practices, but by the laws which they procure to be made to that effect; so that though it is a thing most unjust in itself, to give such small rewards to those who deserve so well of the public, yet they have given those hardships the name and colour of justice, by procuring laws to be made for regulating them.

Therefore I must say that, as I hope for mercy, I can have no other notion of all the other governments that I see or know, than that they are a conspiracy of the rich, who on pretence of managing the public only pursue their private ends, and devise all the ways and arts they can find out; first, that they may, without danger, preserve all that they have so ill acquired, and then that they may engage the poor to toil and labour for them at as low rates as possible, and oppress them as much as they please. And if they can but prevail to get these contrivances established by the show of public authority, which is considered as the representative of the whole people, then they are accounted laws. Yet these wicked men after they have, by a most insatiable covetousness, divided that among themselves with which all the rest might have been well supplied, are far from that happiness that is enjoyed among the Utopians: for the use as well as the desire of money being extinguished, much anxiety and great occasions of mischief is cut off with it. And who does not see that the frauds, thefts, robberies, quarrels, tumults, contentions, seditions, murders, treacheries, and witchcrafts, which are indeed rather punished than restrained by the severities of law, would all fall off, if money were not any more valued by the world? Men's fears, solitudes, cares, labours, and watchings, would all perish in the same moment with the value of money: even poverty itself, for the relief of which money seems most necessary, would fall. But, in order to the apprehending this aright, take one instance.

Consider any year that has been so unfruitful that many thousands have died of hunger; and yet if at the end of that year a survey was made of the granaries of all the rich men that have hoarded up the corn, it would be found that there was enough among them to have prevented all that consumption of men that perished in misery; and that if it had been distributed among them, none would have felt the terrible effects of that scarcity; so easy a thing would it be to supply all the necessities of life, if that blessed thing called

money, which is pretended to be invented for procuring them, was not really the only thing that obstructed their being procured!

I do not doubt but rich men are sensible of this, and that they well know how much a greater happiness it is to want nothing necessary than to abound in many superfluities, and to be rescued out of so much misery than to abound with so much wealth; and I cannot think but the sense of every man's interest, added to the authority of Christ's commands, who as He was infinitely wise, knew what was best, and was not less good in discovering it to us, would have drawn all the world over to the laws of the Utopians, if pride, that plague of human nature, that source of so much misery, did not hinder it; for this vice does not measure happiness so much by its own conveniences as by the miseries of others; and would not be satisfied with being thought a goddess, if none were left that were miserable, over whom she might insult. Pride thinks its own happiness shines the brighter by comparing it with the misfortunes of other persons; that by displaying its own wealth, they may feel their poverty the more sensibly. This is that infernal serpent that creeps into the breasts of mortals, and possesses them too much to be easily drawn out; and therefore I am glad that the Utopians have fallen upon this form of government, in which I wish that all the world could be so wise as to imitate them; for they have indeed laid down such a scheme and foundation of policy, that as men live happily under it, so it is like to be of great continuance; for they having rooted out of the minds of their people all the seeds both of ambition and faction, there is no danger of any commotion at home; which alone has been the ruin of many states, that seemed otherwise to be well secured; but as long as they live in peace at home, and are governed by such good laws, the envy of all their neighbouring princes, who have often though in vain attempted their ruin, will never be able to put their state into any commotion or disorder.

When Raphael had thus made an end of speaking, though many things occurred to me, both concerning the manners and laws of that people, that seemed very absurd, as well as their way of making war, as in their notions of religion and divine matters; together with several other particulars, but chiefly what seemed the foundation of all the rest, their living in common,

without the use of money, by which all nobility, magnificence, splendour, and majesty, which, according to the common opinion, are the true ornaments of a nation, would be quite taken away; yet since I perceived that Raphael was weary, and was not sure whether he could easily bear contradiction, remembering that he had taken notice of some who seemed to think they were bound in honour to support the credit of their own wisdom, by finding out something to censure in all other men's inventions, besides their own; I only commended their constitution, and the account he had given of it in general; and so taking him by the hand, carried him to supper, and told him I would find out some other time for examining this subject more particularly, and for discoursing more copiously upon it; and indeed I shall be glad to embrace an opportunity of doing it. In the meanwhile, though it must be confessed that he is both a very learned man, and a person who has obtained a great knowledge of the world, I cannot perfectly agree to everything he has related; however, there are many things in the Commonwealth of Utopia that I rather wish, than hope, to see followed in our governments.

BACON'S NEW ATLANTIS.

NEW ATLANTIS.

We sailed from Peru, where we had continued by the space of one whole year, for China and Japan, by the South Sea, taking with us victuals for twelve months; and had good winds from the east, though soft and weak, for five months' space and more. But then the wind came about, and settled in the west for many days, so as we could make little or no way, and were sometimes in purpose to turn back. But then again there arose strong and great winds from the south, with a point east; which carried us up, for all that we could do, towards the north: by which time our victuals failed us, though we had made good spare of them. So that finding ourselves, in the midst of the greatest wilderness of waters in the world, without victual, we gave ourselves for lost men, and prepared for death. Yet we did lift up our hearts and voices to God above, who showeth His wonders in the deep; beseeching Him of his mercy, that as in the beginning He discovered the face of the deep, and brought forth dry land, so He would now discover land to us, that we might not perish. And it came to pass, that the next day about evening we saw within a kenning before us, towards the north, as it were thick clouds, which did put us in some hope of land: knowing how that part of the South Sea was utterly unknown: and might have islands or continents, that hitherto were not come to light. Wherefore we bent out course thither, where we saw the appearance of land, all that night: and in the dawning of next day, we might plainly discern that it was a land flat to our sight, and full of boschage, which made it show the more dark. And after an hour and a half's sailing, we entered into a good haven, being the port of a fair city. Not great indeed, but well built, and that gave a pleasant view from the sea. And we thinking every minute long till we were on land, came close to the shore and offered to land. But straightways we saw divers of the people, with bastons in their hands, as it were forbidding us to land: yet without any cries or fierceness, but only as

warning us off, by signs that they made. Whereupon being not a little discomfited, we were advising with ourselves what we should do. During which time there made forth to us a small boat, with about eight persons in it, whereof one of them had in his hand a tipstaff of a yellow cane, tipped at both ends with blue, who made aboard our ship, without any show of distrust at all. And when he saw one of our number present himself somewhat afore the rest, he drew forth a little scroll of parchment (somewhat yellower than our parchment, and shining like the leaves of writing tables, but otherwise soft and flexible), and delivered it to our foremost man. In which scroll were written in ancient Hebrew, and in ancient Greek, and in good Latin of the school, and in Spanish these words: "Land ye not, none of you, and provide to be gone from this coast within sixteen days, except you have further time given you; meanwhile, if you want fresh water, or victual, or help for your sick, or that your ship needeth repair, write down your wants, and you shall have that which belongeth to mercy." This scroll was signed with a stamp of cherubim's wings, not spread, but hanging downwards; and by them a cross. This being delivered, the officer returned, and left only a servant with us to receive our answer. Consulting hereupon amongst ourselves, we were much perplexed. The denial of landing, and hasty warning us away, troubled us much: on the other side, to find that the people had languages, and were so full of humanity, did comfort us not a little. And above all, the sign of the cross to that instrument, was to us a great rejoicing, and as it were a certain presage of good. Our answer was in the Spanish tongue, "That for our ship, it was well; for we had rather met with calms and contrary winds, than any tempests. For our sick, they were many, and in very ill case; so that if they were not permitted to land, they ran in danger of their lives." Our other wants we set down in particular, adding, "That we had some little store of merchandise, which if it pleased them to deal for, it might supply our wants, without being chargeable unto them." We offered some reward in pistolets unto the servant, and a piece of crimson velvet to be presented to the officer; but the servant took them not, nor would scarce look upon them; and so left us, and went back in another little boat which was sent for him.

About three hours after we had despatched our answer there came towards us a person (as it seemed) of a place. He had on him a gown with wide sleeves, of a kind of water chamolet, of an excellent azure colour, far more glossy

than ours: his under apparel was green, and so was his hat, being in the form of a turban, daintily made, and not so huge as the Turkish turbans; and the locks of his hair came down below the brims of it. A reverend man was he to behold. He came in a boat, gilt in some part of it, with four persons more only in that boat; and was followed by another boat, wherein were some twenty. When he was come within a flight-shot of our ship, signs were made to us that we should send forth some to meet him upon the water, which we presently did in our ship-boat, sending the principal man amongst us save one, and four of our number with him. When we were come within six yards of their boat, they called to us to stay, and not to approach farther, which we did. And thereupon the man, whom I before described, stood up, and with a loud voice in Spanish, asked, "Are ye Christians?" We answered, "We were;" fearing the less, because of the cross we had seen in the subscription. At which answer the said person lift up his right hand towards heaven, and drew it softly to his mouth (which is the gesture they use, when they thank God), and then said: "If ye will swear, all of you, by the merits of the Saviour, that ye are no pirates; nor have shed blood, lawfully nor unlawfully, within forty days past; you may have license to come on land." We said, "We were all ready to take that oath." Whereupon one of those that were with him, being (as it seemed) a notary, made an entry of this act. Which done, another of the attendants of the great person, which was with him in the same boat, after his lord had spoken a little to him, said aloud: "My lord would have you know, that it is not of pride, or greatness, that he cometh not aboard your ship: but for that, in your answer, you declare that you have many sick amongst you, he was warned by the conservator of health of the city that he should keep a distance." We bowed ourselves towards him, and answered: "We were his humble servants; and accounted for great honour and singular humanity towards us, that which was already done: but hoped well, that the nature of the sickness of our men was not infectious." So he returned; and a while after came the notary to us aboard our ship; holding in his hand a fruit of that country, like an orange, but of colour between orange-tawny and scarlet: which cast a most excellent odour. He used it (as it seemed) for a preservative against infection. He gave us our oath, "By the name of Jesus, and His merits:" and after told us, that the next day by six of the clock in the morning, we should be sent to, and brought to the strangers' house (so he called it), where we should be accommodated of things, both for our whole and for our

sick. So he left us; and when we offered him some pistolets, he smiling, said, "He must not be twice paid for one labour:" meaning (as I take it) that he had salary sufficient of the state for his service. For (as I after learned) they call an officer that taketh rewards twice-paid.

The next morning early, there came to us the same officer that came to us at first with his cane, and told us: "He came to conduct us to the strangers' house: and that he had prevented the hour, because we might have the whole day before us for our business. For (said he) if you will follow my advice, there shall first go with me some few of you, and see the place, and how it may be made convenient for you: and then you may send for your sick, and the rest of your number, which ye will bring on land." We thanked him, and said, "That his care which he took of desolate strangers, God would reward." And so six of us went on land with him; and when we were on land, he went before us, and turned to us, and said, "He was but our servant, and our guide." He led us through three fair streets; and all the way we went there were gathered some people on both sides, standing in a row; but in so civil a fashion, as if it had been, not to wonder at us, but to welcome us; and divers of them, as we passed by them, put their arms a little abroad, which is their gesture when they bid any welcome. The strangers' house is a fair and spacious house, built of brick, of somewhat a bluer colour than our brick; and with handsome windows, some of glass, some of a kind of cambric oiled. He brought us first into a fair parlour above stairs, and then asked us, "What number of persons we were? and how many sick?" We answered, "We were in all (sick and whole) one and fifty persons, whereof our sick were seventeen." He desired us to have patience a little, and to stay till he came back to us, which was about an hour after; and then he led us to see the chambers which were provided for us, being in number nineteen. They having cast it (as it seemeth) that four of those chambers, which were better than the rest, might receive four of the principal men of our company; and lodge them alone by themselves; and the other fifteen chambers were to lodge us, two and two together. The chambers were handsome and cheerful chambers, and furnished civilly. Then he led us to a long gallery, like a dorture, where he showed us all along the one side (for the other side was but wall and window) seventeen cells, very neat ones, having partitions of cedar wood. Which gallery and cells, being in all forty (many more than we

needed), were instituted as an infirmary for sick persons. And he told us withal, that as any of our sick waxed well, he might be removed from his cell to a chamber: for which purpose there were set forth ten spare chambers, besides the number we spake of before. This done, he brought us back to the parlour, and lifting up his cane a little (as they do when they give any charge or command), said to us, "Ye are to know that the custom of the land requireth, that after this day and to-morrow (which we give you for removing your people from your ship), you are to keep within doors for three days. But let it not trouble you, nor do not think yourselves restrained, but rather left to your rest and ease. You shall want nothing; and there are six of our people appointed to attend you for any business you may have abroad." We gave him thanks with all affection and respect, and said, "God surely is manifested in this land." We offered him also twenty pistolets; but he smiled, and only said: "What? Twice paid!" And so he left us. Soon after our dinner was served in; which was right good viands, both for bread and meat: better than any collegiate diet that I have known in Europe. We had also drink of three sorts, all wholesome and good; wine of the grape; a drink of grain, such as is with us our ale, but more clear; and a kind of cider made of a fruit of that country; a wonderful pleasing and refreshing drink. Besides, there were brought in to us great store of those scarlet oranges for our sick; which (they said) were an assured remedy for sickness taken at sea. There was given us also a box of small grey or whitish pills, which they wished our sick should take, one of the pills every night before sleep; which (they said) would hasten their recovery. The next day, after that our trouble of carriage and removing of our men and goods out of our ship was somewhat settled and quiet, I thought good to call our company together, and when they were assembled, said unto them, "My dear friends, let us know ourselves, and how it standeth with us. We are men cast on land, as Jonas was out of the whale's belly, when we were as buried in the deep; and now we are on land, we are but between death and life, for we are beyond both the old world and the new; and whether ever we shall see Europe, God only knoweth. It is a kind of miracle hath brought us hither, and it must be little less that shall bring us hence. Therefore in regard of our deliverance past, and our danger present and to come, let us look up to God, and every man reform his own ways. Besides we are come here amongst a Christian people, full of piety and humanity. Let us not bring that confusion of face upon ourselves, as to show our vices or

unworthiness before them. Yet there is more, for they have by commandment (though in form of courtesy) cloistered us within these walls for three days; who knoweth whether it be not to take some taste of our manners and conditions? And if they find them bad, to banish us straightways; if good, to give us further time. For these men that they have given us for attendance, may withal have an eye upon us. Therefore, for God's love, and as we love the weal of our souls and bodies, let us so behave ourselves, as we may be at peace with God, and may find grace in the eyes of this people." Our company with one voice thanked me for my good admonition, and promised me to live soberly and civilly, and without giving any the least occasion of offence. So we spent our three days joyfully, and without care, in expectation what would be done with us when they were expired. During which time, we had every hour joy of the amendment of our sick, who thought themselves cast into some divine pool of healing, they mended so kindly and so fast.

The morrow after our three days were past, there came to us a new man, that we had not seen before, clothed in blue as the former was, save that his turban was white with a small red cross on the top. He had also a tippet of fine linen. At his coming in, he did bend to us a little, and put his arms abroad. We of our parts saluted him in a very lowly and submissive manner; as looking that from him we should receive sentence of life or death. He desired to speak with some few of us. Whereupon six of us only stayed, and the rest avoided the room. He said, "I am by office governor of this house of strangers, and by vocation I am a Christian priest; and therefore am come to you, to offer you my service, both as strangers, and chiefly as Christians. Some things I may tell you, which I think you will not be unwilling to hear. The state hath given you license to stay on land for the space of six weeks: and let it not trouble you, if your occasions ask further time, for the law in this point is not precise; and I do not doubt, but myself shall be able to obtain for you such further time as shall be convenient. Ye shall also understand, that the strangers' house is at this time rich, and much aforehand; for it hath laid up revenue these thirty-seven years: for so long it is since any stranger arrived in this part; and therefore take ye no care; the state will defray you all the time you stay. Neither shall you stay one day the less for that. As for any merchandise you have brought, ye shall be well used, and have your return, either in merchandise or in gold and silver: for to us it is all one. And if you

have any other request to make, hide it not; for ye shall find we will not make your countenance to fall by the answer ye shall receive. Only this I must tell you, that none of you must go above a karan (that is with them a mile and a half) from the walls of the city, without special leave." We answered, after we had looked a while upon one another, admiring this gracious and parent-like usage, that we could not tell what to say, for we wanted words to express our thanks; and his noble free offers left us nothing to ask. It seemed to us, that we had before us a picture of our salvation in heaven; for we that were a while since in the jaws of death, were now brought into a place where we found nothing but consolations. For the commandment laid upon us, we would not fail to obey it, though it was impossible but our hearts should be inflamed to tread further upon this happy and holy ground. We added, that our tongues should first cleave to the roofs of our mouths, ere we should forget, either this reverend person, or this whole nation, in our prayers. We also most humbly besought him to accept of us as his true servants, by as just a right as ever men on earth were bounden; laying and presenting both our persons and all we had at his feet. He said, he was a priest, and looked not a priest's reward; which was our brotherly love, and the good of our souls and bodies. So he went from us, not without tears of tenderness in his eyes, and left us also confused with joy and kindness, saying amongst ourselves, that we were come into a land of angels, which did appear to us daily, and prevent us with comforts, which we thought not of, much less expected.

The next day, about ten of the clock, the governor came to us again, and after salutations, said familiarly, that he was come to visit us; and called for a chair, and sat him down; and we being some ten of us (the rest were of the meaner sort, or else gone abroad), sat down with him; and when we were set, he began thus: "We of this island of Bensalem (for so they called it in their language) have this: that by means of our solitary situation, and of the laws of secrecy, which we have for our travellers, and our rare admission of strangers; we know well most part of the habitable world, and are ourselves unknown. Therefore because he that knoweth least is fittest to ask questions, it is more reason, for the entertainment of the time, that ye ask me questions, than that I ask you." We answered, that we humbly thanked him, that he would give us leave so to do. And that we conceived by the taste we had already, that there was no worldly thing on earth more worthy to be known

than the state of that happy land. But above all (we said) since that we were met from the several ends of the world, and hoped assuredly that we should meet one day in the kingdom of heaven (for that we were both parts Christians), we desired to know (in respect that land was so remote, and so divided by vast and unknown seas from the land where our Saviour walked on earth) who was the apostle of that nation, and how it was converted to the faith? It appeared in his face, that he took great contentment in this our question; he said, "Ye knit my heart to you, by asking this question in the first place: for it sheweth that you first seek the kingdom of heaven: and I shall gladly, and briefly, satisfy your demand.

"About twenty years after the ascension of our Saviour it came to pass, that there was seen by the people of Renfusa (a city upon the eastern coast of our island, within sight, the night was cloudy and calm), as it might be some mile in the sea, a great pillar of light; not sharp, but in form of a column, or cylinder, rising from the sea, a great way up towards heaven; and on the top of it was seen a large cross of light, more bright and resplendent than the body of the pillar. Upon which so strange a spectacle, the people of the city gathered apace together upon the sands, to wonder; and so after put themselves into a number of small boats to go nearer to this marvellous sight. But when the boats were come within about sixty yards of the pillar, they found themselves all bound, and could go no further, yet so as they might move to go about, but might not approach nearer; so as the boats stood all as in a theatre, beholding this light, as an heavenly sign. It so fell out, that there was in one of the boats one of the wise men of the Society of Salomon's House; which house or college, my good brethren, is the very eye of this kingdom, who having a while attentively and devoutly viewed and contemplated this pillar and cross, fell down upon his face; and then raised himself upon his knees, and lifting up his hands to heaven, made his prayers in this manner:

"Lord God of heaven and earth; thou hast vouchsafed of thy grace, to those of our order to know thy works of creation, and true secrets of them; and to discern (as far as appertaineth to the generations of men) between divine miracles, works of Nature, works of art and impostures, and illusions of all sorts. I do here acknowledge and testify before this people, that the thing we now see before our eyes, is thy finger, and a true miracle. And forasmuch as

we learn in our books, that thou never workest miracles, but to a divine and excellent end (for the laws of Nature are thine own laws, and thou exceedest them not but upon great cause), we most humbly beseech thee to prosper this great sign, and to give us the interpretation and use of it in mercy; which thou dost in some part secretly promise, by sending it unto us.'

"When he had made his prayer, he presently found the boat he was in movable and unbound; whereas all the rest remained still fast; and taking that for an assurance of leave to approach, he caused the boat to be softly and with silence rowed towards the pillar; but ere he came near it, the pillar and cross of light broke up, and cast itself abroad, as it were into a firmament of many stars, which also vanished soon after; and there was nothing left to be seen but a small ark, or chest of cedar, dry and not wet at all with water, though it swam; and in the fore-end of it, which was towards him, grew a small green branch of palm; and when the wise man had taken it with all reverence into his boat, it opened of itself, and there were found in it a book and a letter, both written in fine parchment, and wrapped in sindons of linen. The book contained all the canonical books of the Old and New Testament, according as you have them (for we know well what the churches with you receive), and the Apocalypse itself; and some other books of the New Testament, which were not at that time written, were nevertheless in the book. And for the letter, it was in these words:

"I Bartholomew, a servant of the Highest, and apostle of Jesus Christ, was warned by an angel that appeared to me in a vision of glory, that I should commit this ark to the floods of the sea. Therefore I do testify and declare unto that people where God shall ordain this ark to come to land, that in the same day is come unto them salvation and peace, and goodwill from the Father, and from the Lord Jesus.'

"There was also in both these writings, as well the book as the letter, wrought a great miracle, conform to that of the apostles, in the original gift of tongues. For there being at that time, in this land, Hebrews, Persians, and Indians, besides the natives, every one read upon the book and letter, as if they had been written in his own language. And thus was this land saved from infidelity (as the remain of the old world was from water) by an ark, through the apostolical and miraculous evangelism of St. Bartholomew." And here he

paused, and a messenger came, and called him forth from us. So this was all that passed in that conference.

The next day, the same governor came again to us, immediately after dinner, and excused himself, saying, "That the day before he was called from us somewhat abruptly, but now he would make us amends, and spend time with us, if we held his company and conference agreeable." We answered, that we held it so agreeable and pleasing to us, as we forgot both dangers past, and fears to come, for the time we heard him speak; and that we thought an hour spent with him was worth years of our former life. He bowed himself a little to us, and after we were set again, he said, "Well, the questions are on your part." One of our number said, after a little pause, that there was a matter we were no less desirous to know than fearful to ask, lest we might presume too far. But encouraged by his rare humanity towards us (that could scarce think ourselves strangers, being his vowed and professed servants), we would take the hardness to propound it; humbly beseeching him, if he thought it not fit to be answered, that he would pardon it, though he rejected it. We said, we well observed those his words, which he formerly spake, that this happy island, where we now stood, was known to few, and yet knew most of the nations of the world, which we found to be true, considering they had the languages of Europe, and knew much of our state and business; and yet we in Europe (notwithstanding all the remote discoveries and navigations of this last age) never heard any of the least inkling or glimpse of this island. This we found wonderful strange; for that all nations have interknowledge one of another, either by voyage into foreign parts, or by strangers that come to them; and though the traveller into a foreign country doth commonly know more by the eye than he that stayeth at home can by relation of the traveller; yet both ways suffice to make a mutual knowledge, in some degree, on both parts. But for this island, we never heard tell of any ship of theirs, that had been seen to arrive upon any shore of Europe; no, nor of either the East or West Indies, nor yet of any ship of any other part of the world, that had made return for them. And yet the marvel rested not in this. For the situation of it (as his lordship said) in the secret conclave of such a vast sea might cause it. But then, that they should have knowledge of the languages, books, affairs, of those that lie such a distance from them, it was a thing we could not tell what to make of; for that it seemed to us a condition and propriety of divine

powers and beings, to be hidden and unseen to others, and yet to have others open, and as in a light to them. At this speech the governor gave a gracious smile and said, that we did well to ask pardon for this question we now asked, for that it imported, as if we thought this land a land of magicians, that sent forth spirits of the air into all parts, to bring them news and intelligence of other countries. It was answered by us all, in all possible humbleness, but yet with a countenance taking knowledge, that we knew that he spake it but merrily. That we were apt enough to think, there was somewhat supernatural in this island, but yet rather as angelical than magical. But to let his lordship know truly what it was that made us tender and doubtful to ask this question, it was not any such conceit, but because we remembered he had given a touch in his former speech, that this land had laws of secrecy touching strangers. To this he said, "You remember it aright; and therefore in that I shall say to you, I must reserve some particulars, which it is not lawful for me to reveal, but there will be enough left to give you satisfaction.

"You shall understand (that which perhaps you will scarce think credible) that about three thousand years ago, or somewhat more, the navigation of the world (especially for remote voyages) was greater than at this day. Do not think with yourselves, that I know not how much it is increased with you, within these threescore years; I know it well, and yet I say, greater then than now; whether it was, that the example of the ark, that saved the remnant of men from the universal deluge, gave men confidence to adventure upon the waters, or what it was; but such is the truth. The Phoenicians, and especially the Tyrians, had great fleets; so had the Carthaginians their colony, which is yet farther west. Toward the east the shipping of Egypt, and of Palestine, was likewise great. China also, and the great Atlantis (that you call America), which have now but junks and canoes, abounded then in tall ships. This island (as appeareth by faithful registers of those times) had then fifteen hundred strong ships, of great content. Of all this there is with you sparing memory, or none; but we have large knowledge thereof.

"At that time, this land was known and frequented by the ships and vessels of all the nations before named. And (as it cometh to pass) they had many times men of other countries, that were no sailors, that came with them; as Persians, Chaldeans, Arabians, so as almost all nations of might and fame resorted hither; of whom we have some stirps and little tribes with us at this day. And

for our own ships, they went sundry voyages, as well to your straits, which you call the Pillars of Hercules, as to other parts in the Atlantic and Mediterranean Seas; as to Paguin (which is the same with Cambalaine) and Quinzy, upon the Oriental Seas, as far as to the borders of the East Tartary.

"At the same time, and an age after or more, the inhabitants of the great Atlantis did flourish. For though the narration and description which is made by a great man with you, that the descendants of Neptune planted there, and of the magnificent temple, palace, city and hill; and the manifold streams of goodly navigable rivers, which as so many chains environed the same site and temple; and the several degrees of ascent, whereby men did climb up to the same, as if it had been a Scala Coeli; be all poetical and fabulous; yet so much is true, that the said country of Atlantis, as well that of Peru, then called Coya, as that of Mexico, then named Tyrambel, were mighty and proud kingdoms, in arms, shipping, and riches; so mighty, as at one time, or at least within the space of ten years, they both made two great expeditions; they of Tyrambel through the Atlantic to the Mediterranean Sea; and they of Coya, through the South Sea upon this our island; and for the former of these, which was into Europe, the same author amongst you, as it seemeth, had some relation from the Egyptian priest, whom he citeth. For assuredly, such a thing there was. But whether it were the ancient Athenians that had the glory of the repulse and resistance of those forces, I can say nothing; but certain it is there never came back either ship or man from that voyage. Neither had the other voyage of those of Coya upon us had better fortune, if they had not met with enemies of greater clemency. For the king of this island, by name Altabin, a wise man and a great warrior, knowing well both his own strength and that of his enemies, handled the matter so, as he cut off their land forces from their ships, and entailed both their navy and their camp with a greater power than theirs, both by sea and land; and compelled them to render themselves without striking a stroke; and after they were at his mercy, contenting himself only with their oath, that they should no more bear arms against him, dismissed them all in safety. But the divine revenge overtook not long after those proud enterprises. For within less than the space of one hundred years the Great Atlantis was utterly lost and destroyed; not by a great earthquake, as your man saith, for that whole tract is little subject to earthquakes, but by a particular deluge, or inundation; those countries having at this day far greater

rivers, and far higher mountains to pour down waters, than any part of the old world. But it is true that the same inundation was not deep, not past forty foot, in most places, from the ground, so that although it destroyed man and beast generally, yet some few wild inhabitants of the wood escaped. Birds also were saved by flying to the high trees and woods. For as for men, although they had buildings in many places higher than the depth of the water, yet that inundation, though it were shallow, had a long continuance, whereby they of the vale that were not drowned perished for want of food, and other things necessary. So as marvel you not at the thin population of America, nor at the rudeness and ignorance of the people; for you must account your inhabitants of America as a young people, younger a thousand years at the least than the rest of the world, for that there was so much time between the universal flood and their particular inundation. For the poor remnant of human seed which remained in their mountains, peopled the country again slowly, by little and little, and being simple and a savage people (not like Noah and his sons, which was the chief family of the earth), they were not able to leave letters, arts, and civility to their posterity; and having likewise in their mountainous habitations been used, in respect of the extreme cold of those regions, to clothe themselves with the skins of tigers, bears, and great hairy goats, that they have in those parts; when after they came down into the valley, and found the intolerable heats which are there, and knew no means of lighter apparel, they were forced to begin the custom of going naked, which continueth at this day. Only they take great pride and delight in the feathers of birds, and this also they took from those their ancestors of the mountains, who were invited unto it, by the infinite flight of birds, that came up to the high grounds, while the waters stood below. So you see, by this main accident of time, we lost our traffic with the Americans, with whom of all others, in regard they lay nearest to us, we had most commerce. As for the other parts of the world, it is most manifest that in the ages following (whether it were in respect of wars, or by a natural revolution of time) navigation did everywhere greatly decay, and specially far voyages (the rather by the use of galleys, and such vessels as could hardly brook the ocean) were altogether left and omitted. So then, that part of intercourse which could be from other nations, to sail to us, you see how it hath long since ceased; except it were by some rare accident, as this of yours. But now of the cessation of that other part of intercourse, which might be by our

sailing to other nations, I must yield you some other cause. For I cannot say, if I shall say truly, but our shipping, for number, strength, mariners, pilots, and all things that appertain to navigation, is as great as ever; and therefore why we should sit at home, I shall now give you an account by itself; and it will draw nearer, to give you satisfaction, to your principal question.

"There reigned in this island, about 1,900 years ago, a king, whose memory of all others we most adore; not superstitiously, but as a divine instrument, though a mortal man: his name was Salomona; and we esteem him as the lawgiver of our nation. This king had a large heart, inscrutable for good; and was wholly bent to make his kingdom and people happy. He therefore taking into consideration how sufficient and substantive this land was, to maintain itself without any aid at all of the foreigner; being 5,000 miles in circuit, and of rare fertility of soil, in the greatest part thereof; and finding also the shipping of this country might be plentifully set on work, both by fishing and by transportations from port to port, and likewise by sailing unto some small islands that are not far from us, and are under the crown and laws of this state; and recalling into his memory the happy and flourishing estate wherein this land then was, so as it might be a thousand ways altered to the worse, but scarce any one way to the better; though nothing wanted to his noble and heroical intentions, but only (as far as human foresight might reach) to give perpetuity to that which was in his time so happily established, therefore amongst his other fundamental laws of this kingdom he did ordain the interdicts and prohibitions which we have touching entrance of strangers; which at that time (though it was after the calamity of America) was frequent; doubting novelties and commixture of manners. It is true, the like law against the admission of strangers without license is an ancient law in the kingdom of China, and yet continued in use. But there it is a poor thing; and hath made them a curious, ignorant, fearful foolish nation. But our lawgiver made his law of another temper. For first, he hath preserved all points of humanity, in taking order and making provision for the relief of strangers distressed; whereof you have tasted." At which speech (as reason was) we all rose up, and bowed ourselves. He went on: "That king also still desiring to join humanity and policy together; and thinking it against humanity, to detain strangers here against their wills; and against policy, that they should return, and discover their knowledge of this estate, he took this course; he did ordain,

that of the strangers that should be permitted to land, as many at all times might depart as many as would; but as many as would stay, should have very good conditions, and means to live from the state. Wherein he saw so far, that now in so many ages since the prohibition, we have memory not of one ship that ever returned, and but of thirteen persons only, at several times, that chose to return in our bottoms. What those few that returned may have reported abroad, I know not. But you must think, whatsoever they have said, could be taken where they came but for a dream. Now for our travelling from hence into parts abroad, our lawgiver thought fit altogether to restrain it. So is it not in China. For the Chinese sail where they will, or can; which showeth, that their law of keeping out strangers is a law of pusillanimity and fear. But this restraint of ours hath one only exception, which is admirable; preserving the good which cometh by communicating with strangers, and avoiding the hurt: and I will now open it to you. And here I shall seem a little to digress, but you will by-and-by find it pertinent. Ye shall understand, my dear friends, that amongst the excellent acts of that king, one above all hath the pre-eminence. It was the erection and institution of an order, or society, which we call Salomon's House; the noblest foundation, as we think, that ever was upon the earth, and the lantern of this kingdom. It is dedicated to the study of the works and creatures of God. Some think it beareth the founder's name a little corrupted, as if it should be Solomon's House. But the records write it as it is spoken. So as I take it to be denominate of the king of the Hebrews, which is famous with you, and no strangers to us; for we have some parts of his works which with you are lost; namely, that natural history which he wrote of all plants, from the cedar of Libanus to the moss that groweth out of the wall; and of all things that have life and motion. This maketh me think that our king finding himself to symbolize, in many things, with that king of the Hebrews, which lived many years before him, honoured him with the title of this foundation. And I am the rather induced to be of this opinion, for that I find in ancient records, this order or society is sometimes called Solomon's House, and sometimes the College of the Six Days' Works; whereby I am satisfied that our excellent king had learned from the Hebrews that God had created the world, and all that therein is, within six days: and therefore he instituted that house, for the finding out of the true nature of all things, whereby God might have the more glory in the workmanship of them, and men the more fruit in their use of them, did give it also that second name. But

now to come to our present purpose. When the king had forbidden to all his people navigation into any part that was not under his crown, he made nevertheless this ordinance; that every twelve years there should be set forth out of this kingdom, two ships, appointed to several voyages; that in either of these ships there should be a mission of three of the fellows or brethren of Salomon's House, whose errand was only to give us knowledge of the affairs and state of those countries to which they were designed; and especially of the sciences, arts, manufactures, and inventions of all the world; and withal to bring unto us books, instruments, and patterns in every kind: that the ships, after they had landed the brethren, should return; and that the brethren should stay abroad till the new mission, the ships are not otherwise fraught than with store of victuals, and good quantity of treasure to remain with the brethren, for the buying of such things, and rewarding of such persons, as they should think fit. Now for me to tell you how the vulgar sort of mariners are contained from being discovered at land, and how they that must be put on shore for any time, colour themselves under the names of other nations, and to what places these voyages have been designed; and what places of rendezvous are appointed for the new missions, and the like circumstances of the practice, I may not do it, neither is it much to your desire. But thus you see we maintain a trade, not for gold, silver, or jewels, nor for silks, nor for spices, nor any other commodity of matter; but only for God's first creature, which was light; to have light, I say, of the growth of all parts of the world." And when he had said this, he was silent, and so were we all; for indeed we were all astonished to hear so strange things so probably told. And he perceiving that we were willing to say somewhat, but had it not ready, in great courtesy took us off, and descended to ask us questions of our voyage and fortunes, and in the end concluded that we might do well to think with ourselves, what time of stay we would demand of the state, and bade us not to scant ourselves; for he would procure such time as we desired. Whereupon we all rose up and presented ourselves to kiss the skirt of his tippet, but he would not suffer us, and so took his leave. But when it came once amongst our people, that the state used to offer conditions to strangers that would stay, we had work enough to get any of our men to look to our ship, and to keep them from going presently to the governor, to crave conditions; but with much ado we restrained them, till we might agree what course to take.

We took ourselves now for freemen, seeing there was no danger of our utter perdition, and lived most joyfully, going abroad and seeing what was to be seen in the city and places adjacent, within our tedder; and obtaining acquaintance with many of the city, not of the meanest quality, at whose hands we found such humanity, and such a freedom and desire to take strangers, as it were, into their bosom, as was enough to make us forget all that was dear to us in our own countries; and continually we met with many things, right worthy of observation and relation; as indeed, if there be a mirror in the world, worthy to hold men's eyes, it is that country. One day there were two of our company bidden to a feast of the family, as they call it; a most natural, pious, and reverend custom it is, showing that nation to be compounded of all goodness. This is the manner of it; it is granted to any man that shall live to see thirty persons descended of his body, alive together, and all above three years old, to make this feast, which is done at the cost of the state. The father of the family, whom they call the Tirsan, two days before the feast, taketh to him three of such friends as he liketh to choose, and is assisted also by the governor of the city or place where the feast is celebrated, and all the persons of the family, of both sexes, are summoned to attend him. These two days the Tirsan sitteth in consultation, concerning the good estate of the family. There, if there be any discord or suits between any of the family, they are compounded and appeased. There, if any of the family be distressed or decayed, order is taken for their relief, and competent means to live. There, if any be subject to vice, or take ill courses, they are reproved and censured. So likewise direction is given touching marriages, and the courses of life which any of them should take, with divers other the like orders and advices. The governor assisteth to the end, to put in execution, by his public authority, the decrees and orders of the Tirsan, if they should be disobeyed, though that seldom needeth; such reverence and obedience they give to the order of Nature. The Tirsan doth also then ever choose one man from amongst his sons, to live in house with him; who is called ever after the Son of the Vine. The reason will hereafter appear. On the feast day, the father or Tirsan cometh forth after divine service into a large room where the feast is celebrated; which room hath an half-pace at the upper end. Against the wall, in the middle of the half-pace, is a chair placed for him, with a table and carpet before it. Over the chair is a state, made round or oval, and it is of ivy; an ivy somewhat whiter than ours, like the leaf of a silver asp, but more

shining; for it is green all winter. And the state is curiously wrought with silver and silk of divers colours, broiding or binding in the ivy; and is ever of the work of some of the daughters of the family; and veiled over at the top, with a fine net of silk and silver. But the substance of it is true ivy; whereof after it is taken down, the friends of the family are desirous to have some leaf or sprig to keep. The Tirsan cometh forth with all his generation or lineage, the males before him, and the females following him; and if there be a mother, from whose body the whole lineage is descended, there is a traverse placed in a loft above on the right hand of the chair, with a privy door, and a carved window of glass, leaded with gold and blue; where she sitteth, but is not seen. When the Tirsan is come forth, he sitteth down in the chair; and all the lineage place themselves against the wall, both at his back, and upon the return of the half-pace, in order of their years, without difference of sex, and stand upon their feet. When he is set, the room being always full of company, but well kept and without disorder, after some pause there cometh in from the lower end of the room a Taratan (which is as much as an herald), and on either side of him two young lads: whereof one carrieth a scroll of their shining yellow parchment, and the other a cluster of grapes of gold, with a long foot or stalk. The herald and children are clothed with mantles of sea-water green satin; but the herald's mantle is streamered with gold, and hath a train. Then the herald with three curtsies, or rather inclinations, cometh up as far as the half-pace, and there first taketh into his hand the scroll. This scroll is the king's charter, containing gift of revenue, and many privileges, exemptions, and points of honour, granted to the father of the family; and it is ever styled and directed, "To such an one, our well-beloved friend and creditor," which is a title proper only to this case. For they say, the king is debtor to no man, but for propagation of his subjects; the seal set to the king's charter is the king's image, embossed or moulded in gold; and though such charters be expedited of course, and as of right, yet they are varied by discretion, according to the number and dignity of the family. This charter the herald readeth aloud; and while it is read, the father or Tirsan standeth up, supported by two of his sons, such as he chooseth. Then the herald mounteth the half-pace, and delivereth the charter into his hand: and with that there is an acclamation, by all that are present, in their language, which is thus much, "Happy are the people of Bensalem." Then the herald taketh into his hand from the other child the cluster of grapes, which is of gold; both the stalk, and

the grapes. But the grapes are daintily enamelled; and if the males of the family be the greater number, the grapes are enamelled purple, with a little sun set on the top; if the females, then they are enamelled into a greenish yellow, with a crescent on the top. The grapes are in number as many as there are descendants of the family. This golden cluster the herald delivereth also to the Tirsan; who presently delivereth it over to that son that he had formerly chosen, to be in house with him: who beareth it before his father, as an ensign of honour, when he goeth in public ever after; and is thereupon called the Son of the Vine. After this ceremony ended the father or Tirsan retireth; and after some time cometh forth again to dinner, where he sitteth alone under the state, as before; and none of his descendants sit with him, of what degree or dignity so ever, except he hap to be of Salomon's House. He is served only by his own children, such as are male; who perform unto him all service of the table upon the knee, and the women only stand about him, leaning against the wall. The room below his half-pace hath tables on the sides for the guests that are bidden; who are served with great and comely order; and towards the end of dinner (which in the greatest feasts with them lasteth never above an hour and a half) there is an hymn sung, varied according to the invention of him that composeth it (for they have excellent poesy), but the subject of it is always the praises of Adam, and Noah, and Abraham; whereof the former two peopled the world, and the last was the father of the faithful: concluding ever with a thanksgiving for the nativity of our Saviour, in whose birth the births of all are only blessed. Dinner being done, the Tirsan retireth again; and having withdrawn himself alone into a place, where he maketh some private prayers, he cometh forth the third time, to give the blessing; with all his descendants, who stand about him as at the first. Then he calleth them forth by one and by one, by name as he pleaseth, though seldom the order of age be inverted. The person that is called (the table being before removed) kneeleth down before the chair, and the father layeth his hand upon his head, or her head, and giveth the blessing in these words: "Son of Bensalem (or daughter of Bensalem), thy father saith it; the man by whom thou hast breath and life speaketh the word; the blessing of the everlasting Father, the Prince of Peace, and the Holy Dove be upon thee, and make the days of thy pilgrimage good and many." This he saith to every of them; and that done, if there be any of his sons of eminent merit and virtue, so they be not above two, he calleth for them again, and saith, laying his arm over their shoulders,

they standing: "Sons, it is well you are born, give God the praise, and persevere to the end." And withal delivereth to either of them a jewel, made in the figure of an ear of wheat, which they ever after wear in the front of their turban, or hat; this done, they fall to music and dances, and other recreations, after their manner, for the rest of the day. This is the full order of that feast.

By that time six or seven days were spent, I was fallen into straight acquaintance with a merchant of that city, whose name was Joabin. He was a Jew and circumcised; for they have some few stirps of Jews yet remaining among them, whom they leave to their own religion. Which they may the better do, because they are of a far differing disposition from the Jews in other parts. For whereas they hate the name of Christ, and have a secret inbred rancour against the people amongst whom they live; these, contrariwise, give unto our Saviour many high attributes, and love the nation of Bensalem extremely. Surely this man of whom I speak would ever acknowledge that Christ was born of a Virgin; and that He was more than a man; and he would tell how God made Him ruler of the seraphims, which guard His throne; and they call Him also the Milken Way, and the Eliah of the Messiah, and many other high names, which though they be inferior to His divine majesty, yet they are far from the language of other Jews. And for the country of Bensalem, this man would make no end of commending it, being desirous by tradition among the Jews there to have it believed that the people thereof were of the generations of Abraham, by another son, whom they call Nachoran; and that Moses by a secret cabala ordained the laws of Bensalem which they now use; and that when the Messias should come, and sit in His throne at Hierusalem, the King of Bensalem should sit at His feet, whereas other kings should keep a great distance. But yet setting aside these Jewish dreams, the man was a wise man and learned, and of great policy, and excellently seen in the laws and customs of that nation. Amongst other discourses one day I told him, I was much affected with the relation I had from some of the company of their custom in holding the feast of the family, for that, methought, I had never heard of a solemnity wherein Nature did so much preside. And because propagation of families proceedeth from the nuptial copulation, I desired to know of him what laws and customs they had concerning marriage, and whether they kept marriage well, and whether they

were tied to one wife? For that where population is so much affected, and such as with them it seemed to be, there is commonly permission of plurality of wives. To this he said: "You have reason for to commend that excellent institution of the feast of the family; and indeed we have experience, that those families that are partakers of the blessings of that feast, do flourish and prosper ever after, in an extraordinary manner. But hear me now, and I will tell you what I know. You shall understand that there is not under the heavens so chaste a nation as this of Bensalem, nor so free from all pollution or foulness. It is the virgin of the world; I remember, I have read in one of your European books, of an holy hermit amongst you, that desired to see the spirit of fornication, and there appeared to him a little foul ugly Ethiope; but if he had desired to see the spirit of chastity of Bensalem, it would have appeared to him in the likeness of a fair beautiful cherubim. For there is nothing, amongst mortal men, more fair and admirable than the chaste minds of this people. Know, therefore, that with them there are no stews, no dissolute houses, no courtezans, nor anything of that kind. Nay, they wonder, with detestation, at you in Europe, which permit such things. They say ye have put marriage out of office; for marriage is ordained a remedy for unlawful concupiscence; and natural concupiscence seemeth as a spur to marriage. But when men have at hand a remedy, more agreeable to their corrupt will, marriage is almost expulsed. And therefore there are with you seen infinite men that marry not, but choose rather a libertine and impure single life, than to be yoked in marriage; and many that do marry, marry late, when the prime and strength of their years is past. And when they do marry, what is marriage to them but a very bargain; wherein is sought alliance, or portion, or reputation, with some desire (almost indifferent) of issue; and not the faithful nuptial union of man and wife, that was first instituted. Neither is it possible, that those that have cast away so basely so much of their strength, should greatly esteem children (being of the same matter) as chaste men do. So likewise during marriage is the case much amended, as it ought to be if those things were tolerated only for necessity; no, but they remain still as a very affront to marriage. The haunting of those dissolute places, or resort to courtezans, are no more punished in married men than in bachelors. And the depraved custom of change, and the delight in meretricious embracements (where sin is turned into art), maketh marriage a dull thing, and a kind of imposition or tax. They hear you defend these things, as done to avoid greater

evils; as advoutries, deflowering of virgins, unnatural lust, and the like. But they say, this is a preposterous wisdom; and they call it Lot's offer, who to save his guests from abusing, offered his daughters; nay, they say further, that there is little gained in this; for that the same vices and appetites do still remain and abound, unlawful lust being like a furnace, that if you stop the flames altogether it will quench, but if you give it any vent it will rage; as for masculine love, they have no touch of it; and yet there are not so faithful and inviolate friendships in the world again as are there, and to speak generally (as I said before) I have not read of any such chastity in any people as theirs. And their usual saying is that whosoever is unchaste cannot reverence himself; and they say that the reverence of a man's self, is, next religion, the chiefest bridle of all vices." And when he had said this the good Jew paused a little; whereupon I, far more willing to hear him speak on than to speak myself; yet thinking it decent that upon his pause of speech I should not be altogether silent, said only this; that I would say to him, as the widow of Sarepta said to Elias: "that he was come to bring to memory our sins;" and that I confess the righteousness of Bensalem was greater than the righteousness of Europe. At which speech he bowed his head, and went on this manner: "They have also many wise and excellent laws, touching marriage. They allow no polygamy. They have ordained that none do intermarry, or contract, until a month be past from their first interview. Marriage without consent of parents they do not make void, but they mulct it in the inheritors; for the children of such marriages are not admitted to inherit above a third part of their parents' inheritance. I have read in a book of one of your men, of a feigned commonwealth, where the married couple are permitted, before they contract, to see one another naked. This they dislike; for they think it a scorn to give a refusal after so familiar knowledge; but because of many hidden defects in men and women's bodies, they have a more civil way; for they have near every town a couple of pools (which they call Adam and Eve's pools), where it is permitted to one of the friends of the man, and another of the friends of the woman, to see them severally bathe naked."

And as we were thus in conference, there came one that seemed to be a messenger, in a rich huke, that spake with the Jew; whereupon he turned to me, and said, "You will pardon me, for I am commanded away in haste." The

next morning he came to me again, joyful as it seemed, and said, "There is word come to the governor of the city, that one of the fathers of Salomon's House will be here this day seven-night; we have seen none of them this dozen years. His coming is in state; but the cause of his coming is secret. I will provide you and your fellows of a good standing to see his entry." I thanked him, and told him I was most glad of the news. The day being come he made his entry. He was a man of middle stature and age, comely of person, and had an aspect as if he pitied men. He was clothed in a robe of fine black cloth with wide sleeves, and a cape: his under garment was of excellent white linen down to the foot, girt with a girdle of the same; and a sindon or tippet of the same about his neck. He had gloves that were curious, and set with stone; and shoes of peach-coloured velvet. His neck was bare to the shoulders. His hat was like a helmet, or Spanish montero; and his locks curled below it decently; they were of colour brown. His beard was cut round and of the same colour with his hair, somewhat lighter. He was carried in a rich chariot, without wheels, litter-wise, with two horses at either end, richly trapped in blue velvet embroidered; and two footmen on each side in the like attire. The chariot was all of cedar, gilt and adorned with crystal; save that the fore-end had panels of sapphires, set in borders of gold, and the hinder-end the like of emeralds of the Peru colour. There was also a sun of gold, radiant upon the top, in the midst; and on the top before a small cherub of gold, with wings displayed. The chariot was covered with cloth of gold tissued upon blue. He had before him fifty attendants, young men all, in white satin loose coats up to the mid-leg, and stockings of white silk; and shoes of blue velvet; and hats of blue velvet, with fine plumes of divers colours, set round like hat-bands. Next before the chariot went two men, bare-headed, in linen garments down to the foot, girt, and shoes of blue velvet, who carried the one a crosier, the other a pastoral staff like a sheep-hook; neither of them of metal, but the crosier of balm-wood, the pastoral staff of cedar. Horsemen he had none, neither before nor behind his chariot; as it seemeth, to avoid all tumult and trouble. Behind his chariot went all the officers and principals of the companies of the city. He sat alone, upon cushions, of a kind of excellent plush, blue; and under his foot curious carpets of silk of divers colours, like the Persian, but far finer. He held up his bare hand, as he went, as blessing the people, but in silence. The street was wonderfully well kept; so that there was never any army had their men stand in better battle-array than the people

stood. The windows likewise were not crowded, but every one stood in them, as if they had been placed. When the show was passed, the Jew said to me, "I shall not be able to attend you as I would, in regard of some charge the city hath laid upon me for the entertaining of this great person." Three days after the Jew came to me again, and said, "Ye are happy men; for the father of Salomon's House taketh knowledge of your being here, and commanded me to tell you, that he will admit all your company to his presence, and have private conference with one of you, that ye shall choose; and for this hath appointed the next day after to-morrow. And because he meaneth to give you his blessing, he hath appointed it in the forenoon." We came at our day and hour, and I was chosen by my fellows for the private access. We found him in a fair chamber, richly hanged, and carpeted under foot, without any degrees to the state; he was set upon a low throne richly adorned, and a rich cloth of state over his head of blue satin embroidered. He was alone, save that he had two pages of honour, on either hand one, finely attired in white. His under garments were the like that we saw him wear in the chariot; but instead of his gown, he had on him a mantle with a cape, of the same fine black, fastened about him. When we came in, as we were taught, we bowed low at our first entrance; and when we were come near his chair, he stood up, holding forth his hand ungloved, and in posture of blessing; and we every one of us stooped down, and kissed the end of his tippet. That done, the rest departed, and I remained. Then he warned the pages forth of the room, and caused me to sit down beside him, and spake to me thus in the Spanish tongue:

"God bless thee, my son; I will give thee the greatest jewel I have. For I will impart unto thee, for the love of God and men, a relation of the true state of Salomon's House. Son, to make you know the true state of Salomon's House, I will keep this order. First, I will set forth unto you the end of our foundation. Secondly, the preparations and instruments we have for our works. Thirdly, the several employments and functions whereto our fellows are assigned. And fourthly, the ordinances and rites which we observe.

"The end of our foundation is the knowledge of causes, and secret motions of things; and the enlarging of the bounds of human empire, to the effecting of all things possible.

"The preparations and instruments are these. We have large and deep caves of

several depths; the deepest are sunk 600 fathoms; and some of them are digged and made under great hills and mountains; so that if you reckon together the depth of the hill, and the depth of the cave, they are, some of them, above three miles deep. For we find that the depth of an hill, and the depth of a cave from the flat, is the same thing; both remote alike from the sun and heaven's beams, and from the open air. These caves we call the lower region. And we use them for all coagulations, indurations, refrigerations, and conservations of bodies. We use them likewise for the imitation of natural mines and the producing also of new artificial metals, by compositions and materials which we use and lay there for many years. We use them also sometimes (which may seem strange) for curing of some diseases, and for prolongation of life, in some hermits that choose to live there, well accommodated of all things necessary, and indeed live very long; by whom also we learn many things.

"We have burials in several earths, where we put divers cements, as the Chinese do their porcelain. But we have them in greater variety, and some of them more fine. We also have great variety of composts and soils, for the making of the earth fruitful.

"We have high towers, the highest about half a mile in height, and some of them likewise set upon high mountains, so that the vantage of the hill with the tower, is in the highest of them three miles at least. And these places we call the upper region, account the air between the high places and the low, as a middle region. We use these towers, according to their several heights and situations, for insulation, refrigeration, conservation, and for the view of divers meteors—as winds, rain, snow, hail; and some of the fiery meteors also. And upon them, in some places, are dwellings of hermits, whom we visit sometimes, and instruct what to observe.

"We have great lakes, both salt and fresh, whereof we have use for the fish and fowl. We use them also for burials of some natural bodies, for we find a difference in things buried in earth, or in air below the earth, and things buried in water. We have also pools, of which some do strain fresh water out of salt, and others by art do turn fresh water into salt. We have also some rocks in the midst of the sea, and some bays upon the shore for some works, wherein is required the air and vapour of the sea. We have likewise violent

streams and cataracts, which serve us for many motions; and likewise engines for multiplying and enforcing of winds to set also on divers motions.

"We have also a number of artificial wells and fountains, made in imitation of the natural sources and baths, as tinted upon vitriol, sulphur, steel, brass, lead, nitre, and other minerals; and again, we have little wells for infusions of many things, where the waters take the virtue quicker and better than in vessels or basins. And amongst them we have a water, which we call water of Paradise, being by that we do it made very sovereign for health and prolongation of life.

"We have also great and spacious houses, where we imitate and demonstrate meteors—as snow, hail, rain, some artificial rains of bodies, and not of water, thunders, lightnings; also generations of bodies in air—as frogs, flies, and divers others.

"We have also certain chambers, which we call chambers of health, where we qualify the air as we think good and proper for the cure of divers diseases, and preservation of health.

"We have also fair and large baths, of several mixtures, for the cure of diseases, and the restoring of man's body from arefaction; and others for the confirming of it in strength of sinews, vital parts, and the very juice and substance of the body.

"We have also large and various orchards and gardens, wherein we do not so much respect beauty as variety of ground and soil, proper for divers trees and herbs, and some very spacious, where trees and berries are set, whereof we make divers kinds of drinks, besides the vineyards. In these we practise likewise all conclusions of grafting, and inoculating, as well of wild-trees as fruit-trees, which produceth many effects. And we make by art, in the same orchards and gardens, trees and flowers, to come earlier or later than their seasons, and to come up and bear more speedily than by their natural course they do. We make them also by art greater much than their nature; and their fruit greater and sweeter, and of differing taste, smell, colour, and figure, from their nature. And many of them we so order, as that they become of medicinal use.

"We have also means to make divers plants rise by mixtures of earths without

seeds, and likewise to make divers new plants, differing from the vulgar, and to make one tree or plant turn into another.

"We have also parks, and enclosures of all sorts, of beasts and birds; which we use not only for view or rareness, but likewise for dissections and trials, that thereby may take light what may be wrought upon the body of man. Wherein we find many strange effects: as continuing life in them, though divers parts, which you account vital, be perished and taken forth; resuscitating of some that seem dead in appearance, and the like. We try also all poisons, and other medicines upon them, as well of chirurgery as physick. By art likewise we make them greater or smaller than their kind is, and contrariwise dwarf them and stay their growth; we make them more fruitful and bearing than their kind is, and contrariwise barren and not generative. Also we make them differ in colour, shape, activity, many ways. We find means to make commixtures and copulations of divers kinds, which have produced many new kinds, and them not barren, as the general opinion is. We make a number of kinds of serpents, worms, flies, fishes of putrefaction, whereof some are advanced (in effect) to be perfect creatures, like beasts or birds, and have sexes, and do propagate. Neither do we this by chance, but we know beforehand of what matter and commixture, what kind of those creatures will arise.

"We have also particular pools where we make trials upon fishes, as we have said before of beasts and birds.

"We have also places for breed and generation of those kinds of worms and flies which are of special use; such as are with you your silkworms and bees.

"I will not hold you long with recounting of our brew-houses, bake-houses, and kitchens, where are made divers drinks, breads, and meats, rare and of special effects. Wines we have of grapes, and drinks of other juice, of fruits, of grains, and of roots, and of mixtures with honey, sugar, manna, and fruits dried and decocted; also of the tears or wounding of trees, and of the pulp of canes. And these drinks are of several ages, some to the age or last of forty years. We have drinks also brewed with several herbs, and roots, and spices; yea, with several fleshs, and white-meats; whereof some of the drinks are such as they are in effect meat and drink both, so that divers, especially in age, do desire to live with them with little or no meat or bread. And above all

we strive to have drinks of extreme thin parts, to insinuate into the body, and yet without all biting, sharpness, or fretting; insomuch as some of them put upon the back of your hand, will with a little stay pass through to the palm, and yet taste mild to the mouth. We have also waters, which we ripen in that fashion, as they become nourishing, so that they are indeed excellent drinks, and many will use no other. Bread we have of several grains, roots, and kernels; yea, and some of flesh, and fish, dried; with divers kinds of leavings and seasonings; so that some do extremely move appetites, some do nourish so, as divers do live of them, without any other meat, who live very long. So for meats, we have some of them so beaten, and made tender, and mortified, yet without all corrupting, as a weak heat of the stomach will turn them into good chylus, as well as a strong heat would meat otherwise prepared. We have some meats also and bread, and drinks, which taken by men, enable them to fast long after; and some other, that used make the very flesh of men's bodies sensibly more hard and tough, and their strength far greater than otherwise it would be.

"We have dispensatories or shops of medicines; wherein you may easily think, if we have such variety of plants, and living creatures, more than you have in Europe (for we know what you have), the simples, drugs, and ingredients of medicines, must likewise be in so much the greater variety. We have them likewise of divers ages, and long fermentations. And for their preparations, we have not only all manner of exquisite distillations, and separations, and especially by gentle heats, and percolations through divers strainers, yea, and substances; but also exact forms of composition, whereby they incorporate almost as they were natural simples.

"We have also divers mechanical arts, which you have not; and stuffs made by them, as papers, linen, silks, tissues, dainty works of feathers of wonderful lustre, excellent dyes, and many others, and shops likewise as well for such as are not brought into vulgar use amongst us, as for those that are. For you must know, that of the things before recited, many of them are grown into use throughout the kingdom, but yet, if they did flow from our invention, we have of them also for patterns and principals.

"We have also furnaces of great diversities, and that keep great diversity of heats; fierce and quick, strong and constant, soft and mild, blown, quiet, dry,

moist, and the like. But above all we have heats, in imitation of the sun's and heavenly bodies' heats, that pass divers inequalities, and as it were orbs, progresses, and returns whereby we produce admirable effects. Besides, we have heats of dung, and of bellies and maws of living creatures and of their bloods and bodies, and of hays and herbs laid up moist, of lime unquenched, and such like. Instruments also which generate heat only by motion. And farther, places for strong insulations; and again, places under the earth, which by nature or art yield heat. These divers heats we use, as the nature of the operation which we intend requireth.

"We have also perspective-houses, where we make demonstrations of all lights and radiations, and of all colours; and out of things uncoloured and transparent, we can represent unto you all several colours, not in rainbows, as it is in gems and prisms, but of themselves single. We represent also all multiplications of light, which we carry to great distance, and make so sharp, as to discern small points and lines. Also all colourations of light: all delusions and deceits of the sight, in figures, magnitudes, motions, colours; all demonstrations of shadows. We find also divers means, yet unknown to you, of producing of light, originally from divers bodies. We procure means of seeing objects afar off, as in the heaven and remote places; and represent things near as afar off, and things afar off as near; making feigned distances. We have also helps for the sight far above spectacles and glasses in use; we have also glasses and means to see small and minute bodies, perfectly and distinctly; as the shapes and colours of small flies and worms, grains, and flaws in gems, which cannot otherwise be seen, observations in urine and blood not otherwise to be seen. We make artificial rainbows, halos, and circles about light. We represent also all manner of reflections, refractions, and multiplications of visual beams of objects.

"We have also precious stones, of all kinds, many of them of great beauty and to you unknown; crystals likewise, and glasses of divers kind; and amongst them some of metals vitrified, and other materials, besides those of which you make glass. Also a number of fossils, and imperfect minerals, which you have not. Likewise loadstones of prodigious virtue: and other rare stones, both natural and artificial.

"We have also sound-houses, where we practise and demonstrate all sounds

and their generation. We have harmony which you have not, of quarter-sounds and lesser slides of sounds. Divers instruments of music likewise to you unknown, some sweeter than any you have; with bells and rings that are dainty and sweet. We represent small sounds as great and deep, likewise great sounds, extenuate and sharp; we make divers tremblings and warblings of sounds, which in their original are entire. We represent and imitate all articulate sounds and letters, and the voices and notes of beasts and birds. We have certain helps, which set to the ear do further the hearing greatly; we have also divers strange and artificial echoes, reflecting the voice many times, and as it were tossing it; and some that give back the voice louder than it came, some shriller and some deeper; yea, some rendering the voice, differing in the letters or articulate sound from that they receive. We have all means to convey sounds in trunks and pipes, in strange lines and distances.

"We have also perfume-houses, wherewith we join also practices of taste. We multiply smells which may seem strange: we imitate smells, making all smells to breathe out of other mixtures than those that give them. We make divers imitations of taste likewise, so that they will deceive any man's taste. And in this house we contain also a confiture-house, where we make all sweetmeats, dry and moist, and divers pleasant wines, milks, broths, and salads, far in greater variety than you have.

"We have also engine-houses, where are prepared engines and instruments for all sorts of motions. There we imitate and practise to make swifter motions than any you have, either out of your muskets or any engine that you have; and to make them and multiply them more easily and with small force, by wheels and other means, and to make them stronger and more violent than yours are, exceeding your greatest cannons and basilisks. We represent also ordnance and instruments of war and engines of all kinds; and likewise new mixtures and compositions of gunpowder, wild-fires burning in water and unquenchable, also fire-works of all variety, both for pleasure and use. We imitate also flights of birds; we have some degrees of flying in the air. We have ships and boats for going under water and brooking of seas, also swimming-girdles and supporters. We have divers curious clocks and other like motions of return, and some perpetual motions. We imitate also motions of living creatures by images of men, beasts, birds, fishes, and serpents; we have also a great number of other various motions, strange for equality,

fineness and subtilty.

"We have also a mathematical-house, where are represented all instruments, as well of geometry as astronomy, exquisitely made.

"We have also houses of deceits of the senses, where we represent all manner of feats of juggling, false apparitions, impostures and illusions, and their fallacies. And surely you will easily believe that we, that have so many things truly natural which induce admiration, could in a world of particulars deceive the senses if we would disguise those things, and labour to make them more miraculous. But we do hate all impostures and lies, insomuch as we have severely forbidden it to all our fellows, under pain of ignominy and fines, that they do not show any natural work or thing adorned or swelling, but only pure as it is, and without all affectation of strangeness.

"These are, my son, the riches of Salomon's House.

"For the several employments and offices of our fellows, we have twelve that sail into foreign countries under the names of other nations (for our own we conceal), who bring us the books and abstracts, and patterns of experiments of all other parts. These we call merchants of light.

"We have three that collect the experiments which are in all books. These we call deprepators.

"We have three that collect the experiments of all mechanical arts, and also of liberal sciences, and also of practices which are not brought into arts. These we call mystery-men.

"We have three that try new experiments.

"Such as themselves think good. These we call pioneers or miners.

"We have three that draw the experiments of the former four into titles and tables, to give the better light for the drawing of observations and axioms out of them. These we call compilers. We have three that bend themselves, looking into the experiments of their fellows, and cast about how to draw out of them things of use and practice for man's life and knowledge, as well for works as for plain demonstration of causes, means of natural divinations, and the easy and clear discovery of the virtues and parts of bodies. These we call

dowry-men or benefactors.

"Then after divers meetings and consults of our whole number, to consider of the former labours and collections, we have three that take care out of them to direct new experiments, of a higher light, more penetrating into Nature than the former. These we call lamps.

"We have three others that do execute the experiment so directed, and report them. These we call inoculators.

"Lastly, we have three that raise the former discoveries by experiments into greater observations, axioms, and aphorisms. These we call interpreters of Nature.

"We have also, as you must think, novices and apprentices, that the succession of the former employed men do not fail; besides a great number of servants and attendants, men and women. And this we do also: we have consultations, which of the inventions and experiences which we have discovered shall be published, and which not: and take all an oath of secrecy for the concealing of those which we think fit to keep secret: though some of those we do reveal sometime to the state, and some not.

"For our ordinances and rites, we have two very long and fair galleries: in one of these we place patterns and samples of all manner of the more rare and excellent inventions: in the other we place the statues of all principal inventors. There we have the statue of your Columbus, that discovered the West Indies: also the inventor of ships: your Monk that was the inventor of ordnance and of gunpowder: the inventor of music: the inventor of letters: the inventor of printing: the inventor of observations of astronomy: the inventor of works in metal: the inventor of glass: the inventor of silk of the worm: the inventor of wine: the inventor of corn and bread: the inventor of sugars; and all these by more certain tradition than you have. Then we have divers inventors of our own, of excellent works; which since you have not seen, it were too long to make descriptions of them; and besides, in the right understanding of those descriptions you might easily err. For upon every invention of value we erect a statue to the inventor, and give him a liberal and honourable reward. These statues are some of brass, some of marble and touchstone, some of cedar and other special woods gilt and adorned; some of

iron, some of silver, some of gold.

"We have certain hymns and services, which we say daily, of laud and thanks to God for His marvellous works. And forms of prayers, imploring His aid and blessing for the illumination of our labours; and turning them into good and holy uses.

"Lastly, we have circuits or visits, of divers principal cities of the kingdom; where as it cometh to pass we do publish such new profitable inventions as we think good. And we do also declare natural divinations of diseases, plagues, swarms of hurtful creatures, scarcity, tempest, earthquakes, great inundations, comets, temperature of the year, and divers other things; and we give counsel thereupon, what the people shall do for the prevention and remedy of them."

And when he had said this, he stood up; and I, as I had been taught, knelt down; and he laid his right hand upon my head, and said, "God bless thee, my son, and God bless this relation which I have made. I give thee leave to publish it, for the good of other nations; for we here are in God's bosom, a land unknown." And so he left me; having assigned a value of about two thousand ducats for a bounty to me and my fellows. For they give great largesses, where they come, upon all occasions.

THE REST WAS NOT PERFECTED.

CAMPANELLA'S CITY OF THE SUN.

THE CITY OF THE SUN.

A Poetical Dialogue between a Grandmaster of the Knights Hospitallers and a Genoese Sea-captain, his guest.

G.M. Prithée, now, tell me what happened to you during that voyage?

Capt. I have already told you how I wandered over the whole earth. In the course of my journeying I came to Taprobane, and was compelled to go ashore at a place, where through fear of the inhabitants I remained in a wood. When I stepped out of this I found myself on a large plain immediately under the equator.

G.M. And what befell you here?

Capt. I came upon a large crowd of men and armed women, many of whom did not understand our language, and they conducted me forthwith to the City of the Sun.

G.M. Tell me after what plan this city is built and how it is governed?

Capt. The greater part of the city is built upon a high hill, which rises from an extensive plain, but several of its circles extend for some distance beyond the base of the hill, which is of such a size that the diameter of the city is upwards of two miles, so that its circumference becomes about seven. On account of the humped shape of the mountain, however, the diameter of the city is really more than if it were built on a plain.

It is divided into seven rings or huge circles named from the seven planets, and the way from one to the other of these is by four streets and through four gates, that look towards the four points of the compass. Furthermore, it is so built that if the first circle were stormed, it would of necessity entail a double amount of energy to storm the second; still more to storm the third; and in

each succeeding case the strength and energy would have to be doubled; so that he who wishes to capture that city must, as it were, storm it seven times. For my own part, however, I think that not even the first wall could be occupied, so thick are the earthworks and so well fortified is it with breastworks, towers, guns and ditches.

When I had been taken through the northern gate (which is shut with an iron door so wrought that it can be raised and let down, and locked in easily and strongly, its projections running into the grooves of the thick posts by a marvellous device), I saw a level space seventy paces^[1] wide between the first and second walls. From hence can be seen large palaces all joined to the wall of the second circuit, in such a manner as to appear all one palace. Arches run on a level with the middle height of the palaces, and are continued round the whole ring. There are galleries for promenading upon these arches, which are supported from beneath by thick and well-shaped columns, enclosing arcades like peristyles, or cloisters of an abbey.

[1] A pace was 1-9/25 yards, 1,000 paces making a mile.

But the palaces have no entrances from below, except on the inner or concave partition, from which one enters directly to the lower parts of the building. The higher parts, however, are reached by flights of marble steps, which lead to galleries for promenading on the inside similar to those on the outside. From these one enters the higher rooms, which are very beautiful, and have windows on the concave and convex partitions. These rooms are divided from one another by richly decorated walls. The convex or outer wall of the ring is about eight spans thick; the concave, three; the intermediate walls are one, or perhaps one and a half. Leaving this circle one gets to the second plain, which is nearly three paces narrower than the first. Then the first wall of the second ring is seen adorned above and below with similar galleries for walking, and there is on the inside of it another interior wall enclosing palaces. It has also similar peristyles supported by columns in the lower part, but above are excellent pictures, round the ways into the upper houses. And so on afterwards through similar spaces and double walls, enclosing palaces, and adorned with galleries for walking, extending along their outer side, and supported by columns, till the last circuit is reached, the way being still over a level plain.

But when the two gates, that is to say, those of the outmost and the inmost walls, have been passed, one mounts by means of steps so formed that an ascent is scarcely discernible, since it proceeds in a slanting direction, and the steps succeed one another at almost imperceptible heights. On the top of the hill is a rather spacious plain, and in the midst of this there rises a temple built with wondrous art.

G.M. Tell on, I pray you! Tell on! I am dying to hear more.

Capt. The temple is built in the form of a circle; it is not girt with walls, but stands upon thick columns, beautifully grouped. A very large dome, built with great care in the centre or pole, contains another small vault as it were rising out of it, and in this is a spiracle, which is right over the altar. There is but one altar in the middle of the temple, and this is hedged round by columns. The temple itself is on a space of more than three hundred and fifty paces. Without it, arches measuring about eight paces extend from the heads of the columns outwards, whence other columns rise about three paces from the thick, strong and erect wall. Between these and the former columns there are galleries for walking, with beautiful pavements, and in the recess of the wall, which is adorned with numerous large doors, there are immovable seats, placed as it were between the inside columns, supporting the temple. Portable chairs are not wanting, many and well adorned. Nothing is seen over the altar but a large globe, upon which the heavenly bodies are painted, and another globe upon which there is a representation of the earth. Furthermore, in the vault of the dome there can be discerned representations of all the stars of heaven from the first to the sixth magnitude, with their proper names and power to influence terrestrial things marked in three little verses for each. There are the poles and greater and lesser circles according to the right latitude of the place, but these are not perfect because there is no wall below. They seem, too, to be made in their relation to the globes on the altar. The pavement of the temple is bright with precious stones. Its seven golden lamps hang always burning, and these bear the names of the seven planets.

At the top of the building several small and beautiful cells surround the small dome, and behind the level space above the bands or arches of the exterior and interior columns there are many cells, both small and large, where the priests and religious officers dwell to the number of forty-nine.

A revolving flag projects from the smaller dome, and this shows in what quarter the wind is. The flag is marked with figures up to thirty-six, and the priests know what sort of year the different kinds of winds bring and what will be the changes of weather on land and sea. Furthermore, under the flag a book is always kept written with letters of gold.

G.M. I pray you, worthy hero, explain to me their whole system of government; for I am anxious to hear it.

Capt. The great ruler among them is a priest whom they call by the name HOH, though we should call him Metaphysic. He is head over all, in temporal and spiritual matters, and all business and lawsuits are settled by him, as the supreme authority. Three princes of equal power—viz., Pon, Sin and Mor—assist him, and these in our tongue we should call POWER, WISDOM and LOVE. To POWER belongs the care of all matters relating to war and peace. He attends to the military arts, and, next to Hoh, he is ruler in every affair of a warlike nature. He governs the military magistrates and the soldiers, and has the management of the munitions, the fortifications, the storming of places, the implements of war, the armories, the smiths and workmen connected with matters of this sort.

But WISDOM is the ruler of the liberal arts, of mechanics, of all sciences with their magistrates and doctors, and of the discipline of the schools. As many doctors as there are, are under his control. There is one doctor who is called Astrologus; a second, Cosmographus; a third, Arithmeticus; a fourth, Geometra; a fifth, Historiographus; a sixth, Poeta; a seventh, Logicus; an eighth, Rhetor; a ninth, Grammaticus; a tenth, Medicus; an eleventh, Physiologus; a twelfth, Politicus; a thirteenth, Moralis. They have but one book, which they call Wisdom, and in it all the sciences are written with conciseness and marvellous fluency of expression. This they read to the people after the custom of the Pythagoreans. It is Wisdom who causes the exterior and interior, the higher and lower walls of the city to be adorned with the finest pictures, and to have all the sciences painted upon them in an admirable manner. On the walls of the temple and on the dome, which is let down when the priest gives an address, lest the sounds of his voice, being scattered, should fly away from his audience, there are pictures of stars in their different magnitudes, with the powers and motions of each, expressed

separately in three little verses.

On the interior wall of the first circuit all the mathematical figures are conspicuously painted—figures more in number than Archimedes or Euclid discovered, marked symmetrically, and with the explanation of them neatly written and contained each in a little verse. There are definitions and propositions, &c. &c. On the exterior convex wall is first an immense drawing of the whole earth, given at one view. Following upon this, there are tablets setting forth for every separate country the customs both public and private, the laws, the origins and the power of the inhabitants; and the alphabets the different people use can be seen above that of the City of the Sun.

On the inside of the second circuit, that is to say of the second ring of buildings, paintings of all kinds of precious and common stones, of minerals and metals, are seen; and a little piece of the metal itself is also there with an apposite explanation in two small verses for each metal or stone. On the outside are marked all the seas, rivers, lakes and streams which are on the face of the earth; as are also the wines and the oils and the different liquids, with the sources from which the last are extracted, their qualities and strength. There are also vessels built into the wall above the arches, and these are full of liquids from one to three hundred years old, which cure all diseases. Hail and snow, storms and thunder, and whatever else takes place in the air, are represented with suitable figures and little verses. The inhabitants even have the art of representing in stone all the phenomena of the air, such as the wind, rain, thunder, the rainbow, &c.

On the interior of the third circuit all the different families of trees and herbs are depicted, and there is a live specimen of each plant in earthenware vessels placed upon the outer partition of the arches. With the specimens there are explanations as to where they were first found, what are their powers and natures, and resemblances to celestial things and to metals: to parts of the human body and to things in the sea, and also as to their uses in medicine, &c. On the exterior wall are all the races of fish, found in rivers, lakes and seas, and their habits and values, and ways of breeding, training and living, the purposes for which they exist in the world, and their uses to man. Further, their resemblances to celestial and terrestrial things, produced both by nature

and art, are so given that I was astonished when I saw a fish which was like a bishop, one like a chain, another like a garment, a fourth like a nail, a fifth like a star, and others like images of those things existing among us, the relation in each case being completely manifest. There are sea-urchins to be seen, and the purple shell-fish and mussels; and whatever the watery world possesses worthy of being known is there fully shown in marvellous characters of painting and drawing.

On the fourth interior wall all the different kinds of birds are painted, with their natures, sizes, customs, colours, manner of living, &c.; and the only real phoenix is possessed by the inhabitants of this city. On the exterior are shown all the races of creeping animals, serpents, dragons and worms; the insects, the flies, gnats, beetles, &c., in their different states, strength, venoms and uses, and a great deal more than you or I can think of.

On the fifth interior they have all the larger animals of the earth, as many in number as would astonish you. We indeed know not the thousandth part of them, for on the exterior wall also a great many of immense size are also portrayed. To be sure, of horses alone, how great a number of breeds there is and how beautiful are the forms there cleverly displayed!

On the sixth interior are painted all the mechanical arts, with the several instruments for each and their manner of use among different nations. Alongside the dignity of such is placed, and their several inventors are named. But on the exterior all the inventors in science, in warfare, and in law are represented. There I saw Moses, Osiris, Jupiter, Mercury, Lycurgus, Pompilius, Pythagoras, Zamolxis, Solon, Charondas, Phoroneus, with very many others. They even have Mahomet, whom nevertheless they hate as a false and sordid legislator. In the most dignified position I saw a representation of Jesus Christ and of the twelve Apostles, whom they consider very worthy and hold to be great. Of the representations of men, I perceived Cæsar, Alexander, Pyrrhus and Hannibal in the highest place; and other very renowned heroes in peace and war, especially Roman heroes, were painted in lower positions, under the galleries. And when I asked with astonishment whence they had obtained our history, they told me that among them there was a knowledge of all languages, and that by perseverance they continually send explorers and ambassadors over the whole earth, who learn

thoroughly the customs, forces, rule and histories of the nations, bad and good alike. These they apply all to their own republic, and with this they are well pleased. I learnt that cannon and typography were invented by the Chinese before we knew of them. There are magistrates, who announce the meaning of the pictures, and boys are accustomed to learn all the sciences, without toil and as if for pleasure; but in the way of history only until they are ten years old.

LOVE is foremost in attending to the charge of the race. He sees that men and women are so joined together, that they bring forth the best offspring. Indeed, they laugh at us who exhibit a studious care for our breed of horses and dogs, but neglect the breeding of human beings. Thus the education of the children is under his rule. So also is the medicine that is sold, the sowing and collecting of fruits of the earth and of trees, agriculture, pasturage, the preparations for the months, the cooking arrangements, and whatever has any reference to food, clothing, and the intercourse of the sexes. Love himself is ruler, but there are many male and female magistrates dedicated to these arts.

Metaphysic then with these three rulers manage all the above-named matters, and even by himself alone nothing is done; all business is discharged by the four together, but in whatever Metaphysic inclines to the rest are sure to agree.

G.M. Tell me, please, of the magistrates, their services and duties, of the education and mode of living, whether the government is a monarchy, a republic, or an aristocracy.

Capt. This race of men came there from India, flying from the sword of the Magi, a race of plunderers and tyrants who laid waste their country, and they determined to lead a philosophic life in fellowship with one another. Although the community of wives is not instituted among the other inhabitants of their province, among them it is in use after this manner. All things are common with them, and their dispensation is by the authority of the magistrates. Arts and honours and pleasures are common, and are held in such a manner that no one can appropriate anything to himself.

They say that all private property is acquired and improved for the reason that each one of us by himself has his own home and wife and children. From this

self-love springs. For when we raise a son to riches and dignities, and leave an heir to much wealth, we become either ready to grasp at the property of the state, if in any case fear should be removed from the power which belongs to riches and rank; or avaricious, crafty, and hypocritical, if any one is of slender purse, little strength, and mean ancestry. But when we have taken away self-love, there remains only love for the state.

G.M. Under such circumstances no one will be willing to labour, while he expects others to work, on the fruit of whose labours he can live, as Aristotle argues against Plato.

Capt. I do not know how to deal with that argument, but I declare to you that they burn with so great a love for their fatherland, as I could scarcely have believed possible; and indeed with much more than the histories tell us belonged to the Romans, who fell willingly for their country, inasmuch as they have to a greater extent surrendered their private property. I think truly that the friars and monks and clergy of our country, if they were not weakened by love for their kindred and friends, or by the ambition to rise to higher dignities, would be less fond of property, and more imbued with a spirit of charity towards all, as it was in the time of the Apostles, and is now in a great many cases.

G.M. St. Augustine may say that, but I say that among this race of men, friendship is worth nothing; since they have not the chance of conferring mutual benefits on one another.

Capt. Nay, indeed. For it is worth the trouble to see that no one can receive gifts from another. Whatever is necessary they have, they receive it from the community, and the magistrate takes care that no one receives more than he deserves. Yet nothing necessary is denied to any one. Friendship is recognized among them in war, in infirmity, in the art contests, by which means they aid one another mutually by teaching. Sometimes they improve themselves mutually with praises, with conversation, with actions and out of the things they need. All those of the same age call one another brothers. They call all over twenty-two years of age, fathers; those who are less than twenty-two are named sons. Moreover, the magistrates govern well, so that no one in the fraternity can do injury to another.

G.M. And how?

Capt. As many names of virtues as there are amongst us, so many magistrates there are among them. There is a magistrate who is named Magnanimity, another Fortitude, a third Chastity, a fourth Liberality, a fifth Criminal and Civil Justice, a sixth Comfort, a seventh Truth, an eighth Kindness, a tenth Gratitude, an eleventh Cheerfulness, a twelfth Exercise, a thirteenth Sobriety, &c. They are elected to duties of that kind, each one to that duty for excellence in which he is known from boyhood to be most suitable. Wherefore among them neither robbery nor clever murders, nor lewdness, incest, adultery, or other crimes of which we accuse one another, can be found. They accuse themselves of ingratitude and malignity when any one denies a lawful satisfaction to another, of indolence, of sadness, of anger, of scurrility, of slander, and of lying, which curseful thing they thoroughly hate. Accused persons undergoing punishment are deprived of the common table, and other honours, until the judge thinks that they agree with their correction.

G.M. Tell me the manner in which the magistrates are chosen.

Capt. You would not rightly understand this, unless you first learnt their manner of living. That you may know then, men and women wear the same kind of garment, suited for war. The women wear the toga below the knee, but the men above. And both sexes are instructed in all the arts together. When this has been done as a start, and before their third year, the boys learn the language and the alphabet on the walls by walking round them. They have four leaders, and four elders, the first to direct them, the second to teach them, and these are men approved beyond all others. After some time they exercise themselves with gymnastics, running, quoits, and other games, by means of which all their muscles are strengthened alike. Their feet are always bare, and so are their heads as far as the seventh ring. Afterwards they lead them to the offices of the trades, such as shoemaking, cooking, metal-working, carpentry, painting, &c. In order to find out the bent of the genius of each one, after their seventh year, when they have already gone through the mathematics on the walls, they take them to the readings of all the sciences; there are four lectures at each reading, and in the course of four hours the four in their order explain everything.

For some take physical exercise or busy themselves with public services or

functions, others apply themselves to reading. Leaving these studies all are devoted to the more abstruse subjects, to mathematics, to medicine, and to other sciences. There is continual debate and studied argument amongst them, and after a time they become magistrates of those sciences or mechanical arts in which they are the most proficient; for every one follows the opinion of his leader and judge, and goes out to the plains to the works of the field, and for the purpose of becoming acquainted with the pasturage of the dumb animals. And they consider him the more noble and renowned who has dedicated himself to the study of the most arts and knows how to practise them wisely. Wherefore they laugh at us in that we consider our workmen ignoble, and hold those to be noble who have mastered no pursuit; but live in ease, and are so many slaves given over to their own pleasure and lasciviousness; and thus as it were from a school of vices so many idle and wicked fellows go forth for the ruin of the state.

The rest of the officials, however, are chosen by the four chiefs, Hoh, Pon, Sin and Mor, and by the teachers of that art over which they are fit to preside. And these teachers know well who is most suited for rule. Certain men are proposed by the magistrates in council, they themselves not seeking to become candidates, and he opposes who knows anything against those brought forward for election, or if not, speaks in favour of them. But no one attains to the dignity of Hoh except him who knows the histories of the nations, and their customs and sacrifices and laws, and their form of government, whether a republic or a monarchy. He must also know the names of the lawgivers and the inventors in science, and the laws and the history of the earth and the heavenly bodies. They think it also necessary that he should understand all the mechanical arts, the physical sciences, astrology and mathematics. (Nearly every two days they teach our mechanical art. They are not allowed to overwork themselves, but frequent practice and the paintings render learning easy to them. Not too much care is given to the cultivation of languages, as they have a goodly number of interpreters who are grammarians in the state.) But beyond everything else it is necessary that Hoh should understand metaphysics and theology; that he should know thoroughly the derivations, foundations and demonstrations of all the arts and sciences; the likeness and difference of things; necessity, fate, and the harmonies of the universe; power, wisdom, and the love of things and of

God; the stages of life and its symbols; everything relating to the heavens, the earth and the sea; and the ideas of God, as much as mortal man can know of Him. He must also be well read in the Prophets and in astrology. And thus they know long beforehand who will be Hoh. He is not chosen to so great a dignity unless he has attained his thirty-fifth year. And this office is perpetual, because it is not known who may be too wise for it or who too skilled in ruling.

G.M. Who indeed can be so wise? If even any one has a knowledge of the sciences it seems that he must be unskilled in ruling.

Capt. This very question I asked them and they replied thus: "We, indeed, are more certain that such a very learned man has the knowledge of governing, than you who place ignorant persons in authority, and consider them suitable merely because they have sprung from rulers or have been chosen by a powerful faction. But our Hoh, a man really the most capable to rule, is for all that never cruel nor wicked, nor a tyrant, inasmuch as he possesses so much wisdom. This, moreover, is not unknown to you, that the same argument cannot apply among you, when you consider that man the most learned who knows most of grammar, or logic, or of Aristotle or any other author. For such knowledge as this of yours much servile labour and memory work is required, so that a man is rendered unskilful; since he has contemplated nothing but the words of books and has given his mind with useless result to the consideration of the dead signs of things. Hence he knows not in what way God rules the universe, nor the ways and customs of Nature and the nations. Wherefore he is not equal to our HOH. For that one cannot know so many arts and sciences thoroughly, who is not esteemed for skilled ingenuity, very apt at all things, and therefore at ruling especially. This also is plain to us that he who knows only one science, does not really know either that or the others, and he who is suited for only one science and has gathered his knowledge from books, is unlearned and unskilled. But this is not the case with intellects prompt and expert in every branch of knowledge and suitable for the consideration of natural objects, as it is necessary that our HOH should be. Besides in our state the sciences are taught with a facility (as you have seen) by which more scholars are turned out by us in one year than by you in ten, or even fifteen. Make trial, I pray you, of these boys." In this matter I was struck with astonishment at their truthful discourse

and at the trial of their boys, who did not understand my language well. Indeed it is necessary that three of them should be skilled in our tongue, three in Arabic, three in Polish, and three in each of the other languages, and no recreation is allowed them unless they become more learned. For that they go out to the plain for the sake of running about and hurling arrows and lances, and of firing harquebuses, and for the sake of hunting the wild animals and getting a knowledge of plants and stones, and agriculture and pasturage; sometimes the band of boys does one thing, sometimes another.

They do not consider it necessary that the three rulers assisting HOH should know other than the arts having reference to their rule, and so they have only a historical knowledge of the arts which are common to all. But their own they know well, to which certainly one is dedicated more than another. Thus POWER is the most learned in the equestrian art, in marshalling the army, in marking out of camps, in the manufacture of every kind of weapon and of warlike machines, in planning stratagems, and in every affair of a military nature. And for these reasons, they consider it necessary that these chiefs should have been philosophers, historians, politicians, and physicists. Concerning the other two triumvirs, understand remarks similar to those I have made about POWER.

G.M. I really wish that you would recount all their public duties, and would distinguish between them, and also that you would tell clearly how they are all taught in common.

Capt. They have dwellings in common and dormitories, and couches and other necessities. But at the end of every six months they are separated by the masters. Some shall sleep in this ring, some in another; some in the first apartment, and some in the second; and these apartments are marked by means of the alphabet on the lintel. There are occupations, mechanical and theoretical, common to both men and women, with this difference, that the occupations which require more hard work, and walking a long distance, are practised by men, such as ploughing, sowing, gathering the fruits, working at the threshing-floor, and perchance at the vintage. But it is customary to choose women for milking the cows, and for making cheese. In like manner, they go to the gardens near to the outskirts of the city both for collecting the plants and for cultivating them. In fact, all sedentary and stationary pursuits

are practised by the women, such as weaving, spinning, sewing, cutting the hair, shaving, dispensing medicines, and making all kinds of garments. They are, however, excluded from working in wood and the manufacture of arms. If a woman is fit to paint, she is not prevented from doing so; nevertheless, music is given over to the women alone, because they please the more, and of a truth to boys also. But the women have not the practice of the drum and the horn.

And they prepare their feasts and arrange the tables in the following manner. It is the peculiar work of the boys and girls under twenty to wait at the tables. In every ring there are the suitable kitchens, barns, and stores of utensils for eating and drinking, and over every department an old man and an old woman preside. These two have at once the command of those who serve, and the power of chastising, or causing to be chastised, those who are negligent or disobedient; and they also examine and mark each one, both male and female, who excels in his or her duties.

All the young people wait upon the older ones who have passed the age of forty, and in the evening when they go to sleep the master and mistress command that those should be sent to work in the morning, upon whom in succession the duty falls, one or two to separate apartments. The young people, however, wait upon one another, and that alas! with some unwillingness. They have first and second tables, and on both sides there are seats. On one side sit the women, on the other the men; and as in the refectories of the monks, there is no noise. While they are eating a young man reads a book from a platform, intoning distinctly and sonorously, and often the magistrates question them upon the more important parts of the reading. And truly it is pleasant to observe in what manner these young people, so beautiful and clothed in garments so suitable, attend to them, and to see at the same time so many friends, brothers, sons, fathers and mothers all in their turn living together with so much honesty, propriety and love. So each one is given a napkin, a plate, fish, and a dish of food. It is the duty of the medical officers to tell the cooks what repasts shall be prepared on each day, and what food for the old, what for the young, and what for the sick. The magistrates receive the full-grown and fatter portion, and they from their share always distribute something to the boys at the table who have shown themselves more studious in the morning at the lectures and debates

concerning wisdom and arms. And this is held to be one of the most distinguished honours. For six days they ordain to sing with music at table. Only a few, however, sing; or there is one voice accompanying the lute and one for each other instrument. And when all alike in service join their hands, nothing is found to be wanting. The old men placed at the head of the cooking business and of the refectories of the servants praise the cleanliness of the streets, the houses, the vessels, the garments, the workshops and the warehouses.

They wear white undergarments to which adheres a covering, which is at once coat and legging, without wrinkles. The borders of the fastenings are furnished with globular buttons, extended round and caught up here and there by chains. The coverings of the legs descend to the shoes and are continued even to the heels. Then they cover the feet with large socks, or as it were half-buskins fastened by buckles, over which they wear a half-boot, and besides, as I have already said, they are clothed with a toga. And so aptly fitting are the garments, that when the toga is destroyed, the different parts of the whole body are straight-way discerned, no part being concealed. They change their clothes for different ones four times in the year, that is when the sun enters respectively the constellations Aries, Cancer, Libra and Capricorn, and according to the circumstances and necessity as decided by the officer of health. The keepers of clothes for the different rings are wont to distribute them, and it is marvellous that they have at the same time as many garments as there is need for, some heavy and some slight, according to the weather. They all use white clothing, and this is washed in each month with lye or soap, as are also the workshops of the lower trades, the kitchens, the pantries, the barns, the store-houses, the armories, the refectories and the baths. Moreover, the clothes are washed at the pillars of the peristyles, and the water is brought down by means of canals which are continued as sewers. In every street of the different rings there are suitable fountains, which send forth their water by means of canals, the water being drawn up from nearly the bottom of the mountain by the sole movement of a cleverly contrived handle. There is water in fountains and in cisterns, whither the rain-water collected from the roofs of the houses is brought through pipes full of sand. They wash their bodies often, according as the doctor and master command. All the mechanical arts are practised under the peristyles, but the speculative are

carried on above in the walking galleries and ramparts where are the more splendid paintings, but the more sacred ones are taught in the temple. In the halls and wings of the rings there are solar time-pieces and bells, and hands by which the hours and seasons are marked off.

G.M. Tell me about their children.

Capt. When their women have brought forth children, they suckle and rear them in temples set apart for all. They give milk for two years or more as the physician orders. After that time the weaned child is given into the charge of the mistresses, if it is a female, and to the masters, if it is a male. And then with other young children they are pleasantly instructed in the alphabet, and in the knowledge of the pictures, and in running, walking and wrestling; also in the historical drawings, and in languages; and they are adorned with a suitable garment of different colours. After their sixth year they are taught natural science, and then the mechanical sciences. The men who are weak in intellect are sent to farms, and when they have become more proficient some of them are received into the state. And those of the same age and born under the same constellation are especially like one another in strength and in appearance, and hence arises much lasting concord in the state, these men honouring one another with mutual love and help. Names are given to them by Metaphysicus, and that not by chance but designedly, and according to each one's peculiarity, as was the custom among the ancient Romans. Wherefore one is called Beautiful (*Pulcher*), another the Big-nosed (*Naso*), another the Fat-legged (*Cranipes*) another Crooked (*Torvus*) another Lean (*Macer*) and so on. But when they have become very skilled in their professions and done any great deed in war or in time of peace, a cognomen from art is given to them, such as Beautiful, the great painter (*Pulcher, Pictor Magnus*), the golden one (*Aureus*) the excellent one (*Excellens*) or the strong (*Strenuus*); or from their deeds, such as Naso the Brave (*Nason Fortis*) or the cunning, or the great, or very great conqueror; or from the enemy any one has overcome, Africanus, Asiaticus, Etruscus; or if any one has overcome Manfred or Tortelius, he is called Macer Manfred or Tortelius, and so on. All these cognomens are added by the higher magistrates, and very often with a crown suitable to the deed or art, and with the flourish of music. For gold and silver is reckoned of little value among them except as material for their vessels and ornaments, which are common to all.

G.M. Tell me, I pray you, is there no jealousy among them or disappointment to that one who has not been elected to a magistracy, or to any other dignity to which he aspires?

Capt. Certainly not. For no one wants either necessities or luxuries. Moreover, the race is managed for the good of the commonwealth and not of private individuals, and the magistrates must be obeyed. They deny what we hold—viz., that it is natural to man to recognize his offspring and to educate them, and to use his wife and house and children as his own. For they say that children are bred for the preservation of the species and not for individual pleasure, as St. Thomas also asserts. Therefore the breeding of children has reference to the commonwealth and not to individuals, except in so far as they are constituents of the commonwealth. And since individuals for the most part bring forth children wrongly and educate them wrongly, they consider that they remove destruction from the state, and therefore, for this reason, with most sacred fear, they commit the education of the children, who as it were are the element of the republic, to the care of magistrates; for the safety of the community is not that of a few. And thus they distribute male and female breeders of the best natures according to philosophical rules. Plato thinks that this distribution ought to be made by lot, lest some men seeing that they are kept away from the beautiful women, should rise up with anger and hatred against the magistrates; and he thinks further that those who do not deserve cohabitation with the more beautiful women, should be deceived whilst the lots are being led out of the city by the magistrates, so that at all times the women who are suitable should fall to their lot, not those whom they desire. This shrewdness, however, is not necessary among the inhabitants of the City of the Sun. For with them deformity is unknown. When the women are exercised they get a clear complexion, and become strong of limb, tall and agile, and with them beauty consists in tallness and strength. Therefore, if any woman dyes her face, so that it may become beautiful, or uses high-heeled boots so that she may appear tall, or garments with trains to cover her wooden shoes, she is condemned to capital punishment. But if the women should even desire them, they have no facility for doing these things. For who indeed would give them this facility? Further, they assert that among us abuses of this kind arise from the leisure and sloth of women. By these means they lose their colour and have pale complexions,

and become feeble and small. For this reason they are without proper complexions, use high sandals, and become beautiful not from strength, but from slothful tenderness. And thus they ruin their own tempers and natures, and consequently those of their offspring. Furthermore, if at any time a man is taken captive with ardent love for a certain woman, the two are allowed to converse and joke together, and to give one another garlands of flowers or leaves, and to make verses. But if the race is endangered, by no means is further union between them permitted. Moreover, the love born of eager desire is not known among them; only that born of friendship.

Domestic affairs and partnerships are of little account, because, excepting the sign of honour, each one receives what he is in need of. To the heroes and heroines of the republic, it is customary to give the pleasing gifts of honour, beautiful wreaths, sweet food or splendid clothes, while they are feasting. In the daytime all use white garments within the city, but at night or outside the city they use red garments either of wool or silk. They hate black as they do dung, and therefore they dislike the Japanese, who are fond of black. Pride they consider the most execrable vice, and one who acts proudly is chastised with the most ruthless correction. Wherefore no one thinks it lowering to wait at table or to work in the kitchen or fields. All work they call discipline, and thus they say that it is honourable to go on foot, to do any act of nature, to see with the eye, and to speak with the tongue; and when there is need, they distinguish philosophically between tears and spittle.

Every man who, when he is told off to work, does his duty, is considered very honourable. It is not the custom to keep slaves. For they are enough, and more than enough, for themselves. But with us, alas! it is not so. In Naples there exists seventy thousand souls, and out of these scarcely ten or fifteen thousand do any work, and they are always lean from overwork and are getting weaker every day. The rest become a prey to idleness, avarice, ill-health, lasciviousness, usury and other vices, and contaminate and corrupt very many families by holding them in servitude for their own use, by keeping them in poverty and slavishness, and by imparting to them their own vices. Therefore public slavery ruins them; useful works, in the field, in military service and in arts, except those which are debasing, are not cultivated, the few who do practise them doing so with much aversion. But in the City of the Sun, while duty and work is distributed among all, it only falls

to each one to work for about four hours every day. The remaining hours are spent in learning joyously, in debating, in reading, in reciting, in writing, in walking, in exercising the mind and body, and with play. They allow no game which is played while sitting, neither the single die nor dice, nor chess, nor others like these. But they play with the ball, with the sack, with the hoop, with wrestling, with hurling at the stake. They say, moreover, that grinding poverty renders men worthless, cunning, sulky, thievish, insidious, vagabonds, liars, false witnesses, &c.; and that wealth makes them insolent, proud, ignorant, traitors, assumers of what they know not, deceivers, boasters, wanting in affection, slanderers, &c. But with them all the rich and poor together make up the community. They are rich because they want nothing, poor because they possess nothing; and consequently they are not slaves to circumstances, but circumstances serve them. And on this point they strongly recommend the religion of the Christians, and especially the life of the Apostles.

G.M. This seems excellent and sacred, but the community of women is a thing too difficult to attain. The holy Roman Clement says that wives ought to be common in accordance with the apostolic institution, and praises Plato and Socrates, who thus teach, but the Glossary interprets this community with regard to obedience. And Tertullian agrees with the Glossary, that the first Christians had everything in common except wives.

Capt. These things I know little of. But this I saw among the inhabitants of the City of the Sun that they did not make this exception. And they defend themselves by the opinion of Socrates, of Cato, of Plato, and of St. Clement but, as you say, they misunderstand the opinions of these thinkers. And the inhabitants of the solar city ascribe this to their want of education, since they are by no means learned in philosophy. Nevertheless, they send abroad to discover the customs of nations, and the best of these they always adopt. Practice makes the women suitable for war and other duties. Thus they agree with Plato, in whom I have read these same things. The reasoning of our Cajetan does not convince me, and least of all that of Aristotle. This thing, however, existing among them is excellent and worthy of imitation—viz., that no physical defect renders a man incapable of being serviceable except the decrepitude of old age, since even the deformed are useful for consultation. The lame serve as guards, watching with the eyes which they

possess. The blind card wool with their hands, separating the down from the hairs, with which latter they stuff the couches and sofas; those who are without the use of eyes and hands give the use of their ears or their voice for the convenience of the state, and if one has only one sense, he uses it in the farms. And these cripples are well treated, and some become spies, telling the officers of the state what they have heard.

G.M. Tell me now, I pray you, of their military affairs. Then you may explain their arts, ways of life and sciences, and lastly their religion.

Capt. The triumvir, Power, has under him all the magistrates of arms, of artillery, of cavalry, of foot-soldiers, of architects, and of strategists, and the masters and many of the most excellent workmen obey the magistrates, the men of each art paying allegiance to their respective chiefs. Moreover, Power is at the head of all the professors of gymnastics, who teach military exercise, and who are prudent generals, advanced in age. By these the boys are trained after their twelfth year. Before this age, however, they have been accustomed to wrestling, running, throwing the weight and other minor exercises, under inferior masters. But at twelve they are taught how to strike at the enemy, at horses and elephants, to handle the spear, the sword, the arrow and the sling; to manage the horse; to advance and to retreat; to remain in order of battle; to help a comrade in arms; to anticipate the enemy by cunning; and to conquer.

The women also are taught these arts under their own magistrates and mistresses, so that they may be able if need be to render assistance to the males in battles near the city. They are taught to watch the fortifications lest at some time a hasty attack should suddenly be made. In this respect they praise the Spartans and Amazons. The women know well also how to let fly fiery balls, and how to make them from lead; how to throw stones from pinnacles and to go in the way of an attack. They are accustomed also to give up wine unmixed altogether, and that one is punished most severely who shows any fear.

The inhabitants of the City of the Sun do not fear death, because they all believe that the soul is immortal, and that when it has left the body it is associated with other spirits, wicked or good, according to the merits of this present life. Although they are partly followers of Bramah and Pythagoras, they do not believe in the transmigration of souls, except in some cases, by a

distinct decree of God. They do not abstain from injuring an enemy of the republic and of religion, who is unworthy of pity. During the second month the army is reviewed, and every day there is practice of arms, either in the cavalry plain or within the walls. Nor are they ever without lectures on the science of war. They take care that the accounts of Moses, of Joshua, of David, of Judas Maccabeus, of Cæsar, of Alexander, of Scipio, of Hannibal, and other great soldiers should be read. And then each one gives his own opinion as to whether these generals acted well or ill, usefully or honourably, and then the teacher answers and says who are right.

G.M. With whom do they wage war, and for what reasons, since they are so prosperous?

Capt. Wars might never occur, nevertheless they are exercised in military tactics and in hunting, lest perchance they should become effeminate and unprepared for any emergency. Besides there are four kingdoms in the island, which are very envious of their prosperity, for this reason that the people desire to live after the manner of the inhabitants of the City of the Sun, and to be under their rule rather than that of their own kings. Wherefore the state often makes war upon these because, being neighbours, they are usurpers and live impiously, since they have not an object of worship and do not observe the religion of other nations or of the Brahmins. And other nations of India, to which formerly they were subject, rise up as it were in rebellion, as also do the Taprobanese, whom they wanted to join them at first. The warriors of the City of the Sun, however, are always the victors. As soon as they suffered from insult or disgrace or plunder, or when their allies have been harassed, or a people have been oppressed by a tyrant of the state (for they are always the advocates of liberty), they go immediately to the council for deliberation. After they have knelt in the presence of God that He might inspire their consultation, they proceed to examine the merits of the business, and thus war is decided on. Immediately after a priest, whom they call Forensic, is sent away. He demands from the enemy the restitution of the plunder, asks that the allies should be freed from oppression, or that the tyrant should be deposed. If they deny these things war is declared by invoking the vengeance of God—the God of Sabaoth—for destruction of those who maintain an unjust cause. But if the enemy refuse to reply, the priest gives him the space of one hour for his answer, if he is a king, but three if it is a republic, so that

they cannot escape giving a response. And in this manner is war undertaken against the insolent enemies of natural rights and of religion. When war has been declared, the deputy of Power performs everything, but Power, like the Roman dictator, plans and wills everything, so that hurtful tardiness may be avoided. And when anything of great moment arises he consults Hoh and Wisdom and Love.

Before this, however, the occasion of war and the justice of making an expedition is declared by a herald in the great council. All from twenty years and upwards are admitted to this council, and thus the necessities are agreed upon. All kinds of weapons stand in the armories, and these they use often in sham fights. The exterior walls of each ring are full of guns prepared by their labours, and they have other engines for hurling which are called cannons, and which they take into battle upon mules and asses and carriages. When they have arrived in an open plain they enclose in the middle the provisions, engines of war, chariots, ladders and machines and all fight courageously. Then each one returns to the standards, and the enemy thinking that they are giving and preparing to flee, are deceived and relax their order: then the warriors of the City of the Sun, wheeling into wings and columns on each side, regain their breath and strength, and ordering the artillery to discharge their bullets they resume the fight against a disorganized host. And they observe many ruses of this kind. They overcome all mortals with their stratagems and engines. Their camp is fortified after the manner of the Romans. They pitch their tents and fortify with wall and ditch with wonderful quickness. The masters of works, of engines and hurling machines, stand ready, and the soldiers understand the use of the spade and the axe.

Five, eight, or ten leaders learned in the order of battle and in strategy consult together concerning the business of war, and command their bands after consultation. It is their wont to take out with them a body of boys, armed and on horses, so that they may learn to fight, just as the whelps of lions and wolves are accustomed to blood. And these in time of danger betake themselves to a place of safety, along with many armed women. After the battle the women and boys soothe and relieve the pain of the warriors, and wait upon them and encourage them with embraces and pleasant words. How wonderful a help is this! For the soldiers, in order that they may acquit themselves as sturdy men in the eyes of their wives and offspring, endure

hardships, and so love makes them conquerors. He who in the fight first scales the enemy's walls receives after the battle a crown of grass, as a token of honour, and at the presentation the women and boys applaud loudly; that one who affords aid to an ally gets a civic crown of oak-leaves; he who kills a tyrant dedicates his arms in the temple and receives from Hoh the cognomen of his deed, and other warriors obtain other kinds of crowns. Every horse-soldier carries a spear and two strongly tempered pistols, narrow at the mouth, hanging from his saddle. And to get the barrels of their pistols narrow they pierce the metal which they intend to convert into arms. Further, every cavalry soldier has a sword and a dagger. But the rest, who form the light-armed troops, carry a metal cudgel. For if the foe cannot pierce their metal for pistols and cannot make swords, they attack him with clubs, shatter and overthrow him. Two chains of six spans length hang from the club, and at the end of these are iron balls, and when these aimed at the enemy they surround his neck and drag him to the ground; and in order that they may be able to use the club more easily, they do not hold the reins with their hands, but use them by means of the feet. If perchance the reins are interchanged above the trappings of the saddle, the ends are fastened to the stirrups with buckles and not to the feet. And the stirrups have an arrangement for swift movement of the bridle, so that they draw in or let out the rein with marvellous celerity. With the right foot they turn the horse to the left and with the left to the right. This secret, moreover, is not known to the Tartars. For, although they govern the reins with their feet, they are ignorant nevertheless of turning them and drawing them in and letting them out by means of the block of the stirrups. The light-armed cavalry with them are the first to engage in battle, then the men forming the phalanx with their spears, then the archers for whose services a great price is paid, and who are accustomed to fight in lines crossing one another as the threads of cloth, some rushing forward in their turn and others receding. They have a band of lancers strengthening the line of battle, but they make trial of the swords only at the end.

After the battle they celebrate the military triumphs after the manner of the Romans, and even in a more magnificent way. Prayers by the way of thank-offerings are made to God, and then the general presents himself in the temple, and the deeds, good and bad, are related by the poet or historian, who according to custom was with the expedition. And the greatest chief, Hoh,

crowns the general with laurel and distributes little gifts and honours to all the valorous soldiers, who are for some days free from public duties. But this exemption from work is by no means pleasing to them, since they know not what it is to be at leisure, and so they help their companions. On the other hand, they who have been conquered through their own fault, or have lost the victory, are blamed; and they who were the first to take to flight are in no way worthy to escape death, unless when the whole army asks their lives, and each one takes upon himself a part of their punishment. But this indulgence is rarely granted, except when there are good reasons favouring it. But he who did not bear help to an ally or friend is beaten with rods. That one who did not obey orders is given to the beasts, in an enclosure, to be devoured, and a staff is put in his hand, and if he should conquer the lions and the bears that are there, which is almost impossible, he is received into favour again. The conquered states or those willingly delivered up to them, forthwith have all things in common, and receive a garrison and magistrates from the City of the Sun, and by degrees they are accustomed to the ways of the city, the mistress of all, to which they even send their sons to be taught without contributing anything for expense.

It would be too great trouble to tell you about the spies and their master, and about the guards and laws and ceremonies, both within and without the state, which you can of yourself imagine. Since from childhood they are chosen according to their inclination and the star under which they were born, therefore each one working according to his natural propensity does his duty well and pleasantly, because naturally. The same things I may say concerning strategy and the other functions.

There are guards in the city by day and by night, and they are placed at the four gates, and outside the walls of the seventh ring, above the breastworks and towers and inside mounds. These places are guarded in the day by women, in the night by men. And lest the guard should become weary of watching, and in case of a surprise, they change them every three hours, as is the custom with our soldiers. At sunset, when the drum and symphonia sound, the armed guards are distributed. Cavalry and infantry make use of hunting as the symbol of war, and practise games and hold festivities in the plains. Then the music strikes up, and freely they pardon the offences and faults of the enemy, and after the victories they are kind to them, if it has

been decreed that they should destroy the walls of the enemy's city and take their lives. All these things are done on the same day as the victory, and afterwards they never cease to load the conquered with favours, for they say that there ought to be no fighting, except when the conquerors give up the conquered, not when they kill them. If there is a dispute among them concerning injury or any other matter (for they themselves scarcely ever contend except in matters of honour), the chief and his magistrates chastise the accused one secretly, if he has done harm in deeds after he has been first angry. If they wait until the time of the battle for the verbal decision, they must give vent to their anger against the enemy, and he who in battle shows the most daring deeds is considered to have defended the better and truer cause in the struggle, and the other yields, and they are punished justly. Nevertheless, they are not allowed to come to single combat, since right is maintained by the tribunal, and because the unjust cause is often apparent when the more just succumbs, and he who professes to be the better man shows this in public fight.

G.M. This is worth while, so that factions should not be cherished for the harm of the fatherland, and so that civil wars might not occur, for by means of these a tyrant often arises, as the examples of Rome and Athens show. Now, I pray you, tell me of their works and matter connected therewith.

Capt. I believe that you have already heard about their military affairs and about their agricultural and pastoral life, and in what way these are common to them, and how they honour with the first grade of nobility whoever is considered, to have a knowledge of these. They who are skilful in more arts than these they consider still nobler, and they set that one apart for teaching the art in which he is most skilful. The occupations which require the most labour, such as working in metals and building, are the most praiseworthy amongst them. No one declines to go to these occupations, for the reason that from the beginning their propensities are well known, and among them, on account of the distribution of labour, no one does work harmful to him, but only that which is necessary for him. The occupations entailing less labour belong to the women. All of them are expected to know how to swim, and for this reason ponds are dug outside the walls of the city and within them near to the fountains.

Commerce is of little use to them, but they know the value of money, and they count for the use of their ambassadors and explorers, so that with it they may have the means of living. They receive merchants into their states from the different countries of the world, and these buy the superfluous goods of the city. The people of the City of the Sun refuse to take money, but in importing they accept in exchange those things of which they are in need, and sometimes they buy with money; and the young people in the City of the Sun are much amused when they see that for a small price they receive so many things in exchange. The old men, however, do not laugh. They are unwilling that the state should be corrupted by the vicious customs of slaves and foreigners. Therefore they do business at the gates, and sell those whom they have taken in war or keep them for digging ditches and other hard work without the city, and for this reason they always send four bands of soldiers to take care of the fields, and with them there are the labourers. They go out of the four gates from which roads with walls on both sides of them lead to the sea, so that goods might easily be carried over them and foreigners might not meet with difficulty on their way.

To strangers they are kind and polite; they keep them for three days at the public expense; after they have first washed their feet, they show them their city and its customs, and they honour them with a seat at the council and public table, and there are men whose duty it is to take care of and guard the guests. But if strangers should wish to become citizens of their state, they try them first for a month on a farm, and for another month in the city, then they decide concerning them, and admit them with certain ceremonies and oaths.

Agriculture is much followed among them; there is not a span of earth without cultivation, and they observe the winds and propitious stars. With the exception of a few left in the city all go out armed, and with flags and drums and trumpets sounding, to the fields, for the purposes of ploughing, sowing, digging, hoeing, reaping, gathering fruit and grapes; and they set in order everything, and do their work in a very few hours and with much care. They use waggons fitted with sails which are borne along by the wind even when it is contrary, by the marvellous contrivance of wheels within wheels.

And when there is no wind a beast draws along a huge cart, which is a grand sight.

The guardians of the land move about in the meantime, armed and always in their proper turn. They do not use dung and filth for manuring the fields, thinking that the fruit contracts something of their rottenness, and when eaten gives a short and poor subsistence, as women who are beautiful with rouge and from want of exercise bring forth feeble offspring. Wherefore they do not as it were paint the earth, but dig it up well and use secret remedies, so that fruit is borne quickly and multiplies, and is not destroyed. They have a book for this work, which they call the Georgics. As much of the land as is necessary is cultivated, and the rest is used for the pasturage of cattle.

The excellent occupation of breeding and rearing horses, oxen, sheep, dogs and all kinds of domestic and tame animals, is in the highest esteem among them as it was in the time of Abraham. And the animals are led so to pair that they may be able to breed well.

Fine pictures of oxen, horses, sheep, and other animals are placed before them. They do not turn out horses with mares to feed, but at the proper time they bring them together in an enclosure of the stables in their fields. And this is done when they observe that the constellation Archer is in favourable conjunction with Mars and Jupiter. For the oxen they observe the Bull, for the sheep the Ram, and so on in accordance with art. Under the Pleiades they keep a drove of hens and ducks and geese, which are driven out by the women to feed near the city. The women only do this when it is a pleasure to them. There are also places enclosed, where they make cheese, butter, and milk-food. They also keep capons, fruit and other things, and for all these matters there is a book which they call the Bucolics. They have an abundance of all things, since every one likes to be industrious, their labours being slight and profitable. They are docile, and that one among them who is head of the rest in duties of this kind they call king. For they say that this is the proper name of the leaders, and it does not belong to ignorant persons. It is wonderful to see how men and women march together collectively, and always in obedience to the voice of the king. Nor do they regard him with loathing as we do, for they know that although he is greater than themselves, he is for all that their father and brother. They keep groves and woods for wild animals, and they often hunt.

The science of navigation is considered very dignified by them, and they

possess rafts and triremes, which go over the waters without rowers or the force of the wind, but by a marvellous contrivance. And other vessels they have which are moved by the winds. They have a correct knowledge of the stars, and of the ebb and flow of the tide. They navigate for the sake of becoming acquainted with nations and different countries and things. They injure nobody, and they do not put up with injury, and they never go to battle unless when provoked. They assert that the whole earth will in time come to live in accordance with their customs, and consequently they always find out whether there be a nation whose manner of living is better and more approved than the rest. They admire the Christian institutions and look for a realisation of the apostolic life in vogue among themselves and in us. There are treaties between them and the Chinese, and many other nations, both insular and continental, such as Siam and Calicut, which they are only just able to explore. Furthermore, they have artificial fires, battles on sea and land, and many strategic secrets. Therefore they are nearly always victorious.

G.M. Now it would be very pleasant to learn with what foods and drinks they are nourished, and in what way and for how long they live.

Capt. Their food consists of flesh, butter, honey, cheese, garden herbs, and vegetables of various kinds. They were unwilling at first to slay animals, because it seemed cruel; but thinking afterwards that it was also cruel to destroy herbs which have a share of sensitive feeling, they saw that they would perish from hunger unless they did an unjustifiable action for the sake of justifiable ones, and so now they all eat meat. Nevertheless, they do not kill willingly useful animals, such as oxen and horses. They observe the difference between useful and harmful foods, and for this they employ the science of medicine. They always change their food. First they eat flesh, then fish, then afterwards they go back to flesh, and nature is never incommoded or weakened. The old people use the more digestible kind of food, and take three meals a day, eating only a little. But the general community eat twice, and the boys four times, that they might satisfy nature. The length of their lives is generally one hundred years, but often they reach two hundred.

As regards drinking, they are extremely moderate. Wine is never given to young people until they are ten years old, unless the state of their health demands it. After their tenth year they take it diluted with water, and so do

the women, but the old men of fifty and upwards use little or no water. They eat the most healthy things, according to the time of the year.

They think nothing harmful which is brought forth by God, except when there has been abuse by taking too much. And therefore in the summer they feed on fruits, because they are moist and juicy and cool, and counteract the heat and dryness. In the winter they feed on dry articles, and in the autumn they eat grapes, since they are given by God to remove melancholy and sadness; and they also make use of scents to a great degree. In the morning, when they have all risen they comb their hair and wash their faces and hands with cold water. Then they chew thyme or rock parsley or fennel, or rub their hands with these plants. The old men make incense, and with their faces to the east repeat the short prayer which Jesus Christ taught us. After this they go to wait upon the old men, some go to the dance, and others to the duties of the state. Later on they meet at the early lectures, then in the temple, then for bodily exercise. Then for a little while they sit down to rest, and at length they go to dinner.

Among them there is never gout in the hands or feet, no catarrh, nor sciatica, nor grievous colics, nor flatulency, nor hard breathing. For these diseases are caused by indigestion and flatulency, and by frugality and exercise they remove every humour and spasm. Wherefore it is unseemly in the extreme to be seen vomiting or spitting, since they say that this is a sign either of little exercise or of ignoble sloth, or of drunkenness or gluttony. They suffer rather from swellings or from the dry spasm, which they relieve with plenty of good and juicy food. They heal fevers with pleasant baths and with milk-food, and with a pleasant habitation in the country and by gradual exercise. Unclean diseases cannot be prevalent with them because they often clean their bodies by bathing in wine, and soothe them with aromatic oil, and by the sweat of exercise they diffuse the poisonous vapour which corrupts the blood and the marrow. They do suffer a little from consumption, because they cannot perspire at the breast, but they never have asthma, for the humid nature of which a heavy man is required. They cure hot fevers with cold potations of water, but slight ones with sweet smells, with cheese-bread or sleep, with music or dancing. Tertiary fevers are cured by bleeding, by rhubarb or by a similar drawing remedy, or by water soaked in the roots of plants, with purgative and sharp-tasting qualities. But it is rarely that they take purgative

medicines. Fevers occurring every fourth day are cured easily by suddenly startling the unprepared patients, and by means of herbs producing effects opposite to the humours of this fever. All these secrets they told me in opposition to their own wishes. They take more diligent pains to cure the lasting fevers, which they fear more, and they strive to counteract these by the observation of stars and of plants, and by prayers to God. Fevers recurring every fifth, sixth, eighth or more days, you never find whenever heavy humours are wanting.

They use baths, and moreover they have warm ones according to the Roman custom, and they make use also of olive oil. They have found out, too, a great many secret cures for the preservation of cleanliness and health. And in other ways they labour to cure the epilepsy, with which they are often troubled.

G.M. A sign this disease is of wonderful cleverness, for from it Hercules, Scotus, Socrates, Callimachus, and Mahomet have suffered.

Capt. They cure by means of prayers to heaven, by strengthening the head, by acids, by planned gymnastics, and with fat cheese-bread sprinkled with the flour of wheaten corn. They are very skilled in making dishes, and in them they put spice, honey, butter and many highly strengthening spices, and they temper their richness with acids, so that they never vomit. They do not drink ice-cold drinks nor artificial hot drinks, as the Chinese do; for they are not without aid against the humours of the body, on account of the help they get from the natural heat of the water; but they strengthen it with crushed garlic, with vinegar, with wild thyme, with mint, and with basil, in the summer or in time of special heaviness. They know also a secret for renovating life after about the seventieth year, and for ridding it of affliction, and this they do by a pleasing and indeed wonderful art.

G.M. Thus far you have said nothing concerning their sciences and magistrates.

Capt. Undoubtedly I have. But since you are so curious I will add more. Both when it is new moon and full moon they call a council after a sacrifice. To this all from twenty years upwards are admitted, and each one is asked separately to say what is wanting in the state, and which of the magistrates have discharged their duties rightly and which wrongly. Then after eight days

all the magistrates assemble, to wit, Hoh first, and with him Power, Wisdom and Love. Each one of the three last has three magistrates under him, making in all thirteen, and they consider the affairs of the arts pertaining to each one of them; Power, of war; Wisdom, of the sciences; Love, of food, clothing, education and breeding. The masters of all the bands, who are captains of tens, of fifties, of hundreds, also assemble, the women first and then the men. They argue about those things which are for the welfare of the state, and they choose the magistrates from among those who have already been named in the great council. In this manner they assemble daily, Hoh and his three princes, and they correct, confirm and execute the matters passing to them, as decisions in the elections; other necessary questions they provide of themselves. They do not use lots unless when they are altogether doubtful how to decide. The eight magistrates under Hoh, Power, Wisdom and Love are changed according to the wish of the people, but the first four are never changed, unless they, taking counsel with themselves, give up the dignity of one to another, whom among them they know to be wiser, more renowned, and more nearly perfect. And then they are obedient and honourable, since they yield willingly to the wiser man and are taught by him. This, however, rarely happens. The principals of the sciences, except Metaphysics, who is Hoh himself, and is as it were the architect of all science, having rule over all, are attached to Wisdom. Hoh is ashamed to be ignorant of any possible thing. Under Wisdom therefore is Grammar, Logic, Physics, Medicine, Astrology, Astronomy, Geometry, Cosmography, Music, Perspective, Arithmetic, Poetry, Rhetoric, Painting, Sculpture. Under the triumvir Love are Breeding, Agriculture, Education, Medicine, Clothing, Pasturage, Coining.

G.M. What about their judges?

Capt. This is the point I was just thinking of explaining. Everyone is judged by the first master of his trade, and thus all the head artificers are judges. They punish with exile, with flogging, with blame, with deprivation of the common table, with exclusion from the church and from the company of women. When there is a case in which great injury has been done, it is punished with death, and they repay an eye with an eye, a nose for a nose, a tooth for a tooth, and so on, according to the law of retaliation. If the offence is wilful the council decides. When there is strife and it takes place undesignedly, the sentence is mitigated; nevertheless, not by the judge but by

the triumvirate, from whom even it may be referred to Hoh, not on account of justice but of mercy, for Hoh is able to pardon. They have no prisons, except one tower for shutting up rebellious enemies, and there is no written statement of a case, which we commonly call a lawsuit. But the accusation and witnesses are produced in the presence of the judge and Power; the accused person makes his defence, and he is immediately acquitted or condemned by the judge; and if he appeals to the triumvirate, on the following day he is acquitted or condemned. On the third day he is dismissed through the mercy and clemency of Hoh, or receives the inviolable rigour of his sentence. An accused person is reconciled to his accuser and to his witnesses, as it were, with the medicine of his complaint, that is, with embracing and kissing. No one is killed or stoned unless by the hands of the people, the accuser and the witnesses beginning first. For they have no executioners and lictors, lest the state should sink into ruin. The choice of death is given to the rest of the people, who enclose the lifeless remains in little bags and burn them by the application of fire, while exhorters are present for the purpose of advising concerning a good death. Nevertheless, the whole nation laments and beseeches God that His anger may be appeased, being in grief that it should as it were have to cut off a rotten member of the state. Certain officers talk to and convince the accused man by means of arguments until he himself acquiesces in the sentence of death passed upon him, or else he does not die. But if a crime has been committed against the liberty of the republic, or against God, or against the supreme magistrates, there is immediate censure without pity. These only are punished with death. He who is about to die is compelled to state in the presence of the people and with religious scrupulousness the reasons for which he does not deserve death, and also the sins of the others who ought to die instead of him, and further the mistakes of the magistrates. If, moreover, it should seem right to the person thus asserting, he must say why the accused ones are deserving of less punishment than he. And if by his arguments he gains the victory he is sent into exile, and appeases the state by means of prayers and sacrifices and good life ensuing. They do not torture those named by the accused person, but they warn them. Sins of frailty and ignorance are punished only with blaming, and with compulsory continuation as learners under the law and discipline of those sciences or arts against which they have sinned. And all these things they have mutually among themselves, since they seem to be in

very truth members of the same body, and one of another.

This further I would have you know, that if a transgressor, without waiting to be accused, goes of his own accord before a magistrate, accusing himself and seeking to make amends, that one is liberated from the punishment of a secret crime, and since he has not been accused of such a crime, his punishment is changed into another. They take special care that no one should invent slander, and if this should happen they meet the offence with the punishment of retaliation. Since they always walk about and work in crowds, five witnesses are required for the conviction of a transgressor. If the case is otherwise, after having threatened him, he is released after he has sworn an oath as the warrant of good conduct. Or if he is accused a second or third time, his increased punishment rests on the testimony of three or two witnesses. They have but few laws, and these short and plain, and written upon a flat table, and hanging to the doors of the temple, that is between the columns. And on single columns can be seen the essences of things described in the very terse style of Metaphysics—viz., the essences of God, of the angels, of the world, of the stars, of man, of fate, of virtue, all done with great wisdom. The definitions of all the virtues are also delineated here, and here is the tribunal, where the judges of all the virtues have their seat. The definition of a certain virtue is written under that column where the judges for the aforesaid virtue sit, and when a judge gives judgment he sits and speaks thus: O son, thou hast sinned against this sacred definition of beneficence, or of magnanimity, or of another virtue, as the case may be. And after discussion the judge legally condemns him to the punishment for the crime of which he is accused—viz., for injury for despondency, for pride, for ingratitude, for sloth, &c. But the sentences are certain and true correctives, savouring more of clemency than of actual punishment.

G.M. Now you ought to tell me about their priests, their sacrifices, their religion, and their belief.

Capt. The chief priest is Hoh, and it is the duty of all the superior magistrates to pardon sins. Therefore the whole state by secret confession, which we also use, tell their sins to the magistrates, who at once purge their souls and teach those that are inimical to the people. Then the sacred magistrates themselves confess their own sinfulness to the three supreme chiefs, and together they

confess the faults of one another, though no special one is named, and they confess especially the heavier faults and those harmful to the state. At length the triumvirs confess their sinfulness to Hoh himself, who forthwith recognizes the kinds of sins that are harmful to the state, and succours with timely remedies. Then he offers sacrifices and prayers to God. And before this he confesses the sins of the whole people, in the presence of God, and publicly in the temple, above the altar, as often as it had been necessary that the fault should be corrected. Nevertheless, no transgressor is spoken of by his name. In this manner he absolves the people by advising them that they should beware of sins of the aforesaid kind. Afterwards he offers sacrifice to God, that He should pardon the state and absolve it of its sins, and to teach and defend it. Once in every year the chief priests of each separate subordinate state confess their sins in the presence of Hoh. Thus he is not ignorant of the wrong-doings of the provinces, and forthwith he removes them with all human and heavenly remedies.

Sacrifice is conducted after the following manner: Hoh asks the people which one among them wishes to give himself as a sacrifice to God for the sake of his fellows. He is then placed upon the fourth table, with ceremonies and the offering up of prayers: the table is hung up in a wonderful manner by means of four ropes passing through four cords attached to firm pulley-blocks in the small dome of the temple. This done they cry to the God of mercy, that He may accept the offering, not of a beast as among the heathen, but of a human being. Then Hoh orders the ropes to be drawn and the sacrifice is pulled up above to the centre of the small dome, and there it dedicates itself with the most fervent supplications. Food is given to it through a window by the priests, who live around the dome, but it is allowed a very little to eat, until it has atoned for the sins of the state. There with prayer and fasting he cries to the God of heaven that He might accept its willing offering. And after twenty or thirty days, the anger of God being appeased, the sacrifice becomes a priest, or sometimes, though rarely, returns below by means of the outer way for the priests. Ever after this man is treated with great benevolence and much honour, for the reason that he offered himself unto death for the sake of his country. But God does not require death. The priests above twenty-four years of age offer praises from their places in the top of the temple. This they do in the middle of the night, at noon, in the morning and in the evening, to wit,

four times a day they sing their chants in the presence of God. It is also their work to observe the stars and to note with the astrolabe their motions and influences upon human things, and to find out their powers. Thus they know in what part of the earth any change has been or will be, and at what time it has taken place, and they send to find whether the matter be as they have it. They make a note of predictions, true and false, so that they may be able from experience to predict most correctly. The priests, moreover, determine the hours for breeding and the days for sowing, reaping, and gathering the vintage, and are as it were the ambassadors and intercessors and connection between God and man. And it is from among them mostly that Hoh is elected. They write very learned treatises and search into the sciences. Below they never descend, unless for their dinner and supper, so that the essence of their heads do not descend to the stomachs and liver. Only very seldom, and that as a cure for the ills of solitude, do they have converse with women. On certain days Hoh goes up to them and deliberates with them concerning the matters which he has lately investigated for the benefit of the state and all the nations of the world.

In the temple beneath one priest always stands near the altar praying for the people, and at the end of every hour another succeeds him, just as we are accustomed in solemn prayer to change every fourth hour. And this method of supplication they call perpetual prayer. After a meal they return thanks to God. Then they sing the deeds of the Christian, Jewish, and Gentile heroes, and of those of all other nations, and this is very delightful to them. Forsooth, no one is envious of another. They sing a hymn to Love, one to Wisdom, and one each to all the other virtues, and this they do under the direction of the ruler of each virtue. Each one takes the woman he loves most, and they dance for exercise with propriety and stateliness under the peristyles. The women wear their long hair all twisted together and collected into one knot on the crown of the head, but in rolling it they leave one curl. The men, however, have one curl only and the rest of their hair around the head is shaven off. Further, they wear a slight covering, and above this a round hat a little larger than the size of their head. In the fields they use caps, but at home each one wears a biretto white, red, or another colour according to his trade or occupation. Moreover, the magistrates use grander and more imposing-looking coverings for the head.

They hold great festivities when the sun enters the four cardinal points of the heavens, that is, when he enters Cancer, Libra, Capricorn, and Aries. On these occasions they have very learned, splendid, and as it were comic performances. They celebrate also every full and every new moon with a festival, as also they do the anniversaries of the founding of the city, and of the days when they have won victories or done any other great achievement. The celebrations take place with the music of female voices, with the noise of trumpets and drums, and the firing of salutations. The poets sing the praises of the most renowned leaders and the victories. Nevertheless, if any of them should deceive even by disparaging a foreign hero, he is punished. No one can exercise the function of a poet who invents that which is not true, and a license like this they think to be a pest of our world, for the reason that it puts a premium upon virtue and often assigns it to unworthy persons, either from fear or flattery, or ambition or avarice. For the praise of no one is a statue erected until after his death; but whilst he is alive, who has found out new arts and very useful secrets, or who has rendered great service to the state either at home or on the battle-field, his name is written in the book of heroes. They do not bury dead bodies, but burn them, so that a plague may not arise from them, and so that they may be converted into fire, a very noble and powerful thing, which has its coming from the sun and returns to it. And for the above reasons no chance is given for idolatry. The statues and pictures of the heroes, however, are there, and the splendid women set apart to become mothers often look at them. Prayers are made from the state to the four horizontal corners of the world. In the morning to the rising sun, then to the setting sun, then to the south, and lastly to the north; and in the contrary order in the evening, first to the setting sun, to the rising sun, to the north, and at length to the south. They repeat but one prayer, which asks for health of body and of mind, and happiness for themselves and all people, and they conclude it with the petition "As it seems best to God." The public prayer for all is long, and it is poured forth to heaven. For this reason the altar is round and is divided crosswise by ways at right angles to one another. By these ways Hoh enters after he has repeated the four prayers, and he prays looking up to heaven. And then a great mystery is seen by them. The priestly vestments are of a beauty and meaning like to those of Aaron. They resemble Nature and they surpass Art.

They divide the seasons according to the revolution of the sun, and not of the stars, and they observe yearly by how much time the one precedes the other. They hold that the sun approaches nearer and nearer, and therefore by ever-lessening circles reaches the tropics and the equator every year a little sooner. They measure months by the course of the moon, years by that of the sun. They praise Ptolemy, admire Copernicus, but place Aristarchus and Philolaus before him. They take great pains in endeavouring to understand the construction of the world, and whether or not it will perish, and at what time. They believe that the true oracle of Jesus Christ is by the signs in the sun, in the moon, and in the stars, which signs do not thus appear to many of us foolish ones. Therefore they wait for the renewing of the age, and perchance for its end. They say that it is very doubtful whether the world was made from nothing, or from the ruins of other worlds, or from chaos, but they certainly think that it was made, and did not exist from eternity. Therefore they disbelieve in Aristotle, whom they consider a logician and not a philosopher. From analogies, they can draw many arguments against the eternity of the world. The sun and the stars they, so to speak, regard as the living representatives and signs of God, as the temples and holy living altars, and they honour but do not worship them. Beyond all other things they venerate the sun, but they consider no created thing worthy the adoration of worship. This they give to God alone, and thus they serve Him, that they may not come into the power of a tyrant and fall into misery by undergoing punishment by creatures of revenge. They contemplate and know God under the image of the Sun, and they call it the sign of God, His face and living image, by means of which light, heat, life, and the making of all things good and bad proceeds. Therefore they have built an altar like to the Sun in shape, and the priests praise God in the sun and in the stars, as it were His altars, and in the heavens, His temple as it were; and they pray to good angels, who are, so to speak, the intercessors living in the stars, their strong abodes. For God long since set signs of their beauty in heaven, and of His glory in the Sun. They say there is but one heaven, and that the planets move and rise of themselves when they approach the sun or are in conjunction with it.

They assert two principles of the physics of things below, namely, that the Sun is the father, and the Earth the mother; the air is an impure part of the heavens; all fire is derived from the sun. The sea is the sweat of earth, or the

fluid of earth combusted, and fused within its bowels; but is the bond of union between air and earth, as the blood is of the spirit and flesh of animals. The world is a great animal, and we live within it as worms live within us. Therefore we do not belong to the system of stars, sun, and earth, but to God only; for in respect to them which seek only to amplify themselves, we are born and live by chance; but in respect to God, whose instruments we are, we are formed by prescience and design, and for a high end. Therefore we are bound to no Father but God, and receive all things from Him. They hold as beyond question the immortality of souls, and that these associate with good angels after death, or with bad angels, according as they have likened themselves in this life to either. For all things seek their like. They differ little from us as to places of reward and punishment. They are in doubt whether there are other worlds beyond ours, and account it madness to say there is nothing. Nonentity is incompatible with the infinite entity of God. They lay down two principles of metaphysics, entity which is the highest God, and nothingness which is the defect of entity. Evil and sin come of the propensity to nothingness; the sin having its cause not efficient, but in deficiency. Deficiency is, they say, of power, wisdom or will. Sin they place in the last of these three, because he who knows and has the power to do good is bound also to have the will, for will arises out of them. They worship God in Trinity, saying God is the supreme Power, whence proceeds the highest Wisdom, which is the same with God, and from these comes Love, which is both Power and Wisdom; but they do not distinguish persons by name, as in our Christian law, which has not been revealed to them. This religion, when its abuses have been removed, will be the future mistress of the world, as great theologians teach and hope. Therefore Spain found the New World (though its first discoverer, Columbus, greatest of heroes, was a Genoese), that all nations should be gathered under one law. We know not what we do, but God knows, whose instruments we are. They sought new regions for lust of gold and riches, but God works to a higher end. The sun strives to burn up the earth, not to produce plants and men, but God guides the battle to great issues. His the praise, to Him the glory!

G.M. Oh, if you knew what our astrologers say of the coming age, and of our age, that has in it more history within a hundred years than all the world had in four thousand years before! Of the wonderful invention of printing and

guns, and the use of the magnet, and how it all comes of Mercury, Mars, the Moon, and the Scorpion!

Capt. Ah, well! God gives all in His good time. They astrologize too much.

A FRAGMENT OF

JOSEPH HALL'S MUNDUS ALTER ET IDEM

(*THE OTHER-AND SAME WORLD*)

TRANSLATED BY

DR. WILLIAM KING.

INTRODUCTORY SKETCH.

Joseph Hall was born at Bristow Park, by Ashby-de-la-Zouch, in the year 1574, and educated at Emmanuel College, Cambridge. In 1597 he published three books, and in 1598 three more books, of Satires, "*Virgidemiarum*, Six Bookes." These satires, with others published about the same time by Marlowe and Marston, were burnt by order of Whitgift, Archbishop of Canterbury, who had no relish for that kind of writing. Nine years later, in the year 1607, at the age of thirty-two, Hall published the satire now to be described. He was a witty and an earnest man, who rose to honour in the Church, became successively Bishop of Exeter and of Norwich; as Bishop of Norwich was in controversy with John Milton on Church Discipline; suffered patiently imprisonment and persecution from the Puritans; and closed an honourable life of more than fourscore years in 1656. He has been called by some the Christian Seneca.

His early work, the "*Mundus Alter et Idem*," represents an ideal world divided into regions answering to man's chief weaknesses or vices. He gave with it a map of its Crapulia, Latronia, &c., fully peopled, with a neighbouring land in which there are no signs of settlement, *Terra Sancta, ignota etiam adhuc*, the Holy Land, even yet unknown.

Joseph Hall's new world is also figured as an Austral Continent. They are good travellers, he says, who tell what they have seen in known lands, but he is a better who not only travels but is himself the maker of the lands he travels through. He chose his day, and went aboard the good ship Phantasy,

quitted harbour, sailed away, reached in two years the Fortunate Isles, and, leaving the shores of Africa behind him, came in sight of the black headland of Crapulia.

Here Introduction ends and Travel begins with the part partly translated by Dr. King: Crapulia, named from Crapula, is the Land of Inebriate Excess, and its two provinces, Pamphagonia and Yvronia, mean by their names the provinces of Omnivorous Gluttony and Drunkenness. Dr. King has translated six chapters, and begun the seventh, which is upon the wars of the Pamphagonians, to which they march forth armed with spits and two-pronged forks and heavy ribs of beef. In their free city, Ucalegon, built near the borders of Moronia, the citizens live happy as monks. They are so well shut in by high rocks that they can laugh at enemies, and through a hollow in the rocks with softest pace creeps the river Oysivius (the Idle). There is only one way up, their rocks for the inhabitants, and that is not by zigzag steps, but by a rope and basket. Birds wholly peculiar to the place supply food by being themselves eatable, and by the great multitude of their eggs, and by the loads of fish they bring into their nests to feed their young. The citizens make to themselves also beds of the soft feathers of these birds. This valley yields to the people of Ucalegon everything except what they don't care for. They are free, therefore, to sup, sleep, rise, dine, and lie down.

Husbandry, as among the old Egyptians, consists chiefly in feeding pigs, for the husbandmen wait on the rich. One, with a gentle touch, opens the richer man's eyes when he wakes; another fans him with a flapper while he eats; another puts bits into his mouth when it opens. There are two cities under Ucalegon, Livona and Roncara (Snort and Snore), which have like privileges, except that here the inhabitants are almost always asleep, and fatten wonderfully.

These are among the laws of Crapulia:—It is a crime to drink alone. Whoever has defrauded Nature by fasting four hours after sleep shall be compelled to sup. When the mouth is full it is enough to answer questions by holding out a finger. What cook soever shall treat food so that it cannot be eaten, shall be tied to a stake beside which is hung meat half raw or half burnt, and shall remain so tied until somebody comes who will eat that meat.

No coin of metal is current in Crapulia, but they make payment in kind. Thus

two sparrows are one starling, two starlings are one fieldfare, two fieldfares one hen, two hens one goose, two geese one lamb, two lambs one kid, two kids one goat, two goats one cow, and so forth.

The next chapter is on the Religion of the Crapulians. They hate Jove because his thunder turns the wine sour and he spoils ripe fruit by raining on it. Their God is Time, who eats everything.

But I hasten, says the traveller, to the palace of the Grand Duke, whither I was happily led by my genius. The first Duke must have been as large as the man two of whose teeth were dug up at Cambridge, each as big as a man's head. On his tomb is an inscription. "I Omasius, Duke of Fagonia, Lord, Victor, Prince and God lie here. No man shall say I starved, shall pass by fasting, or salute me sober. Let him be my heir who can, my subject who will, my enemy who dares. Farewell and Fatten."

After a description of the Island of Hunger, the traveller passes from Pamphagonia to Yvronia, the other province of Crapulia.

These are among the laws of Yvronia:—A cup must be either full or empty. Whoever takes or returns a cup half empty shall be guilty of *lèse société*. The sober man who hurts a drunkard, shall be cut off from wine for ever: if he kill a drunkard, he shall die by thirst. To walk from supper in a right line shall be criminal. He who adds water to wine shall be degraded to the table of the dogs.

Yvronia having been described in seven chapters, the traveller in this Other-and-Same World passes on to Viraginia, the land of the Viragoes. This is Gynia Nova, miswritten New Guinea. The chief of its many provinces is Linguadocia, in which Garrula is one of the famous cities. In Viraginia the traveller was at once made prisoner, but permitted to see the land after he had subscribed to certain articles, as, That in word or deed he would work no ill to the nobler sex; That he would never interpose a word when a woman was speaking; That wherever he might be he would concede domestic rule to the woman; That he would never deny to a wife any ornament of dress she looked at.

As to its form of government, the state seemed to be a democracy, in which all governed and none obeyed. They settled affairs at public meetings, in

which all spoke and none listened; and they had a perpetual Parliament.

The men in Viraginia are subject to the women. When a wife leaves her house for any reason, she places the care of her husband under any other woman of the household until she returns. A husband who survives his wife, is married at once to his wife's maid, or goes into bondage to the nearest mother of a family, because it is not permitted that any man shall become master in his own house.

The women sit while the men serve, sleep when the men are roused to get up, scold them when they complain, and beat them. That day is worthy to be marked with a white stone to which men can say good-bye with a whole skin.

Contrary to the custom with us, the women in Viraginia cut their hair and let their nails grow. Some of them also practise with profit the gymnastic art, so that they can make beautiful use of teeth, nails, and heels. A nobler and more cleanly polished place is not to be seen than Viraginia, where everything is washed, cooked and cared for by the men, and there is nothing unbecoming but the garments of the men themselves.

The next land to be visited was Moronia, Foolsland, the vastest, the most uncultivated and the most populous of all these countries. To the east is Variana or Moronia Mobilis, to the north is Moronia Aspera, to the south Moronia Felix, and to the west Moronia Pia. The people are, nearly all of them, tall and fat, with palish hair, prominent lips, and very thick ears. In midwinter they go with their chests open, and the rest of the body lightly clothed, that the warmth may enter the more readily, and the cold go out of them; but in summer they put on thick overcoats and cloaks, and all the clothes they have, to shut out the heat. They shave their heads, either because they remember that they were born bald, or to allay the heat of the brain, or because the hair comes between the brain and heaven, and checks the freedom of the mind in going heavenward.

Provinces, towns and people of Moronia having been visited and fully described, the traveller through this Other-and-Same World then proceeds to describe Lavernia, the Land of Thieves and Cheats, who obtain great part of their plunder from Moronia. In this land the Larcinians require much attention. And at the end of all, adds Joseph Hall, "These men, these manners,

these cities I have seen, have marvelled at, have laughed at, and at last, broken by the toils of so great a journey, have returned to my own land. PEREGRINUS, QUONDAM ACADEMICUS."

Dr. William King was born in the year 1663, son of Ezekiel King, a gentleman of London. He was educated at Westminster School and Christ Church, Oxford. He early inherited a fair estate, took his Master of Arts degree in 1688, and began his career as writer with a refutation of attacks upon Wiclif in the "History of Heresy," by M. Varillas. He then chose law for a profession, in 1692 graduated as LL.D., and was admitted an Advocate at Doctor's Commons. He kept a light heart and a lighter purse than beseemed one of his fraternity, publishing playful satires, at times showing an earnest mind under his mirth. In or soon after the year 1702 Dr. King went to Ireland as judge of the High Court of Admiralty, sole Commissioner of the Prizes, Vicar-General to the Lord Primate, and Keeper of the Records in Birmingham's Tower, in which office he was succeeded in 1708 by Joseph Addison. Dr. King, who had not increased his credit for a love of work, returned to London about that time, and following his own way of mirth began publishing "Useful Transactions in Philosophy and other sorts of learning." In 1709 he published the best of his playful poems, "The Art of Cookery, in imitation of Horace's Art of Poetry; with some letters to Dr. Lister and others, occasioned principally by the Title of a Book published by the Doctor, being the works of Apicius Cœlius concerning the Soups and Sauces of the Ancients." When he came across Joseph Hall's satire, he found it so much to his mind that he began to translate as follows:—

H.M.

CRAPULIA.

CHAPTER I.

The Situation of the Country.

Crapulia is a very fair and large territory, which on the north is bounded with the Æthiopic Ocean, on the east with Laconia and Viraginia, on the south by Moronia Felix, and westward with the Tryphonian Fens. It lies in that part of the universe where is bred the monstrous bird called Ruc, that for its prey will bear off an elephant in its talons; and is described by the modern geographers.

The soil is too fruitful, and the heavens too serene; so that I have looked upon them with a silent envy, not without pity, when I considered they were blessings so little deserved by the inhabitants. It lies in seventy-four degrees of longitude, and sixty degrees of latitude, and eleven degrees distant from the Cape of Good Hope; and lies, as it were, opposite to the whole coast of Africa. It is commonly divided into two provinces, Pamphagonia and Ivronia, the former of which is of the same length and breadth as Great Britain (which I hope will not be taken as any reflection), the other is equal to the High and Low Dutch Lands. Both obey the same prince, are governed by the same laws, and differ very little in their habit or their manners.

CHAPTER II.

phagonia; or, Glutton's Paradise.

Pamphagonia is of a triangular figure, like that of ancient Egypt, or the Greek letter delta, Δ. It is mountainous, inclosed with very high hills; its soil is of the richest, so that birds which come thither to feed, if they tarry but three months, grow so very fat and weighty, that they cannot fly back again over

the mountains, but suffer themselves to be taken up in the hand, and are as delicious as the ortolan or the beccaficos of the Italians. And it is no wonder to them who know that geese in Scotland are generated from leaves fallen into the water, and believe the testimony of one of our ambassadors, that in the north-east parts of the world lambs grow upon stalks like cabbages and eat up the grass all around about them, to find the same sort of provisions in this country. Besides, the fish upon that coast are in such plenty, and so voracious (whether they conform themselves to the genius of the place and people, or presage to themselves the honour of so magnificent a sepulchre as was given to Nero's turbot), that, as soon as the hook is cast in, they press to it as the ghosts in Lucian did to Charon's boat, and cling to the iron as miners do to a rope that is let down when the light of their candle forbodes some malignant exhalation.

The sea-ports, with which this country abounds more than any other, are of no other use than to receive and take in such things as are edible, which they have for their superfluous wool and hides: nor may the inhabitants export anything that has the least relation to the palate. You see nothing there but fruit-trees. They hate plains, limes, and willows, as being idle and barren, and yielding nothing useful but their shade. There are hops, pears, plums, and apples, in the hedge-rows, as there is in all Ivronia; from whence the Lombards, and some counties in the west of England, have learned their improvements. In ancient times, Frugonia, or the Land of Frugality, took in this country as one of its provinces; and histories tell us, that, in Saturn's time, the Frugonian princes gave laws to all this part of the world, and had their palace there; and that their country was called Fagonia, from the simplicity of their diet, which consisted only in beech-mast. But that yoke has been long ago shaken off; their manners are wholly changed, and, from the universality of their food, they have obtained, in their own country language, the title of Pamphagones.

CHAPTER III.

The First Province of Pamphagonia.

Friviandy, or Tight-bittia (that we may take the provinces in their order), were it not for a temperament peculiar to the place, is rather of the hottest to produce those who are properly called good trencher-men. Its utmost point, which other geographers call the Promontory of the Terra Australis, is of the same latitude as the most southerly parts of Castile, and is about forty-two degrees distant from the equator. The inhabitants have curled hair and dusky complexions, and regard more the delicacy than the largeness and number of their dishes. In this very promontory, which we shall call the black one from its colour (for it is a very smoky region, partly from the frequent vapours of the place, partly from its vicinity to the Terra del Fogo, which, by the common consent of geographers, lies on the right hand of it, but rather nearer than they have placed it), is the city Lucina, whose buildings are lofty, but apt to be smoky and offensive to the smell; from whence a colony went, perhaps, as far as the Indies, where it remains to this day by the name of Cochin-China.

Here is the famous temple of the great deity Omasius Gorgut, or Gorbelly. It is a vast pile, and contains a thousand hearths, and as many altars, which are constantly employed in the Rucal Festivals. In the midst is a high pyramid, as lofty as the hand of man can erect it, little inferior to those of Memphis. It is called the Cheminean Tower. This, rising high, gives the signal of war to the adjoining countries: for, as we by beacons lighted upon a high hill discover the danger of an approaching enemy, so these, on the contrary, do the same by letting their smoke cease and their fires go out: for, when the perpetual vapour ceases to roll forth in thick and dark clouds of smoke, it is a token that the Hambrians are drawing nearer, than whom there can be no enemy more terrible to this nation. There are several smaller towns, that lie under the dominion of this supreme city. Charbona is the largest village, and, what is seldom seen elsewhere, lies all under ground. Upon its barren soil arises another, though of less note, called Favillia. After these lies Tenaille, a narrow town, and Batillû, a broad one, both considerable. On the left are some subservient petty hamlets, as Assadora, Marmitta, Culliera, as useful for the reception of strangers, amongst which, that of Marmitta is watered by the river Livenza; which, as is said of a fountain in the Peak of Derby, boils over twice in four-and-twenty hours.

CHAPTER IV.

The Second Province of Pamphagonia.

Next to this is the Golosinian district, the most pleasant part of Pamphagonia, covered with dates, almonds, figs, olives, pomegranates, oranges, citrons, and pistaches; through which run the smoothest of streams, called the Oglum. Here is the beautiful city of Marzapane, with noble turrets glittering with gold, but lying too open to the enemy. Over it hang the Zucker hills, out of whose bowels they draw something that is hard, white, and sparkling, but sweet as that moisture which the ancients gathered out of the reeds which grew in Arabia and the Indies. You shall find few people here, who are grown up, but what have lost their teeth, and have stinking breaths. Near to this is the little city Sepladium, which admits of no tradesmen but perfumers. It is a town of great commerce with the people of Viraginia, especially the Locanians, who use to change their looking-glass with them for oils and pastils. The agreeableness of the place, and the bounty of the heavens, is favourable to their art; for the whole track of land, at certain seasons, is covered with aromatic comfits, that fall like hail-stones: which Anathumiasis I take to be essentially the same as that aerial honey which we often find upon our oaks, especially in the spring, and that it differs only in thickness; for whereas that honey is sprinkled in drops, the little globules are hardened by the intense cold of the middle region, and rebound in falling.

CHAPTER V.

Of the Third Province of Pamphagonia.

In the fifty-fifth degree, we come into the plains of Lecania, and so into the very heart of Pamphagonia, where the chief city we meet with is Cibinium, which is washed with the acid streams of the river Assagion. In the forum, or market-place, is the tomb (as I conjecture by the footsteps of some letters now remaining) of Apicius, that famous Roman, not very beautiful, but antique. It is engraved upon the shell of a sea-crab; and it might happen, notwithstanding what Seneca says, that this famous epicure, after having

sought for larger shell-fish than the coast of Gallia could supply him with, and then going in vain to Africa to make a farther inquiry, might hear some rumour concerning this coast, steer his course thither, and there die of a surfeit. But this I leave to the critics. Here I shall only mention the most fertile fields of Lardana and Ossulia. The delicious situation of Mortadella, the pleasantest of places, had wonderfully delighted me, had it not been for the salt-works which often approach too near it. There is an offensive stinking town called Formagium, alias Butterboxia, and Mantica, a boggy place near the confines of Ivronia.

I hasten to the metropolis of the whole region, which, whether you respect the uniformity of the building, the manners of the people, or their way of living, their rules for behaviour, their law and justice, will show as much as if I were to descend to particulars.

CHAPTER VI.

Of the Metropolis of Pamphagonia, and the Customs of the Inhabitants.

There are but very few villages in this country, as well as in some others; from whence a traveller may conjecture, that the country towns are devoured by the cities, which are not so many in number as they are large and populous; of which the mother and governess is called Artocreopolis. The report goes, that in ancient times there were two famous cities, Artopolis and Creatium, which had many and long contests about the superiority: for so it happens to places, as well as men, that increase in power; insomuch as the two most flourishing Universities in the world (to both of which I bear the relation of a son, though I am more peculiarly obliged to one of them for my education), notwithstanding they are sisters, could not abstain from so ungrateful a contention.

Artopolis boasted of its antiquity, and that it had flourished in the Saturnian age, when it had as yet no rival. Creatium set forth its own splendour, pleasantness, and power. At last, a council being called, Creatium got the preference by the universal votes of the assembly; for such is the iniquity of

the times, that though the head be covered with grey hairs, yet nothing is allowed to the reverence of antiquity, when encountered by a proud and upstart novelty. The other city is now so far neglected, that the ruins or footsteps of its magnificence are scarce remaining, any more than of Verulam, as is most elegantly set forth by our noble poet Spenser in his verses on that subject; the latter usurping the name of the other, as well as the other has now the double title of Artocreopolis. The city is more extensive than beautiful: it is fortified with a large and deep ditch of running water, which washes almost all the streets, wherein are a thousand several ponds for fish; upon which swim ducks, geese, swans, and all sorts of water-fowl, which has been wisely imitated by the people of Augsburg. This ditch is called Gruessa. There are two walls, whose materials were furnished by the flesh-market; for they are made of bones, the larger serving for the foundations, the lesser for the superstructure, whilst the smallest fill up what is wanting in the middle; being all cemented with the whites of eggs, by a wonderful artifice. The houses are not very beautiful, nor built high after the manner of other cities; so that there is no need of an Augustus to restrain the buildings to the height of seventy feet, as was done at Rome; nor is there room for a Seneca or Juvenal to complain of the multitude of their stairs and number of their stories.

They have no regard for staircases; for indeed none of the citizens care for them, partly from the trouble of getting up them (especially when, as they often do, they have drunk heartily) as much as for the danger of getting down again. Their houses are all covered with large blade-bones, very neatly joined together. There are no free citizens admitted, but such whose employment has more immediately some relation to the table. Husbandmen, smiths, millers, and butchers, live in their colonies, who, when they have a belly of an unwieldy bulk, are promoted to be burgesses; to which degree none were anciently admitted but cooks, bakers, victuallers, and the gravest senators, who are chosen here, as in other places, not for their prudence, riches, or length of beard; but for their measure, which they must come up to yearly if they will pretend to bear any office in the public. As any one grows in dimensions, he rises in honour; so that I have seen some who, from the meanest and most contemptible village, have, for their merits, been promoted to a more famous town, and at last obtained the senatorial dignity in this most

celebrated city: and yet, when by some disease (as it often happens), or by age, they have grown leaner than they are allowed to be by the statutes, have lost their honour, together with the bulk of their carcass. Their streets were paved with polished marble; which seemed strange amongst a people so incurious, both because the workmanship was troublesome, and there might be danger in its being slippery. But the true reason of it was, that they might not be forced to lift their feet higher than ordinary by the inequality of the pavement, and likewise that the chairs of the senators might the more easily be pushed forward; for they never go on foot, or on horseback, nor even in a coach, to the exchange, or their public feasts, because of their weight; but they are moved about in great easy elbow-chairs, with four wheels to them, and continue sitting so fixed, in the same posture, snoring and flabbering till they are wheeled home again.

At the four gates of the city, whose form is circular, there sit in their turns as many senators, who are called Buscadores. These carefully examine all who come in and go out, those that go out, lest they should presume by chance to do it fasting, which they can easily judge of by the extent of their bellies, and the matter being proved, they are fined in a double supper: those that come in, to see what they bring with them upon their return; for they must neither depart with empty stomachs, nor come back with empty hands. Every month, according to the laws, which they unwillingly transgress, there are stated feasts, at which all the senators are obliged to be present, that after dinner (for no person can give his vote before he has dined) they may deliberate concerning the public affairs. The name of their common-hall is Pythanoscome. Every one knows his own seat, and his conveniences and a couch to repose upon when the heat of their wine and seasoned dainties incline them to it. Their greatest delicacies are served up at the first course; for they think it foolish not to eat the best things with the greatest appetite: nor do they cut their boars, sheep, goats, and lambs into joints or quarters, as commonly we do, but convey them whole to table, by the help of machines, as I remember to have read in Petronius Arbiter. They are fineable who rise before they have set six hours; for then the edge of their stomach is blunted. They eat and drink so leisurely, for the same reason as the famous Epicure of old wished that his neck were as long as a crane's. They measure the seasonable time for their departure after this method: they have a door to their

town-house, which is wide enough for the largest man to enter when he is fasting: through this the guests pass; and when any one would depart, if he stops in this passage, he is trusted to go out at another door; but if it be as easy as if he were fasting, the master of the ceremonies makes him tarry till he comes to be of a statutable magnitute: after which example, Willfrid's needle in Belvior Castle was a pleasant trial of Roman Catholic sanctity. They have gardens of many acres extent, but not like those of Adonis or Alcinoüs; for nothing delightful is to be expected in them, neither order, nor regularity of walk, nor grass-plots, nor variety of flowers in the borders: but you will find all planted with cabbages, turnips, garlick, and musk-melons, which were carried hence to Italy, and are in quantity sufficient to feast an hundred Pythagoreans.

There is a public college, or hospital, whither they are sent who have got the dropsy, gout, or asthma, by their eating and drinking; and there they are nourished at the public expense. As for such as have lost their teeth by their luxury, or broken them by eating too greedily or incautiously, they are provided for in the island of Sorbonia. All the richer sort have several servants, in the nature of vassals, to cultivate their gardens, and be employed in inferior offices, who have their liberty when they can arrive at such a bulkiness. If any of the grandees of the country die of a surfeit, he is given, as being all made up of the most exquisite dainties, to be eaten up by his servants; and this they do that nothing should be lost that is so delicate. The men are thick and fat to a miracle; nor will any one salute another whose chin does not come to the midst of his breast, and his paunch falls to his knees. The women are not unlike them, and in shape resemble the Italians, and have breasts like the Hottentots. They go almost naked, having no regard to their garments. The magistrates and persons of better figure have gowns made of the skins of such beasts as they have eaten at one meal. All wear a knife, with a large spoon, hanging upon their right arm. Before their breasts they wear a smooth skin, instead of a napkin, to receive what falls out of their mouths, and to wipe them upon occasion; which whether it be more black or greasy, is hard to determine.

They are of a very slow apprehension, and no way fit for any science; but yet understand such arts as they have occasion for. Their schools are public-houses, where they are educated in the sciences of eating, drinking, and

carving; over which, one Archisilenius, an exquisite Epicure, was then provost, who, instead of grammar, read some fragments of Apicius. Instead of a library, there is a public repository of drinking-vessels, in which cups of all orders and sizes are disposed into certain classes. Cups and dishes are instead of books. The younger scholars have less, the elder have greater; one has a quart, the other a pottle, the other a gallon: this has a hen, that a goose, a third a lamb or a porker: nor have they any liberty, or recess, till the whole is finished; and if by a seven years' stuffing they are no proficient in fatness, are presently banished into the Fancetic Islands; nor are they suffered long to stay there idle and without improvement. Hither likewise are sent all physicians who prescribe a course of diet to any person. When any one is sick, without recourse to Æsculapius, they make him eat radish, and drink warm water; which, according to Celsus, will purge and vomit him. Venison is that which they most delight in; but they never take it in hunting, but by nets and gins. They look upon the swine as the most profitable and best of all animals; whether it is for the likeness of its manners, as being good for nothing but the table, or else from its growing fat on the sudden with the worst of nutriment. It may not seem credible, yet parsimony appears in the midst of their profuseness: but then it is very ill placed, for it is in crumbs, bones, and crusts. They do not so much as keep any dogs, cats, hawks, or anything that eats flesh. If any person suffer meat to stink, he is impaled; but venison and rabbits are to have the *haut-gout*: and then their cheese is kept till it is overrun with little animals, which they devour with mustard and sugar. This is an odd sort of custom, derived from the Dutch.

The country abounds with rivers, which ebb and flow according to their digestion, and generally overflow at the beginning of January, and towards the end of February, and do mischief to the neighbouring country.

CHAPTER VII.

Of the Wars of the Pamphagonians.

The Pamphagones have perpetual wars with the Hambrians, or the Fancetic Islands, and the Frugonians.

Cætera desunt.

THE END.

NOVUM ORGANUM

BY
LORD BACON

[3]

SCIENCE

[5]

NOVUM ORGANUM
OR
TRUE SUGGESTIONS FOR THE INTERPRETATION OF NATURE

PREFACE

THEY who have presumed to dogmatize on nature, as on some well investigated subject, either from self-conceit or arrogance, and in the professorial style, have inflicted the greatest injury on philosophy and learning. For they have tended to stifle and interrupt inquiry exactly in proportion as they have prevailed in bringing others to their opinion: and their own activity has not counterbalanced the mischief they have occasioned by corrupting and destroying that of others. They again who have entered upon a contrary course, and asserted that nothing whatever can be known, whether they have fallen into this opinion from their hatred of the ancient sophists, or from the hesitation of their minds, or from an exuberance of learning, have certainly adduced reasons for it which are by no means contemptible. They have not, however, derived their opinion from true sources, and, hurried on by their zeal and some affectation, have certainly exceeded due moderation. But the more ancient Greeks (whose writings have perished), held a more prudent mean, between the arrogance of dogmatism, and the despair of scepticism; and though too frequently intermingling complaints and indignation[6] at the difficulty of inquiry, and the obscurity of things, and champing, as it were, the bit, have still persisted in pressing their point, and pursuing their intercourse with nature; thinking, as it seems, that the better method was not to dispute upon the very point of the possibility of anything being known, but to put it to the test of experience. Yet they themselves, by only employing the power of the understanding, have not adopted a fixed rule, but have laid their whole stress upon intense meditation, and a continual exercise and perpetual agitation of the mind.

Our method, though difficult in its operation, is easily explained. It consists in determining the degrees of certainty, while we, as it were, restore the senses to their former rank, but generally reject that operation of the mind which follows close upon the senses, and open and establish a new and

certain course for the mind from the first actual perceptions of the senses themselves. This, no doubt, was the view taken by those who have assigned so much to logic; showing clearly thereby that they sought some support for the mind, and suspected its natural and spontaneous mode of action. But this is now employed too late as a remedy, when all is clearly lost, and after the mind, by the daily habit and intercourse of life, has come prepossessed with corrupted doctrines, and filled with the vainest idols. The art of logic therefore being (as we have mentioned), too late a precaution,^[1] and in no way remedying^[7] the matter, has tended more to confirm errors, than to disclose truth. Our only remaining hope and salvation is to begin the whole labor of the mind again; not leaving it to itself, but directing it perpetually from the very first, and attaining our end as it were by mechanical aid. If men, for instance, had attempted mechanical labors with their hands alone, and without the power and aid of instruments, as they have not hesitated to carry on the labors of their understanding with the unaided efforts of their mind, they would have been able to move and overcome but little, though they had exerted their utmost and united powers. And just to pause awhile on this comparison, and look into it as a mirror; let us ask, if any obelisk of a remarkable size were perchance required to be moved, for the purpose of gracing a triumph or any similar pageant, and men were to attempt it with their bare hands, would not any sober spectator avow it to be an act of the greatest madness? And if they should increase the number of workmen, and imagine that they could thus succeed, would he not think so still more? But if they chose to make a selection, and to remove the weak, and only employ the strong and vigorous, thinking by this means, at any rate, to achieve their object, would he not say that they were more fondly deranged? Nay, if not content with this, they were to determine on consulting the athletic art, and were to give orders for all to appear with their hands, arms, and muscles regularly oiled and prepared, would he not exclaim that they were taking pains to rave by method and design? Yet men are hurried on with the same senseless energy and useless combination in intellectual matters, as long as they expect great results either from the number and agreement, or the excellence and acuteness of their wits; or even^[8] strengthen their minds with logic, which may be considered as an athletic preparation, but yet do not desist (if we rightly consider the matter) from applying their own understandings merely with all this zeal and effort. While nothing is more

clear, than that in every great work executed by the hand of man without machines or implements, it is impossible for the strength of individuals to be increased, or for that of the multitude to combine.

Having premised so much, we lay down two points on which we would admonish mankind, lest they should fail to see or to observe them. The first of these is, that it is our good fortune (as we consider it), for the sake of extinguishing and removing contradiction and irritation of mind, to leave the honor and reverence due to the ancients untouched and undiminished, so that we can perform our intended work, and yet enjoy the benefit of our respectful moderation. For if we should profess to offer something better than the ancients, and yet should pursue the same course as they have done, we could never, by any artifice, contrive to avoid the imputation of having engaged in a contest or rivalry as to our respective wits, excellences, or talents; which, though neither inadmissible nor new (for why should we not blame and point out anything that is imperfectly discovered or laid down by them, of our own right, a right common to all?), yet however just and allowable, would perhaps be scarcely an equal match, on account of the disproportion of our strength. But since our present plan leads up to open an entirely different course to the understanding, and one unattempted and unknown to them, the case is altered. There is an end to party zeal, and we only take upon ourselves the character of a guide, which requires a moderate share of authority and good fortune,^[9] rather than talents and excellence. The first admonition relates to persons, the next to things.

We make no attempt to disturb the system of philosophy that now prevails, or any other which may or will exist, either more correct or more complete. For we deny not that the received system of philosophy, and others of a similar nature, encourage discussion, embellish harangues, are employed, and are of service in the duties of the professor, and the affairs of civil life. Nay, we openly express and declare that the philosophy we offer will not be very useful in such respects. It is not obvious, nor to be understood in a cursory view, nor does it flatter the mind in its preconceived notions, nor will it descend to the level of the generality of mankind unless by its advantages and effects.

Let there exist then (and may it be of advantage to both), two sources, and two distributions of learning, and in like manner two tribes, and as it were

kindred families of contemplators or philosophers, without any hostility or alienation between them; but rather allied and united by mutual assistance. Let there be in short one method of cultivating the sciences, and another of discovering them. And as for those who prefer and more readily receive the former, on account of their haste or from motives arising from their ordinary life, or because they are unable from weakness of mind to comprehend and embrace the other (which must necessarily be the case with by far the greater number), let us wish that they may prosper as they desire in their undertaking, and attain what they pursue. But if any individual desire, and is anxious not merely to adhere to, and make use of present discoveries, but to penetrate still further, and not to overcome his adversaries in disputes, but nature by labor, not in short to give elegant^[10] and specious opinions, but to know to a certainty and demonstration, let him, as a true son of science (if such be his wish), join with us; that when he has left the antechambers of nature trodden by the multitude, an entrance may at last be discovered to her inner apartments. And in order to be better understood, and to render our meaning more familiar by assigning determinate names, we have accustomed ourselves to call the one method the anticipation of the mind, and the other the interpretation of nature.

We have still one request left. We have at least reflected and taken pains in order to render our propositions not only true, but of easy and familiar access to men's minds, however wonderfully prepossessed and limited. Yet it is but just that we should obtain this favor from mankind (especially in so great a restoration of learning and the sciences), that whosoever may be desirous of forming any determination upon an opinion of this our work either from his own perceptions, or the crowd of authorities, or the forms of demonstrations, he will not expect to be able to do so in a cursory manner, and while attending to other matters; but in order to have a thorough knowledge of the subject, will himself by degrees attempt the course which we describe and maintain; will be accustomed to the subtilty of things which is manifested by experience; and will correct the depraved and deeply rooted habits of his mind by a seasonable, and, as it were, just hesitation: and then, finally (if he will), use his judgment when he has begun to be master of himself.

FOOTNOTE

[\[1\]](#) Because it was idle to draw a logical conclusion from false principles, error being propagated as much by false premises, which logic does not pretend to examine, as by illegitimate inference. Hence, as Bacon says further on, men being easily led to confound legitimate inference with truth, were confirmed in their errors by the very subtilty of their genius.—*Ed.*

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APHORISMS—BOOK I

ON THE INTERPRETATION OF NATURE AND THE EMPIRE OF MAN

I. MAN, as the minister and interpreter of nature, does and understands as much as his observations on the order of nature, either with regard to things or the mind, permit him, and neither knows nor is capable of more.

II. The unassisted hand and the understanding left to itself possess but little power. Effects are produced by the means of instruments and helps, which the understanding requires no less than the hand; and as instruments either promote or regulate the motion of the hand, so those that are applied to the mind prompt or protect the understanding.

III. Knowledge and human power are synonymous, since the ignorance of the cause frustrates the effect; for nature is only subdued by submission, and that which in contemplative philosophy corresponds with the cause in practical science becomes the rule.

IV. Man while operating can only apply or withdraw natural bodies; nature internally performs the rest.

V. Those who become practically versed in nature are, the mechanic, the mathematician, the physician, the alchemist, and the *magician*,^[2] but all (as matters now stand) with faint efforts and meagre success.

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VI. It would be madness and inconsistency to suppose that things which have never yet been performed can be performed without employing some hitherto untried means.

VII. The creations of the mind and hand appear very numerous, if we judge by books and manufactures; but all that variety consists of an excessive refinement, and of deductions from a few well known matters—*not of a number of axioms*.^[3]

VIII. Even the effects already discovered are due to chance and experiment rather than to the sciences; for our present sciences are nothing more than peculiar arrangements of matters already discovered, and not methods for discovery or plans for new operations.

IX. The sole cause and root of almost every defect in the sciences is this, that while we falsely admire and extol the powers of the human mind, we do not search for its real helps.

X. The subtilty of nature is far beyond that of sense or of the understanding: so that the specious meditations, speculations, and theories of mankind are but a kind of insanity, only there is no one to stand by and observe it.

XI. As the present sciences are useless for the discovery of effects, so the present system of logic^[4] is useless for the discovery of the sciences.

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XII. The present system of logic rather assists in confirming and rendering inveterate the errors founded on vulgar notions than in searching after truth, and is therefore more hurtful than useful.

XIII. The syllogism is not applied to the principles of the sciences, and is of no avail in intermediate axioms,^[5] as^[14] being very unequal to the subtilty of nature. It forces assent, therefore, and not things.

XIV. The syllogism consists of propositions; propositions of words; words are the signs of notions. If, therefore, the notions (which form the basis of the whole) be confused and carelessly abstracted from things, there is no solidity in the superstructure. Our only hope, then, is in genuine induction.

XV. We have no sound notions either in logic or physics; substance, quality, action, passion, and existence are not clear notions; much less weight, levity, density, tenuity, moisture, dryness, generation, corruption, attraction,^[15] repulsion, element, matter, form, and the like. They are all fantastical and ill-defined.

XVI. The notions of less abstract natures, as man, dog, dove, and the immediate perceptions of sense, as heat, cold, white, black, do not deceive us materially, yet even these are sometimes confused by the mutability of matter and the intermixture of things. All the rest which men have hitherto employed

are errors, and improperly abstracted and deduced from things.

XVII. There is the same degree of licentiousness and error in forming axioms as in abstracting notions, and that in the first principles, which depend on common induction; still more is this the case in axioms and inferior propositions derived from syllogisms.

XVIII. The present discoveries in science are such as lie immediately beneath the surface of common notions. It is necessary, however, to penetrate the more secret and remote parts of nature, in order to abstract both notions and axioms from things by a more certain and guarded method.

XIX. There are and can exist but two ways of investigating and discovering truth. The one hurries on rapidly from the senses and particulars to the most general axioms, and from them, as principles and their supposed indisputable truth, derives and discovers the intermediate axioms. This is the way now in use. The other constructs its axioms from the senses and particulars, by ascending continually and gradually, till it finally arrives at the most general axioms, which is the true but unattempted way.

XX. The understanding when left to itself proceeds by the same way as that which it would have adopted under the guidance of logic, namely, the first; for the mind is fond of starting off to generalities, that it may avoid labor, and^[16] after dwelling a little on a subject is fatigued by experiment. But those evils are augmented by logic, for the sake of the ostentation of dispute.

XXI. The understanding, when left to itself in a man of a steady, patient, and reflecting disposition (especially when unimpeded by received doctrines), makes some attempt in the right way, but with little effect, since the understanding, undirected and unassisted, is unequal to and unfit for the task of vanquishing the obscurity of things.

XXII. Each of these two ways begins from the senses and particulars, and ends in the greatest generalities. But they are immeasurably different; for the one merely touches cursorily the limits of experiment and particulars, while the other runs duly and regularly through them—the one from the very outset lays down some abstract and useless generalities, the other gradually rises to those principles which are really the most common in nature.^[6]

XXIII. There is no small difference between the idols of the human mind

and the ideas of the Divine mind—that is to say, between certain idle dogmas and the real stamp and impression of created objects, as they are found in nature.

XXIV. Axioms determined upon in argument can never assist in the discovery of new effects; for the subtilty of nature is vastly superior to that of argument. But axioms properly and regularly abstracted from particulars easily^[17] point out and define new particulars, and therefore impart activity to the sciences.

XXV. The axioms now in use are derived from a scanty handful, as it were, of experience, and a few particulars of frequent occurrence, whence they are of much the same dimensions or extent as their origin. And if any neglected or unknown instance occurs, the axiom is saved by some frivolous distinction, when it would be more consistent with truth to amend it.

XXVI. We are wont, for the sake of distinction, to call that human reasoning which we apply to nature the anticipation of nature (as being rash and premature), and that which is properly deduced from things the interpretation of nature.

XXVII. Anticipations are sufficiently powerful in producing unanimity, for if men were all to become even uniformly mad, they might agree tolerably well with each other.

XXVIII. Anticipations again, will be assented to much more readily than interpretations, because being deduced from a few instances, and these principally of familiar occurrence, they immediately hit the understanding and satisfy the imagination; while, on the contrary, interpretations, being deduced from various subjects, and these widely dispersed, cannot suddenly strike the understanding, so that in common estimation they must appear difficult and discordant, and almost like the mysteries of faith.

XXIX. In sciences founded on opinions and dogmas, it is right to make use of anticipations and logic if you wish to force assent rather than things.

XXX. If all the capacities of all ages should unite and combine and transmit their labors, no great progress will be^[18] made in learning by anticipations, because the radical errors, and those which occur in the first process of the mind, are not cured by the excellence of subsequent means and remedies.

XXXI. It is in vain to expect any great progress in the sciences by the superinducing or ingrafting new matters upon old. An instauration must be made from the very foundations, if we do not wish to revolve forever in a circle, making only some slight and contemptible progress.

XXXII. The ancient authors and all others are left in undisputed possession of their honors; for we enter into no comparison of capacity or talent, but of method, and assume the part of a guide rather than of a critic.

XXXIII. To speak plainly, no correct judgment can be formed either of our method or its discoveries by those anticipations which are now in common use; for it is not to be required of us to submit ourselves to the judgment of the very method we ourselves arraign.

XXXIV. Nor is it an easy matter to deliver and explain our sentiments; for those things which are in themselves new can yet be only understood from some analogy to what is old.

XXXV. Alexander Borgia^[7] said of the expedition of the French into Italy that they came with chalk in their hands to mark up their lodgings, and not with weapons to force their passage. Even so do we wish our philosophy to make its way quietly into those minds that are fit for it, and of good capacity; for we have no need of contention where we^[19] differ in first principles, and in our very notions, and even in our forms of demonstration.

XXXVI. We have but one simple method of delivering our sentiments, namely, we must bring men to particulars and their regular series and order, and they must for a while renounce their notions, and begin to form an acquaintance with things.

XXXVII. Our method and that of the sceptics^[8] agree in some respects at first setting out, but differ most widely, and are completely opposed to each other in their conclusion; for they roundly assert that nothing can be known; we, that but a small part of nature can be known, by the present method; their next step, however, is to destroy the authority of the senses and understanding, while we invent and supply them with assistance.

XXXVIII. The idols and false notions which have already preoccupied the human understanding, and are deeply rooted in it, not only so beset men's minds that they become difficult of access, but even when access is obtained will again meet and trouble us in the instauration of the sciences, unless

mankind when forewarned guard themselves with all possible care against them.

XXXIX. Four species of idols beset the human mind,^[20]^[9] to which (for distinction's sake) we have assigned names, calling the first Idols of the Tribe, the second Idols of the Den, the third Idols of the Market, the fourth Idols of the Theatre.

XL. The formation of notions and axioms on the foundation of true induction is the only fitting remedy by which we can ward off and expel these idols. It is, however, of great service to point them out; for the doctrine of idols bears the same relation to the interpretation of nature as that of the confutation of sophisms does to common logic.^[10]

XLI. The idols of the tribe are inherent in human nature and the very tribe or race of man; for man's sense is falsely asserted to be the standard of things; on the contrary, all the perceptions both of the senses and the mind bear reference to man and not to the universe, and the human mind resembles those uneven mirrors which impart their own^[21] properties to different objects, from which rays are emitted and distort and disfigure them.^[11]

XLII. The idols of the den are those of each individual; for everybody (in addition to the errors common to the race of man) has his own individual den or cavern, which intercepts and corrupts the light of nature, either from his own peculiar and singular disposition, or from his education and intercourse with others, or from his reading, and the authority acquired by those whom he reverences and admires, or from the different impressions produced on the mind, as it happens to be preoccupied and predisposed, or equable and tranquil, and the like; so that the spirit of man (according to its several dispositions), is variable, confused, and as it were actuated by chance; and Heraclitus said well that men search for knowledge in lesser worlds, and not in the greater or common world.

XLIII. There are also idols formed by the reciprocal intercourse and society of man with man, which we call idols of the market, from the commerce and association of men with each other; for men converse by means of language, but words are formed at the will of the generality, and there arises from a bad and unapt formation of words a wonderful obstruction to the mind. Nor can the definitions and explanations with which learned men

are wont to guard and protect themselves in some instances afford a complete remedy—words still manifestly force the understanding, throw everything into confusion, and lead mankind into vain and innumerable controversies and fallacies.

XLIV. Lastly, there are idols which have crept into^[22] men's minds from the various dogmas of peculiar systems of philosophy, and also from the perverted rules of demonstration, and these we denominate idols of the theatre: for we regard all the systems of philosophy hitherto received or imagined, as so many plays brought out and performed, creating fictitious and theatrical worlds. Nor do we speak only of the present systems, or of the philosophy and sects of the ancients, since numerous other plays of a similar nature can be still composed and made to agree with each other, the causes of the most opposite errors being generally the same. Nor, again, do we allude merely to general systems, but also to many elements and axioms of sciences which have become inveterate by tradition, implicit credence, and neglect. We must, however, discuss each species of idols more fully and distinctly in order to guard the human understanding against them.

XLV. The human understanding, from its peculiar nature, easily supposes a greater degree of order and equality in things than it really finds; and although many things in nature be *sui generis* and most irregular, will yet invent parallels and conjugates and relatives, where no such thing is. Hence the fiction, that all celestial bodies move in perfect circles, thus rejecting entirely spiral and serpentine lines (except as explanatory terms).^[12] Hence also the element^[23] of fire is introduced with its peculiar orbit,^[13] to keep square with those other three which are objects of our senses. The relative rarity of the elements (as they are called) is arbitrarily made to vary in tenfold progression, with many other dreams of the like nature.^[14] Nor is this folly confined to theories, but it is to be met with even in simple notions.

XLVI. The human understanding, when any proposition has been once laid down (either from general admission and belief, or from the pleasure it affords), forces everything else to add fresh support and confirmation; and although most cogent and abundant instances may exist to the contrary, yet either does not observe or despises them, or gets rid of and rejects them by some distinction, with violent and injurious prejudice, rather than sacrifice the authority of its first conclusions. It was well answered by him^[15] who

was^[24] shown in a temple the votive tablets suspended by such as had escaped the peril of shipwreck, and was pressed as to whether he would then recognize the power of the gods, by an inquiry, But where are the portraits of those who have perished in spite of their vows? All superstition is much the same, whether it be that of astrology, dreams, omens, retributive judgment, or the like, in all of which the deluded believers observe events which are fulfilled, but neglect and pass over their failure, though it be much more common. But this evil insinuates itself still more craftily in philosophy and the sciences, in which a settled maxim vitiates and governs every other circumstance, though the latter be much more worthy of confidence. Besides, even in the absence of that eagerness and want of thought (which we have mentioned), it is the peculiar and perpetual error of the human understanding to be more moved and excited by affirmatives than negatives, whereas it ought duly and regularly to be impartial; nay, in establishing any true axiom the negative instance is the most powerful.

XLVII. The human understanding is most excited by that which strikes and enters the mind at once and suddenly, and by which the imagination is immediately filled and inflated. It then begins almost imperceptibly to conceive and suppose that everything is similar to the few objects which have taken possession of the mind, while it is very slow and unfit for the transition to the remote and heterogeneous instances by which axioms are tried as by fire, unless the office be imposed upon it by severe regulations and a powerful authority.

XLVIII. The human understanding is active and cannot halt or rest, but even, though without effect, still presses forward. Thus we cannot conceive of any end or external^[25] boundary of the world, and it seems necessarily to occur to us that there must be something beyond. Nor can we imagine how eternity has flowed on down to the present day, since the usually received distinction of an infinity, a parte ante and a parte post,^[16] cannot hold good; for it would thence follow that one infinity is greater than another, and also that infinity is wasting away and tending to an end. There is the same difficulty in considering the infinite divisibility of lines, arising from the weakness of our minds, which weakness interferes to still greater disadvantage with the discovery of causes; for although the greatest generalities in nature must be positive, just as they are found, and in fact not

causable, yet the human understanding, incapable of resting, seeks for something more intelligible. Thus, however, while aiming at further progress, it falls back to what is actually less advanced, namely, final causes; for they are clearly more allied to man's own nature, than the system of the universe, and from this source they have wonderfully corrupted philosophy. But he would be an unskilful and shallow philosopher who should seek for causes in the greatest generalities,^[26] and not be anxious to discover them in subordinate objects.

XLIX. The human understanding resembles not a dry light, but admits a tincture of the will^[17] and passions, which generate their own system accordingly; for man always believes more readily that which he prefers. He, therefore, rejects difficulties for want of patience in investigation; sobriety, because it limits his hope; the depths of nature, from superstition; the light of experiment, from arrogance and pride, lest his mind should appear to be occupied with common and varying objects; paradoxes, from a fear of the opinion of the vulgar; in short, his feelings imbue and corrupt his understanding in innumerable and sometimes imperceptible ways.

L. But by far the greatest impediment and aberration of the human understanding proceeds from the dulness, incompetence, and errors of the senses; since whatever strikes the senses preponderates over everything, however superior, which does not immediately strike them. Hence contemplation mostly ceases with sight, and a very scanty, or perhaps no regard is paid to invisible objects. The entire operation, therefore, of spirits inclosed in tangible bodies^[18] is concealed, and escapes us. All that more delicate change of formation in the parts of coarser substances (vulgarly^[27] called alteration, but in fact a change of position in the smallest particles) is equally unknown; and yet, unless the two matters we have mentioned be explored and brought to light, no great effect can be produced in nature. Again, the very nature of common air, and all bodies of less density (of which there are many) is almost unknown; for the senses are weak and erring, nor can instruments be of great use in extending their sphere or acuteness—all the better interpretations of nature are worked out by instances, and fit and apt experiments, where the senses only judge of the experiment, the experiment of nature and the thing itself.

LI. The human understanding is, by its own nature, prone to abstraction,

and supposes that which is fluctuating to be fixed. But it is better to dissect than abstract nature: such was the method employed by the school of Democritus,^[19] which made greater progress in penetrating nature than the rest. It is best to consider matter, its conformation, and the changes of that conformation, its own action,^[20] and the law of this action or motion; for forms are a mere fiction of the human mind, unless you will call the laws of action by that name.^[21]

[28]

LII. Such are the idols of the tribe, which arise either from the uniformity of the constitution of man's spirit, or its prejudices, or its limited faculties or restless agitation, or from the interference of the passions, or the incompetence of the senses, or the mode of their impressions.

LIII. The idols of the den derive their origin from the peculiar nature of each individual's mind and body, and also from education, habit, and accident; and although they be various and manifold, yet we will treat of some that require the greatest caution, and exert the greatest power in polluting the understanding.

LIV. Some men become attached to particular sciences and contemplations, either from supposing themselves the authors and inventors of them, or from having bestowed the greatest pains upon such subjects, and thus become most habituated to them.^[22] If men of this description apply themselves to philosophy and contemplations of a universal^[29] nature, they wrest and corrupt them by their preconceived fancies, of which Aristotle affords us a single instance, who made his natural philosophy completely subservient to his logic, and thus rendered it little more than useless and disputatious. The chemists, again, have formed a fanciful philosophy with the most confined views, from a few experiments of the furnace. Gilbert,^[23] too, having employed himself most assiduously in the consideration of the magnet, immediately established a system of philosophy to coincide with his favorite pursuit.

LV. The greatest and, perhaps, radical distinction between different men's dispositions for philosophy and the sciences is this, that some are more vigorous and active in observing the differences of things, others in observing their resemblances; for a steady and acute disposition can fix its thoughts, and

dwell upon and adhere to a point, through all the refinements of differences, but those that are sublime and discursive recognize and compare even the most delicate and general resemblances; each of them readily falls into excess, by catching either at nice distinctions or shadows of resemblance.

LVI. Some dispositions evince an unbounded admiration of antiquity, others eagerly embrace novelty, and but few can preserve the just medium, so as neither to tear up^[30] what the ancients have correctly laid down, nor to despise the just innovations of the moderns. But this is very prejudicial to the sciences and philosophy, and instead of a correct judgment we have but the factions of the ancients and moderns. Truth is not to be sought in the good fortune of any particular conjuncture of time, which is uncertain, but in the light of nature and experience, which is eternal. Such factions, therefore, are to be abjured, and the understanding must not allow them to hurry it on to assent.

LVII. The contemplation of nature and of bodies in their individual form distracts and weakens the understanding; but the contemplation of nature and of bodies in their general composition and formation stupefies and relaxes it. We have a good instance of this in the school of Leucippus and Democritus compared with others, for they applied themselves so much to particulars as almost to neglect the general structure of things, while the others were so astounded while gazing on the structure that they did not penetrate the simplicity of nature. These two species of contemplation must, therefore, be interchanged, and each employed in its turn, in order to render the understanding at once penetrating and capacious, and to avoid the inconveniences we have mentioned, and the idols that result from them.

LVIII. Let such, therefore, be our precautions in contemplation, that we may ward off and expel the idols of the den, which mostly owe their birth either to some predominant pursuit, or, secondly, to an excess in synthesis and analysis, or, thirdly, to a party zeal in favor of certain ages, or, fourthly, to the extent or narrowness of the subject. In general, he who contemplates nature should suspect whatever particularly takes and fixes his understanding, ^[31] and should use so much the more caution to preserve it equable and unprejudiced.

LIX. The idols of the market are the most troublesome of all, those namely

which have entwined themselves round the understanding from the associations of words and names. For men imagine that their reason governs words, while, in fact, words react upon the understanding; and this has rendered philosophy and the sciences sophistical and inactive. Words are generally formed in a popular sense, and define things by those broad lines which are most obvious to the vulgar mind; but when a more acute understanding or more diligent observation is anxious to vary those lines, and to adapt them more accurately to nature, words oppose it. Hence the great and solemn disputes of learned men often terminate in controversies about words and names, in regard to which it would be better (imitating the caution of mathematicians) to proceed more advisedly in the first instance, and to bring such disputes to a regular issue by definitions. Such definitions, however, cannot remedy the evil in natural and material objects, because they consist themselves of words, and these words produce others;[\[24\]](#) so that we must necessarily have recourse to particular instances, and their regular series and arrangement, as we[\[32\]](#) shall mention when we come to the mode and scheme of determining notions and axioms.

LX. The idols imposed upon the understanding by words are of two kinds. They are either the names of things which have no existence (for as some objects are from inattention left without a name, so names are formed by fanciful imaginations which are without an object), or they are the names of actual objects, but confused, badly defined, and hastily and irregularly abstracted from things. Fortune, the *primum mobile*, the planetary orbits,[\[25\]](#) the element of fire, and the like fictions, which owe their birth to futile and false theories, are instances of the first kind. And this species of idols is removed with greater facility, because it can be exterminated by the constant refutation or the desuetude of the theories themselves. The others, which are created by vicious and unskilful abstraction, are intricate and deeply rooted. Take some word, for instance, as moist, and let us examine how far the different significations of this word are consistent. It will be found that the word moist is nothing but a confused sign of different actions admitted of no settled and defined uniformity. For it means that which easily diffuses itself over another body; that which is indeterminable and cannot be brought to a consistency; that which[\[33\]](#) yields easily in every direction; that which is easily divided and dispersed; that which is easily united and collected; that

which easily flows and is put in motion; that which easily adheres to, and wets another body; that which is easily reduced to a liquid state though previously solid. When, therefore, you come to predicate or impose this name, in one sense flame is moist, in another air is not moist, in another fine powder is moist, in another glass is moist; so that it is quite clear that this notion is hastily abstracted from water only, and common ordinary liquors, without any due verification of it.

There are, however, different degrees of distortion and mistake in words. One of the least faulty classes is that of the names of substances, particularly of the less abstract and more defined species (those then of chalk and mud are good, of earth bad); words signifying actions are more faulty, as to generate, to corrupt, to change; but the most faulty are those denoting qualities (except the immediate objects of sense), as heavy, light, rare, dense. Yet in all of these there must be some notions a little better than others, in proportion as a greater or less number of things come before the senses.

LXI. The idols of the theatre are not innate, nor do they introduce themselves secretly into the understanding, but they are manifestly instilled and cherished by the fictions of theories and depraved rules of demonstration. To attempt, however, or undertake their confutation would not be consistent with our declarations. For since we neither agree in our principles nor our demonstrations, all argument is out of the question. And it is fortunate that the ancients are left in possession of their honors. We detract nothing from them, seeing our whole doctrine relates only to the^[34] path to be pursued. The lame (as they say) in the path outstrip the swift who wander from it, and it is clear that the very skill and swiftness of him who runs not in the right direction must increase his aberration.

Our method of discovering the sciences is such as to leave little to the acuteness and strength of wit, and indeed rather to level wit and intellect. For as in the drawing of a straight line, or accurate circle by the hand, much depends on its steadiness and practice, but if a ruler or compass be employed there is little occasion for either; so it is with our method. Although, however, we enter into no individual confutations, yet a little must be said, first, of the sects and general divisions of these species of theories; secondly, something further to show that there are external signs of their weakness; and, lastly, we must consider the causes of so great a misfortune, and so long and general a

unanimity in error, that we may thus render the access to truth less difficult, and that the human understanding may the more readily be purified, and brought to dismiss its idols.

LXII. The idols of the theatre, or of theories, are numerous, and may, and perhaps will, be still more so. For unless men's minds had been now occupied for many ages in religious and theological considerations, and civil governments (especially monarchies), had been averse to novelties of that nature even in theory (so that men must apply to them with some risk and injury to their own fortunes, and not only without reward, but subject to contumely and envy), there is no doubt that many other sects of philosophers and theorists would have been introduced, like those which formerly flourished in such diversified abundance among the Greeks. For as many imaginary theories of the heavens can be deduced from the phenomena of the sky, so^[35] it is even more easy to found many dogmas upon the phenomena of philosophy—and the plot of this our theatre resembles those of the poetical, where the plots which are invented for the stage are more consistent, elegant, and pleasurable than those taken from real history.

In general, men take for the groundwork of their philosophy either too much from a few topics, or too little from many; in either case their philosophy is founded on too narrow a basis of experiment and natural history, and decides on too scanty grounds. For the theoretic philosopher seizes various common circumstances by experiment, without reducing them to certainty or examining and frequently considering them, and relies for the rest upon meditation and the activity of his wit.

There are other philosophers who have diligently and accurately attended to a few experiments, and have thence presumed to deduce and invent systems of philosophy, forming everything to conformity with them.

A third set, from their faith and religious veneration, introduce theology and traditions; the absurdity of some among them having proceeded so far as to seek and derive the sciences from spirits and genii. There are, therefore, three sources of error and three species of false philosophy; the sophistic, empiric, and superstitious.

LXIII. Aristotle affords the most eminent instance of the first; for he corrupted natural philosophy by logic—thus he formed the world of

categories, assigned to the human soul, the noblest of substances, a genus determined by words of secondary operation, treated of density and rarity (by which bodies occupy a greater or lesser space), by the frigid distinctions of action and power, asserted that there was a peculiar and proper motion in all bodies, and^[36] that if they shared in any other motion, it was owing to an external moving cause, and imposed innumerable arbitrary distinctions upon the nature of things; being everywhere more anxious as to definitions in teaching and the accuracy of the wording of his propositions, than the internal truth of things. And this is best shown by a comparison of his philosophy with the others of greatest repute among the Greeks. For the similar parts of Anaxagoras, the atoms of Leucippus and Democritus, the heaven and earth of Parmenides, the discord and concord of Empedocles,^[26] the resolution of bodies into the common nature of fire, and their condensation according to Heraclitus, exhibit some sprinkling of natural philosophy, the nature of things, and experiment; while Aristotle's physics are mere logical terms, and he remodelled the same subject in his metaphysics under a more imposing title, and more as a realist than a nominalist. Nor is much stress to be laid on his frequent recourse to experiment in his books on animals, his problems, and other treatises; for he had already decided, without having properly consulted experience as the basis of his decisions and axioms, and after having so decided, he drags experiment along as a captive constrained to accommodate herself to his decisions: so that he is even more to be blamed than his modern followers (of the scholastic school) who have deserted her altogether.

[37]

LXIV. The empiric school produces dogmas of a more deformed and monstrous nature than the sophistic or theoretic school; not being founded in the light of common notions (which, however poor and superstitious, is yet in a manner universal, and of a general tendency), but in the confined obscurity of a few experiments. Hence this species of philosophy appears probable, and almost certain to those who are daily practiced in such experiments, and have thus corrupted their imagination, but incredible and futile to others. We have a strong instance of this in the alchemists and their dogmas; it would be difficult to find another in this age, unless perhaps in the philosophy of Gilbert.^[27] We could not, however, neglect to caution others against this

school, because we already foresee and augur, that if men be hereafter induced by our exhortations to apply seriously to experiments (bidding farewell to the sophistic doctrines), there will then be imminent danger from empirics, owing to the premature and forward haste of the understanding, and its jumping or flying to generalities and the principles of things. We ought, therefore, already to meet the evil.

LXV. The corruption of philosophy by the mixing of it up with superstition and theology, is of a much wider extent, and is most injurious to it both as a whole and in parts. For the human understanding is no less exposed to the impressions of fancy, than to those of vulgar notions. The disputatious and sophistic school entraps the understanding, while the fanciful, bombastic, and, as it were, poetical school, rather flatters it.

There is a clear example of this^[38] among the Greeks, especially in Pythagoras, where, however, the superstition is coarse and overcharged, but it is more dangerous and refined in Plato and his school. This evil is found also in some branches of other systems of philosophy, where it introduces abstracted forms, final and first causes, omitting frequently the intermediate and the like. Against it we must use the greatest caution; for the apotheosis of error is the greatest evil of all, and when folly is worshipped, it is, as it were, a plague spot upon the understanding. Yet some of the moderns have indulged this folly with such consummate inconsiderateness, that they have endeavored to build a system of natural philosophy on the first chapter of Genesis, the book of Job, and other parts of Scripture; seeking thus the dead among the living.^[28] And this folly is the more to be prevented and restrained, because not only fantastical philosophy, but heretical religion spring from the absurd mixture of matters divine and human. It is therefore most wise soberly to render unto faith the things that are faith's.

LXVI. Having spoken of the vicious authority of the systems founded either on vulgar notions, or on a few experiments, or on superstition, we must now consider the faulty subjects for contemplation, especially in natural philosophy. The human understanding is perverted by observing the power of mechanical arts, in which bodies are very materially changed by composition or separation, and is induced to suppose that something similar takes place in the universal nature of things. Hence the fiction of elements,^[39] and their co-operation in forming natural bodies.^[29] Again, when man reflects upon the

entire liberty of nature, he meets with particular species of things, as animals, plants, minerals, and is thence easily led to imagine that there exist in nature certain primary forms which she strives to produce, and that all variation from them arises from some impediment or error which she is exposed to in completing her work, or from the collision or metamorphosis of different species. The first hypothesis has produced the doctrine of elementary properties, the second that of occult properties and specific powers; and both lead to trifling courses of reflection, in which the mind acquiesces, and is thus diverted from more important subjects. But physicians exercise a much more useful labor in the consideration of the secondary qualities of things, and the operations of attraction, repulsion, attenuation, inspissation, dilatation, astringency, separation, maturation, and the like; and would do still more if they would not corrupt these proper observations by the two systems I have alluded to, of elementary qualities and specific powers, by which they either reduce the secondary to first qualities, and their subtile and immeasurable^[40] composition, or at any rate neglect to advance by greater and more diligent observation to the third and fourth qualities, thus terminating their contemplation prematurely. Nor are these powers (or the like) to be investigated only among the medicines for the human body, but also in all changes of other natural bodies.

A greater evil arises from the contemplation and investigation rather of the stationary principles of things from which, than of the active by which things themselves are created. For the former only serve for discussion, the latter for practice. Nor is any value to be set on those common differences of motion which are observed in the received system of natural philosophy, as generation, corruption, augmentation, diminution, alteration, and translation. For this is their meaning: if a body, unchanged in other respects, is moved from its place, this is translation; if the place and species be given, but the quantity changed, it is alteration; but if, from such a change, the mass and quantity of the body do not continue the same, this is the motion of augmentation and diminution; if the change be continued so as to vary the species and substance, and transfuse them to others, this is generation and corruption. All this is merely popular, and by no means penetrates into nature; and these are but the measures and bounds of motion, and not different species of it; they merely suggest how far, and not how or whence.

For they exhibit neither the affections of bodies nor the process of their parts, but merely establish a division of that motion, which coarsely exhibits to the senses matter in its varied form. Even when they wish to point out something relative to the causes of motion, and to establish a division of them, they most absurdly introduce natural and violent motion, which is also a popular notion, [41] since every violent motion is also in fact natural, that is to say, the external efficient puts nature in action in a different manner to that which she had previously employed.

But if, neglecting these, any one were, for instance, to observe that there is in bodies a tendency of adhesion, so as not to suffer the unity of nature to be completely separated or broken, and a *vacuum*[30] to be formed, or that they have a tendency to return to their natural dimensions or tension, so that, if compressed or extended within or beyond it, they immediately strive to recover themselves, and resume their former volume and extent; or that they have a tendency to congregate into masses with similar bodies—the dense, for instance, toward the circumference of the earth, the thin and rare toward that of the heavens. These and the like are true physical genera of motions, but the others are clearly logical and scholastic, as appears plainly from a comparison of the two.

Another considerable evil is, that men in their systems and contemplations bestow their labor upon the investigation and discussion of the principles of things and the extreme limits of nature, although all utility and means of action consist in the intermediate objects. Hence men cease not to abstract nature till they arrive at potential and shapeless matter,[31] and still persist in their dissection, till[42] they arrive at atoms; and yet were all this true, it would be of little use to advance man's estate.

LXVII. The understanding must also be cautioned against the intemperance of systems, so far as regards its giving or withholding its assent; for such intemperance appears to fix and perpetuate idols, so as to leave no means of removing them.

These excesses are of two kinds. The first is seen in those who decide hastily, and render the sciences positive and dictatorial. The other in those who have introduced scepticism, and vague unbounded inquiry. The former subdues, the latter enervates the understanding. The Aristotelian philosophy,

after destroying other systems (as the Ottomans^[32] do their brethren) by its disputatious confutations, decided upon everything, and Aristotle himself then raises up questions at will, in order to settle them; so that everything should be certain and decided, a method now in use among his successors.

The school of Plato introduced scepticism, first, as it were in joke and irony, from their dislike to Protagoras, Hippias,^[33] and others, who were ashamed of appearing not^[43] to doubt upon any subject. But the new academy dogmatized in their scepticism, and held it as their tenet. Although this method be more honest than arbitrary decision (for its followers allege that they by no means confound all inquiry, like Pyrrho and his disciples, but hold doctrines which they can follow as probable, though they cannot maintain them to be true), yet when the human mind has once despaired of discovering truth, everything begins to languish. Hence men turn aside into pleasant controversies and discussions, and into a sort of wandering over subjects rather than sustain any rigorous investigation. But as we observed at first, we are not to deny the authority of the human senses and understanding, although weak, but rather to furnish them with assistance.

LXVIII. We have now treated of each kind of idols, and their qualities, all of which must be abjured and renounced with firm and solemn resolution, and the understanding must be completely freed and cleared of them, so that the access to the kingdom of man, which is founded on the sciences, may resemble that to the kingdom of heaven, where no admission is conceded except to children.

LXIX. Vicious demonstrations are the muniments and support of idols, and those which we possess in logic, merely subject and enslave the world to human thoughts, and thoughts to words. But demonstrations are in some manner themselves systems of philosophy and science; for such as they are, and accordingly as they are regularly or improperly^[44] established, such will be the resulting systems of philosophy and contemplation. But those which we employ in the whole process leading from the senses and things to axioms and conclusions, are fallacious and incompetent. This process is fourfold, and the errors are in equal number. In the first place the impressions of the senses are erroneous, for they fail and deceive us. We must supply defects by substitutions, and fallacies by their correction. Secondly, notions are improperly abstracted from the senses, and indeterminate and confused when

they ought to be the reverse. Thirdly, the induction that is employed is improper, for it determines the principles of sciences by simple enumeration, [34] without adopting exclusions and resolutions, or just separations of nature. Lastly, the usual method of discovery and proof, by first establishing the most general propositions, then applying and proving the intermediate axioms according to them, is the parent of error and the calamity of every science. But we will treat more fully[45] of that which we now slightly touch upon, when we come to lay down the true way of interpreting nature, after having gone through the above expiatory process and purification of the mind.

LXX. But experience is by far the best demonstration, provided it adhere to the experiment actually made, for if that experiment be transferred to other subjects apparently similar, unless with proper and methodical caution it becomes fallacious. The present method of experiment is blind and stupid; hence men wandering and roaming without any determined course, and consulting mere chance, are hurried about to various points, and advance but little—at one time they are happy, at another their attention is distracted, and they always find that they want something further. Men generally make their experiments carelessly, and as it were in sport, making some little variation in a known experiment, and then if they fail they become disgusted and give up the attempt; nay, if they set to work more seriously, steadily, and assiduously, yet they waste all their time on probing some solitary matter, as Gilbert on the magnet, and the alchemists on gold. But such conduct shows their method to be no less unskilful than mean; for nobody can successfully investigate the nature of any object by considering that object alone; the inquiry must be more generally extended.

Even when men build any science and theory upon experiment, yet they almost always turn with premature and hasty zeal to practice, not merely on account of the advantage and benefit to be derived from it, but in order to seize upon some security in a new undertaking of their not employing the remainder of their labor unprofitably, and by making themselves conspicuous, to acquire a greater name[46] for their pursuit. Hence, like Atalanta, they leave the course to pick up the golden apple, interrupting their speed, and giving up the victory. But in the true course of experiment, and in extending it to new effects, we should imitate the Divine foresight and order;

for God on the first day only created light, and assigned a whole day to that work without creating any material substance thereon. In like manner we must first, by every kind of experiment, elicit the discovery of causes and true axioms, and seek for experiments which may afford light rather than profit. Axioms, when rightly investigated and established, prepare us not for a limited but abundant practice, and bring in their train whole troops of effects. But we will treat hereafter of the ways of experience, which are not less beset and interrupted than those of judgment; having spoken at present of common experience only as a bad species of demonstration, the order of our subject now requires some mention of those external signs of the weakness in practice of the received systems of philosophy and contemplation^[35] which we referred to above, and of the causes of a circumstance at first sight so wonderful and incredible. For the knowledge of these external signs prepares the way for assent, and the explanation of the causes removes the wonder; and these two circumstances are of material use in extirpating more easily and gently the idols from the understanding.

LXXI. The sciences we possess have been principally derived from the Greeks; for the addition of the Roman, Arabic, or more modern writers, are but few and of small importance, and such as they are, are founded on the basis^[47] of Greek invention. But the wisdom of the Greeks was professional and disputatious, and thus most adverse to the investigation of truth. The name, therefore, of sophists, which the contemptuous spirit of those who deemed themselves philosophers, rejected and transferred to the rhetoricians—Gorgias,^[36] Protagoras, Hippias, Polus—might well suit the whole tribe, such as Plato, Aristotle, Zeno, Epicurus, Theophrastus, and their successors—Chrysippus, Carneades, and the rest. There was only this difference between them—the former were mercenary vagabonds, travelling about to different states, making a show of their wisdom, and requiring pay; the latter more dignified and noble, in possession of fixed habitations, opening schools, and teaching philosophy gratuitously. Both, however (though differing in other respects), were professorial, and reduced every subject to controversy, establishing and defending certain sects and dogmas of philosophy, so that their doctrines were nearly (what Dionysius not unaptly objected to Plato) the talk of idle old men to ignorant youths. But the more ancient Greeks, as Empedocles, Anaxagoras, Leucippus, Democritus, Parmenides, Heraclitus,

Xenophanes, Philolaus, and the rest^[37] (for I omit Pythagoras as being superstitious),^[48] did not (that we are aware) open schools, but betook themselves to the investigation of truth with greater silence and with more severity and simplicity, that is, with less affectation and ostentation. Hence in our opinion they acted more advisedly, however their works may have been eclipsed in course of time by those lighter productions which better correspond with and please the apprehensions and passions of the vulgar; for time, like a river,^[38] bears down to us that^[49] which is light and inflated, and sinks that which is heavy and solid. Nor were even these more ancient philosophers free from the national defect, but inclined too much to the ambition and vanity of forming a sect, and captivating public opinion, and we must despair of any inquiry after truth when it condescends to such trifles. Nor must we omit the opinion, or rather prophecy, of an Egyptian priest with regard to the Greeks, that they would forever remain children, without any antiquity of knowledge or knowledge of antiquity; for they certainly have this in common with children, that they are prone to talking, and incapable of generation, their wisdom being loquacious and unproductive of effects. Hence the external signs derived from the origin and birthplace of our present philosophy are not favorable.

LXXII. Nor are those much better which can be deduced from the character of the time and age, than the former from that of the country and nation; for in that age the knowledge both of time and of the world was confined and meagre, which is one of the worst evils for those who rely entirely on experience—they had not a thousand years of history worthy of that name, but mere fables and ancient traditions; they were acquainted with but a small portion of the regions and countries of the world, for they indiscriminately called all nations situated far toward the north Scythians, all those to the west Celts; they knew nothing of Africa but the nearest part of Ethiopia, or of Asia beyond^[50] the Ganges, and had not even heard any sure and clear tradition of the regions of the New World. Besides, a vast number of climates and zones, in which innumerable nations live and breathe, were pronounced by them to be uninhabitable; nay, the travels of Democritus, Plato, and Pythagoras, which were not extensive, but rather mere excursions from home, were considered as something vast. But in our times many parts of the New World, and every extremity of the Old, are well known, and the

mass of experiments has been infinitely increased; wherefore, if external signs were to be taken from the time of the nativity or procreation (as in astrology), nothing extraordinary could be predicted of these early systems of philosophy.

LXXIII. Of all signs there is none more certain or worthy than that of the fruits produced, for the fruits and effects are the sureties and vouchers, as it were, for the truth of philosophy. Now, from the systems of the Greeks, and their subordinate divisions in particular branches of the sciences during so long a period, scarcely one single experiment can be culled that has a tendency to elevate or assist mankind, and can be fairly set down to the speculations and doctrines of their philosophy. Celsus candidly and wisely confesses as much, when he observes that experiments were first discovered in medicine, and that men afterward built their philosophical systems upon them, and searched for and assigned causes, instead of the inverse method of discovering and deriving experiments from philosophy and the knowledge of causes; it is not, therefore, wonderful that the Egyptians (who bestowed divinity and sacred honors on the authors of new inventions) should have consecrated more images of brutes than of men, for the brutes by their natural instinct made many discoveries,[51] while men derived but few from discussion and the conclusions of reason.

The industry of the alchemists has produced some effect, by chance, however, and casualty, or from varying their experiments (as mechanics also do), and not from any regular art or theory, the theory they have imagined rather tending to disturb than to assist experiment. Those, too, who have occupied themselves with natural magic (as they term it) have made but few discoveries, and those of small import, and bordering on imposture; for which reason, in the same manner as we are cautioned by religion to show our faith by our works, we may very properly apply the principle to philosophy, and judge of it by its works, accounting that to be futile which is unproductive, and still more so if, instead of grapes and olives, it yield but the thistle and thorns of dispute and contention.

LXXIV. Other signs may be selected from the increase and progress of particular systems of philosophy and the sciences; for those which are founded on nature grow and increase, while those which are founded on opinion change and increase not. If, therefore, the theories we have

mentioned were not like plants, torn up by the roots, but grew in the womb of nature, and were nourished by her, that which for the last two thousand years has taken place would never have happened, namely, that the sciences still continue in their beaten track, and nearly stationary, without having received any important increase, nay, having, on the contrary, rather bloomed under the hands of their first author, and then faded away. But we see that the case is reversed in the mechanical arts, which are founded on nature and the light of experience, for they (as long as they are popular) seem full of life, and uninterruptedly thrive and^[52] grow, being at first rude, then convenient, lastly polished, and perpetually improved.

LXXV. There is yet another sign (if such it may be termed, being rather an evidence, and one of the strongest nature), namely, the actual confession of those very authorities whom men now follow; for even they who decide on things so daringly, yet at times, when they reflect, betake themselves to complaints about the subtilty of nature, the obscurity of things, and the weakness of man's wit. If they would merely do this, they might perhaps deter those who are of a timid disposition from further inquiry, but would excite and stimulate those of a more active and confident turn to further advances. They are not, however, satisfied with confessing so much of themselves, but consider everything which has been either unknown or unattempted by themselves or their teachers, as beyond the limits of possibility, and thus, with most consummate pride and envy, convert the defects of their own discoveries into a calumny on nature and a source of despair to every one else. Hence arose the New Academy, which openly professed scepticism,^[39] and consigned mankind to eternal darkness; hence the notion that forms, or the true differences of things (which are in fact the laws of simple action), are beyond man's^[53] reach, and cannot possibly be discovered; hence those notions in the active and operative branches, that the heat of the sun and of fire are totally different, so as to prevent men from supposing that they can elicit or form, by means of fire, anything similar to the operations of nature; and again, that composition only is the work of man and mixture of nature, so as to prevent men from expecting the generation or transformation of natural bodies by art. Men will, therefore, easily allow themselves to be persuaded by this sign not to engage their fortunes and labor in speculations, which are not only desperate, but actually devoted to

desperation.

LXXVI. Nor should we omit the sign afforded by the great dissension formerly prevalent among philosophers, and the variety of schools, which sufficiently show that the way was not well prepared that leads from the senses to the understanding, since the same groundwork of philosophy (namely, the nature of things), was torn and divided into such widely differing and multifarious errors. And although in these days the dissensions and differences of opinions with regard to first principles and entire systems are nearly extinct,[\[40\]](#) yet there remain innumerable questions and controversies with regard to particular branches of philosophy. So that it is manifest that there is nothing sure or sound either in the systems themselves or in the methods of demonstration.[\[41\]](#)

LXXVII. With regard to the supposition that there is a general unanimity as to the philosophy of Aristotle, because[\[54\]](#) the other systems of the ancients ceased and became obsolete on its promulgation, and nothing better has been since discovered; whence it appears that it is so well determined and founded, as to have united the suffrages of both ages; we will observe—1st. That the notion of other ancient systems having ceased after the publication of the works of Aristotle is false, for the works of the ancient philosophers subsisted long after that event, even to the time of Cicero, and the subsequent ages. But at a later period, when human learning had, as it were, been wrecked in the inundation of barbarians into the Roman empire, then the systems of Aristotle and Plato were preserved in the waves of ages, like planks of a lighter and less solid nature. 2d. The notion of unanimity, on a clear inspection, is found to be fallacious. For true unanimity is that which proceeds from a free judgment, arriving at the same conclusion, after an investigation of the fact. Now, by far the greater number of those who have assented to the philosophy of Aristotle, have bound themselves down to it from prejudice and the authority of others, so that it is rather obsequiousness and concurrence than unanimity. But even if it were real and extensive unanimity, so far from being esteemed a true and solid confirmation, it should even lead to a violent presumption to the contrary. For there is no worse augury in intellectual matters than that derived from unanimity, with the exception of divinity and politics, where suffrages are allowed to decide. For nothing pleases the multitude, unless it strike the imagination or bind down the understanding, as

we have observed above, with the shackles of vulgar notions. Hence we may well transfer Phocion's remark from morals to the intellect: "That men should immediately examine what error or fault they have committed, when the^[55] multitude concurs with, and applauds them."^[42] This then is one of the most unfavorable signs. All the signs, therefore, of the truth and soundness of the received systems of philosophy and the sciences are unpropitious, whether taken from their origin, their fruits, their progress, the confessions of their authors, or from unanimity.

LXXVIII. We now come to the causes of errors,^[43] and of such perseverance in them for ages. These are sufficiently numerous and powerful to remove all wonder, that what we now offer should have so long been concealed from, and have escaped the notice of mankind, and to render it more worthy of astonishment, that it should even now have entered any one's mind, or become the subject of his thoughts; and that it should have done so, we consider rather the gift of fortune than of any extraordinary talent, and as the offspring of time rather than wit. But, in the first place, the number of ages is reduced to very narrow limits, on a proper consideration of the matter. For out of twenty-five^[44] centuries, with which the memory and learning^[56] of man are conversant, scarcely six can be set apart and selected as fertile in science and favorable to its progress. For there are deserts and wastes in times as in countries, and we can only reckon up three revolutions and epochs of philosophy. 1. The Greek. 2. The Roman. 3. Our own, that is the philosophy of the western nations of Europe: and scarcely two centuries can with justice be assigned to each. The intermediate ages of the world were unfortunate both in the quantity and richness of the sciences produced. Nor need we mention the Arabs, or the scholastic philosophy, which, in those ages, ground down the sciences by their numerous treatises, more than they increased their weight. The first cause, then, of such insignificant progress in the sciences, is rightly referred to the small proportion of time which has been favorable thereto.

LXXIX. A second cause offers itself, which is certainly of the greatest importance; namely, that in those very ages in which men's wit and literature flourished considerably, or even moderately, but a small part of their industry was bestowed on natural philosophy, the great mother of the sciences. For every art and science torn from this root may, perhaps, be polished, and put

into a serviceable shape, but can admit of little growth. It is well known, that after the Christian religion had been acknowledged, and arrived at maturity, by far the best wits were busied upon theology, where the highest rewards offered themselves, and every species of assistance was abundantly supplied, and the study of which was the principal occupation of the western European nations during the third epoch; the rather because^[57] literature flourished about the very time when controversies concerning religion first began to bud forth. 2. In the preceding ages, during the second epoch (that of the Romans), philosophical meditation and labor was chiefly occupied and wasted in moral philosophy (the theology of the heathens): besides, the greatest minds in these times applied themselves to civil affairs, on account of the magnitude of the Roman empire, which required the labor of many. 3. The age during which natural philosophy appeared principally to flourish among the Greeks, was but a short period, since in the more ancient times the seven sages (with the exception of Thales), applied themselves to moral philosophy and politics, and at a later period, after Socrates had brought down philosophy from heaven to earth, moral philosophy became more prevalent, and diverted men's attention from natural. Nay, the very period during which physical inquiries flourished, was corrupted and rendered useless by contradictions, and the ambition of new opinions. Since, therefore, during these three epochs, natural philosophy has been materially neglected or impeded, it is not at all surprising that men should have made but little progress in it, seeing they were attending to an entirely different matter.

LXXX. Add to this that natural philosophy, especially of late, has seldom gained exclusive possession of an individual free from all other pursuits, even among those who have applied themselves to it, unless there may be an example or two of some monk studying in his cell, or some nobleman in his villa.^[45] She has rather been made a passage and bridge to other pursuits.

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Thus has this great mother of the sciences been degraded most unworthily to the situation of a handmaid, and made to wait upon medicine or mathematical operations, and to wash the immature minds of youth, and imbue them with a first dye, that they may afterward be more ready to receive and retain another. In the meantime, let no one expect any great progress in the sciences (especially their operative part), unless natural philosophy be

applied to particular sciences, and particular sciences again referred back to natural philosophy. For want of this, astronomy, optics, music, many mechanical arts, medicine itself, and (what perhaps is more wonderful), moral and political philosophy, and the logical sciences have no depth, but only glide over the surface and variety of things; because these sciences, when they have been once partitioned out and established, are no longer nourished by natural philosophy, which would have imparted fresh vigor and growth to them from the sources and genuine contemplation of motion, rays, sounds, texture, and conformation of bodies, and the affections and capacity of the understanding. But we can little wonder that the sciences grow not when separated from their roots.

LXXXI. There is another powerful and great cause of the little advancement of the sciences, which is this; it is impossible to advance properly in the course when the goal is not properly fixed. But the real and legitimate goal of the sciences is the endowment of human life with new inventions and riches. The great crowd of teachers know nothing of this, but consist of dictatorial hirelings; unless it so happen that some artisan of an acute genius, and ambitious of fame, gives up his time to a new discovery, which is generally attended with a loss of property. The majority, so far from proposing to themselves the augmentation^[59] of the mass of arts and sciences, make no other use of an inquiry into the mass already before them, than is afforded by the conversion of it to some use in their lectures, or to gain, or to the acquirement of a name, and the like. But if one out of the multitude be found, who courts science from real zeal, and on his own account, even he will be seen rather to follow contemplation, and the variety of theories, than a severe and strict investigation of truth. Again, if there even be an unusually strict investigator of truth, yet will he propose to himself, as the test of truth, the satisfaction of his mind and understanding, as to the causes of things long since known, and not such a test as to lead to some new earnest of effects, and a new light in axioms. If, therefore, no one have laid down the real end of science, we cannot wonder that there should be error in points subordinate to that end.

LXXXII. But, in like manner, as the end and goal of science is ill defined, so, even were the case otherwise, men have chosen an erroneous and impassable direction. For it is sufficient to astonish any reflecting mind, that

nobody should have cared or wished to open and complete a way for the understanding, setting off from the senses, and regular, well-conducted experiment; but that everything has been abandoned either to the mists of tradition, the whirl and confusion of argument, or the waves and mazes of chance, and desultory, ill-combined experiment. Now, let any one but consider soberly and diligently the nature of the path men have been accustomed to pursue in the investigation and discovery of any matter, and he will doubtless first observe the rude and inartificial manner of discovery most familiar to mankind: which is no other than this. When any one prepares himself for discovery, he first inquires and obtains^[60] a full account of all that has been said on the subject by others, then adds his own reflections, and stirs up and, as it were, invokes his own spirit, after much mental labor, to disclose its oracles. All which is a method without foundation, and merely turns on opinion.

Another, perhaps, calls in logic to assist him in discovery, which bears only a nominal relation to his purpose. For the discoveries of logic are not discoveries of principles and leading axioms, but only of what appears to accord with them.^[46] And when men become curious and importunate, and give trouble, interrupting her about her proofs, and the discovery of principles or first axioms, she puts them off with her usual answer, referring them to faith, and ordering them to swear allegiance to each art in its own department.

There remains but mere experience, which, when it offers itself, is called chance; when it is sought after, experiment.^[47] But this kind of experience is nothing but a loose fagot; and mere groping in the dark, as men at night try all means of discovering the right road, while it would be better and more prudent either to wait for day, or procure a light, and then proceed. On the contrary, the real order of experience begins by setting up a light, and then shows the road by it, commencing with a regulated and digested, not a misplaced and vague course of experiment, and thence deducing axioms, and from those axioms new experiments: for not even the Divine Word proceeded to operate on the general mass of things without due order.

Let men, therefore, cease to wonder if the whole course^[61] of science be not run, when all have wandered from the path; quitting it entirely, and deserting experience, or involving themselves in its mazes, and wandering about, while a regularly combined system would lead them in a sure track

through its wilds to the open day of axioms.

LXXXIII. The evil, however, has been wonderfully increased by an opinion, or inveterate conceit, which is both vainglorious and prejudicial, namely, that the dignity of the human mind is lowered by long and frequent intercourse with experiments and particulars, which are the objects of sense, and confined to matter; especially since such matters generally require labor in investigation, are mean subjects for meditation, harsh in discourse, unproductive in practice, infinite in number, and delicate in their subtilty. Hence we have seen the true path not only deserted, but intercepted and blocked up, experience being rejected with disgust, and not merely neglected or improperly applied.

LXXXIV. Again, the reverence for antiquity,[\[48\]](#) and the authority of men who have been esteemed great in philosophy, and general unanimity, have retarded men from advancing in science, and almost enchanted them. As to unanimity, we have spoken of it above.

The opinion which men cherish of antiquity is altogether idle, and scarcely accords with the term. For the old age and increasing years of the world should in reality be considered as antiquity, and this is rather the character of our own times than of the less advanced age of the world in those of the ancients; for the latter, with respect to ourselves,[\[62\]](#) are ancient and elder, with respect to the world modern and younger. And as we expect a greater knowledge of human affairs, and more mature judgment from an old man than from a youth, on account of his experience, and the variety and number of things he has seen, heard, and meditated upon, so we have reason to expect much greater things of our own age (if it knew but its strength and would essay and exert it) than from antiquity, since the world has grown older, and its stock has been increased and accumulated with an infinite number of experiments and observations.

We must also take into our consideration that many objects in nature fit to throw light upon philosophy have been exposed to our view, and discovered by means of long voyages and travels, in which our times have abounded. It would, indeed, be dishonorable to mankind, if the regions of the material globe, the earth, the sea, and stars, should be so prodigiously developed and illustrated in our age, and yet the boundaries of the intellectual globe should

be confined to the narrow discoveries of the ancients.

With regard to authority, it is the greatest weakness to attribute infinite credit to particular authors, and to refuse his own prerogative to time, the author of all authors, and, therefore, of all authority. For truth is rightly named the daughter of time, not of authority. It is not wonderful, therefore, if the bonds of antiquity, authority, and unanimity, have so enchained the power of man, that he is unable (as if bewitched) to become familiar with things themselves.

LXXXV. Nor is it only the admiration of antiquity, authority, and unanimity, that has forced man's industry to rest satisfied with present discoveries, but, also, the admiration of the effects already placed within his power. For^[63] whoever passes in review the variety of subjects, and the beautiful apparatus collected and introduced by the mechanical arts for the service of mankind, will certainly be rather inclined to admire our wealth than to perceive our poverty: not considering that the observations of man and operations of nature (which are the souls and first movers of that variety) are few, and not of deep research; the rest must be attributed merely to man's patience, and the delicate and well-regulated motion of the hand or of instruments. To take an instance, the manufacture of clocks is delicate and accurate, and appears to imitate the heavenly bodies in its wheels, and the pulse of animals in its regular oscillation, yet it only depends upon one or two axioms of nature.

Again, if one consider the refinement of the liberal arts, or even that exhibited in the preparation of natural bodies in mechanical arts and the like, as the discovery of the heavenly motions in astronomy, of harmony in music, of the letters of the alphabet^[49] (still unadopted by the Chinese) in grammar; or, again, in mechanical operations, the productions of Bacchus and Ceres, that is, the preparation of wine and beer, the making of bread, or even the luxuries of the table, distillation, and the like; if one reflect also, and consider for how long a period of ages (for all the above, except distillation, are ancient) these things have been brought to their present state of perfection, and (as we instanced in clocks) to how few observations and axioms of nature they may be referred, and how easily, and as it were, by obvious chance or contemplation, they might be discovered, one^[64] would soon cease to admire and rather pity the human lot on account of its vast want and dearth of things

and discoveries for so many ages. Yet even the discoveries we have mentioned were more ancient than philosophy and the intellectual arts; so that (to say the truth) when contemplation and doctrinal science began, the discovery of useful works ceased.

But if any one turn from the manufactories to libraries, and be inclined to admire the immense variety of books offered to our view, let him but examine and diligently inspect the matter and contents of these books, and his astonishment will certainly change its object: for when he finds no end of repetitions, and how much men do and speak the same thing over again, he will pass from admiration of this variety to astonishment at the poverty and scarcity of matter, which has hitherto possessed and filled men's minds.

But if any one should condescend to consider such sciences as are deemed rather curious than sound, and take a full view of the operations of the alchemists or magii, he will perhaps hesitate whether he ought rather to laugh or to weep. For the alchemist cherishes eternal hope, and when his labors succeed not, accuses his own mistakes, deeming, in his self-accusation, that he has not properly understood the words of art or of his authors; upon which he listens to tradition and vague whispers, or imagines there is some slight unsteadiness in the minute details of his practice, and then has recourse to an endless repetition of experiments: and in the meantime, when, in his casual experiments, he falls upon something in appearance new, or of some degree of utility, he consoles himself with such an earnest, and ostentatiously publishes them, keeping up his hope of the final result. Nor can it be denied that the alchemists^[65] have made several discoveries, and presented mankind with useful inventions. But we may well apply to them the fable of the old man, who bequeathed to his sons some gold buried in his garden, pretending not to know the exact spot, whereupon they worked diligently in digging the vineyard, and though they found no gold, the vintage was rendered more abundant by their labor.

The followers of natural magic, who explain everything by sympathy and antipathy, have assigned false powers and marvellous operations to things by gratuitous and idle conjectures: and if they have ever produced any effects, they are rather wonderful and novel than of any real benefit or utility.

In superstitious magic (if we say anything at all about it) we must chiefly

observe, that there are only some peculiar and definite objects with which the curious and superstitious arts have, in every nation and age, and even under every religion, been able to exercise and amuse themselves. Let us, therefore, pass them over. In the meantime we cannot wonder that the false notion of plenty should have occasioned want.

LXXXVI. The admiration of mankind with regard to the arts and sciences, which is of itself sufficiently simple and almost puerile, has been increased by the craft and artifices of those who have treated the sciences, and delivered them down to posterity. For they propose and produce them to our view so fashioned, and as it were masked, as to make them pass for perfect and complete. For if you consider their method and divisions, they appear to embrace and comprise everything which can relate to the subject. And although this frame be badly filled up and resemble an empty bladder, yet it presents to the vulgar^[66] understanding the form and appearance of a perfect science.

The first and most ancient investigators of truth were wont, on the contrary, with more honesty and success, to throw all the knowledge they wished to gather from contemplation, and to lay up for use, into aphorisms, or short scattered sentences unconnected by any method, and without pretending or professing to comprehend any entire art. But according to the present system, we cannot wonder that men seek nothing beyond that which is handed down to them as perfect, and already extended to its full complement.

LXXXVII. The ancient theories have received additional support and credit from the absurdity and levity of those who have promoted the new, especially in the active and practical part of natural philosophy. For there have been many silly and fantastical fellows who, from credulity or imposture, have loaded mankind with promises, announcing and boasting of the prolongation of life, the retarding of old age, the alleviation of pains, the remedying of natural defects, the deception of the senses, the restraint and excitement of the passions, the illumination and exaltation of the intellectual faculties, the transmutation of substances, the unlimited intensity and multiplication of motion, the impressions and changes of the air, the bringing into our power the management of celestial influences, the divination of future events, the representation of distant objects, the revelation of hidden

objects, and the like. One would not be very wrong in observing with regard to such pretenders, that there is as much difference in philosophy, between their absurdity and real science, as there is in history between the exploits of Cæsar or Alexander, and those^[67] of Amadis de Gaul and Arthur of Britain. For those illustrious generals are found to have actually performed greater exploits than such fictitious heroes are even pretended to have accomplished, by the means, however, of real action, and not by any fabulous and portentous power. Yet it is not right to suffer our belief in true history to be diminished, because it is sometimes injured and violated by fables. In the meantime we cannot wonder that great prejudice has been excited against any new propositions (especially when coupled with any mention of effects to be produced), by the conduct of impostors who have made a similar attempt; for their extreme absurdity, and the disgust occasioned by it, has even to this day overpowered every spirited attempt of the kind.

LXXXVIII. Want of energy, and the littleness and futility of the tasks that human industry has undertaken, have produced much greater injury to the sciences: and yet (to make it still worse) that very want of energy manifests itself in conjunction with arrogance and disdain.

For, in the first place, one excuse, now from its repetition become familiar, is to be observed in every art, namely, that its promoters convert the weakness of the art itself into a calumny upon nature: and whatever it in their hands fails to effect, they pronounce to be physically impossible. But how can the art ever be condemned while it acts as judge in its own cause? Even the present system of philosophy cherishes in its bosom certain positions or dogmas, which (it will be found on diligent inquiry) are calculated to produce a full conviction that no difficult, commanding, and powerful operation upon nature ought to be anticipated through the means of art; we instanced^[50] above the alleged different^[68] quality of heat in the sun and fire, and composition and mixture. Upon an accurate observation the whole tendency of such positions is wilfully to circumscribe man's power, and to produce a despair of the means of invention and contrivance, which would not only confound the promises of hope, but cut the very springs and sinews of industry, and throw aside even the chances of experience. The only object of such philosophers is to acquire the reputation of perfection for their own art, and they are anxious to obtain the most silly and abandoned renown, by

causing a belief that whatever has not yet been invented and understood can never be so hereafter. But if any one attempt to give himself up to things, and to discover something new; yet he will only propose and destine for his object the investigation and discovery of some one invention, and nothing more; as the nature of the magnet, the tides, the heavenly system, and the like, which appear enveloped in some degree of mystery, and have hitherto been treated with but little success. Now it is the greatest proof of want of skill, to investigate the nature of any object in itself alone; for that same nature, which seems concealed and hidden in some instances, is manifest and almost palpable in others, and excites wonder in the former, while it hardly attracts attention in the latter.^[51] Thus the nature of consistency is scarcely observed in wood or stone, but passed over by the term solid without any further inquiry about the repulsion of separation or the^[69] solution of continuity. But in water-bubbles the same circumstance appears matter of delicate and ingenious research, for they form themselves into thin pellicles, curiously shaped into hemispheres, so as for an instant to avoid the solution of continuity.

In general those very things which are considered as secret are manifest and common in other objects, but will never be clearly seen if the experiments and contemplation of man be directed to themselves only. Yet it commonly happens, that if, in the mechanical arts, any one bring old discoveries to a finer polish, or more elegant height of ornament, or unite and compound them, or apply them more readily to practice, or exhibit them on a less heavy and voluminous scale, and the like, they will pass off as new.

We cannot, therefore, wonder that no magnificent discoveries, worthy of mankind, have been brought to light, while men are satisfied and delighted with such scanty and puerile tasks, nay, even think that they have pursued or attained some great object in their accomplishment.

LXXXIX. Nor should we neglect to observe that natural philosophy has, in every age, met with a troublesome and difficult opponent: I mean superstition, and a blind and immoderate zeal for religion. For we see that, among the Greeks, those who first disclosed the natural causes of thunder and storms to the yet untrained ears of man were condemned as guilty of impiety toward the gods.^[52] Nor did some of the old fathers of Christianity treat those much better who showed by the most positive proofs (such as no^[70] one now

disputes) that the earth is spherical, and thence asserted that there were antipodes.^[53]

Even in the present state of things the condition of discussions on natural philosophy is rendered more difficult and dangerous by the summaries and methods of divines, who, after reducing divinity into such order as they could, and brought it into a scientific form, have proceeded to mingle an undue proportion of the contentious and thorny philosophy of Aristotle with the substance of religion.^[54]

The fictions of those who have not feared to deduce and confirm the truth of the Christian religion by the principles and authority of philosophers, tend to the same end, though in a different manner.^[55] They celebrate the union of faith and the senses as though it were legitimate, with great pomp and solemnity, and gratify men's pleasing minds with a variety, but in the meantime confound most improperly things divine and human. Moreover, in these mixtures of divinity and philosophy the received doctrines of the latter are alone included, and any novelty, even though it^[71] be an improvement, scarcely escapes banishment and extermination.

In short, you may find all access to any species of philosophy, however pure, intercepted by the ignorance of divines. Some in their simplicity are apprehensive that a too deep inquiry into nature may penetrate beyond the proper bounds of decorum, transferring and absurdly applying what is said of sacred mysteries in Holy Writ against those who pry into divine secrets, to the mysteries of nature, which are not forbidden by any prohibition. Others with more cunning imagine and consider, that if secondary causes be unknown, everything may more easily be referred to the Divine hand and wand, a matter, as they think, of the greatest consequence to religion, but which can only really mean that God wishes to be gratified by means of falsehood. Others fear, from past example, lest motion and change in philosophy should terminate in an attack upon religion. Lastly, there are others who appear anxious lest there should be something discovered in the investigation of nature to overthrow, or at least shake, religion, particularly among the unlearned. The last two apprehensions appear to resemble animal instinct, as if men were diffident, in the bottom of their minds and secret meditations, of the strength of religion and the empire of faith over the senses, and therefore feared that some danger awaited them from an inquiry

into nature. But any one who properly considers the subject will find natural philosophy to be, after the Word of God, the surest remedy against superstition, and the most approved support of faith. She is, therefore, rightly bestowed upon religion as a most faithful attendant, for the one exhibits the will and the other the power of God. Nor was he wrong who observed, “Ye err, not knowing the^[72] Scriptures and the power of God,” thus uniting in one bond the revelation of his will and the contemplation of his power. In the meanwhile, it is not wonderful that the progress of natural philosophy has been restrained, since religion, which has so much influence on men’s minds, has been led and hurried to oppose her through the ignorance of some and the imprudent zeal of others.

XC. Again, in the habits and regulations of schools, universities, and the like assemblies, destined for the abode of learned men and the improvement of learning, everything is found to be opposed to the progress of the sciences; for the lectures and exercises are so ordered, that anything out of the common track can scarcely enter the thoughts and contemplations of the mind. If, however, one or two have perhaps dared to use their liberty, they can only impose the labor on themselves, without deriving any advantage from the association of others; and if they put up with this, they will find their industry and spirit of no slight disadvantage to them in making their fortune; for the pursuits of men in such situations are, as it were, chained down to the writings of particular authors, and if any one dare to dissent from them he is immediately attacked as a turbulent and revolutionary spirit. Yet how great is the difference between civil matters and the arts, for there is not the same danger from new activity and new light. In civil matters even a change for the better is suspected on account of the commotion it occasions, for civil government is supported by authority, unanimity, fame, and public opinion, and not by demonstration. In the arts and sciences, on the contrary, every department should resound, as in mines, with new works and advances. And this is the rational, though not the actual view of the case, for that administration and^[73] government of science we have spoken of is wont too rigorously to repress its growth.

XCI. And even should the odium I have alluded to be avoided, yet it is sufficient to repress the increase of science that such attempts and industry pass unrewarded; for the cultivation of science and its reward belong not to

the same individual. The advancement of science is the work of a powerful genius, the prize and reward belong to the vulgar or to princes, who (with a few exceptions) are scarcely moderately well informed. Nay, such progress is not only deprived of the rewards and beneficence of individuals, but even of popular praise; for it is above the reach of the generality, and easily overwhelmed and extinguished by the winds of common opinions. It is not wonderful, therefore, that little success has attended that which has been little honored.

XCII. But by far the greatest obstacle to the advancement of the sciences, and the undertaking of any new attempt or department, is to be found in men's despair and the idea of impossibility; for men of a prudent and exact turn of thought are altogether diffident in matters of this nature, considering the obscurity of nature, the shortness of life, the deception of the senses, and weakness of the judgment. They think, therefore, that in the revolutions of ages and of the world there are certain floods and ebbs of the sciences, and that they grow and flourish at one time, and wither and fall off at another, that when they have attained a certain degree and condition they can proceed no further.

If, therefore, any one believe or promise greater things, they impute it to an uncurbed and immature mind, and imagine that such efforts begin pleasantly, then become^[74] laborious, and end in confusion. And since such thoughts easily enter the minds of men of dignity and excellent judgment, we must really take heed lest we should be captivated by our affection for an excellent and most beautiful object, and relax or diminish the severity of our judgment; and we must diligently examine what gleam of hope shines upon us, and in what direction it manifests itself, so that, banishing her lighter dreams, we may discuss and weigh whatever appears of more sound importance. We must consult the prudence of ordinary life, too, which is diffident upon principle, and in all human matters augurs the worst. Let us, then, speak of hope, especially as we are not vain promisers, nor are willing to enforce or insnare men's judgment, but would rather lead them willingly forward. And although we shall employ the most cogent means of enforcing hope when we bring them to particulars, and especially those which are digested and arranged in our Tables of Invention (the subject partly of the second, but principally of the fourth part of the Instauration), which are, indeed, rather the

very object of our hopes than hope itself; yet to proceed more leniently we must treat of the preparation of men's minds, of which the manifestation of hope forms no slight part; for without it all that we have said tends rather to produce a gloom than to encourage activity or quicken the industry of experiment, by causing them to have a worse and more contemptuous opinion of things as they are than they now entertain, and to perceive and feel more thoroughly their unfortunate condition. We must, therefore, disclose and prefix our reasons for not thinking the hope of success improbable, as Columbus, before his wonderful voyage over the Atlantic, gave the reasons of his conviction that new lands and continents might be discovered besides those^[75] already known; and these reasons, though at first rejected, were yet proved by subsequent experience, and were the causes and beginnings of the greatest events.

XCIII. Let us begin from God, and show that our pursuit from its exceeding goodness clearly proceeds from him, the author of good and father of light. Now, in all divine works the smallest beginnings lead assuredly to some result, and the remark in spiritual matters that "the kingdom of God cometh without observation," is also found to be true in every great work of Divine Providence, so that everything glides quietly on without confusion or noise, and the matter is achieved before men either think or perceive that it is commenced. Nor should we neglect to mention the prophecy of Daniel, of the last days of the world, "Many shall run to and fro, and knowledge shall be increased,"^[56] thus plainly hinting and suggesting that fate (which is Providence) would cause the complete circuit of the globe (now accomplished, or at least going forward by means of so many distant voyages), and the increase of learning to happen at the same epoch.

XCIV. We will next give a most potent reason for hope deduced from the errors of the past, and the ways still unattempted; for well was an ill-governed state thus reprov'd, "That which is worst with regard to the past should appear most consolatory for the future; for if you had done all that your duty commanded, and your affairs proceeded no better, you could not even hope for their improvement; but since their present unhappy situation is not owing to the force of circumstances, but to your own errors, you have reason to hope that by banishing or correcting the latter^[76] you can produce a great change for the better in the former." So if men had, during the many

years that have elapsed, adhered to the right way of discovering and cultivating the sciences without being able to advance, it would be assuredly bold and presumptuous to imagine it possible to improve; but if they have mistaken the way and wasted their labor on improper objects, it follows that the difficulty does not arise from things themselves, which are not in our power, but from the human understanding, its practice and application, which is susceptible of remedy and correction. Our best plan, therefore, is to expose these errors; for in proportion as they impeded the past, so do they afford reason to hope for the future. And although we have touched upon them above, yet we think it right to give a brief, bare, and simple enumeration of them in this place.

XCV. Those who have treated of the sciences have been either empirics or dogmatical.[\[57\]](#) The former like ants only heap up and use their store, the latter like spiders spin out their own webs. The bee, a mean between both, extracts matter from the flowers of the garden and the field, but works and fashions it by its own efforts. The true labor of philosophy resembles hers, for it neither relies entirely or principally on the powers of the mind, nor yet lays up in the memory the matter afforded by the experiments of natural history and mechanics in its raw state, but changes and works it in the understanding. We have good reason,[\[77\]](#) therefore, to derive hope from a closer and purer alliance of these faculties (the experimental and rational) than has yet been attempted.

XCVI. Natural philosophy is not yet to be found unadulterated, but is impure and corrupted—by logic in the school of Aristotle, by natural theology in that of Plato,[\[58\]](#) by mathematics in the second school of Plato (that of Proclus and others)[\[59\]](#) which ought rather to terminate natural philosophy than to generate or create it. We may, therefore, hope for better results from pure and unmixed natural philosophy.

XCVII. No one has yet been found possessed of sufficient firmness and severity to resolve upon and undertake the task of entirely abolishing common theories and notions, and applying the mind afresh, when thus cleared and levelled, to particular researches; hence our human reasoning is a mere farrago and crude mass made up of a great deal of credulity and accident, and the puerile notions it originally contracted.

But if a man of mature age, unprejudiced senses, and clear mind, would betake himself anew to experience and particulars, we might hope much more from such a one; in which respect we promise ourselves the fortune of Alexander the Great, and let none accuse us of vanity till they have heard the tale, which is intended to check vanity.

For Æschines spoke thus of Alexander and his exploits: “We live not the life of mortals, but are born at such a period that posterity will relate and declare our prodigies”; as if he considered the exploits of Alexander to be miraculous.

But in succeeding ages^[60] Livy took a better view of the fact, and has made some such observation as this upon Alexander: “That he did no more than dare to despise insignificance.” So in our opinion posterity will judge of us, that we have achieved no great matters, but only set less account upon what is considered important; for the meantime (as we have before observed) our only hope is in the regeneration of the sciences, by regularly raising them on the foundation of experience and building them anew, which I think none can venture to affirm to have been already done or even thought of.

XCVIII. The foundations of experience (our sole resource) have hitherto failed completely or have been very weak; nor has a store and collection of particular facts, capable of informing the mind or in any way satisfactory, been either sought after or amassed. On the contrary, learned, but idle and indolent, men have received some^[79] mere reports of experience, traditions as it were of dreams, as establishing or confirming their philosophy, and have not hesitated to allow them the weight of legitimate evidence. So that a system has been pursued in philosophy with regard to experience resembling that of a kingdom or state which would direct its councils and affairs according to the gossip of city and street politicians, instead of the letters and reports of ambassadors and messengers worthy of credit. Nothing is rightly inquired into, or verified, noted, weighed, or measured, in natural history; indefinite and vague observation produces fallacious and uncertain information. If this appear strange, or our complaint somewhat too unjust (because Aristotle himself, so distinguished a man and supported by the wealth of so great a king, has completed an accurate history of animals, to which others with greater diligence but less noise have made considerable additions, and others again have composed copious histories and notices of

plants, metals, and fossils), it will arise from a want of sufficiently attending to and comprehending our present observations; for a natural history compiled on its own account, and one collected for the mind's information as a foundation for philosophy, are two different things. They differ in several respects, but principally in this—the former contains only the varieties of natural species without the experiments of mechanical arts; for as in ordinary life every person's disposition, and the concealed feelings of the mind and passions are most drawn out when they are disturbed—so the secrets of nature betray themselves more readily when tormented by art than when left to their own course. We must begin, therefore, to entertain hopes of natural philosophy then only, when we have a better compilation of natural history, its real basis and support.

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XCIX. Again, even in the abundance of mechanical experiments, there is a very great scarcity of those which best inform and assist the understanding. For the mechanic, little solicitous about the investigation of truth, neither directs his attention, nor applies his hand to anything that is not of service to his business. But our hope of further progress in the sciences will then only be well founded, when numerous experiments shall be received and collected into natural history, which, though of no use in themselves, assist materially in the discovery of causes and axioms; which experiments we have termed enlightening, to distinguish them from those which are profitable. They possess this wonderful property and nature, that they never deceive or fail you; for being used only to discover the natural cause of some object, whatever be the result, they equally satisfy your aim by deciding the question.

C. We must not only search for, and procure a greater number of experiments, but also introduce a completely different method, order, and progress of continuing and promoting experience. For vague and arbitrary experience is (as we have observed), mere groping in the dark, and rather astonishes than instructs. But when experience shall proceed regularly and uninterruptedly by a determined rule, we may entertain better hopes of the sciences.

CI. But after having collected and prepared an abundance and store of natural history, and of the experience required for the operations of the

understanding or philosophy, still the understanding is as incapable of acting on such materials of itself, with the aid of memory alone, as any person would be of retaining and achieving, by memory, the computation of an almanac. Yet meditation has hitherto done more for discovery than writing, and no^[81] experiments have been committed to paper. We cannot, however, approve of any mode of discovery without writing, and when that comes into more general use, we may have further hopes.

CII. Besides this, there is such a multitude and host, as it were, of particular objects, and lying so widely dispersed, as to distract and confuse the understanding; and we can, therefore, hope for no advantage from its skirmishing, and quick movements and incursions, unless we put its forces in due order and array, by means of proper and well arranged, and, as it were, living tables of discovery of these matters, which are the subject of investigation, and the mind then apply itself to the ready prepared and digested aid which such tables afford.

CIII. When we have thus properly and regularly placed before the eyes a collection of particulars, we must not immediately proceed to the investigation and discovery of new particulars or effects, or, at least, if we do so, must not rest satisfied therewith. For, though we do not deny that by transferring the experiments from one art to another (when all the experiments of each have been collected and arranged, and have been acquired by the knowledge, and subjected to the judgment of a single individual), many new experiments may be discovered tending to benefit society and mankind, by what we term literate experience; yet comparatively insignificant results are to be expected thence, while the more important are to be derived from the new light of axioms, deduced by certain method and rule from the above particulars, and pointing out and defining new particulars in their turn. Our road is not a long plain, but rises and falls, ascending to axioms, and descending to effects.

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CIV. Nor can we suffer the understanding to jump and fly from particulars to remote and most general axioms (such as are termed the principles of arts and things), and thus prove and make out their intermediate axioms according to the supposed unshaken truth of the former. This, however, has always been done to the present time from the natural bent of the understanding, educated

too, and accustomed to this very method, by the syllogistic mode of demonstration. But we can then only augur well for the sciences, when the ascent shall proceed by a true scale and successive steps, without interruption or breach, from particulars to the lesser axioms, thence to the intermediate (rising one above the other), and lastly, to the most general. For the lowest axioms differ but little from bare experiment;[\[61\]](#) the highest and most general (as they are esteemed at present), are notional, abstract, and of no real weight. The intermediate are true, solid, full of life, and upon them depend the business and fortune of mankind; beyond these are the really general, but not abstract, axioms, which are truly limited by the intermediate.

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We must not then add wings, but rather lead and ballast to the understanding, to prevent its jumping or flying, which has not yet been done; but whenever this takes place, we may entertain greater hopes of the sciences.

CV. In forming axioms, we must invent a different form of induction from that hitherto in use; not only for the proof and discovery of principles (as they are called), but also of minor, intermediate, and, in short, every kind of axioms. The induction which proceeds by simple enumeration is puerile, leads to uncertain conclusions, and is exposed to danger from one contradictory instance, deciding generally from too small a number of facts, and those only the most obvious. But a really useful induction for the discovery and demonstration of the arts and sciences, should separate nature by proper rejections and exclusions, and then conclude for the affirmative, after collecting a sufficient number of negatives. Now this has not been done, nor even attempted, except perhaps by Plato, who certainly uses this form of induction in some measure, to sift definitions and ideas. But much of what has never yet entered the thoughts of man must necessarily be employed, in order to exhibit a good and legitimate mode of induction or demonstration, so as even to render it essential for us to bestow more pains upon it than have hitherto been bestowed on syllogisms. The assistance of induction is to serve us not only in the discovery of axioms, but also in defining our notions. Much indeed is to be hoped from such an induction as has been described.

CVI. In forming our axioms from induction, we must examine and try whether the axiom we derive be only fitted and calculated for the particular instances from which it is^[84] deduced, or whether it be more extensive and

general. If it be the latter, we must observe, whether it confirm its own extent and generality by giving surety, as it were, in pointing out new particulars, so that we may neither stop at actual discoveries, nor with a careless grasp catch at shadows and abstract forms, instead of substances of a determinate nature: and as soon as we act thus, well authorized hope may with reason be said to beam upon us.

CVII. Here, too, we may again repeat what we have said above, concerning the extending of natural philosophy and reducing particular sciences to that one, so as to prevent any schism or dismembering of the sciences; without which we cannot hope to advance.

CVIII. Such are the observations we would make in order to remove despair and excite hope, by bidding farewell to the errors of past ages, or by their correction. Let us examine whether there be other grounds for hope. And, first, if many useful discoveries have occurred to mankind by chance or opportunity, without investigation or attention on their part, it must necessarily be acknowledged that much more may be brought to light by investigation and attention, if it be regular and orderly, not hasty and interrupted. For although it may now and then happen that one falls by chance upon something that had before escaped considerable efforts and laborious inquiries, yet undoubtedly the reverse is generally the case. We may, therefore, hope for further, better, and more frequent results from man's reason, industry, method, and application, than from chance and mere animal instinct, and the like, which have hitherto been the sources of invention.

CIX. We may also derive some reason for hope from the circumstance of several actual inventions being of such a^[85] nature, that scarcely any one could have formed a conjecture about them previously to their discovery, but would rather have ridiculed them as impossible. For men are wont to guess about new subjects from those they are already acquainted with, and the hasty and vitiated fancies they have thence formed: than which there cannot be a more fallacious mode of reasoning, because much of that which is derived from the sources of things does not flow in their usual channel.

If, for instance, before the discovery of cannon, one had described its effects in the following manner: There is a new invention by which walls and the greatest bulwarks can be shaken and overthrown from a considerable

distance; men would have begun to contrive various means of multiplying the force of projectiles and machines by means of weights and wheels, and other modes of battering and projecting. But it is improbable that any imagination or fancy would have hit upon a fiery blast, expanding and developing itself so suddenly and violently, because none would have seen an instance at all resembling it, except perhaps in earthquakes or thunder, which they would have immediately rejected as the great operations of nature, not to be imitated by man.

So, if before the discovery of silk thread, any one had observed, that a species of thread had been discovered, fit for dresses and furniture, far surpassing the thread of worsted or flax in fineness, and at the same time in tenacity, beauty, and softness; men would have begun to imagine something about Chinese plants, or the fine hair of some animals, or the feathers or down of birds, but certainly would never have had an idea of its being spun by a small worm, in so copious a manner, and renewed annually. But if any one had ventured to suggest the silkworm, he would^[86] have been laughed at as if dreaming of some new manufacture from spiders.

So again, if before the discovery of the compass, any one had said, that an instrument had been invented, by which the quarters and points of the heavens could be exactly taken and distinguished, men would have entered into disquisitions on the refinement of astronomical instruments, and the like, from the excitement of their imaginations; but the thought of anything being discovered, which, not being a celestial body, but a mere mineral or metallic substance, should yet in its motion agree with that of such bodies, would have appeared absolutely incredible. Yet were these facts, and the like (unknown for so many ages) not discovered at last either by philosophy or reasoning, but by chance and opportunity; and (as we have observed), they are of a nature most heterogeneous, and remote from what was hitherto known, so that no previous knowledge could lead to them.

We may, therefore, well hope^[62] that many excellent and useful matters are yet treasured up in the bosom of nature, bearing no relation or analogy to our actual discoveries, but out of the common track of our imagination, and still undiscovered, and which will doubtless be brought to light in the course and lapse of years, as the others have been before them; but in the way we now point out, they may rapidly and at once be both represented and

anticipated.

CX. There are, moreover, some inventions which render^[87] it probable that men may pass and hurry over the most noble discoveries which lie immediately before them. For however the discovery of gunpowder, silk, the compass, sugar, paper, or the like, may appear to depend on peculiar properties of things and nature, printing at least involves no contrivance which is not clear and almost obvious. But from want of observing that although the arrangement of the types of letters required more trouble than writing with the hand, yet these types once arranged serve for innumerable impressions, while manuscript only affords one copy; and again, from want of observing that ink might be thickened so as to stain without running (which was necessary, seeing the letters face upward, and the impression is made from above), this most beautiful invention (which assists so materially the propagation of learning) remained unknown for so many ages.

The human mind is often so awkward and ill-regulated in the career of invention that it is at first diffident, and then despises itself. For it appears at first incredible that any such discovery should be made, and when it has been made, it appears incredible that it should so long have escaped men's research. All which affords good reason for the hope that a vast mass of inventions yet remains, which may be deduced not only from the investigation of new modes of operation, but also from transferring, comparing, and applying these already known, by the method of what we have termed literate experience.

CXI. Nor should we omit another ground of hope. Let men only consider (if they will) their infinite expenditure of talent, time, and fortune, in matters and studies of far inferior importance and value; a small portion of which applied to sound and solid learning would be sufficient to overcome^[88] every difficulty. And we have thought right to add this observation, because we candidly own that such a collection of natural and experimental history as we have traced in our own mind, and as is really necessary, is a great and as it were royal work, requiring much labor and expense.

CXII. In the meantime let no one be alarmed at the multitude of particulars, but rather inclined to hope on that very account. For the particular phenomena of the arts and nature are in reality but as a handful, when

compared with the fictions of the imagination removed and separated from the evidence of facts. The termination of our method is clear, and I had almost said near at hand; the other admits of no termination, but only of infinite confusion. For men have hitherto dwelt but little, or rather only slightly touched upon experience, while they have wasted much time on theories and the fictions of the imagination. If we had but any one who could actually answer our interrogations of nature, the invention of all causes and sciences would be the labor of but a few years.

CXIII. We think some ground of hope is afforded by our own example, which is not mentioned for the sake of boasting, but as a useful remark. Let those who distrust their own powers observe myself, one who have among my contemporaries been the most engaged in public business, who am not very strong in health (which causes a great loss of time), and am the first explorer of this course, following the guidance of none, nor even communicating my thoughts to a single individual; yet having once firmly entered in the right way, and submitting the powers of my mind to things, I have somewhat advanced (as I make bold to think) the matter I now treat of. Then let others consider what may^[89] be hoped from men who enjoy abundant leisure, from united labors, and the succession of ages, after these suggestions on our part, especially in a course which is not confined, like theories, to individuals, but admits of the best distribution and union of labor and effect, particularly in collecting experiments. For men will then only begin to know their own power, when each performs a separate part, instead of undertaking in crowds the same work.

CXIV. Lastly, though a much more faint and uncertain breeze of hope were to spring up from our new continent, yet we consider it necessary to make the experiment, if we would not show a dastard spirit. For the risk attending want of success is not to be compared with that of neglecting the attempt; the former is attended with the loss of a little human labor, the latter with that of an immense benefit. For these and other reasons it appears to us that there is abundant ground to hope, and to induce not only those who are sanguine to make experiment, but even those who are cautious and sober to give their assent.

CXV. Such are the grounds for banishing despair, hitherto one of the most powerful causes of the delay and restraint to which the sciences have been

subjected; in treating of which we have at the same time discussed the signs and causes of the errors, idleness, and ignorance that have prevailed; seeing especially that the more refined causes, which are not open to popular judgment and observation, may be referred to our remarks on the idols of the human mind.

Here, too, we should close the demolishing branch of our Instauration, which is comprised in three confutations: 1, the confutation of natural human reason left to itself; 2, the confutation of demonstration; 3, the confutation of theories,^[90] or received systems of philosophy and doctrines. Our confutation has followed such a course as was open to it, namely, the exposing of the signs of error, and the producing evidence of the causes of it: for we could adopt no other, differing as we do both in first principles and demonstrations from others.

It is time for us therefore to come to the art itself, and the rule for the interpretation of nature: there is, however, still something which must not be passed over. For the intent of this first book of aphorisms being to prepare the mind for understanding, as well as admitting, what follows, we must now, after having cleansed, polished, and levelled its surface, place it in a good position, and as it were a benevolent aspect toward our propositions; seeing that prejudice in new matters may be produced not only by the strength of preconceived notions, but also by a false anticipation or expectation of the matter proposed. We shall therefore endeavor to induce good and correct opinions of what we offer, although this be only necessary for the moment, and as it were laid out at interest, until the matter itself be well understood.

CXVI. First, then, we must desire men not to suppose that we are ambitious of founding any philosophical sect, like the ancient Greeks, or some moderns, as Telesius, Patricius, and Severinus.^[63] For neither is this our intention,^[91] nor do we think that peculiar abstract opinions on nature and the principles of things are of much importance to men's fortunes, since it were easy to revive many ancient theories, and to introduce many new ones; as, for instance, many hypotheses with regard to the heavens can be formed, differing in themselves, and yet sufficiently according with the phenomena.

We bestow not our labor on such theoretical and, at the same time, useless topics. On the contrary, our determination is that of trying, whether we can

lay a firmer foundation, and extend to a greater distance the boundaries of human power and dignity. And although here and there, upon some particular points, we hold (in our own opinion) more true and certain, and I might even say, more advantageous tenets than those in general repute (which we have collected in the fifth part of our Instauration), yet we offer^[92] no universal or complete theory. The time does not yet appear to us to be arrived, and we entertain no hope of our life being prolonged to the completion of the sixth part of the Instauration (which is destined for philosophy discovered by the interpretation of nature), but are content if we proceed quietly and usefully in our intermediate pursuit, scattering, in the meantime, the seeds of less adulterated truth for posterity, and, at least, commence the great work.

CXVII. And, as we pretend not to found a sect, so do we neither offer nor promise particular effects; which may occasion some to object to us, that since we so often speak of effects, and consider everything in its relation to that end, we ought also to give some earnest of producing them. Our course and method, however (as we have often said, and again repeat), is such as not to deduce effects from effects, nor experiments from experiments (as the empirics do), but in our capacity of legitimate interpreters of nature, to deduce causes and axioms from effects and experiments; and new effects and experiments from those causes and axioms.

And although any one of moderate intelligence and ability will observe the indications and sketches of many noble effects in our tables of inventions (which form the fourth part of the Instauration), and also in the examples of particular instances cited in the second part, as well as in our observations on history (which is the subject of the third part); yet we candidly confess that our present natural history, whether compiled from books or our own inquiries, is not sufficiently copious and well ascertained to satisfy, or even assist, a proper interpretation.

If, therefore, there be any one who is more disposed and prepared for mechanical art, and ingenious in discovering effects, than in the mere management of experiment, we^[93] allow him to employ his industry in gathering many of the fruits of our history and tables in this way, and applying them to effects, receiving them as interest till he can obtain the principal. For our own part, having a greater object in view, we condemn all hasty and premature rest in such pursuits as we would Atalanta's apple (to

use a common allusion of ours); for we are not childishly ambitious of golden fruit, but use all our efforts to make the course of art outstrip nature, and we hasten not to reap moss or the green blade, but wait for a ripe harvest.

CXVIII. There will be some, without doubt, who, on a perusal of our history and tables of invention, will meet with some uncertainty, or perhaps fallacy, in the experiments themselves, and will thence perhaps imagine that our discoveries are built on false foundations and principles. There is, however, really nothing in this, since it must needs happen in beginnings.^[64] For it is the same as if in writing or printing one or two letters were wrongly turned or misplaced, which is no great inconvenience to the reader, who can easily by his own eye correct the error; let men in the same way conclude, that many experiments in natural history may be erroneously believed and admitted, which are easily expunged and rejected afterward, by the discovery of causes and axioms. It is, however, true, that if these errors in natural history and experiments become great, frequent, and continued, they cannot be corrected and amended by^[94] any dexterity of wit or art. If then, even in our natural history, well examined and compiled with such diligence, strictness, and (I might say) reverential scruples, there be now and then something false and erroneous in the details, what must we say of the common natural history, which is so negligent and careless when compared with ours? or of systems of philosophy and the sciences, based on such loose soil (or rather quicksand)? Let none then be alarmed by such observations.

CXIX. Again, our history and experiments will contain much that is light and common, mean and illiberal, too refined and merely speculative, and, as it were, of no use, and this perhaps may divert and alienate the attention of mankind.

With regard to what is common; let men reflect, that they have hitherto been used to do nothing but refer and adapt the causes of things of rare occurrence to those of things which more frequently happen, without any investigation of the causes of the latter, taking them for granted and admitted.

Hence, they do not inquire into the causes of gravity, the rotation of the heavenly bodies, heat, cold, light, hardness, softness, rarity, density, liquidity, solidity, animation, inanimation, similitude, difference, organic formation, but taking them to be self-evident, manifest, and admitted, they dispute and

decide upon other matters of less frequent and familiar occurrence.

But we (who know that no judgment can be formed of that which is rare or remarkable, and much less anything new brought to light, without a previous regular examination and discovery of the causes of that which is common, and the causes again of those causes) are necessarily compelled^[95] to admit the most common objects into our history. Besides, we have observed that nothing has been so injurious to philosophy as this circumstance, namely, that familiar and frequent objects do not arrest and detain men's contemplation, but are carelessly admitted, and their causes never inquired after; so that information on unknown subjects is not more often wanted than attention to those which are known.

CXX. With regard to the meanness, or even the filthiness of particulars, for which (as Pliny observes), an apology is requisite, such subjects are no less worthy of admission into natural history than the most magnificent and costly; nor do they at all pollute natural history, for the sun enters alike the palace and the privy, and is not thereby polluted. We neither dedicate nor raise a capitol or pyramid to the pride of man, but rear a holy temple in his mind, on the model of the universe, which model therefore we imitate. For that which is deserving of existence is deserving of knowledge, the image of existence. Now the mean and splendid alike exist. Nay, as the finest odors are sometimes produced from putrid matter (such as musk and civet), so does valuable light and information emanate from mean and sordid instances. But we have already said too much, for such fastidious feelings are childish and effeminate.

CXXI. The next point requires a more accurate consideration, namely, that many parts of our history will appear to the vulgar, or even any mind accustomed to the present state of things, fantastically and uselessly refined. Hence, we have in regard to this matter said from the first, and must again repeat, that we look for experiments that shall afford light rather than profit, imitating the divine creation, which,^[96] as we have often observed, only produced light on the first day, and assigned that whole day to its creation, without adding any material work.

If any one, then, imagine such matters to be of no use, he might equally suppose light to be of no use, because it is neither solid nor material. For, in

fact, the knowledge of simple natures, when sufficiently investigated and defined, resembles light, which, though of no great use in itself, affords access to the general mysteries of effects, and with a peculiar power comprehends and draws with it whole bands and troops of effects, and the sources of the most valuable axioms. So also the elements of letters have of themselves separately no meaning, and are of no use, yet are they, as it were, the original matter in the composition and preparation of speech. The seeds of substances, whose effect is powerful, are of no use except in their growth, and the scattered rays of light itself avail not unless collected.

But if speculative subtilties give offence, what must we say of the scholastic philosophers who indulged in them to such excess? And those subtilties were wasted on words, or, at least, common notions (which is the same thing), not on things or nature, and alike unproductive of benefit in their origin and their consequences: in no way resembling ours, which are at present useless, but in their consequences of infinite benefit. Let men be assured that all subtile disputes and discursive efforts of the mind are late and preposterous, when they are introduced subsequently to the discovery of axioms, and that their true, or, at any rate, chief opportunity is, when experiment is to be weighed and axioms to be derived from it. They otherwise catch and grasp at nature, but never seize or detain her: and we may well apply to nature that which has been said of opportunity^[97] or fortune, that she wears a lock in front, but is bald behind.

In short, we may reply decisively to those who despise any part of natural history as being vulgar, mean, or subtile, and useless in its origin, in the words of a poor woman to a haughty prince,^[65] who had rejected her petition as unworthy, and beneath the dignity of his majesty: “Then cease to reign”; for it is quite certain that the empire of nature can neither be obtained nor administered by one who refuses to pay attention to such matters as being poor and too minute.

CXXII. Again, it may be objected to us as being singular and harsh, that we should with one stroke and assault, as it were, banish all authorities and sciences, and that too by our own efforts, without requiring the assistance and support of any of the ancients.

Now we are aware, that had we been ready to act otherwise than sincerely,

it was not difficult to refer our present method to remote ages, prior to those of the Greeks (since the sciences in all probability flourished more in their natural state, though silently, than when they were paraded with the fifes and trumpets of the Greeks); or even (in parts, at least) to some of the Greeks themselves, and to derive authority and honor from thence; as men of no family labor to raise and form nobility for themselves in some ancient line, by the help of genealogies. Trusting, however, to the evidence of facts, we reject every kind of fiction and imposture; and think it of no more consequence to our subject, whether future discoveries were known to the ancients, and set or rose according to the vicissitudes of events and^[98] lapse of ages, than it would be of importance to mankind to know whether the new world be the island of Atlantis,^[66] and known to the ancients, or be now discovered for the first time.

With regard to the universal censure we have bestowed, it is quite clear, to any one who properly considers the matter, that it is both more probable and more modest than any partial one could have been. For if the errors had not been rooted in the primary notions, some well conducted discoveries must have corrected others that were deficient. But since the errors were fundamental, and of such a nature, that men may be said rather to have neglected or passed over things, than to have formed a wrong or false judgment of them, it is little to be wondered at, that they did not obtain what they never aimed at, nor arrive at a goal which they had not determined, nor perform a course which they had neither entered upon nor adhered to.

With regard to our presumption, we allow that if we were to assume a power of drawing a more perfect straight line or circle than any one else, by superior steadiness of hand or acuteness of eye, it would lead to a comparison of talent; but if one merely assert that he can draw a more perfect line or circle with a ruler or compasses, than another can by his unassisted hand or eye, he surely cannot be said to boast of much. Now this applies not only to our first original attempt, but also to those who shall hereafter apply themselves to the pursuit. For our method of discovering the sciences merely levels men's wits, and leaves but little to their superiority, since it achieves everything by the most certain rules and demonstrations. Whence (as we have^[99] often observed), our attempt is to be attributed to fortune rather than talent, and is the offspring of time rather than of wit. For a certain sort of

chance has no less effect upon our thoughts than on our acts and deeds.

CXXIII. We may, therefore, apply to ourselves the joke of him who said, that water and wine drinkers could not think alike,^[67] especially as it hits the matter so well. For others, both ancients and moderns, have in the sciences drank a crude liquor like water, either flowing of itself from the understanding, or drawn up by logic as the wheel draws up the bucket. But we drink and pledge others with a liquor made of many well-ripened grapes, collected and plucked from particular branches, squeezed in the press, and at last clarified and fermented in a vessel. It is not, therefore, wonderful that we should not agree with others.

CXXIV. Another objection will without doubt be made, namely, that we have not ourselves established a correct, or the best goal or aim of the sciences (the very defect we blame in others). For they will say that the contemplation of truth is more dignified and exalted than any utility or extent of effects; but that our dwelling so long and anxiously on experience and matter, and the fluctuating state of particulars, fastens the mind to earth, or rather casts it down into an abyss of confusion and disturbance, and separates and removes it from a much more divine state, the quiet and tranquillity of abstract wisdom. We willingly assent to their reasoning, and are most anxious to effect the very point they hint at and require. For we are founding a real model of the world in the understanding, such as it is found to be, not such as man's reason has distorted.^[100] Now this cannot be done without dissecting and anatomizing the world most diligently; but we declare it necessary to destroy completely the vain, little and, as it were, apish imitations of the world, which have been formed in various systems of philosophy by men's fancies. Let men learn (as we have said above) the difference that exists between the idols of the human mind and the ideas of the divine mind. The former are mere arbitrary abstractions; the latter the true marks of the Creator on his creatures, as they are imprinted on, and defined in matter, by true and exquisite touches. Truth, therefore, and utility, are here perfectly identical, and the effects are of more value as pledges of truth than from the benefit they confer on men.

CXXV. Others may object that we are only doing that which has already been done, and that the ancients followed the same course as ourselves. They may imagine, therefore, that, after all this stir and exertion, we shall at last

arrive at some of those systems that prevailed among the ancients: for that they, too, when commencing their meditations, laid up a great store of instances and particulars, and digested them under topics and titles in their commonplace books, and so worked out their systems and arts, and then decided upon what they discovered, and related now and then some examples to confirm and throw light upon their doctrine; but thought it superfluous and troublesome to publish their notes, minutes, and commonplaces, and therefore followed the example of builders who remove the scaffolding and ladders when the building is finished. Nor can we indeed believe the case to have been otherwise. But to any one, not entirely forgetful of our previous observations, it will be easy to answer this objection or rather^[101] scruple; for we allow that the ancients had a particular form of investigation and discovery, and their writings show it. But it was of such a nature, that they immediately flew from a few instances and particulars (after adding some common notions, and a few generally received opinions most in vogue) to the most general conclusions or the principles of the sciences, and then by their intermediate propositions deduced their inferior conclusions, and tried them by the test of the immovable and settled truth of the first, and so constructed their art. Lastly, if some new particulars and instances were brought forward, which contradicted their dogmas, they either with great subtilty reduced them to one system, by distinctions or explanations of their own rules, or got rid of them clumsily as exceptions, laboring most pertinaciously in the meantime to accommodate the causes of such as were not contradictory to their own principles. Their natural history and their experience were both far from being what they ought to have been, and their flying off to generalities ruined everything.

CXXVI. Another objection will be made against us, that we prohibit decisions and the laying down of certain principles, till we arrive regularly at generalities by the intermediate steps, and thus keep the judgment in suspense and lead to uncertainty. But our object is not uncertainty but fitting certainty, for we derogate not from the senses but assist them, and despise not the understanding but direct it. It is better to know what is necessary, and not to imagine we are fully in possession of it, than to imagine that we are fully in possession of it, and yet in reality to know nothing which we ought.

CXXVII. Again, some may raise this question rather than objection,

whether we talk of perfecting natural philosophy^[102] alone according to our method, or the other sciences also, such as logic, ethics, politics. We certainly intend to comprehend them all. And as common logic, which regulates matters by syllogisms, is applied not only to natural, but also to every other science, so our inductive method likewise comprehends them all.^[68] For we form a history and tables of invention for anger, fear, shame, and the like, and also for examples in civil life, and the mental operations of memory, composition, division, judgment, and the rest, as well as for heat and cold, light, vegetation, and the like. But since our method of interpretation, after preparing and arranging a history, does not content itself with examining the operations and disquisitions of the mind like common logic, but also inspects the nature of things, we so regulate the mind that it may be enabled to apply itself in every respect correctly to that nature. On that account we deliver numerous and various precepts in our doctrine of interpretation, so that they may apply in some^[103] measure to the method of discovering the quality and condition of the subject matter of investigation.

CXXVIII. Let none even doubt whether we are anxious to destroy and demolish the philosophy, arts, and sciences, which are now in use. On the contrary, we readily cherish their practice, cultivation, and honor; for we by no means interfere to prevent the prevalent system from encouraging discussion, adorning discourses, or being employed serviceably in the chair of the professor or the practice of common life, and being taken, in short, by general consent as current coin. Nay, we plainly declare, that the system we offer will not be very suitable for such purposes, not being easily adapted to vulgar apprehensions, except by effects and works. To show our sincerity in professing our regard and friendly disposition toward the received sciences, we can refer to the evidence of our published writings (especially our books on the Advancement of Learning). We will not, therefore, endeavor to evince it any further by words; but content ourselves with steadily and professedly premising, that no great progress can be made by the present methods in the theory or contemplation of science, and that they cannot be made to produce any very abundant effects.

CXXIX. It remains for us to say a few words on the excellence of our proposed end. If we had done so before, we might have appeared merely to express our wishes, but now that we have excited hope and removed

prejudices, it will perhaps have greater weight. Had we performed and completely accomplished the whole, without frequently calling in others to assist in our labors, we should then have refrained from saying any more, lest we should be thought to extol our own deserts. Since, however, the^[104] industry of others must be quickened, and their courage roused and inflamed, it is right to recall some points to their memory.

First, then, the introduction of great inventions appears one of the most distinguished of human actions, and the ancients so considered it; for they assigned divine honors to the authors of inventions, but only heroic honors to those who displayed civil merit (such as the founders of cities and empire legislators, the deliverers of their country from lasting misfortunes, the quellers of tyrants, and the like). And if any one rightly compare them, he will find the judgment of antiquity to be correct; for the benefits derived from inventions may extend to mankind in general, but civil benefits to particular spots alone; the latter, moreover, last but for a time, the former forever. Civil reformation seldom is carried on without violence and confusion, while inventions are a blessing and a benefit without injuring or afflicting any.

Inventions are also, as it were, new creations and imitations of divine works, as was expressed by the poet:^[69]

“Primum frugiferos fœtus mortalibus ægris
Dididerant quondam præstanti nomine Athenæ
Et *recreaverunt* vitam legesque rogarunt.”

And it is worthy of remark in Solomon, that while he flourished in the possession of his empire, in wealth, in the^[105] magnificence of his works, in his court, his household, his fleet, the splendor of his name, and the most unbounded admiration of mankind, he still placed his glory in none of these, but declared^[70] that it is the glory of God to conceal a thing, but the glory of a king to search it out.

Again, let any one but consider the immense difference between men’s lives in the most polished countries of Europe, and in any wild and barbarous region of the new Indies, he will think it so great, that man may be said to be a god unto man, not only on account of mutual aid and benefits, but from their comparative states—the result of the arts, and not of the soil or climate.

Again, we should notice the force, effect, and consequences of inventions, which are nowhere more conspicuous than in those three which were unknown to the ancients; namely, printing, gunpowder, and the compass. For these three have changed the appearance and state of the whole world: first in literature, then in warfare, and lastly in navigation; and innumerable changes have been thence derived, so that no empire, sect, or star, appears to have exercised a greater power and influence on human affairs than these mechanical discoveries.

It will, perhaps, be as well to distinguish three species and degrees of ambition. First, that of men who are anxious to enlarge their own power in their country, which is a vulgar and degenerate kind; next, that of men who strive to enlarge the power and empire of their country over mankind, which is more dignified but not less covetous; but if one were to endeavor to renew and enlarge the power and empire of mankind in general over the universe, such ambition^[106] (if it may be so termed) is both more sound and more noble than the other two. Now the empire of man over things is founded on the arts and sciences alone, for nature is only to be commanded by obeying her.

Besides this, if the benefit of any particular invention has had such an effect as to induce men to consider him greater than a man, who has thus obliged the whole race, how much more exalted will that discovery be, which leads to the easy discovery of everything else! Yet (to speak the truth) in the same manner as we are very thankful for light which enables us to enter on our way, to practice arts, to read, to distinguish each other, and yet sight is more excellent and beautiful than the various uses of light; so is the contemplation of things as they are, free from superstition or imposture, error or confusion, much more dignified in itself than all the advantage to be derived from discoveries.

Lastly, let none be alarmed at the objection of the arts and sciences becoming depraved to malevolent or luxurious purposes and the like, for the same can be said of every worldly good; talent, courage, strength, beauty, riches, light itself, and the rest. Only let mankind regain their rights over nature, assigned to them by the gift of God, and obtain that power, whose exercise will be governed by right reason and true religion.

CXXX. But it is time for us to lay down the art of interpreting nature, to which we attribute no absolute necessity (as if nothing could be done without it) nor perfection, although we think that our precepts are most useful and correct. For we are of opinion, that if men had at their command a proper history of nature and experience, and would apply themselves steadily to it, and could bind themselves to two things: 1, to lay aside received^[107] opinions and notions; 2, to restrain themselves, till the proper season, from generalization, they might, by the proper and genuine exertion of their minds, fall into our way of interpretation without the aid of any art. For interpretation is the true and natural act of the mind, when all obstacles are removed: certainly, however, everything will be more ready and better fixed by our precepts.

Yet do we not affirm that no addition can be made to them; on the contrary, considering the mind in its connection with things, and not merely relatively to its own powers, we ought to be persuaded that the art of invention can be made to grow with the inventions themselves.

FOOTNOTES

[2] Bacon uses the term in its ancient sense, and means one who, knowing the occult properties of bodies, is able to startle the ignorant by drawing out of them wonderful and unforeseen changes. See the [85th aphorism of this book](#), and the 5th cap. book iii. of the *De Augmentis Scientiarum*, where he speaks more clearly.—*Ed.*

[3] By this term *axiomata*, Bacon here speaks of general principles, or universal laws. In the [19th aphorism](#) he employs the term to express any proposition collected from facts by induction, and thus fitted to become the starting-point of deductive reasoning. In the last and more rigorous sense of the term, Bacon held they arose from experience. See Whewell's "Philosophy of the Inductive Sciences," vol. i. p. 74; and Mill's "Logic," vol. i. p. 311; and the June "Quarterly," 1841, for the modern phase of the discussion.—*Ed.*

[4] Bacon here attributes to the Aristotelian logic the erroneous consequences which sprung out of its abuse. The demonstrative forms it exhibits, whether verbally or mathematically expressed, are necessary to the support, verification, and extension of induction, and when the propositions they embrace are founded on an accurate and close observation of facts, the conclusions to which they lead, even in moral science, may be regarded as certain as the facts wrested out of nature by direct experiment. In physics such forms are absolutely required to generalize the results of experience, and to connect intermediate axioms with laws still more general, as is sufficiently attested by the fact, that no science since Bacon's day has ceased to be experimental by the mere method of induction, and that all become exact only so far as they rise above experience, and connect their isolated phenomena with

general laws by the principles of deductive reasoning. So far, then, are these forms from being useless, that they are absolutely essential to the advancement of the sciences, and in no case can be looked on as detrimental, except when obtruded in the place of direct experiment, or employed as a means of deducing conclusions about nature from imaginary hypotheses and abstract conceptions. This had been unfortunately the practice of the Greeks. From the rapid development geometry received in their hands, they imagined the same method would lead to results equally brilliant in natural science, and snatching up some abstract principle, which they carefully removed from the test of experiment, imagined they could reason out from it all the laws and external appearances of the universe. The scholastics were impelled along the same path, not only by precedent, but by profession. Theology was the only science which received from them a consistent development, and the *à priori* grounds on which it rested prevented them from employing any other method in the pursuit of natural phenomena. Thus, forms of demonstration, in themselves accurate, and of momentous value in their proper sphere, became confounded with fable, and led men into the idea they were exploring truth when they were only accurately deducing error from error. One principle ever so slightly deflected, like a false quantity in an equation, could be sufficient to infect the whole series of conclusions of which it was the base; and though the philosopher might subsequently deduce a thousand consecutive inferences with the utmost accuracy or precision, he would only succeed in drawing out very methodically nine hundred and ninety-nine errors.—*Ed.*

[5] It would appear from this and the two preceding aphorisms, that Bacon fell into the error of denying the utility of the syllogism in the very part of inductive science where it is essentially required. Logic, like mathematics, is purely a formal process, and must, as the scaffolding to the building, be employed to arrange facts in the structure of a science, and not to form any portion of its groundwork, or to supply the materials of which the system is to be composed. The word syllogism, like most other psychological terms, has no fixed or original signification, but is sometimes employed, as it was by the Greeks, to denote general reasoning, and at others to point out the formal method of deducing a particular inference from two or more general propositions. Bacon does not confine the term within the boundaries of express definition, but leaves us to infer that he took it in the latter sense, from his custom of associating the term with the wranglings of the schools. The scholastics, it is true, abused the deductive syllogism, by employing it in its naked, skeleton-like form, and confounding it with the whole breadth of logical theory; but their errors are not to be visited on Aristotle, who never dreamed of playing with formal syllogisms, and, least of all, mistook the descending for the ascending series of inference. In our mind we are of accord with the Stagyrte, who propounds, as far as we can interpret him, two modes of investigating truth—the one by which we ascend from particular and singular facts to general laws and axioms, and the other by which we descend from universal propositions to the individual cases which they virtually include. Logic, therefore, must equally vindicate the formal purity of the synthetic illation by which it ascends to the whole, as the analytic process by which it descends to the parts. The deductive and inductive syllogism are of equal significance in building up any body of truth, and whoever restricts logic to either process, mistakes one-half of its province for the whole; and if he acts upon his error, will paralyze his methods, and strike the noblest part of science with sterility.—*Ed.*

[6] The Latin is, *ad ea quæ revera sunt naturæ notiora*. This expression, *naturæ notiora*, *naturæ notior*, is so frequently employed by Bacon, that we may conclude it to point to some distinguishing feature in the Baconian physics. It properly refers to the most evident principles and laws of nature, and springs from that system which regards the material universe as endowed with intelligence, and acting according to rules either fashioned or clearly understood by itself.—*Ed.*

[7] This Borgia was Alexander VI., and the expedition alluded to that in which Charles VIII.

overran the Italian peninsula in five months. Bacon uses the same illustration in concluding his survey of natural philosophy, in the second book of the “De Augmentis.”—*Ed.*

[8] *Ratio eorum qui acatalepsiam tenuerunt.* Bacon alludes to the members of the later academy, who held the ἀκατάληπτα, or the impossibility of comprehending anything. His translator, however, makes him refer to the sceptics, who neither dogmatized about the known or the unknown, but simply held, that as all knowledge was relative, πρὸς πάντα τι, man could never arrive at absolute truth, and therefore could not with certainty affirm or deny anything.—*Ed.*

[9] It is argued by Hallam, with some appearance of truth, that idols is not the correct translation of εἰδωλα, from which the original idola is manifestly derived; but that Bacon used it in the literal sense attached to it by the Greeks, as a species of illusion, or false appearance, and not as a species of divinity before which the mind bows down. If Hallam be right, Bacon is saved from the odium of an analogy which his foreign commentators are not far wrong in denouncing as barbarous; but this service is rendered at the expense of the men who have attached an opposite meaning to the word, among whom are Brown, Playfair and Dugald Stewart.—*Ed.*

[10] We cannot see how these idols have less to do with sophistical paralogsms than with natural philosophy. The process of scientific induction involves only the first elements of reasoning, and presents such a clear and tangible surface, as to allow no lurking-place for prejudice; while questions of politics and morals, to which the deductive method, or common logic, as Bacon calls it, is peculiarly applicable, are ever liable to be swayed or perverted by the prejudices he enumerates. After mathematics, physical science is the least amenable to the illusions of feeling; each portion having been already tested by experiment and observation, is fitted into its place in the system, with all the rigor of the geometrical method; affection or prejudice cannot, as in matters of taste, history or religion, select fragmentary pieces, and form a system of their own. The whole must be admitted, or the structure of authoritative reason razed to the ground. It is needless to say that the idols enumerated present only another interpretation of the substance of logical fallacies.—*Ed.*

[11] The propensity to this illusion may be viewed in the spirit of system, or hasty generalization, which is still one of the chief obstacles in the path of modern science.—*Ed.*

[12] Though Kepler had, when Bacon wrote this, already demonstrated his three great laws concerning the elliptical path of the planets, neither Bacon nor Descartes seems to have known or assented to his discoveries. Our author deemed the startling astronomical announcements of his time to be mere theoretic solutions of the phenomena of the heavens, not so perfect as those advanced by antiquity, but still deserving a praise for the ingenuity displayed in their contrivance. Bacon believed a hundred such systems might exist, and though true in their explanation of phenomena, yet might all more or less differ, according to the preconceived notions which their framers brought to the survey of the heavens. He even thought he might put in his claim to the notice of posterity for his astronomical ingenuity, and, as Ptolemy had labored by means of epicycles and eccentrics, and Kepler with ellipses, to explain the laws of planetary motion, Bacon thought the mystery would unfold itself quite as philosophically through spiral labyrinths and serpentine lines. What the details of his system were, we are left to conjecture, and that from a very meagre but naïve account of one of his inventions which he has left in his Miscellany MSS.—*Ed.*

[13] *Hinc elementum ignis cum orbe suo introductum est.* Bacon saw in fire the mere result of a certain combination of action, and was consequently led to deny its elementary character. The ancient physicists attributed an orbit to each of the four elements, into which they resolved the universe, and supposed their spheres to involve each other. The orbit of the earth was in the centre, that of fire at the

circumference. For Bacon's inquisition into the nature of heat, and its complete failure, see [the commencement of the second book](#) of the Novum Organum.—*Ed.*

[14] Robert Fludd is the theorist alluded to, who had supposed the gravity of the earth to be ten times heavier than water, that of water ten times heavier than air, and that of air ten times heavier than fire.—*Ed.*

[15] Diagoras. The same allusion occurs in the second part of the Advancement of Learning, where Bacon treats of the idols of the mind.

[16] A scholastic term, to signify the two eternities of past and future duration, that stretch out on both sides of the narrow isthmus (time) occupied by man. It must be remembered that Bacon lived before the doctrine of limits gave rise to the higher calculus, and therefore could have no conception of different denominations of infinities: on the other hand he would have thought the man insane who should have talked to him about lines infinitely great, inclosing angles infinitely little; that a right line, which is a right line so long as it is finite, by changing infinitely little its direction, becomes an infinite curve, and that a curve may become infinitely less than another curve; that there are infinite squares and infinite cubes, and infinites of infinites, all greater than one another, and the last but one of which is nothing in comparison with the last. Yet half a century sufficed from Bacon's time, to make this nomenclature, which would have appeared to him the excess of frenzy, not only reasonable but necessary, to grasp the higher demonstrations of physical science.—*Ed.*

[17] Spinoza, in his letter to Oldenberg (Op. Posth. p. 398), considers this aphorism based on a wrong conception of the origin of error, and, believing it to be fundamental, was led to reject Bacon's method altogether. Spinoza refused to acknowledge in man any such thing as a will, and resolved all his volitions into particular acts, which he considered to be as fatally determined by a chain of physical causes as any effects in nature.—*Ed.*

[18] *Operatio spirituum in corporibus tangibilibus*. Bacon distinguished with the schools the gross and tangible parts of bodies, from such as were volatile and intangible. These, in conformity with the scholastic language, he terms spirits, and frequently returns to their operations in the 2d book.—*Ed.*

[19] Democritus, of Abdera, a disciple of Leucippus, born B.C. 470, died 360; all his works are destroyed. He is said to be the author of the doctrine of atoms: he denied the immortality of the soul, and first taught that the milky way was occasioned by a confused light from a multitude of stars. He may be considered as the parent of experimental philosophy, in the prosecution of which he was so ardent as to declare that he would prefer the discovery of one of the causes of natural phenomena, to the possession of the diadem of Persia. Democritus imposed on the blind credulity of his contemporaries, and, like Roger Bacon, astonished them by his inventions.—*Ed.*

[20] The Latin is *actus purus*, another scholastic expression to denote the action of the substance, which composes the essence of the body apart from its accidental qualities. For an exposition of the various kinds of motions he contemplates, the reader may refer to the [48th aphorism of the 2d book](#).—*Ed.*

[21] The scholastics after Aristotle distinguished in a subject three modes of beings: viz., the power or faculty, the act, and the habitude, or in other words that which is able to exist, what exists actually, and what continues to exist. Bacon means that is necessary to fix our attention not on that which can or ought to be, but on that which actually is; not on the right, but on the fact.—*Ed.*

[22] The inference to be drawn from this is to suspect that kind of evidence which is most consonant

to our inclinations, and not to admit any notion as real except we can base it firmly upon that kind of demonstration which is peculiar to the subject, not to our impression. Sometimes the mode of proof may be consonant to our inclinations, and to the subject at the same time, as in the case of Pythagoras, when he applied his beloved numbers to the solution of astronomical phenomena; or in that of Descartes, when he reasoned geometrically concerning the nature of the soul. Such examples cannot be censured with justice, inasmuch as the methods pursued were adapted to the end of the inquiry. The remark in the text can only apply to those philosophers who attempt to build up a moral or theological system by the instruments of induction alone, or who rush, with the geometrical axiom, and the *à priori* syllogism, to the investigation of nature. The means in such cases are totally inadequate to the object in view.—*Ed.*

[23] Gilbert lived toward the close of the sixteenth century, and was court physician to both Elizabeth and James. In his work alluded to in the text he continually asserts the advantages of the experimental over the *à priori* method in physical inquiry, and succeeded when his censor failed in giving a practical example of the utility of his precepts. His “De Magnete” contains all the fundamental parts of the science, and these so perfectly treated, that we have nothing to add to them at the present day.

Gilbert adopted the Copernican system, and even spoke of the contrary theory as utterly absurd, grounding his argument on the vast velocities which such a supposition requires us to ascribe to the heavenly bodies.—*Ed.*

[24] The Latin text adds “without end”; but Bacon is scarcely right in supposing that the descent from complex ideas and propositions to those of simple nature, involve the analyst in a series of continuous and interminable definitions. For in the gradual and analytical scale, there is a bar beyond which we cannot go, as there is a summit bounded by the limited variations of our conceptions. Logical definitions, to fulfil their conditions, or indeed to be of any avail, must be given in simpler terms than the object which is sought to be defined; now this, in the case of primordial notions and objects of sense, is impossible; therefore we are obliged to rest satisfied with the mere names of our perceptions.—*Ed.*

[25] The ancients supposed the planets to describe an exact circle round the south. As observations increased and facts were disclosed, which were irreconcilable with this supposition, the earth was removed from the centre to some other point in the circle, and the planets were supposed to revolve in a smaller circle (epicycle) round an imaginary point, which in its turn described a circle of which the earth was the centre. In proportion as observation elicited fresh facts, contradictory to these representations, other epicycles and eccentrics were added, involving additional confusion. Though Kepler had swept away all these complicated theories in the preceding century, by the demonstration of his three laws, which established the elliptical course of the planets, Bacon regarded him and Copernicus in the same light as Ptolemy and Xenophanes.—*Ed.*

[26] Empedocles, of Agrigentum, flourished 444 B.C. He was the disciple of Telanges the Pythagorean, and warmly adopted the doctrine of transmigration. He resolved the universe into the four ordinary elements, the principles of whose composition were life and happiness, or concord and amity, but whose decomposition brought forth death and evil, or discord and hatred. Heraclitus held matter to be indifferent to any peculiar form, but as it became rarer or more dense, it took the appearance of fire, air, earth and water. Fire, however, he believed to be the elementary principle out of which the others were evolved. This was also the belief of Lucretius. See book i. 783, etc.

[27] It is thus the Vulcanists and Neptunians have framed their opposite theories in geology.

Phrenology is a modern instance of hasty generalization.—*Ed.*

[28] In Scripture everything which concerns the passing interests of the body is called dead; the only living knowledge having regard to the eternal interest of the soul.—*Ed.*

[29] In mechanics and the general sciences, causes compound their effects, or in other words, it is generally possible to deduce *à priori* the consequence of introducing complex agencies into any experiment, by allowing for the effect of each of the simple causes which enter into their composition. In chemistry and physiology a contrary law holds; the causes which they embody generally uniting to form distinct substances, and to introduce unforeseen laws and combinations. The deductive method here is consequently inapplicable, and we are forced back upon experiment.

Bacon in the text is hardly consistent with himself, as he admits in the second book the doctrine, to which modern discovery points, of the reciprocal transmutation of the elements. What seemed poetic fiction in the theories of Pythagoras and Seneca, assumes the appearance of scientific fact in the hands of Baron Caynard.—*Ed.*

[30] Galileo had recently adopted the notion that nature abhorred a vacuum for an axiomatic principle, and it was not till Torricelli, his disciple, had given practical proof of the utility of Bacon's method, by the discovery of the barometer (1643) that this error, as also that expressed below, and believed by Bacon, concerning the homœopathic tendencies of bodies, was destroyed.—*Ed.*

[31] *Donec ad materiam potentialem et informem ventum fuerit.* Nearly all the ancient philosophers admitted the existence of a certain primitive and shapeless matter as the substratum of things which the creative power had reduced to fixed proportions, and resolved into specific substances. The expression potential matter refers to that substance forming the basis of the Peripatetic system, which virtually contained all the forms that it was in the power of the efficient cause to draw out of it.—*Ed.*

[32] An allusion to the humanity of the *Sultans*, who, in their earlier histories are represented as signalizing their accession to the throne by the destruction of their family, to remove the danger of rivalry and the terrors of civil war.—*Ed.*

[33] The text is “in odium veterum sophistarum, Protagoræ, Hippiaæ, et reliquorum.” Those were called sophists, who, *ostentationis aut questus causa philosophabantur.* (Acad. Prior. ii. 72.) They had corrupted and degraded philosophy before Socrates. Protagoras of Abdera (Ἀβδηρα), the most celebrated, taught that man is the measure of all things, by which he meant not only that all which can be known is known only as it related to our faculties, but also that apart from our faculties nothing can be known. The sceptics equally held that knowledge was probable only as it related to our faculties, but they stopped there, and did not, like the sophist, dogmatize about the unknown. The works of Protagoras were condemned for their impiety, and publicly burned by the ædiles of Athens, who appear to have discharged the office of common hangmen to the literary blasphemers of their day.—*Ed.*

[34] Bacon is hardly correct in implying that the *enumerationem per simplicem* was the only light in which the ancients looked upon induction, as they appear to have regarded it as only one, and that the least important, of its species. Aristotle expressly considers induction in a perfect or dialectic sense, and in an imperfect or rhetorical sense. Thus if a genus (G), contains four species (A, B, C, D), the syllogism would lead us to infer, that what is true of G, is true of any one of the four. But perfect induction would reason, that what we can prove of A, B, C, D, separately, we may properly state as true of G, the whole genus. This is evidently a formal argument as demonstrative as the syllogism. In necessary matters, however, legitimate induction may claim a wider province, and infer of the whole

genus what is only apparent in a part of the species. Such are those inductive inferences which concern the laws of nature, the immutability of forms, by which Bacon strove to erect his new system of philosophy. The Stagyrite, however, looked upon *enumerationem per simplicem*, without any regard to the nature of the matter, or to the completeness of the species, with as much reprehensive caution as Bacon, and guarded his readers against it as the source of innumerable errors.—*Ed.*

[35] See [Ax. lxi.](#) toward the end. This subject extends to [Ax. lxxviii.](#)

[36] Gorgias of Leontium went to Athens in 424 B.C. He and Polus were disciples of Empedocles, whom we have already noticed ([Aphorism 63](#)), where he sustained the three famous propositions, that nothing exists, that nothing can be known, and that it is out of the power of man to transmit or communicate intelligence. He is reckoned one of the earliest writers on the art of rhetoric, and for that reason, Plato called his elegant dialogue on that subject after his name.

[37] Chrysippus, a stoic philosopher of Soli in Cilicia, Campestris, born in 280, died in the 143d Olympiad, 208 B.C. He was equally distinguished for natural abilities and industry, seldom suffering a day to elapse without writing 500 lines. He wrote several hundred volumes, of which three hundred were on logical subjects; but in all, borrowed largely from others. He was very fond of the *sorites* in argument, which is hence called by Persius the heap of Chrysippus. He was called the Column of the Portico, a name given to the Stoical School from Zeno, its founder, who had given his lessons under the portico.

Carneades, born about 215, died in 130. He attached himself to Chrysippus, and sustained with *éclat* the scepticism of the academy. The Athenians sent him with Critolaus and Diogenes as ambassador to Rome, where he attracted the attention of his new auditory by the subtilty of his reasoning, and the fluency and vehemence of his language. Before Galba and Cato the Censor, he harangued with great variety of thought and copiousness of diction in praise of justice. The next day, to establish his doctrine of the uncertainty of human knowledge, he undertook to refute all his arguments. He maintained with the New Academy, that the senses, the imagination, and the understanding frequently deceive us, and therefore cannot be infallible judges of truth, but that from the impressions produced on the mind by means of the senses, we infer appearances of truth or probabilities. Nevertheless, with respect to the conduct of life, Carneades held that probable opinions are a sufficient guide.

Xenophanes, a Greek philosopher, of Colophon, born in 556, the founder of the Eleatic school, which owes its fame principally to Parmenides. Wild in his opinions about astronomy, he supposed that the stars were extinguished every morning, and rekindled at night; that eclipses were occasioned by the temporary extinction of the sun, and that there were several suns for the convenience of the different climates of the earth. Yet this man held the chair of philosophy at Athens for seventy years.

Philolaus, a Pythagorean philosopher of Crotona, B.C. 374. He first supported the diurnal motion of the earth round its axis, and its annual motion round the sun. Cicero (*Acad. iv. 39*) has ascribed this opinion to the Syracusan philosopher Nicetas, and likewise to Plato. From this passage, it is most probable that Copernicus got the idea of the system he afterward established. Bacon, in the *Advancement of Human Learning*, charges Gilbert with restoring the doctrines of Philolaus, because he ventured to support the Copernican theory.—*Ed.*

[38] Bacon is equally conspicuous for the use and abuse of analogical illustrations. The levity, as Stuart Mill very properly observes, by which substances float on a stream, and the levity which is synonymous with worthlessness, have nothing beside the name in common; and to show how little value there is in the figure, we need only change the word into buoyancy, to turn the semblance of Bacon's argument against himself.—*Ed.*

[39] We have before observed, that the New Academy did not profess skepticism, but the ἀκατάληπτα, or incomprehensibility of the absolute essences of things. Even modern physicists are not wanting, to assert with this school that the utmost knowledge we can obtain is relative, and necessarily short of absolute certainty. It is not without an appearance of truth that these philosophers maintain that our ideas and perceptions do not express the nature of the things which they represent, but only the effects of the peculiar organs by which they are conveyed to the understanding, so that were these organs changed, we should have different conceptions of their nature. That constitution of air which is dark to man is luminous to bats and owls.

[40] Owing to the universal prevalence of Aristotelism.

[41] It must be remembered, that when Bacon wrote, algebra was in its infancy, and the doctrine of units and infinitesimals undiscovered.

[42] Because the vulgar make up the overwhelming majority in such decisions, and generally allow their judgments to be swayed by passion or prejudice.

[43] See end of [Axiom lxi](#). The subject extends to [Axiom xc](#).

[44] If we adopt the statement of Herodotus, who places the Homeric era 400 years back from his time, Homer lived about 900 years before Christ. On adding this number to the sixteen centuries of the Christian era which had elapsed up to Bacon's time, we get the twenty-five centuries he mentions. The Homeric epoch is the furthest point in antiquity from which Bacon could reckon with any degree of certainty. Hesiod, if he were not contemporary, immediately preceded him.

The epoch of Greek philosophy may be included between Thales and Plato, that is, from the 35th to the 88th Olympiad; that of the Roman, between Terence and Pliny. The modern revolution, in which Bacon is one of the central figures, took its rise from the time of Dante and Petrarch, who lived at the commencement of the fourteenth century; and to which, on account of the invention of printing, and the universal spread of literature, which has rendered a second destruction of learning impossible, it is difficult to foresee any other end than the extinction of the race of man.—*Ed.*

[45] The allusion is evidently to Roger Bacon and René Descartes.—*Ed.*

[46] From the abuse of the scholastics, who mistook the *à priori* method, the deductive syllogism, for the entire province of logic.—*Ed.*

[47] See [Aphorism xcv](#).

[48] The incongruity to which Bacon alludes appears to spring from confounding two things, which are not only distinct, but affect human knowledge in inverse proportion, viz., the experience which terminates with life, with that experience which one century transmits to another.—*Ed.*

[49] The Chinese characters resemble, in many respects, the hieroglyphics of the Egyptians, being adapted to represent ideas, not sounds.

[50] See [Axiom 75](#).

[51] The methods by which Newton carried the rule and compass to the boundaries of creation is a sufficient comment on the sagacity of the text. The same cause which globulizes a bubble, has rounded the earth, and the same law which draws a stone to its surface, keeps the moon in her orbit. It was by calculating and ascertaining these principles upon substances entirely at his disposal that this great

philosopher was enabled to give us a key to unlock the mysteries of the universe.—*Ed.*

[52] See the “Clouds” of Aristophanes, where Socrates is represented as chasing Jupiter out of the sky, by resolving thunderstorms into ærial concussions and whirlwinds.—*Ed.*

[53] Robespierre was the latest victim of this bigotry. In his younger days he attempted to introduce Franklin’s lightning conductor into France, but was persecuted by those whose lives he sought to protect, as one audaciously striving to avert the designs of Providence.—*Ed.*

[54] We can hardly agree with the text. The scholastics, in building up a system of divinity, certainly had recourse to the deductive syllogism, because the inductive was totally inapplicable, except as a verificatory process. With regard to the technical form in which they marshalled their arguments, which is what our author aims at in his censure, they owed nothing at all to Aristotle, the conducting a dispute in naked syllogistic fashion having originated entirely with themselves.—*Ed.*

[55] Bacon cannot be supposed to allude to those divines who have attempted to show that the progress of physical science is confirmatory of revelation, but only to such as have built up a system of faith out of their own refinements on nature and revelation, as Patricius and Emanuel Swedenborg.—*Ed.*

[56] Daniel xii. 4.

[57] Bacon, in this Aphorism, appears to have entertained a fair idea of the use of the inductive and deductive methods in scientific inquiry, though his want of geometrical knowledge must have hindered him from accurately determining the precise functions of each, as it certainly led him in other parts of the Organon (V. [Aph. 82](#)), to undervalue the deductive, and, as he calls it, the dogmatic method, and to rely too much upon empiricism.—*Ed.*

[58] The reader may consult the note of the [23d Aphorism](#) for the fault which Bacon censures, and, if he wish to pursue the subject further, may read Plato’s *Timæus*, where that philosopher explains his system in detail. Bacon, however, is hardly consistent in one part of his censure, for he also talks about the spirit and appetites of inanimate substances, and that so frequently, as to preclude the supposition that he is employing metaphor.—*Ed.*

[59] Proclus flourished about the beginning of the fifth century, and was the successor of Plotinus, Porphyry and Iamblicus, who, in the two preceding centuries, had revived the doctrines of Plato, and assailed the Christian religion. The allusion in the text must be assigned to Iamblicus, who, in the fourth century, had republished the Pythagorean theology of numbers, and endeavored to construct the world out of arithmetic, thinking everything could be solved by the aid of proportions and geometry. Bacon must not be understood in the text to censure the use but the abuse of mathematics and physical investigations, as in the “*De Augmentis*” (lib. iv. c. 6), he enumerates the multiplicity of demonstration scientific facts admit of, from this source.—*Ed.*

[60] See Livy, lib. ix. c. 17, where, in a digression on the probable effect of a contest between Rome and Alexander the Great, he says: “Non cum Dario rem esse dixisset: quem mulierum ac spadonum agmen trahentem inter purpuram atque aurum, oneratum fortunæ apparatus, prædam veriùs quam hostem, nihil aliud quam ausus vana contemnere, incruentus devicit.”

[61] The lowest axioms are such as spring from simple experience—such as in chemistry, that animal substances yield no fixed salt by calcination; in music, that concords intermixed with discords make harmony, etc. Intermediate axioms advance a step further, being the result of reflection, which,

applied to our experimental knowledge, deduces laws from them, such as in optics of the first degree of generality, that the angle of incidence is equal to the angle of reflection; and in mechanics, Kepler's three laws of motion, while his general law, that all bodies attract each other with forces proportional to their masses, and inversely as the squares of their distances, may be taken as one of the highest axioms. Yet so far is this principle from being only notional or abstract, it has presented us with a key which fits into the intricate wards of the heavens, and has laid bare to our gaze the principal mechanism of the universe. But natural philosophy in Bacon's day had not advanced beyond intermediate axioms, and the term notional or abstract is applied to those general axioms then current, not founded on the solid principles of inductive inquiry, but based upon *à priori* reasoning and airy metaphysics.—*Ed.*

[62] This hope has been abundantly realized in the discovery of gravity and the decomposition of light, mainly by the inductive method. To a better philosophy we may also attribute the discovery of electricity, galvanism and their mutual connection with each other, and magnetism, the inventions of the air-pump, steam-engine and the chronometer.

[63] As Bacon very frequently cites these authors, a slight notice of their labors may not be unacceptable to the reader. Bernardinus Telesius, born at Cosenza, in 1508, combated the Aristotelian system in a work entitled "De Rerum Natura juxta propria principia," *i.e.*, according to principles of his own. The proem of the work announces his design was to show that "the construction of the world, the magnitude and nature of the bodies contained in it, are not to be investigated by reasoning, which was done by the ancients, but are to be apprehended by the senses, and collected from the things themselves." He had, however, no sooner laid down this principle than he departed from it in practice, and pursued the deductive method he so much condemned in his predecessors. His first step was an assumption of principles as arbitrary as any of the empirical notions of antiquity; at the outset of his book he very quietly takes it for granted that heat is the principle of motion, cold of immobility, matter being assumed as the corporeal substratum, in which these incorporeal and active agents carry on their operations. Out of these abstract and ill-defined conceptions Telesius builds up a system quite as complete, symmetrical, and imaginative as any of the structures of antiquity.

Francis Patricius, born at Cherso, in Dalmatia, about 1529, was another physicist who rose up against Aristotle, and announced the dawn of a new philosophy. In 1593 appeared his "Nova de Universis Philosophia." He lays down a string of axioms, in which scholastic notions, physical discoveries, and theological dogmas, are strangely commingled, and erects upon them a system which represents all the grotesque features of theological empiricism.

Severinus, born in Jutland, in 1529, published an attack on Aristotle's natural history, but adopted fantasies which the Stagyrite ridiculed in his own day. He was a follower of Paracelsus, a Swiss enthusiast of the fifteenth century, who ignored the ancient doctrine of the four elements for salt, sulphur and mercury, and allied chemistry and medicine with mysticism.—*Ed.*

[64] Bacon's apology is sound, and completely answers those German and French critics, who have refused him a niche in the philosophical pantheon. One German commentator, too modest to reveal his name, accuses Bacon of ignorance of the calculus, though, in his day, Wallis had not yet stumbled upon the laws of continuous fractions; while Count de Maistre, in a coarse attack upon his genius, expresses his astonishment at finding Bacon unacquainted with discoveries which were not heard of till a century after his death.—*Ed.*

[65] Philip of Macedon.

[66] See Plato's Timæus.

[67] The saying of Philocrates when he differed from Demosthenes.—*Ed.*

[68] The old error of placing the deductive syllogism in antagonism to the inductive, as if they were not both parts of one system or refused to cohere together. So far from there being any radical opposition between them, it would not be difficult to show that Bacon's method was syllogistic in his sense of the term. For the suppressed premise of every Baconian enthymeme, viz., the acknowledged uniformity of the laws of nature as stated in the axiom, whatever has once occurred will occur again, must be assumed as the basis of every conclusion which he draws before we can admit its legitimacy. The opposition, therefore, of Bacon's method could not be directed against the old logic, for it assumed and exemplified its principles, but rather to the abusive application which the ancients made of this science, on turning its powers to the development of abstract principles which they imagined to be pregnant with the solution of the latent mysteries of the universe. Bacon justly overthrew these ideal notions, and accepted of no principle as a basis which was not guaranteed by actual experiment and observation; and so far he laid the foundations of a sound philosophy by turning the inductive logic to its proper account in the interpretation of nature.

[69] This is the opening of the Sixth Book of Lucretius. Bacon probably quoted from memory; the lines are—

“Primæ frugiferos fœtus mortalibus ægris
Dididerunt quondam præclaro nomine Athenæ
Et recreaverunt,” etc.

The teeming corn, that feeble mortals crave,
First, and long since, renowned Athens gave,
And cheered their life—then taught to frame their laws.

[70] Prov. xxv. 2.

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APHORISMS—BOOK II

ON THE INTERPRETATION OF NATURE, OR THE REIGN OF MAN

I. TO GENERATE and superinduce a new nature or new natures, upon a given body, is the labor and aim of human power: while to discover the form or true difference of a given nature, or the nature^[71] to which such nature is owing, or source from which it emanates (for these terms approach nearest to an explanation of our meaning), is the labor and discovery of human knowledge; and subordinate to these primary labors are two others of a secondary nature and inferior stamp. Under the first must be ranked the transformation of concrete bodies from one to another, which is possible within certain limits; under the second, the discovery, in every species of generation and motion, of the latent and uninterrupted process from the manifest efficient and manifest subject matter up to the given form: and a like discovery of the latent conformation of bodies which are at rest instead of being in motion.

II. The unhappy state of man's actual knowledge is manifested even by the common assertions of the vulgar. It is rightly laid down that true knowledge is that which is deduced from causes. The division of four causes also is not amiss: matter, form, the efficient, and end or final^[109] cause.^[72] Of these, however, the latter is so far from being beneficial, that it even corrupts the sciences, except in the intercourse of man with man. The discovery of form is considered desperate. As for the efficient cause and matter (according to the present system of inquiry and the received opinions concerning them, by which they are placed remote from, and without any latent process toward form), they are but desultory and superficial, and of scarcely any avail to real and active knowledge. Nor are we unmindful of our having pointed out and corrected above the error of the human mind, in assigning the first qualities of essence to forms.^[73] For although nothing exists in nature except individual bodies,^[74] exhibiting clear individual effects according to

particular laws, yet in each branch of learning, that very law, its investigation, discovery, and development, are the foundation both of theory and practice. This law, therefore, and its parallel in each science, is what we understand by the term form,[\[75\]](#) adopting that word because it has grown into common use, and is of familiar occurrence.

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III. He who has learned the cause of a particular nature (such as whiteness or heat), in particular subjects only, has acquired but an imperfect knowledge: as he who can induce a certain effect upon particular substances only, among those which are susceptible of it, has acquired but an imperfect power. But he who has only learned the efficient and material cause (which causes are variable and mere vehicles[\[111\]](#) conveying form to particular substances) may perhaps arrive at some new discoveries in matters of a similar nature, and prepared for the purpose, but does not stir the limits of things which are much more deeply rooted; while he who is acquainted with forms, comprehends the unity of nature in substances apparently most distinct from each other. He can disclose and bring forward, therefore (though it has never yet been done), things which neither the vicissitudes of nature, nor the industry of experiment, nor chance itself, would ever have brought about, and which would forever have escaped man's thoughts; from the discovery of forms, therefore, results genuine theory and free practice.

IV. Although there is a most intimate connection, and almost an identity between the ways of human power and human knowledge, yet, on account of the pernicious and inveterate habit of dwelling upon abstractions, it is by far the safest method to commence and build up the sciences from those foundations which bear a relation to the practical division, and to let them mark out and limit the theoretical. We must consider, therefore, what precepts, or what direction or guide, a person would most desire, in order to generate and superinduce any nature upon a given body: and this not in abstruse, but in the plainest language.

For instance, if a person should wish to superinduce the yellow color of gold upon silver, or an additional weight (observing always the laws of matter) or transparency on an opaque stone, or tenacity in glass, or vegetation on a substance which is not vegetable, we must (I say) consider what species of precept or guide this person would prefer. And, first, he will doubtless be

anxious to be shown some method that will neither fail in effect, nor deceive him in the trial of^[112] it; secondly, he will be anxious that the prescribed method should not restrict him and tie him down to peculiar means, and certain particular methods of acting; for he will, perhaps, be at loss, and without the power or opportunity of collecting and procuring such means. Now if there be other means and methods (besides those prescribed) of creating such a nature, they will perhaps be of such a kind as are in his power, yet by the confined limits of the precept he will be deprived of reaping any advantage from them; thirdly, he will be anxious to be shown something not so difficult as the required effect itself, but approaching more nearly to practice.

We will lay this down, therefore, as the genuine and perfect rule of practice, that it should be certain, free and preparatory, or having relation to practice. And this is the same thing as the discovery of a true form; for the form of any nature is such, that when it is assigned the particular nature infallibly follows. It is, therefore, always present when that nature is present, and universally attests such presence, and is inherent in the whole of it. The same form is of such a character, that if it be removed the particular nature infallibly vanishes. It is, therefore, absent, whenever that nature is absent, and perpetually testifies such absence, and exists in no other nature. Lastly, the true form is such, that it deduces the particular nature from some source of essence existing in many subjects, and more known (as they term it) to nature, than the form itself. Such, then, is our determination and rule with regard to a genuine and perfect theoretical axiom, that a nature be found convertible with a given nature, and yet such as to limit the more known nature, in the manner of a real genus. But these two rules, the practical and theoretical, are in fact the^[113] same, and that which is most useful in practice is most correct in theory.

V. But the rule or axiom for the transformation of bodies is of two kinds. The first regards the body as an aggregate or combination of simple natures. Thus, in gold are united the following circumstances: it is yellow, heavy, of a certain weight, malleable and ductile to a certain extent; it is not volatile, loses part of its substance by fire, melts in a particular manner, is separated and dissolved by particular methods, and so of the other natures observable in gold. An axiom, therefore, of this kind deduces the subject from the forms of

simple natures; for he who has acquired the forms and methods of superinducing yellowness, weight, ductility, stability, deliquescence, solution, and the like, and their degrees and modes, will consider and contrive how to unite them in any body, so as to transform^[76] it into gold. And this method of operating belongs to primary action; for it is the same thing to produce one or many simple natures, except that man is more confined and restricted in his operations, if many be required, on account of the difficulty of uniting many natures together. It must, however, be observed, that this method of operating (which considers natures as simple though in a concrete body) sets out from what is constant, eternal, and universal in nature, and opens such broad paths to human power, as the thoughts of man can in the present state of things scarcely comprehend or figure to itself.

The second kind of axiom (which depends on the discovery of the latent process) does not proceed by simple natures,^[114] but by concrete bodies, as they are found in nature and in its usual course. For instance, suppose the inquiry to be, from what beginnings, in what manner, and by what process gold or any metal or stone is generated from the original menstruum, or its elements, up to the perfect mineral: or, in like manner, by what process plants are generated, from the first concretion of juices in the earth, or from seeds, up to the perfect plant, with the whole successive motion, and varied and uninterrupted efforts of nature; and the same inquiry be made as to a regularly deduced system of the generation of animals from coition to birth, and so on of other bodies.

Nor is this species of inquiry confined to the mere generation of bodies, but it is applicable to other changes and labors of nature. For instance, where an inquiry is made into the whole series and continued operation of the nutritive process, from the first reception of the food to its complete assimilation to the recipient;^[77] or into the voluntary motion of animals, from the first impression of the imagination, and the continuous effects of the spirits, up to the bending and motion of the joints; or into the free motion of the tongue and lips, and other accessories which give utterance to articulate sounds. For all these investigations relate to concrete or associated natures artificially brought together, and take into consideration certain particular and special habits of nature, and not those fundamental and general laws which constitute forms. It must, however, be plainly owned, that this method

appears more prompt and easy, and of greater promise than the primary one.

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In like manner the operative branch, which answers to this contemplative branch, extends and advances its operation from that which is usually observed in nature, to other subjects immediately connected with it, or not very remote from such immediate connection. But the higher and radical operations upon nature depend entirely on the primary axioms. Besides, even where man has not the means of acting, but only of acquiring knowledge, as in astronomy (for man cannot act upon, change, or transform the heavenly bodies), the investigation of facts or truth, as well as the knowledge of causes and coincidences, must be referred to those primary and universal axioms that regard simple natures; such as the nature of spontaneous rotation, attraction, or the magnetic force, and many others which are more common than the heavenly bodies themselves. For let no one hope to determine the question whether the earth or heaven revolve in the diurnal motion, unless he have first comprehended the nature of spontaneous rotation.

VI. But the latent process of which we speak, is far from being obvious to men's minds, beset as they now are. For we mean not the measures, symptoms, or degrees of any process which can be exhibited in the bodies themselves, but simply a continued process, which, for the most part, escapes the observation of the senses.

For instance, in all generations and transformations of bodies, we must inquire, what is in the act of being lost and escaping, what remains, what is being added, what is being diluted, what is being contracted, what is being united, what is being separated, what is continuous, what is broken off, what is urging forward, what impedes, what predominates, what is subservient, and many other circumstances.

Nor are these inquiries again to be made in the mere[116] generation and transformation of bodies only, but in all other alterations and fluctuations we must in like manner inquire; what precedes, what succeeds, what is quick, what is slow, what produces and what governs motion, and the like. All which matters are unknown and unattempted by the sciences, in their present heavy and inactive state. For, since every natural act is brought about by the smallest efforts,[78] or at least such as are too small to strike our senses, let no

one hope that he will be able to direct or change nature unless he have properly comprehended and observed these efforts.

VII. In like manner, the investigation and discovery of the latent conformation in bodies is no less new, than the discovery of the latent process and form. For we as yet are doubtless only admitted to the antechamber of nature, and do not prepare an entrance into her presence-room. But nobody can endue a given body with a new nature, or transform it successfully and appropriately into a new body, without possessing a complete knowledge of the body so to be changed or transformed. For he will run into vain, or, at least, into difficult and perverse methods, ill adapted to the nature of the body upon which he operates. A clear path, therefore, toward this object also must be thrown open, and well supported.

Labor is well and usefully bestowed upon the anatomy of organized bodies, such as those of men and animals, which appears to be a subtile matter, and a useful examination of nature. The species of anatomy, however, is that of first sight, open to the senses, and takes place only in organized^[117] bodies. It is obvious, and of ready access, when compared with the real anatomy of latent conformation in bodies which are considered similar, particularly in specific objects and their parts; as those of iron, stone, and the similar parts of plants and animals, as the root, the leaf, the flower, the flesh, the blood, and bones, etc. Yet human industry has not completely neglected this species of anatomy; for we have an instance of it in the separation of similar bodies by distillation, and other solutions, which shows the dissimilarity of the compound by the union of the homogeneous parts. These methods are useful, and of importance to our inquiry, although attended generally with fallacy: for many natures are assigned and attributed to the separate bodies, as if they had previously existed in the compound, which, in reality, are recently bestowed and superinduced by fire and heat, and the other modes of separation. Besides, it is, after all, but a small part of the labor of discovering the real conformation in the compound, which is so subtile and nice, that it is rather confused and lost by the operation of the fire, than discovered and brought to light.

A separation and solution of bodies, therefore, is to be effected, not by fire indeed, but rather by reasoning and true induction, with the assistance of experiment, and by a comparison with other bodies, and a reduction to those

simple natures and their forms which meet, and are combined in the compound; and we must assuredly pass from Vulcan to Minerva, if we wish to bring to light the real texture and conformation of bodies, upon which every occult and (as it is sometimes called) specific property and virtue of things depends, and whence also every rule of powerful change and transformation is deduced.

For instance, we must examine what spirit is in every^[118] body,^[79] what tangible essence; whether that spirit is copious and exuberant, or meagre and scarce, fine or coarse, aëriform or igniform, active or sluggish, weak or robust, progressive or retrograde, abrupt or continuous, agreeing with external and surrounding objects, or differing from them, etc. In like manner must we treat tangible essence (which admits of as many distinctions as the spirit), and its hairs, fibres, and varied texture. Again, the situation of the spirit in the corporeal mass, its pores, passages, veins, and cells, and the rudiments or first essays of the organic body, are subject to the same examination. In these, however, as in our former inquiries, and therefore in the whole investigation of latent conformation, the only genuine and clear light which completely dispels all darkness and subtile difficulties, is admitted by means of the primary axioms.

VIII. This method will not bring us to atoms,^[80] which takes for granted the vacuum, and immutability of matter (neither of which hypotheses is correct), but to the real particles such as we discover them to be. Nor is there any^[119] ground for alarm at this refinement as if it were inexplicable, for, on the contrary, the more inquiry is directed to simple natures, the more will everything be placed in a plain and perspicuous light, since we transfer our attention from the complicated to the simple, from the incommensurable to the commensurable, from surds to rational quantities, from the indefinite and vague to the definite and certain; as when we arrive at the elements of letters, and the simple tones of concords. The investigation of nature is best conducted when mathematics are applied to physics. Again, let none be alarmed at vast numbers and fractions, for in calculation it is as easy to set down or to reflect upon a thousand as a unit, or the thousandth part of an integer as an integer itself.

IX.^[81] From the two kinds of axioms above specified, arise the two divisions of philosophy and the sciences, and we will use the commonly

adopted terms which approach the nearest to our meaning, in our own sense. Let the investigation of forms, which (in reasoning at least, and after their own laws), are eternal and immutable, constitute metaphysics,^[82] and let the investigation of the efficient cause of^[120] matter, latent process, and latent conformation (which all relate merely to the ordinary course of nature, and not to her fundamental and eternal laws), constitute physics. Parallel to these, let there be two practical divisions; to physics that of mechanics, and to metaphysics that of magic, in the purest sense of the term, as applied to its ample means, and its command over nature.

X. The object of our philosophy being thus laid down, we proceed to precepts, in the most clear and regular order. The signs for the interpretation of nature comprehend two divisions; the first regards the eliciting or creating of axioms from experiment, the second the deducing or deriving of new experiments from axioms. The first admits of three subdivisions into ministrations. 1. To the senses. 2. To the memory. 3. To the mind or reason.

For we must first prepare as a foundation for the whole, a complete and accurate natural and experimental history. We must not imagine or invent, but discover the acts and properties of nature.

But natural and experimental history is so varied and diffuse, that it confounds and distracts the understanding unless it be fixed and exhibited in due order. We must, therefore, form tables and co-ordinations of instances, upon^[121] such a plan, and in such order that the understanding may be enabled to act upon them.

Even when this is done, the understanding, left to itself and to its own operation, is incompetent and unfit to construct its axioms without direction and support. Our third ministration, therefore, must be true and legitimate induction, the very key of interpretation. We must begin, however, at the end, and go back again to the others.

XI. The investigation of forms proceeds thus: a nature being given, we must first present to the understanding all the known instances which agree in the same nature, although the subject matter be considerably diversified. And this collection must be made as a mere history, and without any premature reflection, or too great degree of refinement. For instance; take the investigation of the form of heat.

Instances agreeing in the Form of Heat

- 1. The rays of the sun, particularly in summer, and at noon.
- 2. The same reflected and condensed, as between mountains, or along walls, and particularly in burning mirrors.
- 3. Ignited meteors.
- 4. Burning lightning.
- 5. Eruptions of flames from the cavities of mountains, etc.
- 6. Flame of every kind.
- 7. Ignited solids.
- 8. Natural warm baths.
- 9. Warm or heated liquids.
- 10. Warm vapors and smoke; and the air itself, which admits a most powerful and violent heat if confined, as in reverberating furnaces.^[122]
- 11. Damp hot weather, arising from the constitution of the air, without any reference to the time of the year.
- 12. Confined and subterraneous air in some caverns, particularly in winter.
- 13. All shaggy substances, as wool, the skins of animals, and the plumage of birds, contain some heat.
- 14. All bodies, both solid and liquid, dense and rare (as the air itself), placed near fire for any time.
- 15. Sparks arising from the violent percussion of flint and steel.
- 16. All bodies rubbed violently, as stone, wood, cloth, etc., so that rudders, and axles of wheels, sometimes catch fire, and the West Indians obtain fire by attrition.
- 17. Green and moist vegetable matter confined and rubbed together, as roses, peas in baskets; so hay, if it be damp when stacked, often catches fire.
- 18. Quicklime sprinkled with water.
- 19. Iron, when first dissolved by acids in a glass, and without any

application to fire; the same of tin, but not so intensely.

- 20. Animals, particularly internally; although the heat is not perceivable by the touch in insects, on account of their small size.
- 21. Horse dung, and the like excrement from other animals, when fresh.
- 22. Strong oil of sulphur and of vitriol exhibit the operation of heat in burning linen.
- 23. As does the oil of marjoram, and like substances, in burning the bony substance of the teeth.
- 24. Strong and well rectified spirits of wine exhibit the same effects; so that white of eggs when thrown into it grows hard and white, almost in the same manner as^[123] when boiled, and bread becomes burned and brown as if toasted.
- 25. Aromatic substances and warm plants, as the dracunculus [arum], old nasturtium, etc., which, though they be not warm to the touch (whether whole or pulverized), yet are discovered by the tongue and palate to be warm and almost burning when slightly masticated.
- 26. Strong vinegar and all acids, on any part of the body not clothed with the epidermis, as the eye, tongue, or any wounded part, or where the skin is removed, excite a pain differing but little from that produced by heat.
- 27. Even a severe and intense cold produces a sensation of burning.^[83]

“Nec Boreæ penetrabile frigus adurit.”
- 28. Other instances.

We are wont to call this a table of existence and presence.

XII. We must next present to the understanding instances which do not admit of the given nature, for form (as we have observed) ought no less to be absent where the given nature is absent, than to be present where it is present. If, however, we were to examine every instance, our labor would be infinite.

Negatives, therefore, must be classed under the affirmatives, and the want of the given nature must be inquired into more particularly in objects which have a very close connection with those others in which it is present and manifest. And this we are wont to term a table of deviation or of absence in proximity.

Proximate Instances wanting the Nature of Heat

The rays of the moon, stars, and comets, are not found to be warm to the touch, nay, the severest cold has been observed to take place at the full of the moon. Yet the larger fixed stars are supposed to increase and render more intense the heat of the sun, as he approaches them, when the sun is in the sign of the Lion, for instance, and in the dog-days.[\[84\]](#)

The rays of the sun in what is called the middle region of the air give no heat, to account for which the commonly assigned reason is satisfactory; namely, that that region is neither sufficiently near to the body of the sun whence the rays emanate, nor to the earth whence they are reflected. And the fact is manifested by snow being perpetual on the tops of mountains, unless extremely lofty. But it is observed, on the other hand, by some, that at the Peak of Teneriffe, and also among the Andes of Peru, the tops of the mountains are free from snow, which only lies in the lower part as you ascend. Besides, the air on the summit of these mountains is found to be by no means cold, but only thin and sharp; so much so, that in the Andes it pricks and hurts the eyes from its extreme sharpness, and even excites the orifice of the stomach and produces vomiting. The ancients also observed, that the rarity of the air on the summit^[125] of Olympus was such, that those who ascended it were obliged to carry sponges moistened with vinegar and water, and to apply them now and then to their nostrils, as the air was not dense enough for their respiration; on the summit of which mountain it is also related, there reigned so great a serenity and calm, free from rain, snow, or wind, that the letters traced upon the ashes of the sacrifices on the altar of Jupiter, by the fingers of those who had offered them, would remain undisturbed till the next year. Those even, who at this day go to the top of the Peak of Teneriffe, walk by night and not in the daytime, and are advised and pressed by their guides, as soon as the sun rises, to make haste in their descent, on account of the danger (apparently arising from the rarity of the atmosphere), lest their breathing should be relaxed and suffocated.[\[85\]](#)

The reflection of the solar rays in the polar regions is found to be weak and inefficient in producing heat, so that the Dutch, who wintered in Nova Zembla, and expected that their vessel would be freed about the beginning of

July from the obstruction of the mass of ice which had blocked it up, were disappointed and obliged to embark in their boat. Hence the direct rays of the sun appear to have but little power even on the plain, and when reflected, unless they are multiplied and condensed, which takes place when the sun tends more to the perpendicular; for, then, the incidence of the rays occurs at more acute angles, so that the reflected rays are nearer to each other, while, on the contrary, when the sun is in a very oblique position,^[126] the angles of incidence are very obtuse, and the reflected rays at a greater distance. In the meantime it must be observed, that there may be many operations of the solar rays, relating, too, to the nature of heat, which are not proportioned to our touch, so that, with regard to us, they do not tend to produce warmth, but, with regard to some other bodies, have their due effect in producing it.

Let the following experiment be made. Take a lens the reverse of a burning-glass, and place it between the hand and the solar rays, and observe whether it diminish the heat of the sun as a burning-glass increases it. For it is clear, with regard to the visual rays, that in proportion as the lens is made of unequal thickness in the middle and at its sides, the images appear either more diffused or contracted. It should be seen, therefore, if the same be true with regard to heat.

Let the experiment be well tried, whether the lunar rays can be received and collected by the strongest and best burning-glasses, so as to produce even the least degree of heat.^[86] But if that degree be, perhaps, so subtile and weak, as not to be perceived or ascertained by the touch, we must have recourse to those glasses which indicate the warm or cold state of the atmosphere, and let the lunar rays fall^[127] through the burning-glass on the top of this thermometer, and then notice if the water be depressed by the heat.^[87]

Let the burning-glass be tried on warm objects which emit no luminous rays, as heated but not ignited iron or stone, or hot water, or the like; and observe whether the heat become increased and condensed, as happens with the solar rays.

Let it be tried on common flame.

The effect of comets (if we can reckon them among meteors^[88]) in augmenting the heat of the season is not found to be constant or clear,

although droughts have generally been observed to follow them. However, luminous lines, and pillars, and openings, and the like, appear more often in winter than in summer, and especially with the most intense cold but joined with drought. Lightning, and coruscations, and thunder, however, rarely happen in winter; and^[128] generally at the time of the greatest heats. The appearances we term falling stars are generally supposed to consist of some shining and inflamed viscous substance, rather than of violently hot matter; but let this be further investigated.

Some coruscations emit light without burning, but are never accompanied by thunder.

Eructations and eruptions of flame are to be found in cold climates as well as in hot, as in Iceland and Greenland; just as the trees of cold countries are sometimes inflammable and more pitchy and resinous than in warm, as the fir, pine, and the like. But the position and nature of the soil, where such eruptions are wont to happen, is not yet sufficiently investigated to enable us to subjoin a negative instance to the affirmative.

All flame is constantly more or less warm, and this instance is not altogether negative; yet it is said that the ignis fatuus (as it is called), and which sometimes is driven against walls, has but little heat; perhaps it resembles that of spirits of wine, which is mild and gentle. That flame, however, appears yet milder, which in some well authenticated and serious histories is said to have appeared round the head and hair of boys and virgins, and instead of burning their hair, merely to have played about it. And it is most certain that a sort of flash, without any evident heat, has sometimes been seen about a horse when sweating at night, or in damp weather. It is also a well known fact,^[89] and it was almost considered as a miracle, that a few years since a girl's apron sparkled when a little shaken or rubbed, which was, perhaps, occasioned by the alum or salts with which^[129] the apron was imbued, and which, after having been stuck together and incrustated rather strongly, were broken by the friction. It is well known that all sugar, whether candied or plain, if it be hard, will sparkle when broken or scraped in the dark. In like manner sea and salt water is sometimes found to shine at night when struck violently by the oar. The foam of the sea when agitated by tempests also sparkles at night, and the Spaniards call this appearance the sea's lungs. It has not been sufficiently ascertained what degree of heat

attends the flame which the ancient sailors called Castor and Pollux, and the moderns call St. Ermus' fire.

Every ignited body that is red-hot is always warm, although without flame, nor is any negative instance subjoined to this affirmative. Rotten wood, however, approaches nearly to it, for it shines at night, and yet is not found to be warm; and the putrefying scales of fish which shine in the same manner are not warm to the touch, nor the body of the glowworm, or of the fly called Lucciola.[\[90\]](#)

The situation and nature of the soil of natural warm baths has not been sufficiently investigated, and therefore a negative instance is not subjoined.

To the instances of warm liquids we may subjoin the negative one of the peculiar nature of liquids in general; for no tangible liquid is known that is at once warm in its nature and constantly continues warm; but their heat is only superinduced as an adventitious nature for a limited time, so that those which are extremely warm in their power and effect, as spirits of wine, chemical aromatic oils, the oils of vitriol and sulphur, and the like, and which speedily burn, are yet cold at first to the touch, and the water of natural baths, poured into any vessel and separated from^[130] its source, cools down like water heated by the fire. It is, however, true that oily substances are rather less cold to the touch than those that are aqueous, oil for instance than water, silk than linen; but this belongs to the table of degrees of cold.

In like manner we may subjoin a negative instance to that of warm vapor, derived from the nature of vapor itself, as far as we are acquainted with it. For exhalations from oily substances, though easily inflammable, are yet never warm unless recently exhaled from some warm substance.

The same may be said of the instance of air; for we never perceive that air is warm unless confined or pressed, or manifestly heated by the sun, by fire, or some other warm body.

A negative instance is exhibited in weather by its coldness with an east or north wind, beyond what the season would lead us to expect, just as the contrary takes place with the south or west winds. An inclination to rain (especially in winter) attends warm weather, and to frost cold weather.

A negative instance as to air confined in caverns may be observed in summer. Indeed, we should make a more diligent inquiry into the nature of

confined air. For in the first place the qualities of air in its own nature with regard to heat and cold may reasonably be the subject of doubt; for air evidently derives its heat from the effects of celestial bodies, and possibly its cold from the exhalation of the earth, and in the mid region of air (as it is termed) from cold vapors and snow, so that no judgment can be formed of the nature of air by that which is out of doors and exposed, but a more correct one might be derived from confined air. It is necessary, however, that the air should be^[131] inclosed in a vessel of such materials as would not imbue it with heat or cold of themselves, nor easily admit the influence of the external atmosphere. The experiment should be made, therefore, with an earthen jar, covered with folds of leather to protect it from the external air, and the air should be kept three or four days in this vessel well closed. On opening the jar, the degree of heat may be ascertained either by the hand or a graduated glass tube.

There is a similar doubt as to whether the warmth of wool, skins, feathers, and the like, is derived from a slight inherent heat, since they are animal excretions, or from their being of a certain fat and oily nature that accords with heat, or merely from the confinement and separation of air which we spoke of in the preceding paragraph;^[91] for all air appears to possess a certain degree of warmth when separated from the external atmosphere. Let an experiment be made, therefore, with fibrous substances of linen, and not of wool, feathers, or silk, which are animal excretions. For it is to be observed that all powders (where air is manifestly inclosed) are less cold than the substances when whole, just as we imagine froth (which contains air) to be less cold than the liquid itself.

We have here no exactly negative instance, for we are not acquainted with any body tangible or spirituous which does not admit of heat when exposed to the fire. There is, however, this difference, that some admit it more rapidly, as air, oil, and water, others more slowly, as stone and metals.^[92] This, however, belongs to the [table of degrees](#).

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No negative is here subjoined, except the remark that sparks are not kindled by flint and steel, or any other hard substance, unless some small particles of the stone or metal are struck off, and that the air never forms them by friction, as is commonly supposed; besides, the sparks from the weight of

the ignited substance have a tendency to descend rather than to rise, and when extinguished become a sort of dark ash.

We are of opinion that here again there is no negative; for we are not acquainted with any tangible body which does not become decidedly warm by friction, so that the ancients feigned that the gods had no other means or power of creating heat than the friction of air, by rapid and violent rotation. On this point, however, further inquiry must be made, whether bodies projected by machines (as balls from cannon) do not derive some degree of heat from meeting the air, which renders them somewhat warm when they fall. The air in motion rather cools than heats, as in the winds, the bellows, or breath when the mouth is contracted. The motion, however, in such instances is not sufficiently rapid to excite heat, and is applied to a body of air, and not to its component parts, so that it is not surprising that heat should not be generated.

We must make a more diligent inquiry into this instance; for herbs and green and moist vegetables appear to possess a latent heat, so small, however, as not to be perceived by the touch in single specimens, but when they are united and confined, so that their spirit cannot exhale into the air, and they rather warm each other, their heat is at once manifested, and even flame occasionally in suitable substances.

Here, too, we must make a more diligent inquiry; for^[133] quicklime, when sprinkled with water, appears to conceive heat, either from its being collected into one point (as we observed of herbs when confined), or from the irritation and exasperation of the fiery spirit by water, which occasions a conflict and struggle. The true reason will more readily be shown if oil be used instead of water, for oil will equally tend to collect the confined spirit, but not to irritate. The experiment may be made more general, both by using the ashes and calcined products of different bodies and by pouring different liquids upon them.

A negative instance may be subjoined of other metals which are more soft and soluble; for leaf gold dissolved by aqua regia, or lead by aqua fortis, are not warm to the touch while dissolving, no more is quicksilver (as far as I remember), but silver excites a slight heat, and so does copper, and tin yet more plainly, and most of all iron and steel, which excite not only a powerful

heat, but a violent bubbling. The heat, therefore, appears to be occasioned by the struggle which takes place when these strong dissolvents penetrate, dig into, and tear asunder the parts of those substances, while the substances themselves resist. When, however, the substances yield more easily, scarcely any heat is excited.

There is no negative instance with regard to the heat of animals, except in insects (as has been observed), owing to their small size; for in fishes, as compared with land animals, a lower degree rather than a deprivation of heat is observable. In plants and vegetables, both as to their exudations and pith when freshly exposed, there is no sensible degree of heat. But in animals there is a great difference in the degree, both in particular parts (for the heat varies near the heart, the brain, and the extremities) and in^[134] the circumstances in which they are placed, such as violent exercise and fevers.

Here, again, there is scarcely a negative instance. I might add that the excrements of animals, even when they are no longer fresh, possess evidently some effective heat, as is shown by their enriching the soil.

Such liquids (whether oily or watery) as are intensely acrid exhibit the effects of heat, by the separation and burning of bodies after some little action upon them, yet they are not at first warm to the touch, but they act according to their affinity and the pores of the substances to which they are applied; for aqua regia dissolves gold but not silver—on the contrary, aqua fortis dissolves silver but not gold; neither of them dissolves glass, and so of the rest.

Let spirits of wine be tried on wood, or butter, wax, or pitch, to see if this will melt them at all by their heat; for the [twenty-fourth instance](#) shows that they possess properties resembling those of heat in causing incrustation. Let an experiment also be made with a graduated glass or calendar,^[93] concave at the top, by pouring well-rectified spirits of wine into the cavity, and covering it up in order that they may the better retain their heat, then observe whether their heat make the water descend.

Spices and acrid herbs are sensibly warm to the palate, and still more so when taken internally; one should see, therefore, on what other substances they exhibit the effects of heat. Now, sailors tell us that when large quantities of spices are suddenly opened, after having been shut up for some time, there

is some danger of fever and inflammation to those who stir them or take them out. An experiment^[135] might, therefore, be made whether such spices and herbs, when produced, will, like smoke, dry fish and meat hung up over them.

There is an acrid effect and a degree of penetration in cold liquids, such as vinegar and oil of vitriol, as well as in warm, such as oil of marjoram and the like; they have, therefore, an equal effect in causing animated substances to smart, and separating and consuming inanimate parts. There is not any negative instance as to this, nor does there exist any animal pain unaccompanied by the sensation of heat.

There are many effects common to cold and heat, however different in their process; for snowballs appear to burn boys' hands after a little time, and cold no less than fire preserves bodies from putrefaction—besides both heat and cold contract bodies. But it is better to refer these instances and the like to the investigation of cold.

XIII. In the third place we must exhibit to the understanding the instances in which that nature, which is the object of our inquiries, is present in a greater or less degree, either by comparing its increase and decrease in the same object, or its degree in different objects; for since the form of a thing is its very essence, and the thing only differs from its form as the apparent from the actual object, or the exterior from the interior, or that which is considered with relation to man from that which is considered with relation to the universe; it necessarily follows that no nature can be considered a real form which does not uniformly diminish and increase with the given nature. We are wont to call this our Table of Degrees, or Comparative Instances.

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Table of the Degrees or Comparative Instances of Heat

We will first speak of those bodies which exhibit no degree of heat sensible to the touch, but appear rather to possess a potential heat, or disposition and preparation for it. We will then go on to others, which are actually warm to the touch, and observe the strength and degree of it.

1. There is no known solid or tangible body which is by its own nature originally warm; for neither stone, metal, sulphur, fossils, wood, water,

nor dead animal carcasses are found warm. The warm springs in baths appear to be heated accidentally, by flame, subterraneous fire (such as is thrown up by Etna and many other mountains), or by the contact of certain bodies, as heat is exhibited in the dissolution of iron and tin. The degree of heat, therefore, in inanimate objects is not sensible to our touch; but they differ in their degrees of cold, for wood and metal are not equally cold.[\[94\]](#) This, however, belongs to the Table of Degrees of Cold.

2. But with regard to potential heat and predisposition to flame, we find many inanimate substances wonderfully adapted to it, as sulphur, naphtha, and saltpetre.

3. Bodies which have previously acquired heat, as horse dung from the animal, or lime, and perhaps ashes and soot from fire, retain some latent portion of it. Hence distillations and separations of substances are effected by burying^[137] them in horse dung, and heat is excited in lime by sprinkling it with water (as has been before observed).

4. In the vegetable world we know of no plant, nor part of any plant (as the exudations or pith) that is warm to man's touch. Yet (as we have before observed) green weeds grow warm when confined, and some vegetables are warm and others cold to our internal touch, *i.e.*, the palate and stomach, or even after a while to our external skin (as is shown in plasters and ointments).

5. We know of nothing in the various parts of animals, when dead or detached from the rest, that is warm to the touch; for horse dung itself does not retain its heat, unless it be confined and buried. All dung, however, appears to possess a potential heat, as in manuring fields; so also dead bodies are endued with this latent and potential heat to such a degree, that in cemeteries where people are interred daily the earth acquires a secret heat, which consumes any recently deposited body much sooner than pure earth; and they tell you that the people of the East are acquainted with a fine soft cloth, made of the down of birds, which can melt butter wrapped gently up in it by its own warmth.

6. Manures, such as every kind of dung, chalk, sea-sand, salt and the like, have some disposition toward heat.

7. All putrefaction exhibits some slight degree of heat, though not

enough to be perceptible by the touch; for neither the substances which by putrefaction are converted into animalculæ,^[95] as flesh and cheese, nor rotten wood which shines in the dark, are warm to the touch. The heat,^[138] however, of putrid substances displays itself occasionally in a disgusting and strong scent.

8. The first degree of heat, therefore, in substances which are warm to the human touch appears to be that of animals, and this admits of a great variety of degrees, for the lowest (as in insects) is scarcely perceptible, the highest scarcely equals that of the sun's rays in warm climates and weather, and is not so acute as to be insufferable to the hand. It is said, however, of Constantius, and some others of a very dry constitution and habit of body, that when attacked with violent fevers, they became so warm as to appear almost to burn the hand applied to them.

9. Animals become more warm by motion and exercise, wine and feasting, venery, burning fevers, and grief.

10. In the paroxysm of intermittent fevers the patients are at first seized with cold and shivering, but soon afterward become more heated than at first—in burning and pestilential fevers they are hot from the beginning.

11. Let further inquiry be made into the comparative heat of different animals, as fishes, quadrupeds, serpents, birds, and also of the different species, as the lion, the kite, or man; for, according to the vulgar opinion, fishes are the least warm internally, and birds the most, particularly doves, hawks, and ostriches.

12. Let further inquiry be made as to the comparative heat in different parts and limbs of the same animal; for milk, blood, seed, and eggs are moderately warm, and less hot than the outward flesh of the animal when in motion or agitated. The degree of heat of the brain, stomach, heart, and the rest, has not yet been equally well investigated.

13. All animals are externally cold in winter and cold weather, but are thought to be internally warmer.^[139]

14. The heat of the heavenly bodies, even in the warmest climates and seasons, never reaches such a pitch as to light or burn the driest wood or straw, or even tinder without the aid of burning-glasses. It can, however, raise vapor from moist substances.

15. Astronomers tell us that some stars are hotter than others. Mars is considered the warmest after the Sun, then Jupiter, then Venus. The Moon and, above all, Saturn, are considered to be cold. Among the fixed stars Sirius is thought the warmest, then Cor Leonis or Regulus, then the lesser Dog-star.

16. The sun gives out more heat as it approaches toward the perpendicular or zenith, which may be supposed to be the case with the other planets, according to their degree of heat; for instance, that Jupiter gives out more heat when situated beneath Cancer or Leo than when he is beneath Capricorn and Aquarius.

17. It is to be supposed that the sun and other planets give more heat in perigee, from their approximation to the earth, than when in apogee. But if in any country the sun should be both in its perigee and nearer to the perpendicular at the same time, it must necessarily give out more heat than in a country where it is also in perigee, but situated more obliquely; so that the comparative altitude of the planets should be observed, and their approach to or declination from the perpendicular in different countries.

18. The sun and other planets are thought also to give out more heat in proportion as they are nearer to the larger fixed stars, as when the sun is in Leo he is nearer Cor Leonis, Cauda Leonis, Spica Virginis, Sirius, and the lesser Dog-star, than when he is in Cancer, where, however, he approaches nearer to the perpendicular. It is probable,^[140] also, that the quarters of the heavens produce a greater heat (though not perceptibly), in proportion as they are adorned with a greater number of stars, particularly those of the first magnitude.

19. On the whole, the heat of the heavenly bodies is augmented in three ways: 1. The approach to the perpendicular; 2. Proximity or their perigee; 3. The conjunction or union of stars.

20. There is a very considerable difference between the degree of heat in animals, and even in the rays of the heavenly bodies (as they reach us), and the heat of the most gentle flame, and even of all ignited substances, nay, liquids, or the air itself when unusually heated by fire. For the flame of spirit of wine, though diffused and uncollected, is yet able to set straw, linen, or paper on fire, which animal heat, or that of the sun, will never

accomplish without a burning-glass.

21. There are, however, many degrees of strength and weakness in flame and ignited bodies: but no diligent inquiry has been made in this respect, and we must, therefore, pass it hastily over. Of all flames, that of spirits of wine appears to be the most gentle, except perhaps the ignis fatuus, or the flashes from the perspiration of animals. After this we should be inclined to place the flame of light and porous vegetables, such as straw, reeds, and dried leaves; from which the flame of hair or feathers differs but little. Then, perhaps, comes the flame of wood, particularly that which contains but little rosin or pitch; that of small wood, however (such as is usually tied up in fagots), is milder than that of the trunks or roots of trees. This can be easily tried in iron furnaces, where a fire of fagots or branches of trees is of little service. Next follows the flame^[141] of oil, tallow, wax, and the like oily and fat substances, which are not very violent. But a most powerful heat is found in pitch and rosin, and a still greater in sulphur, camphor, naphtha, saltpetre, and salts (after they have discharged their crude matter), and in their compounds; as in gunpowder, Greek fire (vulgarly called wild fire), and its varieties, which possess such a stubborn heat as scarcely to be extinguished by water.

22. We consider that the flame which results from some imperfect metals is very strong and active; but on all these points further inquiry should be made.

23. The flame of vivid lightning appears to exceed all the above, so as sometimes to have melted even wrought iron into drops, which the other flames cannot accomplish.

24. In ignited bodies there are different degrees of heat, concerning which, also, a diligent inquiry has not been made. We consider the faintest heat to be that of tinder, touchwood, and dry rope match, such as is used for discharging cannon. Next follows that of ignited charcoal or cinders, and even bricks, and the like; but the most violent is that of ignited metals, as iron, copper, and the like. Further inquiry, however, must be made into this also.

25. Some ignited bodies are found to be much warmer than some flames; for instance, red hot iron is much warmer, and burns more than the flame

of spirits of wine.

· 26. Some bodies even not ignited, but only heated by the fire, as boiling water, and the air confined in reverberatories, surpass in heat many flames and ignited substances.

· 27. Motion increases heat,[\[96\]](#) as is shown in the bellows[\[142\]](#) and the blowpipe; for the harder metals are not dissolved or melted by steady quiet fire, without the aid of the blowpipe.

· 28. Let an experiment be made with burning-glasses; in which respect I have observed, that if a glass be placed at the distance of ten inches, for instance, from the combustible object, it does not kindle or burn it so readily, as if the glass be placed at the distance of five inches (for instance), and be then gradually and slowly withdrawn to the distance of ten inches. The cone and focus of the rays, however, are the same, but the mere motion increases the effect of the heat.

· 29. Conflagrations, which take place with a high wind, are thought to make greater way against than with the wind, because when the wind slackens, the flame recoils more rapidly than it advances when the wind is favorable.

· 30. Flame does not burst out or arise unless it have some hollow space to move and exert itself in, except in the exploding flame of gunpowder, and the like, where the compression and confinement of the flame increase its fury.

· 31. The anvil becomes so hot by the hammer, that if it were a thin plate it might probably grow red, like ignited iron by repeated strokes. Let the experiment be tried.

· 32. But in ignited bodies that are porous, so as to leave room for the fire to move itself, if its motion be prevented by strong compression, the fire is immediately extinguished; thus it is with tinder, or the burning snuff of a candle or lamp, or even hot charcoal or cinders; for when they are squeezed by snuffers, or the foot, and the like, the effect of the fire instantly ceases.[\[143\]](#)

· 33. The approach toward a hot body increases heat in proportion to the approximation; a similar effect to that of light, for the nearer any object is

placed toward the light, the more visible it becomes.

34. The^[97] union of different heats increases heat, unless the substances be mixed; for a large and small fire in the same spot tend mutually to increase each other's heat, but lukewarm water poured into boiling water cools it.

35. The continued neighborhood of a warm body increases heat. For the heat, which perpetually passes and emanates from it, being mixed with that which preceded it, multiplies the whole. A fire, for instance, does not warm a room in half an hour as much as the same fire would in an hour. This does not apply to light, for a lamp or candle placed in a spot gives no more light by remaining there, than it did at first.

36. The irritation of surrounding cold increases heat, as may be seen in fires during a sharp frost. We think that this is owing not merely to the confinement and compression of the heat (which forms a sort of union), but also by the exasperation of it, as when the air or a stick are violently compressed or bent, they recoil, not only to the point they first occupied, but still further back. Let an accurate experiment, therefore, be made with a stick, or something of the kind, put into the flame, in order to see whether it be not sooner burned at the sides than in the middle of it.^[98]^[144]

37. There are many degrees in the susceptibility of heat. And, first, it must be observed how much a low gentle heat changes and partially warms even the bodies least susceptible of it. For even the heat of the hand imparts a little warmth to a ball of lead or other metal held a short time in it; so easily is heat transmitted and excited, without any apparent change in the body.

38. Of all bodies that we are acquainted with, air admits and loses heat the most readily, which is admirably seen in weather-glasses, whose construction is as follows: Take a glass with a hollow belly, and a thin and long neck; turn it upside down, and place it with its mouth downward into another glass vessel containing water; the end of the tube touching the bottom of the vessel, and the tube itself leaning a little on the edge, so as to be fixed upright. In order to do this more readily, let a little wax be applied to the edge, not, however, so as to block up the orifice, lest, by preventing the air from escaping, the motion, which we shall presently

· speak of, and which is very gentle and delicate, should be impeded.

Before the first glass be inserted in the other, its upper part (the belly) should be warmed at the fire. Then upon placing it as we have described, the air (which was dilated by the heat), after a sufficient time has been allowed for it to lose the additional temperature, will restore and contract itself to the same dimensions as that of the external or common atmosphere at the moment of immersion, and the water will be attracted upward in the tube to a proportionate extent. A long narrow slip of paper should be attached to^[145] the tube, divided into as many degrees as you please. You will then perceive, as the weather grows warmer or colder, that the air contracts itself into a narrower space in cold weather and dilates in the warm, which will be exhibited by the rising of the water as the air contracts itself, and its depression as the air dilates. The sensibility of the air with regard to heat or cold is so delicate and exquisite, that it far exceeds the human touch, so that a ray of sunshine, the heat of the breath, and much more, that of the hand placed on the top of the tube, immediately causes an evident depression of the water. We think, however, that the spirit of animals possesses a much more delicate susceptibility of heat and cold, only that it is impeded and blunted by the grossness of their bodies.

· 39. After air, we consider those bodies to be most sensible of heat, which have been recently changed and contracted by cold, as snow and ice; for they begin to be dissolved and melt with the first mild weather. Next, perhaps, follows quicksilver; then greasy substances, as oil, butter, and the like; then wood; then water; lastly, stones and metals, which do not easily grow hot, particularly toward their centre.^[99] When heated, however, they retain their temperature for a very long time; so that a brick or stone, or hot iron, plunged in a basin of cold water, and kept there^[146] for a quarter of an hour or thereabout, retains such a heat as not to admit of being touched.

· 40. The less massive the body is, the more readily it grows warm at the approach of a heated body, which shows that heat with us is somewhat averse to a tangible mass.^[100]

· 41. Heat with regard to the human senses and touch is various and relative, so that lukewarm water appears hot if the hand be cold, and cold

if the hand be hot.

XIV. Any one may readily see how poor we are in history, since in the above tables, besides occasionally inserting traditions and report instead of approved history and authentic instances (always, however, adding some note if their credit or authority be doubtful), we are often forced to subjoin, “Let the experiment be tried—Let further inquiry be made.”

XV. We are wont to term the office and use of these three tables the presenting a review of instances to the understanding; and when this has been done, induction itself is to be brought into action. For on an individual review of all the instances a nature is to be found, such as always to be present and absent with the given nature, to increase and decrease with it, and, as we have said, to form a more common limit of the nature. If the mind attempt this affirmatively from the first (which it always will when left to itself), there will spring up phantoms, mere theories and ill-defined notions, with axioms requiring daily correction. These will, doubtless, be better or worse, according to the power and strength of the understanding which creates them. But it is only for God (the bestower and^[147] creator of forms), and perhaps for angels and intelligences, at once to recognize forms affirmatively at the first glance of contemplation: man, at least, is unable to do so, and is only allowed to proceed first by negatives, and then to conclude with affirmatives, after every species of exclusion.

XVI. We must, therefore, effect a complete solution and separation of nature; not by fire, but by the mind, that divine fire. The first work of legitimate induction, in the discovery of forms, is rejection, or the exclusive instances of individual natures, which are not found in some one instance where the given nature is present, or are found in any one instance where it is absent, or are found to increase in any one instance where the given nature decreases, or the reverse. After an exclusion correctly effected, an affirmative form will remain as the residuum, solid, true, and well defined, while all volatile opinions go off in smoke. This is readily said; but we must arrive at it by a circuitous route. We shall perhaps, however, omit nothing that can facilitate our progress.

XVII. The first and almost perpetual precaution and warning which we consider necessary is this; that none should suppose from the great part

assigned by us to forms, that we mean such forms as the meditations and thoughts of men have hitherto been accustomed to. In the first place, we do not at present mean the concrete forms, which (as we have observed) are in the common course of things compounded of simple natures, as those of a lion, an eagle, a rose, gold, or the like. The moment for discussing these will arrive when we come to treat of the latent process and latent conformation, and the discovery of them as they exist in what are called substances, or concrete natures.

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Nor again, would we be thought to mean (even when treating of simple natures) any abstract forms or ideas, either undefined or badly defined in matter. For when we speak of forms, we mean nothing else than those laws and regulations of simple action which arrange and constitute any simple nature, such as heat, light, weight, in every species of matter, and in a susceptible subject. The form of heat or form of light, therefore, means no more than the law of heat or the law of light. Nor do we ever abstract or withdraw ourselves from things, and the operative branch of philosophy. When, therefore, we say (for instance) in our investigation of the form of heat, Reject rarity, or, Rarity is not of the form of heat, it is the same as if we were to say, Man can superinduce heat on a dense body, or the reverse, Man can abstract or ward off heat from a rare body.

But if our forms appear to any one to be somewhat abstracted, from their mingling and uniting heterogeneous objects (the heat, for instance, of the heavenly bodies appears to be very different from that of fire; the fixed red of the rose and the like, from that which is apparent in the rainbow, or the radiation of opal or the diamond;[\[101\]](#) death by drowning, from that by burning, the sword, apoplexy, or consumption; and yet they all agree in the common natures of heat, redness, and death), let him be assured that his understanding is intralled by habit, by general appearances and hypotheses. For it is most certain that, however heterogeneous and distinct, they agree in the form or law which regulates heat, redness, or death; and that human power cannot be emancipated and freed from the common^[149] course of nature, and expanded and exalted to new efficientes and new modes of operation, except by the revelation and invention of forms of this nature. But after this^[102] union of nature, which is the principal point, we will afterward,

in its proper place, treat of the divisions and ramifications of nature, whether ordinary or internal and more real.

XVIII. We must now offer an example of the exclusion or rejection of natures found by the tables of review, not to be of the form of heat; first premising that not only each table is sufficient for the rejection of any nature, but even each single instance contained in them. For it is clear from what has been said that every contradictory instance destroys a hypothesis as to the form. Still, however, for the sake of clearness, and in order to show more plainly the use of the tables, we redouble or repeat the exclusive.

An Example of the Exclusive Table, or of the Rejection of Natures from the Form of Heat

- 1. On account of the sun's rays, reject elementary (or terrestrial) nature.
- 2. On account of common fire, and particularly subterranean fires (which are the most remote and secluded from the rays of the heavenly bodies), reject celestial nature.
- 3. On account of the heat acquired by every description of substances (as minerals, vegetables, the external parts of animals, water, oil, air, etc.) by mere approximation to the fire or any warm body, reject all variety and delicate texture of bodies.[150]
- 4. On account of iron and ignited metals, which warm other bodies, and yet neither lose their weight nor substance, reject the imparting or mixing of the substance of the heating body.
- 5. On account of boiling water and air, and also those metals and other solid bodies which are heated, but not to ignition, or red heat, reject flame or light.
- 6. On account of the rays of the moon and other heavenly bodies (except the sun), again reject flame or light.
- 7. On account of the comparison between red-hot iron and the flame of spirits of wine (for the iron is more hot and less bright, while the flame of spirits of wine is more bright and less hot), again reject flame and light.
- 8. On account of gold and other ignited metals, which are of the greatest specific density, reject rarity.

- 9. On account of air, which is generally found to be cold and yet continues rare, reject rarity.
- 10. On account of ignited iron,[\[103\]](#) which does not swell in bulk, but retains the same apparent dimension, reject the absolute expansive motion of the whole.
- 11. On account of the expansion of the air in thermometers and the like, which is absolutely moved and expanded to the eye, and yet acquires no manifest increase of heat, again reject absolute or expansive motion of the whole.
- 12. On account of the ready application of heat to all substances without any destruction or remarkable alteration of them, reject destructive nature or the violent communication of any new nature.
- 13. On account of the agreement and conformity of the effects produced by cold and heat, reject both expansive and contracting motion as regards the whole.[\[151\]](#)
- 14. On account of the heat excited by friction, reject principal nature, by which we mean that which exists positively, and is not caused by a preceding nature.

There are other natures to be rejected; but we are merely offering examples, and not perfect tables.

None of the above natures are of the form of heat; and man is freed from them all in his operation upon heat.

XIX. In the exclusive table are laid the foundations of true induction, which is not, however, completed until the affirmative be attained. Nor is the exclusive table perfect, nor can it be so at first. For it is clearly a rejection of simple natures; but if we have not as yet good and just notions of simple natures, how can the exclusive table be made correct? Some of the above, as the notion of elementary and celestial nature, and rarity, are vague and ill defined. We, therefore, who are neither ignorant nor forgetful of the great work which we attempt, in rendering the human understanding adequate to things and nature, by no means rest satisfied with what we have hitherto enforced, but push the matter further, and contrive and prepare more powerful aid for the use of the understanding, which we will next subjoin.

And, indeed, in the interpretation of nature the mind is to be so prepared and formed, as to rest itself on proper degrees of certainty, and yet to remember (especially at first) that what is present depends much upon what remains behind.

XX. Since, however, truth emerges more readily from error than confusion, we consider it useful to leave the understanding at liberty to exert itself and attempt the interpretation of nature in the affirmative, after having constructed and weighed the three tables of preparation, such as we have laid them down, both from the instances there collected, and others occurring elsewhere. Which attempt^[152] we are wont to call the liberty of the understanding, or the commencement of interpretation, or the first vintage.

The First Vintage of the Form of Heat

It must be observed that the form of anything is inherent (as appears clearly from our premises) in each individual instance in which the thing itself is inherent, or it would not be a form. No contradictory instance, therefore, can be alleged. The form, however, is found to be much more conspicuous and evident in some instances than in others; in those (for example) where its nature is less restrained and embarrassed, and reduced to rule by other natures. Such instances we are wont to term coruscations, or conspicuous instances. We must proceed, then, to the first vintage of the form of heat.

From the instances taken collectively, as well as singly, the nature whose limit is heat appears to be motion. This is chiefly exhibited in flame, which is in constant motion, and in warm or boiling liquids, which are likewise in constant motion. It is also shown in the excitement or increase of heat by motion, as by bellows and draughts: for which see [Inst. 29, Tab. 3](#), and by other species of motion, as in [Inst. 28](#) and [31, Tab. 3](#). It is also shown by the extinction of fire and heat upon any strong pressure, which restrains and puts a stop to motion; for which see [Inst. 30](#) and [32, Tab. 3](#). It is further shown by this circumstance, namely, that every substance is destroyed, or at least materially changed, by strong and powerful fire and heat: whence it is clear that tumult and confusion are occasioned by heat, together with a violent motion in the internal parts of bodies; and this gradually tends to their dissolution.

What we have said with regard to motion must be thus^[153] understood, when taken as the genus of heat: it must not be thought that heat generates motion, or motion heat (though in some respects this be true), but that the very essence of heat, or the substantial self^[104] of heat, is motion and nothing else, limited, however, by certain differences which we will presently add, after giving some cautions for avoiding ambiguity.

Sensible heat is relative, and regards man, not universe; and is rightly held to be merely the effect of heat on animal spirit. It is even variable in itself, since the same body (in different states of sensation) excites the feeling of heat and of cold; this is shown by [Inst. 41, Tab. 3](#).

Nor should we confound the communication of heat or its transitive nature, by which a body grows warm at the approach of a heated body, with the form of heat; for heat is one thing and heating another. Heat can be excited by friction without any previous heating body, and, therefore, heating is excluded from the form of heat. Even when heat is excited by the approach of a hot body, this depends not on the form of heat, but on another more profound and common nature; namely, that of assimilation and multiplication, about which a separate inquiry must be made.

The notion of fire is vulgar, and of no assistance; it is merely compounded of the conjunction of heat and light in any body, as in ordinary flame and red-hot substances.

Laying aside all ambiguity, therefore, we must lastly consider the true differences which limit motion and render it the form of heat.

I. The first difference is, that heat is an expansive motion, by which the body strives to dilate itself, and to^[154] occupy a greater space than before. This difference is principally seen in flame, where the smoke or thick vapor is clearly dilated and bursts into flame.

It is also shown in all boiling liquids, which swell, rise, and boil up to the sight, and the process of expansion is urged forward till they are converted into a much more extended and dilated body than the liquid itself, such as steam, smoke, or air.

It is also shown in wood and combustibles where exudation sometimes takes place, and evaporation always.

It is also shown in the melting of metals, which, being very compact, do not easily swell and dilate, but yet their spirit, when dilated and desirous of further expansion, forces and urges its thicker parts into dissolution, and if the heat be pushed still further, reduces a considerable part of them into a volatile state.

It is also shown in iron or stones, which though not melted or dissolved, are however softened. The same circumstance takes place in sticks of wood, which become flexible when a little heated in warm ashes.

It is most readily observed in air, which instantly and manifestly expands with a small degree of heat, as in [Inst. 38, Tab. 3](#).

It is also shown in the contrary nature of cold; for cold contracts and narrows every substance;^[105] so that in intense frosts nails fall out of the wall and brass cracks, and heated glass exposed suddenly to the cold cracks and breaks. So^[155] the air, by a slight degree of cold, contracts itself, as in [Inst. 38, Tab. 3](#). More will be said of this in the inquiry into cold.

Nor is it to be wondered at if cold and heat exhibit many common effects (for which see [Inst. 32, Tab. 2](#)), since two differences, of which we shall presently speak, belong to each nature: although in the present difference the effects be diametrically opposed to each other. For heat occasions an expansive and dilating motion, but cold a contracting and condensing motion.

II. The second difference is a modification of the preceding, namely, that heat is an expansive motion, tending toward the exterior, but at the same time bearing the body upward. For there is no doubt that there be many compound motions, as an arrow or dart, for instance, has both a rotatory and progressive motion. In the same way the motion of heat is both expansive and tending upward.

This difference is shown by putting the tongs or poker into the fire. If placed perpendicularly with the hand above, they soon burn it, but much less speedily if the hand hold them sloping or from below.

It is also conspicuous in distillations *per descensum*, which men are wont to employ with delicate flowers, whose scent easily evaporates. Their industry has devised placing the fire above instead of below, that it may scorch less; for not only flame but all heat has an upward tendency.

Let an experiment be made on the contrary nature of cold, whether its contraction be downward, as the expansion of heat is upward. Take, therefore, two iron rods or two glass tubes, alike in other respects, and warm them a little, and place a sponge, dipped in cold water, or some snow, below the one and above the other. We are of opinion that^[156] the extremities will grow cold in that rod first where it is placed beneath, as the contrary takes place with regard to heat.

III. The third difference is this; that heat is not a uniform expansive motion of the whole, but of the small particles of the body; and this motion being at the same time restrained, repulsed, and reflected, becomes alternating, perpetually hurrying, striving, struggling, and irritated by the repercussion, which is the source of the violence of flame and heat.

But this difference is chiefly shown in flame and boiling liquids, which always hurry, swell, and subside again in detached parts.

It is also shown in bodies of such hard texture as not to swell or dilate in bulk, such as red-hot iron, in which the heat is most violent.

It is also shown by the fires burning most briskly in the coldest weather.

It is also shown by this, that when the air is dilated in the thermometer uniformly and equably, without any impediment or repulsion, the heat is not perceptible. In confined draughts also, although they break out very violently, no remarkable heat is perceived, because the motion affects the whole, without any alternating motion in the particles; for which reason try whether flame do not burn more at the sides than in its centre.

It is also shown in this, that all burning proceeds by the minute pores of bodies—undermining, penetrating, piercing, and pricking them as if with an infinite number of needle-points. Hence all strong acids (if adapted to the body on which they act) exhibit the effects of fire, from their corroding and pungent nature.

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The difference of which we now speak is common also to the nature of cold, in which the contracting motion is restrained by the resistance of expansion, as in heat the expansive motion is restrained by the resistance of contraction.

Whether, therefore, the particles of matter penetrate inward or outward, the reasoning is the same, though the power be very different, because we have nothing on earth which is intensely cold.

IV. The fourth difference is a modification of the preceding, namely, that this stimulating or penetrating motion should be rapid and never sluggish, and should take place not in the very minutest particles, but rather in those of some tolerable dimensions.

It is shown by comparing the effects of fire with those of time. Time dries, consumes, undermines, and reduces to ashes as well as fire, and perhaps to a much finer degree; but as its motion is very slow, and attacks very minute particles, no heat is perceived.

It is also shown in a comparison of the dissolution of iron and gold; for gold is dissolved without the excitement of any heat, but iron with a vehement excitement of it, although most in the same time, because in the former the penetration of the separating acid is mild, and gently insinuates itself, and the particles of gold yield easily, but the penetration of iron is violent, and attended with some struggle, and its particles are more obstinate.

It is partially shown, also, in some gangrenes and mortifications of flesh, which do not excite great heat or pain, from the gentle nature of the putrefaction.

Let this suffice for a first vintage, or the commencement of the interpretation of the form of heat by the liberty of the understanding.

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From this first vintage the form or true definition of heat (considered relatively to the universe and not to the sense) is briefly thus—Heat is an expansive motion restrained, and striving to exert itself in the smaller particles.[\[106\]](#) The expansion is modified by its tendency to rise, though expanding toward the exterior; and the effort is modified by its not being sluggish, but active and somewhat violent.

With regard to the operative definition, the matter is the same. If you are able to excite a dilating or expansive motion in any natural body, and so to repress that motion and force it on itself as not to allow the expansion to proceed equally, but only to be partially exerted and partially repressed, you will beyond all doubt produce heat, without any consideration as to whether

the body be of earth (or elementary, as they term it), or imbued with celestial influence, luminous or opaque, rare or dense, locally expanded^[159] or contained within the bounds of its first dimensions, verging to dissolution or remaining fixed, animal, vegetable, or mineral, water, or oil, or air, or any other substance whatever susceptible of such motion. Sensible heat is the same, but considered relatively to the senses. Let us now proceed to further helps.

XXI. After our tables of first review, our rejection or exclusive table, and the first vintage derived from them, we must advance to the remaining helps of the understanding with regard to the interpretation of nature, and a true and perfect induction, in offering which we will take the examples of cold and heat where tables are necessary, but where fewer instances are required we will go through a variety of others, so as neither to confound investigation nor to narrow our doctrine.

In the first place, therefore, we will treat of prerogative instances;^[107] 2. Of the supports of induction; 3. Of the correction^[160] of induction; 4. Of varying the investigation according to the nature of the subject; 5. Of the prerogative natures with respect to investigation, or of what should be the first or last objects of our research; 6. Of the limits of investigation, or a synopsis of all natures that exist in the universe; 7. Of the application to practical purposes, or of what relates to man; 8. Of the preparations for investigation; 9. And lastly, of the ascending and descending scale of axioms.^[108]

XXII. Among the prerogative instances we will first mention solitary instances. Solitary instances are those which exhibit the required nature in subjects that have nothing in common with any other subject than the nature in question, or which do not exhibit the required nature in subjects resembling others in every respect except that of the nature in question; for these instances manifestly remove prolixity, and accelerate and confirm exclusion, so that a few of them are of as much avail as many.

For instance, let the inquiry be the nature of color. Prisms, crystalline gems, which yield colors not only internally but on the wall, dews, etc., are solitary instances; for^[161] they have nothing in common with the fixed colors in flowers and colored gems, metals, woods, etc., except the color itself. Hence we easily deduce that color is nothing but a modification of the image

of the incident and absorbed light, occasioned in the former case by the different degrees of incidence, in the latter by the various textures and forms of bodies.^[109] These are solitary instances as regards similitude.

Again, in the same inquiry the distinct veins of white and black in marble, and the variegated colors of flowers of the same species, are solitary instances; for the black and white of marble, and the spots of white and purple in the flowers of the stock, agree in every respect but that of color. Thence we easily deduce that color has not much to do with the intrinsic natures of any body, but depends only on the coarser and as it were mechanical arrangement of the parts. These are solitary instances as regards difference. We call them both solitary or wild, to borrow a word from the astronomers.

XXIII. In the second rank of prerogative instances we will consider migrating instances. In these the required nature passes toward generation, having no previous existence, or toward corruption, having first existed. In each of these divisions, therefore, the instances are always twofold, or rather it is one instance, first in motion or on its passage, and then brought to the opposite conclusion. These instances not only hasten and confirm exclusion, but also reduce affirmation, or the form itself, to a narrow compass; for the form must be something conferred by this^[162] migration, or, on the contrary, removed and destroyed by it; and although all exclusion advances affirmation, yet this takes place more directly in the same than in different subjects; but if the form (as it is quite clear from what has been advanced) exhibit itself in one subject, it leads to all. The more simple the migration is, the more valuable is the instance. These migrating instances are, moreover, very useful in practice, for since they manifest the form, coupled with that which causes or destroys it, they point out the right practice in some subjects, and thence there is an easy transition to those with which they are most allied. There is, however, a degree of danger which demands caution, namely, lest they should refer the form too much to its efficient cause, and imbue, or at least tinge, the understanding with a false notion of the form from the appearance of such cause, which is never more than a vehicle or conveyance of the form. This may easily be remedied by a proper application of exclusion.

Let us then give an example of a migrating instance. Let whiteness be the

required nature. An instance which passes toward generation is glass in its entire and in its powdered state, or water in its natural state, and when agitated to froth; for glass when entire, and water in its natural state, are transparent and not white, but powdered glass and the froth of water are white and not transparent. We must inquire, therefore, what has happened to the glass or water in the course of this migration; for it is manifest that the form of whiteness is conveyed and introduced by the bruising of the glass and the agitation of the water; but nothing is found to have been introduced but a diminishing of the parts of the glass and water and the insertion of air. Yet this is no slight progress toward discovering^[163] the form of whiteness, namely, that two bodies, in themselves more or less transparent (as air and water, or air and glass), when brought into contact in minute portions, exhibit whiteness from the unequal refraction of the rays of light.

But here we must also give an example of the danger and caution of which we spoke; for instance, it will readily occur to an understanding perverted by efficiencies, that air is always necessary for producing the form of whiteness, or that whiteness is only generated by transparent bodies, which suppositions are both false, and proved to be so by many exclusions; nay, it will rather appear (without any particular regard to air or the like), that all bodies which are even in such of their parts as affect the sight exhibit transparency, those which are uneven and of simple texture whiteness, those which are uneven and of compound but regular texture all the other colors except black, but those which are uneven and of a compound irregular and confused texture exhibit blackness. An example has been given, therefore, of an instance migrating toward generation in the required nature of whiteness. An instance migrating toward corruption in the same nature is that of dissolving froth or snow, for they lose their whiteness and assume the transparency of water in its pure state without air.

Nor should we by any means omit to state, that under migrating instances we must comprehend not only those which pass toward generation and destruction, but also those which pass toward increase or decrease, for they, too, assist in the discovery of the form, as is clear from our definition of a form and the Table of Degrees. Hence paper, which is white when dry, is less white when moistened (from the exclusion of air and admission of water), and tends more to^[164] transparency. The reason is the same as in the above

instances.[\[110\]](#)

XXIV. In the third rank of prerogative instances we will class conspicuous instances, of which we spoke in our first vintage of the form of heat, and which we are also wont to call coruscations, or free and predominant instances. They are such as show the required nature in its bare substantial shape, and at its height or greatest degree of power, emancipated and free from all impediments, or at least overcoming, suppressing, and restraining them by the strength of its qualities; for since every body is susceptible of many united forms of natures in the concrete, the consequence is that they mutually deaden, depress, break, and confine each other, and the individual forms are obscured. But there are some subjects in which the required nature exists in its full vigor rather than in others, either from the absence of any impediment, or the predominance of its quality. Such instances are eminently conspicuous. But even in these care must be taken, and the hastiness of the understanding checked, for whatever makes a show of the form, and forces it forward, is to be suspected, and recourse must be had to severe and diligent exclusion.

For example, let heat be the required nature. The thermometer is a conspicuous instance of the expansive motion, which (as has been observed) constitutes the chief part of the form of heat; for although flame clearly exhibits expansion, yet from its being extinguished every moment, it does not exhibit the progress of expansion. Boiling water again,[\[165\]](#) from its rapid conversion into vapor, does not so well exhibit the expansion of water in its own shape, while red-hot iron and the like are so far from showing this progress, that, on the contrary, the expansion itself is scarcely evident to the senses, on account of its spirit being repressed and weakened by the compact and coarse particles which subdue and restrain it. But the thermometer strikingly exhibits the expansion of the air as being evident and progressive, durable and not transitory.[\[111\]](#)

Take another example. Let the required nature be weight. Quicksilver is a conspicuous instance of weight; for it is far heavier than any other substance except gold, which is not much heavier, and it is a better instance than gold for the purpose of indicating the form of weight; for gold is solid and consistent, which qualities must be referred to density, but quicksilver is liquid and teeming with spirit, yet much heavier than the diamond and other

substances considered to be most solid; whence it is shown that the form of gravity or weight predominates only in the quantity of matter, and not in the close fitting of it.[\[112\]](#)

XXV. In the fourth rank of prerogative instances we will class clandestine instances, which we are also wont to[\[166\]](#) call twilight instances; they are as it were opposed to the conspicuous instances, for they show the required nature in its lowest state of efficacy, and as it were its cradle and first rudiments, making an effort and a sort of first attempt, but concealed and subdued by a contrary nature. Such instances are, however, of great importance in discovering forms, for as the conspicuous tend easily to differences, so do the clandestine best lead to genera, that is, to those common natures of which the required natures are only the limits.

As an example, let consistency, or that which confines itself, be the required nature, the opposite of which is a liquid or flowing state. The clandestine instances are such as exhibit some weak and low degree of consistency in fluids, as a water bubble, which is a sort of consistent and bounded pellicle formed out of the substance of the water. So eaves' droppings, if there be enough water to follow them, draw themselves out into a thin thread, not to break the continuity of the water, but if there be not enough to follow, the water forms itself into a round drop, which is the best form to prevent a breach of continuity; and at the moment the thread ceases, and the water begins to fall in drops, the thread of water recoils upward to avoid such a breach. Nay, in metals, which when melted are liquid but more tenacious, the melted drops often recoil and are suspended. There is something similar in the instance of the child's looking-glass, which little boys will sometimes form of spittle between rushes, and where the same pellicle of water is observable; and still more in that other amusement of children, when they take some water rendered a little more tenacious by soap, and inflate it with a pipe, forming the water into a sort of castle of bubbles, which assumes such consistency,[\[167\]](#) by the interposition of the air, as to admit of being thrown some little distance without bursting. The best example is that of froth and snow, which assume such consistency as almost to admit of being cut, although composed of air and water, both liquids. All these circumstances clearly show that the terms liquid and consistent are merely vulgar notions adapted to the sense, and that in reality all bodies have

a tendency to avoid a breach of continuity, faint and weak in bodies composed of homogeneous parts (as is the case with liquids), but more vivid and powerful in those composed of heterogeneous parts, because the approach of heterogeneous matter binds bodies together, while the insinuation of homogeneous matter loosens and relaxes them.

Again, to take another example, let the required nature be attraction or the cohesion of bodies. The most remarkable conspicuous instance with regard to its form is the magnet. The contrary nature to attraction is non-attraction, though in a similar substance. Thus iron does not attract iron, lead lead, wood wood, nor water water. But the clandestine instance is that of the magnet armed with iron, or rather that of iron in the magnet so armed. For its nature is such that the magnet when armed does not attract iron more powerfully at any given distance than when unarmed; but if the iron be brought in contact with the armed magnet, the latter will sustain a much greater weight than the simple magnet, from the resemblance of substance in the two portions of iron, a quality altogether clandestine and hidden in the iron until the magnet was introduced. It is manifest, therefore, that the form of cohesion is something which is vivid and robust in the magnet, and hidden and weak in the iron. It is to be observed, also, that small wooden arrows without an iron point, when discharged from large mortars,^[168] penetrate further into wooden substances (such as the ribs of ships or the like), than the same arrows pointed with iron,^[113] owing to the similarity of substance, though this quality was previously latent in the wood. Again, although in the mass air does not appear to attract air, nor water water, yet when one bubble is brought near another, they are both more readily dissolved, from the tendency to contact of the water with the water, and the air with the air.^[114] These clandestine instances (which are, as has been observed, of the most important service) are principally to be observed in small portions of bodies, for the larger masses observe more universal and general forms, as will be mentioned in its proper place.^[115]

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XXVI. In the fifth rank of prerogative instances we will class constitutive instances, which we are wont also to call collective instances. They constitute a species or lesser form, as it were, of the required nature. For since the real forms (which are always convertible with the given nature) lie at some depth,

and are not easily discovered, the necessity of the case and the infirmity of the human understanding require that the particular forms, which collect certain groups of instances (but by no means all) into some common notion, should not be neglected, but most diligently observed. For whatever unites nature, even imperfectly, opens the way to the discovery of the form. The instances, therefore, which are serviceable in this respect are of no mean power, but endowed with some degree of prerogative.

Here, nevertheless, great care must be taken that, after the discovery of several of these particular forms, and the establishing of certain partitions or divisions of the required nature derived from them, the human understanding do not at once rest satisfied, without preparing for the investigation of the great or leading form, and taking it for granted that nature is compound and divided from its very root, despise and reject any further union as a point of superfluous refinement, and tending to mere abstraction.

For instance, let the required nature be memory, or that^[170] which excites and assists memory. The constitutive instances are order or distribution, which manifestly assists memory: topics or commonplaces in artificial memory, which may be either places in their literal sense, as a gate, a corner, a window, and the like, or familiar persons and marks, or anything else (provided it be arranged in a determinate order), as animals, plants, and words, letters, characters, historical persons, and the like, of which, however, some are more convenient than others. All these commonplaces materially assist memory, and raise it far above its natural strength. Verse, too, is recollected and learned more easily than prose. From this group of three instances—order, the commonplaces of artificial memory, and verses—is constituted one species of aid for the memory,^[116] which may be well termed a separation from infinity. For when a man strives to recollect or recall anything to memory, without a preconceived notion or perception of the object of his search, he inquires about, and labors, and turns from point to point, as if involved in infinity. But if he have any preconceived notion, this infinity is separated off, and the range of his memory is brought within closer limits. In the three instances given above, the preconceived notion is clear and determined. In the first, it must be something that agrees with order; in the second, an image which has some relation or agreement with the fixed commonplaces; in the third, words which fall into a verse: and thus infinity is

divided off. Other instances will offer another species, namely, that whatever brings the intellect into contact with^[171] something that strikes the sense (the principal point of artificial memory), assists the memory. Others again offer another species, namely, whatever excites an impression by any powerful passion, as fear, shame, wonder, delight, assists the memory. Other instances will afford another species: thus those impressions remain most fixed in the memory which are taken from the mind when clear and least occupied by preceding or succeeding notions, such as the things we learn in childhood, or imagine before sleep, and the first time of any circumstance happening. Other instances afford the following species: namely, that a multitude of circumstances or handles assist the memory, such as writing in paragraphs, reading aloud, or recitation. Lastly, other instances afford still another species: thus the things we anticipate, and which rouse our attention, are more easily remembered than transient events; as if you read any work twenty times over, you will not learn it by heart so readily as if you were to read it but ten times, trying each time to repeat it, and when your memory fails you looking into the book. There are, therefore, six lesser forms, as it were, of things which assist the memory: namely—1, the separation of infinity; 2, the connection of the mind with the senses; 3, the impression in strong passion; 4, the impression on the mind when pure; 5, the multitude of handles; 6, anticipation.

Again, for example's sake, let the required nature be taste or the power of tasting. The following instances are constitutive: 1. Those who do not smell, but are deprived by nature of that sense, do not perceive or distinguish rancid or putrid food by their taste, nor garlic from roses, and the like. 2. Again, those whose nostrils are obstructed by accident (such as a cold) do not distinguish any putrid or^[172] rancid matter from anything sprinkled with rose-water. 3. If those who suffer from a cold blow their noses violently at the very moment in which they have anything fetid or perfumed in their mouth, or on their palate, they instantly have a clear perception of the feter or perfume. These instances afford and constitute this species or division of taste, namely, that it is in part nothing else than an internal smelling, passing and descending through the upper passages of the nostrils to the mouth and palate. But, on the other hand, those whose power of smelling is deficient or obstructed, perceive what is salt, sweet, pungent, acid, rough, and bitter, and

the like, as well as any one else: so that the taste is clearly something compounded of the internal smelling, and an exquisite species of touch which we will not here discuss.

Again, as another example, let the required nature be the communication of quality, without intermixture of substance. The instance of light will afford or constitute one species of communication, heat and the magnet another. For the communication of light is momentary and immediately arrested upon the removal of the original light. But heat, and the magnetic force, when once transmitted to or excited in another body, remain fixed for a considerable time after the removal of the source.

In fine, the prerogative of constitutive instances is considerable, for they materially assist the definitions (especially in detail) and the divisions or partitions of natures, concerning which Plato has well said, “He who can properly define and divide is to be considered a god.”[\[117\]](#)

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XXVII. In the sixth rank of prerogative instances we will place similar or proportionate instances, which we are also wont to call physical parallels, or resemblances. They are such as exhibit the resemblances and connection of things, not in minor forms (as the constitutive do), but at once in the concrete. They are, therefore, as it were, the first and lowest steps toward the union of nature; nor do they immediately establish any axiom, but merely indicate and observe a certain relation of bodies to each other. But^[174] although they be not of much assistance in discovering forms, yet they are of great advantage in disclosing the frame of parts of the universe, upon whose members they practice a species of anatomy, and thence occasionally lead us gently on to sublime and noble axioms, especially such as relate to the construction of the world, rather than to simple natures and forms.

As an example, take the following similar instances: a mirror and the eye; the formation of the ear, and places which return an echo. From such similarity, besides observing the resemblance (which is useful for many purposes), it is easy to collect and form this axiom. That the organs of the senses, and bodies which produce reflections to the senses, are of a similar nature. Again, the understanding once informed of this, rises easily to a higher and nobler axiom; namely, that the only distinction between sensitive

and inanimate bodies, in those points in which they agree and sympathize, is this: in the former, animal spirit is added to the arrangement of the body, in the latter it is wanting. So that there might be as many senses in animals as there are points of agreement with inanimate bodies, if the animated body were perforated, so as to allow the spirit to have access to the limb properly disposed for action, as a fit organ. And, on the other hand, there are, without doubt, as many motions in an inanimate as there are senses in the animated body, though the animal spirit be absent. There must, however, be many more motions in inanimate bodies than senses in the animated, from the small number of organs of sense. A very plain example of this is afforded by pains. For, as animals are liable to many kinds and various descriptions of pains (such as those of burning, of intense cold, of pricking, squeezing, stretching, [175] and the like), so is it most certain, that the same circumstances, as far as motion is concerned, happen to inanimate bodies, such as wood or stone when burned, frozen, pricked, cut, bent, bruised, and the like; although there be no sensation, owing to the absence of animal spirit.

Again, wonderful as it may appear, the roots and branches of trees are similar instances. For every vegetable swells and throws out its constituent parts toward the circumference, both upward and downward. And there is no difference between the roots and branches, except that the root is buried in the earth, and the branches are exposed to the air and sun. For if one take a young and vigorous shoot, and bend it down to a small portion of loose earth, although it be not fixed to the ground, yet will it immediately produce a root, and not a branch. And, *vice versâ*, if earth be placed above, and so forced down with a stone or any hard substance, as to confine the plant and prevent its branching upward, it will throw out branches into the air downward.

The gums of trees, and most rock gems, are similar instances; for both of them are exudations and filtered juices, derived in the former instance from trees, in the latter from stones; the brightness and clearness of both arising from a delicate and accurate filtering. For nearly the same reason, the hair of animals is less beautiful and vivid in its color than the plumage of most birds, because the juices are less delicately filtered through the skin than through the quills.

The scrotum of males and matrix of females are also similar instances; so that the noble formation which constitutes the difference of the sexes appears

to differ only as to the one being internal and the other external; a greater degree of heat causing the genitals to protrude in the male,^[176] while the heat of the female being too weak to effect this, they are retained internally.

The fins of fishes and the feet of quadrupeds, or the feet and wings of birds, are similar instances; to which Aristotle adds the four folds in the motion of serpents;^[118] so that in the formation of the universe, the motion of animals appears to be chiefly effected by four joints or bendings.

The teeth of land animals, and the beaks of birds, are similar instances, whence it is clear, that in all perfect animals there is a determination of some hard substance toward the mouth.

Again, the resemblance and conformity of man to an inverted plant is not absurd. For the head is the root of the nerves and animal faculties, and the seminal parts are the lowest, not including the extremities of the legs and arms. But in the plant, the root (which resembles the head) is regularly placed in the lowest, and the seeds in the highest part.^[119]

Lastly, we must particularly recommend and suggest, that man's present industry in the investigation and compilation of natural history be entirely changed, and directed to the reverse of the present system. For it has hitherto been active and curious in noting the variety of things, and explaining the accurate differences of animals, vegetables, and minerals, most of which are the mere sport of nature, rather than of any real utility as concerns the sciences.^[177] Pursuits of this nature are certainly agreeable, and sometimes of practical advantage, but contribute little or nothing to the thorough investigation of nature. Our labor must therefore be directed toward inquiring into and observing resemblances and analogies, both in the whole and its parts, for they unite nature, and lay the foundation of the sciences.

Here, however, a severe and rigorous caution must be observed, that we only consider as similar and proportionate instances, those which (as we first observed) point out physical resemblances; that is, real and substantial resemblances, deeply founded in nature, and not casual and superficial, much less superstitious or curious; such as those which are constantly put forward by the writers on natural magic (the most idle of men, and who are scarcely fit to be named in connection with such serious matters as we now treat of), who, with much vanity and folly, describe, and sometimes too, invent,

unmeaning resemblances and sympathies.

But leaving such to themselves, similar instances are not to be neglected, in the greater portions of the world's conformation; such as Africa and the Peruvian continent, which reaches to the Straits of Magellan; both of which possess a similar isthmus and similar capes, a circumstance not to be attributed to mere accident.

Again, the New and Old World are both of them broad and expanded toward the north, and narrow and pointed toward the south.

Again, we have very remarkable similar instances in the intense cold, toward the middle regions (as it is termed) of the air, and the violent fires which are often found to burst from subterraneous spots, the similarity consisting in both being ends and extremes; the extreme of the nature of cold, [178] for instance, is toward the boundary of heaven, and that of the nature of heat toward the centre of the earth, by a similar species of opposition or rejection of the contrary nature.

Lastly, in the axioms of the sciences, there is a similarity of instances worthy of observation. Thus the rhetorical trope which is called surprise, is similar to that of music termed the declining of a cadence. Again—the mathematical postulate, that things which are equal to the same are equal to one another, is similar to the form of the syllogism in logic, which unites things agreeing in the middle term.[120] Lastly, a certain degree of sagacity in collecting and searching for physical points of similarity, is very useful in many respects.[121]

XXVIII. In the seventh rank of prerogative instances, we will place singular instances, which we are also wont to call irregular or heteroclite (to borrow a term from the grammarians). They are such as exhibit bodies in the concrete,[179] of an apparently extravagant and separate nature, agreeing but little with other things of the same species. For, while the similar instances resemble each other, those we now speak of are only like themselves. Their use is much the same with that of clandestine instances: they bring out and unite nature, and discover genera or common natures, which must afterward be limited by real differences. Nor should we desist from inquiry, until the properties and qualities of those things, which may be deemed miracles, as it were, of nature, be reduced to, and comprehended in, some form or certain

law; so that all irregularity or singularity may be found to depend on some common form; and the miracle only consists in accurate differences, degree, and rare coincidence, not in the species itself. Man's meditation proceeds no further at present, than just to consider things of this kind as the secrets and vast efforts of nature, without an assignable cause, and, as it were, exceptions to general rules.

As examples of singular instances, we have the sun and moon among the heavenly bodies; the magnet among minerals; quicksilver among metals; the elephant among quadrupeds; the venereal sensation among the different kinds of touch; the scent of sporting dogs among those of smell. The letter S, too, is considered by the grammarians as *sui generis*, from its easily uniting with double or triple consonants, which no other letter will. These instances are of great value, because they excite and keep alive inquiry, and correct an understanding depraved by habit and the common course of things.

XXIX. In the eighth rank of prerogative instances, we will place deviating instances, such as the errors of nature, or strange and monstrous objects, in which nature deviates^[180] and turns from her ordinary course. For the errors of nature differ from singular instances, inasmuch as the latter are the miracles of species, the former of individuals. Their use is much the same, for they rectify the understanding in opposition to habit, and reveal common forms. For with regard to these, also, we must not desist from inquiry, till we discern the cause of the deviation. The cause does not, however, in such cases rise to a regular form, but only to the latent process toward such a form. For he who is acquainted with the paths of nature, will more readily observe her deviations; and, *vice versâ*, he who has learned her deviations will be able more accurately to describe her paths.

They differ again from singular instances, by being much more apt for practice and the operative branch. For it would be very difficult to generate new species, but less so to vary known species, and thus produce many rare and unusual results.^[122] The passage from the miracles of nature to those of art is easy; for if nature be once seized in her variations, and the cause be manifest, it will be easy to lead her by art to such deviation as she was at first led to by chance; and not only to that but others, since deviations on the one side lead and open the way to others in every direction. Of this we do not require any examples, since they are so abundant. For a compilation, or

particular natural history, must be made of all monsters and prodigious births of nature; of everything, in short, which is new, rare and unusual in nature. This should be done with a rigorous selection, so as to be worthy of credit. [181] Those are most to be suspected which depend upon superstition, as the prodigies of Livy, and those perhaps, but little less, which are found in the works of writers on natural magic, or even alchemy, and the like; for such men, as it were, are the very suitors and lovers of fables; but our instances should be derived from some grave and credible history, and faithful narration.

XXX. In the ninth rank of prerogative instances, we will place bordering instances, which we are also wont to term participants. They are such as exhibit those species of bodies which appear to be composed of two species, or to be the rudiments between the one and the other. They may well be classed with the singular or heteroclite instances; for in the whole system of things, they are rare and extraordinary. Yet from their dignity, they must be treated of and classed separately, for they point out admirably the order and constitution of things, and suggest the causes of the number and quality of the more common species in the universe, leading the understanding from that which is, to that which is possible.

We have examples of them in moss, which is something between putrescence and a plant; [123] in some comets, which hold a place between stars and ignited meteors; in flying fishes, between fishes and birds; and in bats, between birds and quadrupeds. [124] Again,

Simia quam similis turpissima bestia nobis.

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We have also biformed foetus, mingled species and the like.

XXXI. In the tenth rank of prerogative instances, we will place the instances of power, or the fasces (to borrow a term from the insignia of empire), which we are also wont to call the wit or hands of man. These are such works as are most noble and perfect, and, as it were, the masterpieces in every art. For since our principal object is to make nature subservient to the state and wants of man, it becomes us well to note and enumerate the works, which have long since been in the power of man, especially those which are most polished and perfect: because the passage from these to new and

hitherto undiscovered works, is more easy and feasible. For if any one, after an attentive contemplation of such works as are extant, be willing to push forward in his design with alacrity and vigor, he will undoubtedly either advance them, or turn them to something within their immediate reach, or even apply and transfer them to some more noble purpose.

Nor is this all: for as the understanding is elevated and raised by rare and unusual works of nature, to investigate and discover the forms which include them also, so is the same effect frequently produced by the excellent and wonderful works of art; and even to a greater degree, because the mode of effecting and constructing the miracles of art is generally plain, while that of effecting the miracles of nature is more obscure. Great care, however, must be taken, that they do not depress the understanding, and fix it, as it were, to earth.

For there is some danger, lest the understanding should be astonished and chained down, and as it were bewitched, by such works of art, as appear to be the very summit and^[183] pinnacle of human industry, so as not to become familiar with them, but rather to suppose that nothing of the kind can be accomplished, unless the same means be employed, with perhaps a little more diligence, and more accurate preparation.

Now, on the contrary, it may be stated as a fact, that the ways and means hitherto discovered and observed, of effecting any matter or work, are for the most part of little value, and that all really efficient power depends, and is really to be deduced from the sources of forms, none of which have yet been discovered.

Thus (as we have before observed), had any one meditated on ballistic machines, and battering rams, as they were used by the ancients, whatever application he might have exerted, and though he might have consumed a whole life in the pursuit, yet would he never have hit upon the invention of flaming engines, acting by means of gunpowder; nor would any person, who had made woollen manufactories and cotton the subject of his observation and reflection, have ever discovered thereby the nature of the silkworm or of silk.

Hence all the most noble discoveries have (if you observe) come to light, not by any gradual improvement and extension of the arts, but merely by

chance; while nothing imitates or anticipates chance (which is wont to act at intervals of ages) but the invention of forms.

There is no necessity for adducing any particular examples of these instances, since they are abundant. The plan to be pursued is this: all the mechanical, and even the liberal arts (as far as they are practical), should be visited and thoroughly examined, and thence there should be formed a compilation or particular history of the great masterpieces,^[184] or most finished works in each, as well as of the mode of carrying them into effect.

Nor do we confine the diligence to be used in such a compilation to the leading works and secrets only of every art, and such as excite wonder; for wonder is engendered by rarity, since that which is rare, although it be compounded of ordinary natures, always begets wonder.

On the contrary, that which is really wonderful, from some specific difference distinguishing it from other species, is carelessly observed, if it be but familiar. Yet the singular instances of art should be observed no less than those of nature, which we have before spoken of: and as in the latter we have classed the sun, the moon, the magnet, and the like, all of them most familiar to us, but yet in their nature singular, so should we proceed with the singular instances of art.

For example: paper, a very common substance, is a singular instance of art; for if you consider the subject attentively, you will find that artificial substances are either woven by straight and transverse lines, as silk, woollen, or linen cloth, and the like; or coagulated from concrete juices, such as brick, earthenware, glass, enamel, porcelain and the like, which admit of a polish if they be compact, but if not, become hard without being polished; all which latter substances are brittle, and not adherent or tenacious. On the contrary, paper is a tenacious substance, which can be cut and torn, so as to resemble and almost rival the skin of any animal, or the leaf of vegetables, and the like works of nature; being neither brittle like glass, nor woven like cloth, but having fibres and not distinct threads, just as natural substances, so that scarcely anything similar can be found among artificial substances, and it is absolutely^[185] singular. And in artificial works we should certainly prefer those which approach the nearest to an imitation of nature, or, on the other hand, powerfully govern and change her course.

Again, in these instances which we term the wit and hands of man, charms and conjuring should not be altogether despised, for although mere amusements, and of little use, yet they may afford considerable information.

Lastly, superstition and magic (in its common acceptation) are not to be entirely omitted; for although they be overwhelmed by a mass of lies and fables, yet some investigation should be made, to see if there be really any latent natural operation in them; as in fascination, and the fortifying of the imagination, the sympathy of distant objects, the transmission of impressions from spirit to spirit no less than from body to body, and the like.

XXXII. From the foregoing remarks, it is clear that the last five species of instances (the similar, singular, deviating and bordering instances, and those of power) should not be reserved for the investigation of any given nature, as the preceding and many of the succeeding instances must, but a collection of them should be made at once, in the style of a particular history, so that they may arrange the matter which enters the understanding, and correct its depraved habit, for it is necessarily imbued, corrupted, perverted and distorted by daily and habitual impressions.

They are to be used, therefore, as a preparative, for the purpose of rectifying and purifying the understanding; for whatever withdraws it from habit, levels and planes down its surface for the reception of the dry and pure light of true notions.

These instances, moreover, level and prepare the way^[186] for the operative branch, as we will mention in its proper place when speaking of the practical deductions.

XXXIII. In the eleventh rank of prerogative instances we will place accompanying and hostile instances. These are such as exhibit any body or concrete, where the required nature is constantly found, as an inseparable companion, or, on the contrary, where the required nature is constantly avoided, and excluded from attendance, as an enemy. From these instances may be formed certain and universal propositions, either affirmative or negative; the subject of which will be the concrete body, and the predicate the required nature. For particular propositions are by no means fixed, when the required nature is found to fluctuate and change in the concrete, either approaching and acquired, or receding and laid aside. Hence particular

propositions have no great prerogative, except in the case of migration, of which we have spoken above. Yet such particular propositions are of great use, when compared with the universal, as will be mentioned in its proper place. Nor do we require absolute affirmation or negation, even in universal propositions, for if the exceptions be singular or rare, it is sufficient for our purpose.

The use of accompanying instances is to narrow the affirmative of form; for as it is narrowed by the migrating instances, where the form must necessarily be something communicated or destroyed by the act of migration, so it is narrowed by accompanying instances, where the form must necessarily be something which enters into the concretion of the body, or, on the contrary, is repugnant to it; and one who is well acquainted with the constitution or formation of the body, will not be far from bringing to light the form of the required nature.

[187]

For example: let the required nature be heat. Flame is an accompanying instance; for in water, air, stone, metal, and many other substances, heat is variable, and can approach or retire; but all flame is hot, so that heat always accompanies the concretion of flame. We have no hostile instance of heat; for the senses are unacquainted with the interior of the earth, and there is no concretion of any known body which is not susceptible of heat.

Again, let solidity be the required nature. Air is a hostile instance; for metals may be liquid or solid, so may glass; even water may become solid by congelation, but air cannot become solid or lose its fluidity.

With regard to these instances of fixed propositions, there are two points to be observed, which are of importance. First, that if there be no universal affirmative or negative, it be carefully noted as not existing. Thus, in heat, we have observed that there exists no universal negative, in such substances, at least, as have come to our knowledge. Again, if the required nature be eternity or incorruptibility, we have no universal affirmative within our sphere, for these qualities cannot be predicated of any bodies below the heavens, or above the interior of the earth. Secondly, to our general propositions as to any concrete, whether affirmative or negative, we should subjoin the concretes which appear to approach nearest to the non-existing

substances; such as the most gentle or least-burning flames in heat, or gold in incorruptibility, since it approaches nearest to it. For they all serve to show the limit of existence and non-existence, and circumscribe forms, so that they cannot wander beyond the conditions of matter.

XXXIV. In the twelfth rank of prerogative instances,^[188] we will class those subjunctive instances, of which we spoke in the last aphorism, and which we are also wont to call instances of extremity or limits; for they are not only serviceable when subjoined to fixed propositions, but also of themselves and from their own nature. They indicate with sufficient precision the real divisions of nature, and measures of things, and the “how far” nature effects or allows of anything, and her passage thence to something else. Such are gold in weight, iron in hardness, the whale in the size of animals, the dog in smell, the flame of gunpowder in rapid expansion, and others of a like nature. Nor are we to pass over the extremes in defect, as well as in abundance, as spirits of wine in weight, the touchstone in softness, the worms upon the skin in the size of animals, and the like.

XXXV. In the thirteenth rank of prerogative instances we will place those of alliance or union. They are such as mingle and unite natures held to be heterogeneous, and observed and marked as such in received classifications.

These instances show that the operation and effect, which is considered peculiar to some one of such heterogeneous natures, may also be attributed to another nature styled heterogeneous, so as to prove that the difference of the natures is not real nor essential, but a mere modification of a common nature. They are very serviceable, therefore, in elevating and carrying on the mind, from differences to genera, and in removing those phantoms and images of things, which meet it in disguise in concrete substances.

For example: let the required nature be heat. The classification of heat into three kinds, that of the celestial bodies, that of animals, and that of fire, appears to be settled^[189] and admitted; and these kinds of heat, especially one of them compared with the other two, are supposed to be different, and clearly heterogeneous in their essence and species, or specific nature, since the heat of the heavenly bodies and of animals generates and cherishes, while that of fire corrupts and destroys. We have an instance of alliance, then, in a very common experiment, that of a vine branch admitted into a building

where there is a constant fire, by which the grapes ripen a whole month sooner than in the air; so that fruit upon the tree can be ripened by fire, although this appear the peculiar effect of the sun. From this beginning, therefore, the understanding rejects all essential difference, and easily ascends to the investigation of the real differences between the heat of the sun and that of fire, by which their operation is rendered dissimilar, although they partake of a common nature.

These differences will be found to be four in number. 1. The heat of the sun is much milder and gentler in degree than that of fire. 2. It is much more moist in quality, especially as it is transmitted to us through the air. 3. Which is the chief point, it is very unequal, advancing and increased at one time, retiring and diminished at another, which mainly contributes to the generation of bodies. For Aristotle rightly asserted, that the principal cause of generation and corruption on the surface of the earth was the oblique path of the sun in the zodiac, whence its heat becomes very unequal, partly from the alternation of night and day, partly from the succession of summer and winter. Yet must he immediately corrupt and pervert his discovery, by dictating to nature according to his habit, and dogmatically assigning the cause of generation to the approach of^[190] the sun, and that of corruption to its retreat; while, in fact, each circumstance indifferently and not respectively contributes both to generation and corruption; for unequal heat tends to generate and corrupt, as equable heat does to preserve. 4. The fourth difference between the heat of the sun and fire is of great consequence; namely, that the sun, gradually, and for a length of time, insinuates its effects, while those of fire (urged by the impatience of man) are brought to a termination in a shorter space of time. But if any one were to pay attention to the tempering of fire, and reducing it to a more moderate and gentle degree (which may be done in various ways), and then were to sprinkle and mix a degree of humidity with it; and, above all, were to imitate the sun in its inequality; and, lastly, were patiently to suffer some delay (not such, however, as is proportioned to the effects of the sun, but more than men usually admit of in those of fire), he would soon banish the notion of any difference, and would attempt, or equal, or perhaps sometimes surpass the effect of the sun, by the heat of fire. A like instance of alliance is that of reviving butterflies, benumbed and nearly dead from cold, by the gentle warmth of fire; so that fire is no less able to revive animals than

to ripen vegetables. We may also mention the celebrated invention of Fracastorius, of applying a pan considerably heated to the head in desperate cases of apoplexy, which clearly expands the animal spirits, when compressed and almost extinguished by the humors and obstructions of the brain, and excites them to action, as the fire would operate on water or air, and in the result produces life. Eggs are sometimes hatched by the heat of fire, an exact imitation of animal heat; and there are many instances of the like nature, so that no one can doubt that the^[191] heat of fire, in many cases, can be modified till it resemble that of the heavenly bodies and of animals.

Again, let the required natures be motion and rest. There appears to be a settled classification, grounded on the deepest philosophy, that natural bodies either revolve, move in a straight line, or stand still and rest. For there is either motion without limit, or continuance within a certain limit, or a translation toward a certain limit. The eternal motion of revolution appears peculiar to the heavenly bodies, rest to this our globe, and the other bodies (heavy and light, as they are termed, that is to say, placed out of their natural position) are borne in a straight line to masses or aggregates which resemble them, the light toward the heaven, the heavy toward the earth; and all this is very fine language.

But we have an instance of alliance in low comets, which revolve, though far below the heavens; and the fiction of Aristotle, of the comet being fixed to, or necessarily following some star, has been long since exploded; not only because it is improbable in itself, but from the evident fact of the discursive and irregular motion of comets through various parts of the heavens.^[125]

Another instance of alliance is that of the motion of air, which appears to revolve from east to west within the tropics, where the circles of revolution are the greatest.

The flow and ebb of the sea would perhaps be another instance, if the water were once found to have a motion of^[192] revolution, though slow and hardly perceptible, from east to west, subject, however, to a reaction twice a day. If this be so, it is clear that the motion of revolution is not confined to the celestial bodies, but is shared, also, by air and water.

Again—the supposed peculiar disposition of light bodies to rise is rather shaken; and here we may find an instance of alliance in a water bubble. For if

air be placed under water, it rises rapidly toward the surface by that striking motion (as Democritus terms it) with which the descending water strikes the air and raises it, not by any struggle or effort of the air itself; and when it has reached the surface of the water, it is prevented from ascending any further, by the slight resistance it meets with in the water, which does not allow an immediate separation of its parts, so that the tendency of the air to rise must be very slight.

Again, let the required nature be weight. It is certainly a received classification, that dense and solid bodies are borne toward the centre of the earth, and rare and light bodies to the circumference of the heavens, as their appropriate places. As far as relates to places (though these things have much weight in the schools), the notion of there being any determinate place is absurd and puerile. Philosophers trifle, therefore, when they tell you, that if the earth were perforated, heavy bodies would stop on their arrival at the centre. This centre would indeed be an efficacious nothing, or mathematical point, could it affect bodies or be sought by them, for a body is not acted upon except by a body.^[126] In fact, this tendency to ascend and^[193] descend is either in the conformation of the moving body, or in its harmony and sympathy with another body. But if any dense and solid body be found, which does not, however, tend toward the earth, the classification is at an end. Now, if we allow of Gilbert's opinion, that the magnetic power of the earth, in attracting heavy bodies, is not extended beyond the limit of its peculiar virtue (which operates always at a fixed distance and no further),^[127] and this be proved by some instance, such an instance will be one of alliance in our present subject. The nearest approach to it is that of waterspouts, frequently seen by persons navigating the Atlantic toward either of the Indies. For the force and mass of the water suddenly effused by waterspouts, appears to be so considerable, that the water must have been collected previously, and have remained fixed where it was formed, until it was afterward forced down by some violent cause, rather than made to fall by the natural motion of gravity: so that it may be conjectured that a dense and compact mass, at a great distance from the earth, may be suspended as the earth itself is, and would not fall, unless forced down. We do not, however, affirm this as certain. In the meanwhile, both in this respect and many others, it will readily be seen how deficient we are in natural^[194] history, since we are forced to

have recourse to suppositions for examples, instead of ascertained instances.

Again, let the required nature be the discursive power of the mind. The classification of human reason and animal instinct appears to be perfectly correct. Yet there are some instances of the actions of brutes which seem to show that they, too, can syllogize. Thus it is related, that a crow, which had nearly perished from thirst in a great drought, saw some water in the hollow trunk of a tree, but as it was too narrow for him to get into it, he continued to throw in pebbles, which made the water rise till he could drink; and it afterward became a proverb.

Again, let the required nature be vision. The classification appears real and certain, which considers light as that which is originally visible, and confers the power of seeing; and color, as being secondarily visible, and not capable of being seen without light, so as to appear a mere image or modification of light. Yet there are instances of alliance in each respect; as in snow when in great quantities, and in the flame of sulphur; the one being a color originally and in itself light, the other a light verging toward color.[\[128\]](#)

XXXVI. In the fourteenth rank of prerogative instances, we will place the instances of the cross, borrowing our metaphor from the crosses erected where two roads meet, to point out the different directions. We are wont also to call them decisive and judicial instances, and in some cases instances of the oracle and of command. Their nature is as follows: When in investigating any nature the understanding is, as it were, balanced, and uncertain to which of two or more natures the cause of the required^[195] nature should be assigned, on account of the frequent and usual concurrence of several natures, the instances of the cross show that the union of one nature with the required nature is firm and indissoluble, while that of the other is unsteady and separable; by which means the question is decided, and the first is received as the cause, while the other is dismissed and rejected. Such instances, therefore, afford great light, and are of great weight, so that the course of interpretation sometimes terminates, and is completed in them. Sometimes, however, they are found among the instances already observed, but they are generally new, being expressly and purposely sought for and applied, and brought to light only by attentive and active diligence.

For example: let the required nature be the flow and ebb of the sea, which

is repeated twice a day, at intervals of six hours between each advance and retreat, with some little difference, agreeing with the motion of the moon. We have here the following crossways:

This motion must be occasioned either by the advancing and the retiring of the sea, like water shaken in a basin, which leaves one side while it washes the other; or by the rising of the sea from the bottom, and its again subsiding, like boiling water. But a doubt arises, to which of these causes we should assign the flow and ebb. If the first assertion be admitted, it follows, that when there is a flood on one side, there must at the same time be an ebb on another, and the question therefore is reduced to this. Now Acosta, and some others, after a diligent inquiry, have observed that the flood tide takes place on the coast of Florida, and the opposite coasts of Spain and Africa, at the same time, as does also the ebb; and that there is not, on the contrary, a flood tide at Florida when there is an ebb on the coasts of[196] Spain and Africa. Yet if one consider the subject attentively, this does not prove the necessity of a rising motion, nor refute the notion of a progressive motion. For the motion may be progressive, and yet inundate the opposite shores of a channel at the same time; as if the waters be forced and driven together from some other quarter, for instance, which takes place in rivers, for they flow and ebb toward each bank at the same time, yet their motion is clearly progressive, being that of the waters from the sea entering their mouths. So it may happen, that the waters coming in a vast body from the eastern Indian Ocean are driven together, and forced into the channel of the Atlantic, and therefore inundate both coasts at once. We must inquire, therefore, if there be any other channel by which the waters can at the same time sink and ebb; and the Southern Ocean at once suggests itself, which is not less than the Atlantic, but rather broader and more extensive than is requisite for this effect.

We at length arrive, then, at an instance of the cross, which is this. If it be positively discovered, that when the flood sets in toward the opposite coasts of Florida and Spain in the Atlantic, there is at the same time a flood tide on the coasts of Peru and the back part of China, in the Southern Ocean, then assuredly, from this decisive instance, we must reject the assertion, that the flood and ebb of the sea, about which we inquire, takes place by progressive motion; for no other sea or place is left where there can be an ebb. But this may most easily be learned, by inquiring of the inhabitants of Panama and

Lima (where the two oceans are separated by a narrow isthmus), whether the flood and ebb takes place on the opposite sides of the isthmus at the same time, or the reverse. This decision or rejection appears certain,^[197] if it be granted that the earth is fixed; but if the earth revolves, it may perhaps happen, that from the unequal revolution (as regards velocity) of the earth and the waters of the sea, there may be a violent forcing of the waters into a mass, forming the flood, and a subsequent relaxation of them (when they can no longer bear the accumulation), forming the ebb. A separate inquiry must be made into this. Even with this hypothesis, however, it remains equally true, that there must be an ebb somewhere, at the same time that there is a flood in another quarter.

Again, let the required nature be the latter of the two motions we have supposed; namely, that of a rising and subsiding motion, if it should happen that upon diligent examination the progressive motion be rejected. We have, then, three ways before us, with regard to this nature. The motion, by which the waters raise themselves, and again fall back, in the floods and ebbs, without the addition of any other water rolled toward them, must take place in one of the three following ways: Either the supply of water emanates from the interior of the earth, and returns back again; or there is really no greater quantity of water, but the same water (without any augmentation of its quantity) is extended or rarefied, so as to occupy a greater space and dimension, and again contracts itself; or there is neither an additional supply nor any extension, but the same waters (with regard to quantity, density, or rarity) raise themselves and fall from sympathy, by some magnetic power attracting and calling them up, as it were, from above. Let us then (passing over the first two motions) reduce the investigation to the last, and inquire if there be any such elevation of the water by sympathy or a magnetic force; and it is evident, in the first place, that the whole mass of water being^[198] placed in the trench or cavity of the sea, cannot be raised at once, because there would not be enough to cover the bottom, so that if there be any tendency of this kind in the water to raise itself, yet it would be interrupted and checked by the cohesion of things, or (as the common expression is) that there may be no vacuum. The water, therefore, must rise on one side, and for that reason be diminished and ebb on another. But it will again necessarily follow that the magnetic power not being able to operate on the whole,

operates most intensely on the centre, so as to raise the waters there, which, when thus raised successively, desert and abandon the sides.[\[129\]](#)

We at length arrive, then, at an instance of the cross, which is this: if it be found that during the ebb the surface of the waters at sea is more curved and round, from the waters rising in the middle, and sinking at the sides or coast, and if, during a flood, it be more even and level, from the waters returning to their former position, then assuredly, by this decisive instance, the raising of them by a magnetic force can be admitted; if otherwise, it must be entirely rejected. It is not difficult to make the experiment (by sounding in straits), whether the sea be deeper toward the middle in ebbs, than in floods. But it must be observed, if this be the case, that (contrary to common opinion) the waters rise in ebbs, and only return to their former position in floods, so as to bathe and inundate the coast.

Again, let the required nature be the spontaneous motion of revolution, and particularly, whether the diurnal motion, by which the sun and stars appear to us to rise and set, be[\[199\]](#) a real motion of revolution in the heavenly bodies, or only apparent in them, and real in the earth. There may be an instance of the cross of the following nature. If there be discovered any motion in the ocean from east to west, though very languid and weak, and if the same motion be discovered rather more swift in the air (particularly within the tropics, where it is more perceptible from the circles being greater). If it be discovered also in the low comets, and be already quick and powerful in them; if it be found also in the planets, but so tempered and regulated as to be slower in those nearest the earth, and quicker in those at the greatest distance, being quickest of all in the heavens, then the diurnal motion should certainly be considered as real in the heavens, and that of the earth must be rejected; for it will be evident that the motion from east to west is part of the system of the world and universal; since it is most rapid in the height of the heavens, and gradually grows weaker, till it stops and is extinguished in rest at the earth.

Again, let the required nature be that other motion of revolution, so celebrated among astronomers, which is contrary to the diurnal, namely, from west to east—and which the ancient astronomers assign to the planets, and even to the starry sphere, but Copernicus and his followers to the earth also—and let it be examined whether any such motion be found in nature, or it be

rather a fiction and hypothesis for abridging and facilitating calculation, and for promoting that fine notion of effecting the heavenly motions by perfect circles; for there is nothing which proves such a motion in heavenly objects to be true and real, either in a planet's not returning in its diurnal motion to the same point of the starry sphere, or in the pole of the zodiac being different^[200] from that of the world, which two circumstances have occasioned this notion. For the first phenomenon is well accounted for by the spheres overtaking or falling behind each other, and the second by spiral lines; so that the inaccuracy of the return and declination to the tropics may be rather modifications of the one diurnal motion than contrary motions, or about different poles. And it is most certain, if we consider ourselves for a moment as part of the vulgar (setting aside the fictions of astronomers and the school, who are wont undeservedly to attack the senses in many respects, and to affect obscurity), that the apparent motion is such as we have said, a model of which we have sometimes caused to be represented by wires in a sort of a machine.

We may take the following instances of the cross upon this subject. If it be found in any history worthy of credit, that there has existed any comet, high or low, which has not revolved in manifest harmony (however irregularly) with the diurnal motion, then we may decide so far as to allow such a motion to be possible in nature. But if nothing of the sort be found, it must be suspected, and recourse must be had to other instances of the cross.

Again, let the required nature be weight or gravity. Heavy and ponderous bodies must, either of their own nature, tend toward the centre of the earth by their peculiar formation, or must be attracted and hurried by the corporeal mass of the earth itself, as being an assemblage of similar bodies, and be drawn to it by sympathy. But if the latter be the cause, it follows that the nearer bodies approach to the earth, the more powerfully and rapidly they must be borne toward it, and the further they are distant, the more faintly and slowly (as is the case in magnetic attractions),^[201] and that this must happen within a given distance; so that if they be separated at such a distance from the earth that the power of the earth cannot act upon them, they will remain suspended like the earth, and not fall at all.^[130]

The following instance of the cross may be adopted. Take a clock moved by leaden weights,^[131] and another by^[202] a spring, and let them be set well

together, so that one be neither quicker nor slower than the other; then let the clock moved by weights be placed on the top of a very high church, and the other be kept below, and let it be well observed, if the former move slower than it did, from the diminished power of the weights. Let the same experiment be made at the bottom of mines worked to a considerable depth, in order to see whether the clock move more quickly from the increased power of the weights. But if this power be found to diminish at a height, and to increase in subterraneous places, the attraction of the corporeal mass of the earth may be taken as the cause of weight.

Again, let the required nature be the polarity of the steel needle when touched with the magnet. We have these two ways with regard to this nature—Either the touch of the magnet must communicate polarity to the steel toward the north and south, or else it may only excite and prepare it, while the actual motion is occasioned by the presence of the earth, which Gilbert considers to be the case, and endeavors to prove with so much labor. The particulars he has inquired into with such ingenious zeal amount to this—

1. An iron bolt placed for a long time toward the north and south acquires polarity from this habit, without the touch of the magnet, as if the earth itself operating but weakly from its distance (for the surface or outer crust of the earth does not, in his opinion, possess the magnetic power), yet, by long continued motion, could supply the place of the magnet, excite the iron, and convert and change it when excited.
2. Iron, at a red or white heat, when^[203] quenched in a direction parallel to the north and south, also acquires polarity without the touch of the magnet, as if the parts of iron being put in motion by ignition, and afterward recovering themselves, were, at the moment of being quenched, more susceptible and sensitive of the power emanating from the earth, than at other times, and therefore as it were excited. But these points, though well observed, do not completely prove his assertion.

An instance of the cross on this point might be as follows: Let a small magnetic globe be taken, and its poles marked, and placed toward the east and west, not toward the north and south, and let it continue thus. Then let an untouched needle be placed over it, and suffered to remain so for six or seven days. Now, the needle (for this is not disputed), while it remains over the magnet, will leave the poles of the world and turn to those of the magnet, and therefore, as long as it remains in the above position, will turn to the east and

west. But if the needle, when removed from the magnet and placed upon a pivot, be found immediately to turn to the north and south, or even by degrees to return thither, then the presence of the earth must be considered as the cause, but if it remains turned as at first, toward the east and west, or lose its polarity, then that cause must be suspected, and further inquiry made.

Again, let the required nature be the corporeal substance of the moon, whether it be rare, fiery, and aërial (as most of the ancient philosophers have thought), or solid and dense (as Gilbert and many of the moderns, with some of the ancients, hold).^[132] The reasons for this latter opinion^[204] are grounded chiefly upon this, that the moon reflects the sun's rays, and that light does not appear capable of being reflected except by solids. The instances of the cross will therefore (if any) be such as to exhibit reflection by a rare body, such as flame, if it be but sufficiently dense. Now, certainly, one of the reasons of twilight is the reflection^[133] of the rays of the sun by the upper part of the atmosphere. We see the sun's rays also reflected on fine evenings by streaks of moist clouds, with a splendor not less, but perhaps more bright and glorious than that reflected from the body of the moon, and yet it is not clear that those clouds have formed into a dense body of water. We see, also, that the dark air behind the windows at night reflects the light of a candle in the same manner as a dense body would do.^[134] The experiment should also be made of causing the sun's rays to fall through a hole upon some dark and bluish flame. The unconfined rays of the sun, when falling on faint flames, do certainly appear to deaden them, and render them more like white smoke than flames. These are the only instances which occur at present of the nature of those of the cross, and better perhaps can be found. But it must always be observed that reflection is not to be expected from flame, unless it be of some depth, for otherwise it becomes^[205] nearly transparent. This at least may be considered certain, that light is always either received and transmitted or reflected by an even surface.

Again, let the required nature be the motion of projectiles (such as darts, arrows, and balls) through the air. The school, in its usual manner, treats this very carelessly, considering it enough to distinguish it by the name of violent motion, from that which they term natural, and as far as regards the first percussion or impulse, satisfies itself by its axiom, that two bodies cannot exist in one place, or there would be a penetration of dimensions. With regard

to this nature we have these two crossways—The motion must arise either from the air carrying the projected body, and collecting behind it, like a stream behind boats, or the wind behind straws; or from the parts of the body itself not supporting the impression, but pushing themselves forward in succession to ease it. Fracastorius, and nearly all those who have entered into any refined inquiry upon the subject, adopt the first. Nor can it be doubted that the air has some effect, yet the other motion is without doubt real, as is clear from a vast number of experiments. Among others we may take this instance of the cross, namely, that a thin plate or wire of iron rather stiff, or even a reed or pen split in two, when drawn up and bent between the finger and thumb, will leap forward; for it is clear that this cannot be attributed to the air's being collected behind the body, because the source of motion is in the centre of the plate or pen, and not in its extremities.

Again, let the required nature be the rapid and powerful motion of the explosion of gunpowder, by which such vast masses are upheaved, and such weights discharged as we observe in large mines and mortars, there are two crossways^[206] before us with regard to this nature. This motion is excited either by the mere effort of the body expanding itself when inflamed, or by the assisting effort of the crude spirit, which escapes rapidly from fire, and bursts violently from the surrounding flame as from a prison. The school, however, and common opinion only consider the first effort; for men think that they are great philosophers when they assert that flame, from the form of the element, is endowed with a kind of necessity of occupying a greater space than the same body had occupied when in the form of powder, and that thence proceeds the motion in question. In the meantime they do not observe, that although this may be true, on the supposition of flame being generated, yet the generation may be impeded by a weight of sufficient force to compress and suffocate it, so that no such necessity exists as they assert. They are right, indeed, in imagining that the expansion and the consequent emission or removal of the opposing body, is necessary if flame be once generated, but such a necessity is avoided if the solid opposing mass suppress the flame before it be generated; and we in fact see that flame, especially at the moment of its generation, is mild and gentle, and requires a hollow space where it can play and try its force. The great violence of the effect, therefore, cannot be attributed to this cause; but the truth is, that the generation of these

exploding flames and fiery blasts arises from the conflict of two bodies of a decidedly opposite nature—the one very inflammable, as is the sulphur, the other having an antipathy to flame, namely, the crude spirit of the nitre; so that an extraordinary conflict takes place while the sulphur is becoming inflamed as far as it can (for the third body, the willow charcoal, merely incorporates and conveniently unites the two others), and^[207] the spirit of nitre is escaping, as far also as it can, and at the same time expanding itself (for air, and all crude substances, and water are expanded by heat), fanning thus, in every direction, the flame of the sulphur by its escape and violence, just as if by invisible bellows.

Two kinds of instances of the cross might here be used—the one of very inflammable substances, such as sulphur and camphor, naphtha and the like, and their compounds, which take fire more readily and easily than gunpowder if left to themselves (and this shows that the effort to catch fire does not of itself produce such a prodigious effect); the other of substances which avoid and repel flame, such as all salts; for we see that when they are cast into the fire, the aqueous spirit escapes with a crackling noise before flame is produced, which also happens in a less degree in stiff leaves, from the escape of the aqueous part before the oily part has caught fire. This is more particularly observed in quicksilver, which is not improperly called mineral water, and which, without any inflammation, nearly equals the force of gunpowder by simple explosion and expansion, and is said, when mixed with gunpowder, to increase its force.

Again, let the required nature be the transitory nature of flame and its momentaneous extinction; for to us the nature of flame does not appear to be fixed or settled, but to be generated from moment to moment, and to be every instant extinguished; it being clear that those flames which continue and last, do not owe their continuance to the same mass of flame, but to a continued succession of new flame regularly generated, and that the same identical flame does not continue. This is easily shown by removing the food or source of the flame, when it at once goes out. We^[208] have the two following crossways with regard to this nature:

This momentary nature either arises from the cessation of the cause which first produced it, as in light, sounds, and violent motions, as they are termed, or flame may be capable, by its own nature, of duration, but is subjected to

some violence from the contrary natures which surround it, and is destroyed.

We may therefore adopt the following instance of the cross. We see to what a height the flames rise in great conflagrations; for as the base of the flame becomes more extensive, its vertex is more lofty. It appears, then, that the commencement of the extinction takes place at the sides, where the flame is compressed by the air, and is ill at ease; but the centre of the flame, which is untouched by the air and surrounded by flame, continues the same, and is not extinguished until compressed by degrees by the air attacking it from the sides. All flame, therefore, is pyramidal, having its base near the source, and its vertex pointed from its being resisted by the air, and not supplied from the source. On the contrary, the smoke, which is narrow at the base, expands in its ascent, and resembles an inverted pyramid, because the air admits the smoke, but compresses the flame; for let no one dream that the lighted flame is air, since they are clearly heterogeneous.

The instance of the cross will be more accurate, if the experiment can be made by flames of different colors. Take, therefore, a small metal scone, and place a lighted taper in it, then put it in a basin, and pour a small quantity of spirits of wine round the scone, so as not to reach its edge, and light the spirit. Now the flame of the spirit will be blue, and that of the taper yellow; observe, therefore,^[209] whether the latter (which can easily be distinguished from the former by its color, for flames do not mix immediately, as liquids do) continue pyramidal, or tend more to a globular figure, since there is nothing to destroy or compress it. If the latter result be observed, it must be considered as settled, that flame continues positively the same, while inclosed within another flame, and not exposed to the resisting force of the air.

Let this suffice for the instances of the cross. We have dwelt the longer upon them in order gradually to teach and accustom mankind to judge of nature by these instances, and enlightening experiments, and not by probable reasons.^[135]

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XXXVII. We will treat of the instances of divorce as the fifteenth of our prerogative instances. They indicate the separation of natures of the most common occurrence. They differ, however, from those subjoined to the accompanying instances; for the instances of divorce point out the separation

of a particular nature from some concrete substance with which it is usually found in conjunction, while the hostile instances point out the total separation of one nature from another. They differ, also, from the instances of the cross, because they decide nothing, but only inform us that the one nature is capable of being separated from the other. They are of use in exposing false forms, and dissipating hasty theories derived from obvious facts; so that they add ballast and weight, as it were, to the understanding.

For instance, let the acquired natures be those four which Telesius terms associates, and of the same family, namely, heat, light, rarity, and mobility, or promptitude to motion; yet many instances of divorce can be discovered between them. Air is rare and easily moved, but neither hot nor light; the moon is light but not hot; boiling water is warm but not light; the motion of the needle in the compass is swift and active, and yet its substance is cold, dense, and opaque; and there are many similar examples.

Again, let the required natures be corporeal nature and natural action. The latter appears incapable of subsisting without some body, yet may we, perhaps, even here find an instance of divorce, as in the magnetic motion, which draws the iron to the magnet, and heavy bodies to the globe of the earth; to which we may add other actions which operate at a distance. For such action takes place in time, by distinct moments, not in an instant; and in space, by regular degrees^[211] and distances. There is, therefore, some one moment of time and some interval of space, in which the power or action is suspended between the two bodies creating the motion. Our consideration, then, is reduced to this, whether the bodies which are the extremes of motion prepare or alter the intermediate bodies, so that the power advances from one extreme to the other by succession and actual contact, and in the meantime exists in some intermediate body; or whether there exists in reality nothing but the bodies, the power, and the space? In the case of the rays of light, sounds, and heat, and some other objects which operate at a distance, it is indeed probable that the intermediate bodies are prepared and altered, the more so because a qualified medium is required for their operation. But the magnetic or attractive power admits of an indifferent medium, and it is not impeded in any. But if that power or action is independent of the intermediate body, it follows that it is a natural power or action existing in a certain time and space without any body, since it exists neither in the extreme nor in the

intermediate bodies. Hence the magnetic action may be taken as an instance of divorce of corporeal nature and natural action; to which we may add, as a corollary and an advantage not to be neglected, that it may be taken as a proof of essence and substance being separate and incorporeal, even by those who philosophize according to the senses. For if natural power and action emanating from a body can exist at any time and place entirely without any body, it is nearly a proof that it can also emanate originally from an incorporeal substance; for a corporeal nature appears to be no less necessary for supporting and conveying, than for exciting or generating natural action.

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XXXVIII. Next follow five classes of instances which we are wont to call by the general term of instances of the lamp, or of immediate information. They are such as assist the senses; for since every interpretation of nature sets out from the senses, and leads, by a regular fixed and well-established road, from the perceptions of the senses to those of the understanding (which are true notions and axioms), it necessarily follows, that in proportion as the representatives or ministerings of the senses are more abundant and accurate, everything else must be more easy and successful.

The first of these five sets of instances of the lamp, strengthen, enlarge, and correct the immediate operations of the senses; the second reduce to the sphere of the senses such matters as are beyond it; the third indicate the continued process or series of such things and motions, as for the most part are only observed in their termination, or in periods; the fourth supply the absolute wants of the senses; the fifth excite their attention and observation, and at the same time limit the subtilty of things. We will now proceed to speak of them singly.

XXXIX. In the sixteenth rank, then, of prerogative instances, we will place the instances of the door or gate, by which name we designate such as assist the immediate action of the senses. It is obvious, that sight holds the first rank among the senses, with regard to information, for which reason we must seek principally helps for that sense. These helps appear to be threefold, either to enable it to perceive objects not naturally seen, or to see them from a greater distance, or to see them more accurately and distinctly.

We have an example of the first (not to speak of spectacles and the like,

which only correct and remove the infirmity^[213] of a deficient sight, and therefore give no further information) in the lately invented microscopes, which exhibit the latent and invisible minutiae of substances, and their hidden formation and motion, by wonderfully increasing their apparent magnitude. By their assistance we behold with astonishment the accurate form and outline of a flea, moss, and animalculæ, as well as their previously invisible color and motion. It is said, also, that an apparently straight line, drawn with a pen or pencil, is discovered by such a microscope to be very uneven and curved, because neither the motion of the hand, when assisted by a ruler, nor the impression of ink or color, are really regular, although the irregularities are so minute as not to be perceptible without the assistance of the microscope. Men have (as is usual in new and wonderful discoveries) added a superstitious remark, that the microscope sheds a lustre on the works of nature, and dishonor on those of art, which only means that the tissue of nature is much more delicate than that of art. For the microscope is only of use for minute objects, and Democritus, perhaps, if he had seen it, would have exulted in the thought of a means being discovered for seeing his atom, which he affirmed to be entirely invisible. But the inadequacy of these microscopes, for the observation of any but the most minute bodies, and even of those if parts of a larger body, destroys their utility; for if the invention could be extended to greater bodies, or the minute parts of greater bodies, so that a piece of cloth would appear like a net, and the latent minutiae and irregularities of gems, liquids, urine, blood, wounds, and many other things could be rendered visible, the greatest advantage would, without doubt, be derived.

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We have an instance of the second kind in the telescope, discovered by the wonderful exertions of Galileo; by the assistance of which a nearer intercourse may be opened (as by boats or vessels) between ourselves and the heavenly objects. For by its aid we are assured that the Milky Way is but a knot or constellation of small stars, clearly defined and separate, which the ancients only conjectured to be the case; whence it appears to be capable of demonstration, that the spaces of the planetary orbits (as they are termed) are not quite destitute of other stars, but that the heaven begins to glitter with stars before we arrive at the starry sphere, although they may be too small to

be visible without the telescope. By the telescope, also, we can behold the revolutions of smaller stars round Jupiter, whence it may be conjectured that there are several centres of motion among the stars. By its assistance, also, the irregularity of light and shade on the moon's surface is more clearly observed and determined, so as to allow of a sort of selenography.[\[136\]](#) By the telescope we see the spots in the sun, and other similar phenomena; all of which are most noble discoveries, as far as credit can be safely given to demonstrations of this nature, which are on this account very suspicious, namely, that experiment stops at these few, and nothing further has yet been discovered by the same method, among objects equally worthy of consideration.

We have instances of the third kind in measuring-rods, astrolabes, and the like, which do not enlarge, but correct and guide the sight. If there be other instances which assist^[215] the other senses in their immediate and individual action, yet if they add nothing further to their information they are not apposite to our present purpose, and we have therefore said nothing of them.

XL. In the seventeenth rank of prerogative instances we will place citing instances (to borrow a term from the tribunals), because they cite those things to appear, which have not yet appeared. We are wont also to call them invoking instances, and their property is that of reducing to the sphere of the senses objects which do not immediately fall within it.

Objects escape the senses either from their distance, or the intervention of other bodies, or because they are not calculated to make an impression upon the senses, or because they are not in sufficient quantity to strike the senses, or because there is not sufficient time for their acting upon the senses, or because the impression is too violent, or because the senses are previously filled and possessed by the object, so as to leave no room for any new motion. These remarks apply principally to sight, and next to touch, which two senses act extensively in giving information, and that too upon general objects, while the remaining three inform us only, as it were, by their immediate action, and as to specific objects.

There can be no reduction to the sphere of the senses in the first case, unless in the place of the object, which cannot be perceived on account of the distance, there be added or substituted some other object, which can excite

and strike the sense from a greater distance, as in the communication of intelligence by fires, bells, and the like.

In the second case we effect this reduction by rendering those things which are concealed by the interposition of^[216] other bodies, and which cannot easily be laid open, evident to the senses by means of that which lies at the surface, or proceeds from the interior; thus the state of the body is judged of by the pulse, urine, etc.

The third and fourth cases apply to many subjects, and the reduction to the sphere of the senses must be obtained from every quarter in the investigation of things. There are many examples. It is obvious that air, and spirit, and the like, whose whole substance is extremely rare and delicate, can neither be seen nor touched—a reduction, therefore, to the senses becomes necessary in every investigation relating to such bodies.

Let the required nature, therefore, be the action and motion of the spirit inclosed in tangible bodies; for every tangible body with which we are acquainted contains an invisible and intangible spirit, over which it is drawn, and which it seems to clothe. This spirit being emitted from a tangible substance, leaves the body contracted and dry; when retained, it softens and melts it; when neither wholly emitted nor retained, it models it, endows it with limbs, assimilates, manifests, organizes it, and the like. All these points are reduced to the sphere of the senses by manifest effects.

For in every tangible and inanimate body the inclosed spirit at first increases, and as it were feeds on the tangible parts which are most open and prepared for it; and when it has digested and modified them, and turned them into spirit, it escapes with them. This formation and increase of spirit is rendered sensible by the diminution of weight; for in every desiccation something is lost in quantity, not only of the spirit previously existing in the body, but of the body itself, which was previously tangible, and has^[217] been recently changed, for the spirit itself has no weight. The departure or emission of spirit is rendered sensible in the rust of metals, and other putrefactions of a like nature, which stop before they arrive at the rudiments of life, which belong to the third species of process.^[137] In compact bodies the spirit does not find pores and passages for its escape, and is therefore obliged to force out, and drive before it, the tangible parts also, which

consequently protrude, whence arises rust and the like. The contraction of the tangible parts, occasioned by the emission of part of the spirit (whence arises desiccation), is rendered sensible by the increased hardness of the substance, and still more by the fissures, contractions, shrivelling, and folds of the bodies thus produced. For the parts of wood split and contract, skins become shrivelled, and not only that, but, if the spirit be emitted suddenly by the heat of the fire, become so hastily contracted as to twist and roll themselves up.

On the contrary, when the spirit is retained, and yet expanded and excited by heat or the like (which happens in solid and tenacious bodies), then the bodies are softened, as in hot iron; or flow, as in metals; or melt, as in gums, wax, and the like. The contrary effects of heat, therefore (hardening some substances and melting others), are easily reconciled,^[138] because the spirit is emitted in the former, and^[218] agitated and retained in the latter; the latter action is that of heat and the spirit, the former that of the tangible parts themselves, after the spirit's emission.

But when the spirit is neither entirely retained nor emitted, but only strives and exercises itself, within its limits, and meets with tangible parts, which obey and readily follow it wherever it leads them, then follows the formation of an organic body, and of limbs, and the other vital actions of vegetables and animals. These are rendered sensible chiefly by diligent observation of the first beginnings, and rudiments or effects of life in animalculæ sprung from putrefaction, as in the eggs of ants, worms, mosses, frogs after rain, etc. Both a mild heat and a pliant substance, however, are necessary for the production of life, in order that the spirit may neither hastily escape, nor be restrained by the obstinacy of the parts, so as not to be able to bend and model them like wax.

Again, the difference of spirit which is important and of effect in many points (as unconnected spirit, branching spirit, branching and cellular spirit, the first of which is that of all inanimate substances, the second of vegetables, and the third of animals), is placed, as it were, before the eyes by many reducing instances.

Again, it is clear that the more refined tissue and conformation of things (though forming the whole body of visible or tangible objects) are neither visible nor tangible. Our information, therefore, must here also be derived

from reduction to the sphere of the senses. But the most radical and primary difference of formation depends on the abundance or scarcity of matter within the same space or dimensions. For the other formations which regard the dissimilarity of the parts contained in the same body, and their^[219] collocation and position, are secondary in comparison with the former.

Let the required nature then be the expansion or coherence of matter in different bodies, or the quantity of matter relative to the dimensions of each. For there is nothing in nature more true than the twofold proposition—that nothing proceeds from nothing and that nothing is reduced to nothing, but that the quantum, or sum total of matter, is constant, and is neither increased nor diminished. Nor is it less true, that out of this given quantity of matter, there is a greater or less quantity, contained within the same space or dimensions according to the difference of bodies; as, for instance, water contains more than air. So that if any one were to assert that a given content of water can be changed into an equal content of air, it is the same as if he were to assert that something can be reduced into nothing. On the contrary, if any one were to assert that a given content of air can be changed into an equal content of water, it is the same as if he were to assert that something can proceed from nothing. From this abundance or scarcity of matter are properly derived the notions of density and rarity, which are taken in various and promiscuous senses.

This third assertion may be considered as being also sufficiently certain; namely, that the greater or less quantity of matter in this or that body, may, by comparison, be reduced to calculation, and exact, or nearly exact, proportion. Thus, if one should say that there is such an accumulation of matter in a given quantity of gold, that it would require twenty-one times the quantity in dimension of spirits of wine, to make up the same quantity of matter, it would not be far from the truth.

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The accumulation of matter, however, and its relative quantity, are rendered sensible by weight; for weight is proportionate to the quantity of matter, as regards the parts of a tangible substance, but spirit and its quantity of matter are not to be computed by weight, which spirit rather diminishes than augments.

We have made a tolerably accurate table of weight, in which we have selected the weights and size of all the metals, the principal minerals, stones, liquids, oils, and many other natural and artificial bodies: a very useful proceeding both as regards theory and practice, and which is capable of revealing many unexpected results. Nor is this of little consequence, that it serves to demonstrate that the whole range of the variety of tangible bodies with which we are acquainted (we mean tolerably close, and not spongy, hollow bodies, which are for a considerable part filled with air), does not exceed the ratio of one to twenty-one. So limited is nature, or at least that part of it to which we are most habituated.

We have also thought it deserving our industry, to try if we could arrive at the ratio of intangible or pneumatic bodies to tangible bodies, which we attempted by the following contrivance. We took a vial capable of containing about an ounce, using a small vessel in order to effect the subsequent evaporation with less heat. We filled this vial, almost to the neck, with spirits of wine, selecting it as the tangible body which, by our table, was the rarest, and contained a less quantity of matter in a given space than all other tangible bodies which are compact and not hollow. Then we noted exactly the weight of the liquid and vial. We next took a bladder, containing about two pints, and squeezed all the air out of it, as completely as possible, and^[221] until the sides of the bladder met. We first, however, rubbed the bladder gently with oil, so as to make it air-tight, by closing its pores with the oil. We tied the bladder tightly round the mouth of the vial, which we had inserted in it, and with a piece of waxed thread to make it fit better and more tightly, and then placed the vial on some hot coals in a brazier. The vapor or steam of the spirit, dilated and become æriform by the heat, gradually swelled out the bladder, and stretched it in every direction like a sail. As soon as that was accomplished, we removed the vial from the fire and placed it on a carpet, that it might not be cracked by the cold; we also pricked the bladder immediately, that the steam might not return to a liquid state by the cessation of heat, and confound the proportions. We then removed the bladder, and again took the weight of the spirit which remained; and so calculated the quantity which had been converted into vapor, or an æriform shape, and then examined how much space had been occupied by the body in its form of spirits of wine in the vial, and how much, on the other hand, had been

occupied by it in its aëriform shape in the bladder, and subtracted the results; from which it was clear that the body, thus converted and changed, acquired an expansion of one hundred times beyond its former bulk.

Again, let the required nature be heat or cold, of such a degree as not to be sensible from its weakness. They are rendered sensible by the thermometer, as we described it above;^[139] for the cold and heat are not actually perceived by the touch, but heat expands and cold contracts the air. Nor, again, is that expansion or contraction of the air in^[222] itself visible, but the air when expanded depresses the water, and when contracted raises it, which is the first reduction to sight.

Again, let the required nature be the mixture of bodies; namely, how much aqueous, oleaginous or spirituous, ashy or salt parts they contain; or, as a particular example, how much butter, cheese, and whey there is in milk, and the like. These things are rendered sensible by artificial and skilful separations in tangible substances; and the nature of the spirit in them, though not immediately perceptible, is nevertheless discovered by the various motions and efforts of bodies. And, indeed, in this branch men have labored hard in distillations and artificial separations, but with little more success than in their other experiments now in use; their methods being mere guesses and blind attempts, and more industrious than intelligent; and what is worst of all, without any imitation or rivalry of nature, but rather by violent heats and too energetic agents, to the destruction of any delicate conformation, in which principally consist the hidden virtues and sympathies. Nor do men in these separations ever attend to or observe what we have before pointed out; namely, that in attacking bodies by fire, or other methods, many qualities are superinduced by the fire itself, and the other bodies used to effect the separation, which were not originally in the compound. Hence arise most extraordinary fallacies; for the mass of vapor which is emitted from water by fire, for instance, did not exist as vapor or air in the water, but is chiefly created by the expansion of the water by the heat of the fire.

So, in general, all delicate experiments on natural or artificial bodies, by which the genuine are distinguished from the adulterated, and the better from the more common,^[223] should be referred to this division; for they bring that which is not the object of the senses within their sphere. They are therefore to be everywhere diligently sought after.

With regard to the fifth cause of objects escaping our senses, it is clear that the action of the sense takes place by motion, and this motion is time. If, therefore, the motion of any body be either so slow or so swift as not to be proportioned to the necessary momentum which operates on the senses, the object is not perceived at all; as in the motion of the hour hand, and that, again, of a musket-ball. The motion which is imperceptible by the senses from its slowness, is readily and usually rendered sensible by the accumulation of motion; that which is imperceptible from its velocity, has not as yet been well measured; it is necessary, however, that this should be done in some cases, with a view to a proper investigation of nature.

The sixth case, where the sense is impeded by the power of the object, admits of a reduction to the sensible sphere, either by removing the object to a greater distance, or by deadening its effects by the interposition of a medium, which may weaken and not destroy the object; or by the admission of its reflection where the direct impression is too strong, as that of the sun in a basin of water.

The seventh case, where the senses are so overcharged with the object as to leave no further room, scarcely occurs except in the smell or taste, and is not of much consequence as regards our present subject. Let what we have said, therefore, suffice with regard to the reduction to the sensible sphere of objects not naturally within its compass.

Sometimes, however, this reduction is not extended to the senses of man, but to those of some other animal, whose senses, in some points, exceed those of man; as (with regard^[224] to some scents) to that of the dog, and with regard to light existing imperceptibly in the air, when not illuminated from any extraneous source, to the sense of the cat, the owl, and other animals which see by night. For Telesius has well observed, that there appears to be an original portion of light even in the air itself,^[140] although but slight and meagre, and of no use for the most part to the eyes of men, and those of the generality of animals; because those animals to whose senses this light is proportioned can see by night, which does not, in all probability, proceed from their seeing either without light or by any internal light.

Here, too, we would observe, that we at present discuss only the wants of the senses, and their remedies; for their deceptions must be referred to the

inquiries appropriated to the senses, and sensible objects; except that important deception, which makes them define objects in their relation to man, and not in their relation to the universe, and which is only corrected by universal reasoning and philosophy.[\[141\]](#)

XLI. In the eighteenth rank of prerogative instances we will class the instances of the road, which we are also wont to call itinerant and jointed instances. They are such as indicate the gradually continued motions of nature. This[\[225\]](#) species of instances escapes rather our observation than our senses; for men are wonderfully indolent upon this subject, consulting nature in a desultory manner, and at periodic intervals, when bodies have been regularly finished and completed, and not during her work. But if any one were desirous of examining and contemplating the talents and industry of an artificer, he would not merely wish to see the rude materials of his art, and then his work when finished, but rather to be present while he is at labor, and proceeding with his work. Something of the same kind should be done with regard to nature. For instance, if any one investigate the vegetation of plants, he should observe from the first sowing of any seed (which can easily be done, by pulling up every day seeds which have been two, three, or four days in the ground, and examining them diligently), how and when the seed begins to swell and break, and be filled, as it were, with spirit; then how it begins to burst the bark and push out fibres, raising itself a little at the same time, unless the ground be very stiff; then how it pushes out these fibres, some downward for roots, others upward for the stem, sometimes also creeping laterally, if it find the earth open and more yielding on one side, and the like. The same should be done in observing the hatching of eggs, where we may easily see the process of animation and organization, and what parts are formed of the yolk, and what of the white of the egg, and the like. The same may be said of the inquiry into the formation of animals from putrefaction; for it would not be so humane to inquire into perfect and terrestrial animals, by cutting the foetus from the womb; but opportunities may perhaps be offered of abortions, animals killed in hunting, and the like. Nature, therefore, must, as it were, be watched, as being[\[226\]](#) more easily observed by night than by day: for contemplations of this kind may be considered as carried on by night, from the minuteness and perpetual burning of our watch-light.

The same must be attempted with inanimate objects, which we have

ourselves done by inquiring into the opening of liquids by fire. For the mode in which water expands is different from that observed in wine, vinegar, or verjuice, and very different, again, from that observed in milk and oil, and the like; and this was easily seen by boiling them with slow heat, in a glass vessel, through which the whole may be clearly perceived. But we merely mention this, intending to treat of it more at large and more closely when we come to the discovery of the latent process; for it should always be remembered that we do not here treat of things themselves, but merely propose examples.[\[142\]](#)

XLII. In the nineteenth rank of prerogative instances we will class supplementary or substitutive instances, which we are also wont to call instances of refuge. They are such as supply information, where the senses are entirely deficient, and we therefore have recourse to them when appropriate instances cannot be obtained. This substitution is^[227] twofold, either by approximation or by analogy. For instance, there is no known medium which entirely prevents the effect of the magnet in attracting iron—neither gold, nor silver, nor stone, nor glass, wood, water, oil, cloth, or fibrous bodies, air, flame, or the like. Yet by accurate experiment, a medium may perhaps be found which would deaden its effect, more than another comparatively and in degree; as, for instance, the magnet would not perhaps attract iron through the same thickness of gold as of air, or the same quantity of ignited as of cold silver, and so on; for we have not ourselves made the experiment, but it will suffice as an example. Again, there is no known body which is not susceptible of heat, when brought near the fire; yet air becomes warm much sooner than stone. These are examples of substitution by approximation.

Substitution by analogy is useful, but less sure, and therefore to be adopted with some judgment. It serves to reduce that which is not the object of the senses to their sphere, not by the perceptible operations of the imperceptible body, but by the consideration of some similar perceptible body. For instance, let the subject for inquiry be the mixture of spirits, which are invisible bodies. There appears to be some relation between bodies and their sources or support. Now, the source of flame seems to be oil and fat; that of air, water, and watery substances; for flame increases over the exhalation of oil, and air over that of water. One must therefore consider the mixture of oil

and water, which is manifest to the senses, since that of air and flame in general escapes the senses. But oil and water mix very imperfectly by composition or stirring, while they are exactly and nicely mixed in herbs, blood, and the parts of animals. Something similar, therefore, may take place in^[228] the mixture of flame and air in spirituous substances, not bearing mixture very well by simple collision, while they appear, however, to be well mixed in the spirits of plants and animals.

Again, if the inquiry do not relate to perfect mixtures of spirits, but merely to their composition, as whether they easily incorporate with each other, or there be rather (as an example) certain winds and exhalations, or other spiritual bodies, which do not mix with common air, but only adhere to and float in it in globules and drops, and are rather broken and pounded by the air, than received into, and incorporated with it; this cannot be perceived in common air, and other aëriform substances, on account of the rarity of the bodies, but an image, as it were, of this process may be conceived in such liquids as quicksilver, oil, water, and even air, when broken and dissipated it ascends in small portions through water, and also in the thicker kinds of smoke; lastly, in dust, raised and remaining in the air, in all of which there is no incorporation: and the above representation in this respect is not a bad one, if it be first diligently investigated, whether there can be such a difference of nature between spirituous substances, as between liquids, for then these images might conveniently be substituted by analogy.

And although we have observed of these supplementary instances, that information is to be derived from them, when appropriate instances are wanting, by way of refuge, yet we would have it understood, that they are also of great use, when the appropriate instances are at hand, in order to confirm the information afforded by them; of which we will speak more at length, when our subject leads us, in due course, to the support of induction.

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XLIII. In the twentieth rank of prerogative instances we will place lancing instances, which we are also wont (but for a different reason) to call twitching instances. We adopt the latter name, because they twitch the understanding, and the former because they pierce nature, whence we style them occasionally the instances of Democritus.^[143] They are such as warn the understanding of the admirable and exquisite subtilty of nature, so that it

becomes roused and awakened to attention, observation, and proper inquiry; as, for instance, that a little drop of ink should be drawn out into so many letters; that silver merely gilt on its surface should be stretched to such a length of gilt wire; that a little worm, such as you may find on the skin, should possess both a spirit and a varied conformation of its parts; that a little saffron should imbue a whole tub of water with its color; that a little musk or aroma should imbue a much greater extent of air with its perfume; that a cloud of smoke should be raised by a little incense; that such accurate differences of sounds as articulate words should be conveyed in all directions through the air, and even penetrate the pores of wood and water (though they become much weakened), that they should be, moreover, reflected, and that with such distinctness and velocity; that light and color should for such an extent and so rapidly pass through solid bodies, such as glass and water, with so great and so exquisite a variety of images, and should be refracted and reflected; that the magnet should attract through every description of body, even the most compact; but (what is still more wonderful) that in all these cases the action of one should not impede that of another in a common^[230] medium, such as air; and that there should be borne through the air, at the same time, so many images of visible objects, so many impulses of articulation, so many different perfumes, as of the violet, rose, etc., besides cold and heat, and magnetic attractions; all of them, I say, at once, without any impediment from each other, as if each had its paths and peculiar passage set apart for it, without infringing against or meeting each other.

To these lancing instances, however, we are wont, not without some advantage, to add those which we call the limits of such instances. Thus, in the cases we have pointed out, one action does not disturb or impede another of a different nature, yet those of a similar nature subdue and extinguish each other; as the light of the sun does that of the candle, the sound of a cannon that of the voice, a strong perfume a more delicate one, a powerful heat a more gentle one, a plate of iron between the magnet and other iron the effect of the magnet. But the proper place for mentioning these will be also among the supports of induction.

XLIV. We have now spoken of the instances which assist the senses, and which are principally of service as regards information; for information begins from the senses. But our whole labor terminates in practice, and as the

former is the beginning, so is the latter the end of our subject. The following instances, therefore, will be those which are chiefly useful in practice. They are comprehended in two classes, and are seven in number. We call them all by the general name of practical instances. Now there are two defects in practice, and as many divisions of important instances. Practice is either deceptive or too laborious. It is generally deceptive (especially after a diligent^[231] examination of natures), on account of the power and actions of bodies being ill defined and determined. Now the powers and actions of bodies are defined and determined either by space or by time, or by the quantity at a given period, or by the predominance of energy; and if these four circumstances be not well and diligently considered, the sciences may indeed be beautiful in theory, but are of no effect in practice. We call the four instances referred to this class, mathematical instances and instances of measure.

Practice is laborious either from the multitude of instruments, or the bulk of matter and substances requisite for any given work. Those instances, therefore, are valuable, which either direct practice to that which is of most consequence to mankind, or lessen the number of instruments or of matter to be worked upon. We assign to the three instances relating to this class, the common name of propitious or benevolent instances. We will now separately discuss these seven instances, and conclude with them that part of our work which relates to the prerogative or illustrious instances.

XLV. In the twenty-first rank of prerogative instances we will place the instances of the rod or rule, which we are also wont to call the instances of completion or *non ultra*. For the powers and motions of bodies do not act and take effect through indefinite and accidental, but through limited and certain spaces; and it is of great importance to practice that these should be understood and noted in every nature which is investigated, not only to prevent deception, but to render practice more extensive and efficient. For it is sometimes possible to extend these powers, and bring the distance, as it were, nearer, as in the example of telescopes.

Many powers act and take effect only by actual touch, as^[232] in the percussion of bodies, where the one does not remove the other, unless the impelling touch the impelled body. External applications in medicine, as ointment and plasters, do not exercise their efficacy except when in contact

with the body. Lastly, the objects of touch and taste only strike those senses when in contact with their organs.

Other powers act at a distance, though it be very small, of which but few have as yet been noted, although there be more than men suspect; this happens (to take everyday instances) when amber or jet attracts straws, bubbles dissolve bubbles, some purgative medicines draw humors from above, and the like. The magnetic power by which iron and the magnet, or two magnets, are attracted together, acts within a definite and narrow sphere, but if there be any magnetic power emanating from the earth a little below its surface, and affecting the needle in its polarity, it must act at a great distance.

Again, if there be any magnetic force which acts by sympathy between the globe of the earth and heavy bodies, or between that of the moon and the waters of the sea (as seems most probable from the particular floods and ebbs which occur twice in the month), or between the starry sphere and the planets, by which they are summoned and raised to their apogees, these must all operate at very great distances.[\[144\]](#)

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Again, some conflagrations and the kindling of flames take place at very considerable distances with particular substances, as they report of the naphtha of Babylon. Heat, too, insinuates itself at wide distances, as does also cold, so that the masses of ice which are broken off and float upon the Northern Ocean, and are borne through the Atlantic to the coast of Canada, become perceptible by the inhabitants, and strike them with cold from a distance. Perfumes also (though here there appears to be always some corporeal emission) act at remarkable distances, as is experienced by persons sailing by the coast of Florida, or parts of Spain, where there are whole woods of lemons, oranges, and other odoriferous plants, or rosemary and marjoram bushes, and the like. Lastly, the rays of light and the impressions of sound act at extensive distances.

Yet all these powers, whether acting at a small or great distance, certainly act within definite distances, which are well ascertained by nature, so that there is a limit depending either on the mass or quantity of the bodies, the vigor or faintness of the powers, or the favorable or impeding nature of the medium, all of which should be taken into[\[234\]](#) account and observed. We

must also note the boundaries of violent motions, such as missiles, projectiles, wheels and the like, since they are also manifestly confined to certain limits.

Some motions and virtues are to be found of a directly contrary nature to these, which act in contact but not at a distance; namely, such as operate at a distance and not in contact, and again act with less force at a less distance, and the reverse. Sight, for instance, is not easily effective in contact, but requires a medium and distance; although I remember having heard from a person deserving of credit, that in being cured of a cataract (which was done by putting a small silver needle within the first coat of the eye, to remove the thin pellicle of the cataract, and force it into a corner of the eye), he had distinctly seen the needle moving across the pupil. Still, though this may be true, it is clear that large bodies cannot be seen well or distinctly, unless at the vertex of a cone, where the rays from the object meet at some distance from the eye. In old persons the eye sees better if the object be moved a little further, and not nearer. Again, it is certain that in projectiles the impact is not so violent at too short a distance as a little afterward.[\[145\]](#) Such are the observations to be made on the measure of motions as regards distance.

There is another measure of motion in space which must^[235] not be passed over, not relating to progressive but spherical motion—that is, the expansion of bodies into a greater, or their contraction into a lesser sphere. For in our measure of this motion we must inquire what degree of compression or extension bodies easily and readily admit of, according to their nature, and at what point they begin to resist it, so as at last to bear it no further—as when an inflated bladder is compressed, it allows a certain compression of the air, but if this be increased, the air does not suffer it, and the bladder is burst.

We have proved this by a more delicate experiment. We took a metal bell, of a light and thin sort, such as is used for salt-cellars, and immersed it in a basin of water, so as to carry the air contained in its interior down with it to the bottom of the basin. We had first, however, placed a small globe at the bottom of the basin, over which we placed the bell. The result was, that if the globe were small compared with the interior of the bell, the air would contract itself, and be compressed without being forced out, but if it were too large for the air readily to yield to it, the latter became impatient of the pressure, raised the bell partly up, and ascended in bubbles.

To prove, also, the extension (as well as the compression) which air admits of, we adopted the following method:—We took a glass egg, with a small hole at one end; we drew out the air by violent suction at this hole, and then closed the hole with the finger, immersed the egg in water, and then removed the finger. The air being constrained by the effort made in suction, and dilated beyond its natural state, and therefore striving to recover and contract itself (so that if the egg had not been immersed in water, it would have drawn in the air with a hissing sound), now drew in^[236] a sufficient quantity of water to allow the air to recover its former dimensions.^[146]

It is well ascertained that rare bodies (such as air) admit of considerable contraction, as has been before observed; but tangible bodies (such as water) admit of it much less readily, and to a less extent. We investigated the latter point by the following experiment:

We had a leaden globe made, capable of containing about two pints, wine measure, and of tolerable thickness, so as to support considerable pressure. We poured water into it through an aperture, which we afterward closed with melted lead, as soon as the globe was filled with water, so that the whole became perfectly solid. We next flattened the two opposite sides with a heavy hammer, which necessarily caused the water to occupy a less space, since the sphere is the solid of greatest content; and when hammering failed from the resistance of the water, we made use of a mill or press, till at last the water, refusing to submit to a greater pressure, exuded like a fine dew through the solid lead. We then computed the extent to which the original space had been reduced, and concluded that water admitted such a degree of compression when constrained by great violence.

The more solid, dry or compact bodies, such as stones, wood and metals, admit of much less, and indeed scarcely any perceptible compression or expansion, but escape by breaking, slipping forward, or other efforts; as appears in bending wood, or steel for watch-springs, in projectiles, hammering and many other motions, all of which, together^[237] with their degrees, are to be observed and examined in the investigation of nature, either to a certainty, or by estimation, or comparison, as opportunity permits.

XLVI. In the twenty-second rank of prerogative instances we will place the instances of the course, which we are also wont to call water instances,

borrowing our expression from the water hour-glasses employed by the ancients instead of those with sand. They are such as measure nature by the moments of time, as the last instances do by the degrees of space. For all motion or natural action takes place in time, more or less rapidly, but still in determined moments well ascertained by nature. Even those actions which appear to take effect suddenly, and in the twinkling of an eye (as we express it), are found to admit of greater or less rapidity.

In the first place, then, we see that the return of the heavenly bodies to the same place takes place in regular times, as does the flood and ebb of the sea. The descent of heavy bodies toward the earth, and the ascent of light bodies toward the heavenly sphere, take place in definite times,^[147] according to the nature of the body, and of the medium through which it moves. The sailing of ships, the motions of animals, the transmission of projectiles, all^[238] take place in times the sums of which can be computed. With regard to heat, we see that boys in winter bathe their hands in the flame without being burned; and conjurers, by quick and regular movements, overturn vessels filled with wine or water, and replace them without spilling the liquid, with several similar instances. The compression, expansion and eruption of several bodies, take place more or less rapidly, according to the nature of the body and its motion, but still in definite moments.

In the explosion of several cannon at once (which are sometimes heard at the distance of thirty miles), the sound of those nearest to the spot is heard before that of the most distant. Even in sight (whose action is most rapid), it is clear that a definite time is necessary for its exertion, which is proved by certain objects being invisible from the velocity of their motion, such as a musket-ball; for the flight of the ball is too swift to allow an impression of its figure to be conveyed to the sight.

This last instance, and others of a like nature, have sometimes excited in us a most marvellous doubt, no less than whether the image of the sky and stars is perceived as at the actual moment of its existence, or rather a little after, and whether there is not (with regard to the visible appearance of the heavenly bodies) a true and apparent time, as well as a true and apparent place, which is observed by astronomers in parallaxes. It appeared so incredible to us, that the images or radiations of heavenly bodies could suddenly be conveyed through such immense spaces to the sight, and it

seemed that they ought rather to be transmitted in a definite time.^[148] That doubt, however^[239] (as far as regards any great difference between the true and apparent time), was subsequently completely set at rest, when we considered the infinite loss and diminution of size as regards the real and apparent magnitude of a star, occasioned by its distance, and at the same time observed at how great a distance (at least sixty miles) bodies which are merely white can be suddenly seen by us. For there is no doubt, that the light of the heavenly bodies not only far surpasses the vivid appearance of white, but even the light of any flame (with which we are acquainted) in the vigor of its radiation. The immense velocity of the bodies themselves, which is perceived in their diurnal motion, and has so astonished thinking men, that they have been more ready to believe in the motion of the earth, renders the motion of radiation from them (marvellous as it is in its rapidity) more worthy of belief. That which has weighed most with us, however, is, that if there were any considerable interval of time between the reality and the appearance, the images would often be interrupted and confused by clouds formed in the meantime, and similar disturbances of the medium. Let this suffice with regard to the simple measures of time.

It is not merely the absolute, but still more the relative measure of motions and actions which must be inquired into, for this latter is of great use and application. We perceive that the flame of firearms is seen sooner than the sound is heard, although the ball must have struck the air before the flame, which was behind it, could escape: the reason of which is, that light moves with greater velocity^[240] than sound. We perceive, also, that visible images are received by the sight with greater rapidity than they are dismissed, and for this reason, a violin string touched with the finger appears double or triple, because the new image is received before the former one is dismissed. Hence, also, rings when spinning appear globular, and a lighted torch, borne rapidly along at night, appears to have a tail. Upon the principle of the inequality of motion, also, Galileo attempted an explanation of the flood and ebb of the sea, supposing the earth to move rapidly, and the water slowly, by which means the water, after accumulating, would at intervals fall back, as is shown in a vessel of water made to move rapidly. He has, however, imagined this on data which cannot be granted (namely, the earth's motion), and besides, does not satisfactorily account for the tide taking place every six hours.

An example of our present point (the relative measure of motion), and, at the same time, of its remarkable use of which we have spoken, is conspicuous in mines filled with gunpowder, where immense weights of earth, buildings, and the like, are overthrown and prostrated by a small quantity of powder; the reason of which is decidedly this, that the motion of the expansion of the gunpowder is much more rapid than that of gravity,^[149] which would resist it, so that the former has terminated before the latter has commenced. Hence, also, in missiles, a strong blow will not carry them so far as a sharp and rapid one. Nor could a small portion of animal spirit in animals, especially in such^[241] vast bodies as those of the whale and elephant, have ever bent or directed such a mass of body, were it not owing to the velocity of the former, and the slowness of the latter in resisting its motion.

In short, this point is one of the principal foundations of the magic experiments (of which we shall presently speak), where a small mass of matter overcomes and regulates a much larger, if there but be an anticipation of motion, by the velocity of one before the other is prepared to act.

Finally, the point of the first and last should be observed in all natural actions. Thus, in an infusion of rhubarb the purgative property is first extracted, and then the astringent; we have experienced something of the same kind in steeping violets in vinegar, which first extracts the sweet and delicate odor of the flower, and then the more earthy part, which disturbs the perfume; so that if the violets be steeped a whole day, a much fainter perfume is extracted than if they were steeped for a quarter of an hour only, and then taken out; and since the odoriferous spirit in the violet is not abundant, let other and fresh violets be steeped in the vinegar every quarter of an hour, as many as six times, when the infusion becomes so strengthened, that although the violets have not altogether remained there for more than one hour and a half, there remains a most pleasing perfume, not inferior to the flower itself, for a whole year. It must be observed, however, that the perfume does not acquire its full strength till about a month after the infusion. In the distillation of aromatic plants macerated in spirits of wine, it is well known that an aqueous and useless phlegm rises first, then water containing more of the spirit, and, lastly, water containing more of the^[242] aroma; and many observations of the like kind, well worthy of notice, are to be made in distillations. But let these suffice as examples.^[150]

XLVII. In the twenty-third rank of prerogative instances we will place instances of quantity, which we are also wont to call the doses of nature (borrowing a word from medicine). They are such as measure the powers by the quantity of bodies, and point out the effect of the quantity in the degree of power. And in the first place, some powers only subsist in the universal quantity, or such as bears a relation to the confirmation and fabric of the universe. Thus the earth is fixed, its parts fall. The waters in the sea flow and ebb, but not in the rivers, except by the admission of the sea. Then, again, almost all particular powers act according to the greater or less quantity of the body. Large masses of water are not easily rendered foul, small are. New wine and beer become ripe and drinkable in small skins much more readily than in large casks. If a herb be placed in a considerable quantity of liquid, infusion takes place rather than impregnation; if in less, the reverse. A bath, therefore, and a light sprinkling, produce different effects on the human body. Light dew, again, never falls, but is dissipated and incorporated with the air; thus we see that in breathing on gems, the slight quantity of moisture, like a small cloud in the air, is immediately dissolved. Again, a piece of the same magnet does not attract so much iron as the whole magnet did. There are some powers where the smallness of the quantity is of more avail; as in boring, a sharp point pierces more readily than a blunt one; the diamond, when pointed, makes an impression on glass, and the like.

Here, too, we must not rest contented with a vague result, but inquire into the exact proportion of quantity requisite for a particular exertion of power; for one would be apt to suppose that the power bears an exact proportion^[244] to the quantity; that if a leaden bullet of one ounce, for instance, would fall in a given time, one of two ounces ought to fall twice as rapidly, which is most erroneous. Nor does the same ratio prevail in every kind of power, their difference being considerable. The measure, therefore, must be determined by experiment, and not by probability or conjecture.

Lastly, we must in all our investigations of nature observe what quantity, or dose, of the body is requisite for a given effect, and must at the same time be guarded against estimating it at too much or too little.

XLVIII. In the twenty-fourth rank of prerogative instances we will place wrestling instances, which we are also wont to call instances of

predominance. They are such as point out the predominance and submission of powers compared with each other, and which of them is the more energetic and superior, or more weak and inferior. For the motions and effects of bodies are compounded, decomposed, and combined, no less than the bodies themselves. We will exhibit, therefore, the principal kinds of motions or active powers, in order that their comparative strength, and thence a demonstration and definition of the instances in question, may be rendered more clear.

Let the first motion be that of the resistance of matter, which exists in every particle, and completely prevents its annihilation; so that no conflagration, weight, pressure, violence, or length of time can reduce even the smallest portion of matter to nothing, or prevent it from being something, and occupying some space, and delivering itself (whatever straits it be put to), by changing its form or place, or, if that be impossible, remaining as it is; nor can it ever happen that it should either be nothing or nowhere.^[245] This motion is designated by the schools (which generally name and define everything by its effects and inconveniences rather than by its inherent cause) by the axiom, that two bodies cannot exist in the same place, or they call it a motion to prevent the penetration of dimensions. It is useless to give examples of this motion, since it exists in every body.

Let the second motion be that which we term the motion of connection, by which bodies do not allow themselves to be separated at any point from the contact of another body, delighting, as it were, in the mutual connection and contact. This is called by the schools a motion to prevent a vacuum. It takes place when water is drawn up by suction or a syringe, the flesh by cupping, or when the water remains without escaping from perforated jars, unless the mouth be opened to admit the air, and innumerable instances of a like nature.

Let the third be that which we term the motion of liberty, by which bodies strive to deliver themselves from any unnatural pressure or tension, and to restore themselves to the dimensions suited to their mass; and of which, also, there are innumerable examples. Thus, we have examples of their escaping from pressure, in the water in swimming, in the air in flying, in the water again in rowing, and in the air in the undulation of the winds, and in springs of watches. An exact instance of the motion of compressed air is seen in children's popguns, which they make by scooping out elder-branches or some

such matter, and forcing in a piece of some pulpy root or the like, at each end; then they force the root or other pellet with a ramrod to the opposite end, from which the lower pellet is emitted and projected with a report, and that before it is touched^[246] by the other piece of root or pellet, or by the ramrod. We have examples of their escape from tension, in the motion of the air that remains in glass eggs after suction, in strings, leather, and cloth, which recoil after tension, unless it be long continued. The schools define this by the term of motion from the form of the element; injudiciously enough, since this motion is to be found not only in air, water, or fire, but in every species of solid, as wood, iron, lead, cloth, parchment, etc., each of which has its own proper size, and is with difficulty stretched to any other. Since, however, this motion of liberty is the most obvious of all, and to be seen in an infinite number of cases, it will be as well to distinguish it correctly and clearly; for some most carelessly confound this with the two others of resistance and connection; namely, the freedom from pressure with the former, and that from tension with the latter, as if bodies when compressed yielded or expanded to prevent a penetration of dimensions, and when stretched rebounded and contracted themselves to prevent a vacuum. But if the air, when compressed, could be brought to the density of water, or wood to that of stone, there would be no need of any penetration of dimensions, and yet the compression would be much greater than they actually admit of. So if water could be expanded till it became as rare as air, or stone as rare as wood, there would be no need of a vacuum, and yet the expansion would be much greater than they actually admit of.

We do not, therefore, arrive at a penetration of dimensions or a vacuum before the extremes of condensation and rarefaction, while the motion we speak of stops and exerts itself much within them, and is nothing more than a desire of bodies to preserve their specific density (or,^[247] if it be preferred, their form), and not to desert them suddenly, but only to change by degrees, and of their own accord. It is, however, much more necessary to intimate to mankind (because many other points depend upon this), that the violent motion which we call mechanical, and Democritus (who, in explaining his primary motions, is to be ranked even below the middling class of philosophers) termed the motion of a blow, is nothing else than this motion of liberty, namely, a tendency to relaxation from compression. For in all simple

impulsion or flight through the air, the body is not displaced or moved in space, until its parts are placed in an unnatural state, and compressed by the impelling force. When that takes place, the different parts urging the other in succession, the whole is moved, and that with a rotatory as well as progressive motion, in order that the parts may, by this means also, set themselves at liberty, or more readily submit. Let this suffice for the motion in question.

Let the fourth be that which we term the motion of matter, and which is opposed to the last; for in the motion of liberty, bodies abhor, reject, and avoid, a new size or volume, or any new expansion or contraction (for these different terms have the same meaning), and strive, with all their power, to rebound and resume their former density; on the contrary, in the motion of matter, they are anxious to acquire a new volume or dimension, and attempt it willingly and rapidly, and occasionally by a most vigorous effort, as in the example of gunpowder. The most powerful, or at least most frequent, though not the only instruments of this motion, are heat and cold. For instance, the air, if expanded by tension (as by suction in the glass egg), struggles^[248] anxiously to restore itself; but if heat be applied, it strives, on the contrary, to dilate itself, and longs for a larger volume, regularly passing and migrating into it, as into a new form (as it is termed); nor after a certain degree of expansion is it anxious to return, unless it be invited to do so by the application of cold, which is not indeed a return, but a fresh change. So also water, when confined by compression, resists, and wishes to become as it was before, namely, more expanded; but if there happen an intense and continued cold, it changes itself readily, and of its own accord, into the condensed state of ice; and if the cold be long continued, without any intervening warmth (as in grottoes and deep caves), it is changed into crystal or similar matter, and never resumes its form.

Let the fifth be that which we term the motion of continuity. We do not understand by this simple and primary continuity with any other body (for that is the motion of connection), but the continuity of a particular body in itself; for it is most certain that all bodies abhor a solution of continuity, some more and some less, but all partially. In hard bodies (such as steel and glass) the resistance to an interruption of continuity is most powerful and efficacious, while although in liquids it appears to be faint and languid, yet it

is not altogether null, but exists in the lowest degree, and shows itself in many experiments, such as bubbles, the round form of drops, the thin threads which drip from roofs, the cohesion of glutinous substances, and the like. It is most conspicuous, however, if an attempt be made to push this separation to still smaller particles. Thus, in mortars, the pestle produces no effect after a certain degree of contusion, water does not penetrate small fissures, and the air itself, notwithstanding its subtilty,^[249] does not penetrate the pores of solid vessels at once, but only by long-continued insinuation.

Let the sixth be that which we term the motion of acquisition, or the motion of need.^[151] It is that by which bodies placed among others of a heterogeneous and, as it were, hostile nature, if they meet with the means or opportunity of avoiding them, and uniting themselves with others of a more analogous nature, even when these latter are not closely allied to them, immediately seize and, as it were, select them, and appear to consider it as something acquired (whence we derive the name), and to have need of these latter bodies. For instance, gold, or any other metal in leaf, does not like the neighborhood of air; if, therefore, they meet with any tangible and thick substance (such as the finger, paper, or the like), they immediately adhere to it, and are not easily torn from it. Paper, too, and cloth, and the like, do not agree with the air, which is inherent and mixed in their pores. They readily, therefore, imbibe water or other liquids, and get rid of the air. Sugar, or a sponge, dipped in water or wine, and though part of it be out of the water or wine, and at some height above it, will yet gradually absorb them.^[152]

Hence an excellent rule is derived for the opening and dissolution of bodies; for (not to mention corrosive and strong waters, which force their way) if a body can be found which is more adapted, suited, and friendly to a given solid, than that with which it is by some necessity united, the given solid immediately opens and dissolves^[250] itself to receive the former, and excludes or removes the latter.^[153] Nor is the effect or power of this motion confined to contact, for the electric energy (of which Gilbert and others after him have told so many fables) is only the energy excited in a body by gentle friction, and which does not endure the air, but prefers some tangible substance if there be any at hand.

Let the seventh be that which we term the motion of greater congregation, by which bodies are borne toward masses of a similar nature, for instance,

heavy bodies toward the earth, light to the sphere of heaven. The schools termed this natural motion, by a superficial consideration of it, because produced by no external visible agent, which made them consider it innate in the substances; or perhaps because it does not cease, which is little to be wondered at, since heaven and earth are always present, while the causes and sources of many other motions are sometimes absent and sometimes present. They therefore called this perpetual and proper, because it is never interrupted, but instantly takes place when the others are interrupted, and they called the others adscititious. The former, however, is in reality weak and slow, since it yields, and is inferior to the others as long as they act, unless the mass of the body be great; and although this motion have so filled men's minds, as almost to have obscured all others, yet they know but little about it, and commit many errors in its estimate.

Let the eighth be that which we term the motion of lesser congregation, by which the homogeneous parts in^[251] any body separate themselves from the heterogeneous and unite together, and whole bodies of a similar substance coalesce and tend toward each other, and are sometimes congregated, attracted, and meet, from some distance; thus in milk the cream rises after a certain time, and in wine the dregs and tartar sink; which effects are not to be attributed to gravity and levity only, so as to account for the rising of some parts and the sinking of others, but much more to the desire of the homogeneous bodies to meet and unite. This motion differs from that of need in two points: 1st, because the latter is the stimulus of a malignant and contrary nature, while in this of which we treat (if there be no impediment or restraint), the parts are united by their affinity, although there be no foreign nature to create a struggle; 2dly, because the union is closer and more select. For in the other motion, bodies which have no great affinity unite, if they can but avoid the hostile body, while in this, substances which are connected by a decided kindred resemblance come together and are molded into one. It is a motion existing in all compound bodies, and would be readily seen in each, if it were not confined and checked by the other affections and necessities of bodies which disturb the union.

This motion is usually confined in the three following manners: by the torpor of the bodies; by the power of the predominating body; by external motion. With regard to the first, it is certain that there is more or less

sluggishness in tangible bodies, and an abhorrence of locomotion; so that unless excited they prefer remaining contented with their actual state, to placing themselves in a better position. There are three means of breaking through this sluggishness—heat; the active power of a similar body; vivid and^[252] powerful motion. With regard to the first, heat is, on this account, defined as that which separates heterogeneous, and draws together homogeneous substances; a definition of the Peripatetics which is justly ridiculed by Gilbert, who says it is as if one were to define man to be that which sows wheat and plants vineyards; being only a definition deduced from effects, and those but partial. But it is still more to be blamed, because those effects, such as they are, are not a peculiar property of heat, but a mere accident (for cold, as we shall afterward show, does the same), arising from the desire of the homogeneous parts to unite; the heat then assists them in breaking through that sluggishness which before restrained their desire. With regard to the assistance derived from the power of a similar body, it is most conspicuous in the magnet when armed with steel, for it excites in the steel a power of adhering to steel, as a homogeneous substance, the power of the magnet breaking through the sluggishness of the steel. With regard to the assistance of motion, it is seen in wooden arrows or points, which penetrate more deeply into wood than if they were tipped with iron, from the similarity of the substance, the swiftness of the motion breaking through the sluggishness of the wood; of which two last experiments we have spoken above in the aphorism on clandestine instances.^[154]

The confinement of the motion of lesser congregation, which arises from the power of the predominant body, is shown in the decomposition of blood and urine by cold. For as long as these substances are filled with the active spirit, which regulates and restrains each of their component parts, as the predominant ruler of the whole, the several^[253] different parts do not collect themselves separately on account of the check; but as soon as that spirit has evaporated, or has been choked by the cold, then the decomposed parts unite, according to their natural desire. Hence it happens, that all bodies which contain a sharp spirit (as salts and the like), last without decomposition, owing to the permanent and durable power of the predominating and imperious spirit.

The confinement of the motion of lesser congregation, which arises from

external motion, is very evident in that agitation of bodies which preserves them from putrefaction. For all putrefaction depends on the congregation of the homogeneous parts, whence, by degrees, there ensues a corruption of the first form (as it is called), and the generation of another. For the decomposition of the original form, which is itself the union of the homogeneous parts, precedes the putrefaction, which prepares the way for the generation of another. This decomposition, if not interrupted, is simple; but if there be various obstacles, putrefactions ensue, which are the rudiments of a new generation. But if (to come to our present point) a frequent agitation be excited by external motion, the motion toward union (which is delicate and gentle, and requires to be free from all external influence) is disturbed, and ceases; which we perceive to be the case in innumerable instances. Thus, the daily agitation or flowing of water prevents putrefaction; winds prevent the air from being pestilent; corn turned about and shaken in granaries continues clean: in short, everything which is externally agitated will with difficulty rot internally.

We must not omit that union of the parts of bodies which is the principal cause of induration and desiccation.^[254] When the spirit or moisture, which has evaporated into spirit, has escaped from a porous body (such as wood, bone, parchment, and the like), the thicker parts are drawn together, and united with a greater effort, and induration or desiccation is the consequence; and this we attribute not so much to the motion of connection (in order to prevent a vacuum), as to this motion of friendship and union.

Union from a distance is rare, and yet is to be met with in more instances than are generally observed. We perceive it when one bubble dissolves another, when medicines attract humors from a similarity of substance, when one string moves another in unison with it on different instruments, and the like. We are of opinion that this motion is very prevalent also in animal spirits, but are quite ignorant of the fact. It is, however, conspicuous in the magnet, and magnetized iron. While speaking of the motions of the magnet, we must plainly distinguish them, for there are four distinct powers or effects of the magnet which should not be confounded, although the wonder and astonishment of mankind has classed them together. 1. The attraction of the magnet to the magnet, or of iron to the magnet, or of magnetized iron to iron. 2. Its polarity toward the north and south, and its variation. 3. Its penetration

through gold, glass, stone, and all other substances. 4. The communication of power from the mineral to iron, and from iron to iron, without any communication of the substances. Here, however, we only speak of the first. There is also a singular motion of attraction between quicksilver and gold, so that the gold attracts quicksilver even when made use of in ointment; and those who work surrounded by the vapors of quicksilver, are wont to hold a piece of gold in their mouths, to collect the exhalations,^[255] which would otherwise attack their heads and bones, and this piece soon grows white.^[155] Let this suffice for the motion of lesser congregation.

Let the ninth be the magnetic motion, which, although of the nature of that last mentioned, yet, when operating at great distances, and on great masses, deserves a separate inquiry, especially if it neither begin in contact, as most motions of congregation do, nor end by bringing the substances into contact, as all do, but only raise them, and make them swell without any further effect. For if the moon raise the waters, or cause moist substances to swell, or if the starry sphere attract the planets toward their apogees, or the sun confine the planets Mercury and Venus to within a certain distance of his mass;^[156] these motions do not appear capable of being classed under either of those of congregation, but to be, as it were, intermediately and imperfectly congregative, and thus to form a distinct species.

Let the tenth motion be that of avoidance, or that which is opposed to the motion of lesser congregation, by which bodies, with a kind of antipathy, avoid and disperse, and separate themselves from, or refuse to unite themselves with others of a hostile nature. For although this may sometimes appear to be an accidental motion, necessarily attendant upon that of the lesser congregation, because the homogeneous parts cannot unite, unless the heterogeneous be first removed and excluded, yet it is still to be classed separately,^[157] and considered as a distinct species, because,^[256] in many cases, the desire of avoidance appears to be more marked than that of union.

It is very conspicuous in the excrements of animals, nor less, perhaps, in objects odious to particular senses, especially the smell and taste; for a fetid smell is rejected by the nose, so as to produce a sympathetic motion of expulsion at the mouth of the stomach; a bitter and rough taste is rejected by the palate or throat, so as to produce a sympathetic concussion and shivering of the head. This motion is visible also in other cases. Thus it is observed in

some kinds of antiperistasis, as in the middle region of the air, the cold of which appears to be occasioned by the rejection of cold from the regions of the heavenly bodies; and also in the heat and combustion observed in subterranean spots, which appear to be owing to the rejection of heat from the centre of the earth. For heat and cold, when in small quantities, mutually destroy each other, while in larger quantities, like armies equally matched, they remove and eject each other in open conflict. It is said, also that cinnamon and other perfumes retain their odor longer when placed near privies and foul places, because they will not unite and mix with stinks. It is well known that quicksilver, which would otherwise reunite into a complete mass, is prevented from so doing by man's spittle, pork lard, turpentine and the like, from the little affinity of its parts with those substances, so that when surrounded by them it draws itself back, and its avoidance of these intervening obstacles is greater than its desire of reuniting itself to its homogeneous parts; which is what they term the mortification of quicksilver. Again, the difference in weight of oil and water is not the only reason for their refusing to mix, but it is also owing to the little affinity of the two; for spirits^[257] of wine, which are lighter than oil, mix very well with water. A very remarkable instance of the motion in question is seen in nitre, and crude bodies of a like nature, which abhor flame, as may be observed in gunpowder, quicksilver and gold. The avoidance of one pole of the magnet by iron is not (as Gilbert has well observed), strictly speaking, an avoidance, but a conformity, or attraction to a more convenient situation.

Let the eleventh motion be that of assimilation, or self-multiplication, or simple generation, by which latter term we do not mean the simple generation of integral bodies, such as plants or animals, but of homogeneous bodies. By this motion homogeneous bodies convert those which are allied to them, or at least well disposed and prepared, into their own substance and nature. Thus flame multiplies itself over vapors and oily substances and generates fresh flame; the air over water and watery substances multiplies itself and generates fresh air; the vegetable and animal spirit, over the thin particles of a watery or oleaginous spirit contained in its food, multiplies itself and generates fresh spirit; the solid parts of plants and animals, as the leaf, flower, the flesh, bone and the like, each of them assimilate some part of the juices contained in their food, and generate a successive and daily substance. For let

none rave with Paracelsus, who (blinded by his distillations) would have it, that nutrition takes place by mere separation, and that the eye, nose, brain and liver lie concealed in bread and meat, the root, leaf and flower, in the juice of the earth; asserting that just as the artist brings out a leaf, flower, eye, nose, hand, foot and the like, from a rude mass of stone or wood by the separation and rejection of what is superfluous; so the great artist within us^[258] brings out our several limbs and parts by separation and rejection. But to leave such trifling, it is most certain that all the parts of vegetables and animals, as well the homogeneous as organic, first of all attract those juices contained in their food, which are nearly common, or at least not very different, and then assimilate and convert them into their own nature. Nor does this assimilation, or simple generation, take place in animated bodies only, but the inanimate also participate in the same property (as we have observed of flame and air), and that languid spirit, which is contained in every tangible animated substance, is perpetually working upon the coarser parts, and converting them into spirit, which afterward is exhaled, whence ensues a diminution of weight, and a desiccation of which we have spoken elsewhere.^[158]

Nor should we, in speaking of assimilation, neglect to mention the accretion which is usually distinguished from aliment, and which is observed when mud grows into a mass between stones, and is converted into a stony substance, and the scaly substance round the teeth is converted into one no less hard than the teeth themselves; for we are of opinion that there exists in all bodies a desire of assimilation, as well as of uniting with homogeneous masses. Each of these powers, however, is confined, although in different manners, and should be diligently investigated, because they are connected with the revival of old age. Lastly, it is worthy of observation, that in the nine preceding motions, bodies appear to aim at the mere preservation of their nature, while in this they attempt its propagation.

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Let the twelfth motion be that of excitement, which appears to be a species of the last, and is sometimes mentioned by us under that name. It is, like that, a diffusive, communicative, transitive and multiplying motion; and they agree remarkably in their effect, although they differ in their mode of action, and in their subject matter. The former proceeds imperiously and with authority; it orders and compels the assimilated to be converted and changed into the

assimilating body. The latter proceeds by art, insinuation and stealth, inviting and disposing the excited toward the nature of the exciting body. The former both multiplies and transforms bodies and substances; thus a greater quantity of flame, air, spirit and flesh is formed; but in the latter, the powers only are multiplied and changed, and heat, the magnetic power, and putrefaction, in the above instances, are increased. Heat does not diffuse itself when heating other bodies by any communication of the original heat, but only by exciting the parts of the heated body to that motion which is the form of heat, and of which we spoke in the first vintage of the nature of heat. Heat, therefore, is excited much less rapidly and readily in stone or metal than in air, on account of the inaptitude and sluggishness of those bodies in acquiring that motion, so that it is probable, that there may be some substances, toward the centre of the earth, quite incapable of being heated, on account of their density, which may deprive them of the spirit by which the motion of excitement is usually commenced. Thus also the magnet creates in the iron a new disposition of its parts, and a conformable motion, without losing any of its virtue. So the leaven of bread, yeast, rennet and some poisons, excite and invite successive and continued motion in dough, beer, cheese or^[260] the human body; not so much from the power of the exciting, as the predisposition and yielding of the excited body.

Let the thirteenth motion be that of impression, which is also a species of motion of assimilation, and the most subtile of diffusive motions. We have thought it right, however, to consider it as a distinct species, on account of its remarkable difference from the last two; for the simple motion of assimilation transforms the bodies themselves, so that if you remove the first agent, you diminish not the effect of those which succeed; thus, neither the first lighting of flame, nor the first conversion into air, are of any importance to the flame or air next generated. So, also, the motion of excitement still continues for a considerable time after the removal of the first agent, as in a heated body on the removal of the original heat, in the excited iron on the removal of the magnet, and in the dough on the removal of the leaven. But the motion of impression, although diffusive and transitive, appears, nevertheless, to depend on the first agent, so that upon the removal of the latter the former immediately fails and perishes; for which reason also it takes effect in a moment, or at least a very short space of time. We are wont to call the two

former motions the motions of the generation of Jupiter, because when born they continue to exist; and the latter, the motion of the generation of Saturn, because it is immediately devoured and absorbed. It may be seen in three instances: 1, in the rays of light; 2, in the percussions of sounds; 3, in magnetic attractions as regards communication. For, on the removal of light, colors and all its other images disappear, as on the cessation of the first percussion and the vibration of the body, sound soon fails, and although^[261] sounds are agitated by the wind, like waves, yet it is to be observed, that the same sound does not last during the whole time of the reverberation. Thus, when a bell is struck, the sound appears to be continued for a considerable time, and one might easily be led into the mistake of supposing it to float and remain in the air during the whole time, which is most erroneous.^[159] For the reverberation is not one identical sound, but the repetition of sounds, which is made manifest by stopping and confining the sonorous body; thus, if a bell be stopped and held tightly, so as to be immovable, the sound fails, and there is no further reverberation, and if a musical string be touched after the first vibration, either with the finger (as in the harp), or a quill (as in the harpsichord), the sound immediately ceases. If the magnet be removed the iron falls. The moon, however, cannot be removed from the sea, nor the earth from a heavy falling body, and we can, therefore, make no experiment upon them; but the case is the same.

Let the fourteenth motion be that configuration or position, by which bodies appear to desire a peculiar situation, collocation, and configuration with others, rather than union or separation. This is a very abstruse notion, and has not been well investigated; and, in some instances, appears to occur almost without any cause, although we^[262] be mistaken in supposing this to be really the case. For if it be asked, why the heavens revolve from east to west, rather than from west to east, or why they turn on poles situate near the Bears, rather than round Orion or any other part of the heaven, such a question appears to be unreasonable, since these phenomena should be received as determinate and the objects of our experience. There are, indeed, some ultimate and self-existing phenomena in nature, but those which we have just mentioned are not to be referred to that class: for we attribute them to a certain harmony and consent of the universe, which has not yet been properly observed. But if the motion of the earth from west to east be

allowed, the same question may be put, for it must also revolve round certain poles, and why should they be placed where they are, rather than elsewhere? The polarity and variation of the needle come under our present head. There is also observed in both natural and artificial bodies, especially solids rather than fluids, a particular collocation and position of parts, resembling hairs or fibres, which should be diligently investigated, since, without a discovery of them, bodies cannot be conveniently controlled or wrought upon. The eddies observable in liquids by which, when compressed, they successively raise different parts of their mass before they can escape, so as to equalize the pressure, is more correctly assigned to the motion of liberty.

Let the fifteenth motion be that of transmission or of passage, by which the powers of bodies are more or less impeded or advanced by the medium, according to the nature of the bodies and their effective powers, and also according to that of the medium. For one medium is adapted to light, another to sound, another to heat and^[263] cold, another to magnetic action, and so on with regard to the other actions.

Let the sixteenth be that which we term the royal or political motion, by which the predominant and governing parts of any body check, subdue, reduce, and regulate the others, and force them to unite, separate, stand still, move, or assume a certain position, not from any inclination of their own, but according to a certain order, and as best suits the convenience of the governing part, so that there is a sort of dominion and civil government exercised by the ruling part over its subjects. The motion is very conspicuous in the spirits of animals, where, as long as it is in force, it tempers all the motions of the other parts. It is found in a less degree in other bodies, as we have observed in blood and urine, which are not decomposed until the spirit, which mixed and retained their parts, has been emitted or extinguished. Nor is this motion peculiar to spirits only, although in most bodies the spirit predominates, owing to its rapid motion and penetration; for the grosser parts predominate in denser bodies, which are not filled with a quick and active spirit (such as exists in quicksilver or vitriol), so that unless this check or yoke be thrown off by some contrivance, there is no hope of any transformation of such bodies. And let not any one suppose that we have forgotten our subject, because we speak of predominance in this classification of motions, which is made entirely with the view of assisting the

investigation of wrestling instances, or instances of predominance. For we do not now treat of the general predominance of motions or powers, but of that of parts in whole bodies, which constitutes the particular species here considered.

Let the seventeenth motion be the spontaneous motion^[264] of revolution, by which bodies having a tendency to move, and placed in a favorable situation, enjoy their peculiar nature, pursuing themselves and nothing else, and seeking, as it were, to embrace themselves. For bodies seem either to move without any limit, or to tend toward a limit, arrived at which they either revolve according to their peculiar nature, or rest. Those which are favorably situated, and have a tendency to motion, move in a circle with an eternal and unlimited motion; those which are favorably situated and abhor motion, rest. Those which are not favorably situated move in a straight line (as their shortest path), in order to unite with others of a congenial nature. This motion of revolution admits of nine differences: 1, with regard to the centre about which the bodies move; 2, the poles round which they move; 3, the circumference or orbit relatively to its distance from the centre; 4, the velocity, or greater or less speed with which they revolve; 5, the direction of the motion as from east to west, or the reverse; 6, the deviation from a perfect circle, by spiral lines at a greater or less distance from the centre; 7, the deviation from the circle, by spiral lines at a greater or less distance from the poles; 8, the greater or less distance of these spirals from each other; 9, and lastly, the variation of the poles if they be movable; which, however, only affects revolution when circular. The motion in question is, according to common and long-received opinion, considered to be that of the heavenly bodies. There exists, however, with regard to this, a considerable dispute between some of the ancients as well as moderns, who have attributed a motion of revolution to the earth. A much more reasonable controversy, perhaps, exists (if it be not a matter beyond dispute), whether the motion in question (on^[265] the hypothesis of the earth's being fixed) is confined to the heavens, or rather descends and is communicated to the air and water. The rotation of missiles, as in darts, musket-balls, and the like, we refer entirely to the motion of liberty.

Let the eighteenth motion be that of trepidation,^[160] to which (in the sense assigned to it by astronomers) we do not give much credit; but in our serious

and general search after the tendencies of natural bodies, this motion occurs, and appears worthy of forming a distinct species. It is the motion of an (as it were) eternal captivity; when bodies, for instance, being placed not altogether according to their nature, and yet not exactly ill, constantly tremble, and are restless, not contented with their position, and yet not daring to advance. Such is the motion of the heart and pulse of animals, and it must necessarily occur in all bodies which are situated in a mean state, between conveniences and inconveniences; so that being removed from their proper position, they strive to escape, are repulsed, and again continue to make the attempt.

Let the nineteenth and last motion be one which can scarcely be termed a motion, and yet is one; and which we may call the motion of repose, or of abhorrence of motion. It is by this motion that the earth stands by its own weight, while its extremes move toward the middle, not to an imaginary centre, but in order to unite. It is owing to the same tendency, that all bodies of considerable density abhor motion, and their only tendency is not to move, which nature they preserve, although excited and urged^[266] in a variety of ways to motion. But if they be compelled to move, yet do they always appear anxious to recover their former state, and to cease from motion, in which respect they certainly appear active, and attempt it with sufficient swiftness and rapidity, as if fatigued, and impatient of delay. We can only have a partial representation of this tendency, because with us every tangible substance is not only not condensed to the utmost, but even some spirit is added, owing to the action and concocting influence of the heavenly bodies.

We have now, therefore, exhibited the species, or simple elements of the motions, tendencies, and active powers, which are most universal in nature; and no small portion of natural science has been thus sketched out. We do not, however, deny that other instances can perhaps be added, and our divisions changed according to some more natural order of things, and also reduced to a less number; in which respect we do not allude to any abstract classification, as if one were to say, that bodies desire the preservation, exaltation, propagation, or fruition of their nature; or, that motion tends to the preservation and benefit either of the universe (as in the case of those of resistance and connection), or of extensive wholes, as in the case of those of the greater congregation, revolution, and abhorrence of motion, or of particular forms, as in the case of the others. For although such remarks be

just, yet, unless they terminate in matter and construction, according to true definitions, they are speculative, and of little use. In the meantime, our classification will suffice, and be of much use in the consideration of the predominance of powers, and examining the wrestling instances which constitute our present subject.

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For of the motions here laid down, some are quite invincible, some more powerful than others, which they confine, check, and modify; others extend to a greater distance, others are more immediate and swift, others strengthen, increase, and accelerate the rest.

The motion of resistance is most adamant and invincible. We are yet in doubt whether such be the nature of that of connection; for we cannot with certainty determine whether there be a vacuum, either extensive or intermixed with matter. Of one thing, however, we are satisfied, that the reason assigned by Leucippus and Democritus for the introduction of a vacuum (namely, that the same bodies could not otherwise comprehend, and fill greater and less spaces) is false. For there is clearly a folding of matter, by which it wraps and unwraps itself in space within certain limits, without the intervention of a vacuum. Nor is there two thousand times more of vacuum in air than in gold, as there should be on this hypothesis; a fact demonstrated by the very powerful energies of fluids (which would otherwise float like fine dust *in vacuo*), and many other proofs. The other motions direct, and are directed by each other, according to their strength, quantity, excitement, emission, or the assistance or impediments they meet with.

For instance; some armed magnets hold and support iron of sixty times their own weight; so far does the motion of lesser congregation predominate over that of the greater; but if the weight be increased, it yields. A lever of a certain strength will raise a given weight, and so far the motion of liberty predominates over that of the greater congregation, but if the weight be greater, the former motion yields. A piece of leather stretched to a certain point does not break, and so far the motion of continuity^[268] predominates over that of tension, but if the tension be greater, the leather breaks, and the motion of continuity yields. A certain quantity of water flows through a chink, and so far the motion of greater congregation predominates over that of continuity, but if the chink be smaller it yields. If a musket be charged with

ball and powdered sulphur alone, and fire be applied, the ball is not discharged, in which case the motion of greater congregation overcomes that of matter; but when gunpowder is used, the motion of matter in the sulphur predominates, being assisted by that motion, and the motion of avoidance in the nitre; and so of the rest. For wrestling instances (which show the predominance of powers, and in what manner and proportion they predominate and yield) must be searched for with active and industrious diligence.

The methods and nature of this yielding must also be diligently examined, as for instance, whether the motions completely cease, or exert themselves, but are constrained. For in the bodies with which we are acquainted, there is no real but an apparent rest, either in the whole or in parts. This apparent rest is occasioned either by equilibrium, or the absolute predominance of motions. By equilibrium, as in the scales of the balance, which rest if the weights be equal. By predominance, as in perforated jars, in which the water rests, and is prevented from falling by the predominance of the motion of connection. It is, however, to be observed (as we have said before), how far the yielding motions exert themselves. For if a man be held stretched out on the ground against his will, with arms and legs bound down, or otherwise confined, and yet strive with all his power to get up, the struggle is not the less, although ineffectual. The real state of the case (namely, whether^[269] the yielding motion be, as it were, annihilated by the predominance, or there be rather a continued, although an invisible effort) will, perhaps, appear in the concurrence of motions, although it escape our notice in their conflict. For instance: let an experiment be made with muskets; whether a musket-ball, at its utmost range in a straight line, or (as it is commonly called) point-blank, strike with less force when projected upward, where the motion of the blow is simple, than when projected downward, where the motion of gravity concurs with the blow.

The rules of such instances of predominance as occur should be collected: such as the following; the more general the desired advantage is, the stronger will be the motion; the motion of connection, for instance, which relates to the intercourse of the parts of the universe, is more powerful than that of gravity, which relates to the intercourse of dense bodies only. Again, the desire of a private good does not in general prevail against that of a public

one, except where the quantities are small. Would that such were the case in civil matters!

XLIX. In the twenty-fifth rank of prerogative instances we will place suggesting instances; such as suggest, or point out, that which is advantageous to mankind; for bare power and knowledge in themselves exalt rather than enrich human nature. We must, therefore, select from the general store such things as are most useful to mankind. We shall have a better opportunity of discussing these when we treat of the application to practice; besides, in the work of interpretation, we leave room, on every subject, for the human or optative chart; for it is a part of science to make judicious inquiries and wishes.

L. In the twenty-sixth rank of prerogative instances we^[270] will place the generally useful instances. They are such as relate to various points, and frequently occur, sparing by that means considerable labor and new trials. The proper place for treating of instruments and contrivances, will be that in which we speak of the application to practice, and the methods of experiment. All that has hitherto been ascertained, and made use of, will be described in the particular history of each art. At present, we will subjoin a few general examples of the instances in question.

Man acts, then, upon natural bodies (besides merely bringing them together or removing them) by seven principal methods: 1, by the exclusion of all that impedes and disturbs; 2, by compression, extension, agitation, and the like; 3, by heat and cold; 4, by detention in a suitable place; 5, by checking or directing motion; 6, by peculiar harmonies; 7, by a seasonable and proper alternation, series, and succession of all these, or, at least, of some of them.

1. With regard to the first—common air, which is always at hand, and forces its admission, as also the rays of the heavenly bodies, create much disturbance. Whatever, therefore, tends to exclude them may well be considered as generally useful. The substance and thickness of vessels in which bodies are placed when prepared for operations may be referred to this head. So also may the accurate methods of closing vessels by consolidation, or the *lutum sapientiæ*, as the chemists call it. The exclusion of air by means of liquids at the extremity is also very useful, as when they pour oil on wine,

or the juices of herbs, which by spreading itself upon the top like a cover, preserves them uninjured from the air. Powders, also, are serviceable, for although they contain air mixed up in them, yet they ward off the power of the mass of circumambient air,[271] which is seen in the preservation of grapes and other fruits in sand or flour. Wax, honey, pitch, and other resinous bodies, are well used in order to make the exclusion more perfect, and to remove the air and celestial influence. We have sometimes made an experiment by placing a vessel or other bodies in quicksilver, the most dense of all substances capable of being poured round others. Grottoes and subterraneous caves are of great use in keeping off the effects of the sun, and the predatory action of air, and in the north of Germany are used for granaries. The depositing of bodies at the bottom of water may be also mentioned here; and I remember having heard of some bottles of wine being let down into a deep well in order to cool them, but left there by chance, carelessness, and forgetfulness for several years, and then taken out; by which means the wine not only escaped becoming flat or dead, but was much more excellent in flavor, arising (as it appears) from a more complete mixture of its parts. But if the case require that bodies should be sunk to the bottom of water, as in rivers or the sea, and yet should not touch the water, nor be inclosed in sealed vessels, but surrounded only by air, it would be right to use that vessel which has been sometimes employed under water above ships that have sunk, in order to enable the divers to remain below and breathe occasionally by turns. It was of the following nature: A hollow tub of metal was formed, and sunk so as to have its bottom parallel with the surface of the water; it thus carried down with it to the bottom of the sea all the air contained in the tub. It stood upon three feet (like a tripod), being of rather less height than a man, so that, when the diver was in want of breath, he could put his head into the hollow of the tub, breathe, and then continue his work.[272] We hear that some sort of boat or vessel has now been invented, capable of carrying men some distance under water. Any bodies, however, can easily be suspended under some such vessel as we have mentioned, which has occasioned our remarks upon the experiment.

Another advantage of the careful and hermetical closing of bodies is this— not only the admission of external air is prevented (of which we have treated), but the spirit of bodies also is prevented from making its escape,

which is an internal operation. For any one operating on natural bodies must be certain as to their quantity, and that nothing has evaporated or escaped, since profound alterations take place in bodies, when art prevents the loss or escape of any portion, while nature prevents their annihilation. With regard to this circumstance, a false idea has prevailed (which if true would make us despair of preserving quantity without diminution), namely, that the spirit of bodies, and air when rarefied by a great degree of heat, cannot be so kept in by being inclosed in any vessel as not to escape by the small pores. Men are led into this idea by the common experiments of a cup inverted over water, with a candle or piece of lighted paper in it, by which the water is drawn up, and of those cups which, when heated, draw up the flesh. For they think that in each experiment the rarefied air escapes, and that its quantity is therefore diminished, by which means the water or flesh rises by the motion of connection. This is, however, most incorrect. For the air is not diminished in quantity, but contracted in dimensions,[\[161\]](#) nor does this motion of the rising of the water[\[273\]](#) begin till the flame is extinguished, or the air cooled, so that physicians place cold sponges, moistened with water, on the cups, in order to increase their attraction. There is, therefore, no reason why men should fear much from the ready escape of air: for although it be true that the most solid bodies have their pores, yet neither air, nor spirit, readily suffers itself to be rarefied to such an extreme degree; just as water will not escape by a small chink.

2. With regard to the second of the seven above-mentioned methods, we must especially observe, that compression and similar violence have a most powerful effect either in producing locomotion, and other motions of the same nature, as may be observed in engines and projectiles, or in destroying the organic body, and those qualities, which consist entirely in motion (for all life, and every description of flame and ignition are destroyed by compression, which also injures and deranges every machine); or in destroying those qualities which consist in position and a coarse difference of parts, as in colors; for the color of a flower when whole, differs from that it presents when bruised, and the same may be observed of whole and powdered amber; or in tastes, for the taste of a pear before it is ripe, and of the same pear when bruised and softened, is different, since it becomes perceptibly more sweet. But such violence is of little avail in the more noble

transformations and changes of homogeneous bodies, for they do not, by such means, acquire any constantly and permanently new state, but one that is transitory, and always struggling to return to its former habit and freedom. It would not, however, be useless^[274] to make some more diligent experiments with regard to this; whether, for instance, the condensation of a perfectly homogeneous body (such as air, water, oil, and the like) or their rarefaction, when effected by violence, can become permanent, fixed, and, as it were, so changed, as to become a nature. This might at first be tried by simple perseverance, and then by means of helps and harmonies. It might readily have been attempted (if we had but thought of it), when we condensed water (as was mentioned above), by hammering and compression, until it burst out. For we ought to have left the flattened globe untouched for some days, and then to have drawn off the water, in order to try whether it would have immediately occupied the same dimensions as it did before the condensation. If it had not done so, either immediately, or soon afterward, the condensation would have appeared to have been rendered constant; if not, it would have appeared that a restitution took place, and that the condensation had been transitory. Something of the same kind might have been tried with the glass eggs; the egg should have been sealed up suddenly and firmly, after a complete exhaustion of the air, and should have been allowed to remain so for some days, and it might then have been tried whether, on opening the aperture, the air would be drawn in with a hissing noise, or whether as much water would be drawn into it when immersed, as would have been drawn into it at first, if it had not continued sealed. For it is probable (or, at least, worth making the experiment) that this might have happened, or might happen, because perseverance has a similar effect upon bodies which are a little less homogeneous. A stick bent together for some time does not rebound, which is not owing to any loss of quantity in the wood during the time, for the same would^[275] occur (after a larger time) in a plate of steel, which does not evaporate. If the experiment of simple perseverance should fail, the matter should not be given up, but other means should be employed. For it would be no small advantage, if bodies could be endued with fixed and constant natures by violence. Air could then be converted into water by condensation, with other similar effects; for man is more the master of violent motions than of any other means.

3. The third of our seven methods is referred to that great practical engine of nature, as well as of art, cold and heat. Here, man's power limps, as it were, with one leg. For we possess the heat of fire, which is infinitely more powerful and intense than that of the sun (as it reaches us), and that of animals. But we want cold,^[162] except such as we can obtain in winter, in caverns, or by surrounding objects with snow and ice, which, perhaps, may be compared in degree with the noontide heat of the sun in tropical countries, increased by the reflection of mountains and walls. For this degree of heat and cold can be borne for a short period only by animals, yet it is nothing compared with the heat of a burning furnace, or the corresponding degree of cold.^[163] Everything with us has a tendency to become rarefied, dry and wasted, and nothing^[276] to become condensed or soft, except by mixtures, and, as it were, spurious methods. Instances of cold, therefore, should be searched for most diligently, such as may be found by exposing bodies upon buildings in a hard frost, in subterraneous caverns, by surrounding bodies with snow and ice in deep places excavated for that purpose, by letting bodies down into wells, by burying bodies in quicksilver and metals, by immersing them in streams which petrify wood, by burying them in the earth (which the Chinese are reported to do with their china, masses of which, made for that purpose, are said to remain in the ground for forty or fifty years, and to be transmitted to their heirs as a sort of artificial mine) and the like. The condensations which take place in nature, by means of cold, should also be investigated, that by learning their causes, they may be introduced into the arts; such as are observed in the exudation of marble and stones, in the dew upon the panes of glass in a room toward morning after a frosty night, in the formation and the gathering of vapors under the earth into water, whence spring fountains and the like.

Besides the substances which are cold to the touch, there are others which have also the effect of cold, and condense; they appear, however, to act only upon the bodies of animals, and scarcely any further. Of these we have many instances, in medicines and plasters. Some condense the flesh and tangible parts, such as astringent and inspissating medicines, others the spirits, such as soporifics. There are two modes of condensing the spirits, by soporifics or provocatives to sleep; the one by calming the motion, the other by expelling the spirit. The violet, dried roses, lettuces, and other benign or mild remedies,

by their friendly and gently cooling vapors, invite the spirits^[277] to unite, and restrain their violent and perturbed motion. Rose-water, for instance, applied to the nostrils in fainting fits, causes the resolved and relaxed spirits to recover themselves, and, as it were, cherishes them. But opiates, and the like, banish the spirits by their malignant and hostile quality. If they be applied, therefore, externally, the spirits immediately quit the part and no longer readily flow into it; but if they be taken internally, their vapor, mounting to the head, expels, in all directions, the spirits contained in the ventricles of the brain, and since these spirits retreat, but cannot escape, they consequently meet and are condensed, and are sometimes completely extinguished and suffocated; although the same opiates, when taken in moderation, by a secondary accident (the condensation which succeeds their union), strengthen the spirits, render them more robust, and check their useless and inflammatory motion, by which means they contribute not a little to the cure of diseases, and the prolongation of life.

The preparations of bodies, also, for the reception of cold should not be omitted, such as that water a little warmed is more easily frozen than that which is quite cold, and the like.

Moreover, since nature supplies cold so sparingly, we must act like the apothecaries, who, when they cannot obtain any simple ingredient, take a succedaneum, or *quid pro quo*, as they term it, such as aloes for xylobalsamum, cassia for cinnamon. In the same manner we should look diligently about us, to ascertain whether there may be any substitutes for cold, that is to say, in what other manner condensation can be effected, which is the peculiar operation of cold. Such condensations appear hitherto to be of four kinds only. 1. By simple compression, which is of little^[278] avail toward permanent condensation, on account of the elasticity of substances, but may still, however, be of some assistance. 2. By the contraction of the coarser, after the escape or departure of the finer parts of a given body; as is exemplified in induration by fire, and the repeated heating and extinguishing of metals, and the like. 3. By the cohesion of the most solid homogeneous parts of a given body, which were previously separated, and mixed with others less solid, as in the return of sublimated mercury to its simple state, in which it occupies much less space than it did in powder, and the same may be observed of the cleansing of all metals from their dross. 4. By harmony, or

the application of substances which condense by some latent power. These harmonies are as yet but rarely observed, at which we cannot be surprised, since there is little to hope for from their investigation, unless the discovery of forms and confirmation be attained. With regard to animal bodies, it is not to be questioned that there are many internal and external medicines which condense by harmony, as we have before observed, but this action is rare in inanimate bodies. Written accounts, as well as report, have certainly spoken of a tree in one of the Tercera or Canary Islands (for I do not exactly recollect which) that drips perpetually, so as to supply the inhabitants, in some degree, with water; and Paracelsus says that the herb called *ros solis* is filled with dew at noon, while the sun gives out its greatest heat, and all other herbs around it are dry. We treat both these accounts as fables; they would, however, if true, be of the most important service, and most worthy of examination. As to the honey-dew, resembling manna, which is found in May on the leaves of the oak, we are of opinion that it is not condensed by any harmony or peculiarity^[279] of the oak leaf, but that while it falls equally upon other leaves it is retained and continues on those of the oak, because their texture is closer, and not so porous as that of most of the other leaves.^[164]

With regard to heat, man possesses abundant means and power; but his observation and inquiry are defective in some respects, and those of the greatest importance, notwithstanding the boasting of quacks. For the effects of intense heat are examined and observed, while those of a more gentle degree of heat, being of the most frequent occurrence in the paths of nature, are, on that very account, least known. We see, therefore, the furnaces, which are most esteemed, employed in increasing the spirits of bodies to a great extent, as in the strong acids, and some chemical oils; while the tangible parts are hardened, and, when the volatile part has escaped, become sometimes fixed; the homogeneous parts are separated, and the heterogeneous incorporated and agglomerated in a coarse lump; and (what is chiefly worthy of remark) the junction of compound bodies, and the more delicate conformations are destroyed and confounded. But the operation of a less violent heat should be tried and investigated, by which more delicate mixtures and regular conformations may be produced and elicited, according to the example of nature, and in imitation of the effect of the sun, which we have alluded to in the [aphorism on the instances of alliance](#). For the works of

nature are carried on in much smaller portions, and in more delicate and varied positions than those of fire, as we now employ it. But man will then appear to have really augmented his power, when the works of nature can be^[280] imitated in species, perfected in power, and varied in quantity; to which should be added the acceleration in point of time. Rust, for instance, is the result of a long process, but *crocus martis* is obtained immediately; and the same may be observed of natural verdigris and ceruse. Crystal is formed slowly, while glass is blown immediately: stones increase slowly, while bricks are baked immediately, etc. In the meantime (with regard to our present subject) every different species of heat should, with its peculiar effects, be diligently collected and inquired into; that of the heavenly bodies, whether their rays be direct, reflected, or refracted, or condensed by a burning-glass; that of lightning, flame, and ignited charcoal; that of fire of different materials, either open or confined, straitened or overflowing, qualified by the different forms of the furnaces, excited by the bellows, or quiescent, removed to a greater or less distance, or passing through different media; moist heats, such as the *balneum Mariæ*, and the dunghill; the external and internal heat of animals; dry heats, such as the heat of ashes, lime, warm sand; in short, the nature of every kind of heat, and its degrees.

We should, however, particularly attend to the investigation and discovery of the effects and operations of heat, when made to approach and retire by degrees, regularly, periodically, and by proper intervals of space and time. For this systematical inequality is in truth the daughter of heaven and mother of generation, nor can any great result be expected from a vehement, precipitate, or desultory heat. For this is not only most evident in vegetables, but in the wombs of animals also there arises a great inequality of heat, from the motion, sleep, food, and passions of the female. The same inequality prevails in those subterraneous^[281] beds where metals and fossils are perpetually forming, which renders yet more remarkable the ignorance of some of the reformed alchemists, who imagined they could attain their object by the equable heat of lamps, or the like, burning uniformly. Let this suffice concerning the operation and effects of heat; nor is it time for us to investigate them thoroughly before the forms and conformations of bodies have been further examined and brought to light. When we have determined upon our models, we may seek, apply, and arrange our instruments.

4. The fourth mode of action is by continuance, the very steward and almoner, as it were, of nature. We apply the term continuance to the abandonment of a body to itself for an observable time, guarded and protected in the meanwhile from all external force. For the internal motion then commences to betray and exert itself when the external and adventitious is removed. The effects of time, however, are far more delicate than those of fire. Wine, for instance, cannot be clarified by fire as it is by continuance. Nor are the ashes produced by combustion so fine as the particles dissolved or wasted by the lapse of ages. The incorporations and mixtures, which are hurried by fire, are very inferior to those obtained by continuance; and the various conformations assumed by bodies left to themselves, such as mouldiness, etc., are put a stop to by fire or a strong heat. It is not, in the meantime, unimportant to remark that there is a certain degree of violence in the motion of bodies entirely confined; for the confinement impedes the proper motion of the body. Continuance in an open vessel, therefore, is useful for separations, and in one hermetically sealed for mixtures, that in a vessel partly closed, but admitting the air, for putrefaction. But instances of the^[282] operation and effect of continuance must be collected diligently from every quarter.

5. The direction of motion (which is the fifth method of action) is of no small use. We adopt this term, when speaking of a body which, meeting with another, either arrests, repels, allows, or directs its original motion. This is the case principally in the figure and position of vessels. An upright cone, for instance, promotes the condensation of vapor in alembics, but when reversed, as in inverted vessels, it assists the refining of sugar. Sometimes a curved form, or one alternately contracted and dilated, is required. Strainers may be ranged under this head, where the opposed body opens a way for one portion of another substance and impedes the rest. Nor is this process or any other direction of motion carried on externally only, but sometimes by one body within another. Thus, pebbles are thrown into water to collect the muddy particles, and syrups are refined by the white of an egg, which glues the grosser particles together so as to facilitate their removal. Telesius, indeed, rashly and ignorantly enough attributes the formation of animals to this cause, by means of the channels and folds of the womb. He ought to have observed a similar formation of the young in eggs which have no wrinkles or

inequalities. One may observe a real result of this direction of motion in casting and modelling.

6. The effects produced by harmony and aversion (which is the sixth method) are frequently buried in obscurity; for these occult and specific properties (as they are termed), the sympathies and antipathies, are for the most part but a corruption of philosophy. Nor can we form any great expectation of the discovery of the harmony which exists between natural objects, before that of their forms and^[283] simple conformations, for it is nothing more than the symmetry between these forms and conformations.

The greater and more universal species of harmony are not, however, so wholly obscure, and with them, therefore, we must commence. The first and principal distinction between them is this; that some bodies differ considerably in the abundance and rarity of their substance, but correspond in their conformation; others, on the contrary, correspond in the former and differ in the latter. Thus the chemists have well observed, that in their trial of first principles sulphur and mercury, as it were, pervade the universe; their reasoning about salt, however, is absurd, and merely introduced to comprise earthy dry fixed bodies. In the other two, indeed, one of the most universal species of natural harmony manifests itself. Thus there is a correspondence between sulphur, oil, greasy exhalations, flame, and, perhaps, the substance of the stars. On the other hand, there is a like correspondence between mercury, water, aqueous vapor, air, and, perhaps, pure inter-sidereal ether. Yet do these two quaternions, or great natural tribes (each within its own limits), differ immensely in quantity and density of substance, while they generally agree in conformation, as is manifest in many instances. On the other hand, the metals agree in such quantity and density (especially when compared with vegetables, etc.), but differ in many respects in conformation. Animals and vegetables, in like manner, vary in their almost infinite modes of conformation, but range within very limited degrees of quantity and density of substance.

The next most general correspondence is that between individual bodies and those which supply them by way of menstruum or support. Inquiry, therefore, must be made^[284] as to the climate, soil, and depth at which each metal is generated, and the same of gems, whether produced in rocks or mines, also as to the soil in which particular trees, shrubs, and herbs, mostly

grow and, as it were, delight; and as to the best species of manure, whether dung, chalk, sea sand, or ashes, etc., and their different propriety and advantage according to the variety of soils. So also the grafting and setting of trees and plants (as regards the readiness of grafting one particular species on another) depends very much upon harmony, and it would be amusing to try an experiment I have lately heard of, in grafting forest trees (garden trees alone having hitherto been adopted), by which means the leaves and fruit are enlarged, and the trees produce more shade. The specific food of animals again should be observed, as well as that which cannot be used. Thus the carnivorous cannot be fed on herbs, for which reason the order of feuilletans, the experiment having been made, has nearly vanished; human nature being incapable of supporting their regimen, although the human will has more power over the bodily frame than that of other animals. The different kinds of putrefaction from which animals are generated should be noted.

The harmony of principal bodies with those subordinate to them (such indeed may be deemed those we have alluded to above) are sufficiently manifest, to which may be added those that exist between different bodies and their objects, and, since these latter are more apparent, they may throw great light when well observed and diligently examined upon those which are more latent.

The more internal harmony and aversion, or friendship and enmity (for superstition and folly have rendered the terms of sympathy and antipathy almost disgusting), have^[285] been either falsely assigned, or mixed with fable, or most rarely discovered from neglect. For if one were to allege that there is an enmity between the vine and the cabbage, because they will not come up well when sown together, there is a sufficient reason for it in the succulent and absorbent nature of each plant, so that the one defrauds the other. Again, if one were to say that there is a harmony and friendship between the corn and the corn-flower, or the wild poppy, because the latter seldom grow anywhere but in cultivated soils, he ought rather to say, there is an enmity between them, for the poppy and the corn-flower are produced and created by those juices which the corn has left and rejected, so that the sowing of the corn prepares the ground for their production. And there are a vast number of similar false assertions. As for fables, they must be totally exterminated. There remains, then, but a scanty supply of such species of

harmony as has borne the test of experiment, such as that between the magnet and iron, gold and quicksilver, and the like. In chemical experiments on metals, however, there are some others worthy of notice, but the greatest abundance (where the whole are so few in numbers) is discovered in certain medicines, which, from their occult and specific qualities (as they are termed), affect particular limbs, humors, diseases, or constitutions. Nor should we omit the harmony between the motion and phenomena of the moon, and their effects on lower bodies, which may be brought together by an accurate and honest selection from the experiments of agriculture, navigation, and medicine, or of other sciences. By as much as these general instances, however, of more latent harmony, are rare, with so much the more diligence are they to be inquired after, through tradition, and faithful and honest^[286] reports, but without rashness and credulity, with an anxious and, as it were, hesitating degree of reliance. There remains one species of harmony which, though simple in its mode of action, is yet most valuable in its use, and must by no means be omitted, but rather diligently investigated. It is the ready or difficult coition or union of bodies in composition, or simple juxtaposition. For some bodies readily and willingly mix, and are incorporated, others tardily and perversely; thus powders mix best with water, chalk and ashes with oils, and the like. Nor are these instances of readiness and aversion to mixture to be alone collected, but others, also, of the collocation, distribution, and digestion of the parts when mingled, and the predominance after the mixture is complete.

7. Lastly, there remains the seventh, and last of the seven, modes of action; namely, that by the alternation and interchange of the other six; but of this, it will not be the right time to offer any examples, until some deeper investigation shall have taken place of each of the others. The series, or chain of this alternation, in its mode of application to separate effects, is no less powerful in its operation than difficult to be traced. But men are possessed with the most extreme impatience, both of such inquiries, and their practical application, although it be the clew of the labyrinth in all greater works. Thus far of the generally useful instances.

LI. The twenty-seventh and last place we will assign to the magical instances, a term which we apply to those where the matter or efficient agent is scanty or small, in comparison with the grandeur of the work or effect

produced; so that even when common they appear miraculous, some at first sight, others even upon more attentive observation.[287] Nature, however, of herself, supplies these but sparingly. What she will do when her whole store is thrown open, and after the discovery of forms, processes, and conformation, will appear hereafter. As far as we can yet conjecture, these magic effects are produced in three ways, either by self-multiplication, as in fire, and the poisons termed specific, and the motions transferred and multiplied from wheel to wheel; or by the excitement, or, as it were, invitation of another substance, as in the magnet, which excites innumerable needles without losing or diminishing its power; and again in leaven, and the like; or by the excess of rapidity of one species of motion over another, as has been observed in the case of gunpowder, cannon, and mines. The two former require an investigation of harmonies, the latter of a measure of motion. Whether there be any mode of changing bodies *per minima* (as it is termed), and transferring the delicate conformations of matter, which is of importance in all transformations of bodies, so as to enable art to effect, in a short time, that which nature works out by divers expedients, is a point of which we have as yet no indication. But, as we aspire to the extremest and highest results in that which is solid and true, so do we ever detest, and, as far as in us lies, expel all that is empty and vain.

LII. Let this suffice as to the respective dignity of prerogatives of instances. But it must be noted, that in this our organ, we treat of logic, and not of philosophy. Seeing, however, that our logic instructs and informs the understanding, in order that it may not, with the small hooks, as it were, of the mind, catch at, and grasp mere abstractions, but rather actually penetrate nature, and discover the properties and effects of bodies, and the determinate laws of[288] their substance (so that this science of ours springs from the nature of things, as well as from that of the mind); it is not to be wondered at, if it have been continually interspersed and illustrated with natural observations and experiments, as instances of our method. The prerogative instances are, as appears from what has preceded, twenty-seven in number, and are termed, solitary instances, migrating instances, conspicuous instances, clandestine instances, constitutive instances, similar instances, singular instances, deviating instances, bordering instances, instances of power, accompanying and hostile instances, subjunctive instances, instances

of alliance, instances of the cross, instances of divorce, instances of the gate, citing instances, instances of the road, supplementary instances, lancing instances, instances of the rod, instances of the course, doses of nature, wrestling instances, suggesting instances, generally useful instances, and magical instances. The advantage, by which these instances excel the more ordinary, regards specifically either theory or practice, or both. With regard to theory, they assist either the senses or the understanding; the senses, as in the five instances of the lamp; the understanding, either by expediting the exclusive mode of arriving at the form, as in solitary instances, or by confining, and more immediately indicating the affirmative, as in the migrating, conspicuous, accompanying, and subjunctive instances; or by elevating the understanding, and leading it to general and common natures, and that either immediately, as in the clandestine and singular instances, and those of alliance; or very nearly so, as in the constitutive; or still less so, as in the similar instances; or by correcting the understanding of its habits, as in the deviating instances; or by leading to the grand form or fabric of the universe, as in the bordering^[289] instances; or by guarding it from false forms and causes, as in those of the cross and of divorce. With regard to practice, they either point it out, or measure, or elevate it. They point it out, either by showing where we must commence in order not to repeat the labors of others, as in the instances of power; or by inducing us to aspire to that which may be possible, as in the suggesting instances; the four mathematical instances measure it. The generally useful and the magical elevate it.

Again, out of these twenty-seven instances, some must be collected immediately, without waiting for a particular investigation of properties. Such are the similar, singular, deviating, and bordering instances, those of power, and of the gate, and suggesting, generally useful, and magical instances; for these either assist and cure the understanding and senses, or furnish our general practice. The remainder are to be collected when we finish our synoptical tables for the work of the interpreter, upon any particular nature; for these instances, honored and gifted with such prerogatives, are like the soul amid the vulgar crowd of instances, and (as we from the first observed) a few of them are worth a multitude of the others. When, therefore, we are forming our tables they must be searched out with the greatest zeal, and placed in the table. And, since mention must be made of

them in what follows, a treatise upon their nature has necessarily been prefixed. We must next, however, proceed to the supports and corrections of induction, and thence to concretes, the latent process, and latent conformations, and the other matters, which we have enumerated in their order in the [twenty-first aphorism](#), in order that, like good and faithful guardians, we may yield up their fortune to mankind upon the emancipation and majority^[290] of their understanding; from which must necessarily follow an improvement of their estate, and an increase of their power over nature. For man, by the fall, lost at once his state of innocence, and his empire over creation, both of which can be partially recovered even in this life, the first by religion and faith, the second by the arts and sciences. For creation did not become entirely and utterly rebellious by the curse, but in consequence of the Divine decree, “in the sweat of thy brow shalt thou eat bread,” she is compelled by our labors (not assuredly by our disputes or magical ceremonies), at length, to afford mankind in some degree his bread, that is to say, to supply man’s daily wants.

END OF “NOVUM ORGANUM”

FOOTNOTES

[71] Τὸ τὶ ἦν εἶναι, or ἦν οὐσία of Aristotle.—See lib. iii. Metaph.

[72] These divisions are from Aristotle’s Metaphysics, where they are termed, 1. ὕλη ἢ τὸ ὑποκείμενον. 2. τὸ τὶ ἦν εἶναι. 3. ὅθεν ἢ ἀρχὴ τῆς κινήσεως. 4. τὸ οὗ ἕνεκεν—καὶ τὸ ἀγαθόν.

[73] See [Aphorism li.](#) and [second paragraph of Aphorism lxxv.](#) in the first book.

[74] Bacon means, that although there exist in nature only individualities, yet a certain number of these may have common properties, and be controlled by the same laws. Now, these homogeneous qualities which distinguish them from other individuals, lead us to class them under one expression, and sometimes under a single term. Yet these classes are only pure conceptions in Bacon’s opinion, and cannot be taken for distinct substances. He evidently here aims a blow at the Realists, who concluded that the essence which united individualities in a class was the only real and immutable existence in nature, inasmuch as it entered into their ideas of individual substances as a distinct and essential property, and continued in the mind as the mold, type or pattern of the class, while its individual forms were undergoing perpetual renovation and decay.—*Ed.*

[75] Bacon's definition is obscure. All the idea we have of a law of nature consists in invariable sequence between certain classes of phenomena; but this cannot be the complete sense attached by Bacon to the term form, as he employs it in the [fourth aphorism](#) as convertible with the nature of any object; and again, in the [first aphorism](#), as the *natura naturans*, or general law or condition in any substance or quality—*natura naturata*—which is whatever its form is, or that particular combination of forces which impresses a certain nature upon matter subject to its influence. Thus, in the Newtonian sense, the form of whiteness would be that combination of the seven primitive rays of light which give rise to that color. In combination with this word, and affording a still further insight into its meaning, we have the phrases, *latens processus ad formam, et latens schematismus corporum*. Now, the *latens schematismus* signifies the internal texture, structure, or configuration of bodies, or the result of the respective situation of all the parts of a body; while the *latens processus ad formam* points out the gradation of movements which takes place among the molecula of bodies when they either conserve or change their figure. Hence we may consider the form of any quality in body as something convertible with that quality, *i.e.*, when it exists the quality is present, and *vice versâ*. In this sense, the form of a thing differs only from its efficient cause in being permanent, whereas we apply cause to that which exists in order of time. The *latens processus* and *latens schematismus* are subordinate to form, as concrete exemplifications of its essence. The former is the secret and invisible process by which change is effected, and involves the principle since called the law of continuity. Thus, the succession of events between the application of the match to the expulsion of the bullet is an instance of latent progress which we can now trace with some degree of accuracy. It also more directly refers to the operation by which one form or condition of being is induced upon another. For example, when the surface of iron becomes rusty, or when water is converted into steam, some change has taken place, or latent process from one form to another. Mechanics afford many exemplifications of the first latent process we have denoted, and chemistry of the second. The *latens schematismus* is that visible structure of bodies on which so many of their properties depend. When we inquire into the constitution of crystals, and into the internal structure of plants, we are examining into their latent schematism.—*Ed.*

[76] By the recent discoveries in electric magnetism, copper wires, or, indeed, wires of any metal, may be transformed into magnets; the magnetic law, or form, having been to that extent discovered.

[77] Haller has pursued this investigation in his "Physiology," and has left his successors little else to do than repeat his discoveries.—*Ed.*

[78] Bacon here first seems pregnant with the important development of the higher calculus, which, in the hands of Newton and Descartes, was to effect as great a revolution in philosophy as his method.—*Ed.*

[79] By spirit, Bacon here plainly implies material fluid too fine to be grasped by the unassisted sense, which rather operates than reasons. We sometimes adopt the same mode of expression, as in the words spirits of nitre, spirits of wine. Some such agency has been assumed by nearly all the modern physicists, a few of whom, along with Bacon, would leave us to gather from their expressions, that they believe such bodies endowed with the sentient powers of perception. As another specimen of his sentiment on this subject, we may refer to a paragraph on the decomposition of compounds, in his essay on death, beginning—"The spirit which exists in all living bodies, keeps all the parts in due subjection; when it escapes, the body decomposes, or the similar parts unite."—*Ed.*

[80] The theory of the Epicureans and others. The atoms are supposed to be invisible, unalterable particles, endued with all the properties of the given body, and forming that body by their union. They must be separated, of course, which either takes a vacuum for granted, or introduces a tertium quid into

the composition of the body.

[81] Compare the three following aphorisms with the last three chapters of the third book of the “De Augmentis Scientiarum.”

[82] Bacon gives this unfortunate term its proper signification; *μετα*, in composition, with the Greeks signifying change or mutation. Most of our readers, no doubt, are aware that the obtrusion of this word into technical philosophy was purely capricious, and is of no older date than the publication of Aristotle’s works by Andronicus of Rhodes, one of the learned men into whose hands the manuscripts of that philosopher fell, after they were brought by Sylla from Athens to Rome. To fourteen books in these MSS. with no distinguishing title, Andronicus is said to have prefixed the words *τα μετα τα φυσικα*, to denote the place which they ought to hold either in the order of Aristotle’s arrangement, or in that of study. These books treat first of those subjects which are common to matter and mind; secondly, of things separate from matter, *i.e.* of God, and of the subordinate spirits, which were supposed by the Peripatetics to watch over particular portions of the universe. The followers of Aristotle accepted the whimsical title of Andronicus, and in their usual manner allowed a word to unite things into one science which were plainly heterogeneous. Their error was adopted by the Peripatetics of the Christian Church. The schoolmen added to the notion of ontology, the science of the mind, or pneumatology, and as that genus of being has since become extinct with the schools, metaphysics thus in modern parlance comes to be synonymous with psychology. It were to be wished that Bacon’s definition of the term had been accepted, and mental science delivered from one of the greatest monstrosities in its nomenclature, yet Bacon whimsically enough in his *De Augmentis* includes mathematics in metaphysics.—*Ed.*

[83]

“Ne tenues pluviae, rapidive potentia solis
Acrior, aut Boreae penetrabile frigus adurat.”
—Virg. Georg. i. 92, 93.

[84] This notion, which he repeats again, and particularizes in the [18th aph.](#) of this book, is borrowed from the ancients, and we need not say is as wise as their other astronomical conjectures. The sun also approaches stars quite as large in other quarters of the zodiac, when it looks down upon the earth through the murky clouds of winter. When that luminary is in Leo, the heat of the earth is certainly greater than at any other period, but this arises from the accumulation of heat after the solstice, for the same reason that the maximum heat of the day is at two o’clock instead of noon.—*Ed.*

[85] Bouguer, employed by Louis XIV. in philosophical researches, ascended the Andes to discover the globular form of the earth, and published an account of his passage, which verifies the statement of Bacon.

[86] Montanari asserts in his book against the astrologers that he had satisfied himself by numerous and oft-repeated experiments, that the lunar rays gathered to a focus produced a sensible degree of heat. Muschenbröck, however, adopts the opposite opinion, and asserts that himself, De la Hire, Villet, and Tschirnhausen had tried with that view the strongest burning-glasses in vain. (*Opera de Igne.*) De la Lande makes a similar confession in his *Astronomy* (vol. ii. vii. § 1413). Bouguer, whom we have just quoted, demonstrated that the light of the moon was 300,000 degrees less than that of the sun; it would consequently be necessary to invent a glass with an absorbing power 300,000 degrees greater than those ordinarily in use, to try the experiment Bacon speaks of.—*Ed.*

[87] In this thermometer, mercury was not dilated by heat or contracted by cold, as the one now in use, but a mass of air employed instead, which filled the cavity of the bulb. This being placed in an inverted position to ours, that is to say, with the bulb uppermost, pressed down the liquor when the air became dilated by heat, as ours press it upward; and when the heat diminished, the liquor rose to occupy the place vacated by the air, as the one now in use descends. It consequently was liable to be affected by a change in the temperature, as by the weight of air, and could afford only a rude standard of accuracy in scientific investigations. This thermometer was not Bacon's own contrivance, as is commonly supposed, but that of Drebbel.—*Ed.*

[88] La Lande is indignant that the Chaldeans should have more correct notions of the nature of comets than the modern physicists, and charges Bacon with entertaining the idea that they were the mere effects of vapor and heat. This passage, with two others more positive, in the "De Aug." (cap. xl.) and the "Descript. Globi Intellect." (cap. vi.) certainly afford ground for the assertion; but if Bacon erred, he erred with Galileo, and with the foremost spirits of the times. It is true that Pythagoras and Seneca had asserted their belief in the solidity of these bodies, but the wide dominion which Aristotle subsequently exercised, threw their opinions into the shade, and made the opposite doctrine everywhere paramount.—*Ed.*

[89] Was it a silk apron which exhibited electric sparks? Silk was then scarce.

[90] The Italian fire-fly.

[91] This last is found to be the real reason, air not being a good conductor, and therefore not allowing the escape of heat. The confined air is disengaged when these substances are placed under an exhausted receiver.

[92] This is erroneous. Air, in fact, is one of the worst, and metals are the best conductors of heat.

[93] See [No. 28 in the table of the degrees of heat](#).

[94] Bacon here mistakes sensation confined to ourselves for an internal property of distinct substances. Metals are denser than wood, and our bodies consequently coming into contact with more particles of matter when we touch them, lose a greater quantity of heat than in the case of lighter substances.—*Ed.*

[95] This was the ancient opinion, but the moderns incline to the belief that these insects are produced by generation or fecundity from seeds deposited by their tribes in bodies on the verge of putrefaction.—*Ed.*

[96] The correct measure of the activity of flame may be obtained by multiplying its natural force into the square of its velocity. On this account the flame of vivid lightning mentioned in [No. 23](#) contains so much vigor, its velocity being greater than that arising from other heat.—*Ed.*

[97] The fires supply fresh heat, the water has only a certain quantity of heat, which being diffused over a fresh supply of cooler water, must be on the whole lowered.

[98] If condensation were the cause of the greater heat, Bacon concludes the centre of the flame would be the hotter part, and *vice versâ*. The fact is, neither of the causes assigned by Bacon is the true one; for the fire burns more quickly only because the draught of air is more rapid, the cold dense air pressing rapidly into the heated room and toward the chimney.—*Ed.*

[99] Bacon appears to have confounded combustibility and fusibility with susceptibility of heat; for

though the metals will certainly neither dissolve as soon as ice or butter, nor be consumed as soon as wood, that only shows that different degrees of heat are required to produce similar effects on different bodies; but metals much more readily acquire and transmit the same degree of heat than any of the above substances. The rapid transmission renders them generally cold to the touch. The convenience of fixing wooden handles to vessels containing hot water illustrates these observations.

[100] Another singular error, the truth being, that solid bodies are the best conductors; but of course where heat is diffused over a large mass, it is less in each part, than if that part alone absorbed the whole quantum of heat.—*Ed.*

[101] This general law or form has been well illustrated by Newton's discovery of the decomposition of colors.

[102] *I.e.*, the common link or form which connects the various kinds of natures, such as the different hot or red natures enumerated above.—See [Aphorism iii. part 2](#).

[103] This is erroneous—all metals expand considerably when heated.

[104] “Quid ipsum,” the τὸ τί ἦν εἶναι of Aristotle.

[105] To show the error of the text, we need only mention the case of water, which, when confined in corked vases, and exposed to the action of a freezing atmosphere, is sure to swell out and break those vessels which are not sufficiently large to contain its expanded volume. Megalotti narrates a hundred other instances of a similar character.—*Ed.*

[106] Bacon's inquisition into the nature of heat, as an example of the mode of interpreting nature, cannot be looked upon otherwise than as a complete failure. Though the exact nature of this phenomenon is still an obscure and controverted matter, the science of thermotics now consists of many important truths, and to none of these truths is there so much as an approximation in Bacon's process. The steps by which this science really advanced were the discovery of a measure of a heat or temperature, the establishment of the laws of conduction and radiation, of the laws of specific heat, latent heat, and the like. Such advances have led to Ampère's hypothesis, that heat consists in the vibrations of an imponderable fluid; and to Laplace's theory, that temperature consists in the internal radiation of a similar medium. These hypotheses cannot yet be said to be even probable, but at least they are so modified as to include some of the preceding laws which are firmly established, whereas Bacon's “form,” or true definition of heat, as stated in the text, includes no laws of phenomena, explains no process, and is indeed itself an example of illicit generalization.

In all the details of his example of heat he is unfortunate. He includes in his collection of instances, the *hot* tastes of aromatic plants, the caustic effects of acids, and many other facts which cannot be ascribed to heat without a studious laxity in the use of the word.—*Ed.*

[107] By this term Bacon understands general phenomena, taken in order from the great mass of indiscriminative facts, which, as they lie in nature, are apt to generate confusion by their number, indistinctness and complication. Such classes of phenomena, as being peculiarly suggestive of causation, he quaintly classes under the title of prerogative inquiries, either seduced by the fanciful analogy, which such instances bore to the *prerogativa centuria* in the Roman Comitia, or justly considering them as Herschel supposes to hold a kind of prerogative dignity from being peculiarly suggestive of causation.

Two high authorities in physical science (v. Herschel, *Nat. Phil.*, art. 192; Whewell's *Philosophy of*

the Inductive Sciences, vol. ii. p. 243) pronounce these instances of little service in the task of induction, being for the most part classed not according to the ideas which they involve, or to any obvious circumstance in the facts of which they consist, but according to the extent and manner of their influence upon the inquiry in which they are employed. Thus we have solitary instances, migrating instances, ostensive instances, clandestine instances, so termed according to the degree in which they exhibit, or seem to exhibit, the property, whose nature we would examine. We have guide-post instances, crucial instances, instances of the parted road, of the doorway, of the lamp, according to the guidance they supply to our advance. Whewell remarks that such a classification is much of the same nature as if, having to teach the art of building, we were to describe tools with reference to the amount and place of the work which they must do, instead of pointing out their construction and use; as if we were to inform the pupil that we must have tools for lifting a stone up, tools for moving it sidewise, tools for laying it square, and tools for cementing it firmly. The means are thus lost in the end, and we reap the fruits of unmethodical arrangement in the confusion of cross division. In addition, all the instances are leavened with the error of confounding the laws with the causes of phenomena, and we are urged to adopt the fundamental error of seeking therein the universal agents, or general causes of phenomena, without ascending the gradual steps of intermediate laws.—*Ed.*

[108] Of these nine general heads no more than the first is prosecuted by the author.

[109] This very nearly approaches to Sir I. Newton's discovery of the decomposition of light by the prism.

[110] The mineral kingdom, as displaying the same nature in all its gradations, from the shells so perfect in structure in limestone to the finer marbles in which their nature gradually disappears, is the great theatre for instances of migration.—*Ed.*

[111] Bacon was not aware of the fact since brought to light by Römer, that down to fourteen fathoms from the earth's mean level the thermometer remains fixed at the tenth degree, but that as the thermometer descends below that depth the heat increases in a ratio proportionate to the descent, which happens with little variation in all climates. Buffon considers this a proof of a central fire in our planet.—*Ed.*

[112] All the diversities of bodies depend upon two principles, *i.e.*, the quantity and the position of the elements that enter into their composition. The primary difference is not that which depends on the greatest or least quantity of material elements, but that which depends on their position. It was the quick perception of this truth that made Leibnitz say that to complete mathematics it was necessary to join to the analysis of quantity the analysis of position.—*Ed.*

[113] Query?

[114] The real cause of this phenomenon is the attraction of the surface-water in the vessel by the sides of the bubbles. When the bubbles approach, the sides nearest each other both tend to raise the small space of water between them, and consequently less water is raised by each of these nearer sides than by the exterior part of the bubble, and the greater weight of the water raised on the exterior parts pushes the bubbles together. In the same manner a bubble near the side of a vessel is pushed toward it; the vessel and bubble both drawing the water that is between them. The latter phenomenon cannot be explained on Bacon's hypothesis.

[115] Modern discoveries appear to bear out the sagacity of Bacon's remark, and the experiments of Baron Cagnard may be regarded as a first step toward its full demonstration. After the new facts

elicited by that philosopher, there can be little doubt that the solid, liquid and æriform state of bodies are merely stages in a progress of gradual transition from one extreme to the other, and that however strongly marked the distinctions between them may appear, they will ultimately turn out to be separated by no sudden or violent line of demarcation, but slide into each other by imperceptible gradations. Bacon's suggestion, however, is as old as Pythagoras, and perhaps simultaneous with the first dawn of philosophic reason. The doctrine of the reciprocal transmutation of the elements underlies all the physical systems of the ancients, and was adopted by the Epicureans as well as the Stoics. Ovid opens his last book of the *Metamorphoses* with the poetry of the subject, where he expressly points to the hint of Bacon:—

——“*Tenuatus in auras
Aëraque humor abit, etc., etc.*

Inde retro redeunt, idemque retexitur ordo.”—xv. 246–249.

and Seneca, in the third book of his *Natural Philosophy*, quest. iv., states the opinion in more precise language than either the ancient bard or the modern philosopher.—*Ed.*

[116] The author's own system of *Memoria Technica* may be found in the *De Augmentis*, chap. xv. We may add that, notwithstanding Bacon's assertion that he intended his method to apply to religion, politics, and morals, this is the only lengthy illustration he has adduced of any subject out of the domain of physical science.—*Ed.*

[117] The collective instances here meant are no other than general facts or laws of some degree of generality, and are themselves the result of induction. For example, the system of Jupiter, or Saturn with its satellites, is a collective instance, and materially assisted in securing the admission of the Copernican system. We have here in miniature, and displayed at one view, a system analogous to that of the planets about the sun, of which, from the circumstance of our being involved in it, and unfavorably situated for seeing it otherwise than in detail, we are incapacitated from forming a general idea, but by slow and progressive efforts of reason.

But there is a species of collective instance which Bacon does not seem to have contemplated, in which particular phenomena are presented in such numbers at once, as to make the induction of their law a matter of ocular inspection. For example, the parabolic form assumed by a jet of water spouted out of a hole is a collective instance of the velocities and directions of the motions of all the particles which compose it seen together, and which thus leads us without trouble to recognize the law of the motion of a projectile. Again, the beautiful figures exhibited by sand strewed on regular plates of glass or metal set in vibration, are collective instances of an infinite number of points which remain at rest while the remainder of the plate vibrates, and in consequence afford us an insight into the law which regulates their arrangement and sequence throughout the whole surface. The richly colored lemniscates seen around the optic axis of crystals exposed to polarized light afford a striking instance of the same kind, pointing at once to the general mathematical expression of the law which regulates their production. Such collective instances as these lead us to a general law by an induction which offers itself spontaneously, and thus furnish advanced posts in philosophical exploration. The laws of Kepler, which Bacon ignored on account of his want of mathematical taste, may be cited as a collective instance. The first is, that the planets move in elliptical orbits, having the sun for their common focus. The second, that about this focus the *radius vector* of each planet describes equal areas in equal times. The third, that the squares of the periodic times of the planets are as the cubes of their mean distance

from the sun. This collective instance “opened the way” to the discovery of the Newtonian law of gravitation.—*Ed.*

[118] Is not this very hasty generalization? Do serpents move with four folds only? Observe also the motion of centipedes and other insects.

[119] Shaw states another point of difference between the objects cited in the text—animals having their roots within, while plants have theirs without; for their lacteals nearly correspond with the fibres of the roots in plants; so that animals seem nourished within themselves as plants are without.—*Ed.*

[120] Bacon falls into an error here in regarding the syllogism as something distinct from the reasoning faculty, and only one of its forms. It is not generally true that the syllogism is only a form of reasoning by which we unite ideas which accord with the middle term. This agreement is not even essential to accurate syllogisms; when the relation of the two things compared to the third is one of equality or similitude, it of course follows that the two things compared may be pronounced equal, or like to each other. But if the relation between these terms exist in a different form, then it is not true that the two extremes stand in the same relation to each other as to the middle term. For instance, if A is double of B, and B double of C, then A is quadruple of C. But then the relation of A to C is different from that of A to B and of B to C.—*Ed.*

[121] Comparative anatomy is full of analogies of this kind. Those between natural and artificial productions are well worthy of attention, and sometimes lead to important discoveries. By observing an analogy of this kind between the plan used in hydraulic engines for preventing the counter-current of a fluid, and a similar contrivance in the blood vessels, Harvey was led to the discovery of the circulation of the blood.—*Ed.*

[122] This is well illustrated in plants, for the gardener can produce endless varieties of any known species, but can never produce a new species itself.

[123] The discoveries of Tournefort have placed moss in the class of plants. The fish alluded to below are to be found only in the tropics.—*Ed.*

[124] There is, however, no real approximation to birds in either the flying fish or bat, any more than a man approximates to a fish because he can swim. The wings of the flying fish and bat are mere expansions of skin, bearing no resemblance whatever to those of birds.—*Ed.*

[125] Seneca was a sounder astronomer than Bacon. He ridiculed the idea of the motion of any heavenly bodies being irregular, and predicted that the day would come, when the laws which guided the revolution of these bodies would be proved to be identical with those which controlled the motions of the planets. The anticipation, was realized by Newton.—*Ed.*

[126] But see Bacon’s own corollary at the end of the Instances of Divorce, [Aphorism xxxvii](#). If Bacon’s remark be accepted, the censure will fall upon Newton and the system so generally received at the present day. It is, however, unjust, as the centre of which Newton so often speaks is not a point with an active inherent force, but only the result of all the particular and reciprocal attractions of the different parts of the planet acting upon one spot. It is evident, that if all these forces were united in this centre, that the sum would be equal to all their partial effects.—*Ed.*

[127] Since Newton’s discovery of the law of gravitation, we find that the attractive force of the earth must extend to an infinite distance. Bacon himself alludes to the operation of this attractive force at great distances in the Instances of the Rod, [Aphorism xlv](#).

[128] Snow reflects light, but is not a source of light.

[129] Bacon's sagacity here foreshadows Newton's theory of the tides.

[130] The error in the text arose from Bacon's impression that the earth was immovable. It is evident, since gravitation acts at an infinite distance, that no such point could be found; and even supposing the impossible point of equilibrium discovered, the body could not maintain its position an instant, but would be hurried, at the first movement of the heavenly bodies, in the direction of the dominant gravitating power.—*Ed.*

[131] Fly clocks are referred to in the text, not pendulum clocks, which were not known in England till 1662. The former, though clumsy and rude in their construction, still embodied sound mechanical principles. The comparison of the effect of a spring with that of a weight in producing certain motions in certain times on altitudes and in mines, has recently been tried by Professors Airy and Whewell in Dalcoath mine, by means of a pendulum, which is only a weight moved by gravity, and a chronometer balance moved and regulated by a spring. In his [thirty-seventh Aphorism](#), Bacon also speaks of gravity as an incorporeal power, acting at a distance, and requiring time for its transmission; a consideration which occurred at a later period to Laplace in one of his most delicate investigations.

Crucial instances, as Herschel remarks, afford the readiest and securest means of eliminating extraneous causes, and deciding between the claims of rival hypotheses; especially when these, running parallel to each other, in the explanation of great classes of phenomena, at length come to be placed at issue upon a single fact. A curious example is given by M. Fresnel, as decisive in his mind of the question between the two great theories on the nature of light, which, since the time of Newton and Huyghens, have divided philosophers. When two very clean glasses are laid one on the other, if they be not perfectly flat, but one or both, in an almost imperceptible degree, convex or prominent, beautiful and vivid colors will be seen between them; and if these be viewed through a red glass, their appearance will be that of alternate dark and bright stripes. These stripes are formed between the two surfaces in apparent contact, and being applicable on both theories, are appealed to by their respective supporters as strong confirmatory facts; but there is a difference in one circumstance, according as one or other theory is employed to explain them. In the case of the Huyghenian theory, the intervals between the bright stripes ought to appear absolutely black, when a prism is used for the upper glass, in the other half bright. This curious case of difference was tried, as soon as the opposing consequences of the two theories were noted by M. Fresnel, and the result is stated by him to be decisive in favor of that theory which makes light to consist in the vibrations of an elastic medium.—*Ed.*

[132] Bacon plainly, from this passage, was inclined to believe that the moon, like the comets, was nothing more than illuminated vapor. The Newtonian law, however, has not only established its solidity, but its density and weight. A sufficient proof of the former is afforded by the attraction of the sea, and the moon's motion round the earth.—*Ed.*

[133] Rather the refraction; the sky or air, however, *reflects* the blue rays of light.

[134] The polished surface of the glass causes the reflection in this case, and not the air; and a hat or other black surface put behind the window in the daytime will enable the glass to reflect distinctly for the same reason, namely, that the reflected rays are not mixed and confused with those transmitted from the other side of the window.

[135] These instances, which Bacon seems to consider as a great discovery, are nothing more than disjunctive propositions combined with dilemmas. In proposing to explain an effect, we commence

with the enumeration of the different causes which seem connected with its production; then with the aid of one or more dilemmas, we eliminate each of the phenomena accidental to its composition, and conclude with attributing the effect to the residue. For instance, a certain phenomenon (*a*) is produced either by phenomenon (B) or phenomenon (C); but C cannot be the cause of *a*, for it is found in D, E, F, neither of which are connected with *a*. Then the true cause of phenomenon (*a*) must be phenomenon (B).

This species of reasoning is liable to several paralogisms, against which Bacon has not guarded his readers, from the very fact that he stumbled into them unwittingly himself. The two principal ones are false exclusions and defective enumerations. Bacon, in his survey of the causes which are able to concur in producing the phenomena of the tides, takes no account of the periodic melting of the Polar ice, or the expansion of water by the solar heat; nor does he fare better in his exclusions. For the attraction of the planets and the progression and retrograde motion communicated by the earth's diurnal revolution, can plainly affect the sea together, and have a simultaneous influence on its surface.

Bacon is hardly just or consistent in his censure of Ramus; the end of whose dichotomy was only to render reasoning by dilemma, and crucial instances, more certain in their results, by reducing the divisions which composed their parts to two sets of contradictory propositions. The affirmative or negative of one would then necessarily have led to the acceptance or rejection of the other.—*Ed.*

[136] Père Shenier first pointed out the spots on the sun's disk, and by the marks which they afforded him, computed its revolution to be performed in twenty-five days and some hours.—*Ed.*

[137] Rust is now well known to be a chemical combination of oxygen with the metal, and the metal when rusty acquires additional weight. His theory as to the generation of animals, is deduced from the erroneous notion of the possibility of spontaneous generation (as it was termed). See the next paragraph but one.

[138]

“Limus ut hic durescit, et hæc ut cera liquescit
Uno eodemque igni.”—Virg. Ecl. viii.

[139] See [Table of Degrees, No. 38](#).

[140] Riccati, and all modern physicists, discover some portion of light in every body, which seems to confirm the passage in Genesis that assigns to this substance priority in creation.—*Ed.*

[141] As instances of this kind, which the progress of science since the time of Bacon affords, we may cite the air-pump and the barometer, for manifesting the weight and elasticity of air: the measurement of the velocity of light, by means of the occultation of Jupiter's satellites and the aberration of the fixed stars: the experiments in electricity and galvanism, and in the greater part of pneumatic chemistry. In all these cases scientific facts are elicited, which sense could never have revealed to us.—*Ed.*

[142] The itinerant instances, as well as frontier instances, are cases in which we are enabled to trace the general law of continuity which seems to pervade all nature, and which has been aptly embodied in the sentence, “*natura non agit per saltum*.” The pursuit of this law into phenomena where its application is not at first sight obvious, has opened a mine of physical discovery, and led us to perceive an intimate connection between facts which at first seemed hostile to each other. For example, the transparency of gold-leaf, which permits a bluish-green light to pass through it, is a frontier instance between

transparent and opaque bodies, by exhibiting a body of the glass generally regarded the most opaque in nature, as still possessed of some slight degree of transparency. It thus proves that the quality of opacity is not a contrary or antagonistic quality to that of transparency, but only its extreme lowest degree.

[143] Alluding to his theory of atoms.

[144] Observe the approximation to Newton's theory. The same notion repeated still more clearly in the ninth motion. Newton believed that the planets might so conspire as to derange the earth's annual revolution, and to elongate the line of the apsides and ellipsis that the earth describes in its annual revolution round the sun. In the supposition that all the planets meet on the same straight line, Venus and Mercury on one side of the sun, and the earth, moon, Mars, Jupiter and Saturn on the side diametrically opposite; then Saturn would attract Jupiter, Jupiter Mars, Mars the moon, which must in its turn attract the earth in proportion to the force with which it was drawn out of its orbit. The result of this combined action on our planet would elongate its ecliptic orbit, and so far draw it from the source of heat, as to produce an intensity of cold destructive to animal life. But this movement would immediately cease with the planetary concurrence which produced it, and the earth, like a compressed spring, bound almost as near to the sun as she had been drawn from it, the reaction of the heat on its surface being about as intense as the cold caused by the first removal was severe. The earth, until it gained its regular track, would thus alternately vibrate between each side of its orbit, with successive changes in its atmosphere, proportional to the square of the variation of its distance from the sun. In no place is Bacon's genius more conspicuous than in these repeated guesses at truth. He would have been a strong Copernican, had not Gilbert defended the system.—*Ed.*

[145] This is not true except when the projectile acquires greater velocity at every successive instant of its course, which is never the case except with falling bodies. Bacon appears to have been led into the opinion from observing that gunshots pierce many objects at a distance from which they rebound when brought within a certain proximity of contact. This apparent inconsistency, however, arises from the resistance of the parts of the object, which velocity combined with force is necessary to overcome.—*Ed.*

[146] This passage shows that the pressure of the external atmosphere, which forces the water into the egg, was not in Bacon's time understood.—*Ed.*

[147] We have already alluded, in a note prefixed to the same aphorism of the first book, to Newton's error of the absolute lightness of bodies. In speaking again of the volatile or spiritual substances ([Aph. xl. b. ii.](#)) which he supposed with the Platonists and some of the schoolmen to enter into the composition of every body, he ascribes to them a power of lessening the weight of the material coating in which he supposes them inclosed. It would appear from these passages and the text that Bacon had no idea of the relative density of bodies, and the capability which some have to diminish the specific gravity of the heavier substances by the dilation of their parts; or if he had, the reveries in which Aristotle indulged in treating of the soul, about the appetency of bodies to fly to kindred substances—flame and spirit to the sky, and solid opaque substances to the earth, must have vitiated his mind.—*Ed.*

[148] Römer, a Danish astronomer, was the first to demonstrate, by connecting the irregularities of the eclipses of Jupiter's satellites with their distances from the earth, the necessity of time for the propagation of light. The idea occurred to Dominic Cassini as well as Bacon, but both allowed the discovery to slip out of their hands.—*Ed.*

[149] The author in the text confounds inertness, which is a simple indifference of bodies to action,

with gravity, which is a force acting always in proportion to their density. He falls into the same error further on.—*Ed.*

[150] The experiments of the last two classes of instances are considered only in relation to practice, and Bacon does not so much as mention their infinitely greater importance in the theoretical part of induction. The important law of gravitation in physical astronomy could never have been demonstrated but by such observations and experiments as assigned accurate geometrical measures to the quantities compared. It was necessary to determine with precision the demi-diameter of the earth, the velocity of falling bodies at its surface, the distance of the moon, and the speed with which she describes her orbit, before the relation could be discovered between the force which draws a stone to the ground and that which retains the moon in her sphere.

In many cases the result of a number of particular facts, or the collective instances rising out of them, can only be discovered by geometry, which so far becomes necessary to complete the work of induction. For instance, in the case of optics, when light passes from one transparent medium to another, it is refracted, and the angle which the ray of incidence makes with the superficies which bounds the two media determines that which the refracted ray makes with the same superficies. Now, all experiment can do for us in this case is, to determine for any particular angle of incidence the corresponding angle of refraction. But with respect to the general rule which in every possible case deduces one of these angles from the other, or expresses the constant and invariable relation which subsists between them, experiment gives no direct information. Geometry must, consequently, be called in, which, when a constant though unknown relation subsists between two angles, or two variable qualities of any kind, and when an indefinite number of values of those quantities are assigned, furnishes infallible means of discovering that unknown relation either accurately or by approximation. In this way it has been found, when the two media remain the same, the cosines of the above-mentioned angles have a constant ratio to each other. Hence, when the relations of the simple elements of phenomena are discovered to afford a general rule which will apply to any concrete case, the deductive method must be applied, and the elementary principles made through its agency to account for the laws of their more complex combinations. The reflection and refraction of light by the rain falling from a cloud opposite to the sun was thought, even before Newton's day, to contain the *form* of the rainbow. This philosopher transformed a probable conjecture into a certain fact when he deduced from the known laws of reflection and refraction the breadth of the colored arch, the diameter of the circle of which it is a part, and the relation of the latter to the place of the spectator and the sun. Doubt was at once silenced when there came out of his calculus a combination of the same laws of the simple elements of optics answering to the phenomena in nature.—*Ed.*

[151] As far as this motion results from attraction and repulsion, it is only a simple consequence of the last two.—*Ed.*

[152] These two cases are now resolved into the property of the capillary tubes and present only another feature of the law of attraction.—*Ed.*

[153] This is one of the most useful practical methods in chemistry at the present day.

[154] See [Aphorism xxv](#).

[155] Query?

[156] Observe this approximation to Newton's theory.

[157] Those differences which are generated by the masses and respective distances of bodies are

only differences of quantity, and not specific; consequently those three classes are only one.—*Ed.*

[158] See the citing instances, [Aphorism xl](#).

[159] Aristotle's doctrine, that sound takes place when bodies strike the air, which the modern science of acoustics has completely established, was rejected by Bacon in a treatise upon the same subject: "The collision or thrusting of air," he says, "which they will have to be the cause of sound, neither denotes the form nor the latent process of sound, but is a term of ignorance and of superficial contemplation." To get out of the difficulty, he betook himself to his theory of spirits, a species of phenomena which he constantly introduces to give himself the air of explaining things he could not understand, or would not admit upon the hypothesis of his opponents.—*Ed.*

[160] The motion of trepidation, as Bacon calls it, was attributed by the ancient astronomers to the eight spheres, relative to the precession of the equinoxes. Galileo was the first to observe this kind of lunar motion.—*Ed.*

[161] Part of the air is expanded and escapes, and part is consumed by the flame. When condensed, therefore, by the cold application, it cannot offer sufficient resistance to the external atmosphere to prevent the liquid or flesh from being forced into the glass.

[162] Heat can now be abstracted by a very simple process, till the degree of cold be of almost any required intensity.—*Ed.*

[163] It is impossible to compare a degree of heat with a degree of cold, without the assumption of some arbitrary test, to which the degrees are to be referred. In the next sentence Bacon appears to have taken the power of animal life to support heat or cold as the test, and then the comparison can only be between the degree of heat or of cold that will produce death.

The zero must be arbitrary which divides equally a certain degree of heat from a certain degree of cold.—*Ed.*

[164] It may often be observed on the leaves of the lime and other trees.

PREFACES AND PROLOGUES TO FAMOUS BOOKS

WITH INTRODUCTIONS, NOTES AND ILLUSTRATIONS

"DR. ELIOT'S FIVE-FOOT SHELF OF BOOKS"

P.F. COLLIER & SON

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INTRODUCTORY NOTE

No part of a book is so intimate as the Preface. Here, after the long labor of the work is over, the author descends from his platform, and speaks with his reader as man to man, disclosing his hopes and fears, seeking sympathy for his difficulties, offering defence or defiance, according to his temper, against the criticisms which he anticipates. It thus happens that a personality which has been veiled by a formal method throughout many chapters, is suddenly seen face to face in the Preface; and this alone, if there were no other reason, would justify a volume of Prefaces.

But there are other reasons why a Preface may be presented apart from its parent work, and may, indeed, be expected sometimes to survive it. The Prologues and Epilogues of Caxton were chiefly prefixed to translations which have long been superseded; but the comments of this frank and enthusiastic pioneer of the art of printing in England not only tell us of his personal tastes, but are in a high degree illuminative of the literary habits and standards of western Europe in the fifteenth century. Again, modern research has long ago put Raleigh's "History of the World" out of date; but his eloquent Preface still gives us a rare picture of the attitude of an intelligent Elizabethan, of the generation which colonised America, toward the past, the present, and the future worlds. Bacon's "Great Restoration" is no longer a guide to scientific method; but his prefatory statements as to his objects and hopes still offer a lofty inspiration.

And so with the documents here drawn from the folios of Copernicus and Calvin, with the criticism of Dryden and Wordsworth and Hugo, with Dr. Johnson's Preface to his great Dictionary, with the astounding manifesto of a new poetry from Walt Whitman's "Leaves of Grass"—each of them has a

value and significance independent now of the work which it originally introduced, and each of them presents to us a man._

PREFACES AND EPILOGUES

BY WILLIAM CAXTON[A]

THE RECUYELL OF THE HISTORIES OF TROY

TITLE AND PROLOGUE TO BOOK I

Here beginneth the volume entituled and named the Recuyell of the Histories of Troy, composed and drawn out of divers books of Latin into French by the right venerable person and worshipful man, Raoul le Feure, priest and chaplain unto the right noble, glorious, and mighty prince in his time, Philip, Duke of Burgundy, of Brabant, etc. in the year of the Incarnation of our Lord God a thousand four hundred sixty and four, and translated and drawn out of French into English by William Caxton, mercer, of the city of London, at the commandment of the right high, mighty, and virtuous Princess, his redoubted Lady, Margaret, by the grace of God Duchess of Burgundy, of Lotrylk, of Brabant, etc.; which said translation and work was begun in Bruges in the County of Flanders, the first day of March, the year of the Incarnation of our said Lord God a thousand four hundred sixty and eight, and ended and finished in the holy city of Cologne the 19th day of September, the year of our said Lord God a thousand four hundred sixty and eleven, etc.

And on that other side of this leaf followeth the prologue.

When I remember that every man is bounden by the commandment and counsel of the wise man to eschew sloth and idleness, which is mother and nourisher of vices, and ought to put myself unto virtuous occupation and business, then I, having no great charge of occupation, following the said counsel took a French book, and read therein many strange and marvellous histories, wherein I had great pleasure and delight, as well for the novelty of the same as for the fair language of French, which was in prose so well and compendiously set and written, which methought I understood the sentence and substance of every matter. And for so much as this book was new and

late made and drawn into French, and never had seen it in our English tongue, I thought in myself it should be a good business to translate it into our English, to the end that it might be had as well in the royaume of England as in other lands, and also for to pass therewith the time, and thus concluded in myself to begin this said work. And forthwith took pen and ink, and began boldly to run forth as blind Bayard in this present work, which is named "The Recuyell of the Trojan Histories." And afterward when I remembered myself of my simpleness and unperfectness that I had in both languages, that is to wit in French and in English, for in France was I never, and was born and learned my English in Kent, in the Weald, where I doubt not is spoken as broad and rude English as in any place of England; and have continued by the space of 30 years for the most part in the countries of Brabant, Flanders, Holland, and Zealand. And thus when all these things came before me, after that I had made and written five or six quires I fell in despair of this work, and purposed no more to have continued therein, and those quires laid apart, and in two years after laboured no more in this work, and was fully in will to have left it, till on a time it fortun'd that the right high, excellent, and right virtuous princess, my right redoubted Lady, my Lady Margaret, by the grace of God sister unto the King of England and of France, my sovereign lord, Duchess of Burgundy, of Lotryk, of Brabant, of Limburg, and of Luxembourg, Countess of Flanders, of Artois, and of Burgundy, Palatine of Hainault, of Holland, of Zealand and of Namur, Marquesse of the Holy Empire, Lady of Frisia, of Salins and of Mechlin, sent for me to speak with her good Grace of divers matters, among the which I let her Highness have knowledge of the foresaid beginning of this work, which anon commanded me to show the said five or six quires to her said Grace; and when she had seen them anon she found a default in my English, which she commanded me to amend, and moreover commanded me straitly to continue and make an end of the residue then not translated; whose dreadful commandment I durst in no wise disobey, because I am a servant unto her said Grace and receive of her yearly fee and other many good and great benefits, (and also hope many more to receive of her Highness), but forthwith went and laboured in the said translation after my simple and poor cunning, also nigh as I can following my author, meekly beseeching the bounteous Highness of my said Lady that of her benevolence list to accept and take in gree this simple and rude work here following; and if there be anything written or said to her pleasure, I shall

think my labour well employed, and whereas there is default that she arette it to the simpleness of my cunning which is full small in this behalf; and require and pray all them that shall read this said work to correct it, and to hold me excused of the rude and simple translation.

And thus I end my prologue.

[Footnote A: William Caxton (1422?-1491), merchant and translator, learned the art of printing on the Continent, probably at Bruges or Cologne. He translated "The Recuyell of the Histories of Troy" between 1469 and 1471, and, on account of the great demand for copies, was led to have it printed—the first English book to be reproduced by this means. The date was about 1474; the place, probably Bruges. In 1476, Caxton came back to England, and set up a press of his own at Westminster. In 1477, he issued the first book known to have been printed in England, "The Dictes and Sayings of the Philosophers." The following Prefaces and Epilogues from Caxton's own pen show his attitude towards some of the more important of the works that issued from his press.]

EPILOGUE TO BOOK II

Thus endeth the second book of the Recule of the Histories of Troy. Which bookes were late translated into French out of Latin by the labour of the venerable person Raoul le Feure, priest, as afore is said; and by me indigne and unworthy, translated into this rude English by the commandment of my said redoubted Lady, Duchess of Burgundy. And for as much as I suppose the said two books be not had before this time in our English language, therefore I had the better will to accomplish this said work; which work was begun in Bruges and continued in Ghent and finished in Cologne, in the time of the troublous world, and of the great divisions being and reigning, as well in the royaumes of England and France as in all other places universally through the world; that is to wit the year of our Lord a thousand four hundred seventy one. And as for the third book, which treateth of the general and last destruction of Troy, it needeth not to translate it into English, for as much as that worshipful and religious man, Dan John Lidgate, monk of Bury, did translate it but late; after whose work I fear to take upon me, that am not worthy to bear his penner and ink-horn after him, to meddle me in that work. But yet for as much as I am bound to contemplate my said Lady's good grace, and also that his work is in rhyme and as far as I know it is not had in prose in our tongue, and also, peradventure, he translated after some other author than this is; and yet for as much as divers men be of divers desires, some to read in rhyme and metre and some in prose; and also because that I have now good leisure, being in Cologne, and have none other thing to do at this time; in eschewing of idleness, mother of all vices, I have delibered in myself for the contemplation of my said redoubted lady to take this labour in hand, by the sufferance and help of Almighty God; whom I meekly supplie to give me grace to accomplish it to the pleasure of her that is causer thereof, and that she receive it in gree of me, her faithful, true, and most humble servant etc.

EPILOGUE TO BOOK III

Thus end I this book, which I have translated after mine Author as nigh as God hath given me cunning, to whom be given the laud and praising. And for as much as in the writing of the same my pen is worn, my hand weary and not steadfast, mine eyne dimmed with overmuch looking on the white paper, and my courage not so prone and ready to labour as it hath been, and that age creepeth on me daily and feebleth all the body, and also because I have promised to divers gentlemen and to my friends to address to them as hastily as I might this said book, therefore I have practised and learned at my great charge and dispense to ordain this said book in print, after the manner and form as ye may here see, and is not written with pen and ink as other books be, to the end that every man may have them at once. For all the books of this story, named "The Recule of the Histories of Troy" thus imprinted as ye here see, were begun in one day and also finished in one day, which book I have presented to my said redoubted Lady, as afore is said. And she hath well accepted it, and largely rewarded me, wherefore I beseech Almighty God to reward her everlasting bliss after this life, praying her said Grace and all them that shall read this book not to disdain the simple and rude work, neither to reply against the saying of the matters touched in this book, though it accord not unto the translation of others which have written it. For divers men have made divers books which in all points accord not, as Dictes, Dares, and Homer. For Dictes and Homer, as Greeks, say and write favorably for the Greeks, and give to them more worship than to the Trojans; and Dares writeth otherwise than they do. And also as for the proper names, it is no wonder that they accord not, for some one name in these days have divers equivocations after the countries that they dwell in; but all accord in conclusion the general destruction of that noble city of Troy, and the death of so many noble princes, as kings, dukes, earls, barons, knights, and common

people, and the ruin irreparable of that city that never since was re-edified; which may be example to all men during the world how dreadful and jeopardous it is to begin a war and what harms, losses, and death followeth. Therefore the Apostle saith: "All that is written is written to our doctrine," which doctrine for the common weal I beseech God may be taken in such place and time as shall be most needful in increasing of peace, love, and charity; which grant us He that suffered for the same to be crucified on the rood tree. And say we all Amen for charity!

DICTES AND SAYINGS OF THE PHILOSOPHERS

FIRST EDITION (1477). EPILOGUE

Here endeth the book named *The Dictes or Sayings of the Philosophers*, imprinted by me, William Caxton, at Westminster, the year of our Lord 1477. Which book is late translated out of French into English by the noble and puissant Lord Lord Antony, Earl of Rivers, Lord of Scales and of the Isle of Wight, defender and director of the siege apostolic for our holy father the Pope in this royaume of England, and governor of my Lord Prince of Wales. And it is so that at such time as he had accomplished this said work, it liked him to send it to me in certain quires to oversee, which forthwith I saw, and found therein many great, notable, and wise sayings of the philosophers, according unto the books made in French which I had often before read; but certainly I had seen none in English until that time. And so afterward I came unto my said Lord, and told him how I had read and seen his book, and that he had done a meritorious deed in the labour of the translation thereof into our English tongue, wherein he had deserved a singular laud and thanks, &c. Then my said Lord desired me to oversee it, and where I should find fault to correct it; whereon I answered unto his Lordship that I could not amend it, but if I should so presume I might apaire it, for it was right well and cunningly made and translated into right good and fair English. Notwithstanding, he willed me to oversee it, and shewed me divers things, which, as seemed to him, might be left out, as divers letters, missives sent from Alexander to Darius and Aristotle, and each to other, which letters were little appertinent unto dictes and sayings aforesaid, forasmuch as they specify of other matters. And also desired me, that done, to put the said book in imprint. And thus obeying his request and commandment, I have put me in devoir to oversee this his said book, and behold as nigh as I could how it

accordeth with the original, being in French. And I find nothing discordant therein, save only in the dictes and sayings of Socrates, wherein I find that my said Lord hath left out certain and divers conclusions touching women. Whereof I marvel that my Lord hath not written them, ne what hath moved him so to do, ne what cause he had at that time; but I suppose that some fair lady hath desired him to leave it out of his book; or else he was amorous on some noble lady, for whose love he would not set it in his book; or else for the very affection, love, and good will that he hath unto all ladies and gentlewomen, he thought that Socrates spared the sooth and wrote of women more than truth; which I cannot think that so true a man and so noble a philosopher as Socrates was should write otherwise than truth. For if he had made fault in writing of women, he ought not, ne should not, be believed in his other dictes and sayings. But I perceive that my said Lord knoweth verily that such defaults be not had ne found in the women born and dwelling in these parts ne regions of the world. Socrates was a Greek, born in a far country from hence, which country is all of other conditions than this is, and men and women of other nature than they be here in this country. For I wot well, of whatsoever condition women be in Greece, the women of this country be right good, wise, pleasant, humble, discreet, sober, chaste, obedient to their husbands, true, secret, steadfast, ever busy, and never idle, attemperate in speaking, and virtuous in all their works—or at least should be so. For which causes so evident my said Lord, as I suppose, thought it was not of necessity to set in his book the sayings of his author Socrates touching women. But forasmuch as I had commandment of my said Lord to correct and amend where I should find fault, and other find I none save that he hath left out these dictes and sayings of the women of Greece, therefore in accomplishing his commandment—forasmuch as I am not certain whether it was in my Lord's copy or not, or else, peradventure, that the wind had blown over the leaf at the time of translation of his book—I purpose to write those same sayings of that Greek Socrates, which wrote of the women of Greece and nothing of them of this royaume, whom, I suppose, he never knew; for if he had, I dare plainly say that he would have reserved them specially in his said dictes. Always not presuming to put and set them in my said Lord's book but in the end apart in the rehearsal of the works, humbly requiring all them that shall read this little rehearsal, that if they find any fault to arette it to Socrates, and not to me, which writeth as hereafter followeth.

Socrates said that women be the apparels to catch men, but they take none but them that will be poor or else them that know them not. And he said that there is none so great empechement unto a man as ignorance and women. And he saw a woman that bare fire, of whom he said that the hotter bore the colder. And he saw a woman sick, of whom he said that the evil resteth and dwelleth with the evil. And he saw a woman brought to the justice, and many other women followed her weeping, of whom he said the evil be sorry and angry because the evil shall perish. And he saw a young maid that learned to write, of whom he said that men multiplied evil upon evil. And he said that the ignorance of a man is known in three things, that is to wit, when he hath no thought to use reason; when he cannot refrain his covetise; and when he is governed by the counsel of women, in that he knoweth that they know not. And he said unto his disciples: "Will ye that I enseign and teach you how ye shall now escape from all evil?" And they answered, "Yea." And then he said to them, "For whatsoever thing that it be, keep you and be well ware that ye obey not women." Who answered to him again, "And what sayest thou by our good mothers, and of our sisters?" He said to them, "Suffice you with that I have said to you, for all be semblable in malice." And he said, "Whosoever will acquire and get science, let him never put him in the governance of a woman." And he saw a woman that made her fresh and gay, to whom he said, "Thou resemblest the fire; for the more wood is laid to the fire the more will it burn, and the greater is the heat." And on a time one asked him what him semed of women; he answered that the women resemble a tree called Edelfla, which is the fairest tree to behold and see that may be, but within it is full of venom. And they said to him and demanded wherefore he blamed so women? and that he himself had not come into this world, ne none other men also, without them. He answered, "The woman is like unto a tree named Chassoygnet, on which tree there be many things sharp and pricking, which hurt and prick them that approach unto it; and yet, nevertheless, that same tree bringeth forth good dates and sweet." And they demanded him why he fled from the women? And he answered, "Forasmuch as I see them flee and eschew the good and commonly do evil." And a woman said to him, "Wilt thou have any other woman than me?" And he answered to her, "Art not ashamed to offer thyself to him that demandeth nor desireth thee not?"

So, these be the dictes and sayings of the philosopher Socrates, which he wrote in his book; and certainly he wrote no worse than afore is rehearsed. And forasmuch as it is accordant that his dictes and sayings should be had as well as others', therefore I have set it in the end of this book. And also some persons, peradventure, that have read this book in French would have arette a great default in me that I had not done my devoir in visiting and overseeing of my Lord's book according to his desire. And some other also, haply, might have supposed that Socrates had written much more ill of women than here afore is specified, wherefore in satisfying of all parties, and also for excuse of the said Socrates, I have set these said dictes and sayings apart in the end of this book, to the intent that if my said lord or any other person, whatsoever he or she be that shall read or hear it, that if they be not well pleased withal, that they with a pen race it out, or else rend the leaf out of the book. Humbly requiring and beseeching my said lord to take no displeasure on me so presuming, but to pardon whereas he shall find fault; and that it please him to take the labour of the imprinting in gree and thanks, which gladly have done my diligence in the accomplishing of his desire and commandment; in which I am bounden so to do for the good reward that I have received of his said lordship; whom I beseech Almighty God to increase and to continue in his virtuous disposition in this world, and after this life to live everlastingly in Heaven. Amen.

GOLDEN LEGEND.

FIRST EDITION (1483). PROLOGUE

The Holy and blessed doctor Saint Jerome saith this authority, "Do always some good work to the end that the devil find thee not Idle." And the holy doctor Saint Austin saith in the book of the labour of monks, that no man strong or mighty to labour ought to be idle; for which cause when I had performed and accomplished divers works and histories translated out of French into English at the request of certain lords, ladies, and gentlemen, as the Recuyel of the History of Troy, the Book of the Chess, the History of Jason, the history of the Mirror of the World, the 15 books of Metamorphoses in which be contained the fables of Ovid, and the History of Godfrey of Boulogne in the conquest of Jerusalem, with other divers works and books, I ne wist what work to begin and put forth after the said works to-fore made. And forasmuch as idleness is so much blamed, as saith Saint Bernard, the mellifluous doctor, that she is mother of lies and step-dame of virtues, and it is she that overthroweth strong men into sin, quencheth virtue, nourisheth pride, and maketh the way ready to go to hell; and John Cassiodorus saith that the thought of him that is idle thinketh on none other thing but on licorous meats and viands for his belly; and the holy Saint Bernard aforesaid saith in an epistle, when the time shall come that it shall behove us to render and give accounts of our idle time, what reason may we render or what answer shall we give when in idleness is none excuse; and Prosper saith that whosoever liveth in idleness liveth in manner of a dumb beast. And because I have seen the authorities that blame and despise so much idleness, and also know well that it is one of the capital and deadly sins much hateful unto God, therefore I have concluded and firmly purposed in myself no more to be idle, but will apply myself to labour and such occupation as I have been

accustomed to do. And forasmuch as Saint Austin aforesaid saith upon a psalm that good work ought not to be done for fear of pain, but for the love of righteousness, and that it be of very and sovereign franchise, and because me seemeth to be a sovereign weal to incite and exhort men and women to keep them from sloth and idleness, and to let to be understood to such people as be not lettered the nativities, the lives, the passions, the miracles, and the death of the holy saints, and also some other notorious deeds and acts of times past, I have submised myself to translate into English the legend of Saints, which is called *Legenda Aurea* in Latin, that is to say, the *Golden Legend*; for in like wise as gold is most noble above all other metals, in like wise is this legend holden most noble above all other works. Against me here might some persons say that this legend hath been translated before, and truth it is; but forasmuch as I had by me a legend in French, another in Latin, and the third in English, which varied in many and divers places, and also many histories were comprised in the two other books which were not in the English books; and therefore I have written one out of the said three books, which I have ordered otherwise than the said English legend is, which was so to-fore made, beseeching all them that shall see or hear it read to pardon me where I have erred or made fault, which, if any be, is of ignorance and against my will; and submit it wholly of such as can and may, to correct it, humbly beseeching them so to do, and in so doing they shall deserve a singular laud and merit; and I shall pray for them unto Almighty God that He of His benign grace reward them, etc., and that it profit to all them that shall read or hear it read, and may increase in them virtue, and expel vice and sin, that by the example of the holy saints amend their living here in this short life, that by their merits they and I may come to everlasting life and bliss in Heaven. Amen.

CATON (1483)

PROLOGUE

Here beginneth the prologue of proem of the book called *Caton*, which book hath been translated into English by Master Benet Burgh, late Archdeacon of Cochester, and high canon of St. Stephen's at Westminster, which ful craftily hath made it in ballad royal for the erudition of my lord Bousher, son and heir at that time to my lord the Earl of Essex. And because of late came to my hand a book of the said Cato in French, which rehearseth many a fair learning and notable examples, I have translated it out of French into English, as all along hereafter shall appear, which I present unto the city of London.

Unto the noble, ancient, and renowned city, the city of London, in England, I, William Caxton, citizen and conjury of the same, and of the fraternity and fellowship of the mercery, owe of right my service and good will, and of very duty am bounden naturally to assist, aid, and counsel, as far forth as I can to my power, as to my mother of whom I have received my nurture and living, and shall pray for the good prosperity and policy of the same during my life. For, as me seemeth, it is of great need, because I have known it in my young age much more wealthy, prosperous, and richer, than it is at this day. And the cause is that there is almost none that intendeth to the common weal, but only every man for his singular profit Oh! when I remember the noble Romans, that for the common weal of the city of Rome they spent not only their moveable goods but they put their bodies and lives in jeopardy and to the death, as by many a noble example we may see in the acts of Romans, as of the two noble Scipios, African and Asian, Actilius, and many others. And among all others the noble Cato, author and maker of this book, which he hath left for to remain ever to all the people for to learn in it and to know how

every man ought to rule and govern him in this life, as well for the life temporal as for the life spiritual. And as in my judgement it is the best book for to be taught to young children in school, and also to people of every age, it is full convenient if it be well understood And because I see that the children that be born within the said city increase, and profit not like their fathers and elders, but for the most part after that they be come to their perfect years of discretion and ripeness of age, how well that their fathers have left to them great quantity of goods yet scarcely among ten two thrive, [whereas] I have seen and know in other lands in divers cities that of one name and lineage successively have endured prosperously many heirs, yea, a five or six hundred years, and some a thousand; and in this noble city of London it can unneth continue unto the third heir or scarcely to the second,— O blessed Lord, when I remember this I am all abashed; I cannot judge the cause, but fairer ne wiser ne better spoken children in their youth be nowhere than there be in London, but at their full ripening there is no kernel ne good corn found, but chaff for the most part. I wot well there be many noble and wise, and prove well and be better and richer than ever were their fathers. And to the end that many might come to honour and worship, I intend to translate this said book of Cato, in which I doubt not, and if they will read it and understand they shall much the better con rule themselves thereby; for among all other books this is a singular book, and may well be called the regiment or governance of the body and soul.

There was a noble clerk named Pogius of Florence, and was secretary to Pope Eugene and also to Pope Nicholas, which had in the city of Florence a noble and well-stuffed library which all noble strangers coming to Florence desired to see; and therein they found many noble and rare books. And when they had asked of him which was the best book of them all, and that he reputed for best, he said that he held Cato glosed for the best book of his library. Then since that he that was so noble a clerk held this book for the best, doubtless it must follow that this is a noble book and a virtuous, and such one that a man may eschew all vices and ensue virtue. Then to the end that this said book may profit unto the hearers of it, I beseech Almighty God that I may achieve and accomplish it unto his laud and glory, and to the erudition and learning of them that be ignorant, that they may thereby profit and be the better. And I require and beseech all such that find fault or error, that of their charity they

correct and amend it, and I shall heartily pray for them to Almighty God, that he reward them.

AESOP. (1483)

EPILOGUE

Now then I will finish all these fables with this tale that followeth, which a worshipful priest and a parson told me lately. He said that there were dwelling in Oxford two priests, both masters of art, of whom that one was quick and could put himself forth, and that other was a good simple priest. And so it happened that the master that was pert and quick, was anon promoted to a benefice or twain, and after to prebends and for to be a dean of a great prince's chapel, supposing and weening that his fellow the simple priest should never have been promoted, but be alway an Annual, or at the most a parish priest. So after long time that this worshipful man, this dean, came riding into a good parish with a ten or twelve horses, like a prelate, and came into the church of the said parish, and found there this good simple man sometime his fellow, which came and welcomed him lowly; and that other bade him "good morrow, master John," and took him slightly by the hand, and asked him where he dwelt. And the good man said, "In this parish." "How," said he, "are ye here a soul priest or a parish priest?" "Nay, sir," said he, "for lack of a better, though I be not able ne worthy, I am parson and curate of this parish." And then that other availed his bonnet and said, "Master parson, I pray you to be not displeased; I had supposed ye had not been beneficed; but master," said he, "I pray you what is this benefice worth to you a year?" "Forsooth," said the good simple man, "I wot never, for I make never accounts thereof how well I have had it four or five years." "And know ye not," said he, "what it is worth? it should seem a good benefice." "No, forsooth," said he, "but I wot well what it shall be worth to me." "Why," said he, "what shall it be worth?" "Forsooth," said he, "if I do my true diligence in the cure of my parishioners in preaching and teaching, and do my

part longing to my cure, I shall have heaven therefore; and if their souls be lost, or any of them by my default, I shall be punished therefore, and hereof am I sure." And with that word the rich dean was abashed, and thought he should do the better and take more heed to his cures and benefices than he had done. This was a good answer of a good priest and an honest. And herewith I finished this book, translated and printed by me, William Caxton, at Westminster in the Abbey, and finished the 26th day of March, the year of our Lord 1484, and the first year of the reign of King Richard the Third.

CHAUCER'S CANTERBURY TALES

Second Edition. (1484)

PROEM

Great thanks, laud, and honour ought to be given unto the clerks, poets, and historiographers that have written many noble books of wisdom of the lives, passions, and miracles of holy saints, of histories of noble and famous acts and faites, and of the chronicles since the beginning of the creation of the world unto this present time, by which we be daily informed and have knowledge of many things of whom we should not have known if they had not left to us their monuments written. Among whom and in especial before all others, we ought to give a singular laud unto that noble and great philosopher Geoffrey Chaucer, the which for his ornate writing in our tongue may well have the name of a laureate poet. For to-fore that he by labour embellished, ornated, and made fair our English, in this realm was had rude speech and incongruous, as yet it appeareth by old books, which at this day ought not to have place ne be compared among, ne to, his beauteous volumes and ornate writings, of whom he made many books and treatises of many a noble history, as well in metre as in rhyme and prose; and them so craftily made that he comprehended his matters in short, quick, and high sentences, eschewing prolixity, casting away the chaff of superfluity, and shewing the picked grain of sentence uttered by crafty and sugared eloquence; of whom among all others of his books I purpose to print, by the grace of God, the book of the tales of Canterbury, in which I find many a noble history of every state and degree; first rehearsing the conditions and the array of each of them as properly as possible is to be said. And after their tales which be of nobleness, wisdom, gentleness, mirth and also of very holiness and virtue,

wherein he finisheth this said book, which book I have diligently overseen and duly examined, to that end it be made according unto his own making. For I find many of the said books which writers have abridged it, and many things left out; and in some place have set certain verses that he never made ne set in his book; of which books so incorrect was one brought to me, 6 years past, which I supposed had been very true and correct; and according to the same I did so imprint a certain number of them, which anon were sold to many and divers gentlemen, of whom one gentleman came to me and said that this book was not according in many place unto the book that Geoffrey Chaucer had made. To whom I answered that I had made it according to my copy, and by me was nothing added ne minished. Then he said he knew a book which his father had and much loved, that was very true and according unto his own first book by him made; and said more, if I would imprint it again he would get me the same book for a copy, howbeit he wist well that his father would not gladly depart from it. To whom I said, in case that he could get me such a book, true and correct, yet I would once endeavour me to imprint it again for to satisfy the author, whereas before by ignorance I erred in hurting and defaming his book in divers places, in setting in some things that he never said ne made, and leaving out many things that he made which be requisite to be set in it. And thus we fell at accord, and he full gently got of his father the said book and delivered it to me, by which I have corrected my book, as hereafter, all along by the aid of Almighty God, shall follow; whom I humbly beseech to give me grace and aid to achieve and accomplish to his laud, honour, and glory; and that all ye that shall in this book read or hear, will of your charity among your deeds of mercy remember the soul of the said Geoffrey Chaucer, first author and maker of this book. And also that all we that shall see and read therein may so take and understand the good and virtuous tales, that it may so profit unto the health of our souls that after this short and transitory life we may come to everlasting life in Heaven. Amen.

BY WILLIAM CAXTON

MALORY'S KING ARTHUR. (1485)

PROLOGUE

After that I had accomplished and finished divers histories, as well of contemplation as of other historical and worldly acts of great conquerors and princes, and also certain books of ensamples and doctrine, many noble and divers gentlemen of this realm of England came and demanded me many and oft times wherefore that I have not done made and printed the noble history of the Saint Graal, and of the most renowned Christian King, first and chief of the three best Christian and worthy, Arthur, which ought most to be remembered among us Englishmen before all other Christian Kings. For it is notoyrly known through the universal world that there be nine worthy and the best that ever were; that is to wit three Paynims, three Jews, and three Christian men. As for the Paynims, they were to-fore the Incarnation of Christ, which were named—the first, Hector of Troy, of whom the history is come both in ballad and in prose—the second, Alexander the Great; and the third, Julius Cæsar, Emperor of Rome, of whom the histories be well known and had. And as for the three Jews, which also were before the Incarnation of our Lord of whom the first was Duke Joshua, which brought the children of Israel into the land of behest; the second, David, King of Jerusalem; and the third Judas Maccabaeus; of these three the Bible rehearseth all their noble histories and acts. And since the said Incarnation have been three noble Christian men, installed and admitted through the universal world into the number of the nine best and worthy, of whom was first the noble Arthur, whose noble acts I purpose to write in this present book here following. The second was Charlemagne, or Charles the Great, of whom the history is had in many places both in French and English; and the third and last was Godfrey of Boulogne, of whose acts and life I made a book unto the excellent prince

and king of noble memory, King Edward the Fourth. The said noble gentlemen instantly required me to print the history of the said noble king and conqueror, King Arthur, and of his knights, with the history of the Saint Graal, and of the death and ending of the said Arthur, affirming that I ought rather to print his acts and noble feats than of Godfrey of Boulogne or any of the other eight, considering that he was a man born within this realm, and king and emperor of the same; and that there be in French divers and many noble volumes of his acts, and also of his knights. To whom I answered that divers men hold opinion that there was no such Arthur, and that all such books as be made of him be but feigned and fables, because that some chronicles make of him no mention, ne remember him nothing ne of his knights; whereto they answered, and one in special said, that in him that should say or think that there was never such a king called Arthur, might well be aretted great folly and blindness; for he said that there were many evidences of the contrary. First ye may see his sepulchre in the monastery of Glastonbury; and also in 'Polychronicon,' in the fifth book, the sixth chapter, and in the seventh book, the twenty-third chapter, where his body was buried, and after found and translated into the said monastery. Ye shall see also in the history of Boccaccio, in his book 'De casu principum,' part of his noble acts and also of his fall. Also Galfridus in his British book recounteth his life, and in divers places of England many remembrances be yet of him, and shall remain perpetually, and also of his knights. First in the Abbey of Westminster at Saint Edward's shrine remaineth the print of his seal in red wax closed in beryl, in which is written 'Patricius Arthurus, Britanniae Galliae Germaniae Daciae Imperator.' Item, in the castle of Dover ye may see Gawain's skull and Caradoc's mantle; at Winchester the round table; in other places Lancelot's sword, and many other things. Then all these things considered, there can no man reasonably gainsay but here was a king of this land named Arthur; for in all places, Christian and heathen, he is reputed and taken for one of the nine worthy, and the first of the three Christian men. And also he is more spoken of beyond the sea; more books made of his noble acts than there be in England, as well in Dutch, Italian, Spanish, and Greek as in French; and yet of record remain in witness of him in Wales in the town of Camelot the great stones and marvellous works of iron lying under the ground, and royal vaults, which divers now living hath seen. Wherefore it is a marvel why he is no more renowned in his own country, save only it accordeth to the word of

God, which saith that no man is accepted for a prophet in his own country. Then all these things aforesaid alleged, I could not well deny but that there was such a noble king named Arthur, and reputed one of the nine worthy, and first and chief of the Christian men; and many noble volumes be made of him and of his noble knights in French, which I have seen and read beyond the sea, which be not had in our maternal tongue, but in Welsh be many, and also in French, and some in English, but nowhere nigh all. Wherefore such as have lately been drawn out briefly into English, I have, after the simple cunning that God hath sent to me, under the favour and correction of all noble lords and gentlemen, emprised to imprint a book of the noble histories of the said King Arthur and of certain of his knights, after a copy unto me delivered, which copy Sir Thomas Mallory did take out of certain books of French and reduced it into English. And I according to my copy have down set it in print, to the intent that noble men may see and learn the noble acts of chivalry, the gentle and virtuous deeds that some knights used in those days, by which they came to honour, and how they that were vicious were punished and oft put to shame and rebuke; humbly beseeching all noble lords and ladies and all other estates, of what estate or degree they be of, that shall see and read in this said book and work, that they take the good and honest acts in their remembrance and to follow the same, wherein they shall find many joyous and pleasant histories and noble and renowned acts of humanity, gentleness, and chivalry. For herein may be seen noble chivalry, courtesy, humanity, friendliness, hardyhood, love, friendship, cowardice, murder, hate, virtue and sin. Do after the good and leave the evil, and it shall bring you to good fame and renown. And for to pass the time this book shall be pleasant to read in; but for to give faith and believe that all is true that is contained herein, ye be at your liberty. But all is written for our doctrine, and for to beware that we fall not to vice ne sin, but to exercise and follow virtue, by which we may come and attain to good fame and renown in this life, and after this short and transitory life to come unto everlasting bliss in heaven; the which He grant us that reigneth in Heaven, the Blessed Trinity. Amen.

Then to proceed forth in this said book which I direct unto all noble princes, lords and ladies, gentlemen or gentlewomen, that desire to read or hear read of the noble and joyous history of the great conqueror and excellent king, King Arthur, sometime King of this noble realm then called Britain, I,

William Caxton, simple person, present this book following which I have emprised to imprint. And treateth of the noble acts, feats of arms, of chivalry, prowess, hardihood, humanity, love, courtesy, and very gentleness, with many wonderful histories and adventures. And for to understand briefly the contents of this volume, I have divided it into 21 books, and every book chaptered, as hereafter shall by God's grace follow. The first book shall treat how Uther Pendragon begat the noble conqueror, King Arthur, and containeth 28 chapters. The second book treateth of Balyn the noble knight, and containeth 19 chapters. The third book treateth of the marriage of King Arthur to Queen Guinevere, with other matters, and containeth 15 chapters. The fourth book how Merlin was assotted, and of war made to King Arthur, and containeth 29 chapters. The fifth book treateth of the conquest of Lucius the emperor, and containeth 12 chapters. The sixth book treateth of Sir Lancelot and Sir Lionel, and marvellous adventures, and containeth 18 chapters. The seventh book treateth of a noble knight called Sir Gareth, and named by Sir Kay 'Beaumains,' and containeth 36 chapters. The eighth book treateth of the birth of Sir Tristram the noble knight, and of his acts, and containeth 41 chapters. The ninth book treateth of a knight named by Sir Kay, 'Le cote mal tailié,' and also of Sir Tristram, and containeth 44 chapters. The tenth book treateth of Sir Tristram, and other marvellous adventures, and containeth 83 chapters. The eleventh book treateth of Sir Lancelot and Sir Galahad, and containeth 14 chapters. The twelfth book treateth of Sir Lancelot and his madness, and containeth 14 chapters. The thirteenth book treateth how Galahad came first to King Arthur's court, and the quest how the Sangreal was begun, and containeth 20 chapters. The fourteenth book treateth of the quest of the Sangreal, and containeth 10 chapters. The fifteenth book treateth of Sir Lancelot, and containeth 6 chapters. The sixteenth book treateth of Sir Boris and Sir Lionel his brother, and containeth 17 chapters. The seventeenth book treateth of the Sangreal, and containeth 23 chapters. The eighteenth book treateth of Sir Lancelot and the Queen, and containeth 25 chapters. The nineteenth book treateth of Queen Guinevere, and Lancelot, and containeth 13 chapters. The twentieth book treateth of the piteous death of Arthur, and containeth 22 chapters. The twenty-first book treateth of his last departing, and how Sir Lancelot came to revenge his death, and containeth 13 chapters. The sum is 21 books, which contain the sum of five hundred and seven chapters, as more plainly shall follow hereafter.

ENEYDOS (1490)

PROLOGUE

After divers work made, translated, and achieved, having no work in hand, I sitting in my study whereas lay many divers pamphlets and books, happened that to my hand came a little book in French, which lately was translated out of Latin by some noble clerk of France, which book is named *Aeneidos*, made in Latin by that noble poet and great clerk, Virgil Which book I saw over, and read therein how, after the general destruction of the great Troy, Aeneas departed, bearing his old father Anchises upon his shoulders, his little son Iulus on his hand, his wife with much other people following, and how he shipped and departed, with all the history of his adventures that he had ere he came to the achievement of his conquest of Italy, as all along shall be shewed in his present book. In which book I had great pleasure because of the fair and honest terms and words in French; which I never saw before like, ne none so pleasant ne so well ordered; which book as seemed to me should be much requisite to noble men to see, as well for the eloquence as the histories. How well that many hundred years past was the said book of *Aeneidos*, with other works, made and learned daily in schools, especially in Italy and other places; which history the said Virgil made in metre. And when I had advised me in this said book, I delibered and concluded to translate it into English; and forthwith took a pen and ink and wrote a leaf or twain, which I oversaw again to correct it. And when I saw the fair and strange terms therein, I doubted that it should not please some gentlemen which late blamed me, saying that in my translations I had over curious terms, which could not be understood of common people, and desired me to use old and homely terms in my translations. And fain would I satisfy every man, and so to do took an old book and read therein, and certainly the English was so rude and broad

that I could not well understood it. And also my Lord Abbot of Westminster did do show to me lately certain evidences written in old English, for to reduce it into our English now used. And certainly it was written in such wise that it was more like to Dutch than English, I could not reduce ne bring it to be understood. And certainly our language now used varieth far from that which was used and spoken when I was born. For we Englishmen be born under the domination of the moon, which is never steadfast but ever wavering, waxing one season and waneth and decreaseth another season. And that common English that is spoken in one shire varieth from another, insomuch that in my days happened that certain merchants were in a ship in Thames for to have sailed over the sea into Zealand, and for lack of wind they tarried at Foreland, and went to land for to refresh them. And one of them named Sheffield, a mercer, came into a house and asked for meat, and especially he asked after eggs; and the good wife answered that she could speak no French, and the merchant was angry, for he also could speak no French, but would have had eggs, and she understood him not. And then at last another said, that he would have "eyren"; then the goodwife said that she understood him well. Lo, what should a man in these days now write, eggs or eyren? Certainly it is hard to please every man because of diversity and change of language. For in these days every man that is in any reputation in his country will utter his communication and matters in such manners and terms that few men shall understand them. And some honest and great clerks have been with me and desired me to write the most curious terms that I could find; and thus between plain, rude and curious I stand abashed. But in my judgment the common terms that be daily used be lighter to be understood than the old and ancient English. And forasmuch as this present book is not for a rude uplandish man to labour therein ne read it, but only for a clerk and a noble gentleman that feeleth and understandeth in feats of arms, in love and in noble chivalry. Therefore in a mean between both I have reduced and translated this said book into our English, not over-rude ne curious; but in such terms as shall be understood, by God's grace, according to my copy. And if any man will intermit in reading of it, and findeth such terms that he cannot understand, let him go read and learn Virgil of the pistles of Ovid, and there he shall see and understand lightly all, if he have a good reader and informer. For this book is not for every rude and uncunning man to see, but to clerks and very gentlemen that understand gentleness and

science. Then I pray all them that shall read in this little treatise to hold me for excused for the translating of it, for I acknowledge myself ignorant of cunning to emprise on me so high and noble a work. But I pray Master John Skelton, late created poet laureate in the University of Oxenford, to oversee and correct this said book, and to address and expound, wherever shall be found fault, to them that shall require it.

For him I know for sufficient to expound and English every difficulty that is therein; for he hath lately translated the Epistles of Tully, and the book of Diodorus Siculus, and divers other works out of Latin into English, not in rude and old language, but in polished and ornate terms craftily, as he that hath read Virgil, Ovid, Tully, and all the other noble poets and orators to me unknown. And also he hath read the nine Muses, and understands their musical sciences, and to whom of them each, science is appropred. I suppose he hath drunken of Helicon's well. Then I pray him and such others to correct, add, or minish whereas he or they shall find fault; for I have but followed my copy in French as nigh as to me is possible. And if any word be said therein well, I am glad; and if otherwise, I submit my said book to their correction. Which book I present unto the high born, my to-coming natural and sovereign lord Arthur, by the grace of God Prince of Wales, Duke of Cornwall and Earl of Chester, first-begotten son and heir unto our most dread natural and sovereign lord and most Christian King, Henry the VII., by the grace of God King of England and of France, and lord of Ireland; beseeching his noble Grace to receive it in thank of me his most humble subject and servant. And I shall pray unto Almighty God for his prosperous increasing in virtue, wisdom, and humanity, that he may be equal with the most renowned of all his noble progenitors; and so to live in this present life that after this transitory life he and we all may come to everlasting life in Heaven. Amen.

DEDICATION OF THE INSTITUTES OF THE CHRISTIAN RELIGION

BY JOHN CALVIN (1536)[A]

To His Most Christian Majesty, FRANCIS, King of the French, and his Sovereign, John Calvin wisheth peace and salvation in Christ.

When I began this work, Sire, nothing was further from my thoughts than writing a book which would afterwards be presented to your Majesty. My intention was only to lay down some elementary principles, by which inquirers on the subject of religion might be instructed in the nature of true piety. And this labour I undertook chiefly for my countrymen, the French, of whom I apprehended multitudes to be hungering and thirsting after Christ, but saw very few possessing any real knowledge of him. That this was my design, the book itself proves by its simple method and unadorned composition. But when I perceived that the fury of certain wicked men in your kingdom had grown to such a height, as to leave no room in the land for sound doctrine, I thought I should be usefully employed, if in the same work I delivered my instructions to them, and exhibited my confession to you, that you may know the nature of that doctrine, which is the object of such unbounded rage to those madmen who are now disturbing the country with fire and sword. For I shall not be afraid to acknowledge, that this treatise contains a summary of that very doctrine, which, according to their clamours, deserves to be punished with imprisonment, banishment, proscription, and flames, and to be exterminated from the face of the earth. I well know with what atrocious insinuations your ears have been filled by them, in order to render our cause most odious in your esteem; but your clemency should lead you to consider that, if accusation be accounted a sufficient evidence of guilt,

there will be an end of all innocence in words and actions. If any one, indeed, with a view to bring odium upon the doctrine which I am endeavouring to defend, should allege that it has long ago been condemned by the general consent, and suppressed by many judicial decisions, this will be only equivalent to saying, that it has been sometimes violently rejected through the influence and power of its adversaries, and sometimes insidiously and fraudulently oppressed by falsehoods, artifices, and calumnies. Violence is displayed, when sanguinary sentences are passed against it without the cause being heard; and fraud, when it is unjustly accused of sedition and mischief. Lest any one should suppose that these our complaints are unfounded, you yourself, Sire, can bear witness of the false calumnies with which you hear it daily traduced; that its only tendency is to wrest the sceptres of kings out of their hands, to overturn all the tribunals and judicial proceedings, to subvert all order and governments, to disturb the peace and tranquillity of the people, to abrogate all laws, to scatter all properties and possessions, and, in a word, to involve every thing in total confusion. And yet you hear the smallest portion of what is alleged against it; for such horrible things are circulated amongst the vulgar, that, if they were true, the whole world would justly pronounce it and its abettors worthy of a thousand fires and gibbets. Who, then, will wonder at its becoming the object of public odium, where credit is given to such most iniquitous accusations? This is the cause of the general consent and conspiracy to condemn us and our doctrine. Hurried away with this impulse, those who sit in judgment pronounce for sentences the prejudices they brought from home with them; and think their duty fully discharged if they condemn none to be punished but such as are convicted by their own confession, or by sufficient proofs. Convicted of what crime? Of this condemned doctrine, they say. But with what justice is it condemned? Now, the ground of defence was not to abjure the doctrine itself, but to maintain its truth. On this subject, however, not a word is allowed to be uttered.

Wherefore I beseech you, Sire,—and surely it is not an unreasonable request,—to take upon yourself the entire cognizance of this cause, which has hitherto been confusedly and carelessly agitated, without any order of law, and with outrageous passion rather than judicial gravity. Think not that I am now meditating my own individual defence, in order to effect a safe return to

my native country; for, though I feel the affection which every man ought to feel for it, yet, under the existing circumstances, I regret not my removal from it. But I plead the cause of all the godly, and consequently of Christ himself, which, having been in these times persecuted and trampled on in all ways in your kingdom, now lies in a most deplorable state; and this indeed rather through the tyranny of certain Pharisees, than with your knowledge. How this comes to pass is foreign to my present purpose to say; but it certainly lies in a most afflicted state. For the ungodly have gone to such lengths, that the truth of Christ, if not vanquished, dissipated, and entirely destroyed, is buried, as it were, in ignoble obscurity, while the poor, despised church is either destroyed by cruel massacres, or driven away into banishment, or menaced and terrified into total silence. And still they continue their wonted madness and ferocity, pushing violently against the wall already bent, and finishing the ruin they have begun. In the meantime, no one comes forward to plead the cause against such furies. If there be any persons desirous of appearing most favourable to the truth, they only venture an opinion, that forgiveness should be extended to the error and imprudence of ignorant people. For this is the language of these moderate men, calling that error and imprudence which they know to be the certain truth of God, and those ignorant people, whose understanding they perceive not to have been so despicable to Christ, but that he has favoured them with the mysteries of his heavenly wisdom. Thus all are ashamed of the Gospel. But it shall be yours, Sire, not to turn away your ears or thoughts from so just a defence, especially in a cause of such importance as the maintenance of God's glory unimpaired in the world, the preservation of the honor of divine truth, and the continuance of the kingdom of Christ uninjured among us. This is a cause worthy of your attention, worthy of your cognizance, worthy of your throne. This consideration constitutes true royalty, to acknowledge yourself in the government of your kingdom to be the minister of God. For where the glory of God is not made the end of the government, it is not a legitimate sovereignty, but a usurpation. And he is deceived who expects lasting prosperity in that kingdom which is not ruled by the sceptre of God, that is, his holy word; for that heavenly oracle cannot fail, which declares that "where there is no vision, the people perish,"[1] Nor should you be seduced from this pursuit by a contempt of our meanness. We are fully conscious to ourselves how very mean and abject we are, being miserable sinners before God, and accounted most despicable by men; being,

(if you please) the refuse of the world, deserving of the vilest appellations that can be found; so that nothing remains for us to glory in before God, but his mercy alone, by which, without any merit of ours, we have been admitted to the hope of eternal salvation, and before men nothing but our weakness, the slightest confession of which is esteemed by them as the greatest disgrace. But our doctrine must stand, exalted above all the glory, and invincible by all the power of the world; because it is not ours, but the doctrine of the living God, and of his Christ, whom the Father hath constituted King, that he may have dominion from sea to sea, and from the river even to the ends of the earth, and that he may rule in such a manner, that the whole earth, with its strength of iron and with its splendour of gold and silver, smitten by the rod of his mouth, may be broken to pieces like a potter's vessel;[2] for thus do the prophets foretell the magnificence of his kingdom.

Our adversaries reply, that our pleading the word of God is a false pretence, and that we are nefarious corrupters of it. But that this is not only a malicious calumny, but egregious impudence, by reading our confession, you will, in your wisdom, be able to judge. Yet something further is necessary to be said, to excite your attention, or at least to prepare your mind for this perusal. Paul's direction, that every prophecy be framed "according to the analogy of faith,"[3] has fixed an invariable standard by which all interpretation of Scripture ought to be tried. If our principles be examined by this rule of faith, the victory is ours. For what is more consistent with faith than to acknowledge ourselves naked of all virtue, that we may be clothed by God; empty of all good, that we may be filled by him; slaves to sin, that we may be liberated by him; blind, that we may be enlightened by him; lame, that we may be guided; weak, that we may be supported by him; to divest ourselves of all ground of glorying, that he alone may be eminently glorious, and that we may glory in him? When we advance these and similar sentiments, they interrupt us with complaints that this is the way to overturn, I know not what blind light of nature, pretended preparations, free will, and works meritorious of eternal salvation, together with all their supererogations; because they cannot bear that the praise and glory of all goodness, strength, righteousness, and wisdom, should remain entirely with God. But we read of none being reproved for having drawn too freely from the fountain of living waters; on the contrary, they are severely upbraided who have "hewed them out cisterns,

broken cisterns, that can hold no water."[4] Again, what is more consistent with faith, than to assure ourselves of God being a propitious Father, where Christ is acknowledged as a brother and Mediator? than securely to expect all prosperity and happiness from Him, whose unspeakable love towards us went so far, that "he spared not his own Son, but delivered him up for us?"[5] than to rest in the certain expectation of salvation and eternal life, when we reflect upon the Father's gift of Christ, in whom such treasures are hidden? Here they oppose us, and complain that this certainty of confidence is chargeable with arrogance and presumption. But as we ought to presume nothing of ourselves, so we should presume every thing of God; nor are we divested of vain glory for any other reason than that we may learn to glory in the Lord. What shall I say more? Review, Sire, all the parts of our cause, and consider us worse than the most abandoned of mankind, unless you clearly discover that we thus "both labor and suffer reproach, because we trust in the living God,"[6] because we believe that "this is life eternal, to know the only true God, and Jesus Christ whom he hath sent."[7] For this hope some of us are bound in chains, others are lashed with scourges, others are carried about as laughing-stocks, others are outlawed, others are cruelly tortured, others escape by flight; but we are all reduced to extreme perplexities, execrated with dreadful curses, cruelly slandered and treated with the greatest indignities. Now, look at our adversaries, (I speak of the order of priests, at whose will and directions others carry on these hostilities against us,) and consider a little with me by what principles they are actuated. The true religion, which is taught in the Scriptures, and ought to be universally maintained, they readily permit both themselves and others to be ignorant of, and to treat with neglect and contempt. They think it unimportant what any one holds or denies concerning God and Christ, provided he submits his mind with an implicit faith (as they call it) to the judgment of the Church. Nor are they much affected, if the glory of God happens to be violated with open blasphemies, provided no one lift a finger against the primacy of the Apostolic See, and the authority of their holy Mother Church. Why, therefore, do they contend with such extreme bitterness and cruelty for the mass, purgatory, pilgrimages, and similar trifles, and deny that any piety can be maintained without a most explicit faith, so to speak, in these things; whereas they prove none of them from the word of God? Why, but because their belly is their God, their kitchen is their religion; deprived of which they

consider themselves no longer as Christians, or even as men. For though some feast themselves in splendour, and others subsist on slender fare, yet all live on the same pot, which, without this fuel, would not only cool, but completely freeze. Every one of them, therefore, who is most solicitous for his belly, is found to be a most strenuous champion for their faith. Indeed, they universally exert themselves for the preservation of their kingdom, and the repletion of their bellies; but not one of them discovers the least indication of sincere zeal.

Nor do their attacks on our doctrine cease here; they urge every topic of accusation and abuse to render it an object of hatred or suspicion. They call it novel, and of recent origin,—they cavil at it as doubtful and uncertain,—they inquire by what miracles it is confirmed,—they ask whether it is right for it to be received contrary to the consent of so many holy fathers, and the custom of the highest antiquity,—they urge us to confess that it is schismatical in stirring up opposition against the Church, or that the Church was wholly extinct for many ages, during which no such thing was known.—Lastly, they say all arguments are unnecessary; for that its nature may be determined by its fruits, since it has produced such a multitude of sects, so many factious tumults, and such great licentiousness of vices. It is indeed very easy for them to insult a deserted cause with the credulous and ignorant multitude; but, if we had also the liberty of speaking in our turn, this acrimony, which they now discover in violently foaming against us with equal licentiousness and impunity, would presently cool.

In the first place, their calling it novel is highly injurious to God, whose holy word deserves not to be accused of novelty. I have no doubt of its being new to them, to whom Jesus Christ and the Gospel are equally new. But those who know the antiquity of this preaching of Paul, "that Jesus Christ died for our sins, and rose again for our justification,"[8] will find no novelty among us. That it has long been concealed, buried, and unknown, is the crime of human impiety. Now that the goodness of God has restored it to us, it ought at least to be allowed its just claim of antiquity.

From the same source of ignorance springs the notion of its being doubtful and uncertain. This is the very thing which the Lord complains of by his

prophet; that "the ox knoweth his owner, and the ass his master's crib,"[9] but that his people know not him. But however they may laugh at its uncertainty, if they were called to seal their own doctrine with their blood and lives, it would appear how much they value it. Very different is our confidence, which dreads neither the terrors of death, nor even the tribunal of God.

Their requiring miracles of us is altogether unreasonable; for we forge no new Gospel, but retain the very same whose truth was confirmed by all the miracles ever wrought by Christ and the apostles. But they have this peculiar advantage above us, that they can confirm their faith by continual miracles even to this day. But the truth is, they allege miracles which are calculated to unsettle a mind otherwise well established, they are so frivolous and ridiculous, or vain and false. Nor, if they were ever so preternatural, ought they to have any weight in opposition to the truth of God, since the name of God ought to be sanctified in all places and at all times, whether by miraculous events, or by the common order of nature. This fallacy might perhaps be more specious, if the Scripture did not apprize us of the legitimate end and use of miracles. For Mark informs us, that the miracles which followed the preaching of the apostles were wrought in confirmation[10] of it, and Luke tells us, that[11] "the Lord gave testimony to the word of his grace," when "signs and wonders" were "done by the hands" of the apostles. Very similar to which is the assertion of the apostle, that "salvation was confirmed" by the preaching of the Gospel, "God also bearing witness with signs, and wonders, and divers miracles." [12] But those things which we are told were seals of the Gospel, shall we pervert to undermine the faith of the Gospel? Those things which were designed to be testimonials of the truth, shall we accommodate to the confirmation of falsehood? It is right, therefore, that the doctrine, which, according to the evangelist, claims the first attention, be examined and tried in the first place; and if it be approved, then it ought to derive confirmation from miracles. But it is the characteristic of sound doctrine, given by Christ, that it tends to promote, not the glory of men, but the glory of God.[13] Christ having laid down this proof of a doctrine, it is wrong to esteem those as miracles which are directed to any other end than the glorification of the name of God alone. And we should remember that Satan has his wonders, which, though they are juggling tricks rather than real miracles, are such as delude the ignorant and inexperienced. Magicians and

enchanters have always been famous for miracles; idolatry has been supported by astonishing miracles; and yet we admit them not as proofs of the superstition of magicians or idolaters. With this engine also the simplicity of the vulgar was anciently assailed by the Donatists, who abounded in miracles. We therefore give the same answer now to our adversaries as Augustine[14] gave to the Donatists, that our Lord hath cautioned us against these miracle-mongers by his prediction, that there should arise false prophets, who, by various signs and lying wonders, "should deceive (if possible) the very elect." [15] And Paul has told us, that the kingdom of Antichrist would be "with all power, and signs, and lying wonders." [16] But these miracles (they say) are wrought, not by idols, or sorcerers, or false prophets, but by saints; as if we were ignorant, that it is a stratagem of Satan to "transform" himself "into an angel of light." [17] At the tomb of Jeremiah, [18] who was buried in Egypt, the Egyptians formerly offered sacrifices and other divine honours. Was not this abusing God's holy prophet to the purposes of idolatry? Yet they supposed this veneration of his sepulchre to be rewarded with a cure for the bite of serpents. What shall we say, but that it has been, and ever will be, the most righteous vengeance of God to "send those who receive not the love of the truth strong delusions, that they should believe a lie?" [19] We are by no means without miracles, and such as are certain, and not liable to cavils. But those under which they shelter themselves are mere illusions of Satan, seducing the people from the true worship of God to vanity.

Another calumny is their charging us with opposition to the fathers,—I mean the writers of the earlier and purer ages,—as if those writers were abettors of their impiety; whereas, if the contest were to be terminated by this authority, the victory in most parts of the controversy—to speak in the most modest terms—would be on our side. But though the writings of those fathers contain many wise and excellent things, yet in some respects they have suffered the common fate of mankind; these very dutiful children reverence only their errors and mistakes, but their excellences they either overlook, or conceal, or corrupt; so that it may truly be said to be their only study to collect dross from the midst of gold. Then they overwhelm us with senseless clamours, as despisers and enemies of the fathers. But we do not hold them in such contempt, but that, if it were consistent with my present design, I could easily

support by their suffrages most of the sentiments that we now maintain. But while we make use of their writings, we always remember that "all things are ours," to serve us, not to have dominion over us, and that "we are Christ's" [20] alone, and owe him universal obedience. He who neglects this distinction will have nothing decided in religion; since those holy men were ignorant of many things, frequently at variance with each other, and sometimes even inconsistent with themselves. There is great reason, they say, for the admonition of Solomon, "not to transgress or remove the ancient landmarks, which our fathers have set." [21] But the same rule is not applicable to the bounding of fields, and to the obedience of faith, which ought to be ready to "forget her own people and her father's house." [22] But if they are so fond of allegorizing, why do they not explain the apostles, rather than any others, to be those fathers, whose appointed landmarks it is so unlawful to remove? For this is the interpretation of Jerome, whose works they have received into their canons. But if they insist on preserving the landmarks of those whom they understand to be intended, why do they at pleasure so freely transgress them themselves? There were two fathers, [23] of whom one said, that our God neither eats nor drinks, and therefore needs neither cups nor dishes; the other, that sacred things require no gold, and that gold is no recommendation of that which is not purchased with gold. This landmark therefore is transgressed by those who in sacred things are so much delighted with gold, silver, ivory, marble, jewels, and silks, and suppose that God is not rightly worshipped, unless all things abound in exquisite splendour, or rather extravagant profusion. There was a father [24] who said he freely partook of flesh on a day when others abstained from it, because he was a Christian. They transgress the landmarks therefore when they curse the soul that tastes flesh in Lent. There were two fathers, [25] of whom one said, that a monk who labors not with his hands is on a level with a cheat or a robber; and the other, that it is unlawful for monks to live on what is not their own, notwithstanding their assiduity in contemplations, studies, and prayers; and they have transgressed this landmark by placing the idle and distended carcasses of monks in cells and brothels, to be pampered on the substance of others. There was a father [26] who said, that to see a painted image of Christ, or of any other saint, in the temples of Christians, is a dreadful abomination. Nor was this merely the sentence of an individual; it was also decreed by an ecclesiastical council, that the object of worship should not be painted on the

walls. They are far from confining themselves within these landmarks, for every corner is filled with images. Another father[27] has advised that, after having discharged the office of humanity towards the dead by the rites of sepulture, we should leave them to their repose. They break through these landmarks by inculcating a constant solicitude for the dead. There was one of the fathers[28] who asserted that the substance of bread and wine in the eucharist ceases not, but remains, just as the substance of the human nature remains in the Lord Christ united with the divine. They transgress this landmark therefore by pretending that, on the words of the Lord being recited, the substance of bread and wine ceases, and is transubstantiated into his body and blood. There were fathers[29] who, while they exhibited to the universal Church only one eucharist, and forbade all scandalous and immoral persons to approach it, at the same time severely censured all who, when present, did not partake of it. How far have they removed these landmarks, when they fill not only the churches, but even private houses, with their masses, admit all who choose to be spectators of them, and every one the more readily in proportion to the magnitude of his contribution, however chargeable with impurity and wickedness! They invite none to faith in Christ and a faithful participation of the sacraments; but rather for purposes of gain bring forward their own work instead of the grace and merit of Christ. There were two fathers,[30] of whom one contended that the use of Christ's sacred supper should be wholly forbidden to those who, content with partaking of one kind, abstained from the other; the other strenuously maintained that Christian people ought not to be refused the blood of their Lord, for the confession of whom they are required to shed their own. These landmarks also they have removed, in appointing, by an inviolable law, that very thing which the former punished with excommunication, and the latter gave a powerful reason for disapproving. There was a father[31] who asserted the temerity of deciding on either side of an obscure subject, without clear and evident testimonies of Scripture. This landmark they forgot when they made so many constitutions, canons, and judicial determinations, without any authority from the word of God. There was a father[32] who upbraided Montanus with having, among other heresies, been the first imposer of laws for the observance of fasts. They have gone far beyond this landmark also, in establishing fasts by the strictest laws. There was a father[33] who denied that marriage ought to be forbidden to the ministers of the Church, and

pronounced cohabitation with a wife to be real chastity; and there were fathers who assented to his judgment. They have transgressed these landmarks by enjoining on their priests the strictest celibacy. There was a father who thought that attention should be paid to Christ only, of whom it is said, "Hear ye him," and that no regard should be had to what others before us have either said or done, only to what has been commanded by Christ, who is preeminent over all. This landmark they neither prescribe to themselves, nor permit to be observed by others, when they set up over themselves and others any masters rather than Christ. There was a father[34] who contended that the Church ought not to take precedence of Christ, because his judgment is always according to truth; but ecclesiastical judges, like other men, may generally be deceived. Breaking down this landmark also, they scruple not to assert, that all the authority of the Scripture depends on the decision of the Church. All the fathers, with one heart and voice, have declared it execrable and detestable for the holy word of God to be contaminated with the subtleties of sophists, and perplexed by the wrangles of logicians. Do they confine themselves within these landmarks, when the whole business of their lives is to involve the simplicity of the Scripture in endless controversies, and worse than sophistical wrangles? so that if the fathers were now restored to life, and heard this art of wrangling, which they call speculative divinity, they would not suspect the dispute to have the least reference to God. But if I would enumerate all the instances in which the authority of the fathers is insolently rejected by those who would be thought their dutiful children, my address would exceed all reasonable bounds. Months and years would be insufficient for me. And yet such is their consummate and incorrigible impudence, they dare to censure us for presuming to transgress the ancient landmarks.

Nor can they gain any advantage against us by their argument from custom; for, if we were compelled to submit to custom, we should have to complain of the greatest injustice. Indeed, if the judgments of men were correct, custom should be sought among the good. But the fact is often very different. What appears to be practiced by many soon obtains the force of a custom. And human affairs have scarcely ever been in so good a state as for the majority to be pleased with things of real excellence. From the private vices of multitudes, therefore, has arisen public error, or rather a common agreement

of vices, which these good men would now have to be received as law. It is evident to all who can see, that the world is inundated with more than an ocean of evils, that it is overrun with numerous destructive pests, that every thing is fast verging to ruin, so that we must altogether despair of human affairs, or vigorously and even violently oppose such immense evils. And the remedy is rejected for no other reason, but because we have been accustomed to the evils so long. But let public error be tolerated in human society; in the kingdom of God nothing but his eternal truth should be heard and regarded, which no succession of years, no custom, no confederacy, can circumscribe. Thus Isaiah once taught the chosen people of God: "Say ye not, A confederacy, to all to whom this people shall say, A confederacy:" that is, that they should not unite in the wicked consent of the people; "nor fear their fear, nor be afraid," but rather "sanctify the Lord of hosts," that he might "be their fear and their dread." [35] Now, therefore, let them, if they please, object against us past ages and present examples; if we "sanctify the Lord of hosts," we shall not be much afraid. For, whether many ages agree in similar impiety, he is mighty to take vengeance on the third and fourth generation; or whether the whole world combine in the same iniquity, he has given an example of the fatal end of those who sin with a multitude, by destroying all men with a deluge, and preserving Noah and his small family, in order that his individual faith might condemn the whole world. Lastly, a corrupt custom is nothing but an epidemical pestilence, which is equally fatal to its objects, though they fall with a multitude. Besides, they ought to consider a remark, somewhere made by Cyprian, [36] that persons who sin through ignorance, though they cannot be wholly exculpated, may yet be considered in some degree excusable; but those who obstinately reject the truth offered by the Divine goodness, are without any excuse at all.

Nor are we so embarrassed by their dilemma as to be obliged to confess, either that the Church was for some time extinct, or that we have now a controversy with the Church. The Church of Christ has lived, and will continue to live, as long as Christ shall reign at the right hand of the Father, by whose hand she is sustained, by whose protection she is defended, by whose power she is preserved in safety. For he will undoubtedly perform what he once promised, to be with his people "even to the end of the world." [37] We have no quarrel against the Church, for with one consent we unite

with all the company of the faithful in worshipping and adoring the one God and Christ the Lord, as he has been adored by all the pious in all ages. But our opponents deviate widely from the truth when they acknowledge no Church but what is visible to the corporeal eye, and endeavour to circumscribe it by those limits within which it is far from being included. Our controversy turns on the two following points:—first, they contend that the form of the Church is always apparent and visible; secondly, they place that form in the see of the Roman Church and her order of prelates. We assert, on the contrary, first, that the Church may exist without any visible form; secondly, that its form is not contained in that external splendour which they foolishly admire, but is distinguished by a very different criterion, viz, the pure preaching of God's word, and the legitimate administration of the sacraments. They are not satisfied unless the Church can always be pointed out with the finger. But how often among the Jewish people was it so disorganized, as to have no visible form left? What splendid form do we suppose could be seen, when Elias deplored his being left alone?[38] How long, after the coming of Christ, did it remain without any external form? How often, since that time, have wars, seditions, and heresies, oppressed and totally obscured it? If they had lived at that period, would they have believed that any Church existed? Yet Elias was informed that there were "left seven thousand" who had "not bowed the knee to Baal." Nor should we entertain any doubt of Christ's having always reigned on earth ever since his ascension to heaven. But if the pious at such periods had sought for any form evident to their senses, must not their hearts have been quite discouraged? Indeed it was already considered by Hilary in his day as a grievous error, that people were absorbed in foolish admiration of the episcopal dignity, and did not perceive the dreadful mischiefs concealed under that disguise. For this is his language: [39] "One thing I advise you—beware of Antichrist, for you have an improper attachment to walls; your veneration for the Church of God is misplaced on houses and buildings; you wrongly introduce under them the name of peace. Is there any doubt that they will be seats of Antichrist? I think mountains, woods, and lakes, prisons and whirlpools, less dangerous; for these were the scenes of retirement or banishment in which the prophets prophesied." But what excites the veneration of the multitude in the present day for their horned bishops, but the supposition that those are the holy prelates of religion whom they see presiding over great cities? Away, then,

with such stupid admiration. Let us rather leave it to the Lord, since he alone "knoweth them that are his,"[40] sometimes to remove from human observation all external knowledge of his Church. I admit this to be a dreadful judgment of God on the earth; but if it be deserved by the impiety of men, why do we attempt to resist the righteous vengeance of God? Thus the Lord punished the ingratitude of men in former ages; for, in consequence of their resistance to his truth, and extinction of the light he had given them, he permitted them to be blinded by sense, deluded by absurd falsehoods, and immersed in profound darkness, so that there was no appearance of the true Church left; yet, at the same time, in the midst of darkness and errors, he preserved his scattered and concealed people from total destruction. Nor is this to be wondered at; for he knew how to save in all the confusion of Babylon, and the flame of the fiery furnace. But how dangerous it is to estimate the form of the Church by I know not what vain pomp, which they contend for; I shall rather briefly suggest than state at large, lest I should protract this discourse to an excessive length. The Pope, they say, who holds the Apostolic see, and the bishops anointed and consecrated by him, provided they are equipped with mitres and crosiers, represent the Church, and ought to be considered as the Church. Therefore they cannot err. How is this?—Because they are pastors of the Church, and consecrated to the Lord. And did not the pastoral character belong to Aaron, and the other rulers of Israel? Yet Aaron and his sons, after their designation to the priesthood, fell into error when they made the golden calf.[41] According to this mode of reasoning, why should not the four hundred prophets, who lied to Ahab, have represented the Church?[42] But the Church remained on the side of Micaiah, solitary and despised as he was, and out of his mouth proceeded the truth. Did not those prophets exhibit both the name and appearance of the Church, who with united violence rose up against Jeremiah, and threatened and boasted, "the law shall not perish from the priest, nor counsel from the wise, nor the word from the prophet?"[48] Jeremiah is sent singly against the whole multitude of prophets, with a denunciation from the Lord, that the "law shall perish from the priest, counsel from the wise, and the word from the prophet." [44] And was there not the like external respectability in the council convened by the chief priests, scribes, and Pharisees, to consult about putting Christ to death?[45] Now, let them go and adhere to the external appearance, and thereby make Christ and all the prophets schismatics, and, on the other

hand, make the ministers of Satan instruments of the Holy Spirit. But if they speak their real sentiments, let them answer me sincerely, what nation or place they consider as the seat of the Church, from the time when, by a decree of the council of Basil, Eugenius was deposed and degraded from the pontificate, and Amadeus substituted in his place. They cannot deny that the council, as far as relates to external forms, was a lawful one, and summoned not only by one pope, but by two. There Eugenius was pronounced guilty of schism, rebellion, and obstinacy, together with all the host of cardinals and bishops who had joined him in attempting a dissolution of the council. Yet afterwards, assisted by the favour of princes, he regained the quiet possession of his former dignity. That election of Amadeus, though formally made by the authority of a general and holy synod, vanished into smoke; and he was appeased with a cardinal's hat, like a barking dog with a morsel. From the bosom of those heretics and rebels have proceeded all the popes, cardinals, bishops, abbots, and priests ever since. Here they must stop. For to which party will they give the title of the Church? Will they deny that this was a general council, which wanted nothing to complete its external majesty, being solemnly convened by two papal bulls, consecrated by a presiding legate of the Roman see, and well regulated in every point of order, and invariably preserving the same dignity to the last? Will they acknowledge Eugenius to be a schismatic, with all his adherents, by whom they have all been consecrated? Either, therefore, let them give a different definition of the form of the Church, or, whatever be their number, we shall account them all schismatics, as having been knowingly and voluntarily ordained by heretics. But if it had never been ascertained before, that the Church is not confined to external pomps they would themselves afford us abundant proof of it, who have so long superciliously exhibited themselves to the world under the title of the Church, though they were at the same time the deadly plagues of it. I speak not of their morals, and those tragical exploits with which all their lives abound, since they profess themselves to be Pharisees, who are to be heard and not imitated. I refer to the very doctrine itself, on which they found their claim to be considered as the Church. If you devote a portion of your leisure, Sire, to the perusal of our writings, you will clearly discover that doctrine to be a fatal pestilence of souls, the firebrand, ruin, and destruction of the Church.

Finally, they betray great want of candour, by invidiously repeating what great commotions, tumults, and contentions, have attended the preaching of our doctrine, and what effects it produces in many persons. For it is unfair to charge it with those evils which ought to be attributed to the malice of Satan. It is the native property of the Divine word, never to make its appearance without disturbing Satan, and rousing his opposition. This is a most certain and unequivocal criterion by which it is distinguished from false doctrines, which are easily broached when they are heard with general attention, and received with applauses by the world. Thus, in some ages, when all things were immersed in profound darkness, the prince of this world amused and diverted himself with the generality of mankind, and, like another Sardanapalus, gave himself up to his ease and pleasures in perfect peace; for what would he do but amuse and divert himself, in the quiet and undisturbed possession of his kingdom? But when the light shining from above dissipated a portion of his darkness—when that Mighty One alarmed and assaulted his kingdom—then he began to shake off his wonted torpor, and to hurry on his armour. First, indeed, he stirred up the power of men to suppress the truth by violence at its first appearance; and when this proved ineffectual, he had recourse to subtlety. He made the Catabaptists, and other infamous characters, the instruments of exciting dissensions and doctrinal controversies, with a view to obscure and finally to extinguish it. And now he continues to attack it both ways; for he endeavours to root up this genuine seed by means of human force, and at the same time tries every effort to choke it with his tares, that it may not grow and produce fruit. But all his attempts will be vain, if we attend to the admonitions of the Lord, who hath long ago made us acquainted with his devices, that we might not be caught by him unawares, and has armed us with sufficient means of defence against all his assaults. But to charge the word of God with the odium of seditions, excited against it by wicked and rebellious men, or of sects raised by imposters,—is not this extreme malignity? Yet it is not without example in former times. Elias was asked whether it was not he "that troubled Israel." [46] Christ was represented by the Jews as guilty of sedition.[47] The apostles were accused of stirring up popular commotions.[48] Wherein does this differ from the conduct of those who, at the present day, impute to us all the disturbances, tumults, and contentions, that break out against us? But the proper answer to such accusations has been taught us by Elias, that the

dissemination of errors and the raising of tumults is not chargeable on us, but on those who are resisting the power of God. But as this one reply is sufficient to repress their temerity, so, on the other hand, we must meet the weakness of some persons, who are frequently disturbed with such offences, and become unsettled and wavering in their minds. Now, that they may not stumble and fall amidst this agitation and perplexity, let them know that the apostles in their day experienced the same things that now befall us. There were "unlearned and unstable" men, Peter says, who "wrested" the inspired writings of Paul "to their own destruction." [49] There were despisers of God, who, when they heard that "where sin abounded grace did much more abound," immediately concluded, Let us "continue in sin, that grace may abound." When they heard that the faithful were "not under the law," they immediately croaked, "We will sin, because we are not under the law, but under grace." [50] There were some who accused him as an encourager of sin. Many false apostles crept in, to destroy the churches he had raised. "Some preached" the gospel "of envy and strife, not in sincerity," maliciously "supposing to add affliction to his bonds." [51] In some places the Gospel was attended with little benefit. "All were seeking their own, not the things of Jesus Christ." [52] Others returned "like dogs to their vomit, and like swine to their wallowing in the mire." [53] Many perverted the liberty of the spirit into the licentiousness of the flesh. Many insinuated themselves as brethren, who afterwards brought the pious into dangers. Various contentions were excited among the brethren themselves. What was to be done by the apostles in such circumstances? Should they not have dissembled for a time, or rather have rejected and deserted that Gospel which appeared to be the nursery of so many disputes, the cause of so many dangers, the occasion of so many offences? But in such difficulties as these, their minds were relieved by this reflection that Christ is the "stone of stumbling and rock of offence," [54] "set for the fall and rising again of many, and for a sign which shall be spoken against;" [55] and armed with this confidence, they proceeded boldly through all the dangers of tumults and offences. The same consideration should support us, since Paul declares it to be the perpetual character of the Gospel, that it is a "savour of death unto death in them that perish," [56] although it was rather given us to be the "savour of life unto life," and "the power of God to" the "salvation" of the faithful; [57] which we also should certainly experience it to be, if we did not corrupt this eminent gift of God by our

ingratitude, and prevert to our destruction what ought to be a principal instrument of our salvation.

But I return to you, Sire. Let not your Majesty be at all moved by those groundless accusations with which our adversaries endeavour to terrify you; as that the sole tendency and design of this new Gospel—for so they call it—is to furnish a pretext for seditions, and to gain impunity for all crimes. "For God is not the author of confusion, but of peace;"[58] nor is "the Son of God," who came to "destroy the works of the devil, the minister of sin." [59] And it is unjust to charge us with such motives and designs, of which we have never given cause for the least suspicion. Is it probable that we are meditating the subversion of kingdoms?—we, who were never heard to utter a factious word, whose lives were ever known to be peaceable and honest while We lived under your government, and who, even now in our exile, cease not to pray for all prosperity to attend yourself and your kingdom! Is it probable that we are seeking an unlimited license to commit crimes with impunity? in whose conduct, though many things may be blamed, yet there is nothing worthy of such severe reproach! Nor have we, by Divine Grace, profited so little in the Gospel, but that our life may be an example to our detractors of chastity, liberality, mercy, temperance, patience, modesty, and every other virtue. It is an undeniable fact, that we sincerely fear and worship God, whose name we desire to be sanctified both by our life and by our death; and envy itself is constrained to bear testimony to the innocence and civil integrity of some of us, who have suffered the punishment of death for that very thing which ought to be accounted their highest praise. But if the Gospel be made a pretext for tumults, which has not yet happened in your kingdom; if any persons make the liberty of divine grace an excuse for the licentiousness of their vices, of whom I have known many,—there are laws and legal penalties, by which they may be punished according to their deserts; only let not the Gospel of God be reproached for the crimes of wicked men. You have now, Sire, the virulent iniquity of our calumniators laid before you in a sufficient number of instances, that you may not receive their accusations with too credulous an ear.—I fear I have gone too much into the detail, as this preface already approaches the size of a full apology; whereas I intended it not to contain our defence, but only to prepare your mind to attend to the pleading of our cause; for, though you are now averse

and alienated from us, and even inflamed against us, we despair not of regaining your favour, if you will only once read with calmness and composure this our confession, which we intend as our defence before your Majesty. But, on the contrary, if your ears are so preoccupied with the whispers of the malevolent, as to leave no opportunity for the accused to speak for themselves, and if those outrageous furies, with your connivance, continue to persecute with imprisonments, scourges, tortures, confiscations, and flames, we shall indeed, like sheep destined to the slaughter, be reduced to the greatest extremities. Yet shall we in patience possess our souls, and wait for the mighty hand of the Lord, which undoubtedly will in time appear, and show itself armed for the deliverance of the poor from their affliction, and for the punishment of their despisers, who now exult in such perfect security. May the Lord, the King of kings, establish your throne with righteousness, and your kingdom with equity. *Basil, 1st August, 1536.*

[Footnote A: John Calvin was born at Noyon, Picardy, France, in 1509, and died at Geneva in 1564. He joined the Reformation about 1528, and, having been banished from Paris, took refuge in Switzerland. The "Institutes," published at Basle in 1536, contain a comprehensive statement of the beliefs of that school of Protestant theology which bears Calvin's name; and in this "Dedication" we have Calvin's own summing up of the essentials of his creed.]

[Footnote 1: Prov. xxix. 18.]

[Footnote 2: Daniel ii. 34. Isaiah xi. 4. Psalm ii. 9.]

[Footnote 3 Rom. xii. 6.]

[Footnote 4: Jer. ii. 13.]

[Footnote 5: Rom. viii. 32.]

[Footnote 6: I Tim. iv. 10.]

[Footnote 7: John xvii, 3.]

[Footnote 8: Rom, iv. 25. I Cor. xv. 3, 17.]

[Footnote 9: Isaiah i. 3.]

[Footnote 10: Mark xvi. 20.]

[Footnote 11: Acts xiv. 3.]

[Footnote 12: Heb. ii. 3-4.]

[Footnote 13: John vii. 18, viii. 50.]

[Footnote 14: In Joan, tract. 13.]

[Footnote 15: Matt. xxiv. 24.]

[Footnote 16: 2 Thess. ii. 9.]

[Footnote 17: 2 Cor. xi. 14.]

[Footnote 18: Hierom. in praef. Jerem.]

[Footnote 19: 2 Thess. ii. 10, 11.]

[Footnote 20: i Cor. iii. 21, 23]

[Footnote 21: Prov xxii. 28.]

[Footnote 22: Psalm xlv. 10.]

[Footnote 23: Acat. in lib. II, cap. 16. Trip. Hist. Amb. lib. 2, de Off. c. 28.]

[Footnote 24: Spiridion. Trip. Hist. lib. 1, c. 10.]

[Footnote 25: Trip. Hist. lib. 8, c. 1. August. de Opere Mon. c. 17.]

[Footnote 26: Epiph. Epist. ab Hier. vers. Con. Eliber. c. 36.]

[Footnote 27: Amb de Abra. lib 1, c. 7.]

[Footnote 28: Gelas. Pap in Conc. Rom.]

[Footnote 29: Chrys. in 1 Cap. Ephes. Calix. Papa de Cons. dist. 2.]

[Footnote 30: Gelas. can. Comperimus de Cons. dist. 2. Cypr. Epist. 2, lib. 1, de Laps.]

[Footnote 31: August. lib. 2, de Pec. Mer. cap. ult.]

[Footnote 32: Apollon de quo Eccl. Hist. lib. 5, cap. 11, 12.]

[Footnote 33: Paphnut. Trip. Hist. lib. 2, c. 14. Cypr. Epist. 2, lib. 2.]

[Footnote 34: Aug. cap. 2, contr. Cresc. Grammatic.]

[Footnote 35: Isaiah viii. 12, 13.]

[Footnote 36: Epist. 3, lib. 2, et in Epist. ad. Julian, de Haeret. baptiz.]

[Footnote 37: Matt, xxvlii. 20.]

[Footnote 38: i Kings xix. 14, 18.]

[Footnote 39: Contr. Auxent.]

[Footnote 40: 2 Tim. ii. 19.]

[Footnote 41: Exod. xxxii. 4.]

[Footnote 42: i Kings xxii. 6, 11-23.]

[Footnote 43: Jer. xviii. 18.]

[Footnote 44: Jer. iv. 9.]

[Footnote 45: Matt. xxvi. 3, 4.]

[Footnote 46: 1 Kings xviii. 17.]

[Footnote 47: Luke xxiii. 2, 5.]

[Footnote 48: Acts xvii. 6, xxiv. 5.]

[Footnote 49: 2 Pet. iii. 16.]

[Footnote 50: Rom. v. 20, vi. 1, 14, 15.]

[Footnote 51: Phil. i. 15, 16.]

[Footnote 52: Phil. ii. 21.]

[Footnote 53: 2 Pet. ii. 22.]

[Footnote 54: 1 Pet. ii. 8.]

[Footnote 55: Luke ii. 34.]

[Footnote 56: 2 Cor. ii. 15, 16.]

[Footnote 57: Rom. i. 16.]

[Footnote 58: 1 Cor. xiv. 33.]

[Footnote 59: 1 John iii. 8. Gal. ii. 17.]

GENERAL SYLLABUS

The design of the Author in these Christian Institutes is twofold, relating, First to the knowledge of God, as the way to attain a blessed immortality; and, in connection with and subservience to this, Secondly, to the knowledge of ourselves.

In the prosecution of this design, he strictly follows the method of the Apostles' Creed, as being most familiar to all Christians. For as the Creed consists of four parts, the first relating to God the Father, the second to the Son, the third to the Holy Spirit, the fourth to the Church; so the Author distributes the whole of this work into Four Books, corresponding respectively to the four parts of the Creed; as will clearly appear from the following detail:—

I. The first article of the Creed relates to God the Father, and to the creation, conservation, and government of all things, which are included in his omnipotence.

So the first book is on the knowledge of God, considered as the Creator, Preserver, and Governor of the universe at large, and every thing contained in it. It shows both the nature and tendency of the true knowledge of the Creator—that this is not learned in the schools, but that every man from his birth is self-taught it—Yet that the depravity of men is so great as to corrupt and extinguish this knowledge, partly by ignorance, partly by wickedness; so that it neither leads him to glorify God as he ought, nor conducts him to the attainment of happiness—And though this internal knowledge is assisted by all the creatures around, which serve as a mirror to display the Divine perfections, yet that man does not profit by it—Therefore, that to those,

whom it is God's will to bring to an intimate and saving knowledge of himself, he gives his written word; which introduces observations on the sacred Scripture—That he has therein revealed himself; that not the Father only, but the Father, Son, and Holy Spirit, united, is the Creator of heaven and earth; whom neither the knowledge innate by nature, nor the very beautiful mirror displayed to us in the world, can, in consequence of our depravity, teach us to know so as to glorify him. This gives occasion for treating of the revelation of God in the Scripture, of the unity of the Divine Essence, and the trinity of Persons.—To prevent man from attributing to God the blame of his own voluntary blindness, the Author shows the state of man at his creation, and treats of the image of God, freewill, and the primitive integrity of nature.—Having finished the subject of creation, he proceeds to the conservation and government of all things, concluding the first book with a full discussion of the doctrine of divine providence.

II. But since man is fallen by sin from the state in which he was created, it is necessary to come to Christ. Therefore it follows in the Creed, "And in Jesus Christ, his only Son our Lord," &c.

So in the second book of the Institutes our Author treats of the knowledge of God as the Redeemer in Christ; and having shown the fall of man, leads him to Christ the Mediator. Here he states the doctrine of original sin—that man possesses no inherent strength to enable him to deliver himself from sin and the impending curse, but that, on the contrary, nothing can proceed from him, antecedently to reconciliation and renovation, but what is deserving of condemnation—Therefore, that, man being utterly lost in himself, and incapable of conceiving even a good thought by which he may restore himself, or perform actions acceptable to God, he must seek redemption out of himself, in Christ—That the Law was given for this purpose, not to confine its observers to itself, but to conduct them to Christ; which gives occasion to introduce an exposition of the Moral Law—That he was known, as the Author of salvation, to the Jews under the Law, but more fully under the Gospel, in which he is manifested to the world.—Hence follows the doctrine of the similarity and difference of the Old and New Testament, of the Law and Gospel.—It is next stated, that, in order to the complete accomplishment of salvation, it was necessary for the eternal Son of God to

become man, and that he actually assumed a real human nature:—it is also shown how these two natures constitute one person—That the office of Christ, appointed for the acquisition and application of complete salvation by his merit and efficacy, is sacerdotal, regal, and prophetic—Next follows the manner in which Christ executed his office, or actually performed the part of a Mediator, being an exposition of the Articles respecting his death, resurrection, and ascension to heaven.—Lastly, the Author shows the truth and propriety of affirming that Christ merited the grace of God and salvation for us.

III. As long as Christ is separate from us, he profits us nothing. Hence the necessity of our being ingrafted into him, as branches into a vine. Therefore the doctrine concerning Christ is followed, in the third part of the Creed, by this clause, "I believe in the Holy Spirit," as being the bond of union between us and Christ.

So in the third book our Author treats of the Holy Spirit, who unites us to Christ—and consequently of faith, by which we embrace Christ, with his twofold benefit, free righteousness, which he imputes to us, and regeneration, which he commences within us, by bestowing repentance upon us.—And to show that we have not the least room to glory in such faith as is unconnected with the pursuit of repentance, before proceeding to the full discussion of justification, he treats at large of repentance and the continual exercise of it, which Christ, apprehended by faith, produces in us by his Spirit—He next fully discusses the first and chief benefit of Christ when united to us by the Holy Spirit that is, justification—and then treats of prayer, which resembles the hand that actually receives those blessings to be enjoyed, which faith knows, from the word of promise, to be laid up with God for our use.—But as all men are not united to Christ, the sole Author of salvation, by the Holy Spirit, who creates and preserves faith in us, he treats of God's eternal election; which is the cause that we, in whom he foresaw no good but what he intended freely to bestow, have been favored with the gift of Christ, and united to God by the effectual call of the Gospel.—Lastly, he treats of complete regeneration, and the fruition of happiness; that is, the final resurrection, towards which our eyes must be directed, since in this world the felicity of the pious, in respect of enjoyment, is only begun.

IV. But as the Holy Spirit does not unite all men to Christ, or make them partakers of faith, and on those to whom he imparts it he does not ordinarily bestow it without means, but employs for this purpose the preaching of the Gospel and the use of the sacraments, with the administration of all discipline, therefore it follows in the Creed, "I believe in the Holy Catholic Church," whom, although involved in eternal death, yet, in pursuance of the gratuitous election, God has freely reconciled to himself in Christ, and made partakers of the Holy Spirit, that, being ingrafted into Christ, they may have communion with him as their head, whence flows a perpetual remission of sins, and a full restoration to eternal life.

So in the fourth book our Author treats of the Church—then of the means used by the Holy Spirit in effectually calling from spiritual death, and preserving the church—the word and sacraments—baptism and the Lord's supper—which are as it were Christ's regal sceptre, by which he commences his spiritual reign in the Church by the energy of his Spirit, and carries it forwards from day to day during the present life, after the close of which he perfects it without those means.

And as political institutions are the asylums of the Church in this life, though civil government is distinct from the spiritual kingdom of Christ, our Author instructs us respecting it as a signal blessing of God, which the Church ought to acknowledge with gratitude of heart, till we are called out of this transitory state to the heavenly inheritance, where God will be all in all.

This is the plan of the Institutes, which may be comprised in the following brief summary:—

Man, created originally upright, being afterwards ruined, not partially, but totally, finds salvation out of himself, wholly in Christ; to whom being united by the Holy Spirit, freely bestowed, without any regard of future works, he enjoys in him a twofold benefit, the perfect imputation of righteousness, which attends him to the grave, and the commencement of sanctification, which he daily increases, till at length he completes it at the day of regeneration or resurrection of the body, so that in eternal life and the heavenly inheritance his praises are celebrated for such stupendous mercy.

DEDICATION OF THE REVOLUTIONS OF THE HEAVENLY BODIES

BY NICOLAUS COPERNICUS (1543)[A]

TO POPE PAUL III

I can easily conceive, most Holy Father, that as soon as some people learn that in this book which I have written concerning the revolutions of the heavenly bodies, I ascribe certain motions to the Earth, they will cry out at once that I and my theory should be rejected. For I am not so much in love with my conclusions as not to weigh what others will think about them, and although I know that the meditations of a philosopher are far removed from the judgment of the laity, because his endeavor is to seek out the truth in all things, so far as this is permitted by God to the human reason, I still believe that one must avoid theories altogether foreign to orthodoxy. Accordingly, when I considered in my own mind how absurd a performance it must seem to those who know that the judgment of many centuries has approved the view that the Earth remains fixed as center in the midst of the heavens, if I should, on the contrary, assert that the Earth moves; I was for a long time at a loss to know whether I should publish the commentaries which I have written in proof of its motion, or whether it were not better to follow the example of the Pythagoreans and of some others, who were accustomed to transmit the secrets of Philosophy not in writing but orally, and only to their relatives and friends, as the letter from Lysis to Hipparchus bears witness. They did this, it seems to me, not as some think, because of a certain selfish reluctance to give their views to the world, but in order that the noblest truths, worked out by the careful study of great men, should not be despised by those who are vexed at the idea of taking great pains with any forms of literature except

such as would be profitable, or by those who, if they are driven to the study of Philosophy for its own sake by the admonitions and the example of others, nevertheless, on account of their stupidity, hold a place among philosophers similar to that of drones among bees. Therefore, when I considered this carefully, the contempt which I had to fear because of the novelty and apparent absurdity of my view, nearly induced me to abandon utterly the work I had begun.

My friends, however, in spite of long delay and even resistance on my part, withheld me from this decision. First among these was Nicolaus Schonberg, Cardinal of Capua, distinguished in all branches of learning. Next to him comes my very dear friend, Tidemann Giese, Bishop of Culm, a most earnest student, as he is, of sacred and, indeed, of all good learning. The latter has often urged me, at times even spurring me on with reproaches, to publish and at last bring to the light the book which had lain in my study not nine years merely, but already going on four times nine. Not a few other very eminent and scholarly men made the same request, urging that I should no longer through fear refuse to give out my work for the common benefit of students of Mathematics. They said I should find that the more absurd most men now thought this theory of mine concerning the motion of the Earth, the more admiration and gratitude it would command after they saw in the publication of my commentaries the mist of absurdity cleared away by most transparent proofs. So, influenced by these advisors and this hope, I have at length allowed my friends to publish the work, as they had long besought me to do.

But perhaps Your Holiness will not so much wonder that I have ventured to publish these studies of mine, after having taken such pains in elaborating them that I have not hesitated to commit to writing my views of the motion of the Earth, as you will be curious to hear how it occurred to me to venture, contrary to the accepted view of mathematicians, and well-nigh contrary to common sense, to form a conception of any terrestrial motion whatsoever. Therefore I would not have it unknown to Your Holiness, that the only thing which induced me to look for another way of reckoning the movements of the heavenly bodies was that I knew that mathematicians by no means agree in their investigations thereof. For, in the first place, they are so much in doubt concerning the motion of the sun and the moon, that they can not even

demonstrate and prove by observation the constant length of a complete year; and in the second place, in determining the motions both of these and of the five other planets, they fail to employ consistently one set of first principles and hypotheses, but use methods of proof based only upon the apparent revolutions and motions. For some employ concentric circles only; others, eccentric circles and epicycles; and even by these means they do not completely attain the desired end. For, although those who have depended upon concentric circles have shown that certain diverse motions can be deduced from these, yet they have not succeeded thereby in laying down any sure principle, corresponding indisputably to the phenomena. These, on the other hand, who have devised systems of eccentric circles, although they seem in great part to have solved the apparent movements by calculations which by these eccentrics are made to fit, have nevertheless introduced many things which seem to contradict the first principles of the uniformity of motion. Nor have they been able to discover or calculate from these the main point, which is the shape of the world and the fixed symmetry of its parts; but their procedure has been as if someone were to collect hands, feet, a head, and other members from various places, all very fine in themselves, but not proportionate to one body, and no single one corresponding in its turn to the others, so that a monster rather than a man would be formed from them. Thus in their process of demonstration which they term a "method," they are found to have omitted something essential, or to have included something foreign and not pertaining to the matter in hand. This certainly would never have happened to them if they had followed fixed principles; for if the hypotheses they assumed were not false, all that resulted therefrom would be verified indubitably. Those things which I am saying now may be obscure, yet they will be made clearer in their proper place.

Therefore, having turned over in my mind for a long time this uncertainty of the traditional mathematical methods of calculating the motions of the celestial bodies, I began to grow disgusted that no more consistent scheme of the movements of the mechanism of the universe, set up for our benefit by that best and most law abiding Architect of all things, was agreed upon by philosophers who otherwise investigate so carefully the most minute details of this world. Wherefore I undertook the task of rereading the books of all the philosophers I could get access to, to see whether any one ever was of the

opinion that the motions of the celestial bodies were other than those postulated by the men who taught mathematics in the schools. And I found first, indeed, in Cicero, that Niceta perceived that the Earth moved; and afterward in Plutarch I found that some others were of this opinion, whose words I have seen fit to quote here, that they may be accessible to all:—

"Some maintain that the Earth is stationary, but Philolaus the Pythagorean says that it revolves in a circle about the fire of the ecliptic, like the sun and moon. Heraklides of Pontus and Ekphantus the Pythagorean make the Earth move, not changing its position, however, confined in its falling and rising around its own center in the manner of a wheel."

Taking this as a starting point, I began to consider the mobility of the Earth; and although the idea seemed absurd, yet because I knew that the liberty had been granted to others before me to postulate all sorts of little circles for explaining the phenomena of the stars, I thought I also might easily be permitted to try whether by postulating some motion of the Earth, more reliable conclusions could be reached regarding the revolution of the heavenly bodies, than those of my predecessors.

And so, after postulating movements, which, farther on in the book, I ascribe to the Earth, I have found by many and long observations that if the movements of the other planets are assumed for the circular motion of the Earth and are substituted for the revolution of each star, not only do their phenomena follow logically therefrom, but the relative positions and magnitudes both of the stars and all their orbits, and of the heavens themselves, become so closely related that in none of its parts can anything be changed without causing confusion in the other parts and in the whole universe. Therefore, in the course of the work I have followed this plan: I describe in the first book all the positions of the orbits together with the movements which I ascribe to the Earth, in order that this book might contain, as it were, the general scheme of the universe. Thereafter in the remaining books, I set forth the motions of the other stars and of all their orbits together with the movement of the Earth, in order that one may see from this to what extent the movements and appearances of the other stars and their orbits can be saved, if they are transferred to the movement of the

Earth. Nor do I doubt that ingenious and learned mathematicians will sustain me, if they are willing to recognize and weigh, not superficially, but with that thoroughness which Philosophy demands above all things, those matters which have been adduced by me in this work to demonstrate these theories. In order, however, that both the learned and the unlearned equally may see that I do not avoid anyone's judgment, I have preferred to dedicate these lucubrations of mine to Your Holiness rather than to any other, because, even in this remote corner of the world where I live, you are considered to be the most eminent man in dignity of rank and in love of all learning and even of mathematics, so that by your authority and judgment you can easily suppress the bites of slanderers, albeit the proverb hath it that there is no remedy for the bite of a sycophant. If perchance there shall be idle talkers, who, though they are ignorant of all mathematical sciences, nevertheless assume the right to pass judgment on these things, and if they should dare to criticise and attack this theory of mine because of some passage of scripture which they have falsely distorted for their own purpose, I care not at all; I will even despise their judgment as foolish. For it is not unknown that Lactantius, otherwise a famous writer but a poor mathematician, speaks most childishly of the shape of the Earth when he makes fun of those who said that the Earth has the form of a sphere. It should not seem strange then to zealous students, if some such people shall ridicule us also. Mathematics are written for mathematicians, to whom, if my opinion does not deceive me, our labors will seem to contribute something to the ecclesiastical state whose chief office Your Holiness now occupies; for when not so very long ago, under Leo X, in the Lateran Council the question of revising the ecclesiastical calendar was discussed, it then remained unsettled, simply because the length of the years and months, and the motions of the sun and moon were held to have been not yet sufficiently determined. Since that time, I have given my attention to observing these more accurately, urged on by a very distinguished man, Paul, Bishop of Fossombrone, who at that time had charge of the matter. But what I may have accomplished herein I leave to the judgment of Your Holiness in particular, and to that of all other learned mathematicians; and lest I seem to Your Holiness to promise more regarding the usefulness of the work than I can perform, I now pass to the work itself.

[Footnote A: Nicolaus Copernicus was born in 1473 at Thorn in West Prussia, of a Polish father and a German mother. He attended the university of Cracow and Bologna, lectured on astronomy and mathematics at Rome, and later studied medicine at Padua and canon law at Ferrara. He was appointed canon of the cathedral of Frauenburg, and in this town he died in 1543, having devoted the latter part of his life largely to astronomy.

The book which was introduced by this dedication laid the foundations of modern astronomy. At the time when it was written, the earth was believed by all to be the fixed centre of the universe; and although many of the arguments used by Copernicus were invalid and absurd, he was the first modern to put forth the heliocentric theory as "a better explanation." It remained for Kepler, Galileo, and Newton, to establish the theory on firm grounds.]

PREFACE TO THE HISTORY OF THE REFORMATION IN SCOTLAND

BY JOHN KNOX (C. 1566)[A]

To the gentill readar, grace and peace from God the Father of our Lord Jesus Christ, with the perpetuall encrease of the Holy Spreit.

It is not unknowen, Christeane Reader, that the same clud of ignorance, that long hath darkened many realmes under this accursed kingdome of that Romane Antichrist, hath also owercovered this poore Realme; that idolatrie hath bein mantained, the bloode of innocentis hath bene sched, and Christ Jesus his eternall treuth hath bene abhorred, detested, and blasphemed. But that same God that caused light to schyne out of darknes, in the multitud of his mercyes, hath of long tyme opened the eis of some evin within this Realme, to see the vanitie of that which then was universally embrased for trew religioun; and hes gevin unto them strenth to oppone[1] thame selfis unto the same: and now, into these our last and moist[2] corrupt dayis, hath maid his treuth so to triumphs amonges us, that, in despyte of Sathan, hipochrisye is disclosed, and the trew wyrshipping of God is manifested to all the inhabitantis of this realme who eis Sathan blyndis not, eyther by thair fylthy lustes, or ellis by ambitioun, and insatiable covetousness, which mack them repung to[3] the power of God working by his worde.

And becaus we ar not ignorant what diverse bruitis[4] war dispersed of us, the professoures of Jesus Christ within this realme, in the begynnyng of our interprise, ordour was tackin, that all our proceidingis should be committed to register; as that thei war, by such as then paynfullie travailled boith by tounge and pen; and so was collected a just volume, (as after will appeir,)

conteanyng thingis done frome the fyftie-awght[5] year of God, till the arrivall of the Quenis Majestic[6] furth of France, with the which the Collectour and Writtar for that tyme was content, and never mynded[7] further to have travailled in that kynd of writting. But, after invocatioun of the name of God, and after consultatioun with some faythfull, what was thought by thame expedient to advance Goddis glorie, and to edifie this present generatioun, and the posteritie to come, it was concluded, that faythfull rehersall should be maid of such personages as God had maid instruments of his glorie, by oponyng of thame selfis to manifest abuses, superstitioun, and idolatrie; and albeit thare be no great nomber, yet ar thei mo then the Collectour wold have looked for at the begynnyng, and thairfoir is the volume somewhat enlarged abuif his expectatioun: And yit, in the begynnyng, mon[8] we crave of all the gentill Readaris, not to look[9] of us such ane History as shall expresse all thingis that have occurred within this Realme, during the tyme of this terrible conflict that lies bene betuix the sanctes[10] of God and these bloody wolves who clame to thame selves the titill of clargie, and to have authentic ower the saules of men; for, with the Pollicey,[11] mynd we to meddill no further then it hath Religioun mixed with it. And thairfoir albeit that many thingis which wer don be omitted, yit, yf we invent no leys,[12] we think our selves blamless in that behalf. Of one other (thing) we mon[8] foirwarne the discreat Readaris, which is, that thei be not offended that the sempill treuth be spokin without partialitie; for seing that of men we neyther hunt for reward, nor yitt for vane glorie, we litill pass by the approbatioun of such as seldome judge weill of God and of his workis. Lett not thairfoar the Readir wonder, albeit that our style vary and speik diverslie of men, according as thei have declared thameselves sometymes ennemymes and sometymes freindis, sometymes fervent, sometymes cold, sometymes constant, and sometymes changeable in the cause of God and of his holy religioun: for, in this our simplicitie, we suppoise that the Godlie shall espy our purpose, which is, that God may be praised for his mercy schawin,[13] this present age may be admonished to be thankfull for Goddis benefittis offerred, and the posteritie to cum may be instructed how wonderouslie hath the light of Christ Jesus prevailed against darkness in this last and most corrupted age.

[Footnote A: John Knox (1505-1571), the leader of the Scottish Reformation and its historian, was educated at Glasgow University; was pastor to English congregations at Frankfort-on-Maine and at Geneva, where he met Calvin; returned to Scotland in 1559; and from that time till his death was active in the establishment of the Presbyterian organization, through which his powerful personality has continued to influence the Scottish national character to the present day. His preface, which is printed here in the original Scottish spelling, gives some indication of the sternness, not to say virulence, of his temper towards the Roman Church.]

[Footnote 1: Oppose]

[Footnote 2: Most]

[Footnote 3: Resist.]

[Footnote 4: Rumors.]

[Footnote 5: I.e. 1558.]

[Footnote 6: Mary, Queen of Scots, arrived in Scotland, Aug. 19, 1562.]

[Footnote 7: Intended.]

[Footnote 8: Must.]

[Footnote 9: Expect.]

[Footnote 10: Saints.]

[Footnote 11: Civil or State politics.]

[Footnote 12: Lies.]

[Footnote 13: Shown.]

PREFATORY LETTER TO SIR WALTER RALEIGH ON THE FAERIE QUEENE

BY EDMUND SPENSER (1589)[A]

A LETTER OF THE AUTHORS EXPOUNDING HIS WHOLE INTENTION IN THE COURSE
OF THIS WORKE: WHICH FOR THAT IT GIVETH GREAT LIGHT TO THE READER,
FOR THE BETTER UNDERSTANDING IS HEREUNTO ANNEXED

To the Right Noble, and Valorous, Sir Walter Raleigh, Knight, Lord
Wardein of the Stanneryes, and Her Majesties Liefetenaunt of the
County of Cornewayll

Sir, knowing how doubtfully all allegories may be construed, and this booke of mine, which I have entituled the *Faery Queene*, being a continued allegory, or darke conceit, I have thought good, as well for avoyding of gealous opinions and misconstructions, as also for your better light in reading thereof, (being so by you commanded,) to discover unto you the general intention and meaning, which in the whole course thereof I have fashioned, without expressing of any particular purposes or by accidents therein occasioned. The generall end therefore of all the booke is to fashion a gentleman or noble person in vertuous and gentle discipline: which for that I conceived shoulde be most plausible and pleasing, being coloured with an historicall fiction, the which the most part of men delight to read, rather for variety of matter then for profile of the ensample, I chose the historye of King Arthure, as most fitte for the excellency of his person, being made famous by many mens former workes, and also furthest from the daunger of envy, and suspition of present time. In which I have followed all the antique poets historicall: first Homere, who in the persons of Agamemnon and Ulysses hath ensampled a good governour and a vertuous man, the one in his *Ilias*, the other in his *Odysséis*;

then Virgil, whose like intention was to doe in the person of Æneas; after him Ariosto comprised them both in his Orlando; and lately Tasso dissevered them againe, and formed both parts in two persons, namely that part which they in philosophy call Ethice, or vertues of a private man, coloured in his Rinaldo; the other named Politice in his Godfredo. By ensample of which excellent poets, I labour to pourtraict in Arthure, before he was king, the image of a brave knight, perfected in the twelve private morall vertues, as Aristotle hath devised, the which is the purpose of these first twelve bookes: which if I finde to be well accepted, I may be perhaps encouraged to frame the other part of polliticke vertues in his person, after that hee came to be king. To some, I know, this methode will seeme displeasaunt, which had rather have good discipline delivered plainly in way of precepts, or sermoned at large, as they use, then thus clowdily enwrapped in allegoricall devises. But such, me seeme, should be satisfide with the use of these dayes, seeing all things accounted by their shewes, and nothing esteemed of, that is not delightfull and pleasing to commune sence. For this cause is Xenophon preferred before Plato, for that the one, in the exquisite depth of his judgement, formed a commune welth such as it should be, but the other in the person of Cyrus and the Persians fashioned a government, such as might best be: so much more profitable and gracious is doctrine by ensample, then by rule. So have I laboured to doe in the person of Arthure: whome I conceive, after his long education by Timon, to whom he was by Merlin delivered to be brought up, so soone as he was borne of the Lady Igrayne, to have seene in a dream or vision the Faery Queen, with whose excellent beauty ravished, he awaking resolved to seeke her out, and so being by Merlin armed, and by Timon thoroughly instructed, he went to seeke her forth in Faery Land. In that Faery Queene I meane glory in my generall intention, but in my particular I conceive the most excellent and glorious person of our soveraine the Queene, and her kingdome in Faery Land. And yet, in some places els, I doe otherwise shadow her. For considering she beareth two persons, the one of a most royall queene or empresse, the other of a most vertuous and beautifull lady, this latter part in some places I doe expresse in Belphoebe, fashioning her name according to your owne excellent conceipt of Cynthia, (Phæbe and Cynthia being both names of Diana.) So in the person of Prince Arthure I sette forth magnificence in particular, which vertue, for that (according to Aristotle and the rest) it is the perfection of all the rest, and

containeth in it them all, therefore in the whole course I mention the deedes of Arthure applyable to that vertue which I write of in that booke. But of the xii. other vertues I make xii. other knights the patrones, for the more variety of the history: of which these three bookes contain three. The first of the Knight of the Redcrosse, in whome I expresse holynes: The seconde of Sir Guyon, in whome I sette forth temperaunce: The third of Britomartis, a lady knight, in whome I picture chastity. But because the beginning of the whole worke seemeth abrupte and as depending upon other antecedents, it needs that ye know the occasion of these three knights severall adventures. For the methode of a poet historical is not such as of an historiographer. For an historiographer discourseth of affayres orderly as they were donne, accounting as well the times as the actions; but a poet thrusteth into the midst, even where it most concerneth him, and there recouring to the thinges forepaste, and divining of thinges to come, maketh a pleasing analysis of all.

The beginning therefore of my history, if it were to be told by an historiographer, should be the twelfth booke, which is the last; where I devise that the Faery Queene kept her annuall feaste xii. dayes, uppon which xii. severall dayes, the occasions of the xii. several adventures hapned, which being undertaken by xii. severall knights, are in these xii. books severally handled and discoursed. The first was this. In the beginning of the feast, there presented him selfe a tall clownish younge man, who, falling before the Queen of Faries, desired a boone (as the manner then was) which during that feast she might not refuse: which was that hee might have the atchievement of any adventure, which during that feaste should happen: that being graunted, he rested him on the floore, unfitte through his rusticity for a better place. Soone after entred a faire ladye in mourning weedes, riding on a white asse, with a dwarfe behind her leading a warlike steed, that bore the armes of a knight, and his speare in the dwarfes hand. Shee, falling before the Queene of Faeries, complayned that her father and mother, an ancient king and queene, had bene by an huge dragon many years shut up in a brasen castle, who thence suffred them not to yssew: and therefore besought the Faery Queene to assygne her some one of her knights to take on him that exployt. Presently that clownish person, upstarting, desired that adventure: whereat the Queene much wondering, and the lady much gainesaying, yet he earnestly

importuned his desire. In the end the lady told him, that unlesse that armour which she brought would serve him (that is, the armour of a Christian man specified by Saint Paul, vi. Ephes.), that he could not succeed in that enterprise: which being forthwith put upon him with dewe furnitures thereunto, he seemed the goodliest man in al that company, and was well liked of the lady. And eftesoones taking on him knighthood, and mounting on that straunge courser, he went forth with her on that adventure: where beginneth the first booke vz.

A gentle knight was pricking on the playne, &c.

The second day ther came in a palmer bearing an infant with bloody hands, whose parents he complained to have bene slayn by an enchaunteresse called Acrasia: and therefore craved of the Faery Queene, to appoint him some knight to performe that adventure; which being assigned to Sir Guyon, he presently went forth with that same palmer: which is the beginning of the second booke and the whole subject thereof. The third day there came in a groome, who complained before the Faery Queene, that a vile enchanter, called Busirane, had in hand a most faire lady, called Amoretta, whom he kept in most grievous torment, because she would not yield him the pleasure of her body. Whereupon Sir Scudamour, the lover of that lady, presently tooke on him that adventure. But being unable to performe it by reason of the hard enchauntments, after long sorrow, in the end met with Britomartis, who succoured him, and reskewed his love.

But by occasion hereof, many other adventures are intermedled, but rather as accidents then intendments: as the love of Britomart, the overthrow of Marinell, the misery of Florimell, the vertuousnes of Belpheobe, the lasciviousnes of Hellenora, and many the like.

Thus much, Sir, I have briefly overronne, to direct your understanding to the wel-head of the history, that from thence gathering the whole intention of the conceit, ye may, as in a handfull, gripe al the discourse, which otherwise may happily seeme tedious and confused. So humbly craving the continuance of your honourable favour towards me, and th' eternall establishment of your happines, I humbly take leave.

23. January, 1589. Yours most humbly affectionate, Ed. Spenser.

[Footnote A: Edmund Spenser was born in London about 1552, and died there in 1599. He was the greatest of the non-dramatic poets of the age of Elizabeth; and the "Faerie Queene" is the longest and most famous of his works. The first three books were published in 1590, the second three in 1596; of the remaining six which he had planned some fragments were issued after his death. The poem is a combination of allegory and romance; and in this prefatory letter to Raleigh the poet himself explains the plan of the work and its main allegorical signification.]

PREFACE TO THE HISTORY OF THE WORLD

BY SIR WALTER RALEIGH (1614)[A]

How unfit and how unworthy a choice I have made of myself, to undertake a work of this mixture, mine own reason, though exceeding weak, hath sufficiently resolved me. For had it been begotten then with my first dawn of day, when the light of common knowledge began to open itself to my younger years, and before any wound received either from Fortune or Time, I might yet well have doubted that the darkness of Age and Death would have covered over both It and Me, long before the performance. For, beginning with the Creation, I have proceeded with the History of the World; and lastly purposed (some few sallies excepted) to confine my discourse with this our renowned Island of Great Britain. I confess that it had better sorted with my disability, the better part of whose times are run out in other travails, to have set together (as I could) the unjointed and scattered frame of our English affairs, than of the universal in whom, had there been no other defect (who am all defect) than the time of the day, it were enough, the day of a tempestuous life, drawn on to the very evening ere I began. But those inmost and soul-piercing wounds, which are ever aching while uncured; with the desire to satisfy those few friends, which I have tried by the fire of adversity, the former enforcing, the latter persuading; have caused me to make my thoughts legible, and myself the subject of every opinion, wise or weak.

To the world I present them, to which I am nothing indebted: neither have others that were, (Fortune changing) sped much better in any age. For prosperity and adversity have evermore tied and untied vulgar affections. And as we see it in experience, that dogs do always bark at those they know not, and that it is their nature to accompany one another in those clamors: so

it is with the inconsiderate multitude; who wanting that virtue which we call honesty in all men, and that especial gift of God which we call charity in Christian men, condemn without hearing, and wound without offence given: led thereunto by uncertain report only; which his Majesty truly acknowledged for the author of all lies. "Blame no man," saith Siracides, "before thou have inquired the matter: understand first, and then reform righteously. 'Rumor, res sine teste, sine iudice, maligna, fallax'; Rumor is without witness, without judge, malicious and deceivable." This vanity of vulgar opinion it was, that gave St. Augustine argument to affirm, that he feared the praise of good men, and detested that of the evil. And herein no man hath given a better rule, than this of Seneca; "*Conscientiæ satisfaciamus: nihil in famam laboremus, sequatur vel mala, dum bene merearis.*" "Let us satisfy our own consciences, and not trouble ourselves with fame: be it never so ill, it is to be despised so we deserve well."

For myself, if I have in anything served my Country, and prized it before my private, the general acceptation can yield me no other profit at this time, than doth a fair sunshine day to a sea-man after shipwreck; and the contrary no other harm, than an outrageous tempest after the port attained. I know that I lost the love of many, for my fidelity towards Her,[1] whom I must still honor in the dust; though further than the defence of her excellent person, I never persecuted any man. Of those that did it, and by what device they did it, He that is the Supreme Judge of all the world, hath taken the account: so as for this kind of suffering, I must say With Seneca, "*Mala opinio, bene parta, delectat.*"[2] As for other men; if there be any that have made themselves fathers of that fame which hath been begotten for them, I can neither envy at such their purchased glory, nor much lament mine own mishap in that kind; but content myself to say with Virgil, "*Sic vos non vobis,*"[3] in many particulars. To labor other satisfaction, were an effect of frenzy, not of hope, seeing it is not truth, but opinion, that can travel the world without a passport. For were it otherwise; and were there not as many internal forms of the mind, as there are external figures of men; there were then some possibility to persuade by the mouth of one advocate, even equity alone.

But such is the multiplying and extensive virtue of dead earth, and of that breath-giving life which God hath cast upon time and dust, as that among

those that were, of whom we read and hear; and among those that are, whom we see and converse with; everyone hath received a several picture of face, and everyone a diverse picture of mind; everyone a form apart, everyone a fancy and cogitation differing: there being nothing wherein Nature so much triumpheth as in dissimilitude. From whence it cometh that there is found so great diversity of opinions; so strong a contrariety of inclinations; so many natural and unnatural; wise, foolish, manly, and childish affections and passions in mortal men. For it is not the visible fashion and shape of plants, and of reasonable creatures, that makes the difference of working in the one, and of condition in the other; but the form internal.

And though it hath pleased God to reserve the art of reading men's thoughts to himself: yet, as the fruit tells the name of the tree; so do the outward works of men (so far as their cogitations are acted) give us whereof to guess at the rest. Nay, it were not hard to express the one by the other, very near the life, did not craft in many, fear in the most, and the world's love in all, teach every capacity, according to the compass it hath, to qualify and make over their inward deformities for a time. Though it be also true, "*Nemo potest diu personam ferre fictam: cito in naturam suam residunt, quibus veritas non subest*": "No man can long continue masked in a counterfeit behavior: the things that are forced for pretences having no ground of truth, cannot long dissemble their own natures." Neither can any man (saith Plutarch) so change himself, but that his heart may be sometimes seen at his tongue's end.

In this great discord and dissimilitude of reasonable creatures, if we direct ourselves to the multitude; "*omnis honestæ rei malus iudex est vulgus*": "The common people are evil judges of honest things, and whose wisdom (saith Ecclesiastes) is to be despised": if to the better sort, every understanding hath a peculiar judgment, by which it both censureth other men, and valueth itself. And therefore unto me it will not seem strange, though I find these my worthless papers torn with rats: seeing the slothful censurers of all ages have not spared to tax the Reverend Fathers of the Church, with ambition; the severest men to themselves, with hypocrisy; the greatest lovers of justice, with popularity; and those of the truest valor and fortitude, with vain-glory. But of these natures which lee in wait to find fault, and to turn good into evil, seeing Solomon complained long since: and that the very age of the world

renders it every day after other more malicious; I must leave the professors to their easy ways of reprehension, than which there is nothing of more facility.

To me it belongs in the first part of this Preface, following the common and approved custom of those who have left the memories of time past to after ages, to give, as near as I can, the same right to history which they have done. Yet seeing therein I should but borrow other men's words, I will not trouble the Reader with the repetition. True it is that among many other benefits for which it hath been honored, in this one it triumpheth over all human knowledge, that it hath given us life in our understanding, since the world itself had life and beginning, even to this day: yea, it hath triumphed over time, which besides it nothing but eternity hath triumphed over: for it hath carried our knowledge over the vast and devouring space of many thousands of years, and given so fair and piercing eyes to our mind; that we plainly behold living now (as if we had lived then) that great world, "*Magni Dei sapiens opus*," "The wise work (saith Hermes) of a great God," as it was then, when but new to itself. By it (I say) it is, that we live in the very time when it was created: we behold how it was governed: how it was covered with waters, and again re-peopled: how kings and kingdoms have flourished and fallen, and for what virtue and piety God made prosperous; and for what vice and deformity he made wretched, both the one and the other. And it is not the least debt which we owe unto history, that it hath made us acquainted with our dead ancestors; and, out of the depth and darkness of the earth, delivered us their memory and fame. In a word, we may gather out of history a policy no less wise than eternal; by the comparison and application of other men's fore-passed miseries with our own like errors and ill deservings. But it is neither of examples the most lively instruction, nor the words of the wisest men, nor the terror of future torments, that hath yet so wrought in our blind and stupified minds, as to make us remember, that the infinite eye and wisdom of God doth pierce through all our pretences; as to make us remember, that the justice of God doth require none other accuser than our own consciences: which neither the false beauty of our apparent actions, nor all the formality, which (to pacify the opinions of men) we put on, can in any, or the least kind, cover from his knowledge. And so much did that heathen wisdom confess, no way as yet qualified by the knowledge of a true God. If any (saith Euripides) "having in his life committed wickedness, thinks he can

hide it from the everlasting gods, he thinks not well."

To repeat God's judgments in particular, upon those of all degrees, which have played with his mercies would require a volume apart: for the sea of examples hath no bottom. The marks, set on private men, are with their bodies cast into the earth; and their fortunes, written only in the memories of those that lived with them: so as they who succeed, and have not seen the fall of others, do not fear their own faults. God's judgments upon the greater and greatest have been left to posterity; first, by those happy hands which the Holy Ghost hath guided; and secondly, by their virtue, who have gathered the acts and ends of men mighty and remarkable in the world. Now to point far off, and to speak of the conversion of angels into devils; for ambition: or of the greatest and most glorious kings, who have gnawn the grass of the earth with beasts for pride and ingratitude towards God: or of that wise working of Pharaoh, when he slew the infants of Israel, ere they had recovered their cradles: or of the policy of Jezebel, in covering the murder of Naboth by a trial of the Elders, according to the Law, with many thousands of the like: what were it other, than to make an hopeless proof, that far-off examples would not be left to the same far-off respects, as heretofore? For who hath not observed, what labor, practice, peril, bloodshed, and cruelty, the kings and princes of the world have undergone, exercised, taken on them, and committed; to make themselves and their issues masters of the world? And yet hath Babylon, Persia, Syria, Macedon, Carthage, Rome, and the rest, no fruit, no flower, grass, nor leaf, springing upon the face of the earth, of those seeds: no, their very roots and ruins do hardly remain. "Omnia quae manu hominum facta sunt, vel manu hominum evertuntur, vel stando et durando deficiunt": "All that the hand of man can make, is either overturned by the hand of man, or at length by standing and continuing consumed." The reasons of whose ruins, are diversely given by those that ground their opinions on second causes. All kingdoms and states have fallen (say the politicians) by outward and foreign force, or by inward negligence and dissension, or by a third cause arising from both. Others observe, that the greatest have sunk down under their own weight; of which Livy hath a touch: "eo crevit, ut magnitudine laboret sua":[4] Others, That the divine providence (which Cratippus objected to Pompey) hath set down the date and period of every estate, before their first foundation and erection. But hereof I will give myself

a day over to resolve.

For seeing the first hooks of the following story, have undertaken the discourse of the first kings and kingdoms: and that it is impossible for the short life of a Preface, to travel after, and overtake far-off antiquity, and to judge of it; I will, for the present, examine what profit hath been gathered by our own Kings, and their neighbour princes: who having beheld, both in divine and human letters, the success of infidelity, injustice, and cruelty; have (notwithstanding) planted after the same pattern.

True it is, that the judgments of all men are not agreeable; nor (which is more strange) the affection of any one man stirred up alike with examples of like nature: but every one is touched most, with that which most nearly seemeth to touch his own private, or otherwise best suiteth with his apprehension. But the judgments of God are forever unchangeable: neither is He wearied by the long process of time, and won to give His blessing in one age, to that which He hath cursed in another. Wherefor those that are wise, or whose wisdom if it be not great, yet is true and well grounded, will be able to discern the bitter fruits of irreligious policy, as well among those examples that are found in ages removed far from the present, as in those of latter times. And that it may no less appear by evident proof, than by asseveration, that ill doing hath always been attended with ill success; I will here, by way of preface, run over some examples, which the work ensuing hath not reached.

Among our kings of the Norman race, we have no sooner passed over the violence of the Norman Conquest, than we encounter with a singular and most remarkable example of God's justice, upon the children of Henry the First. For that King, when both by force, craft, and cruelty, he had dispossessed, overreached, and lastly made blind and destroyed his elder brother Robert Duke of Normandy, to make his own sons lords of this land: God cast them all, male and female, nephews and nieces (Maud excepted) into the bottom of the sea, with above a hundred and fifty others that attended them; whereof a great many were noble and of the King dearly beloved.

To pass over the rest, till we come to Edward the Second; it is certain, that after the murder of that King, the issue of blood then made, though it had

some times of stay and stopping, did again break out, and that so often and in such abundance, as all our princes of the masculine race (very few excepted) died of the same disease. And although the young years of Edward the Third made his knowledge of that horrible fact no more than suspicious; yet in that he afterwards caused his own uncle, the Earl of Kent, to die, for no other offence than the desire of his brother's redemption, whom the Earl as then supposed to be living; the King making that to be treated in his uncle, which was indeed treason in himself, (had his uncle's intelligence been true) this I say made it manifest, that he was not ignorant of what had past, nor greatly desirous to have had it otherwise, though he caused Mortimer to die for the same.

This cruelty the secret and unsearchable judgment of God revenged on the grandchild of Edward the Third: and so it fell out, even to the last of that line, that in the second or third descent they were all buried under the ruins of those buildings, of which the mortar had been tempered with innocent blood. For Richard the Second, who saw both his Treasurers, his Chancellor, and his Steward, with divers others of his counsellors, some of them slaughtered by the people, others in his absence executed by his enemies, yet he always took himself for over-wise to be taught by examples. The Earls of Huntingdon and Kent, Montagu and Spencer, who thought themselves as great politicians in those days as others have done in these: hoping to please the King, and to secure themselves, by the murder of Gloucester; died soon after, with many other their adherents, by the like violent hands; and far more shamefully than did that duke. And as for the King himself (who in regard of many deeds, unworthy of his greatness, cannot be excused, as the disavowing himself by breach of faith, charters, pardons, and patents): he was in the prime of his youth deposed, and murdered by his cousin-german and vassal, Henry of Lancaster, afterwards Henry the Fourth.

This King, whose title was weak, and his obtaining the Crown traitorous; who brake faith with the lords at his landing, protesting to intend only the recovery of his proper inheritance, brake faith with Richard himself; and brake faith with all the kingdom in Parliament, to whom he swore that the deposed King should live. After that he had enjoyed this realm some few years, and in that time had been set upon all sides by his subjects, and never

free from conspiracies and rebellions: he saw (if souls immortal see and discern anythings after the bodies' death) his grandchild Henry the Sixth, and his son the Prince, suddenly and without mercy, murdered; the possession of the Crown (for which he had caused so much blood to be poured out) transferred from his race, and by the issues of his enemies worn and enjoyed: enemies, whom by his own practice he supposed that he had left no less powerless, than the succession of the Kingdom questionless; by entailing the same upon his own issues by Parliament. And out of doubt, human reason could have judged no otherwise, but that these cautious provisions of the father, seconded by the valor and signal victories of his son Henry the Fifth, had buried the hopes of every competitor, under the despair of all reconquest and recovery. I say, that human reason might so have judged, were not this passage of Casaubon also true; "Dies, hora, momentum, evertendis dominationibus sufficit, quae adamantinis credebantur radicibus esse fundatae:" "A day, an hour, a moment, is enough to overturn the things, that seemed to have been founded and rooted in adamant."

Now for Henry the Sixth, upon whom the great storm of his grandfather's grievous faults fell, as it formerly had done upon Richard the grandchild of Edward: although he was generally esteemed for a gentle and innocent prince, yet as he refused the daughter of Armagnac, of the House of Navarre, the greatest of the Princes of France, to whom he was affianced (by which match he might have defended his inheritance in France) and married the daughter of Anjou, (by which he lost all that he had in France) so in condescending to the unworthy death of his uncle of Gloucester, the main and strong pillar of the House of Lancaster; he drew on himself and this kingdom the greatest joint-loss and dishonor, that ever it sustained since the Norman Conquest. Of whom it may truly be said which a counsellor of his own spake of Henry the Third of France, "Qu'il estait tme fort gentile Prince; mais son reigne est advenu en une fort mauvais temps:" "He was a very gentle Prince; but his reign happened in a very unfortunate season."

It is true that Buckingham and Suffolk were the practicers and contrivers of the Duke's death: Buckingham and Suffolk, because the Duke gave instructions to their authority, which otherwise under the Queen had been absolute; the Queen in respect of her personal wound, "spretaeque injuria

formae,"[5] because Gloucester dissuaded her marriage. But the fruit was answerable to the seed; the success to the counsel. For after the cutting down of Gloucester, York grew up so fast, as he dared to dispute his right both by arguments and arms; in which quarrel, Suffolk and Buckingham, with the greatest number of their adherents, were dissolved. And although for his breach of oath by sacrament, it pleased God to strike down York: yet his son the Earl of March, following the plain path which his father had trodden out, despoiled Henry the father, and Edward the son, both of their lives and kingdom. And what was the end now of that politic lady the Queen, other than this, that she lived to behold the wretched ends of all her partakers: that she lived to look on, while her husband the King, and her only son the Prince, were hewn in sunder; while the Crown was set on his head that did it. She lived to see herself despoiled of her estate, and of her moveables: and lastly, her father, by rendering up to the Crown of France the Earldom of Provence and other places, for the payment of fifty thousand crowns for her ransom, to become a stark beggar. And this was the end of that subtilty, which Siracides calleth "fine" but "unrighteous:" for other fruit hath it never yielded since the world was.

And now it came to Edward the Fourth's turn (though after many difficulties) to triumph. For all the plants of Lancaster were rooted up, one only Earl of Richmond excepted: whom also he had once bought of the Duke of Brittany, but could not hold him. And yet was not this of Edward such a plantation, as could any way promise itself stability. For this Edward the King (to omit more than many of his other cruelties) beheld and allowed the slaughter which Gloucester, Dorset, Hastings, and others, made of Edward the Prince in his own presence; of which tragical actors, there was not one that escaped the judgment of God in the same kind And he, which (besides the execution of his brother Clarence, for none other offence than he himself had formed in his own imagination) instructed Gloucester to kill Henry the Sixth, his predecessor; taught him also by the same art to kill his own sons and successors, Edward and Richard. For those kings which have sold the blood of others at a low rate; have but made the market for their own enemies, to buy of theirs at the same price.

To Edward the Fourth succeeded Richard the Third, the greatest master in

mischief of all that fore-went him: who although, for the necessity of his tragedy, he had more parts to play, and more to perform in his own person, than all the rest; yet he so well fitted every affection that played with him, as if each of them had but acted his own interest. For he wrought so cunningly upon the affections of Hastings and Buckingham, enemies to the Queen and to all her kindred, as he easily allured them to condescend, that Rivers and Grey, the King's maternal uncle and half brother, should (for the first) be severed from him: secondly, he wrought their consent to have them imprisoned: and lastly (for the avoiding of future inconvenience) to have their heads severed from their bodies. And having now brought those his chief instruments to exercise that common precept which the Devil hath written on every post, namely, to depress those whom they had grieved, and destroy those whom they had depressed; he urged that argument so far and so forcibly, as nothing but the death of the young King himself, and of his brother, could fashion the conclusion. For he caused it to be hammered into Buckingham's head, that, whensoever the King or his brother should have able years to exercise their power, they would take a most severe revenge of that cureless wrong, offered to their uncle and brother, Rivers and Grey.

But this was not his manner of reasoning with Hastings, whose fidelity to his master's sons was without suspect: and yet the Devil, who never dissuades by impossibility, taught him to try him. And so he did. But when he found by Catesby, who sounded him, that he was not fordable; he first resolved to kill him sitting in council: wherein having failed with his sword, he set the hangman upon him, with a weapon of more weight. And because nothing else could move his appetite, he caused his head to be stricken off, before he ate his dinner. A greater judgment of God than this upon Hastings, I have never observed in any story. For the selfsame day that the Earl Rivers, Grey, and others, were (without trial of law, of offence given) by Hastings' advice executed at Pomfret: I say Hastings himself in the same day, and (as I take it) in the same hour, in the same lawless manner had his head stricken off in the Tower of London. But Buckingham lived a while longer; and with an eloquent oration persuaded the Londoners to elect Richard for their king. And having received the Earldom of Hereford for reward, besides the high hope of marrying his daughter to the King's only son; after many grievous vexations of mind, and unfortunate attempts, being in the end betrayed and delivered up

by his trustiest servant; he had his head severed from his body at Salisbury, without the trouble of any of his Peers. And what success had Richard himself after all these mischiefs and murders, policies, and counter-policies to Christian religion: and after such time as with a most merciless hand he had pressed out the breath of his nephews and natural lords; other than the prosperity of so short a life, as it took end, ere himself could well look over and discern it? The great outcry of innocent blood, obtained at God's hands the effusion of his; who became a spectacle of shame and dishonor, both to his friends and enemies.

This cruel King, Henry the Seventh cut off; and was therein (no doubt) the immediate instrument of God's justice. A politic Prince he was if ever there were any, who by the engine of his wisdom, beat down and overturned as many strong oppositions both before and after he wore the Crown, as ever King of England did: I say by his wisdom, because as he ever left the reins of his affections in the hands of his profit, so he always weighed his undertakings by his abilities, leaving nothing more to hazard than so much as cannot be denied it in all human actions. He had well observed the proceedings of Louis the Eleventh, whom he followed in all that was royal or royal-like, but he was far more just, and begun not their processes whom he hated or feared by the execution, as Louis did.

He could never endure any mediation in rewarding his servants, and therein exceeding wise; for whatsoever himself gave, he himself received back the thanks and the love, knowing it well that the affections of men (purchased by nothing so readily as by benefits) were trains that better became great kings, than great subjects. On the contrary, in whatsoever he grieved his subjects, he wisely put it off on those, that he found fit ministers for such actions. Howsoever the taking off of Stanley's head, who set the Crown on his, and the death of the young Earl of Warwick, son to George, Duke of Clarence, shows, as the success also did, that he held somewhat of the errors of his ancestors; for his possession in the first line ended in his grandchildren, as that of Edward the Third and Henry the Fourth had done.

Now for King Henry the Eighth; if all the pictures and patterns of a merciless prince were lost in the world, they might all again be painted to the life, out

of the story of this king. For how many servants did he advance in haste (but for what virtue no man could suspect) and with the change of his fancy ruined again; no man knowing for what offence? To how many others of more desert gave he abundant flowers from whence to gather honey, and in the end of harvest burnt them in the hive? How many wives did he cut off, and cast off, as his fancy and affection changed? How many princes of the blood (whereof some of them for age could hardly crawl towards the block) with a world of others of all degrees (of whom our common chronicles have kept the account) did he execute? Yea, in his very death-bed, and when he was at the point to have given his account to God for the abundance of blood already spilt, he imprisoned the Duke of Norfolk the father; and executed the Earl of Surrey the son; the one, whose deservings he knew not how to value, having never omitted anything that concerned his own honor, and the King's service; the other never having committed anything worthy of his least displeasure: the one exceeding valiant and advised; the other no less valiant than learned, and of excellent hope. But besides the sorrows which he heaped upon the fatherless and widows at home: and besides the vain enterprises abroad, wherein it is thought that he consumed more treasure than all our victorious kings did in their several conquests; what causeless and cruel wars did he make upon his own nephew King James the First? What laws and wills did he devise to cut off, and cut down those branches, which sprang from the same root that himself did? And in the end (notwithstanding these his so many irreligious provisions) it pleased God to take away all his own, without increase; though, for themselves in their several kinds, all princes of eminent virtue. For these words of Samuel to Agag King of the Amalekites, have been verified upon many others: "As thy sword hath made other women childless, so shall thy mother be childless among other women." And that blood which the same King Henry affirmed, that the cold air of Scotland had frozen up in the North, God hath diffused by the sunshine of his grace: from whence his Majesty now living, and long to live, is descended. Of whom I may say it truly, "That if all the malice of the world were infused into one eye: yet could it not discern in his life, even to this day, any one of these foul spots, by which the consciences of all the forenamed princes (in effect) have been defiled; nor any drop of that innocent blood on the sword of his justice, with which the most that fore-went him have stained both their hands and fame." And for this Crown of England; it may truly be avowed: that he hath

received it even from the hand of God, and hath stayed the time of putting it on, howsoever he were provoked to hasten it: that he never took revenge of any man, that sought to put him beside it: that he refused the assistance of Her enemies, that wore it long, with as great glory as ever princess did: that his Majesty entered not by a breach, nor by blood; but by the ordinary gate, which his own right set open; and into which, by a general love and obedience, he was received. And howsoever his Majesty's preceding title to this Kingdom was preferred by many princes (witness the Treaty at Cambray in the year 1559) yet he never pleased to dispute it, during the life of that renowned lady his predecessor; no, notwithstanding the injury of not being declared heir, in all the time of her long reign.

Neither ought we to forget, or neglect our thankfulness to God for the uniting of the northern parts of Britain to the south, to wit, of Scotland to England, which though they were severed but by small brooks and banks, yet by reason of the long continued war, and the cruelties exercised upon each other, in the affections of the nations, they were infinitely severed. This I say is not the least of God's blessings which his Majesty hath brought with him unto this land: no, put all our petty grievances together, and heap them up to their height, they will appear but as a molehill compared with the mountain of this concord. And if all the historians since then have acknowledged the uniting of the Red Rose, and the White, for the greatest happiness (Christian Religion excepted), that ever this kingdom received from God, certainly the peace between the two lions of gold and gules, and the making them one, doth by many degrees exceed the former; for by it, besides the sparing of our British blood, heretofore and during the difference, so often and abundantly shed, the state of England is more assured, the kingdom more enabled to recover her ancient honor and rights, and by it made more invincible, than by all our former alliances, practises, policies, and conquests. It is true that hereof we do not yet find the effect. But had the Duke of Parma in the year 1588, joined the army which he commanded, with that of Spain, and landed it on the south coast; and had his Majesty at the same time declared himself against us in the North: it is easy to divine what had become of the liberty of England, certainly we would then without murmur have bought this union at far greater price than it hath since cost us. It is true, that there was never any common weal or kingdom in the world, wherein no man had cause to lament. Kings

live in the world, and not above it. They are not infinite to examine every man's cause, or to relieve every man's wants. And yet in the latter (though to his own prejudice), his Majesty hath had more comparison of other men's necessities, than of his own coffers. Of whom it may he said, as of Solomon, [6] "Dedit Deus Solomon! latitudinem cordis": Which if other men do not understand with Pineda, to be meant by liberality, but by "latitude of knowledge"; yet may it be better spoken of His Majesty, than of any king that ever England had; who as well in divine, as human understanding, hath exceeded all that fore-went him, by many degrees.

I could say much more of the King's majesty, without flattery: did I not fear the imputation of presumption, and withal suspect, that it might befall these papers of mine (though the loss were little) as it did the pictures of Queen Elizabeth, made by unskilful and common painters, which by her own commandment were knocked in pieces and cast into the fire. For ill artists, in setting out the beauty of the external; and weak writers, in describing the virtues of the internal; do often leave to posterity, of well formed faces a deformed memory; and of the most perfect and princely minds, a most defective representation. It may suffice, and there needs no other discourse; if the honest reader but compare the cruel and turbulent passages of our former kings, and of other their neighbor-princes (of whom for that purpose I have inserted this brief discourse) with his Majesty's temperate, revengeless and liberal disposition: I say, that if the honest reader weigh them justly, and with an even hand; and withal but bestow every deformed child on his true parent; he shall find, that there is no man that hath so just cause to complain, as the King himself hath. Now as we have told the success of the trumperies and cruelties of our own kings, and other great personages: so we find, that God is everywhere the same God. And as it pleased him to punish the usurpation, and unnatural cruelty of Henry the First, and of our third Edward, in their children for many generations: so dealt He with the sons of Louis Debonnaire, the son of Charles the Great, or Charlemagne. For after such time as Debonnaire of France, had torn out the eyes of Bernard his nephew, the son of Pepin the eldest son of Charlemagne, and heir of the Empire, and then caused him to die in prison, as did our Henry to Robert his eldest brother: there followed nothing but murders upon murders, poisoning, imprisonments, and civil war; till the whole race of that famous Emperor was

extinguished. And though Debonnaire, after he had rid himself of his nephew by a violent death; and of his bastard brothers by a civil death (having inclosed them with sure guard, all the days of their lives, within a monastery) held himself secure from all opposition: yet God raised up against him (which he suspected not) his own sons, to vex him, to invade him, to take him prisoner, and to depose him; his own sons, with whom (to satisfy their ambition) he had shared his estate, and given them crowns to wear, and kingdoms to govern, during his own life. Yea his eldest son, Lothair (for he had four, three by his first wife, and one by his second; to wit, Lothair, Pepin, Louis, and Charles), made it the cause of his deposition, that he had used violence towards his brothers and kinsmen; and that he had suffered his nephew (whom he might have delivered) to be slain. "Eo quod," saith the text,[7] "fratribus, et propinquis violentiam intulerit, et nepotem suum, quem ipse liberare poterat, interfici permiserit": "Because he used violence to his brothers and kinsmen, and suffered his nephew to be slain whom he might have delivered."

Yet did he that which few kings do; namely, repent him of his cruelty. For, among many other things which he performed in the General Assembly of the States, it follows: "Post haec autem palam se errasse confessus, et imitatus Imperatoris Theodosii exemplum, poenitentiam spontaneam suscepit, tam de his, quam quae in Bernardum proprium nepotem gesserat": "After this he did openly confess himself to have erred, and following the example of the Emperor Theodosius, he underwent voluntary penance, as well for his other offences, as for that which he had done against Bernard his own nephew."

This he did; and it was praise-worthy. But the blood that is unjustly spilt, is not again gathered up from the ground by repentance. These medicines, ministered to the dead, have but dead rewards.

This king, as I have said, had four sons. To Lothair his eldest he gave the Kingdom of Italy; as Charlemagne, his father, had done to Pepin, the father of Bernard, who was to succeed him in the Empire. To Pepin the second son he gave the Kingdom of Aquitaine: to Louis, the Kingdom of Bavaria: and to Charles, whom he had by a second wife called Judith, the remainder of the

Kingdom of France. But this second wife, being a mother-in-law[8] to the rest, persuaded Debonnaire to cast his son Pepin out of Aquitaine, thereby to greaten Charles, which, after the death of his son Pepin, he prosecuted to effect, against his grandchild bearing the same name. In the meanwhile, being invaded by his son Louis of Bavaria, he dies for grief.

Debonnaire dead, Louis of Bavaria, and Charles afterwards called the Bald, and their nephew Pepin, of Aquitaine, join in league against the Emperor Lothair their eldest brother. They fight near to Auxerre the most bloody battle that ever was stroken in France: in which, the marvellous loss of nobility, and men of war, gave courage to the Saracens to invade Italy; to the Huns to fall upon Almaine; and the Danes to enter upon Normandy. Charles the Bald by treason seizeth upon his nephew Pepin, kills him in a cloister: Carloman rebels against his father Charles the Bald, the father burns out the eyes of his son Carloman; Bavaria invades the Emperor Lothair his brother, Lothair quits the Empire, he is assailed and wounded to the heart by his own conscience, for his rebellion against his father, and for his other cruelties, and dies in a monastery. Charles the Bald, the uncle, oppreseth his nephews the sons of Lothair, he usurpeth the Empire to the prejudice of Louis of Bavaria his elder brother; Bavaria's armies and his son Carloman are beaten, he dies of grief, and the usurper Charles is poisoned by Zedechias a Jew, his physician, his son Louis le Bègue dies of the same drink. Bègue had Charles the Simple and two bastards, Louis and Carloman; they rebel against their brother, but the eldest breaks his neck, the younger is slain by a wild boar; the son of Bavaria had the same ill destiny, and brake his neck by a fall out of a window in sporting with his companions. Charles the Gross becomes lord of all that the sons of Debonnaire held in Germany; wherewith not contented, he invades Charles the Simple: but being-forsaken of his nobility, of his wife, and of his understanding, he dies a distracted beggar. Charles the Simple is held in wardship by Eudes, Mayor of the Palace, then by Robert the brother of Eudes: and lastly, being taken by the Earl of Vermandois; he is forced to die in the prison of Peron, Louis the son of Charles the Simple breaks his neck in chasing a wolf, and of the two sons of this Louis, the one dies of poison, the other dies in the prison of Orleans; after whom Hugh Capet, of another race, and a stranger to the French, makes himself king.

These miserable ends had the issues of Debonnaire, who after he had once apparelled injustice with authority, his sons and successors took up the fashion, and wore that garment so long without other provision, as when the same was torn from their shoulders, every man despised them as miserable and naked beggars. The wretched success they had (saith a learned Frenchman) shows, "que en ceste mort il y avait plus du fait des homines que de Pieu, ou de la justice": "that in the death of that Prince, to wit, of Bernard the son of Pepin, the true heir of Charlemagne, men had more meddling than either God or justice had."

But to come nearer home; it is certain that Francis the First, one of the worthiest kings (except for that fact) that ever Frenchmen had, did never enjoy himself, after he had commended the destruction of the Protestants of Mirandol and Cabrieres, to the Parliament of Provence, which poor people were thereupon burnt and murdered; men, women, and children. It is true that the said King Francis repented himself of the fact, and gave charge to Henry his son, to do justice upon the murderers, threatening his son with God's judgments, if he neglected it. But this unseasonable care of his, God was not pleased to accept for payment. For after Henry himself was slain in sport by Montgomery, we all may remember what became of his four sons, Francis, Charles, Henry, and Hercules. Of which although three of them became kings, and were married to beautiful and virtuous ladies: yet were they, one after another, cast out of the world, without stock or seed. And notwithstanding their subtilty, and breach of faith; with all their massacres upon those of the religion,[9] and great effusion of blood, the crown was set on his head, whom they all labored to dissolve; the Protestants remain more in number than ever they were, and hold to this day more strong cities than ever they had.

Let us now see if God be not the same God in Spain, as in England and France. Towards whom we will look no further back than to Don Pedro of Castile: in respect of which Prince, all the tyrants of Sicil, our Richard the Third, and the great Ivan Vasilowich of Moscow, were but petty ones: this Castilian, of all Christian and heathen kings, having been the most merciless. For, besides those of his own blood and nobility, which he caused to be slain in his own court and chamber, as Sancho Ruis, the great master of Calatrava,

Ruis Gonsales, Alphonso Tello, and Don John of Arragon, whom he cut in pieces and cast into the streets, denying him Christian burial: I say, besides these, and the slaughter of Gomes Mauriques, Diego Peres, Alphonso Gomes, and the great commander of Castile; he made away the two infants of Arragon his cousin germans, his brother Don Frederick, Don John de la Cerde, Albuquerque, Nugnes de Guzman, Cornel, Cabrera, Tenorio, Mendes de Toledo, Guttiere his great treasurer and all his kindred; and a world of others. Neither did he spare his two youngest brothers, innocent princes: whom after he had kept in close prison from their cradles, till one of them had lived sixteen years, and the other fourteen, he murdered them there. Nay, he spared not his mother, nor his wife the Lady Blanche of Bourbon. Lastly, as he caused the Archbishop of Toledo, and the Dean to be killed of purpose to enjoy their treasures; so did he put to death Mahomet Aben Alhamar, King of Barbary, with thirty-seven of his nobility, that came unto him for succor, with a great sum of money, to levy (by his favor) some companies of soldiers to return withal. Yea, he would needs assist the hangman with his own hand, in the execution of the old king; in so much as Pope Urban declareth him an enemy both to God and man. But what was his end? Having been formerly beaten out of his kingdom, and reestablished by the valor of the English nation, led by the famous Duke of Lancaster: he was stabbed to death by his younger brother the Earl of Astramara, who dispossessed all his children of their inheritance; which, but for the father's injustice and cruelty, had never been in danger of any such thing.

If we can parallel any man with this king, it must be Duke John of Burgogne, who, after his traitorous murder of the Duke of Orleans, caused the Constable of Armagnac, the Chancellor of France, the Bishops of Constance, Bayeux, Eureux, Senlis, Saintes, and other religious and reverend Churchmen, the Earl of Gran Pre, Hector of Chartres, and (in effect) all the officers of justice, of the Chamber of Accounts, Treasury, and Request, (with sixteen hundred others to accompany them) to be suddenly and violently slain. Hereby, while he hoped to govern, and to have mastered France, he was soon after struck with an axe in the face, in the presence of the Dauphin; and, without any leisure to repent his misdeeds, presently^[10] slain. *These were the lovers of other men's miseries: and misery found them out.*

Now for the kings of Spain, which lived both with Henry the Seventh, Henry the Eighth, Queen Mary, and Queen Elizabeth; Ferdinand of Arragon was the first: and the first that laid the foundation of the present Austrian greatness. For this King did not content himself to hold Arragon by the usurpation of his ancestor; and to fasten thereunto the Kingdom of Castile and Leon, which Isabel his wife held by strong hand, and his assistance, from her own niece the daughter of the last Henry: but most cruelly and craftily, without all color or pretence of right, he also cast his own niece out of the Kingdom of Navarre, and, contrary to faith, and the promise that he made to restore it, fortified the best places, and so wasted the rest, as there was no means left for any army to invade it. This King, I say, that betrayed also Ferdinand and Frederick, Kings of Naples, princes of his own blood, and by double alliance tied unto him; sold them to the French: and with the same army, sent for their succor under Gonsalvo, cast them out; and shared their kingdom with the French, whom afterwards he most shamefully betrayed.

This wise and politic King, who sold Heaven and his own honor, to make his son, the Prince of Spain, the greatest monarch of the world; saw him die in the flower of his years; and his wife great with child, with her untimely birth, at once and together buried. His eldest daughter married unto Don Alphonso, Prince of Portugal, beheld her first husband break his neck in her presence; and being with child by her second, died with it. A just judgment of God upon the race of John, father to Alphonso, now wholly extinguished; who had not only left many disconsolate mothers in Portugal, by the slaughter of their children; but had formerly slain with his own hand, the son and only comfort of his aunt the Lady Beatrix, Duchess of Viseo.

The second daughter of Ferdinand, married to the Arch-Duke Philip, turned fool, and died mad and deprived.[11] His third daughter, bestowed on King Henry the Eighth, he saw cast off by the King: the mother of many troubles in England; and the mother of a daughter, that in her unhappy zeal shed a world of innocent blood; lost Calais to the French; and died heartbroken without increase. To conclude, all those kingdoms of Ferdinand have masters of a new name; and by a strange family are governed and possessed.

Charles the Fifth, son to the Arch-Duke Philip, in whose vain enterprises

upon the French, upon the Almaines, and other princes and states, so many multitudes of Christian soldiers, and renowned captains were consumed; who gave the while a most perilous entrance to the Turks, and suffered Rhodes, the Key of Christendom, to be taken; was in conclusion chased out of France, and in a sort out of Germany; and left to the French, Mentz, Toule, and Verdun, places belonging to the Empire, stole away from Insprug; and scaled the Alps by torchlight, pursued by Duke Maurice; having hoped to swallow up all those dominions wherein he concocted nothing save his own disgraces. And having, after the slaughter of so many millions of men, no one foot of ground in either: he crept into a cloister, and made himself a pensioner of an hundred thousand ducats by the year, to his son Philip, from whom he very slowly received his mean and ordinary maintenance.

His son again King Philip the Second, not satisfied to hold Holland and Zeeland, (wrested by his ancestors from Jacqueline their lawful Princess) and to possess in peace many other provinces of the Netherlands: persuaded by that mischievous Cardinal of Granville, and other Romish tyrants; not only forgot the most remarkable services done to his father the Emperor by the nobilities of those countries, not only forgot the present made him upon his entry, of forty millions of florins, called the "Novaile aide"; nor only forgot that he had twice most solemnly sworn to the General States, to maintain and preserve their ancient rights, privileges, and customs, which they had enjoyed under their thirty and five earls before him, Conditional Princes of those provinces: but beginning first to constrain them, and enthrall them by the Spanish Inquisition, and then to impoverish them by many new devised and intolerable impositions; he lastly, by strong hand and main force, attempted to make himself not only an absolute monarch over them, like unto the kings and sovereigns of England and France; but Turk-like to tread under his feet all their natural and fundamental laws, privileges, and ancient rights. To effect which, after he had easily obtained from the Pope a dispensation of his former oaths (which dispensation was the true cause of the war and bloodshed since then;) and after he had tried what he could perform, by dividing of their own nobility, under the government of his base sister Margaret of Austria, and the Cardinal Granville; he employed that most merciless Spaniard Don Ferdinand Alvarez of Toledo, Duke of Alva, followed with a powerful army of strange nations: by whom he first

slaughtered that renowned captain, the Earl of Egmont, Prince of Gavare: and Philip Montmorency, Earl of Horn: made away Montigue, and the Marquis of Bergues, and cut off in those six years (that Alva governed) of gentlemen and others, eighteen thousand and six hundred, by the hands of the hangman, besides all his other barbarous murders and massacres. By whose ministry when he could not yet bring his affairs to their wished ends, having it in his hope to work that by subtilty, which he had failed to perform by force; he sent for governor his bastard brother Don John of Austria, a prince of great hope, and very gracious to those people. But he, using the same papal advantage that his predecessors had done, made no scruple to take oath upon the Holy Evangelists, to observe the treaty made with the General States; and to discharge the Low Countries of all Spaniards, and other strangers therein garrisoned: towards whose pay and passport, the Netherlands strained themselves to make payment of six hundred thousand pounds. Which monies received, he suddenly surprised the citadels of Antwerp and Nemours: not doubting (being unsuspected by the states) to have possessed himself of all the mastering places of those provinces. For whatsoever he overtly pretended, he held in secret a contrary counsel with the Secretary Escovedo, Rhodus, Barlemont, and others, ministers of the Spanish tyranny, formerly practised, and now again intended. But let us now see the effect and end of this perjury and of all other the Duke's cruelties. First, for himself, after he had murdered so many of the nobility; executed (as aforesaid) eighteen thousand and six hundred in six years, and most cruelly slain man, woman, and child, in Mechlin, Zutphen, Naerden, and other places: notwithstanding his Spanish vaunt, that he would suffocate the Hollanders in their own butter-barrels, and milk-tubs; he departed the country no otherwise accompanied, than with the curse and detestation of the whole nation; leaving his master's affairs in a tenfold worse estate, than he found them at his first arrival. For Don John, whose haughty conceit of himself overcame the greatest difficulties; though his judgment were over-weak to manage the least: what wonders did his fearful breach of faith bring forth, other than the King his brother's jealousy and distrust, with the untimely death that seized him, even in the flower of his youth? And for Escovedo his sharp-witted secretary, who in his own imagination had conquered for his master both England and the Netherlands; being sent into Spain upon some new project, he was at the first arrival, and before any access to the King, by certain ruffians appointed by Anthony

Peres (though by better warrant than his) rudely murdered in his own lodging. Lastly, if we consider the King of Spain's carriage, his counsel and success in this business, there is nothing left to the memory of man more remarkable. For he hath paid above an hundred millions, and the lives of above four hundred thousand Christians, for the loss of all those countries; which, for beauty, gave place to none; and for revenue, did equal his West Indies: for the loss of a nation which most willingly obeyed him; and who at this day, after forty years war, are in despite of all his forces become a free estate, and far more rich and powerful than they were, when he first began to impoverish and oppress them.

Oh, by what plots, by what forswearings, betrayings, oppressions, imprisonments, tortures, poisonings, and under what reasons of state, and politic subtlety, have these fore-named kings, both strangers, and of our own nation, pulled the vengeance of God upon themselves, upon theirs, and upon their prudent ministers! and in the end have brought those things to pass for their enemies, and seen an effect so directly contrary to all their own counsels and cruelties; as the one could never have hoped for themselves; and the other never have succeeded; if no such opposition had ever been made. God hath said it and performed it ever: "Perdam sapientiam sapientum"; "I will destroy the wisdom of the wise."

But what of all this? and to what end do we lay before the eyes of the living, the fall and fortunes of the dead: seeing the world is the same that it hath been; and the children of the present time, will still obey their parents? It is in the present time that all the wits of the world are exercised. To hold the times we have, we hold all things lawful: and either we hope to hold them forever; or at least we hope that there is nothing after them to be hoped for. For as we are content to forget our own experience, and to counterfeit the ignorance of our own knowledge, in all things that concern ourselves; or persuade ourselves, that God hath given us letters patents to pursue all our irreligious affections, with a "non obstante"[12] so we neither look behind us what hath been, nor before us what shall be. It is true, that the quantity which we have, is of the body: we are by it joined to the earth: we are compounded of earth; and we inhabit it. The Heavens are high, far off, and unsearchable: we have sense and feeling of corporal things; and of eternal grace, but by revelation.

No marvel then that our thoughts are also earthly: and it is less to be wondered at, that the words of worthless men can not cleanse them: seeing their doctrine and instruction, whose understanding the Holy Ghost vouchsafed to inhabit, have not performed it. For as the Prophet Isaiah cried out long ago, "Lord, who hath believed our reports?" And out of doubt, as Isaiah complained then for himself and others: so are they less believed, every day after other. For although religion, and the truth thereof be in every man's mouth, yea, in the discourse of every woman, who for the greatest number are but idols of vanity: what is it other than an universal dissimulation? We profess that we know God: but by works we deny him. For beatitude doth not consist in the knowledge of divine things, but in a divine life: for the Devils know them better than men. "Beatitudo non est divinatorum cognitio, sed vita divina." And certainly there is nothing more to be admired, and more to be lamented, than the private contention, the passionate dispute, the personal hatred, and the perpetual war, massacres, and murders for religion among Christians: the discourse whereof hath so occupied the world, as it hath well near driven the practice thereof out of the world. Who would not soon resolve, that took knowledge but of the religious disputations among men, and not of their lives which dispute, that there were no other thing in their desires, than the purchase of Heaven; and that the world itself were but used as it ought, and as an inn or place, wherein to repose ourselves in passing on towards our celestial habitation? when on the contrary, besides the discourse and outward profession, the soul hath nothing but hypocrisy. We are all (in effect) become comedians in religion: and while we act in gesture and voice, divine virtues, in all the course of our lives we renounce our persons, and the parts we play. For Charity, Justice, and Truth have but their being *in terms*, like the philosopher's *Materia prima*.

Neither is it that wisdom, which Solomon defineth to be the "Schoolmistress of the knowledge of God," that hath valuation in the world: it is enough that we give it our good word: but the same which is altogether exercised in the service of the world as the gathering of riches chiefly, by which we purchase and obtain honor, with the many respects which attend it. These indeed be the marks, which (when we have bent our consciences to the highest) we all shoot at. For the obtaining whereof it is true, that the care is our own; the care our own in this life, the peril our own in the future: and yet when we have

gathered the greatest abundance, we ourselves enjoy no more thereof, than so much as belongs to one man. For the rest, he that had the greatest wisdom and the greatest ability that ever man had, hath told us that this is the use: "When goods increase (saith Solomon) they also increase that eat them; and what good cometh to the owners, but the beholding thereof with their eyes?" As for those that devour the rest, and follow us in fair weather: they again forsake us in the first tempest of misfortune, and steer away before the sea and wind; leaving us to the malice of our destinies. Of these, among a thousand examples, I will take but one out of Master Danner, and use his own words: "Whilest the Emperor Charles the Fifth, after the resignation of his estates, stayed at Flushing for wind, to carry him his last journey into Spain; he conferred on a time with Seldius, his brother Ferdinand's Ambassador, till the deep of the night. And when Seldius should depart, the Emperor calling for some of his servants, and nobody answering him (for those that attended upon him, were some gone to their lodgings, and all the rest asleep), the Emperor took up the candle himself, and went before Seldius to light him down the stairs; and so did, notwithstanding all the resistance that Seldius could make. And when he was come to the stair's foot, he said thus unto him: "Seldius, remember this of Charles the Emperor, when he shall be dead and gone, that him, whom thou hast known in thy time environed with so many mighty armies and guards of soldiers, thou hast also seen alone, abandoned, and forsaken, yea even of his own domestical servants, &c. I acknowledge this change of Fortune to proceed from the mighty hand of God, which I will by no means go about to withstand."

But you will say, that there are some things else, and of greater regard than the former. The first is the reverend respect that is held of great men, and the honor done unto them by all sorts of people. And it is true indeed: provided, that an inward love for their justice and piety accompany the outward worship given to their places and power; without which what is the applause of the multitude, but as the outcry of an herd of animals, who without the knowledge of any true cause, please themselves with the noise they make? For seeing it is a thing exceeding rare, to distinguish Virtue and Fortune: the most impious (if prosperous) have ever been applauded; the most virtuous (if unprosperous) have ever been despised. For as Fortune's man rides the horse, so Fortune herself rides the man; who when he is descended and on foot, the

man taken from his beast, and Fortune from the man, a base groom beats the one, and a bitter contempt spurns at the other, with equal liberty.

The second is the greatening of our posterity, and the contemplation of their glory whom we leave behind us. Certainly, of those which conceive that their souls departed take any comfort therein, it may be truly said of them, which Lactantius spake of certain heathen philosophers, "quod sapientes sunt in re stulta." [13] For when our spirits immortal shall be once separate from our mortal bodies, and disposed by God; there remaineth in them no other joy of their posterity which succeed, than there doth of pride in that stone, which sleepeth in the wall of the king's palace; nor any other sorrow for their poverty, than there doth of shame in that, which beareth up a beggar's cottage. "Nesciunt mortui, etiam sancti, quid agunt vivi, etiam eorum filii, quia animae mortuorum rebus viventium non intersunt": "The dead, though holy, know nothing of the living, no, not of their own children: for the souls of those departed, are not conversant with their affairs that remain." [14] And if we doubt of St. Augustine, we can not of Job; who tells us, "That we know not if our sons shall be honorable: neither shall we understand concerning them, whether they shall be of low degree." Which Ecclesiastes also confirmeth: "Man walketh in a shadow, and disquieteth himself in vain: he heapeth up riches, and can not tell who shall gather them. The living (saith he) know that they shall die, but the dead know nothing at all: for who can show unto man what shall be after him under the sun?" He therefore accounteth it among the rest of worldly vanities, to labor and travail in the world; not knowing after death whether a fool or a wise man should enjoy the fruits thereof: "which made me (saith he) endeavor even to abhor mine own labor." And what can other men hope, whose blessed or sorrowful estates after death God hath reserved? man's knowledge lying but in his hope, seeing the Prophet Isaiah confesseth of the elect, "That Abraham is ignorant of us, and Israel knows us not." But hereof we are assured, that the long and dark night of death (of whose following day we shall never behold the dawn till his return that hath triumphed over it), shall cover us over till the world be no more. After which, and when we shall again receive organs glorified and incorruptible, the seats of angelical affections, in so great admiration shall the souls of the blessed be exercised, as they can not admit the mixture of any second or less joy; nor any return of foregone and mortal affection towards

friends, kindred, or children. Of whom whether we shall retain any particular knowledge, or in any sort distinguish them, no man can assure us; and the wisest men doubt. But on the contrary, if a divine life retain any of those faculties which the soul exercised in a mortal body, we shall not at that time so divide the joys of Heaven, as to cast any part thereof on the memory of their felicities which remain in the world. No, be their estates greater than ever the world gave, we shall (by the difference known unto us) even detest their consideration. And whatsoever comfort shall remain of all forepast, the same will consist in the charity which we exercised living; and in that piety, justice, and firm faith, for which it pleased the infinite mercy of God to accept of us, and receive us. Shall we therefore value honor and riches at nothing? and neglect them, as unnecessary and vain? Certainly no. For that infinite wisdom of God, which hath distinguished his angels by degrees; which hath given greater and less light and beauty to heavenly bodies; which hath made differences between beasts and birds; created the eagle and the fly, the cedar and the shrub; and among stones, given the fairest tincture to the ruby, and the quickest light to the diamond; hath also ordained kings, dukes, or leaders of the people, magistrates, judges, and other degrees among men. And as honor is left to posterity, for a mark and ensign of the virtue and understanding of their ancestors: so (seeing Siracides preferreth death before beggary: and that titles, without proportionable estates, fall under the miserable succor of other men's pity) I account it foolishness to condemn such a care: provided, that worldly goods be well gotten, and that we raise not our own buildings out of other men's ruins. For, as Plato doth first prefer the perfection of bodily health; secondly, the form and beauty; and thirdly, "*Divitias nulla fraude quaesitas*":[15] so Jeremiah cries, "Woe unto them that erect their houses by unrighteousness, and their chambers without equity": and Isaiah the same, "Woe to those that spoil and were not spoiled." And it was out of the true wisdom of Solomon, that he commandeth us, "not to drink the wine of violence; not to lie in wait for blood, and not to swallow them up alive, whose riches we covet: for such are the ways (saith he) of everyone that is greedy of gain."

And if we could afford ourselves but so much leisure as to consider, that he which hath most in the world, hath, in respect of the world, nothing in it: and that he which hath the longest time lent him to live in it, hath yet no

proportion at all therein, setting it either by that which is past, when we were not, or by that time which is to come, in which we shall abide forever: I say, if both, to wit, our proportion in the world, and our time in the world, differ not much from that which is nothing; it is not out of any excellency of understanding, that we so much prize the one, which hath (in effect) no being: and so much neglect the other, which hath no ending: coveting those mortal things of the world, as if our souls were therein immortal; and neglecting those things which are immortal, as if ourselves after the world were but mortal.

But let every man value his own wisdom, as he pleaseth. Let the rich man think all fools, that cannot equal his abundance: the revenger esteem all negligent, that have not trodden down their opposites; the politician, all gross that cannot merchandise their faith: yet when we once come in sight of the port of death, to which all winds drive us, and when by letting fall that fatal anchor, which can never be weighed again, the navigation of this life takes end; then it is, I say, that our own cogitations (those sad and severe cogitations, formerly beaten from us by our health and felicity) return again, and pay us to the uttermost for all the pleasing passages of our lives past. It is then that we cry out to God for mercy; then when our selves can no longer exercise cruelty to others; and it is only then, that we are stricken through the soul with this terrible sentence, "That God will not be mocked." For if according to St. Peter, "The righteous scarcely be saved: and that God spared not his angels"; where shall those appear, who, having served their appetites all their lives, presume to think, that the severe commandments of the all-powerful God were given but in sport; and that the short breath, which we draw when death presseth us, if we can but fashion it to the sound of mercy (without any kind of satisfaction or amends) is sufficient? "O quam multi," saith a reverend father, "cum hac spe ad aeternos labores et bella descendunt!"[16] I confess that it is a great comfort to our friends, to have it said, that we ended well; for we all desire (as Balaam did) "to die the death of the righteous." But what shall we call a disesteeming, an opposing, or (indeed) a mocking of God: if those men do not oppose Him, disesteem Him, and mock Him, that think it enough for God, to ask Him forgiveness at leisure, with the remainder and last drawing of a malicious breath? For what do they otherwise, that die this kind of well-dying, but say unto God as

followeth? "We beseech Thee, O God, that all the falsehoods, forswearings, and treacheries of our lives past, may be pleasing unto Thee; that Thou wilt for our sakes (that have had no leisure to do anything for Thine) change Thy nature (though impossible,) and forget to be a just God; that Thou wilt love injuries and oppressions, call ambition wisdom, and charity foolishness. For I shall prejudice my son (which I am resolved not to do) if I make restitution; and confess myself to have been unjust (which I am too proud to do) if I deliver the oppressed." Certainly, these wise worldlings have either found out a new God, or made one: and in all likelihood such a leaden one, as Louis the Eleventh wore in his cap; which when he had caused any that he feared, or hated, to be killed, he would take it from his head and kiss it: beseeching it to pardon him this one evil act more, and it should be the last; which (as at other times) he did, when by the practice of a cardinal and a falsified sacrament, he caused the Earl of Armagnac to be stabbed to death: mockeries indeed fit to be used towards a leaden, but not towards the ever-living God. But of this composition are all devout lovers of the world, that they fear all that is dureless^[17] and ridiculous: they fear the plots and practises of their opposites,^[18] and their very whisperings: they fear the opinions of men, which beat but upon shadows: they flatter and forsake the prosperous and unprosperous, be they friends or kings: yea they dive under water, like ducks, at every pebblestone, that is but thrown toward them by a powerful hand: and on the contrary, they show an obstinate and giant-like valor, against the terrible judgments of the all-powerful God, yea they show themselves gods against God, and slaves towards men; towards men whose bodies and consciences are alike rotten.

Now for the rest: If we truly examine the difference of both conditions; to wit, of the rich and mighty, whom we call fortunate; and of the poor and oppressed, whom we account wretched we shall find the happiness of the one, and the miserable estate of the other, so tied by God to the very instant, and both so subject to interchange (witness the sudden downfall of the greatest princes, and the speedy uprising of the meanest persons) as the one hath nothing so certain, whereof to boast; nor the other so uncertain, whereof to bewail itself. For there is no man so assured of his honor, of his riches, health, or life; but that he may be deprived of either, or all, the very next hour or day to come. "Quid vesper vehat, incertum est," "What the evening will

bring with it, it is uncertain." "And yet ye cannot tell (saith St. James) what shall be tomorrow. Today he is set up, and tomorrow he shall not be found; for he is turned into dust, and his purpose perisheth." And although the air which compasseth adversity be very obscure; yet therein we better discern God, than in that shining light which environeth worldly glory; through which, for the clearness thereof, there is no vanity which escapeth our sight. And let adversity seem what it will; to happy men ridiculous, who make themselves merry at other men's misfortunes; and to those under the cross, grievous: yet this is true, that for all that is past, to the very instant, the portions remaining are equal to either. For be it that we have lived many years, "and (according to Solomon) in them all we have rejoiced;" or be it that we have measured the same length of days and therein have evermore sorrowed: yet looking back from our present being, we find both the one and the other, to wit, the joy and the woe, sailed out of sight; and death, which doth pursue us and hold us in chase, from our infancy, hath gathered it. "Quicquid aetatis retro est, mors tenet:" "Whatsoever of our age is past, death holds it." So as whosoever he be, to whom Fortune hath been a servant, and the Time a friend; let him but take the account of his memory (for we have no other keeper of our pleasures past), and truly examine what it hath reserved either beauty and youth, or foregone delights; what it hath saved, that it might last, of his dearest affections, or of whatever else the amorous springtime gave his thoughts of contentment, then unvaluable; and he shall find that all the art which his elder years have, can draw no other vapor out of these dissolutions, than heavy, secret, and sad sighs. He shall find nothing remaining, but those sorrows, which grow up after our fast-springing youth; overtake it, when it is at a stand; and overtopped it utterly, when it begins to wither: in so much as looking back from the very instant time, and from our now being, the poor, diseased, and captive creature, hath as little sense of all his former miseries and pains, as he, that is most blessed in common opinions, hath of his fore-passed pleasure and delights. For whatsoever is cast behind us, is just nothing: and what is to come, deceitful hope hath it: "Omnia quae eventura sunt, in incerto jacent." [19] Only those few black swans, I must except: who having had the grace to value worldly vanities at no more than their own price; do, by retaining the comfortable memory of a well acted life, behold death without dread, and the grave without fear; and embrace both, as necessary guides to endless glory.

For myself, this is my consolation, and all that I can offer to others, that the sorrows of this life are but of two sorts: whereof the one hath respect to God, the other, to the world. In the first we complain to God against ourselves, for our offences against Him; and confess, "Et Tu Justus es in omnibus quae venerunt super nos." "And Thou, O Lord, are just in all that hath befallen us." In the second we complain to ourselves against God: as if he had done us wrong, either in not giving us worldly goods and honors, answering our appetites: or for taking them again from us having had them; forgetting that humble and just acknowledgment of Job, "the Lord hath given, and the Lord hath taken." To the first of which St. Paul hath promised blessedness; to the second, death. And out of doubt he is either a fool, or ungrateful to God, or both, that doth not acknowledge, how mean soever his estate be, that the same is yet far greater than that which God oweth him: or doth not acknowledge, how sharp soever his afflictions be, that the same are yet far less, than those which are due unto him. And if an heathen wise man call the adversities of the world but "*tributa vivendi*," "the tributes of living;" a wise Christian man ought to know them, and bear them, but as the tributes of offending. He ought to bear them manlike, and resolvedly; and not as those whining soldiers do, "*qui gementes sequuntur imperatorem*." [20]

For seeing God, who is the author of all our tragedies, hath written out for us and appointed us all the parts we are to play: and hath not, in their distribution, been partial to the most mighty princes of the world: that gave unto Darius the part of the greatest emperor, and the part of the most miserable beggar, a beggar begging water of an enemy, to quench the great drought of death: that appointed Bajazet to play the Grand Signior of the Turks in the morning, and in the same day the footstool of Tamerlane (both which parts Valerian had also played, being taken by Saporess): that made Belisarius play the most victorious captain, and lastly the part of a blind beggar: of which examples many thousands may be produced: why should other men, who are but as the least worms, complain of wrong? Certainly there is no other account to be made of this ridiculous world, than to resolve, that the change of fortune on the great theatre, is but as the change of garments on the less. For when on the one and the other, every man wears but his own skin, the players are all alike. Now, if any man out of weakness prize

the passages of this world otherwise (for saith Petrarch, "*Magni ingenii est revocare mentem a sensibus*"[21]) it is by reason of that unhappy phantasy of ours, which forgeth in the brains of man all the miseries (the corporal excepted) whereunto he is subject. Therein it is, that misfortunes and adversity work all that they work. For seeing Death, in the end of the play, takes from all whatsoever Fortune or Force takes from any one; it were a foolish madness in the shipwreck of worldly things, where all sinks but the sorrow, to save it. That were, as Seneca saith, "*Fortunae succumbere, quod tristius est omni fato*:" "To fall under Fortune, of all other the most miserable destiny."

But it is now time to sound a retreat; and to desire to be excused of this long pursuit: and withal, that the good intent, which hath moved me to draw the picture of time past (which we call History) in so large a table, may also be accepted in place of a better reason.

The examples of divine providence, everywhere found (the first divine histories being nothing else but a continuation of such examples) have persuaded me to fetch my beginning from the beginning of all things: to wit, Creation. For though these two glorious actions of the Almighty be so near, and (as it were) linked together, that the one necessarily implieth the other: Creation inferring Providence (for what father forsaketh the child that he hath begotten?) and Providence pre-supposing Creation: yet many of those that have seemed to excel in worldly wisdom, have gone about to disjoin this coherence; the epicure denying both Creation and Providence, but granting the world had a beginning; the Aristotelian granting Providence, but denying both the creation and the beginning.

Now although this doctrine of faith, touching the creation in time (for by faith we understand, that the world was made by the word of God), be too weighty a work for Aristotle's rotten ground to bear up, upon which he hath (notwithstanding) founded the defences and fortresses of all his verbal doctrine: yet that the necessity of infinite power, and the world's beginning, and the impossibility of the contrary even in the judgment of natural reason, wherein he believed, had not better informed him; it is greatly to be marvelled at. And it is no less strange, that those men which are desirous of

knowledge (seeing Aristotle hath failed in this main point; and taught little other than terms in the rest) have so retrenched their minds from the following and overtaking of truth, and so absolutely subjected themselves to the law of those philosophical principles; as all contrary kind of teaching, in the search of causes, they have condemned either for phantastical, or curious. Both doth it follow, that the positions of heathen philosophers are undoubted grounds and principles indeed, because so called? Or that *ipsi dixerunt*, doth make them to be such? Certainly no. But this is true, that where natural reason hath built anything so strong against itself, as the same reason can hardly assail it, much less batter it down: the same in every question of nature, and infinite power, may be approved for a fundamental law of human knowledge. For saith Charron in his book of wisdom, "Toute proposition humaine a autant d'autorite quel'autre, si la raison n'on fait la difference;" "Every human proposition hath equal authority, if reason make not the difference," the rest being but the fables of principles. But hereof how shall the upright and impartial judgment of man give a sentence, where opposition and examination are not admitted to give in evidence? And to this purpose it was well said of Lactantius, "Sapientiam sibi adimunt, qui sine ullo judicio inventa maiorum probant, et ab aliis pecudum more ducuntur:" "They neglect their own wisdom, who without any judgment approve the invention of those that forewent them; and suffer themselves after the manner of beasts, to be led by them;" by the advantage of which sloth and dullness, ignorance is now become so powerful a tyrant, as it hath set true philosophy, physics, and divinity in a pillory; and written over the first, "Contra negantem principia;" [22] over the second, "Virtus specifica;"[23] over the third, "Ecclesia Romana." [24]

But for myself, I shall never be persuaded, that God hath shut up all light of learning within the lanthorn of Aristotle's brains: or that it was ever said unto him, as unto Esdras, "*Accendam in corde tuo Lucernam intellectus*";[25] that God hath given invention but to the heathen, and that they only invaded nature, and found the strength and bottom thereof; the same nature having consumed all her store, and left nothing of price to after-ages. That these and these be the causes of these and these effects, time hath taught us; and not reason: and so hath experience without art. The cheese-wife knoweth it as well as the philosopher, that sour rennet doth coagulate her milk into a curd.

But if we ask a reason of this cause, why the sourness doth it? whereby it doth it? and the manner how? I think that there is nothing to be found in vulgar philosophy, to satisfy this and many other like vulgar questions. But man to cover his ignorance in the least things, who can not give a true reason for the grass under his feet, why it should be green rather than red, or of any other color; that could never yet discover the way and reason of nature's working, in those which are far less noble creatures than himself; who is far more noble than the heavens themselves: "Man (saith Solomon) that can hardly discern the things that are upon the earth, and with great labor find out the things that are before us"; that hath so short a time in the world, as he no sooner begins to learn, than to die; that hath in his memory but borrowed knowledge; in his understanding, nothing truly; that is ignorant of the essence of his own soul, and which the wisest of the naturalists (if Aristotle be he) could never so much as define, but by the action and effect, telling us what it works (which all men knew as well as he) but not what it is, which neither he, nor any else, doth know, but God that created it; ("For though I were perfect, yet I know not my soul," saith Job). Man, I say, that is but an idiot in the next cause of his own life, and in the cause of all actions of his life, will (notwithstanding) examine the art of God in creating the world; of God, who (saith Job) "is so excellent as we know him not"; and examine the beginning of the work, which had end before mankind had a beginning of being. He will disable God's power to make a world, without matter to make it of. He will rather give the motes of the air for a cause; cast the work on necessity or chance; bestow the honor thereof on nature; make two powers, the one to be the author of the matter, the other of the form; and lastly, for want of a workman, have it eternal: which latter opinion Aristotle, to make himself the author of a new doctrine, brought into the world: and his Sectators[26] have maintained it; "parati ac conjurati, quos sequuntur, philosophorum animis invictis opiniones tueri." [27] For Hermes, who lived at once with, or soon after Moses, Zoroaster, Musaeus, Orpheus, Linus, Anaximenes, Anaxagoras, Empedocles, Melissus, Pherecydes, Thales, Cleanthes, Pythagoras, Plato, and many other (whose opinions are exquisitely gathered by Steuchius Eugubinus) found in the necessity of invincible reason, "One eternal and infinite Being," to be the parent of the universal. "Horum omnium sententia quamvis sit incerta, eodem tamen spectat, ut Providentiam unam esse consentiant: sive enim natura, sive aether, sive ratio, sive mens, sive fatalis

necessitas, sive divina lex; idem est quod a nobis dicitur Deus": "All these men's opinions (saith Lactantius) though uncertain, come to this; That they agree upon one Providence; whether the same be nature, or light, or reason, or understanding, or destiny, or divine ordinance, that it is the same which we call God." Certainly, as all the rivers in the world, though they have divers risings, and divers runnings; though they sometimes hide themselves for a while under ground, and seem to be lost in sea-like lakes; do at last find, and fall into the great ocean: so after all the searches that human capacity hath, and after all philosophical contemplation and curiosity; in the necessity of this infinite power, all the reason of man ends and dissolves itself.

As for the others; the first touching those which conceive the matter of the world to have been eternal, and that God did not create the world "Exnihilo," [28] but "ex materia praeexistente":[29] the supposition is so weak, as is hardly worth the answering. For (saith Eusebius) "Mihi videntur qui hoc dicunt, fortunam quoque Deo annectere," "They seem unto me, which affirm this, to give part of the work to God, and part to Fortune"; insomuch as if God had not found this first matter by chance, He had neither been author nor father, nor creator, nor lord of the universal. For were the matter or chaos eternal, it then follows, that either this supposed matter did fit itself to God, or God accommodate Himself to the matter. For the first, it is impossible, that things without sense could proportion themselves to the workman's will. For the second: it were horrible to conceive of God, that as an artificer He applied himself, according to the proportion of matter which He lighted upon.

But let it be supposed, that this matter hath been made by any power, not omnipotent, and infinitely wise; I would gladly learn how it came to pass, that the same was proportionable to his intention, that was omnipotent and infinitely wise; and no more, nor no less, than served to receive the form of the universal. For, had it wanted anything of what was sufficient; then must it be granted, that God created out of nothing so much new matter, as served to finish the work of the world: or had there been more of this matter than sufficed, then God did dissolve and annihilate whatsoever remained and was superfluous. And this must every reasonable soul confess, that it is the same work of God alone, to create anything out of nothing, and by the same art and power, and by none other, can those things, or any part of that eternal matter,

be again changed into nothing; by which those things, that once were nothing, obtained a beginning of being.

Again, to say that this matter was the cause of itself; this, of all other, were the greatest idiotism. For, if it were the cause of itself at any time; then there was also a time when itself was not: at which time of not being, it is easy enough to conceive, that it could neither procure itself, nor anything else. For to be, and not to be, at once, is impossible. "Nihil autem seipsum praecedit, neque; seipsum componit corpus": "There is nothing that doth precede itself, neither do bodies compound themselves."

For the rest, those that feign this matter to be eternal, must of necessity confess, that infinite cannot be separate from eternity. And then had infinite matter left no place for infinite form, but that the first matter was finite, the form which it received proves it. For conclusion of this part, whosoever will make choice, rather to believe in eternal deformity, or in eternal dead matter, than in eternal light and eternal life: let eternal death be his reward. For it is a madness of that kind, as wanteth terms to express it. For what reason of man (whom the curse of presumption hath not stupefied) hath doubted, that infinite power (of which we can comprehend but a kind of shadow, "quia comprehensio est intra terminos, qui infinito repugnant"[30]) hath anything wanting in itself, either for matter or form; yea for as many worlds (if such had been God's will) as the sea hath sands? For where the power is without limitation, the work hath no other limitation, than the workman's will. Yea reason itself finds it more easy for infinite power to deliver from itself a finite world, without the help of matter prepared; than for a finite man, a fool and dust, to change the form of matter made to his hands. They are Dionysius his words, "Deus in una existentia omnia praehabet"[31] and again, "Esse omnium est ipsa divinitas, omne quod vides, et quod non vides",[32] to wit, "causaliter",[33] or in better terms, "non tanquam forma, sed tanquam causa universalis"[34] Neither hath the world universal closed up all of God "For the most part of his works (saith Siracides) are hid". Neither can the depth of his wisdom be opened, by the glorious work of the world, which never brought to knowledge all it can, for then were his infinite power bounded and made finite. And hereof it comes, That we seldom entitle God the all-showing, or the all-willing, but the Almighty, that is, infinitely able.

But now for those, who from that ground, "that out of nothing, nothing is made," infer the world's eternity, and yet not so savage therein, as those are, which give an eternal being to dead matter, it is true if the word (nothing) be taken in the affirmative, and the making, imposed upon natural agents and finite power; that out of nothing, nothing is made. But seeing their great doctor Aristotle himself confesseth, "*quod omnes antiqui decreverunt quasi quodam return principium, ipsumque infinitum*" "That all the ancient decree a kind of beginning, and the same to be infinite"; and a little after, more largely and plainly, "*Principium eius est nullum, sed ipsum omnium cernitur esse principium, ac omnia complecti ac regere*",[35] it is strange that this philosopher, with his followers, should rather make choice out of falsehood, to conclude falsely, than out of truth, to resolve truly. For if we compare the world universal, and all the unmeasurable orbs of Heaven, and those marvellous bodies of the sun, moon, and stars, with "*ipsum infinitum*": it may truly be said of them all, which himself affirms of his imaginary "*Materia prima*",[36] that they are neither "*quid, quale*," nor "*quantum* "; and therefore to bring finite (which hath no proportion with infinite) out of infinite ("*qui destruit omnem proportionem*"[37]) is no wonder in God's power. And therefore Anaximander, Melissus, and Empedocles, call the world universal, but "*particulam universitatis*" and "*infinitatis*," a parcel of that which is the universality and the infinity in itself; and Plato, but a shadow of God. But the other to prove the world's eternity, urgeth this maxim, "that, a sufficient and effectual cause being granted, an answerable effect thereof is also granted": inferring that God being forever a sufficient and effectual cause of the world, the effect of the cause should also have been forever; to wit, the world universal. But what a strange mockery is this in so great a master, to confess a sufficient and effectual cause of the world, (to wit, an almighty God) in his antecedent; and the same God to be a God restrained in his conclusion; to make God free in power, and bound in will; able to effect, unable to determine; able to make all things, and yet unable to make choice of the time when? For this were impiously to resolve of God, as of natural necessity; which hath neither choice, nor will, nor understanding; which cannot but work matter being present: as fire, to burn things combustible. Again he thus disputeth, that every agent which can work, and doth not work, if it afterward work, it is either thereto moved by itself, or by somewhat else: and so it passeth from power to act. But God (saith he) is immovable, and is neither

moved by himself, nor by any other: but being always the same, doth always work. Whence he concludeth, if the world were caused by God, that he was forever the cause thereof: and therefore eternal. The answer to this is very easy, for that God's performing in due time that which he ever determined at length to perform, doth not argue any alteration or change, but rather constancy in him. For the same action of his will, which made the world forever, did also withhold the effect to the time ordained. To this answer, in itself sufficient, others add further, that the pattern or image of the world may be said to be eternal: which the Platonics call "*spiritualem mundum*"[38] and do in this sort distinguish the idea and creation in time. "*Spiritualis ille mundus, mundi huius exemplar, primumque Dei opus, vita aequali est architecto, fuit semper cum illo, eritque semper. Mundus autem corporalis, quod secundum opus est Dei, decedit iam ab opifice ex parte una, quia non fuit semper: retinet alteram, quia sit semper futurus*": "That representative, or the intentional world (say they) the sampler of this visible world, the first work of God, was equally ancient with the architect; for it was forever with him, and ever shall be. This material world, the second work or creature of God, doth differ from the worker in this, that it was not from everlasting, and in this it doth agree, that it shall be forever to come." The first point, that it was not forever, all Christians confess: the other they understand no otherwise, than that after the consummation of this world, there shall be a new Heaven and a new earth, without any new creation of matter. But of these things we need not here stand to argue; though such opinions be not unworthy the propounding, in this consideration, of an eternal and unchangeable cause, producing a changeable and temporal effect. Touching which point Proclus the Platonist disputeth, that the compounded essence of the world (and because compounded, therefore dissipable) is continued, and knit to the Divine Being, by an individual and inseparable power, flowing from Divine unity; and that the world's natural appetite of God sheweth, that the same proceedeth from a good and understanding divine; and that this virtue, by which the world is continued and knit together, must be infinite, that it may infinitely and everlastingly continue and preserve the same. Which infinite virtue, the finite world (saith he) is not capable of, but receiveth it from the divine infinite, according to the temporal nature it hath, successively every moment by little and little; even as the whole material world is not altogether: but the abolished parts are departed by small degrees,

and the parts yet to come, do by the same small degrees succeed; as the shadow of a tree in a river seemeth to have continued the same a long time in the water, but it is perpetually renewed, in the continual ebbing and flowing thereof.

But to return to them, which denying that ever the world had any beginning, withal deny that ever it shall have any end, and to this purpose affirm, that it was never heard, never read, never seen, no not by any reason perceived, that the heavens have ever suffered corruption; or that they appear any way the older by continuance; or in any sort otherwise than they were; which had they been subject to final corruption, some change would have been discerned in so long a time. To this it is answered, that the little change as yet perceived, doth rather prove their newness, and that they have not continued so long; than that they will continue forever as they are. And if conjectural arguments may receive answer by conjectures; it then seemeth that some alteration may be found. For either Aristotle, Pliny, Strabo, Beda, Aquinas, and others, were grossly mistaken; or else those parts of the world lying within the burnt zone, were not in elder times habitable, by reason of the sun's heat, neither were the seas, under the equinoctial, navigable. But we know by experience, that those regions, so situate, are filled with people, and exceeding temperate; and the sea, over which we navigate, passable enough. We read also many histories of deluges: and how in the time of Phaeton, divers places in the world were burnt up, by the sun's violent heat.

But in a word, this observation is exceeding feeble. For we know it for certain, that stone walls, of matter mouldering and friable, have stood two, or three thousand years; that many things have been digged up out of the earth, of that depth, as supposed to have been buried by the general flood; without any alteration either of substance or figure: yea it is believed, and it is very probable, that the gold which is daily found in mines, and rocks, under ground, was created together with the earth.

And if bodies elementary, and compounded, the eldest times have not invaded and corrupted: what great alteration should we look for in celestial and quint-essential bodies? And yet we have reason to think, that the sun, by whose help all creatures are generate, doth not in these latter ages assist

nature, as heretofore. We have neither giants, such as the eldest world had; nor mighty men, such as the elder world had; but all things in general are reputed of less virtue which from the heavens receive virtue. Whence, if the nature of a preface would permit a larger discourse, we might easily fetch store of proof; as that this world shall at length have end, as that once it had beginning.

And I see no good answer that can be made to this objection: if the world were eternal, why not all things in the world eternal? If there were no first, no cause, no father, no creator, no incomprehensible wisdom, but that every nature had been alike eternal; and man more rational than every other nature: why had not the eternal reason of man provided for his eternal being in the world? For if all were equal why not equal conditions to all? Why should heavenly bodies live forever; and the bodies of men rot and die?

Again, who was it that appointed the earth to keep the center, and gave order that it should hang in the air: that the sun should travel between the tropics, and never exceed those bounds, nor fail to perform that progress once in every year: the moon to live by borrowed light; the fixed stars (according to common opinion) to be fastened like nails in a cartwheel; and the planets to wander at their pleasure? Or if none of these had power over other: was it out of charity and love, that the sun by his perpetual travel within these two circles, hath visited, given light unto, and relieved all parts of the earth, and the creatures therein, by turns and times? Out of doubt, if the sun have of his own accord kept this course in all eternity, he may justly be called eternal charity and everlasting love. The same may be said of all the stars; who being all of them most large and clear fountains of virtue and operation, may also, be called eternal virtues: the earth may be called eternal patience; the moon, an eternal borrower and beggar; and man of all other the most miserable, eternally mortal. And what were this, but to believe again in the old play of the gods? Yea in more gods by millions, than ever Hesiodus dreamed of. But instead of this mad folly, we see it well enough with our feeble and mortal eyes; and the eyes of our reason discern it better; that the sun, moon, stars, and the earth, are limited bounded, and constrained: themselves they have not constrained nor could. "Omne determinatum causam habet aliquam efficientem, quae illud determinaverit:" "Everything bounded hath some

efficient cause, by which it is bounded."

Now for Nature; as by the ambiguity of this name, the school of Aristotle hath both commended many errors unto us, and sought also thereby to obscure the glory of the high moderator of all things, shining in the creation, and in the governing of the world: so if the best definition be taken out of the second of Aristotle's "Physics," or "primo de Coelo," or out of the fifth of his "Metaphysics"; I say that the best is but nominal, and serving only to difference the beginning of natural motion from artificial: which yet the Academics open better, when they call it "a seminary strength, infused into matter by the soul of the world": who give the first place to Providence, the second to Fate, and but the third to Nature. "Providentia" (by which they understand God) "dux et caput; Fatum, medium ex providentia prodians; Natura postremum"[39] But be it what he will, or be it any of these (God excepted) or participating of all: yet that it hath choice or understanding (both which are necessarily in the cause of all things) no man hath avowed. For this is unanswerable of Lactantius, "Is autem facit aliquid, qui aut voluntatem faciendi habet, aut scientiam:" "He only can be said to be the doer of a thing, that hath either will or knowledge in the doing it."

But the will and science of Nature, are in these words truly expressed by Ficinus: "Potest ubique Natura, vel per diversa media, vel ex diversis materiis, diversa facere: sublata vero mediorum materiaturque diversitate, vel unicum, vel similimum operatur, neque potest quando adest materia non operari"; "It is the power of Nature by the diversity of means, or out of diversity of matter, to produce divers things: but taking away the diversity of means, and the diversity of matter, it then works but one or the like work; neither can it but work, matter being present." Now if Nature made choice of diversity of matter, to work all these variable works of heaven and earth, it had then both understanding and will; it had counsel to begin; reason to dispose; virtue and knowledge to finish, and power to govern: without which all things had been but one and the same: all of the matter of heaven; or all of the matter of earth. And if we grant Nature this will, and this understanding, this course, reason, and power: "Cur Natura potius quam Deus nominetur?" "Why should we then call such a cause rather Nature, than God?" "God, of whom all men have notion, and give the first and highest place to divine

power": "Omnes homines notionem deorum habent, omnesque summum locum divino cuidam numini assignant." And this I say in short; that it is a true effect of true reason in man (were there no authority more binding than reason) to acknowledge and adore the first and most sublime power. "Vera philosophia, est ascensus ab his quae fluunt, et oriuntur, et occidunt, ad ea quae vera sunt, et semper eadem": "True philosophy, is an ascending from the things which flow, and arise, and fall, to the things that are forever the same."

For the rest; I do also account it not the meanest, but an impiety monstrous, to confound God and Nature; be it but in terms. For it is God, that only disposeth of all things according to His own will, and maketh of one earth, vessels of honor and dishonor. It is Nature that can dispose of nothing, but according to the will of the matter wherein it worketh. It is God that commandeth all: it is Nature that is obedient to all: it is God that doth good unto all, knowing and loving the good He doth: It is Nature, that secondarily doth also good, but it neither knoweth nor loveth the good it doth. It is God, that hath all things in Himself: Nature, nothing in itself. It is God, which is the Father, and hath begotten all things: it is Nature, which is begotten by all things, in which it liveth and laboreth; for by itself it existeth not. For shall we say, that it is out of affection to the earth, that heavy things fall towards it? Shall we call it reason, which doth conduct every river into the salt sea? Shall we term it knowledge in fire, that makes it to consume combustible matter? If it be affection, reason, and knowledge in these; by the same affection, reason, and knowledge it is, that Nature worketh. And therefore seeing all things work as they do, (call it by Form, or Nature, or by what you please) yet because they work by an impulsion, which they cannot resist, or by a faculty, infused by the supremest power; we are neither to wonder at, nor to worship, the faculty that worketh, nor the creature wherein it worketh. But herein lies the wonder: and to him is the worship due, who hath created such a nature in things, and such a faculty, as neither knowing itself, the matter wherein it worketh, nor the virtue and power which it hath; do yet work all things to their last and uttermost perfection. And therefore every reasonable man, taking to himself for a ground that which is granted by all antiquity, and by all men truly learned that ever the world had; to wit; that there is a power infinite, and eternal (which also necessity doth prove unto us, without the help of faith, and reason; without the force of authority) all things do as easily

follow which have been delivered by divine letters, as the waters of a running river do successfully pursue each other from the first fountains.

This much I say it is, that reason itself hath taught us: and this is the beginning of knowledge. "Sapientia praecedit, Religio sequitur: quia prius est Deum scire, consequens colere"; "Sapience goes before, Religion follows: because it is first to know God, and then to worship Him." This sapience Plato calleth "absoluti boni scientiam," "the science of the absolute good": and another "scientiam rerum primarum, sempiternarum, perpetuarum"[40] For "faith (saith Isidore) is not extorted by violence; but by reason and examples persuaded": "fides nequaquam vi extorquetur, sed ratione et exemplis suadetur." I confess it, that to inquire further, as to the essence of God, of His power, of His art, and by what means He created the world: or of His secret judgment, and the causes, is not an effect of reason. "Sed cum ratione insaniunt," but "they grow mad with reason," that inquire after it. For as it is no shame, nor dishonor (saith a French author) "de faire arrest au but qu'on nasceu surpasser," "for a man to rest himself there where he finds it impossible to pass on further": so whatsoever is beyond, and out of the reach of true reason, it acknowledged it to be so; as understanding itself not to be infinite, but according to the name and nature it hath, to be a teacher, that best knows the end of his own art. For seeing both reason and necessity teach us (reason, which is "pars divini spiritus in corpus humanum mersi"[41]) that the world was made by a power infinite; and yet how it was made, it cannot teach us: and seeing the same reason and necessity make us know, that the same infinite power is everywhere in the world; and yet how everywhere, it cannot inform us: our belief hereof is not weakened, but greatly strengthened, by our ignorance, because it is the same reason that tells us, that such a nature cannot be said to be God, that can be in all conceived by man.

I have already been over-long, to make any large discourse either of the parts of the following story, or in mine own excuse: especially in the excuse of this or that passage; seeing the whole is exceeding weak and defective. Among the grossest, the unsuitable division of the books, I could not know how to excuse, had I not been directed to enlarge the building after the foundation was laid, and the first part finished. All men know that there is no great art in the dividing evenly of these things, which are subject to number and measure.

For the rest, it suits well enough with a great many books of this age, which speak too much, and yet say little; "*Ipsi nobis furto subducimur*"; "We are stolen away from ourselves," setting a high price on all that is our own. But hereof, though a late good writer make complaint, yet shall it not lay hold on me, because I believe as he doth; that who so thinks himself the wisest man, is but a poor and miserable ignorant. Those that are the best men of war against all the vanities and fooleries of the world, do always keep the strongest guards against themselves, to defend them from themselves; from self-love, self-estimation, and self-opinion.

Generally concerning the order of the work, I have only taken counsel from the argument. For of the Assyrians, which after the downfall of Babel take up the first part, and were the first great kings of the world, there came little to the view of posterity: some few enterprises, greater in fame than faith, of Ninus and Semiramis, excepted.

It was the story of the Hebrews, of all before the Olympiads, that overcame the consuming disease of time, and preserved itself, from the very cradle and beginning to this day: and yet not so entire, but that the large discourses thereof (to which in many Scriptures we are referred) are nowhere found. The fragments of other stories, with the actions of those kings and princes which shot up here and there in the same time, I am driven to relate by way of digression: of which we may say with Virgil: "*Apparent rari nantes in gurgite vasto*"; "They appear here and there floating in the great gulf of time."

To the same first ages do belong the report of many inventions therein found, and from them derived to us; though most of the authors' names have perished in so long a navigation. For those ages had their laws; they had diversity of government; they had kingly rule; nobility; policy in war; navigation, and all, or the most of needful trades. To speak therefore of these (seeing in a general history we should have left a great deal of nakedness, by their omission) it cannot properly be called a digression. True it is, that I have made also many others: which if they shall be laid to my charge, I must cast the fault into the great heap of human error. For seeing we digress in all the ways of our lives: yea, seeing the life of man is nothing else but digression; I may the better be excused, in writing their lives and actions. I am not

altogether ignorant in the laws of history and of the kinds.

The same hath been taught by many, but no man better, and with greater brevity, than by that excellent learned gentleman, Sir Francis Bacon. Christian laws are also taught us by the prophets and apostles; and every day preached unto us. But we still make large digressions: yea, the teachers themselves do not (in all) keep the path which they point out to others.

For the rest, after such time as the Persians had wrested the Empire from the Chaldeans, and had raised a great monarchy, producing actions of more importance than were elsewhere to be found; it was agreeable to the order of the story, to attend this Empire; whilst it so flourished, that the affairs of the nations adjoining had reference thereunto. The like observance was to be used towards the fortunes of Greece, when they again began to get ground upon the Persians; as also towards the affairs of Rome, when the Romans grew more mighty than the Greeks.

As for the Medes, the Macedonians, the Sicilians, the Carthaginians, and other nations who resisted the beginnings of the former empires, and afterwards became but parts of their composition and enlargement; it seemed best to remember what was known of them from their several beginnings, in such times and places as they in their flourishing estates opposed those monarchies, which in the end swallowed them up. And herein I have followed the best geographers: who seldom give names to those small brooks, whereof many, joined together, make great rivers: till such times as they become united, and run in main stream to the ocean sea. If the phrase be weak, and the style not everywhere like itself: the first shows their legitimation and true parent; the second will excuse itself upon the variety of matter. For Virgil, who wrote his *Eclogues*, "gracili avena,"[42] used stronger pipes, when he sounded the wars of Aeneas. It may also be laid to my charge, that I use divers Hebrew words in my first book, and elsewhere: in which language others may think and I myself acknowledge it, that I am altogether ignorant: but it is true, that some of them I find in Montanus, others in Latin characters in S. Senensis; and of the rest I have borrowed the interpretation of some of my friends. But say I had been beholding to neither, yet were it not to be wondered at, having had an eleven years' leisure, to attain the

knowledge of that, or of any other tongue; howsoever, I know that it will be said by many, that I might have been more pleasing to the reader, if I had written the story of mine own times, having been permitted to draw water as near the well-head as another. To this I answer, that whosoever in writing a modern history, shall follow truth too near the heels, it may haply strike out his teeth. There is no mistress or guide, that hath led her followers and servants into greater miseries. He that goes after her too far off, loseth her sight, and loseth himself: and he that walks after her at a middle distance: I know not whether I should call that kind of course, temper,[43] or baseness. It is true, that I never travelled after men's opinions, when I might have made the best use of them: and I have now too few days remaining, to imitate those, that either out of extreme ambition, or of extreme cowardice, or both, do yet (when death hath them on his shoulders) flatter the world, between the bed and the grave. It is enough for me (being in that state I am) to write of the eldest times: wherein also why may it not be said, that in speaking of the past, I point at the present, and tax the vices of those that are yet living, in their persons that are long since dead; and have it laid to my charge? But this I cannot help, though innocent. And certainly, if there be any, that finding themselves spotted like the tigers of old time, shall find fault with me for painting them over anew, they shall therein accuse themselves justly, and me falsely.

For I protest before the Majesty of God, that I malice no man under the sun. Impossible I know it is to please all; seeing few or none are so pleased with themselves, or so assured of themselves, by reason of their subjection to their private passions, but that they seem divers persons in one and the same day. Seneca hath said it, and so do I: "Unus mihi pro populo erat";[44] and to the same effect Epicurus, "Hoc ego non multis sed tibi";[45] or (as it hath since lamentably fallen out) I may borrow the resolution of an ancient philosopher, "Satis est unus, satis est nullus." [46] For it was for the service of that inestimable Prince Henry, the successive hope, and one of the greatest of the Christian world, that I undertook this work. It pleased him to peruse some part thereof, and to pardon what was amiss. It is now left to the world without a master: from which all that is presented, hath received both blows and thanks: "Eadem probamus, eadem reprehendimus: hic exitus est omnis iudicii, in quolis secundum plures datur." [47] But these discourses are idle. I

know that as the charitable will judge charitably: so against those, "Qui gloriantur in malitia,"[48] my present adversity hath disarmed me, I am on the ground already, and therefore have not far to fall: and for rising again, as in the natural privation there is no recession to habit; so it is seldom seen in the privation politic. I do therefore forbear to style my readers gentle, courteous, and friendly, thereby to beg their good opinions, or to promise a second and third volume (which I also intend) if the first receive grace and good acceptance. For that which is already done, may be thought enough, and too much: and it is certain, let us claw the reader with never so many courteous phrases, yet shall we evermore be thought fools, that write foolishly. For conclusion, all the hope I have lies in this, that I have already found more ungentle and uncourteous readers of my love towards them, and well-deserving of them, than ever I shall do again. For had it been otherwise, I should hardly have had this leisure, to have made myself a fool in print.

[Footnote A: A sketch of the life of Raleigh will be found prefixed to his "Discovery of Guiana" in the volume of "Voyages and Travels". His "History of the World" was written during his imprisonment in the Tower of London, which lasted from 1603 to 1616. The Preface is interesting not only as a fine piece of Elizabethan prose but as exhibiting the attitude toward history, and the view of the relation of history to religion and philosophy, which characterized one who represented with exceptional vigor the typical Elizabethan man of action and who was also a man of thought and imagination.]

[Footnote 1: Queen Elizabeth]

[Footnote 2: "An ill opinion, honorably acquired, is pleasing."]

[Footnote 3: "So you not to yourselves."]

[Footnote 4: "He increased, with the result that he is oppressed by his greatness."]

[Footnote 5: "The insult done in scorning her beauty."]

[Footnote 6: "God gave to Solomon largeness of heart."—1 Kings iv. 89.]

[Footnote 7: Step. Pasquiere, Recherches, lib. v. cap. i.]

[Footnote 8: Step-mother.]

[Footnote 9: i.e., Protestantism]

[Footnote 10: Instantly.]

[Footnote 11: Dispossessed.]

[Footnote 12: "Nothing hindering."]

[Footnote 13: "That they are wise in a foolish matter."—Lactantius,*De falsa sapientia*, 3, 29.]

[Footnote 14: Augustine,*De cura pro morte*.]

[Footnote 15: "Wealth acquired without fraud."]

[Footnote 16: "O how many go down with this hope to endless labors and wars."]

[Footnote 17: Transient.]

[Footnote 18: Opponents.]

[Footnote 19: "Everything which is to come lies in uncertainty."]

[Footnote 20: "Who follow their commander with groans."]

[Footnote 21: "It takes great genius to call back the mind from the senses."]

[Footnote 22: "Against him who denies the principles."]

[Footnote 23: "Specific virtue, or power."]

[Footnote 24: "The Roman Church."]

[Footnote 25: "I shall light a lamp of understanding in thine heart."—IV. Esdras xiv. 25.]

[Footnote 26: Followers.]

[Footnote 27: "Prepared and sworn to protect with unconquered minds the opinions of the philosophers whom they follow."]

[Footnote 28: "Out of nothing."]

[Footnote 29: "Out of pre-existing matter."]

[Footnote 30: "Because comprehension is between limits, which are opposed to infinity."]

[Footnote 31: "God exhibits all things in one existence"]

[Footnote 32: "The essence of all things, visible and invisible, is divinity itself"]

[Footnote 33: "Causally."]

[Footnote 34: "Not as form, but as universal cause"]

[Footnote 35: "It [i.e., the infinite] has no beginning, but itself is perceived to be the beginning of all things, and to embrace and govern all things."]

[Footnote 36: "Primal matter."]

[Footnote 37: "Which destroys all proportion."]

[Footnote 38: "The spiritual world."]

[Footnote 39: "Providence, leader and head; Fate, in the middle and proceeding from Providence; Nature, last."]

[Footnote 40: "The science of things first, eternal, perpetual."]

[Footnote 41: "Part of the divine spirit immersed in the human body."]

[Footnote 42: "With delicate pipe."]

[Footnote 43: Moderation]

[Footnote 44: "To me one man stood for the people."]

[Footnote 45: "I [have done] this not for many, but for thee."]

[Footnote 46: "One is enough, none is enough."]

[Footnote 47: "We approve the same things, we blame the same things—this is the result in every case in which the verdict is rendered according to the majority."]

[Footnote 48: "Who glory in malice"]

PROOEMIUM, EPISTLE DEDICATORY, PREFACE, AND PLAN OF THE INSTAURATIO MAGNA, ETC.

BY FRANCIS BACON[A]

FRANCIS OF VERULAM REASONED THUS WITH HIMSELF,

**AND JUDGED IT TO BE FOR THE INTEREST OF THE PRESENT AND FUTURE
GENERATIONS THAT THEY SHOULD BE MADE ACQUAINTED WITH HIS THOUGHTS**

Being convinced that the human intellect makes its own difficulties, not using the true helps which are at man's disposal soberly and judiciously; whence follows manifold ignorance of things, and by reason of that ignorance mischiefs innumerable; he thought all trial should be made, whether that commerce between the mind of man and the nature of things, which is more precious than anything on earth, or at least than anything that is of the earth, might by any means be restored to its perfect and original condition, or if that may not be, yet reduced to a better condition than that in which it now is. Now that the errors which have hitherto prevailed, and which will prevail forever, should (if the mind be left to go its own way), either by the natural force of the understanding or by help of the aids and instruments of Logic, one by one correct themselves, was a thing not to be hoped for: because the primary notions of things which the mind readily and passively imbibes, stores up, and accumulates (and it is from them that all the rest flow) are false, confused, and overhastily abstracted from the facts; nor are the secondary and subsequent notions less arbitrary and inconstant; whence it follows that the entire fabric of human reason which we employ in the inquisition of nature, is badly put together and built up, and like some magnificent structure without any foundation. For while men are occupied in admiring and applauding the false powers of the mind, they pass by and

throw away those true powers, which, if it be supplied with the proper aids and can itself be content to wait upon nature instead of vainly affecting to overrule her, are within its reach. There was but one course left, therefore,—to try the whole thing anew upon a better plan, and to commence a total reconstruction of sciences, arts, and all human knowledge, raised upon the proper foundations. And this, though in the project and undertaking it may seem a thing infinite and beyond the powers of man, yet when it comes to be dealt with it will be found sound and sober, more so than what has been done hitherto. For of this there is some issue; whereas in what is now done in the matter of science there is only a whirling round about, and perpetual agitation, ending where it began. And although he was well aware how solitary an enterprise it is, and how hard a thing to win faith and credit for, nevertheless he was resolved not to abandon either it or himself; nor to be deterred from trying and entering upon that one path which is alone open to the human mind. For better it is to make a beginning of that which may lead to something, than to engage in a perpetual struggle and pursuit in courses which have no exit. And certainly the two ways of contemplation are much like those two ways of action, so much celebrated, in this—that the one, arduous and difficult in the beginning, leads out at last into the open country; while the other, seeming at first sight easy and free from obstruction, leads to pathless and precipitous places.

Moreover, because he knew not how long it might be before these things would occur to any one else, judging especially from this, that he has found no man hitherto who has applied his mind to the like, he resolved to publish at once so much as he has been able to complete. The cause of which haste was not ambition for himself, but solicitude for the work; that in case of his death there might remain some outline and project of that which he had conceived, and some evidence likewise of his honest mind and inclination towards the benefit of the human race. Certain it is that all other ambition whatsoever seemed poor in his eyes compared with the work which he had in hand; seeing that the matter at issue is either nothing, or a thing so great that it may well be content with its own merit, without seeking other recompence.

[Footnote A: A sketch of Bacon's life will be found prefixed to his "Essays"

in another volume of the Harvard Classics. His "Instauratio Magna" or "Great Renewal," the great work by which he hoped to create a scientific revolution and deliver mankind from Aristotelianism, was left far from complete; but the nature of his scheme and the scale on which it was planned are indicated in these Prefaces, which are typical both of the man and of the age in which he lived.]

EPISTLE DEDICATORY

TO THE INSTAURATIO MAGNA

TO OUR MOST GRACIOUS AND MIGHTY PRINCE AND LORD

JAMES

BY THE GRACE OF GOD OF GREAT BRITAIN, FRANCE AND IRELAND KING,
DEFENDER OF THE FAITH, ETC.

Most Gracious and Mighty King,

Your Majesty may perhaps accuse me of larceny, having stolen from your affairs so much time as was required for this work. I know not what to say for myself. For of time there can be no restitution, unless it be that what has been abstracted from your business may perhaps go to the memory of your name and the honour of your age; if these things are indeed worth anything. Certainly they are quite new; totally new in their very kind: and yet they are copied from a very ancient model; even the world itself and the nature of things and of the mind. And to say truth, I am wont for my own part to regard this work as a child of time rather than of wit; the only wonder being that the first notion of the thing, and such great suspicions concerning matters long established, should have come into any man's mind. All the rest follows readily enough. And no doubt there is something of accident (as we call it) and luck as well in what men think as in what they do or say. But for this accident which I speak of, I wish that if there be any good in what I have to offer, it may be ascribed to the infinite mercy and goodness of God, and to the felicity of your Majesty's times; to which as I have been an honest and affectionate servant in my life, so after my death I may yet perhaps, through the kindling of this new light in the darkness of philosophy, be the means of

making this age famous to posterity; and surely to the times of the wisest and most learned of kings belongs of right the regeneration and restoration of the sciences. Lastly, I have a request to make—a request no way unworthy of your Majesty, and which especially concerns the work in hand; namely, that you who resemble Solomon in so many things—in the gravity of your judgments, in the peacefulness of your reign, in the largeness of your heart, in the noble variety of the books which you have composed—would further follow his example in taking order for the collecting and perfecting of a Natural and Experimental History, true and severe (unincumbered with literature and book-learning), such as philosophy may be built upon,—such, in fact, as I shall in its proper place describe: that so at length, after the lapse of so many ages, philosophy and the sciences may no longer float in air, but rest on the solid foundation of experience of every kind, and the same well examined and weighed. I have provided the machine, but the stuff must be gathered from the facts of nature. May God Almighty long preserve your Majesty!

Your Majesty's
Most bounden and devoted Servant,
FRANCIS VERULAM,
Chancellor.

PREFACE

TO THE INSTAURATIO MAGNA

That the state of knowledge is not prosperous nor greatly advancing; and that a way must be opened for the human understanding entirely different from any hitherto known, and other helps provided, in order that the mind may exercise over the nature of things the authority which properly belongs to it.

It seems to me that men do not rightly understand either their store or their strength, but overrate the one and underrate the other. Hence it follows, that either from an extravagant estimate of the value of the arts which they possess, they seek no further; or else from too mean an estimate of their own powers, they spend their strength in small matters and never put it fairly to the trial in those which go to the main. These are as the pillars of fate set in the path of knowledge; for men have neither desire nor hope to encourage them to penetrate further. And since opinion of store is one of the chief causes of want, and satisfaction with the present induces neglect of provision for the future, it becomes a thing not only useful, but absolutely necessary, that the excess of honour and admiration with which our existing stock of inventions is regarded be in the very entrance and threshold of the work, and that frankly and without circumlocution, stripped off, and men be duly warned not to exaggerate or make too much of them. For let a man look carefully into all that variety of books with which the arts and sciences abound, he will find everywhere endless repetitions of the same thing, varying in the method of treatment, but not new in substance, insomuch that the whole stock, numerous as it appears at first view, proves on examination to be but scanty. And for its value and utility it must be plainly avowed that

that wisdom which we have derived principally from the Greeks is but like the boyhood of knowledge, and has the characteristic property of boys; it can talk, but it cannot generate; for it is fruitful of controversies but barren of works. So that the state of learning as it now is appears to be represented to the life in the old fable of Scylla, who had the head and face of a virgin, but her womb was hung round with barking monsters, from which she could not be delivered. For in like manner the sciences to which we are accustomed have certain general positions which are specious and flattering; but as soon as they come to particulars, which are as the parts of generation, when they should produce fruit and works, then arise contentions and barking disputations, which are the end of the matter and all the issue they can yield. Observe also, that if sciences of this kind had any life in them, that could never have come to pass which has been the case now for many ages—that they stand almost at a stay, without receiving any augmentations worthy of the human race; insomuch that many times not only what was asserted once is asserted still, but what was a question once is a question still, and instead of being resolved by discussion is only fixed and fed; and all the tradition and succession of schools is still a succession of masters and scholars, not of inventors and those who bring to further perfection the things invented. In the mechanical arts we do not find it so; they, on the contrary, as having in them some breath of life, are continually growing and becoming more perfect. As originally invented they are commonly rude, clumsy, and shapeless; afterwards they acquire new powers and more commodious arrangements and constructions; in so far that men shall sooner leave the study and pursuit of them and turn to something else, than they arrive at the ultimate perfection of which they are capable. Philosophy and the intellectual sciences, on the contrary, stand like statues, worshiped and celebrated, but not moved or advanced. Nay, they sometimes flourish most in the hands of the first author, and afterwards degenerate. For when men have once made over their judgments to others' keeping, and (like those senators whom they called *Pedarii*) have agreed to support some one person's opinion, from that time they make no enlargement of the sciences themselves, but fall to the servile office of embellishing certain individual authors and increasing their retinue. And let it not be said that the sciences have been growing gradually till they have at last reached their full stature, and so (their course being completed) have settled in the works of a few writers; and that there being

now no room for the invention of better, all that remains is to embellish and cultivate those things which have been invented already. Would it were so! But the truth is that this appropriating of the sciences has its origin in nothing better than the confidence of a few persons and the sloth and indolence of the rest. For after the sciences had been in several parts perhaps cultivated and handled diligently, there has risen up some man of bold disposition, and famous for methods and short ways which people like, who has in appearance reduced them to an art, while he has in fact only spoiled all that the others had done. And yet this is what posterity like, because it makes the work short and easy, and saves further inquiry, of which they are weary and impatient. And if any one take this general acquiescence and consent for an argument of weight, as being the judgment of Time, let me tell him that the reasoning on which he relies is most fallacious and weak. For, first, we are far from knowing all that in the matter of sciences and arts has in various ages and places been brought to light and published; much less, all that has been by private persons secretly attempted and stirred, so neither the births nor the miscarriages of Time are entered in our records. Nor, secondly, is the consent itself and the time it has continued a consideration of much worth. For however various are the forms of civil politics, there is but one form of polity in the sciences; and that always has been and always will be popular. Now the doctrines which find most favour with the populace are those which are either contentious and pugnacious, or specious and empty; such, I say, as either entangle assent or tickle it. And therefore no doubt the greatest wits in each successive age have been forced out of their own course, men of capacity and intellect above the vulgar having been fain, for reputation's sake, to bow to the judgment of the time and the multitude; and thus if any contemplations of a higher order took light anywhere, they were presently blown out by the winds of vulgar opinions. So that Time is like a river, which has brought down to us things light and puffed up, while those which are weighty and solid have sunk. Nay, those very authors who have usurped a kind of dictatorship in the sciences and taken upon them to lay down the law with such confidence, yet when from time to time they come to themselves again, they fall to complaints of the subtlety of nature, the hiding-places of truth, the obscurity of things, the entanglement of causes, the weakness of the human mind; wherein nevertheless they show themselves never the more modest, seeing that they will rather lay the blame upon the common condition

of man and nature than upon themselves. And then whatever any art fails to attain, they ever set it down upon the authority of that art itself as impossible of attainment; and how can art be found guilty when it is judge in its own cause? So it is but a device for exempting ignorance from ignominy. Now for those things which are delivered and received, this is their condition: barren of works, full of questions; in point of enlargement slow and languid; carrying a show of perfection in the whole, but in the parts ill filled up; in selection popular, and unsatisfactory even to those who propound them; and therefore fenced round and set forth with sundry artifices. And if there be any who have determined to make trial for themselves, and put their own strength to the work of advancing the boundaries of the sciences, yet have they not ventured to cast themselves completely loose from received opinions or to seek their knowledge at the fountain; but they think they have done some great thing if they do but add and introduce into the existing sum of science something of their own; prudently considering with themselves that by making the addition they can assert their liberty, while they retain the credit of modesty by assenting to the rest. But these mediocrities and middle ways so much praised, in deferring to opinions and customs, turn to the great detriment of the sciences. For it is hardly possible at once to admire an author and to go beyond him; knowledge being as water, which will not rise above the level from which it fell. Men of this kind, therefore, amend some things, but advance little; and improve the condition of knowledge, but do not extend its range. Some, indeed, there have been who have gone more boldly to work, and taking it all for an open matter and giving their genius full play, have made a passage for themselves and their own opinions by pulling down and demolishing former ones; and yet all their stir has but little advanced the matter; since their aim has been not to extend philosophy and the arts in substance and value, but only to change doctrines and transfer the kingdom of opinions to themselves; whereby little has indeed been gained, for though the error be the opposite of the other, the causes of erring are the same in both. And if there have been any who, not binding themselves either to other men's opinions or to their own, but loving liberty, have desired to engage others along with themselves in search, these, though honest in intention, have been weak in endeavour. For they have been content to follow probable reasons, and are carried round in a whirl of arguments, and in the promiscuous liberty of search have relaxed the severity of inquiry. There is none who has dwelt

upon experience and the facts of nature as long as is necessary. Some there are indeed who have committed themselves to the waves of experience, and almost turned mechanics; yet these again have in their very experiments pursued a kind of wandering inquiry, without any regular system of operations. And besides they have mostly proposed to themselves certain petty tasks, taking it for a great matter to work out some single discovery;—a course of proceeding at once poor in aim and unskilful in design. For no man can rightly and successfully investigate the nature of anything in the thing itself; let him vary his experiments as laboriously as he will, he never comes to a resting-place, but still finds something to seek beyond. And there is another thing to be remembered; namely, that all industry in experimenting has begun with proposing to itself certain definite works to be accomplished, and has pursued them with premature and unseasonable eagerness; it has sought, I say, experiments of Fruit, not experiments of Light; not Imitating the divine procedure, which In its first day's work created light only and assigned to it one entire day; on which day it produced no material work, but proceeded to that on the days following. As for those who have given the first place to Logic, supposing that the surest helps to the sciences were to be found in that, they have indeed most truly and excellently perceived that the human intellect left to its own course is not to be trusted; but then the remedy is altogether too weak for the disease; nor is it without evil in itself. For the Logic which is received, though it be very properly applied to civil business and to those arts which rest in discourse and opinion, is not nearly subtle enough to deal with nature; and in offering at what it cannot master, has done more to establish and perpetuate error than to open the way to truth.

Upon the whole therefore, it seems that men have not been happy hitherto either in the trust which they have placed in others or in their own industry with regard to the sciences; especially as neither the demonstrations nor the experiments as yet known are much to be relied upon. But the universe to the eye of the human understanding is framed like a labyrinth; presenting as it does on every side so many ambiguities of way, such deceitful resemblances of objects and signs, natures so irregular in their lines, and so knotted and entangled. And then the way is still to be made by the uncertain light of the sense, sometimes shining out, sometimes clouded over, through the woods of experience and particulars; while those who offer themselves for guides are

(as was said) themselves also puzzled, and increase the number of errors and wanderers. In circumstances so difficult neither the natural force of man's judgment nor even any accidental felicity offers any chance of success. No excellence of wit, no repetition of chance experiments, can overcome such difficulties as these. Our steps must be guided by a clue, and the whole way from the very first perception of the senses must be laid out upon a sure plan. Not that I would be understood to mean that nothing whatever has been done in so many ages by so great labours. We have no reason to be ashamed of the discoveries which have been made, and no doubt the ancients proved themselves in everything that turns on wit and abstract meditation, wonderful men. But as in former ages when men sailed only by observation of the stars, they could indeed coast along the shores of the old continent or cross a few small and mediterranean seas; but before the ocean could be traversed and the new world discovered, the use of the mariner's needle, as a more faithful and certain guide, had to be found out; in like manner the discoveries which have been hitherto made in the arts and sciences are such as might be made by practice, meditation, observation, argumentation,—for they lay near to the senses, and immediately beneath common notions; but before we can reach the remoter and more hidden parts of nature, it is necessary that a more perfect use and application of the human mind and intellect be introduced.

For my own part at least, in obedience to the everlasting love of truth, I have committed myself to the uncertainties and difficulties and solitudes of the ways, and relying on the divine assistance have upheld my mind both against the shocks and embattled ranks of opinion, and against my own private and inward hesitations and scruples, and against the fogs and clouds of nature, and the phantoms flitting about on every side; in the hope of providing at last for the present and future generations guidance more faithful and secure. Wherein if I have made any progress, the way has been opened to me by no other means than the true and legitimate humiliation of the human spirit. For all those who before me have applied themselves to the invention of arts have but cast a glance or two upon facts and examples and experience, and straightway proceeded, as if invention were nothing more than an exercise of thought, to invoke their own spirits to give them oracles. I, on the contrary, dwelling purely and constantly among the facts of nature, withdraw my intellect from them no further than may suffice to let the images and rays of

natural objects meet in a point, as they do in the sense of vision; whence it follows that the strength and excellency of the wit has but little to do in the matter. And the same humility which I use in inventing I employ likewise in teaching. For I do not endeavour either by triumphs of confutation, or pleadings of antiquity, or assumption of authority, or even by the veil of obscurity, to invest these inventions of mine with any majesty; which might easily be done by one who sought to give lustre to his own name rather than light to other men's minds. I have not sought (I say) nor do I seek either to force or ensnare men's judgments, but I lead them to things themselves and the concordances of things, that they may see for themselves what they have, what they can dispute, what they can add and contribute to the common stock. And for myself, if in anything I have been either too credulous or too little awake and attentive, or if I have fallen off by the way and left the inquiry incomplete, nevertheless I so present these things naked and open, that my errors can be marked and set aside before the mass of knowledge be further infected by them; and it will be easy also for others to continue and carry on my labours. And by these means I suppose that I have established for ever a true and lawful marriage between the empirical and the rational faculty, the unkind and ill-starred divorce and separation of which has thrown into confusion all the affairs of the human family.

Wherefore, seeing that these things do not depend upon myself, at the outset of the work I most humbly and fervently pray to God the Father, God the Son, and God the Holy Ghost, that remembering the sorrows of mankind and the pilgrimage of this our life wherein we wear out days few and evil, they will vouchsafe through my hands to endow the human family with new mercies. This likewise I humbly pray, that things human may not interfere with things divine, and that from the opening of the ways of sense and the increase of natural light there may arise in our minds no incredulity or darkness with regard to the divine mysteries; but rather that the understanding being thereby purified and purged of fancies and vanity, and yet not the less subject and entirely submissive to the divine oracles, may give to faith that which is faith's. Lastly, that knowledge being now discharged of that venom which the serpent infused into it, and which makes the mind of man to swell, we may not be wise above measure and sobriety, but cultivate truth in charity.

And now having said my prayers I turn to men; to whom I have certain salutary admonitions to offer and certain fair requests to make. My first admonition (which was also my prayer) is that men confine the sense within the limits of duty in respect to things divine: for the sense is like the sun, which reveals the face of earth, but seals and shuts up the face of heaven. My next, that in flying from this evil they fall not into the opposite error, which they will surely do if they think that the inquisition of nature is in any part interdicted or forbidden. For it was not that pure and uncorrupted natural knowledge whereby Adam gave names to the creatures according to their propriety, which gave occasion to the fall. It was the ambitious and proud desire of moral knowledge to judge of good and evil, to the end that man may revolt from God and give laws to himself, which was the form and manner of the temptation. Whereas of the sciences which regard nature, the divine philosopher declares that "it is the glory of God to conceal a thing, but it is the glory of the King to find a thing out," Even as though the divine nature took pleasure in the innocent and kindly sport of children playing at hide and seek, and vouchsafed of his kindness and goodness to admit the human spirit for his playfellow at that game. Lastly, I would address one general admonition to all; that they consider what are the true ends of knowledge, and that they seek it not either for pleasure of the mind, or for contention, or for superiority to others, or for profit, or fame, or power, or any of these inferior things; but for the benefit and use of life; and that they perfect and govern it in charity. For it was from lust of power that the angels fell, from lust of knowledge that man fell; but of charity there can be no excess, neither did angel or man ever come in danger by it.

The requests I have to make are these. Of myself I say nothing; but in behalf of the business which is in hand I entreat men to believe that it is not an opinion to be held, but a work to be done; and to be well assured that I am labouring to lay the foundation, not of any sect or doctrine, but of human utility and power. Next, I ask them to deal fairly by their own interests, and laying aside all emulations and prejudices in favour of this or that opinion, to join in consultation for the common good; and being now freed and guarded by the securities and helps which I offer from the errors and impediments of the way, to come forward themselves and take part in that which remains to be done Moreover, to be of good hope, nor to imagine that this Instauration

of mine is a thing infinite and beyond the power of man, when it is in fact the true end and termination of infinite error, and seeing also that it is by no means forgetful of the conditions of mortality and humanity, (for it does not suppose that the work can be altogether completed within one generation, but provides for its being taken up by another), and finally that it seeks for the sciences not arrogantly in the little cells of human wit, but with reverence in the greater world. But it is the empty things that are vast things solid are most contracted and lie in little room. And now I have only one favour more to ask (else injustice to me may perhaps imperil the business itself)—that men will consider well how far, upon that which I must needs assert (if I am to be consistent with myself), they are entitled to judge and decide upon these doctrines of mine, inasmuch as all that premature human reasoning which anticipates inquiry, and is abstracted from the facts rashly and sooner than is fit, is by me rejected (so far as the inquisition of nature is concerned), as a thing uncertain, confused, and ill built up, and I cannot be fairly asked to abide by the decision of a tribunal which is itself on its trial.

THE PLAN OF THE INSTAURATIO MAGNA

The work is in six Parts:—

1.*The Divisions of the Sciences.*

2.*The New Organon; or Directions concerning the Interpretation of Nature.*

3.*The Phenomena of the Universe; or a Natural and Experimental History for the foundation of Philosophy.*

4.*The Ladder of the Intellect.*

5.*The Forerunners; or Anticipations of the New Philosophy.*

6.*The New Philosophy; or Active Science.*

The Arguments of the several Parts.

It being part of my design to set everything forth, as far as may be, plainly and perspicuously (for nakedness of the mind is still, as nakedness of the body once was, the companion of innocence and simplicity), let me first explain the order and plan of the work. I distribute it into six parts.

The first part exhibits a summary or general description of the knowledge which the human race at present possesses. For I thought it good to make some pause upon that which is received; that thereby the old may be more easily made perfect and the new more easily approached. And I hold the improvement of that which we have to be as much an object as the acquisition of more. Besides which it will make me the better listened to; for "He that is ignorant (says the proverb) receives not the words of knowledge, unless thou first tell him that which is in his own heart." We will therefore make a coasting voyage along the shores of the arts and sciences received; not without importing into them some useful things by the way.

In laying out the divisions of the sciences however, I take into account not only things already invented and known, but likewise things omitted which ought to be there. For there are found in the intellectual as in the terrestrial globe waste regions as well as cultivated ones. It is no wonder therefore if I am sometimes obliged to depart from the ordinary divisions. For in adding to the total you necessarily alter the parts and sections; and the received divisions of the sciences are fitted only to the received sum of them as it stands now.

With regard to those things which I shall mark down as omitted, I intend not merely to set down a simple title or a concise argument of that which is wanted. For as often as I have occasion to report anything as deficient, the nature of which is at all obscure, so that men may not perhaps easily understand what I mean or what the work is which I have in my head, I shall always (provided it be a matter of any worth) take care to subjoin either directions for the execution of such work, or else a portion of the work itself executed by myself as a sample of the whole: thus giving assistance in every case either by work or by counsel. For if it were for the sake of my reputation only and other men's interests were not concerned in it, I would not have any man think that in such cases merely some light and vague notion has crossed

my mind, and that the things which I desire and offer at are no better than wishes; when they are in fact things which men may certainly command if they will, and of which I have formed in my own mind a clear and detailed conception. For I do not propose merely to survey these regions in my mind, like an augur taking auspices, but to enter them like a general who means to take possession.—So much for the first part of the work.

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Having thus coasted past the ancient arts, the next point is to equip the intellect for passing beyond. To the second part therefore belongs the doctrine concerning the better and more perfect use of human reason in the inquisition of things, and the true helps of the understanding: that thereby (as far as the condition of mortality and humanity allows) the intellect may be raised and exalted, and made capable of overcoming the difficulties and obscurities of nature. The art which I introduce with this view (which I call *Interpretation of Nature*) is a kind of logic; though the difference between it and the ordinary logic is great; indeed immense. For the ordinary logic professes to contrive and prepare helps and guards for the understanding, as mine does; and in this one point they agree. But mine differs from it in three points especially; viz. in the end aimed at; in the order of demonstration; and in the starting point of the inquiry.

For the end which this science of mine proposes is the invention not of arguments but of arts; not of things in accordance with principles, but of principles themselves; not of probable reasons, but of designations and directions for works. And as the intention is different, so accordingly is the effect; the effect of the one being to overcome an opponent in argument, of the other to command nature in action.

In accordance with this end is also the nature and order of the demonstrations. For in the ordinary logic almost all the work is spent about the syllogism. Of induction the logicians seem hardly to have taken any serious thought, but they pass it by with a slight notice, and hasten on to the formulæ of disputation. I on the contrary reject demonstration by syllogism, as acting too confusedly, and letting nature slip out of its hands. For although

no one can doubt that things which agree in a middle term agree with one another (which is a proposition of mathematical certainty), yet it leaves an opening for deception; which is this. The syllogism consists of propositions; propositions of words; and words are the tokens and signs of notions. Now if the very notions of the mind (which are as the soul of words and the basis of the whole structure) be improperly and over-hastily abstracted from facts, vague not sufficiently definite, faulty in short in many ways, the whole edifice tumbles. I therefore reject the syllogism; and that not only as regards principles (for to principles the logicians themselves do not apply it) but also as regards middle propositions; which, though obtainable no doubt by the syllogism, are, when so obtained, barren of works, remote from practice, and altogether unavailable for the active department of the sciences. Although therefore I leave to the syllogism and these famous and boasted modes of demonstration their jurisdiction over popular arts and such as are matter of opinion (in which department I leave all as it is), yet in dealing with the nature of things I use induction throughout, and that in the minor propositions as well as the major. For I consider induction to be that form of demonstration which upholds the sense, and closes with nature, and comes to the very brink of operation, if it does not actually deal with it.

Hence it follows that the order of demonstration is likewise inverted. For hitherto the proceeding has been to fly at once from the sense and particulars up to the most general propositions, as certain fixed poles for the argument to turn upon, and from these to derive the rest by middle terms a short way, no doubt, but precipitate, and one which will never lead to nature, though it offers an easy and ready way to disputation. Now my plan is to proceed regularly and gradually from one axiom to another, so that the most general are not reached till the last but then when you do come to them you find them to be not empty notions, but well defined, and such as nature would really recognise as her first principles, and such as lie at the heart and marrow of things.

But the greatest change I introduce is in the form itself of induction and the judgment made thereby. For the induction of which the logicians speak, which proceeds by simple enumeration, is a puerile thing, concludes at hazard, is always liable to be upset by a contradictory instance, takes into

account only what is known and ordinary, and leads to no result.

Now what the sciences stand in need of is a form of induction which shall analyse experience and take it to pieces, and by a due process of exclusion and rejection lead to an inevitable conclusion. And if that ordinary mode of judgment practised by the logicians was so laborious, and found exercise for such great wits how much more labour must we be prepared to bestow upon this other, which is extracted not merely out of the depths of the mind, but out of the very bowels of nature.

Nor is this all. For I also sink the foundations of the sciences deeper and firmer; and I begin the inquiry nearer the source than men have done heretofore; submitting to examination those things which the common logic takes on trust. For first, the logicians borrow the principles of each science from the science itself; secondly, they hold in reverence the first notions of the mind; and lastly, they receive as conclusive the immediate informations of the sense, when well disposed. Now upon the first point, I hold that true logic ought to enter the several provinces of science armed with a higher authority than belongs to the principles of those sciences themselves, and ought to call those putative principles to account until they are fully established. Then with regard to the first notions of the intellect; there is not one of the impressions taken by the intellect when left to go its own way, but I hold it for suspected, and no way established, until it has submitted to a new trial and a fresh judgment has been thereupon pronounced. And lastly, the information of the sense itself I sift and examine in many ways. For certain it is that the senses deceive; but then at the same time they supply the means of discovering their own errors; only the errors are here, the means of discovery are to seek.

The sense fails in two ways. Sometimes it gives no information, sometimes it gives false information. For first, there are very many things which escape the sense, even when best disposed and no way obstructed; by reason either of the subtlety of the whole body, or the minuteness of the parts, or distance of place, or slowness or else swiftness of motion, or familiarity of the object, or other causes. And again when the sense does apprehend a thing its apprehension is not much to be relied upon. For the testimony and

information of the sense has reference always to man, not to the universe; and it is a great error to assert that the sense is the measure of things.

To meet these difficulties, I have sought on all sides diligently and faithfully to provide helps for the sense—substitutes to supply its failures, rectifications to correct its errors; and this I endeavour to accomplish not so much by instruments as by experiments. For the subtlety of experiments is far greater than that of the sense itself, even when assisted by exquisite instruments; such experiments, I mean, as are skilfully and artificially devised for the express purpose of determining the point in question. To the immediate and proper perception of the sense therefore I do not give much weight; but I contrive that the office of the sense shall be only to judge of the experiment, and that the experiment itself shall judge of the thing. And thus I conceive that I perform the office of a true priest of the sense (from which all knowledge in nature must be sought, unless men mean to go mad) and a not unskilful interpreter of its oracles; and that while others only profess to uphold and cultivate the sense, I do so in fact. Such then are the provisions I make for finding the genuine light of nature and kindling and bringing it to bear. And they would be sufficient of themselves, if the human intellect were even, and like a fair sheet of paper with no writing on it. But since the minds of men are strangely possessed and beset, so that there is no true and even surface left to reflect the genuine rays of things, it is necessary to seek a remedy for this also.

Now the idols, or phantoms, by which the mind is occupied are either adventitious or innate. The adventitious come into the mind from without; namely, either from the doctrines and sects of philosophers, or from perverse rules of demonstration. But the innate are inherent in the very nature of the intellect, which is far more prone to error than the sense is. For let men please themselves as they will in admiring and almost adoring the human mind, this is certain: that as an uneven mirror distorts the rays of objects according to its own figure and section, so the mind, when it receives impressions of objects through the sense, cannot be trusted to report them truly, but in forming its notions mixes up its own nature with the nature of things.

And as the first two kinds of idols are hard to eradicate, so idols of this last

kind cannot be eradicated at all. All that can be done is to point them out, so that this insidious action of the mind may be marked and reprov'd (else as fast as old errors are destroyed new ones will spring up out of the ill complexion of the mind itself, and so we shall have but a change or errors, and not a clearance); and to lay it down once for all as a fixed and established maxim, that the intellect is not qualified to judge except by means of induction, and induction in its legitimate form. This doctrine then of the expurgation of the intellect to qualify it for dealing with truth, is comprised in three refutations: the refutation of the Philosophies; the refutation of the Demonstrations; and the refutation of the Natural Human Reason. The explanation of which things, and of the true relation between the nature of things and the nature of the mind, is as the strewing and decoration of the bridal chamber of the Mind and the Universe, the Divine Goodness assisting; out of which marriage let us hope (and be this the prayer of the bridal song) there may spring helps to man, and a line and race of inventions that may in some degree subdue and overcome the necessities and miseries of humanity. This is the second part of the work.

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But I design not only to indicate and mark out the ways, but also to enter them. And therefore the third part of the work embraces the Phenomena of the Universe; that is to say, experience of every kind, and such a natural history as may serve for a foundation to build philosophy upon. For a good method of demonstration or form of interpreting nature may keep the mind from going astray or stumbling, but it is not any excellence of method that can supply it with the material of knowledge. Those however who aspire not to guess and divine, but to discover and know; who propose not to devise mimic and fabulous worlds of their own, but to examine and dissect the nature of this very world itself; must go to facts themselves for everything. Nor can the place of this labour and search and worldwide perambulation be supplied by any genius or meditation or argumentation; no, not if all men's wits could meet in one. This therefore we must have, or the business must be for ever abandoned. But up to this day such has been the condition of men in this matter, that it is no wonder if nature will not give herself into their hands.

For first, the information of the sense itself, sometimes failing, sometimes false; observation, careless, irregular, and led by chance; tradition, vain and fed on rumour; practice, slavishly bent upon its work; experiment, blind, stupid, vague, and prematurely broken off; lastly, natural history, trivial and poor;—all these have contributed to supply the understanding with very bad materials for philosophy and the sciences.

Then an attempt is made to mend the matter by a preposterous subtlety and winnowing of argument. But this comes too late, the case being already past remedy; and is far from setting the business right or sifting away the errors. The only hope therefore of any greater increase or progress lies in a reconstruction of the sciences.

Of this reconstruction the foundation must be laid in natural history, and that of a new kind and gathered on a new principle. For it is in vain that you polish the mirror if there are no images to be reflected; and it is as necessary that the intellect should be supplied with fit matter to work upon, as with safeguards to guide its working. But my history differs from that in use (as my logic does) in many things,—in end and office, in mass and composition, in subtlety, in selection also and setting forth, with a view to the operations which are to follow.

For first, the object of a natural history which I propose is not so much to delight with variety of matter or to help with present use of experiments, as to give light to the discovery of causes and supply a suckling philosophy with its first food. For though it be true that I am principally in pursuit of works and the active department of the sciences, yet I wait for harvest-time, and do not attempt to mow the moss or to reap the green corn. For I well know that axioms once rightly discovered will carry whole troops of works along with them, and produce them, not here and there one, but in clusters. And that unseasonable and puerile hurry to snatch by way of earnest at the first works which come within reach, I utterly condemn and reject, as an Atalanta's apple that hinders the race. Such then is the office of this natural history of mine.

Next, with regard to the mass and composition of it: I mean it to be a history not only of nature free and at large (when she is left to her own course and

does her work her own way)—such as that of the heavenly bodies, meteors, earth and sea, minerals, plants, animals,—but much more of nature under constraint and vexed; that is to say, when by art and the hand of man she is forced out of her natural state, and squeezed and moulded. Therefore I set down at length all experiments of the mechanical arts, of the operative part of the liberal arts, of the many crafts which have not yet grown into arts properly so called, so far as I have been able to examine them and as they conduce to the end in view. Nay (to say the plain truth) I do in fact (low and vulgar as men may think it) count more upon this part both for helps and safeguards than upon the other; seeing that the nature of things betrays itself more readily under the vexations of art than in its natural freedom.

Nor do I confine the history to Bodies; but I have thought it my duty besides to make a separate history of such Virtues as may be considered cardinal in nature. I mean those original passions or desires of matter which constitute the primary elements of nature; such as Dense and Rare, Hot and Cold, Solid and Fluid, Heavy and Light, and several others.

Then again, to speak of subtlety: I seek out and get together a kind of experiments much subtler and simpler than those which occur accidentally. For I drag into light many things which no one who was not proceeding by a regular and certain way to the discovery of causes would have thought of inquiring after; being indeed in themselves of no great use; which shows that they were not sought for on their own account; but having just the same relation to things and works which the letters of the alphabet have to speech and words—which, though in themselves useless, are the elements of which all discourse is made up.

Further, in the selection of the relation and experiments I conceive I have been a more cautious purveyor than those who have hitherto dealt with natural history. For I admit nothing but on the faith of eyes, or at least of careful and severe examination; so that nothing is exaggerated for wonder's sake, but what I state is sound and without mixture of fables or vanity. All received or current falsehoods also (which by strange negligence have been allowed for many ages to prevail and become established) I proscribe and brand by name; that the sciences may be no more troubled with them For it

has been well observed that the fables and superstitions and follies which nurses instil into children do serious injury to their minds; and the same consideration makes me anxious, having the management of the childhood as it were of philosophy in its course of natural history, not to let it accustom itself in the beginning to any vanity. Moreover, whenever I come to a new experiment of any subtlety (though it be in my own opinion certain and approved), I nevertheless subjoin a clear account of the manner in which I made it; that men knowing exactly how each point was made out, may see whether there be any error connected with it, and may arouse themselves to devise proofs more trustworthy and exquisite, if such can be found; and finally, I interpose everywhere admonitions and scruples and cautions, with a religious care to eject, repress, and as it were exorcise every kind of phantasm.

Lastly, knowing how much the sight of man's mind is distracted by experience and history, and how hard it is at the first (especially for minds either tender or preoccupied) to become familiar with nature, I not unfrequently subjoin observations of my own, being as the first offers, inclinations, and as it were glances of history towards philosophy; both by way of an assurance to men that they will be kept for ever tossing on the waves of experience, and also that when the time comes for the intellect to begin its work, it may find everything the more ready. By such a natural history then as I have described, I conceive that a safe and convenient approach may be made to nature, and matter supplied of good quality and well prepared for the understanding to work upon.

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And now that we have surrounded the intellect with faithful helps and guards, and got together with most careful selection a regular army of divine works, it may seem that we have no more to do but to proceed to philosophy itself. And yet in a matter so difficult and doubtful there are still some things which it seems necessary to premise, partly for convenience of explanation, partly for present use.

Of these the first is to set forth examples of inquiry and invention according

to my method, exhibited by anticipation in some particular subjects; choosing such subjects as are at once the most noble in themselves among those under inquiry, and most different one from another; that there may be an example in every kind. I do not speak of those examples which are joined to the several precepts and rules by way of illustration (for of these I have given plenty in the second part of the work); but I mean actual types and models, by which the entire process of the mind and the whole fabric and order of invention from the beginning to the end, in certain subjects, and those various and remarkable, should be set as it were before the eyes. For I remember that in the mathematics it is easy to follow the demonstration when you have a machine beside you; whereas without that help all appears involved and more subtle than it really is. To examples of this kind,—being in fact nothing more than an application of the second part in detail and at large,—the fourth part of the work is devoted.

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The fifth part is for temporary use only, pending the completion of the rest; like interest payable from time to time until the principal be forthcoming. For I do not make so blindly for the end of my journey, as to neglect anything useful that may turn up by the way. And therefore I include in this fifth part such things as I have myself discovered, proved, or added,—not however according to the true rules and methods of interpretation, but by the ordinary use of the understanding in inquiring and discovering. For besides that I hope my speculations may in virtue of my continual conversancy with nature have a value beyond the pretensions of my wit, they will serve in the meantime for wayside inns in which the mind may rest and refresh itself on its journey to more certain conclusions. Nevertheless I wish it to be understood in the meantime that they are conclusions by which (as not being discovered and proved by the true form of interpretation) I do not at all mean to bind myself. Nor need any one be alarmed at such suspension of judgment, in one who maintains not simply that nothing can be known, but only that nothing can be known except in a certain course and way; and yet establishes provisionally certain degrees of assurance, for use and relief until the mind shall arrive at a knowledge of causes in which it can rest. For even those schools of philosophy which held the absolute impossibility of knowing anything were

not inferior to those which took upon them to pronounce. But then they did not provide helps for the sense and understanding, as I have done, but simply took away all their authority: which is quite a different thing—almost the reverse.

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The sixth part of my work (to which the rest is subservient and ministrant) discloses and sets forth that philosophy which by the legitimate, chaste, and severe course of inquiry which I have explained and provided is at length developed and established. The completion however of this last part is a thing both above my strength and beyond my hopes. I have made a beginning of the work—a beginning, as I hope, not unimportant:—the fortune of the human race will give the issue;—such an issue, it may be, as in the present condition of things and men's minds cannot easily be conceived or imagined. For the matter in hand is no mere felicity of speculation, but the real business and fortunes of the human race, and all power of operation. For man is but the servant and interpreter of nature: what he does and what he knows is only what he has observed of nature's order in fact or in thought; beyond this he knows nothing and can do nothing. For the chain of causes cannot by any force be loosed or broken, nor can nature be commanded except by being obeyed. And so those twin objects, human Knowledge and human Power, do really meet in one; and it is from ignorance of causes that operation fails.

And all depends on keeping the eye steadily fixed upon the facts of nature and so receiving their images simply as they are. For God forbid that we should give out a dream of our own imagination for a pattern of the world; rather may he graciously grant to us to write an apocalypse or true vision of the footsteps of the Creator imprinted on his creatures.

Therefore do thou, O Father, who gavest the visible light as the first fruits of creation, and didst breathe into the face of man the intellectual light as the crown and consummation thereof, guard and protect this work, which coming from thy goodness returneth to thy glory. Thou when thou turnedst to look upon the works which thy hands had made, sawest that all was very good, and didst rest from thy labours. But man, when he turned to look upon the

work which his hands had made, saw that all was vanity and vexation of spirit, and could find no rest therein. Wherefore if we labour in thy works with the sweat of our brows thou wilt make us partakers of thy vision and thy sabbath. Humbly we pray that this mind may be steadfast in us, and that through these our hands, and the hands of others to whom thou shalt give the same spirit, thou wilt vouchsafe to endow the human family with new mercies.

PREFACE

TO THE NOVUM ORGANUM

Those who have taken upon them to lay down the law of nature as a thing already searched out and understood, whether they have spoken in simple assurance or professional affectation, have therein done philosophy and the sciences great injury. For as they have been successful in inducing belief, so they have been effective in quenching and stopping inquiry; and have done more harm by spoiling and putting an end to other men's efforts than good by their own. Those on the other hand who have taken a contrary course, and asserted that absolutely nothing can be known,—whether it were from hatred of the ancient sophists, or from uncertainty and fluctuation of mind, or even from a kind of fulness of learning, that they fell upon this opinion,—have certainly advanced reasons for it that are not to be despised; but yet they have neither started from true principles nor rested in the just conclusion, zeal and affectation having carried them much too far. The more ancient of the Greeks (whose writings are lost) took up with better judgment a position between these two extremes,—between the presumption of pronouncing on everything, and the despair of comprehending anything; and though frequently and bitterly complaining of the difficulty of inquiry and the obscurity of things, and like impatient horses champing the bit, they did not the less follow up their object and engage with Nature; thinking (it seems) that this very question,—viz. whether or no anything can be known,—was to be settled not by arguing, but by trying. And yet they too, trusting entirely to the force of their understanding, applied no rule, but made everything turn upon hard thinking and perpetual working and exercise of the mind.

Now my method, though hard to practise, is easy to explain; and it is this. I

propose to establish progressive stages of certainty. The evidence of the sense, helped and guarded by a certain process of correction, I retain. But the mental operation which follows the act of sense I for the most part reject; and instead of it I open and lay out a new and certain path for the mind to proceed in, starting directly from the simple sensuous perception. The necessity of this was felt no doubt by those who attributed so much importance to Logic; showing thereby that they were in search of helps for the understanding, and had no confidence in the native and spontaneous process of the mind. But this remedy comes too late to do any good, when the mind is already, through the daily intercourse and conversation of life, occupied with unsound doctrines and beset on all sides by vain imaginations. And therefore that art of Logic, coming (as I said) too late to the rescue, and no way able to set matters right again, has had the effect of fixing errors rather than disclosing truth. There remains but one course for the recovery of a sound and healthy condition,—namely, that the entire work of the understanding be commenced afresh, and the mind itself be from the very outset not left to take its own course, but guided at every step; and the business be done as if by machinery. Certainly if in things mechanical men had set to work with their naked hands, without help or force of instruments, just as in things intellectual they have set to work with little else than the naked forces of the understanding, very small would the matters have been which, even with their best efforts applied in conjunction, they could have attempted or accomplished. Now (to pause while upon this example and look in it as in a glass) let us suppose that some vast obelisk were (for the decoration of a triumph or some such magnificence) to be removed from its place, and that men should set to work upon it with their naked hands; would not any sober spectator think them mad? And if they should then send for more people, thinking that in that way they might manage it, would he not think them all the madder? And if they then proceeded to make a selection, putting away the weaker hands, and using only the strong and vigorous, would he not think them madder than ever? And if lastly, not content with this, they resolved to call in aid the art of athletics, and required all their men to come with hands, arms, and sinews well anointed and medicated according to the rules of art, would he not cry out that they were only taking pains to show a kind of method and discretion in their madness? Yet just so it is that men proceed in matters intellectual,—with just the same kind of mad effort and useless combination of forces,—

when they hope great things either from the number and cooperation or from the excellency and acuteness of individual wits; yea, and when they endeavour by Logic (which may be considered as a kind of athletic art) to strengthen the sinews of the understanding; and yet with all this study and endeavour it is apparent to any true judgment that they are but applying the naked intellect all the time; whereas in every great work to be done by the hand of man it is manifestly impossible, without instruments or machinery, either for the strength of each to be exerted or the strength of all to be united.

Upon these premises two things occur to me of which, that they may not be overlooked, I would have men reminded. First it falls out fortunately as I think for the allaying of contradictions and heart-burnings, that the honour and reverence due to the ancients remains untouched and undiminished; while I may carry out my designs and at the same time reap the fruit of my modesty. For if I should profess that I, going the same road as the ancients, have something better to produce, there must needs have been some comparison or rivalry between us (not to be avoided by any art of words) in respect of excellency or ability of wit; and though in this there would be nothing unlawful or new (for if there be anything misapprehended by them, or falsely laid down, why may not I, using a liberty common to all, take exception to it?) yet the contest, however just and allowable, would have been an unequal one perhaps, in respect of the measure of my own powers. As it is however,—my object being to open a new way for the understanding, a way by them untried and unknown,—the case is altered; party zeal and emulation are at an end; and I appear merely as a guide to point out the road; an office of small authority, and depending more upon a kind of luck than upon any ability or excellency. And thus much relates to the persons only. The other point of which I would have men reminded relates to the matter itself.

Be it remembered then that I am far from wishing to interfere with the philosophy which now flourishes, or with any other philosophy more correct and complete than this which has been or may hereafter be propounded. For I do not object to the use of this received philosophy, or others like it, for supplying matter for disputations or ornaments for discourse,—for the professor's lecture and for the business of life. Nay more, I declare openly

that for these uses the philosophy which I bring forward will not be much available. It does not lie in the way. It cannot be caught up in passage. It does not flatter the understanding by conformity with preconceived notions. Nor will it come down to the apprehension of the vulgar except by its utility and effects.

Let there be therefore (and may it be for the benefit of both) two streams and two dispensations of knowledge; and in like manner two tribes or kindreds of students in philosophy—tribes not hostile or alien to each other, but bound together by mutual services;—let there in short be one method for the cultivation, another for the invention, of knowledge.

And for those who prefer the former, either from hurry or from considerations of business or for want of mental power to take in and embrace the other (which must needs be most men's case), I wish that they may succeed to their desire in what they are about, and obtain what they are pursuing. But if any man there be who, not content to rest in and use the knowledge which has already been discovered, aspires to penetrate further; to overcome, not an adversary in argument, but nature in action; to seek, not pretty and probable conjectures, but certain and demonstrable knowledge;—I invite all such to join themselves, as true sons of knowledge, with me, that passing by the outer courts of nature, which numbers have trodden, we may find a way at length into her inner chambers. And to make my meaning clearer and to familiarise the thing by giving it a name, I have chosen to call one of these methods or ways *Anticipation of the Mind*, the other *Interpretation of Nature*.

Moreover I have one request to make. I have on my own part made it my care and study that the things which I shall propound should not only be true, but should also be presented to men's minds, how strangely soever preoccupied and obstructed, in a manner not harsh or unpleasant. It is but reasonable however (especially in so great a restoration of learning and knowledge) that I should claim of men one favour in return; which is this; If any one would form an opinion or judgment either out of his own observation, or out of the crowd of authorities, or out of the forms of demonstration (which have now acquired a sanction like that of judicial laws), concerning these speculations

of mine, let him not hope that he can do it in passage or by the by; but let him examine the thing thoroughly; let him make some little trial for himself of the way which I describe and lay out; let him familiarise his thoughts with that subtlety of nature to which experience bears witness; let him correct by seasonable patience and due delay the depraved and deep-rooted habits of his mind; and when all this is done and he has begun to be his own master, let him (if he will) use his own judgment.

PREFACE TO THE FIRST FOLIO EDITION OF SHAKESPEARE'S PLAYS (1623)[A]

TO THE GREAT VARIETY OF READERS

From the most able, to him that can but spell: There you are number'd. We had rather you were weigh'd. Especially, when the fate of all Bookes depends vpon your capacities: and not of your heads alone, but of your purses. Well! it is now publique, & you wil stand for your priuiledges wee know: to read, and censure. Do so, but buy it first. That doth best commend a Booke, the Stationer saies. Then, how odde soeuer your braines be, or your wisdomes, make your licence the same, and spare not. Iudge your sixe-pen'orth, your shillings worth, your fiue shillings worth at a time, or higher, so you rise to the iust rates, and welcome. But, what euer you do, Buy. Censure will not driue a Trade, or make the Iacke go. And though you be a Magistrate of wit, and sit on the Stage at *Black-Friers*, or the *Cock-pit*, to arraigne Playes dailie, know, these Playes haue had their triall already, and stood out all Appeals; and do now come forth quitted rather by a Decree of Court, then any purchas'd Letters of commendation.

It had bene a thing, we confesse, worthie to haue bene wished, that the Author himselfe had liu'd to haue set forth, and ouerseen his owne writings. But since it hath bin ordain'd otherwise, and he by death departed from that right, we pray you do not envie his Friends, the office of their care, and paine to haue collected & publish'd them, and so to haue publish'd them, as where (before) you were abus'd with diuerse stolne, and surreptitious copies, maimed, and deformed by the frauds and stealthes of iniurious imposters, that expos'd them euen those, are now offer'd to your view cur'd, and perfect of their limbes, and all the rest, absolute in their numbers, as he conceiued them.

Who, as he was a happie imitator of Nature, was a most gentle expresser of it. His mind and hand went together. And what he thought, he vttered with that easinesse, that wee haue scarce receiued from him a blot in his papers. But it is not our prouince, who onely gather his works, and giue them you, to praise him. It is yours that reade him. And there we hope, to your diuers capacities, you will finde enough, both to draw, and hold you for his wit can no more lie hid then it could be lost. Reade him, therefore and againe and againe. And if then you doe not like him surely you are in some manifest danger, not to vnderstand him. And so we leaue you to other of his Friends, whom if you need can bee your guides: if you neede them not, you can leade your selues, and others. And such Readers we wish him.

JOHN HEMINGE HENRIE CONDELL.

[Footnote A: Little more than half of Shakespeare's plays were published during his lifetime; and in the publication of these there is no evidence that the author had any hand. Seven years after his death, John Heminge and Henry Condell, two of his fellow-actors, collected the unpublished plays, and, in 1623, issued them along with the others in a single volume, usually known as the First Folio. When one considers what would have been lost had it not been for the enterprise of these men, it seems safe to say that the volume they introduced by this quaint and not too accurate preface, is the most important single book in the imaginative literature of the world.]

PREFACE TO THE PHILOSOPHIAE NATURALIS PRINCIPIA MATHEMATICA

BY SIR ISAAC NEWTON. (1686)[A]

Since the ancients (as we are told by Pappus) made great account of the science of mechanics in the investigation of natural things; and the moderns, laying aside substantial forms and occult qualities, have endeavored to subject the phenomena of nature to the laws of mathematics, I have in this treatise cultivated mathematics so far as it regards philosophy. The ancients considered mechanics in a twofold respect; as rational, which proceeds accurately by demonstration, and practical. To practical mechanics all the manual arts belong, from which mechanics took its name. But as artificers do not work with perfect accuracy, it comes to pass that mechanics is so distinguished from geometry, that what is perfectly accurate is called geometrical; what is less so is called mechanical. But the errors are not in the art, but in the artificers. He that works with less accuracy is an imperfect mechanic: and if any could work with perfect accuracy, he would be the most perfect mechanic of all; for the description of right lines and circles, upon which geometry is founded, belongs to mechanics. Geometry does not teach us to draw these lines, but requires them to be drawn; for it requires that the learner should first be taught to describe these accurately, before he enters upon geometry; then it shows how by these operations problems may be solved. To describe right lines and circles are problems, but not geometrical problems. The solution of these problems is required from mechanics; and by geometry the use of them, when so solved, is shown; and it is the glory of geometry that from those few principles, fetched from without, it is able to produce so many things. Therefore geometry is founded in mechanical practice, and is nothing but that part of universal mechanics which accurately

proposes and demonstrates the art of measuring. But since the manual arts are chiefly conversant in the moving of bodies, it comes to pass that geometry is commonly referred to their magnitudes, and mechanics to their motion. In this sense rational mechanics will be the science of motions resulting from any forces whatsoever, and of the forces required to produce any motions, accurately proposed and demonstrated. This part of mechanics was cultivated by the ancients in the five powers which relate to manual arts, who considered gravity (it not being a manual power) no otherwise than as it moved weights by those powers. Our design, not respecting arts, but philosophy, and our subject, not manual, but natural powers, we consider chiefly those things which relate to gravity, levity, elastic force, the resistance of fluids, and the like forces, whether attractive or impulsive; and therefore we offer this work as mathematical principles of philosophy; for all the difficulty of philosophy seems to consist in this—from the phenomena of motions to investigate the forces of nature, and then from these forces to demonstrate the other phenomena; and to this end the general propositions in the first and second book are directed. In the third book we give an example of this in the explication of the system of the World; for by the propositions mathematically demonstrated in the first book, we there derive from the celestial phenomena the forces of gravity with which bodies tend to the sun and the several planets. Then, from these forces, by other propositions which are also mathematical, we deduce the motions of the planets, the comets, the moon, and the sea. I wish we could derive the rest of the phenomena of nature by the same kind of reasoning from mechanical principles; for I am induced by many reasons to suspect that they may all depend upon certain forces by which the particles of bodies, by some causes hitherto unknown, are either mutually impelled towards each other, and cohere in regular figures, or are repelled and recede from each other; which forces being unknown, philosophers have hitherto attempted the search of nature in vain; but I hope the principles here laid down will afford some light either to that or some truer method of philosophy.

In the publication of this work, the most acute and universally learned Mr. Edmund Halley not only assisted me with his pains in correcting the press and taking care of the schemes, but it was to his solicitations that its becoming public is owing; for when he had obtained of me my

demonstrations of the figure of the celestial orbits, he continually pressed me to communicate the same to the Royal Society, who afterwards, by their kind encouragement and entreaties, engaged me to think of publishing them. But after I had begun to consider the inequalities of the lunar motions, and had entered upon some other things relating to the laws and measures of gravity, and other forces; and the figures that would be described by bodies attracted according to given laws; and the motion of several bodies moving among themselves; the motion of bodies in resisting mediums; the forces, densities, and motions of mediums; the orbits of the comets, and such like; I put off that publication till I had made a search into those matters, and could put out the whole together. What relates to the lunar motions (being imperfect) I have put all together in the corollaries of proposition 66, to avoid being obliged to propose and distinctly demonstrate the several things there contained in a method more prolix than the subject deserved, and interrupt the series of the several propositions. Some things, found out after the rest, I chose to insert in places less suitable, rather than change the number of the propositions and the citations. I heartily beg that what I have here done may be read with candor; and that the defects I have been guilty of upon this difficult subject may be not so much reprehended as kindly supplied, and investigated by new endeavors of my readers.

Cambridge, Trinity College, ISAAC NEWTON.

May 8, 1686

[Footnote A: Sir Isaac Newton, the great English mathematician and physicist, was born at Woolsthorpe in 1642, and died at Kensington in 1727. He held a professorship at Cambridge, represented the University in Parliament, as master of the mint reformed the English coinage, and for twenty five years was president of the Royal Society. His theory of the law of universal gravitation, the most important of his many discoveries, is expounded in his "Philosophiae Naturalis Principia Mathematica," usually known merely as the "Principia," from which, this Preface is translated.]

PREFACE TO FABLES,

ANCIENT AND MODERN

BY JOHN DRYDEN. (1700)[A]

'Tis with a poet as with a man who designs to build, and is very exact, as he supposes, in casting up the cost beforehand, but, generally speaking, he is mistaken in his account, and reckons short of the expense he first intended. He alters his mind as the work proceeds, and will have this or that convenience more, of which he had not thought when he began. So has it happened to me; I have built a house, where I intended but a lodge; yet with better success than a certain nobleman,[1] who, beginning with a dog kennel, never liv'd to finish the palace he had contriv'd.

From translating the first of Homer's *Iliads* (which I intended as an essay to the whole work) I proceeded to the translation of the twelfth book of Ovid's *Metamorphoses*, because it contains, among other things, the causes, the beginning, and ending, of the Trojan war. Here I ought in reason to have stopp'd; but the speeches of Ajax and Ulysses lying next in my way, I could not balk 'em. When I had compass'd them, I was so taken with the former part of the fifteenth book, (which is the masterpiece of the whole *Metamorphoses*,) that I enjoin'd myself the pleasing task of rend'ring it into English. And now I found, by the number of my verses, that they began to swell into a little volume; which gave me an occasion of looking backward on some beauties of my author, in his former books. There occurred to me the *Hunting of the Boar*, *Cinyras and Myrrha*, the good-natur'd story of *Baucis and Philemon*, with the rest, which I hope I have translated closely enough, and given them the same turn of verse which they had in the original; and this, I may say without vanity, is not the talent of every poet. He who has arriv'd the nearest

to it, is the ingenious and learned Sandys, the best versifier of the former age; if I may properly call it by that name, which was the former part of this concluding century. For Spenser and Fairfax both flourish'd in the reign of Queen Elizabeth; great masters in our language, and who saw much farther into the beauties of our numbers than those who immediately followed them. Milton was the poetical son of Spenser, and Mr. Waller of Fairfax, for we have our lineal descents and clans as well as other families. Spenser more than once insinuates that the soul of Chaucer was transfus'd into his body, and that he was begotten by him two hundred years after his decease. Milton has acknowledg'd to me that Spenser was his original, and many besides myself have heard our famous Waller own that he deriv'd the harmony of his numbers from the *Godfrey of Bulloign*, which was turned into English by Mr. Fairfax. But to return. Having done with Ovid for this time, it came into my mind that our old English poet, Chaucer, in many things resembled him, and that with no disadvantage on the side of the modern author, as I shall endeavor to prove when I compare them; and as I am, and always have been, studious to promote the honor of my native country, so I soon resolv'd to put their merits to the trial, by turning some of the *Canterbury Tales* into our language, as it is now refin'd; for by this means, both the poets being set in the same light, and dress'd in the same English habit, story to be compar'd with story, a certain judgment may be made betwixt them by the reader, without obtruding my opinion on him. Or, if I seem partial to my countryman and predecessor in the laurel, the friends of antiquity are not few; and besides many of the learn'd, Ovid has almost all the beaux, and the whole fair sex, his declared patrons. Perhaps I have assum'd somewhat more to myself than they allow me, because I have adventur'd to sum up the evidence; but the readers are the jury, and their privilege remains entire, to decide, according to the merits of the cause, or if they please, to bring it to another hearing before some other court. In the mean time, to follow the thrid of my discourse, (as thoughts, according to Mr. Hobbes, have always some connection,) so from Chaucer I was led to think on Boccace, who was not only his contemporary, but also pursued the same studies; wrote novels in prose, and many works in verse; particularly is said to have invented the octave rhyme,[2] or stanza of eight lines, which ever since has been maintain'd by the practice of all Italian writers, who are, or at least assume the title of, heroic poets. He and Chaucer, among other things, had this in common, that they refin'd their mother

tongues; but with this difference, that Dante had begun to file their language, at least in verse, before the time of Boccace, who likewise receiv'd no little help from his master Petrarch. But the reformation of their prose was wholly owing to Boccace himself, who is yet the standard of purity in the Italian tongue; tho' many of his phrases are become obsolete, as in process of time it must needs happen. Chaucer (as you have formerly been told by our learn'd Mr. Rymer) first adorn'd and amplified our barren tongue from the Provençal, [3] which was then the most polish'd of all the modern languages; but this subject has been copiously treated by that great critic, who deserves no little commendation from us his countrymen. For these reasons of time, and resemblance of genius in Chaucer and Boccace, I resolv'd to join them in my present work; to which I have added some original papers of my own; which, whether they are equal or inferior to my other poems, an author is the most improper judge, and therefore I leave them wholly to the mercy of the reader. I will hope the best, that they will not be condemn'd; but if they should, I have the excuse of an old gentleman, who mounting on horseback before some ladies, when I was present, got up somewhat heavily, but desir'd of the fair spectators that they would count fourscore and eight before they judg'd him. By the mercy of God, I am already come within twenty years of his number, a cripple in my limbs; but what decays are in my mind, the reader must determine. I think myself as vigorous as ever in the faculties of my soul, excepting only my memory, which is not impair'd to any great degree; and if I lose not more of it, I have no great reason to complain. What judgment I had, increases rather than diminishes; and thoughts, such as they are, come crowding in so fast upon me, that my only difficulty is to choose or to reject; to run them into verse, or to give them the other harmony of prose. I have so long studied and practic'd both, that they are grown into a habit, and become familiar to me. In short, tho' I may lawfully plead some part of the old gentleman's excuse, yet I will reserve it till I think I have greater need, and ask no grains of allowance for the faults of this my present work, but those which are given of course to human frailty. I will not trouble my reader with the shortness of time in which I writ it, or the several intervals of sickness. They who think too well of their own performances are apt to boast in their prefaces how little time their works have cost them, and what other business of more importance interfere'd; but the reader will be as apt to ask the question, why they allow'd not a longer time to make their works more

perfect, and why they had so despicable an opinion of their judges as to thrust their indigested stuff upon them, as if they deser'd no better.

With this account of my present undertaking, I conclude the first part of this discourse; in the second part, as at a second sitting, tho' I alter not the draught, I must touch the same features over again, and change the dead coloring[4] of the whole. In general, I will only say that I have written nothing which savors of immorality or profaneness; at least, I am not conscious to myself of any such intention. If there happen to be found an irreverent expression, or a thought too wanton, they are crept into my verses thro' my inadvertency; if the searchers find any in the cargo, let them be stay'd or forfeited, like counterbanded goods; at least, let their authors be answerable for them, as being but imported merchandise, and not of my own manufacture. On the other side, I have endeavor'd to choose such fables, both ancient and modern, as contain in each of them some instructive moral; which I could prove by induction, but the way is tedious, and they leap foremost into sight, without the reader's trouble of looking after them. I wish I could affirm, with a safe conscience, that I had taken the same care in all my former writings; for it must be own'd, that supposing verses are never so beautiful or pleasing, yet if they contain anything which shocks religion, or good manners, they are at best what Horace says of good numbers without good sense, *Versus inopes rerum, nugaeque canorae*. [5] Thus far, I hope, I am right in court, without renouncing to my other right of self-defense, where I have been wrongfully accus'd, and my sense wiredrawn into blasphemy or bawdry, as it has often been by a religious lawyer, [6] in a late pleading against the stage; in which he mixes truth with falsehood, and has not forgotten the old rule of calumniating strongly, that something may remain.

I resume the thrid of my discourse with the first of my translations, which was the *First Iliad* of Homer. If it shall please God to give me longer life, and moderate health, my intentions are to translate the whole *Ilias*; provided still that I meet with those encouragements from the public which may enable me to proceed in my undertaking with some cheerfulness. And this I dare assure the world beforehand, that I have found by trial Homer a more pleasing task than Virgil, (tho' I say not the translation will be less laborious). For the Grecian is more according to my genius than the Latin poet. In the works of

the two authors we may read their manners and natural inclinations, which are wholly different. Virgil was of a quiet, sedate temper; Homer was violent, impetuous, and full of fire. The chief talent of Virgil was propriety of thoughts, and ornament of words; Homer was rapid in his thoughts, and took all the liberties, both of numbers and of expressions, which his language, and the age in which he liv'd, allow'd him. Homer's invention was more copious, Virgil's more confin'd; so that if Homer had not led the way, it was not in Virgil to have begun heroic poetry; for nothing can be more evident than that the Roman poem is but the second part of the *Iliad*; a continuation of the same story, and the persons already form'd; the manners of Æneas are those of Hector superadded to those which Homer gave him. The adventures of Ulysses in the *Odyssey* are imitated in the first six books of Virgil's *Aeneid*; and tho' the accidents are not the same, (which would have argued him of a servile, copying, and total barrenness of invention,) yet the seas were the same, in which both the heroes wander'd; and Dido cannot be denied to be the poetical daughter of Calypso. The six latter books of Virgil's poem are the four and twenty *Iliads* contracted: a quarrel occasioned by a lady, a single combat, battles fought, and a town besieg'd. I say not this in derogation to Virgil, neither do I contradict anything which I have formerly said in his just praise: for his episodes are almost wholly of his own invention; and the form which he has given to the telling makes the tale his own, even tho' the original story had been the same. But this proves, however, that Homer taught Virgil to design; and if invention be the first virtue of an epic poet, then the Latin poem can only be allow'd the second place. Mr. Hobbes, in the preface to his own bald translation of the *Iliad* (studying poetry as he did mathematics, when it was too late)—Mr. Hobbes, I say, begins the praise of Homer where he should have ended it. He tells us that the first beauty of an epic poem consists in diction, that is, in the choice of words, and harmony of numbers; now the words are the coloring of the work, which in the order of nature is last to be consider'd. The design, the disposition, the manners, and the thoughts, are all before it: where any of those are wanting or imperfect, so much wants or is imperfect in the imitation of human life; which is in the very definition of a poem. Words, indeed, like glaring colors, are the first beauties that arise and strike the sight: but if the draught be false or lame, the figures ill disposed, the manners obscure or inconsistent, or the thoughts unnatural, then the finest colors are but daubing, and the piece is a beautiful

monster at the best. Neither Virgil nor Homer were deficient in any of the former beauties; but in this last, which is expression, the Roman poet is at least equal to the Grecian, as I have said elsewhere; supplying the poverty of his language by his musical ear, and by his diligence. But to return: our two great poets, being so different in their tempers, one choleric and sanguine, the other phlegmatic and melancholic; that which makes them excel in their several ways is that each of them has follow'd his own natural inclination, as well in forming the design as in the execution of it. The very heroes shew their authors: Achilles is hot, impatient, revengeful, *Impiger, iracundus, inexorabilis, acer*[7] &c.; Æneas patient, considerate, careful of his people, and merciful to his enemies; ever submissive to the will of Heaven—*Quo fata trahunt retrahuntque sequitmur*. [8] I could please myself with enlarging on this subject, but am forc'd to defer it to a fitter time. From all I have said I will only draw this inference, that the action of Homer being more full of vigor than that of Virgil, according to the temper of the writer, is of consequence more pleasing to the reader. One warms you by degrees: the other sets you on fire all at once, and never intermits his heat. 'Tis the same difference which Longinus makes betwixt the effects of eloquence in Demosthenes and Tully. One persuades; the other commands. You never cool while you read Homer, even not in the second book (a graceful flattery to his countrymen); but he hastens from the ships, and concludes not that book till he has made you an amends by the violent playing of a new machine. From thence he hurries on his action with variety of events, and ends it in less compass than two months. This vehemence of his, I confess, is more suitable to my temper; and therefore I have translated his first book with greater pleasure than any part of Virgil; but it was not a pleasure without pains. The continual agitations of the spirits must needs be a weakening of any constitution, especially in age; and many pauses are required for refreshment betwixt the heats; the *Iliad* of itself being a third part longer than all Virgil's works together.

This is what I thought needful in this place to say of Homer. I proceed to Ovid and Chaucer, considering the former only in relation to the latter. With Ovid ended the golden age of the Roman tongue; from Chaucer the purity of the English tongue began. The manners of the poets were not unlike: both of them were well bred, well natur'd, amorous, and libertine, at least in their

writings, it may be also in their lives. Their studies were the same, philosophy and philology. Both of them were knowing in astronomy, of which Ovid's books of the Roman feasts, and Chaucer's treatise of the Astrolabe, are sufficient witnesses. But Chaucer was likewise an astrologer, as were Virgil, Horace, Persius, and Manilius. Both writ with wonderful facility and clearness: neither were great inventors; for Ovid only copied the Grecian fables; and most of Chaucer's stories were taken from his Italian contemporaries, or their predecessors.[9] Boccace his *Decameron* was first publish'd; and from thence our Englishman has borrow'd many of his *Canterbury Tales*; yet that of *Palamon and Arcite* was written in all probability by some Italian wit in a former age, as I shall prove hereafter. The tale of Grizild was the invention of Petrarch; by him sent to Boccace; from whom it came to Chaucer. *Troilus and Cressida* was also written by a Lombard author; but much amplified by our English translator, as well as beautified; the genius of our countrymen, in general, being rather to improve an invention, than to invent themselves; as is evident not only in our poetry, but in many of our manufactures. I find I have anticipated already, and taken up from Boccace before I come to him; but there is so much less behind; and I am of the temper of most kings, *who love to be in debt*, are all for present money, no matter how they pay it afterwards: besides, the nature of a preface is rambling; never wholly out of the way, nor in it. This I have learn'd from the practice of honest Montaigne, and return at my pleasure to Ovid and Chaucer, of whom I have little more to say. Both of them built on the inventions of other men; yet since Chaucer had something of his own, as *The Wife of Bath's Tale*, *The Cock and the Fox*, [10] which I have translated, and some others, I may justly give our countryman the precedence in that part; since I can remember nothing of Ovid which was wholly his. Both of them understood the manners, under which name I comprehend the passions, and, in a larger sense, the descriptions of persons, and their very habits; for an example, I see Baucis and Philemon as perfectly before me, as if some ancient painter had drawn them; and all the pilgrims in the *Canterbury Tales*, their humors, their features, and the very dress, as distinctly as if I had sup'd with them at the Tabard in Southwark; yet even there too the figures of Chaucer are much more lively, and set in a better light: which tho' I have not time to prove, yet I appeal to the reader, and am sure he will clear me from partiality. The thoughts and words remain to be consider'd in the comparison

of the two poets; and I have sav'd myself one half of that labor, by owning that Ovid liv'd when the Roman tongue was in its meridian, Chaucer in the dawning of our language; therefore that part of the comparison stands not on an equal foot, any more than the diction of Ennius and Ovid, or of Chaucer and our present English. The words are given up as a post not to be defended in our poet, because he wanted the modern art of fortifying. The thoughts remain to be consider'd, and they are to be measured only by their propriety; that is, as they flow more or less naturally from the persons describ'd, on such and such occasions. The vulgar judges, which are nine parts in ten of all nations, who call conceits and jingles wit, who see Ovid full of them, and Chaucer altogether without them, will think me little less than mad, for preferring the Englishman to the Roman: yet, with their leave, I must presume to say that the things they admire are only glittering trifles, and so far from being witty, that in a serious poem they are nauseous, because they are unnatural. Would any man who is ready to die for love describe his passion like Narcissus? Would he think *ofinopem me copia fecit*,[11] and a dozen more of such expressions, pour'd on the neck of one another, and signifying all the same thing? If this were wit, was this a time to be witty, when the poor wretch was in the agony of death? This is just John Littlewit in *Bartholomew Fair*,[12] who had a conceit (as he tells you) left him in his misery; a miserable conceit. On these occasions the poet should endeavor to raise pity; but instead of this, Ovid is tickling you to laugh. Virgil never made use of such machines, when he was moving you to commiserate the death of Dido: he would not destroy what he was building. Chaucer makes Arcite violent in his love, and unjust in the pursuit of it; yet when he came to die, he made him think more reasonably: he repents not of his love, for that had alter'd his character; but acknowledges the injustice of his proceedings, and resigns Emilia to Palamon. What would Ovid have done on this occasion? He would certainly have made Arcite witty on his deathbed. He had complain'd he was farther off from possession by being so near, and a thousand such boyisms, which Chaucer rejected as below the dignity of the subject. They who think otherwise would by the same reason prefer Lucan and Ovid to Homer and Virgil, and Martial to all four of them. As for the turn of words, in which Ovid particularly excels all poets, they are sometimes a fault, and sometimes a beauty, as they are us'd properly or improperly; but in strong passions always to be shunn'd, because passions are serious, and will admit

no playing. The French have a high value for them; and I confess, they are often what they call delicate, when they are introduced with judgment; but Chaucer writ with more simplicity, and followed nature more closely, than to use them. I have thus far, to the best of my knowledge, been an upright judge betwixt the parties in competition, not meddling with the design nor the disposition of it; because the design was not their own, and in the disposing of it they were equal. It remains that I say somewhat of Chaucer in particular.

In the first place, as he is the father of English poetry, so I hold him in the same degree of veneration as the Grecians held Homer or the Romans Virgil. He is a perpetual fountain of good sense, learn'd in all sciences, and therefore speaks properly on all subjects as he knew what to say, so he knows also when to leave off, a continence which is practic'd by few writers, and scarcely by any of the ancients, excepting Virgil and Horace. One of our late great poets[13] is sunk in his reputation, because he could never forgive any conceit which came in his way, but swept like a dragnet, great and small. There was plenty enough, but the dishes were ill sorted, whole pyramids of sweetmeats for boys and women, but little of solid meat for men. All this proceeded not from any want of knowledge, but of judgment, neither did he want that in discerning the beauties and faults of other poets, but only indulg'd himself in the luxury of writing, and perhaps knew it was a fault, but hop'd the reader would not find it. For this reason, tho' he must always be thought a great poet he is no longer esteem'd a good writer, and for ten impressions, which his works have had in so many successive years, yet at present a hundred books are scarcely purchas'd once a twelvemonth for, as my last Lord Rochester said, tho' somewhat profanely, "Not being of God, he could not stand."

Chaucer follow'd Nature everywhere, but was never so bold to go beyond her, and there is a great difference of being *poeta* and *aimis poeta*, [14] if we may believe Catullus, as much as betwixt a modest behavior and affectation. The verse of Chaucer, I confess, is not harmonious to us, but 'tis like the eloquence of one whom Tacitus commends it was *auribus istius temporis accommodata* [15] they who liv'd with him, and some time after him, thought it musical and it continued so even in our judgment, if compar'd with the numbers of Lydgate and Gower, his contemporaries there is the rude

sweetness of a Scotch tune in it, which is natural and pleasing, tho' not perfect. 'Tis true, I cannot go so far as he who published the last edition of him [16] for he would make us believe the fault is in our ears, and that there were really ten syllables in a verse where we find but nine but this opinion is not worth confuting, 'tis so gross and obvious an error, that common sense (which is a rule in everything but matters of faith and revelation) must convince the reader that equality of numbers in every verse which we call heroic was either not known, or not always practic'd, in Chaucer's age. It were an easy matter to produce some thousands of his verses, which are lame for want of half a foot, and sometimes a whole one, and which no pronunciation can make otherwise. We can only say, that he liv'd in the infancy of our poetry, and that nothing is brought to perfection at the first. We must be children before we grow men. There was an Ennius, and in process of time a Lucilius and a Lucretius, before Virgil and Horace; even after Chaucer there was a Spenser, a Harrington, a Fairfax, before Waller and Denham were in being: and our numbers were in their nonage till these last appear'd. I need say little of his parentage, life, and fortunes;[17] they are to be found at large in all the editions of his works. He was employ'd abroad and favor'd by Edward the Third, Richard the Second, and Henry the Fourth, and was poet, as I suppose, to all three of them. In Richard's time, I doubt, he was a little dipp'd in the rebellion of the commons, and being brother-in-law to John of Ghant, it was no wonder if he follow'd the fortunes of that family, and was well with Henry the Fourth when he had depos'd his predecessor. Neither is it to be admir'd,[18] that Henry, who was a wise as well as a valiant prince, who claim'd by succession, and was sensible that his title was not sound, but was rightfully in Mortimer, who had married the heir of York; it was not to be admir'd, I say, if that great politician should be pleas'd to have the greatest wit of those times in his interests, and to be the trumpet of his praises. Augustus had given him the example, by the advice of Mæcenus, who recommended Virgil and Horace to him; whose praises help'd to make him popular while he was alive, and after his death have made him precious to posterity. As for the religion of our poet, he seems to have some little bias towards the opinions of Wycliffe, after John of Ghant his patron; somewhat of which appears in the tale of Piers Plowman.[19] Yet I cannot blame him for inveighing so sharply against the vices of the clergy in his age; their pride, their ambition, their pomp, their avarice, their worldly interest, deserv'd the

lashes which he gave them, both in that and in most of his *Canterbury Tales*: neither has his contemporary Boccace spar'd them. Yet both those poets liv'd in much esteem with good and holy men in orders; for the scandal which is given by particular priests reflects not on the sacred function. Chaucer's Monk, his Canon, and his Friar, took not from the character of his Good Parson. A satirical poet is the check of the laymen on bad priests. We are only to take care that we involve not the innocent with the guilty in the same condemnation. The good cannot be too much honor'd, nor the bad too coarsely us'd: for the corruption of the best becomes the worst. When a clergyman is whipp'd, his gown is first taken off, by which the dignity of his order is secur'd: if he be wrongfully accus'd, he has his action of slander; and 'tis at the poet's peril if he transgress the law. But they will tell us that all kind of satire, tho' never so well deserv'd by particular priests, yet brings the whole order into contempt. Is then the peerage of England anything dishonored, when a peer suffers for his treason? If he be libel'd or any way defam'd, he has his *scandalum magnatum*[20] to punish the offender. They who use this kind of argument seem to be conscious to themselves of somewhat which has deserv'd the poet's lash, and are less concern'd for their public capacity than for their private; at least there is pride at the bottom of their reasoning. If the faults of men in orders are only to be judg'd among themselves, they are all in some sort parties: for, since they say the honor of their order is concern'd in every member of it, how can we be sure that they will be impartial judges? How far I may be allow'd to speak my opinion in this case, I know not; but I am sure a dispute of this nature caus'd mischief in abundance betwixt a king of England and an archbishop of Canterbury,[21] one standing up for the laws of his land, and the other for the honor (as he call'd it) of God's Church; which ended in the murder of the prelate, and in the whipping of his Majesty from post to pillar for his penance. The learn'd and ingenious Dr. Drake[22] has say'd me the labour of inquiring into the esteem and reverence which the priests have had of old, and I would rather extend than diminish any part of it: yet I must needs say, that when a priest provokes me without any occasion given him, I have no reason, unless it be the charity of a Christian, to forgive him: *prior læsit*[23] is justification sufficient in the civil law. If I answer him in his own language, self-defense, I am sure, must be allow'd me; and if I carry it farther, even to a sharp recrimination, somewhat may be indulg'd to human frailty. Yet my resentment has not wrought so far, but that I have

followed Chaucer in his character of a holy man, and have enlarg'd on that subject with some pleasure, reserving to myself the right, if I shall think fit hereafter, to describe another sort of priests, such as are more easily to be found than the Good Parson; such as have given the last blow to Christianity in this age, by a practice so contrary to their doctrine. But this will keep cold till another time. In the mean while I take up Chaucer where I left him. He must have been a man of a most wonderful comprehensive nature, because, as it has been truly observed of him, he has taken into the compass of his *Canterbury Tales* the various manners and humors (as we now call them) of the whole English nation, in his age. Not a single character has escap'd him. All his pilgrims are severally distinguish'd from each other; and not only in their inclinations, but in their very physiognomies and persons. Bapista Porta[24] could not have described their natures better, than by the marks which the poet gives them. The matter and manner of their tales, and of their telling, are so suited to their different educations, humors, and callings, that each of them would be improper in any other mouth. Even the grave and serious characters are distinguished by their several sorts of gravity: their discourses are such as belong to their age, their calling, and their breeding; such as are becoming of them, and of them only. Some of his persons are vicious, and some virtuous; some are unlearn'd, or (as Chaucer calls them) lewd, and some are learn'd. Even the ribaldry of the low characters is different: the Reeve, the Miller, and the Cook are several men, and distinguished from each other, as much as the mincing Lady Prioress and the broad-speaking gap-tooth'd Wife of Bath. But enough of this: there is such a variety of game springing up before me, that I am distracted in my choice, and know not which to follow. 'Tis sufficient to say, according to the proverb, that here is God's plenty. We have our forefathers and great-grandames all before us, as they were in Chaucer's days; their general characters are still remaining in mankind, and even in England, tho' they are call'd by other names than those of Monks and Friars, and Canons, and Lady Abbesses, and Nuns: for mankind is ever the same, and nothing lost out of nature, tho' everything is alter'd. May I have leave to do myself the justice—since my enemies will do me none, and are so far from granting me to be a good poet, that they will not allow me so much as to be a Christian, or a moral man—may I have leave, I say, to inform my reader that I have confin'd my choice to such tales of Chaucer as savor nothing of immodesty. If I had desir'd more to

please than to instruct, the Reeve, the Miller, the Shipman, the Merchant, the Sumner, and, above all, the Wife of Bath, in the prologue to her tale, would have procured me as many friends and readers, as there are beaux and ladies of pleasure in the town. But I will no more offend against good manners: I am sensible, as I ought to be, of the scandal I have given by my loose writings; and make what reparation I am able, by this public acknowledgment. If anything of this nature, or of profaneness, be crept into these poems, I am so far from defending it, that I disown it. *Totum hoc indictum volo*.^[25] Chaucer makes another manner of apology for his broad speaking, and Boccace makes the like; but I will follow neither of them. Our countryman, in the end of his characters, before the *Canterbury Tales*, thus excuses the ribaldry, which is very gross in many of his novels:

But first, I pray you of your courtesy,
That ye ne arrete^[26] it nought my villany,
Though that I plainly speak in this mattere
To tellen you her^[27] words, and eke her chere:
Ne though I speak her words properly,
For this ye knowen as well as I,
Who shall tellen a tale after a man,
He mote rehearse as nye as ever he can:
Everich word of it been in his charge,
All speke he never so rudely ne large.
Or else he mote tellen his tale untrue,
Or feine things, or find words new:
He may not spare, altho he were his brother,
He mote as well say o word as another.
Christ spake himself full broad in holy writ,
And well I wote no villany is it.
Eke Plato saith, who so can him rede,
The words mote^[28] been cousin to the dede.^[29]

Yet if a man should have enquired of Boccace or of Chaucer, what need they had of introducing such characters, where obscene words were proper in their mouths, but very undecent to be heard; I know not what answer they could have made: for that reason such tales shall be left untold by me. You have

here a specimen of Chaucer's language, which is so obsolete that his sense is scarce to be understood; and you have likewise more than one example of his unequal numbers, which were mentioned before. Yet many of his verses consist of ten syllables, and the words not much behind our present English: as for example, these two lines, in the description of the carpenter's young wife:

Wincing she was, as is a jolly colt,
Long as a mast, and upright as a bolt.

I have almost done with Chaucer, when I have answer'd some objections relating to my present work. I find some people are offended that I have turn'd these tales into modern English; because they think them unworthy of my pains, and look on Chaucer as a dry, old-fashion'd wit, not worth reviving. I have often heard the late Earl of Leicester say that Mr. Cowley himself was of that opinion; who having read him over at my lord's request, declar'd he had no taste of him. I dare not advance my opinion against the judgment of so great an author; but I think it fair, however, to leave the decision to the public: Mr. Cowley was too modest to set up for a dictator; and being shock'd perhaps with his old style, never examin'd into the depth of his good sense. Chaucer, I confess, is a rough diamond, and must first be polish'd, ere he shines. I deny not, likewise, that, living in our early days of poetry, he writes not always of a piece, but sometimes mingles trivial things with those of greater moment. Sometimes also, tho' not often, he runs riot, like Ovid, and knows not when he has said enough. But there are more great wits, beside Chaucer, whose fault is their excess of conceits, and those ill sorted. An author is not to write all he can, but only all he ought. Having observ'd this redundancy in Chaucer, (as it is an easy matter for a man of ordinary parts to find a fault in one of greater,) I have not tied myself to a literal translation; but have often omitted what I judg'd unnecessary, or not of dignity enough to appear in the company of better thoughts. I have presumed farther, in some places, and added somewhat of my own where I thought my author was deficient, and had not given his thoughts their true luster, for want of words in the beginning of our language. And to this I was the more embolden'd, because (if I may be permitted to say it of myself) I found I had a soul congenial to his, and that I had been conversant in the same studies.

Another poet, in another age, may take the same liberty with my writings; if at least they live long enough to deserve correction. It was also necessary sometimes to restore the sense of Chaucer, which was lost or mangled in the errors of the press. Let this example suffice at present; in the story of *Palawan and Arcite*, where the temple of Diana is describ'd, you find these verses, in all the editions of our author:

There saw I Danè turned unto a tree,
I mean not the goddess Diane,
But Venus daughter, which that hight Danè;

which after a little consideration I knew was to be reformed into this sense, that Daphne, the daughter of Peneus, was turn'd into a tree. I durst not make thus bold with Ovid, lest some future Milbourne should arise, and say I varied from my author, because I understood him not.

But there are other judges, who think I ought not to have translated Chaucer into English, out of a quite contrary notion: they suppose there is a certain veneration due to his old language; and that it is little less than profanation and sacrilege to alter it. They are farther of opinion that somewhat of his good sense will suffer in this transfusion, and much of the beauty of his thoughts will infallibly be lost, which appear with more grace in their old habit. Of this opinion was that excellent person whom I mention'd, the late Earl of Leicester, who valued Chaucer as much as Mr. Cowley despis'd him. My lord dissuaded me from this attempt, (for I was thinking of it some years before his death,) and his authority prevail'd so far with me as to defer my undertaking while he liv'd, in deference to him: yet my reason was not convinc'd with what he urg'd against it. If the first end of a writer be to be understood, then as his language grows obsolete, his thoughts must grow obscure:

Multa renascentur quæ nunc cecidere; cadentque,
Quæ nunc sunt in honore vocabula, si volet usus,
Quem penes arbitrium est et jus et norma loquendi.[30]

When an ancient word for its sound and significance deserves to be reviv'd, I

have that reasonable veneration for antiquity, to restore it. All beyond this is superstition. Words are not like landmarks, so sacred as never to be remov'd; customs are chang'd, and even statutes are silently repeal'd, when the reason ceases for which they were enacted. As for the other part of the argument, that his thoughts will lose of their original beauty, by the innovation of words; in the first place, not only their beauty, but their being is lost, where they are no longer understood, which is the present case. I grant that something must be lost in all transfusion, that is, in all translations; but the sense will remain, which would otherwise be lost, or at least be maim'd, when it is scarce intelligible; and that but to a few. How few are there who can read Chaucer so as to understand him perfectly! And if imperfectly, then with less profit and no pleasure. 'Tis not for the use of some old Saxon friends that I have taken these pains with him: let them neglect my version, because they have no need of it. I made it for their sakes who understand sense and poetry as well as they, when that poetry and sense is put into words which they understand. I will go farther, and dare to add, that what beauties I lose in some places, I give to others which had them not originally; but in this I may be partial to myself; let the reader judge, and I submit to his decision. Yet I think I have just occasion to complain of them, who, because they understand Chaucer, would deprive the greater part of their countrymen of the same advantage, and hoard him up, as misers do their grandam gold, only to look on it themselves and hinder others from making use of it. In sum, I seriously protest that no man ever had, or can have, a greater veneration for Chaucer, than myself. I have translated some part of his works, only that I might perpetuate his memory, or at least refresh it, amongst my countrymen. If I have alter'd him anywhere for the better, I must at the same time acknowledge that I could have done nothing without him: *facile est inventis addere*, [31] is no great commendation; and I am not so vain to think I have deserv'd a greater. I will conclude what I have to say of him singly, with this one remark: a lady of my acquaintance, who keeps a kind of correspondence with some authors of the fair sex in France, has been inform'd by them, that Mademoiselle de Scudéry, who is as old as Sibyl, and inspir'd like her by the same God of Poetry, is at this time translating Chaucer into modern French. From which I gather that he has been formerly translated into the old Provençal (for how she should come to understand old English I know not). But the matter of fact being true, it makes me think that there is something in

it like fatality; that, after certain periods of time, the fame and memory of great wits should be renewed, as Chaucer is both in France and England. If this be wholly chance, 't is extraordinary, and I dare not call it more, for fear of being tax'd with superstition.

Boccace comes last to be consider'd, who living in the same age with Chaucer, had the same genius, and follow'd the same studies: both writ novels, and each of them cultivated his mother tongue. But the greatest resemblance of our two modern authors being in their familiar style, and pleasing way of relating comical adventures, I may pass it over, because I have translated nothing from Boccace of that nature. In the serious part of poetry, the advantage is wholly on Chaucer's side; for tho' the Englishman has borrow'd many tales from the Italian, yet it appears that those of Boccace were not generally of his own making, but taken from authors of former ages, and by him only model'd; so that what there was of invention in either of them may be judg'd equal. But Chaucer has refin'd on Boccace, and has mended the stones which he has borrowed, in his way of telling; tho' prose allows more liberty of thought, and the expression is more easy when unconfin'd by numbers. Our countryman carries weight, and yet wins the race at disadvantage. I desire not the reader should take my word, and therefore I will set two of their discourses on the same subject, in the same light, for every man to judge betwixt them. I translated Chaucer first, and, amongst the rest, pitch'd on *The Wife of Bath's Tale*; not daring, as I have said, to adventure on her prologue, because 't is too licentious: there Chaucer introduces an old woman of mean parentage, whom a youthful knight of noble blood was forc'd to marry, and consequently loath'd her; the crone being in bed with him on the wedding night, and finding his aversion, endeavors to win his affection by reason, and speaks a good word for herself (as who could blame her?) in hope to mollify the sullen bridegroom. She takes her topics from the benefits of poverty, the advantages of old age and ugliness, the vanity of youth, and the silly pride of ancestry and titles without inherent virtue, which is the true nobility. When I had clos'd Chaucer, I returned to Ovid, and translated some more of his fables; and by this time had so far forgotten *The Wife of Bath's Tale*, that, when I took up Boccace, unawares I fell on the same argument of preferring virtue to nobility of blood, and titles, in the story of Sigismonda; which I had certainly avoided for the

resemblance of the two discourses, if my memory had not fail'd me. Let the reader weigh them both; and if he thinks me partial to Chaucer, 't is in him to right Boccace.

I prefer in our countryman, far above all his other stories, the noble poem of *Palamon and Arcite*, which is of the epic kind, and perhaps not much inferior to the *Iliad* or the *Aeneis*: the story is more pleasing than either of them, the manners as perfect, the diction as poetical, the learning as deep and various, and the disposition full as artful; only it includes a greater length of time, as taking up seven years at least, but Aristotle has left undecided the duration of the action; which yet is easily reduc'd into the compass of a year, by a narration of what preceded the return of Palamon to Athens. I had thought for the honor of our nation, and more particularly for his, whose laurel, tho' unworthy, I have worn after him, that this story was of English growth, and Chaucer's own; but I was undeceiv'd by Boccace; for, casually looking on the end of his seventh *Giornata*, I found Dionco (under which name he shadows himself) and Fiametta (who represents his mistress, the natural daughter of Robert, King of Naples), of whom these words are spoken: *Dionco e Fiametta gran pezza cantarono insieme d'Arcita, e di Palamone*: [32] by which it appears that this story was written before the time of Boccace; but, the name of its author being wholly lost, Chaucer is now become an original; and I question not but the poem has receiv'd many beauties by passing thro' his noble hands. Besides this tale, there is another of his own invention, after the manner of the Provençals, call'd *The Flower and the Leaf*, [33] with which I was so particularly pleas'd, both for the invention and the moral, that I cannot hinder myself from recommending it to the reader.

As a corollary to this preface, in which I have done justice to others, I owe somewhat to myself: not that I think it worth my time to enter the lists with one M——, [34] or one B——, [35] but barely to take notice, that such men there are who have written scurrilously against me, without any provocation. M——, who is in orders, pretends amongst the rest this quarrel to me, that I have fallen foul on priesthood: if I have, I am only to ask pardon of good priests, and am afraid his part of the reparation will come to little. Let him to satisfied that he shall not be able to force himself upon me for an adversary. I

contemn him too much to enter into competition with him. His own translations of Virgil have answer'd his criticisms on mine. If (as they say he has declar'd in print) he prefers the version of Ogleby to mine, the world has made him the same compliment: for 't is agreed on all hands, that he writes even below Ogleby: that, you will say, is not easily to be done; but what cannot M—— bring about? I am satisfied, however, that while he and I live together, I shall not be thought the worst poet of the age. It looks as if I had desir'd him underhand to write so ill against me; but upon my honest word I have not brib'd him to do me this service, and am wholly guiltless of his pamphlet. 'T is true, I should be glad if I could persuade him to continue his good offices, and write such another critique on anything of mine for I find by experience he has a great stroke with the reader, when he condemns any of my poems, to make the world have a better opinion of them. He has taken some pains with my poetry, but nobody will be persuaded to take the same with his. If I had taken to the Church, (as he affirms, but which was never in my thoughts,) I should have had more sense, if not more grace, than to have turn'd myself out of my benefice by writing libels on my parishioners. But his account of my manners and my principles are of a piece with his cavils and his poetry; and so I have done with him for ever.

As for the City Bard, or Knight Physician, I hear his quarrel to me is that I was the author of *Absalom and Achitophel*, which, he thinks, is a little hard on his fanatic patrons in London.

But I will deal the more civilly with his two poems, because nothing ill is to be spoken of the dead; and therefore peace be to the *manes* of his *Arthurs*. I will only say that it was not for this noble knight that I drew the plan of an epic poem on King Arthur, in my preface to the translation of Juvenal. The guardian angels of kingdoms were machines too ponderous for him to manage; and therefore he rejected them, as Dares did the whirlbats of Eryx, when they were thrown before him by Entellus. Yet from that preface he plainly took his hint: for he began immediately upon the story, tho' he had the baseness not to acknowledge his benefactor but, instead of it, to traduce me in a libel.

I shall say the less of Mr. Collier, because in many things he has tax'd me

justly; and I have pleaded guilty to all thoughts and expressions of mine which can be truly argued of obscenity, profaneness, of immorality; and retract them. If he be my enemy, let him triumph; if he be my friend, as I have given him no personal occasion to be otherwise, he will be glad of my repentance. It becomes me not to draw my pen in the defense of a bad cause, when I have so often drawn it for a good one. Yet it were not difficult to prove that in many places he has perverted my meaning by his glosses, and interpreted my words into blasphemy and bawdry, of which they were not guilty. Besides that, he is too much given to horseplay in his raillery, and comes to battle like a dictator from the plow. I will not say: "The zeal of God's house has eaten him up;" but I am sure it has devoured some part of his good manners and civility. It might also be doubted whether it were altogether zeal which prompted him to this rough manner of proceeding: perhaps it became not one of his function to rake into the rubbish of ancient and modern plays; a divine might have employ'd his pains to better purpose than in the nastiness of Plautus and Aristophanes; whose examples, as they excuse not me, so it might be possibly supposed that he read them not without some pleasure. They who have written commentaries on those poets, or on Horace, Juvenal, and Martial, have explain'd some vices which, without their interpretation, had been unknown to modern times. Neither has he judg'd impartially betwixt the former age and us.

There is more bawdry in one play of Fletcher's, call'd *The Custom of the Country*, than in all ours together. Yet this has been often acted on the stage in my remembrance. Are the times so much more reform'd now than they were five and twenty years ago? If they are, I congratulate the amendment of our morals. But I am not to prejudice the cause of my fellow poets, tho' I abandon my own defense: they have some of them answer'd for themselves, and neither they nor I can think Mr. Collier so formidable an enemy that we should shun him. He has lost ground at the latter end of the day, by pursuing his point too far, like the Prince of Condé at the battle of Seneffe: from immoral plays to no plays, *ab abusu ad usum, non valet consequentia*[36]. But being a party, I am not to erect myself into a judge. As for the rest of those who have written against me, they are such scoundrels that they deserve not the least notice to be taken of them, B—— and M—— are only distinguish'd from the crowd by being remember'd to their infamy:

—Demetri, teque Tigelli[37]
Discipulorum inter jubeo plorare cathedras.

[Footnote A: John Dryden (1631-1700), the great dramatic and satirical poet of the later seventeenth century, whose translation of Virgil's "Æneid" appears in another volume of the Harvard Classics, deserves hardly less distinction as a prose writer than as a poet. The present essay, prefixed to a volume of narrative poems, is largely concerned with Chaucer, and in its genial and penetrating criticism, expressed with characteristic clearness and vigor, can be seen the ground for naming Dryden the first of English literary critics, and the founder of modern prose style.]

[Footnote 1: Scott suggests that the allusion is to the Duke of Buckingham, who was often satirized for the slow progress of his great mansion at Chefdon.]

[Footnote 2: Boccaccio did not invent this stanza, which had been used in both French and Italian before his day, but he did constitute it the Italian form for heroic verse.]

[Footnote 3: Rymer misled Dryden. There is no trace of Provençal influence on Chaucer.]

[Footnote 4: The foundation layer of color in a painting.]

[Footnote 5: "Verses without content, melodious trifles."—*Ars Poet.* 322.]

[Footnote 6: Jeremy Collier, in his *Short View of the Immortality and Profaneness of the Stage*, 1698.]

[Footnote 7: "Energetic, irascible, unyielding, vehement."—Horace, *Ars Poet.* 121.]

[Footnote 8: "Whithersoever the fates drag us to and fro, let us follow."—Virgil, *Æneid*, v. 709.]

[Footnote 9: The statements that follow as to Chaucer's sources are mostly not in accord with the results of modern scholarship.]

[Footnote 10: The plot of neither of these poems was original with Chaucer.]

[Footnote 11: "Plenty has made me poor."—*Meta*.iii, 466.]

[Footnote 12: By Ben Jonson.]

[Footnote 13: Cowley]

[Footnote 14: 'Too much a poet'—Martial iii 44 (not Catullus)]

[Footnote 15: Suited to the ears of that time]

[Footnote 16: Speght, whom modern scholarship has shown to be right in this matter.]

[Footnote 17: What follows on Chaucer's life is full of errors.]

[Footnote 18: Wondered at]

[Footnote 19: A spurious "Plowman's Tale" was included in the older editions of Chaucer.]

[Footnote 20: A law term for slander of a man of high rank, involving more severe punishment than ordinary slander.]

[Footnote 21: Henry II. and Thomas à Becket.]

[Footnote 22: Dr. James Drake wrote a reply to Jeremy Collier's *Short View*.]

[Footnote 23: "He did the first injury"]

[Footnote 24: A Neapolitan physician who wrote on physiognomy.]

[Footnote 25: "I wish all this unsaid."]

[Footnote 26: Reckon.]

[Footnote 27: Their.]

[Footnote 28: Must.]

[Footnote 29: The corrupt state of the text of this passage is enough to explain why Dryden found Chaucer rough.]

[Footnote 30: "Many words which have now fallen out of use shall be born again; and others which are now in honor shall fall, if custom wills it, in the force of which lie the judgement and law and rules of speech."—Horace*Ars Poet.* 70-72.]

[Footnote 31: "It is easy to add to what is already invented."]

[Footnote 32: Dionco and Fiametta sang together a long time of Arcite and Palamon.]

[Footnote 33: Not by Chaucer.]

[Footnote 34: Rev. Luke Milbourne, who had attacked Dryden's Virgil.]

[Footnote 35: Sir Richard Blackmore, who had censured Dryden for the indecency of his writings.]

[Footnote 36: "The argument from abuse to use is not valid."]

[Footnote 37: "You, Demetrius and Tigellius, I bid lament among the chairs of your scholars." Blackmore had once been a schoolmaster.—Noyes.]

PREFACE TO JOSEPH ANDREWS

BY HENRY FIELDING (1742)[A]

THE COMIC EPIC IN PROSE

As it is possible the mere English reader may have a different idea of romance with the author of these little volumes; and may consequently expect a kind of entertainment, not to be found, nor which was even intended, in the following pages; it may not be improper to premise a few words concerning this kind of writing, which I do not remember to have seen hitherto attempted in our language.

The EPIC, as well as the DRAMA, is divided into tragedy and comedy. HOMER, who was the father of this species of poetry, gave us the pattern of both these, tho' that of the latter kind is entirely lost; which Aristotle tells us, bore the same relation to comedy which his Iliad bears to tragedy. And perhaps, that we have no more instances of it among the writers of antiquity, is owing to the loss of this great pattern, which, had it survived, would have found its imitators equally with the other poems of this great original.

And farther, as this poetry may be tragic or comic, I will not scruple to say it may be likewise either in verse or prose: for tho' it wants one particular, which the critic enumerates in the constituent parts of an epic poem, namely, metre; yet, when any kind of writing contains all its other parts, such as fable, action, characters, sentiments, and diction, and is deficient in metre only, it seems, I think, reasonable to refer it to the epic; at least, as no critic hath thought proper to range it under any other head, nor to assign it a particular name to itself.

Thus the Telemachus of the archbishop of Cambray appears to me of the epic kind, as well as the Odyssey of Homer, indeed, it is much fairer and more reasonable to give it a name common with that species from which it differs only in a single instance, than to confound it with those which it resembles in no other. Such are those voluminous works, commonly called Romances, namely Clelia, Cleopatra, Astræa, Cassandra, the Grand Cyrus, and innumerable others which contain, as I apprehend, very little instruction or entertainment.

Now, a comic romance is a comic epic-poem in prose; differing from comedy, as the serious epic from tragedy: its action being more extended and comprehensive; containing a much larger circle of incidents, and introducing a greater variety of characters. It differs from the serious romance in its fable and action, in this: that as in the one these are grave and solemn, so in the other they are light and ridiculous; it differs in its characters, by introducing persons of inferiour rank, and consequently of inferiour manners, whereas the grave romance sets the highest before us; lastly in its sentiments and diction; by preserving the ludicrous instead of the sublime. In the diction I think, burlesque itself may be sometimes admitted; of which many instances will occur in this work, as in the description of the battles, and some other places not necessary to be pointed out to the classical reader; for whose entertainment those parodies or burlesque imitations are chiefly calculated.

But tho' we have sometimes admitted this in our diction, we have carefully excluded it from our sentiments and characters; for there it is never properly introduced, unless in writings of the burlesque kind, which this is not intended to be. Indeed, no two species of writing can differ more widely than the comic and the burlesque: for as the latter is ever the exhibition of what is monstrous and unnatural, and where our delight, if we examine it, arises from the surprising absurdity, as in appropriating the manners of the highest to the lowest, orè *converso*; so in the former, we should ever confine ourselves strictly to nature, from the just imitation of which, will flow all the pleasure we can this way convey to a sensible reader. And perhaps, there is one reason, why a comic writer should of all others be the least excused for deviating from nature, since it may not be always so easy for a serious poet to meet with the great and the admirable; but life everywhere furnishes an

accurate observer with the ridiculous.

I have hinted this little, concerning burlesque; because I have often heard that name given to performances, which have been truly of the comic kind, from the author's having sometimes admitted it in his diction only; which as it is the dress of poetry, doth like the dress of men establish characters, (the one of the whole poem, and the other of the whole man), in vulgar opinion, beyond any of their greater excellences: but surely, a certain drollery in style, where characters and sentiments are perfectly natural, no more constitutes the burlesque, than an empty pomp and dignity of words, where everything else is mean and low, can entitle any performance to the appellation of the true sublime.

And I apprehend, my Lord Shaftesbury's opinion of mere burlesque agrees with mine, when he asserts, "There is no such thing to be found in the writings of the ancients." But perhaps I have less abhorrence than he professes for it: and that not because I have had some little success on the stage this way; but rather as it contributes more to exquisite mirth and laughter than any other; and these are probably more wholesome physic for the mind, and conduce better to purge away spleen, melancholy, and ill affections, than is generally imagined. Nay, I will appeal to common observation, whether the same companies are not found more full of good-humour and benevolence, after they have been sweetened for two or three hours with entertainments of this kind, than soured by a tragedy or a grave lecture.

But to illustrate all this by another science, in which, perhaps, we shall see the distinction more clearly and plainly: let us examine the works of a comic history-painter, with those performances which the Italians call *Caricatura*, where we shall find the greatest excellence of the former to consist in the exactest copy of nature, insomuch, that a judicious eye instantly rejects anything *outré*, any liberty which the painter hath taken with the features of that *alma mater*. Whereas in the *Caricatura* we allow all licence. Its aim is to exhibit monsters, not men, and all distortions and exaggerations whatever are within its proper province.

Now what *Caricatura* is in painting Burlesque is in writing, and in the same

manner the comic writer and painter correlate to each other. And here I shall observe, that as in the former, the painter seems to have the advantage, so it is in the latter infinitely on the side of the writer, for the Monstrous is much easier to paint than describe, and the Ridiculous to describe than paint.

And tho' perhaps this latter species doth not in either science so strongly affect and agitate the muscles as the other, yet it will be owned I believe, that a more rational and useful pleasure arises to us from it. He who should call the ingenious Hogarth a burlesque painter, would, in my opinion, do him very little honour: for sure it is much easier, much less the subject of admiration, to paint a man with a nose, or any other feature of a preposterous size, or to expose him in some absurd or monstrous attitude, than to express the affections of men on canvas. It hath been thought a vast commendation of a painter to say his figures *seem to breathe*, but surely it is a much greater and nobler applause, *that they appear to think*.

But to return The Ridiculous only, as I have before said, falls within my province in the present work. Nor will some explanation of this word be thought impertinent by the reader, if he considers how wonderfully it hath been mistaken, even by writers who have profess'd it; for to what but such a mistake, can we attribute the many attempts to ridicule the blackest villainies, and what is yet worse the most dreadful calamities? What could exceed the absurdity of an author, who should write the comedy of Nero, with the merry incident of ripping up his mother's belly, or what would give a greater shock to humanity than an attempt to expose the miseries of poverty and distress to ridicule? And yet, the reader will not want much learning to suggest such instances to himself.

Besides, it may seem remarkable, that Aristotle, who is so fond and free of definitions, hath not thought proper to define the Ridiculous. Indeed, where he tells us it is proper to comedy, he hath remarked that villainy is not its object: but that he hath not, as I remember, positively asserted what is. Nor doth the Abbé Bellegarde, who hath written a treatise on this subject, tho' he shows us many species of it, once trace it to its fountain.

The only source of the true Ridiculous (as it appears to me) is affectation. But

tho' it arises from one spring only, when we consider the infinite streams into which this one branches, we shall presently cease to admire at the copious field it affords to an observer. Now affectation proceeds from one of these two causes; vanity, or hypocrisy: for as vanity puts us on affecting false characters, in order to purchase applause; so hypocrisy sets us on an endeavour to avoid censure by concealing our vices under an appearance of their opposite virtues. And tho' these two causes are often confounded, (for they require some distinguishing;) yet, as they proceed from very different motives, so they are as clearly distinct in their operations: for indeed, the affectation which arises from vanity is nearer to truth than the other; as it hath not that violent repugnancy of nature to struggle with, which that of the hypocrite hath. It may be likewise noted, that affectation doth not imply an absolute negation of those qualities which are affected: and therefore, tho', when it proceeds from hypocrisy, it be nearly allied to deceit; yet when it comes from vanity only, it partakes of the nature of ostentation: for instance, the affectation of liberality in a vain man, differs visibly from the same affectation in the avaricious; for tho' the vain man is not what he would appear, or hath not the virtue he affects, to the degree he would be thought to have it; yet it sits less awkwardly on him than on the avaricious man, who is the very reverse of what he would seem to be.

From the discovery of this affectation arises the Ridiculous—which always strikes the reader with surprize and pleasure; and that in a higher and stronger degree when the affectation arises from hypocrisy, than when from vanity: for to discover any one to be the exact reverse of what he affects, is more surprizing, and consequently more ridiculous, than to find him a little deficient in the quality he desires the reputation of. I might observe that our Ben Jonson, who of all men understood the Ridiculous the best, hath chiefly used the hypocritical affectation.

Now from affectation only, the misfortunes and calamities of life, or the imperfections of nature, may become the objects of ridicule. Surely he hath a very ill-framed mind, who can look on ugliness, infirmity, or poverty, as ridiculous in themselves: nor do I believe any man living who meets a dirty fellow riding through the streets in a cart, is struck with an idea of the Ridiculous from it; but if he should see the same figure descend from his

coach and six, or bolt from his chair with his hat under his arm, he would then begin to laugh, and with justice. In the same manner, were we to enter a poor house and behold a wretched family shivering with cold and languishing with hunger, it would not incline us to laughter, (at least we must have very diabolical natures, if it would): but should we discover there a grate, instead of coals, adorned with flowers, empty plate or china dishes on the side-board, or any other affectation of riches and finery either on their persons or in their furniture: we might then indeed be excused, for ridiculing so fantastical an appearance. Much less are natural imperfections the object of derision: but when ugliness aims at the applause of beauty, or lameness endeavours to display agility; it is then that these unfortunate circumstances, which at first moved our compassion, tend only to raise our mirth.

The poet carries this very far;

None are for being what they are in fault,
But for not being what they would be thought.

Where if the metre would suffer the word Ridiculous to close the first line, the thought would be rather more proper. Great vices are the proper objects of our detestation, smaller faults of our pity: but affectation appears to me the only true source of the Ridiculous.

But perhaps it may be objected to me, that I have against my own rules introduced vices, and of a very black kind into this work. To this I shall answer: First, that it is very difficult to pursue a series of human actions and keep clear from them. Secondly, that the vices to be found here, are rather the accidental consequences of some human frailty, or foible, than causes habitually existing in the mind. Thirdly, that they are never set forth as the objects of ridicule, but detestation. Fourthly, that they are never the principal figure at that time on the scene; lastly, they never produce the intended evil.

[Footnote A: Henry Fielding, dramatist, novelist, and judge, was born near Glastonbury, Somersetshire, April 22, 1707, and died at Lisbon, October 8, 1754. Though seldom spoken of as an essayist, Fielding scattered through his novels a large number of detached or detachable discussions which are

essentially essays, of which the preface to "Joseph Andrews" on the "Comic Epic in Prose," is a favorable specimen. The novel which it introduces was begun as a parody on Richardson's "Pamela," and the preface gives Fielding's conception of this form of fiction.]

PREFACE TO THE ENGLISH DICTIONARY

BY SAMUEL JOHNSON (1755)[A]

It is the fate of those who toil at the lower employments of life, to be rather driven by the fear of evil, than attracted by the prospect of good; to be exposed to censure, without hope of praise; to be disgraced by miscarriage, or punished for neglect, where success would have been without applause; and diligence without reward.

Among these unhappy mortals is the writer of dictionaries; whom mankind have considered, not as the pupil, but the slave of science, the pioneer of literature, doomed only to remove rubbish and clear obstructions from the paths through which Learning and Genius press forward to conquest and glory, without bestowing a smile on the humble drudge that facilitates their progress. Every other author may aspire to praise; the lexicographer can only hope to escape reproach, and even this negative recompense has been yet granted to very few.

I have, notwithstanding this discouragement, attempted a Dictionary of the English Language, which, while it was employed in the cultivation of every species of literature, has itself been hitherto neglected; suffered to spread, under the direction of chance, into wild exuberance; resigned to the tyranny of time and fashion: and exposed to the corruptions of ignorance, and caprices of innovation.

When I took the first survey of my undertaking, I found our speech copious without order, and energetic without rule: wherever I turned my view, there was perplexity to be disentangled and confusion to be regulated; choice was to be made out of boundless variety, without any established principle of

selection; adulterations were to be detected, without a settled test of purity; and modes of expression to be rejected or received, without the suffrages of any writers of classical reputation or acknowledged authority.

Having therefore no assistance but from general grammar, I applied myself to the perusal of our writers; and noting whatever might be of use to ascertain or illustrate any word or phrase, accumulated in time the materials of a dictionary, which, by degrees, I reduced to method, establishing to myself, in the progress of the work, such as experience and analogy suggested to me; experience, which practice and observation were continually increasing; and analogy, which, though in some words obscure, was evident in others.

In adjusting the ORTHOGRAPHY, which has been to this time unsettled and fortuitous, I found it necessary to distinguish those irregularities that are inherent in our tongue, and perhaps coeval with it, from others which the ignorance or negligence of later writers has produced. Every language has its anomalies, which though inconvenient, and in themselves once unnecessary, must be tolerated among the imperfections of human things, and which require only to be registered, that they may not be increased; and ascertained, that they may not be confounded: but every language has likewise its improprieties and absurdities, which it is the duty of the lexicographer to correct or proscribe.

As language was at its beginning merely oral, all words of necessary or common use were spoken before they were written; and while they were unfixed by any visible signs, must have been spoken with great diversity, as we now observe those who cannot read to catch sounds imperfectly, and utter them negligently. When this wild and barbarous jargon was first reduced to an alphabet, every penman endeavored to express, as he could, the sounds which he was accustomed to pronounce or to receive, and vitiated in writing such words as were already vitiated in speech. The powers of the letters, when they were applied to a new language, must have been vague and unsettled, and therefore different hands would exhibit the same sound by different combinations.

From this uncertain pronunciation arise in a great part the various dialects of

the same country, which will always be observed to grow fewer, and less different, as books are multiplied; and from this arbitrary representation of sounds by letters proceeds that diversity of spelling observable in the Saxon remains, and I suppose in the first books of every nation, which perplexes or destroys analogy, and produces anomalous formations, which, being once incorporated can never be afterward dismissed or reformed.

Of this kind are the derivatives *length* from *long*, *strength* from *strong*, *darling* from *dear*, *breadth* from *dry*, *drought*, and from *high*, *height*, which Milton, in zeal for analogy, writes *highth*. 'Quid te exempta juvat spinis de pluribus una?' To change all would be too much, and to change one is nothing.

This uncertainty is most frequent in the vowels, which are so capriciously pronounced, and so differently modified, by accident or affectation, not only in every province, but in every mouth, that to them, as is well known to etymologists, little regard is to be shown in the deduction of one language from another.

Such defects are not errors in orthography, but spots of barbarity impressed so deep in the English language, that criticism can never wash them away: these, therefore, must be permitted to remain untouched; but many words have likewise been altered by accident, or depraved by ignorance, as the pronunciation of the vulgar has been weakly followed; and some still continue to be variously written, as authors differ in their care or skill: of these it was proper to inquire the true orthography, which I have always considered as depending on their derivation, and have therefore referred them to their original languages; thus I write *enchant*, *enchantment*, *enchanter*, after the French, and *incantation* after the Latin; thus *entire* is chosen rather than *intire*, because it passed to us not from the Latin *integer*, but from the French *entier*.

Of many words it is difficult to say whether they were immediately received from the Latin or the French, since at the time when we had dominions in France, we had Latin service in our churches. It is, however, my opinion that the French generally supplied us; for we have few Latin words, among the

terms of domestic use, which are not French; but many French, which are very remote from Latin.

Even in words of which the derivation is apparent, I have been often obliged to sacrifice uniformity to custom; thus I write, in compliance with a numberless majority, *convey* and *inveigh*, *deceit* and *receipt*, *fancy* and *phantom*; sometimes the derivative varies from the primitive, as *explain* and *explanation*, *repeat* and *repetition*.

Some combinations of letters having the same power, are used indifferently without any discoverable reason of choice, as in *choak*, *choke*; *soap*, *sope*; *fewel*, *fuel*, and many others; which I have sometimes inserted twice, that those who search for them under either form, may not search in vain.

In examining the orthography of any doubtful word, the mode of spelling by which it is inserted in the series of the dictionary, is to be considered as that to which I give, perhaps not often rashly, the preference. I have left, in the examples, to every author his own practice unmolested, that the reader may balance suffrages, and judge between us: but this question is not always to be determined by reputed or by real learning; some men, intent upon greater things, have thought little on sounds and derivations; some, knowing in the ancient tongues, have neglected those in which our words are commonly to be sought. Thus Hammond writes *fecibleness* for *feasibleness*, because I suppose he imagined it derived immediately from the Latin; and some words, such as *dependant*, *dependent*; *dependance*, *dependence*, vary their final syllable, as one or other language is present to the writer.

In this part of the work, where caprice has long wanted without control, and vanity sought praise by petty reformation, I have endeavored to proceed with a scholar's reverence for antiquity, and a grammarian's regard to the genius of our tongue. I have attempted few alterations, and among those few, perhaps the greater part is from the modern to the ancient practice; and I hope I may be allowed to recommend to those, whose thoughts have been perhaps employed too anxiously on verbal singularities, not to disturb, upon narrow views, or for minute propriety, the orthography of their fathers. It has been asserted, that for the law to be *known*, is of more importance than to be *right*.

'Change,' says Hooker, 'is not made without inconvenience, even from worse to better.' There is in constancy and stability a general and lasting advantage, which will always overbalance the slow improvements of gradual correction. Much less ought our written language to comply with the corruptions of oral utterance, or copy that which every variation of time or place makes different from itself, and imitate those changes, which will again be changed, while imitation is employed in observing them.

This recommendation of steadiness and uniformity does not proceed from an opinion that particular combinations of letters have much influence on human happiness; or that truth may not be successfully taught by modes of spelling fanciful and erroneous; I am not yet so lost in lexicography as to forget that 'words are the daughters of earth, and that things are the sons of heaven.' Language is only the instrument of science, and words are but the signs of ideas: I wish, however, that the instrument might be less apt to decay, and that signs might be permanent, like the things which they denote.

In settling the orthography, I have not wholly neglected the pronunciation, which I have directed, by printing an accent upon the acute or elevated syllable. It will sometimes be found that the accent is placed by the author quoted, on a different syllable from that marked in the alphabetical series; it is then to be understood, that custom has varied, or that the author has, in my opinion, pronounced wrong. Short directions are sometimes given where the sound of letters is irregular; and if they are sometimes omitted, defect in such minute observations will be more easily excused, than superfluity.

In the investigation, both of the orthography and signification of words, their ETYMOLOGY was necessarily to be considered, and they were therefore to be divided into primitives and derivatives. A primitive word is that which can be traced no further to any English root; thus *circumspect*, *circumvent*, *circumstance*, *delude*, *concave*, and *complicate*, though compounds in the Latin, are to us primitives. Derivatives, are all those that can be referred to any word in English of greater simplicity.

The derivatives I have referred to their primitives, with an accuracy sometimes needless; for who does not see that *remoteness* comes

from *remote*, *lovely* from *love*, *concavity* from *concave*,
and *demonstrative* from *demonstrate*? But this grammatical exuberance the
scheme of my work did not allow me to repress. It is of great importance, in
examining the general fabric of a language, to trace one word from another,
by noting the usual modes of derivation and inflection; and uniformity must
be preserved in systematical works; though sometimes at the expense of
particular propriety.

Among other derivatives I have been careful to insert and elucidate the
anomalous plurals of nouns and preterites of verbs, which in the Teutonic
dialects are very frequent, and, though familiar to those who have always
used them, interrupt and embarrass the learners of our language.

The two languages from which our primitives have been derived, are the
Roman and Teutonic: under the Roman, I comprehend the French and
provincial tongues; and under the Teutonic, range the Saxon, German, and all
their kindred dialects. Most of our polysyllables are Roman, and our words of
one syllable are very often Teutonic.

In assigning the Roman original, it has perhaps sometimes happened that I
have mentioned only the Latin, when the word was borrowed from the
French; and considering myself as employed only in the illustration of my
own language, I have not been very careful to observe whether the Latin
would be pure or barbarous, or the French elegant or obsolete.

For the Teutonic etymologies, I am commonly indebted to Junius and
Skinner, the only names which I have forborne to quote when I copied their
books; not that I might appropriate their labors or usurp their honors, but that
I might spare perpetual repetition by one general acknowledgment. Of these,
whom I ought not to mention but with the reverence due to instructors and
benefactors, Junius appears to have excelled in extent of learning, and
Skinner in rectitude of understanding. Junius was accurately skilled in all the
northern languages, Skinner probably examined the ancient and remoter
dialects only by occasional inspection into dictionaries; but the learning of
Junius is often of no other use than to show him a track by which he may
deviate from his purpose, to which Skinner always presses forward by the

shortest way. Skinner is often ignorant, but never ridiculous: Junius is always full of knowledge; but his variety distracts his judgment, and his learning is very frequently disgraced by his absurdities.

The votaries of the northern muses will not perhaps easily restrain their indignation, when they find the name of Junius thus degraded by a disadvantageous comparison; but whatever reverence is due to his diligence, or his attainments, it can be no criminal degree of censoriousness to charge that etymologist with want of judgment, who can seriously derive *dream* from *drama*, because 'life is a drama and a drama is a dream'; and who declares with a tone of defiance, that no man can fail to derive *moan* from [Greek: monos], *monos*, *single* or *solitary*, who considers that grief naturally loves to be alone.

Our knowledge of the northern literature is so scanty, that of words undoubtedly Teutonic, the original is not always to be found in an ancient language; and I have therefore inserted Dutch or German substitutes, which I consider not as radical, but parallel, not as the parents, but sisters of the English.

The words which are represented as thus related by descent or cognation, do not always agree in sense; for it is incident to words, as to their authors, to degenerate from their ancestors, and to change their manners when they change their country. It is sufficient, in etymological inquiries, if the senses of kindred words be found such as may easily pass into each other, or such as may both be referred to one general idea.

The etymology, so far as it is yet known, was easily found in the volumes, where it is particularly and professedly delivered, and, by proper attention to the rules of derivation, the orthography was soon adjusted. But to COLLECT THE WORDS of our language was a task of greater difficulty the deficiency of dictionaries was immediately apparent, and when they were exhausted, what was yet wanting must be sought by fortuitous and unguided excursions into books and gleaned as industry should find, or chance should offer it, in the boundless chaos of a living speech. My search, however, has been either skilful or lucky, for I have much augmented the vocabulary.

As my design was a dictionary, common or appellative, I have omitted all words which have relation to proper names, such as *Arian*, *Socinian*, *Calvinist*, *Benedictine*, *Mahometan*, but have retained those of a more general nature, as *Heathen*, *Pagan*.

Of the terms of art I have received such as could be found either in books of science or technical dictionaries, and have often inserted, from philosophical writers, words which are supported perhaps only by a single authority, and which, being not admitted into general use, stand yet as candidates or probationers, and must depend for their adoption on the suffrage of futurity. The words which our authors have introduced by their knowledge of foreign languages or ignorance of their own, by vanity or wantonness, by compliance with fashion or lust of innovation, I have registered as they occurred, though commonly only to censure them, and warn others against the folly of naturalizing useless foreigners to the injury of the natives.

I have not rejected any by design, merely because they were unnecessary or exuberant, but have received those which by different writers have been differently formed, as *viscid*, and *viscidit*, *viscous*, and *viscosity*.

Compounded or double words I have seldom noted, except when they obtain a signification different from that which the components have in then simple state.

Thus *highwayman*, *woodman*, and *horsecourser*, require an explanation, but of *thieflike*, or *coachdriver*, no notice was needed, because the primitives contain the meaning of the compounds.

Words arbitrarily formed by a constant and settled analogy, like diminutive adjectives *inish*, as *greenish*, *bluish*; adverbs *inly*, as *dully*, *openly*; substantives *inness*, as *vileness*, *faultiness*; were less diligently sought, and many sometimes have been omitted, when I had no authority that invited me to insert them; not that they are not genuine, and regular offsprings of English roots, but because their relation to the primitive being always the same, their signification cannot be mistaken.

The verbal nouns *ining*, such as the *keeping of the castle*, the *leading of*

the *army*, are always neglected, or placed only to illustrate the sense of the verb, except when they signify things as well as actions, and have therefore a plural number, as *dwelling, living*; or have an absolute and abstract signification, as *coloring, painting, learning*.

The participles are likewise omitted, unless, by signifying rather habit or quality than action, they take the nature of adjectives; as *a thinking man*, a man of prudence; *a pacing horse*, a horse that can pace: these I have ventured to call *participial adjectives*. But neither are these always inserted, because they are commonly to be understood without any danger of mistake, by consulting the verb.

Obsolete words are admitted when they are found in authors not obsolete, or when they have any force or beauty that may deserve revival.

As composition is one of the chief characteristics of a language, I have endeavored to make some reparation for the universal negligence of my predecessors, by inserting great numbers of compounded words, as may be found under *after, fore, new, night, fair*, and many more. These, numerous as they are, might be multiplied, but that use and curiosity are here satisfied, and the frame of our language and modes of our combination amply discovered.

Of some forms of composition, such as that by which *re* is prefixed to *note repetition*, and *unto* signify *contrariety or privation*, all the examples cannot be accumulated, because the use of these particles, if not wholly arbitrary, is so little limited, that they are hourly affixed to new words as occasion requires, or is imagined to require them.

There is another kind of composition more frequent in our language than perhaps in any other, from which arises to foreigners the greatest difficulty. We modify the signification of many verbs by a particle subjoined; as *to come off*, to escape by a fetch; *to fall on*, to attack; *fall off*, to apostatize; *to break off*, to stop abruptly; *to bear out*, to justify; *to fall in*, to comply; *to give over*, to cease; *to set off*, to embellish; *to set in*, to begin a continual tenor; *to set out*, to begin a course or journey; *to take off*, to copy; with innumerable expressions of the same kind, of which some appear wildly irregular, being so far distant

from the sense of the simple words, that no sagacity will be able to trace the steps by which they arrived at the present use. These I have noted with great care; and though I cannot flatter myself that the collection is complete, I believe I have so far assisted the students of our language that this kind of phraseology will be no longer insuperable; and the combinations of verbs and particles, by chance omitted, will be easily explained by comparison with those that may be found.

Many words yet stand supported only by the name of Bailey, Ainsworth, Philips, or the contracted *Dict.* for Dictionaries, subjoined; of these I am not always certain that they are read in any book but the works of lexicographers. Of such I have omitted many, because I had never read them; and many I have inserted, because they may perhaps exist, though they have escaped my notice: they are, however, to be yet considered as resting only upon the credit of former dictionaries. Others, which I considered as useful, or know to be proper, though I could not at present support them by authorities, I have suffered to stand upon my own attestation, claiming the same privilege with my predecessors, of being sometimes credited without proof.

The words, thus selected and disposed, are grammatically considered; they are referred to the different parts of speech; traced when they are irregularly inflected, through their various terminations; and illustrated by observations, not indeed of great or striking importance, separately considered, but necessary to the elucidation of our language, and hitherto neglected or forgotten by English grammarians.

That part of my work on which I expect malignity most frequently to fasten, is the EXPLANATION; in which I cannot hope to satisfy those, who are perhaps not inclined to be pleased, since I have not always been able to satisfy myself. To interpret a language by itself is very difficult; many words cannot be explained by synonymes, because the idea signified by them has not more than one appellation; nor by paraphrase, because simple ideas cannot be described. When the nature of things is unknown, or the notion unsettled and indefinite, and various in various minds, the words by which such notions are conveyed, or such things denoted, will be ambiguous and perplexed. And such is the fate of hapless lexicography, that not only darkness, but light

impedes and distresses it; things may be not only too little, but too much known, to be happily illustrated. To explain, requires the use of terms less abstruse than that which is to be explained, and such terms cannot always be found; for as nothing can be proved but by supposing something intuitively known, and evident without proof, so nothing can be defined but by the use of words too plain to admit a definition.

Other words there are, of which the sense is too subtle and evanescent to be fixed in a paraphrase; such are all those which are by the grammarians termed expletives, and, in dead languages, are suffered to pass for empty sounds, of no other use than to fill a verse, or to modulate a period, but which are easily perceived in living tongues to have power and emphasis, though it be sometimes such as no other form of expression can convey.

My labor has likewise been much increased by a class of verbs too frequent in the English language, of which the signification is so loose and general, the use so vague and indeterminate, and the senses detorted so widely from the first idea, that it is hard to trace them through the maze of variation, to catch them on the brink of utter inanity, to circumscribe them by any limitations, or interpret them by any words of distinct and settled meaning; such are *bear, break, come, cast, full, get, give, do, put, set, go, run, make, take, turn, throw*. If of these the whole power is not accurately delivered, it must be remembered, that while our language is yet living, and variable by the caprice of every one that speaks it, these words are hourly shifting their relations, and can no more be ascertained in a dictionary, than a grove, in the agitation of a storm, can be accurately delineated from its picture in the water.

The particles are among all nations applied with so great latitude, that they are not easily reducible under any regular scheme of explication: this difficulty is not less, nor perhaps greater, in English, than in other languages. I have labored them with diligence, I hope with success; such at least as can be expected in a task, which no man, however learned or sagacious, has yet been able to perform.

Some words there are which I cannot explain, because I do not understand them; these might have been omitted very often with little inconvenience, but

I would not so far indulge my vanity as to decline this confession: for when Tully owns himself ignorant whether *lessus*, in the twelve tables, means *a funeral song, or mourning garment*; and Aristotle doubts whether [Greek: *ourous*] in the *Iliad* signifies *amule, or muleteer*, I may surely without shame, leave some obscurities to happier industry, or future information.

The rigor of interpretative lexicography requires that *the explanation, and the word explained should be always reciprocal*; this I have always endeavoured, but could not always attain. Words are seldom exactly synonymous; a new term was not introduced, but because the former was thought inadequate: names, therefore, have often many ideas, but few ideas have many names. It was then necessary to use the proximate word, for the deficiency of single terms can very seldom be supplied by circumlocution; nor is the inconvenience great of such mutilated interpretations, because the sense may easily be collected entire from the examples.

In every word of extensive use, it was requisite to mark the progress of its meaning, and show by what gradations of intermediate sense it has passed from its primitive to its remote and accidental signification; so that every foregoing explanation should tend to that which follows, and the series be regularly concatenated from the first notion to the last.

This is specious, but not always practicable; kindred senses may be so interwoven, that the perplexity cannot be disentangled, nor any reason be assigned why one should be ranged before the other. When the radical idea branches out into parallel ramifications, how can a consecutive series be formed of senses in their nature collateral? The shades of meaning sometimes pass imperceptibly into each other, so that though on one side they apparently differ, yet it is impossible to mark the point of contact. Ideas of the same race, though not exactly alike, are sometimes so little different, that no words can express the dissimilitude, though the mind easily perceives it when they are exhibited together; and sometimes there is such a confusion of acceptations, that discernment is wearied and distinction puzzled, and perseverance herself hurries to an end, by crowding together what she cannot separate.

These complaints of difficulty will, by those that have never considered

words beyond their popular use, be thought only the jargon of a man willing to magnify his labors, and procure veneration to his studies by involution and obscurity. But every art is obscure to those that have not learned it; this uncertainty of terms, and commixture of ideas, is well known to those who have joined philosophy with grammar; and if I have not expressed them very clearly, it must be remembered that I am speaking of that which words are insufficient to explain.

The original sense of words is often driven out of use by their metaphorical acceptations, yet must be inserted for the sake of a regular origination. Thus I know not whether *ardoris* used for *material heat*, or whether *flagrant*, in English, ever signifies the same with *burning*; yet such are the primitive ideas of these words, which are therefore set first, though without examples, that the figurative senses may be commodiously deduced.

Such is the exuberance of signification which many words have obtained, that it was scarcely possible to collect all their senses; sometimes the meaning of derivatives must be sought in the mother term, and sometimes deficient explanations of the primitive may be supplied in the train of derivation. In any case of doubt or difficulty, it will be always proper to examine all the words of the same race; for some words are slightly passed over to avoid repetition, some admitted easier and clearer explanation than others, and all will be better understood, as they are considered in greater variety of structures and relations.

All the interpretations of words are not written with the same skill, or the same happiness: things equally easy in themselves, are not all equally easy to any single mind. Every writer of a long word commits errors, where there appears neither ambiguity to mislead, nor obscurity to confound him; and in a search like this, many felicities of expression will be casually overlooked, many convenient parallels will be forgotten, and many particulars will admit improvement from a mind utterly unequal to the whole performance.

But many seeming faults are to be imputed rather to the nature of the undertaking, than the negligence of the performer. Thus some explanations are unavoidably reciprocal or circular, as *hind*, *the female of the stag*; *stag*, *the*

male of the hind: sometimes easier words are changed into harder, *asburialintosepulture, or interment, drierintodesiccative, drynessintosiccityoraridity, fitintoparoxysm*; for the easiest word, whatever it be, can never be translated into one more easy. But easiness and difficulty are merely relative; and if the present prevalence of our language should invite foreigners to this Dictionary, many will be assisted by those words which now seem only to increase or produce obscurity. For this reason I have endeavoured frequently to join a Teutonic and Roman interpretation, as *tocheer, togladdenorexhilarate*, that every learner of English may be assisted by his own tongue.

The solution of all difficulties, and the supply of all defects must be sought in the examples, subjoined to the various senses of each word, and ranged according to the time of their authors.

When I first collected these authorities, I was desirous that every quotation should be useful to some other end than the illustration of a word; I therefore extracted from philosophers principles of science; from historians remarkable facts; from chymists complete processes; from divines striking exhortations; and from poets beautiful descriptions. Such is design, while it is yet at a distance from execution. When the time called upon me to range this accumulation of elegance and wisdom into an alphabetical series, I soon discovered that the bulk of my volumes would fright away the student, and was forced to depart from my scheme of including all that was pleasing or useful in English literature, and reduce my transcripts very often to clusters of words, in which scarcely any meaning is retained; thus to the weariness of copying, I was condemned to add the vexation of expunging. Some passages I have yet spared, which may relieve the labor of verbal searches, and intersperse with verdure and flowers the dusty deserts of barren philology.

The examples, thus mutilated, are no longer to be considered as conveying the sentiments or doctrine of their authors; the word for the sake of which they are inserted, with all its appendant clauses, has been carefully preserved; but it may sometimes happen, by hasty detruncation, that the general tendency of the sentence may be changed: the divine may desert his tenets, or the philosopher his system.

Some of the examples have been taken from writers who were never mentioned as masters of elegance, or models of style; but words must be sought where they are used; and in what pages, eminent for purity, can terms of manufacture or agriculture be found? Many quotations serve no other purpose than that of proving the bare existence of words, and are therefore selected with less scrupulousness than those which are to teach their structures and relations.

My purpose was to admit no testimony of living authors, that I might not be misled by partiality, and that none of my contemporaries might have reason to complain; nor have I departed from this resolution, but when some performance of uncommon excellence excited my veneration, when my memory supplied me, from late books, with an example that was wanting, or when my heart, in the tenderness of friendship, solicited admission for a favorite name.

So far have I been from any care to grace my pages with modern decorations, that I have studiously endeavored to collect examples and authorities from the writers before the Restoration, whose works I regard as the 'wells of English undefiled,' as the pure sources of genuine diction. Our language, for almost a century, has, by the concurrence of many causes, been gradually departing from its original Teutonic character and deviating towards a Gallic structure and phraseology, from which it ought to be our endeavor to recall it, by making our ancient volumes the groundwork of style, admitting among the additions of later times, only such as may supply real deficiencies, such as are readily adopted by the genius of our tongue, and incorporate easily with our native idioms.

But as every language has a time of rudeness antecedent to perfection, as well as of false refinement and declension, I have been cautious lest my zeal for antiquity might drive me into times too remote, and crowd my book with words now no longer understood. I have fixed Sidney's work for the boundary, beyond which I make few excursions. From the authors which rose in the time of Elizabeth, a speech might be formed adequate to all the purposes of use and elegance. If the language of theology were extracted from Hooker and the translation of the Bible, the terms of natural knowledge

from Bacon, the phrases of policy, war, and navigation from Raleigh, the dialect of poetry and fiction from Spenser and Sidney, and the diction of common life from Shakespeare, few ideas would be lost to mankind, for want of English words in which they might be expressed.

It is not sufficient that a word is found, unless it be so combined as that its meaning is apparently determined by the tract and tenor of the sentence, such passages I have therefore chosen, and when it happened that any author gave a definition of a term, or such an explanation as is equivalent to a definition, I have placed his authority as a supplement to my own, without regard to the chronological order that is otherwise observed.

Some words, indeed, stand unsupported by any authority, but they are commonly derivative nouns or adverbs, formed from their primitives by regular and constant analogy, or names of things seldom occurring in books, or words of which I have reason to doubt the existence.

There is more danger of censure from the multiplicity than paucity of examples, authorities will sometimes seem to have been accumulated without necessity or use, and perhaps some will be found, which might, without loss, have been omitted. But a work of this kind is not hastily to be charged with superfluities; those quotations, which to careless or unskillful perusers appear only to repeat the same sense, will often exhibit, to a more accurate examiner, diversities of signification, or, at least, afford different shades of the same meaning: one will show the word applied to persons, another to things; one will express an ill, another a good, and a third a neutral sense; one will prove the expression genuine from an ancient author; another will show it elegant from a modern: a doubtful authority is corroborated by another of more credit; an ambiguous sentence is ascertained by a passage clear and determinate: the word, how often soever repeated, appears with new associates and in different combinations, and every quotation contributes something to the stability or enlargement of the language.

When words are used equivocally I receive them in either sense; when they are metaphorical, I adopt them in their primitive acceptation.

I have sometimes, though rarely, yielded to the temptation of exhibiting a genealogy of sentiments, by showing how one author copied the thoughts and diction of another: such quotations are indeed little more than repetitions, which might justly be censured, did they not gratify the mind, by affording a kind of intellectual history.

The various syntactical structures occurring in the examples have been carefully noted; the license or negligence with which many words have been hitherto used, has made our style capricious and indeterminate; when the different combinations of the same word are exhibited together, the preference is readily given to propriety, and I have often endeavored to direct the choice.

Thus have I labored by settling the orthography, displaying the analogy, regulating the structures, and ascertaining the signification of English words, to perform all the parts of a faithful lexicographer: but I have not always executed my own scheme, or satisfied my own expectations. The work, whatever proofs of diligence and attention it may exhibit, is yet capable of many improvements; the orthography which I recommend is still controvertible, the etymology which I adopt is uncertain, and perhaps frequently erroneous; the explanations are sometimes too much contracted, and sometimes too much diffused, the significations are distinguished rather with subtlety than skill, and the attention is harassed with unnecessary minuteness.

The examples are too often injudiciously truncated, and perhaps sometimes—I hope very rarely—alleged in a mistaken sense; for in making this collection I trusted more to memory, than, in a state of disquiet and embarrassment, memory can contain, and purposed to supply at the review what was left incomplete in the first transcription.

Many terms appropriated to particular occupations, though necessary and significant, are undoubtedly omitted, and of the words most studiously considered and exemplified, many senses have escaped observation.

Yet these failures, however frequent, may admit extenuation and apology. To

have attempted much is always laudable, even when the enterprise is above the strength that undertakes it: to rest below his own aim is incident to every one whose fancy is active, and whose views are comprehensive; nor is any man satisfied with himself because he has done much, but because he can conceive little. When first I engaged in this work, I resolved to leave neither words nor things unexamined, and pleased myself with a prospect of the hours which I should revel away in feasts of literature, the obscure recesses of northern learning which I should enter and ransack, the treasures with which I expected every search into those neglected mines to reward my labor, and the triumph with which I should display my acquisitions to mankind. When I had thus inquired into the original of words, I resolved to show likewise my attention to things; to pierce deep into every science, to inquire the nature of every substance of which I inserted the name, to limit every idea by a definition strictly logical, and exhibit every production of art or nature in an accurate description, that my book might be in place of all other dictionaries whether appellative or technical. But these were the dreams of a poet doomed at last to wake a lexicographer. I soon found that it is too late to look for instruments, when the work calls for execution, and that whatever abilities I had brought to my task, with those I must finally perform it. To deliberate whenever I doubted, to inquire whenever I was ignorant, would have protracted the undertaking without end, and, perhaps, without much improvement; for I did not find by my first experiments, that what I had not of my own was easily to be obtained: I saw that one inquiry only gave occasion to another, that book referred to book, that to search was not always to find, and to find was not always to be informed; and that thus to pursue perfection, was, like the first inhabitants of Arcadia, to chase the sun, which, when they had reached the hill where he seemed to rest, was still beheld at the same distance from them.

I then contracted my design, determining to confide in myself, and no longer to solicit auxiliaries which produced more incumbrance than assistance; by this I obtained at least one advantage, that I set limits to my work, which would in time be ended, though not completed.

Despondency has never so far prevailed as to depress me to negligence; some faults will at last appear to be the effects of anxious diligence and persevering

activity. The nice and subtle ramifications of meaning were not easily avoided by a mind intent upon accuracy, and convinced of the necessity of disentangling combinations, and separating similitudes. Many of the distinctions which to common readers appear useless and idle, will be found real and important by men versed in the school philosophy, without which no dictionary can ever be accurately compiled, or skillfully examined.

Some senses, however, there are, which, though not the same, are yet so nearly allied, that they are often confounded. Most men think indistinctly, and therefore cannot speak with exactness; and consequently some examples might be indifferently put to either signification: this uncertainty is not to be imputed to me, who do not form, but register the language; who do not teach men how they should think, but relate how they have hitherto expressed their thoughts.

The imperfect sense of some examples I lamented, but could not remedy, and hope they will be compensated by innumerable passages selected with propriety, and preserved with exactness; some shining with sparks of imagination, and some replete with treasures of wisdom.

The orthography and etymology, though imperfect, are not imperfect for want of care, but because care will not always be successful, and recollection or information come too late for use.

That many terms of art and manufacture are omitted, must be frankly acknowledged; but for this defect I may boldly allege that it is unavoidable; I could not visit caverns to learn the miner's language, nor take a voyage to perfect my skill in the dialect of navigation, nor visit the warehouses of merchants, and shops of artificers, to gain the names of wares, tools, and operations, of which no mention is found in books; what favorable accident or easy inquiry brought within my reach, has not been neglected; but it had been a hopeless labor to glean up words, by courting living information, and contesting with the sullenness of one, and the roughness of another.

To furnish the Academicians *della Crusca* with words of this kind, a series of comedies called *La Fiera*, or *The Fair*, was professedly written by Buonaroti;

but I had no such assistant, and therefore was content to want what they must have wanted likewise, had they not luckily been so supplied.

Nor are all words which are not found in the vocabulary, to be lamented as omissions. Of the laborious and mercantile part of the people, the diction is in a great measure casual and mutable; many of their terms are formed for some temporary or local convenience, and though current at certain times and places, are in others utterly unknown. This fugitive cant, which is always in a state of increase or decay, cannot be regarded as any part of the durable materials of a language, and therefore must be suffered to perish with other things unworthy of preservation.

Care will sometimes betray to the appearance of negligence. He that is catching opportunities which seldom occur, will suffer those to pass by unregarded, which he expects hourly to return; he that is searching for rare and remote things, will neglect those that are obvious and familiar: thus many of the most common and cursory words have been inserted with little illustration, because in gathering the authorities, I forebore to copy those which I thought likely to occur whenever they were wanted. It is remarkable that, in reviewing my collection, I found the word *seaun* exemplified.

Thus it happens, that in things difficult there is danger from ignorance, and in things easy, from confidence; the mind, afraid of greatness, and disdainful of littleness, hastily withdraws herself from painful searches, and passes with scornful rapidity over tasks not adequate to her powers; sometimes too secure for caution, and again too anxious for vigorous effort; sometimes idle in a plain path, and sometimes distracted in labyrinths, and dissipated by different intentions.

A large work is difficult because it is large, even though all its parts might singly be performed with facility; where there are many things to be done, each must be allowed its share of time and labor, in the proportion only which it bears to the whole; nor can it be expected, that the stones which form the dome of a temple, should be squared and polished like the diamond of a ring.

Of the event of this work, for which; having labored it with so much application, I cannot but have some degree of parental fondness, it is natural to form conjectures. Those who have been persuaded to think well of my design, will require that it should fix our language, and put a stop to those alterations which time and chance have hitherto been suffered to make in it without opposition. With this consequence I will confess that I flattered myself for a while; but now begin to fear that I have indulged expectation which neither reason nor experience can justify. When we see men grow old and die at a certain time one after another, from century to century, we laugh at the elixir that promises to prolong life to a thousand years; and with equal justice may the lexicographer be derided, who being able to produce no example of a nation that has preserved their words and phrases from mutability, shall imagine that his dictionary can embalm his language, and secure it from corruption and decay, that it is in his power to change sublunary nature, and clear the world at once from folly, vanity, and affectation.

With this hope, however, academies have been instituted, to guard the avenues of their languages, to retain fugitives, and repulse intruders; but their vigilance and activity have hitherto been vain; sounds are too volatile and subtile for legal restraints; to enchain syllables, and to lash the wind, are equally the undertakings of pride, unwilling to measure its desires by its strength. The French language has visibly changed under the inspection of the Academy; the style of Amelot's translation of Father Paul is observed by Le Courayer to be *un peu passé*; and no Italian will maintain that the diction of any modern writer is not perceptibly different from that of Boccace, Machiavel, or Caro.

Total and sudden transformations of a language seldom happen; conquests and migrations are now very rare: but there are other causes of change, which, though slow in their operation, and invisible in their progress, are perhaps as much superior to human resistance, as the revolutions of the sky, or intumescence of the tide. Commerce, however necessary, however lucrative, as it depraves the manners, corrupts the language; they that have frequent intercourse with strangers, to whom they endeavor to accommodate themselves, must in time learn a mingled dialect, like the jargon which serves

the traffickers on the Mediterranean and Indian coasts. This will not always be confined to the exchange, the warehouse, or the port, but will be communicated by degrees to other ranks of the people, and be at last incorporated with the current speech.

There are likewise internal causes equally forcible. The language most likely to continue long without alterations, would be that of a nation raised a little, and but a little, above barbarity, secluded from strangers, and totally employed in procuring the conveniences of life; either without books, or, like some of the Mahometan countries, with every few: men thus busied and unlearned, having only such words as common use requires, would perhaps long continue to express the same notions by the same signs. But no such constancy can be expected in a people polished by arts, and classed by subordination, where one part of the community is sustained and accommodated by the labor of the other. Those who have much leisure to think, will always be enlarging the stock of ideas; and every increase of knowledge, whether real or fancied, will produce new words, or combination of words. When the mind is unchained from necessity, it will range after convenience; when it is left at large in the fields of speculation, it will shift opinions; as any custom is disused, the words that expressed it must perish with it; as any opinion grows popular, it will innovate speech in the same proportion as it alters practice.

As by the cultivation of various sciences a language is amplified, it will be more furnished with words deflected from their original sense; the geometrician will talk of a courtier's zenith or the eccentric virtue of a wild hero, and the physician, of sanguine expectations and phlegmatic delays. Copiousness of speech will give opportunities to capricious choice, by which some words will be preferred, and others degraded; vicissitudes of fashion will enforce the use of new, or extend the signification of known terms. The tropes of poetry will make hourly encroachments, and the metaphorical will become the current sense: pronunciation will be varied by levity or ignorance, and the pen must at length comply with the tongue; illiterate writers will, at one time or other, by public infatuation, rise into renown, who, not knowing the original import of words, will use them with colloquial licentiousness, confound distinction, and forget propriety. As politeness

increases, some expressions will be considered as too gross and vulgar for the delicate, others as too formal and ceremonious for the gay and airy; new phrases are therefore adopted, which must for the same reasons be in time dismissed. Swift, in his petty treatise on the English language, allows that new words must sometimes be introduced, but proposes that none should be suffered to become obsolete. But what makes a word obsolete, more than general agreement to forbear it? and how shall it be continued, when it conveys an offensive idea, or recalled again into the mouths of mankind, when it has once become unfamiliar by disuse, and unpleasing by unfamiliarity?

There is another cause of alteration more prevalent than any other, which yet in the present state of the world cannot be obviated. A mixture of two languages will produce a third distinct from both, and they will always be mixed, where the chief parts of education, and the most conspicuous accomplishment, is skill in ancient or in foreign tongues. He that has long cultivated another language, will find its words and combinations crowd upon his memory; and haste and negligence, refinement and affectation, will obtrude borrowed terms and exotic expressions.

The great pest of speech is frequency of translation. No book was ever turned from one language into another, without imparting something of its native idiom; this is the most mischievous and comprehensive innovation; single words may enter by thousands, and the fabric of the tongue continue the same; but new phraseology changes much at once; it alters not the single stones of the building, but the order of the columns. If an academy should be established for the cultivation of our style—which I, who can never wish to see dependence multiplied, hope the spirit of English liberty will hinder or destroy—let them, instead of compiling grammars and dictionaries, endeavor, with all their influence, to stop the license of translators, whose idleness and ignorance, if it be suffered to proceed, will reduce us to babble a dialect of France.

If the changes that we fear be thus irresistible, what remains but to acquiesce with silence, as in the other insurmountable distresses of humanity? It remains that we retard what we cannot repel, that we palliate what we cannot

cure. Life may be lengthened by care, though death cannot be ultimately defeated: tongues, like governments, have a natural tendency to degeneration; we have long preserved our constitution, let us make some struggles for our language.

In hope of giving longevity to that which its own nature forbids to be immortal, I have devoted this book, the labor of years, to the honor of my country, that we may no longer yield the palm of philology, without a contest, to the nations of the continent. The chief glory of every people arises from its authors: whether I shall add any thing by my own writings to the reputation of English literature, must be left to time: much of my life has been lost under the pressures of disease; much has been trifled away; and much has always been spent in provision for the day that was passing over me; but I shall not think my employment useless or ignoble, if by my assistance foreign nations, and distant ages, gain access to the propagators of knowledge, and understand the teachers of truth; if my labors afford light to the repositories of science, and add celebrity to Bacon, to Hooker, to Milton, and to Boyle.

When I am animated by this wish, I look with pleasure on my book, however defective, and deliver it to the world with the spirit of a man that has endeavored well. That it will immediately become popular I have not promised to myself: a few wild blunders, and risible absurdities, from which no work of such multiplicity was ever free, may for a time furnish folly with laughter, and harden ignorance into contempt; but useful diligence will at last prevail, and there never can be wanting some who distinguish desert; who will consider that no dictionary of a living tongue ever can be perfect, since, while it is hastening to publication, some words are budding, and some falling away; that a whole life cannot be spent upon syntax and etymology, and that even a whole life would not be sufficient; that he, whose design includes whatever language can express, must often speak of what he does not understand; that a writer will sometimes be hurried by eagerness to the end, and sometimes faint with weariness under a task which Scaliger compares to the labors of the anvil and the mine; that what is obvious is not always known, and what is known is not always present; that sudden fits of inadvertency will surprise vigilance, slight avocations will seduce attention,

and casual eclipses of the mind will darken learning; and that the writer shall often in vain trace his memory at the moment of need, for that which yesterday he knew with intuitive readiness, and which will come uncalled into his thoughts to-morrow.

In this work, when it shall be found that much is omitted, let it not be forgotten that much likewise is performed; and though no book was ever spared out of tenderness to the author, and the world is little solicitous to know whence proceed the faults of that which it condemns; yet it may gratify curiosity to inform it, that the English Dictionary was written with little assistance of the learned, and without any patronage of the great; not in the soft obscurities of retirement, or under the shelter of academic bowers, but amidst inconvenience and distraction, in sickness and in sorrow. It may repress the triumph of malignant criticism to observe, that if our language is not here fully displayed, I have only failed in an attempt which no human powers have hitherto completed. If the lexicons of ancient tongues, now immutably fixed, and comprised in a few volumes, be yet, after the toil of successive ages, inadequate and delusive; if the aggregated knowledge, and co-operating diligence of the Italian academicians, did not secure them from the censure of Beni; if the embodied critics of France, when fifty years had been spent upon their work, were obliged to change its economy, and give their second edition another form, I may surely be contented without the praise of perfection, which, if I could obtain, in this gloom of solitude, what would it avail me? I have protracted my work till most of those whom I wished to please have sunk into the grave, and success and miscarriage are empty sounds: I therefore dismiss it with frigid tranquillity, having little to fear or hope from censure or from praise.

TO THE RIGHT HONORABLE THE EARL OF CHESTERFIELD

February 7, 1755.

MY LORD:

I have lately been informed by the proprietor of *The World*, that two papers, in which my *Dictionary* is recommended to the public, were written by your

Lordship. To be so distinguished is an honor which, being very little accustomed to favours from the great, I know not well how to receive, or in what terms to acknowledge.

When, upon some slight encouragement, I first visited your Lordship, I was overpowered, like the rest of mankind, by the enchantment of your address; and I could not forbear to wish that I might boast myself 'Le vainqueur du vainqueur de la terre'; that I might obtain that regard for which I saw the world contending; but I found my attendance so little encouraged, that neither pride nor modesty would suffer me to continue it. When I had once addressed your Lordship in public, I had exhausted all the art of pleasing which a retired and uncourtly scholar can possess. I had done all that I could; and no man is well pleased to have his all neglected, be it ever so little.

Seven years, my Lord, have now passed, since I waited in your outward rooms, or was repulsed from your door; during which time I have been pushing on my work through difficulties, of which it is useless to complain, and have brought it at last to the verge of publication, without one act of assistance, one word of encouragement, or one smile of favor. Such treatment I did not expect, for I never had a Patron before.

The shepherd in Virgil grew at last acquainted with Love, and found him a native of the rocks.

Is not a Patron, my Lord, one who looks with unconcern on a man struggling for life in the water, and, when he has reached ground, encumbers him with help? The notice which you have been pleased to take of my labors, had it been early, had been kind; but it has been delayed till I am indifferent, and cannot enjoy it; till I am solitary, and cannot impart it; till I am known, and do not want it. I hope it is no very cynical asperity not to confess obligations where no benefit has been received, or to be unwilling that the Public should consider me as owing that to a Patron, which Providence has enabled me to do for myself.

Having carried on my work thus far with so little obligation to any favorer of learning, I shall not be disappointed though I should conclude it, if less be

possible, with less; for I have been long wakened from that dream of hope, in which I once boasted myself with so much exultation,

My Lord, Your Lordship's most humble,

Most obedient servant, SAM. JOHNSON.

[Footnote A: For a sketch of Johnson's life, see the Introduction to "Life of Addison" in the volume of English Essays. The interest of his preface to the great Dictionary need hardly be pointed out, since the work itself is a landmark in the history of our language. The letter to Chesterfield, short though it is is a document of great importance in the freeing of literature from patronage, and is in itself a notable piece of literature. The preface to Johnson's edition of Shakespeare's plays not only explains the editor's conception of his task, but contains what is perhaps the best appreciation of the dramatist written in the eighteenth century.]

PREFACE TO SHAKESPEARE

BY SAMUEL JOHNSON. (1765)

That praises are without reason lavished on the dead, and that the honours due only to excellence are paid to antiquity, is a complaint likely to be always continued by those, who, being able to add nothing to truth, hope for eminence from the heresies of paradox; or those, who, being forced by disappointment upon consolatory expedients, are willing to hope from posterity what the present age refuses, and flatter themselves that the regard which is yet denied by envy, will be at last bestowed by time.

Antiquity, like every other quality that attracts the notice of mankind, has undoubtedly votaries that reverence it, not from reason, but from prejudice. Some seem to admire indiscriminately whatever has been long preserved, without considering that time has sometimes co-operated with chance; all perhaps are more willing to honour past than present excellence; and the mind contemplates genius through the shades of age, as the eye surveys the sun through artificial opacity. The great contention of criticism is to find the faults of the moderns, and the beauties of the ancients. While an author is yet living we estimate his powers by his worst performance, and when he is dead, we rate them by his best.

To works, however, of which the excellence is not absolute and definite, but gradual and comparative; to works not raised upon principles demonstrative and scientifick, but appealing wholly to observation and experience, no other test can be applied than length of duration and continuance of esteem. What mankind have long possessed they have often examined and compared; and if they persist to value the possession, it is because frequent comparisons have confirmed opinion in its favour. As among the works of nature no man can

properly call a river deep, or a mountain high, without the knowledge of many mountains, and many rivers; so in the productions of genius, nothing can be stiled excellent till it has been compared with other works of the same kind. Demonstration immediately displays its power, and has nothing to hope or fear from the flux of years; but works tentative and experimental must be estimated by their proportion to the general and collective ability of man, as it is discovered in a long succession of endeavours. Of the first building that was raised, it might be with certainty determined that it was round or square; but whether it was spacious or lofty must have been referred to time. The Pythagorean scale of numbers was at once discovered to be perfect; but the poems of *Homer* we yet know not to transcend the common limits of human intelligence, but by remarking, that nation after nation, and century after century, has been able to do little more than transpose his incidents, new-name his characters, and paraphrase his sentiments.

The reverence due to writings that have long subsisted arises therefore not from any credulous confidence in the superior wisdom of past ages, or gloomy persuasion of the degeneracy of mankind, but is the consequence of acknowledged and indubitable positions, that what has been longest known has been most considered, and what is most considered is best understood.

The Poet, of whose works I have undertaken the revision, may now begin to assume the dignity of an ancient, and claim the privilege of established fame and prescriptive veneration. He has long outlived his century, the term commonly fixed as the test of literary merit. Whatever advantages he might once derive from personal allusions, local customs, or temporary opinions, have for many years been lost; and every topick of merriment, or motive of sorrow, which the modes of artificial life afforded him, now only obscure the scenes which they once illuminated. The effects of favour and competition are at an end; the tradition of his friendships and his enemies has perished; his works support no opinion with arguments, nor supply any faction with invectives; they can neither indulge vanity nor gratify malignity; but are read without any other reason than the desire of pleasure, and are therefore praised only as pleasure is obtained; yet, thus unassisted by interest or passion, they have past through variations of taste and changes of manners, and, as they devolved from one generation to another, have received new honours at every

transmission.

But because human judgment, though it be gradually gaining upon certainty, never becomes infallible; and approbation, though long continued, may yet be only the approbation of prejudice or fashion; it is proper to inquire, by what peculiarities of excellence *Shakespeare* has gained and kept the favour of his countrymen.

Nothing can please many, and please long, but just representations of general nature. Particular manner, can be known to few, and therefore few only can judge how nearly they are copied. The irregular combinations of fanciful invention may delight a-while, by that novelty of which the common satiety of life sends us all in quest; but the pleasures of sudden wonder are soon exhausted, and the mind can only repose on the stability of truth.

Shakespeare is above all writers, at least above all modern writers, the poet of nature; the poet that holds up to his readers a faithful mirror of manners and of life. His characters are not modified by the customs of particular places, unpractised by the rest of the world; by the peculiarities of studies or professions, which can operate but upon small numbers; or by the accidents of transient fashions or temporary opinions: they are the genuine progeny of common humanity, such as the world will always supply, and observation will always find. His persons act and speak by the influence of those general passions and principles by which all minds are agitated, and the whole system of life is continued in motion. In the writings of other poets a character is too often an individual; in those of *Shakespeare* it is commonly a species.

It is from this wide extension of design that so much instruction is derived. It is this which fills the plays of *Shakespeare* with practical axioms and domestic wisdom. It was said of *Euripides*, that every verse was a precept; and it may be said of *Shakespeare*, that from his works may be collected a system of civil and oeconomical prudence. Yet his real power is not shewn in the splendour of particular passages, but by the progress of his fable, and the tenour of his dialogue; and he that tries to recommend him by select quotations, will succeed like the pedant in *Hierocles*, who, when he offered his house to sale, carried a brick in his pocket as a specimen.

It will not easily be imagined how much *Shakespeare* excels in accommodating his sentiments to real life, but by comparing him with other authors. It was observed of the ancient schools of declamation, that the more diligently they were frequented, the more was the student disqualified for the world, because he found nothing there which he should ever meet in any other place. The same remark may be applied to every stage but that of *Shakespeare*. The theatre, when it is under any other direction, is peopled by such characters as were never seen, conversing in a language which was never heard, upon topics which will never rise in the commerce of mankind. But the dialogue of this author is often so evidently determined by the incident which produces it, and is pursued with so much ease and simplicity, that it seems scarcely to claim the merit of fiction, but to have been gleaned by diligent selection out of common conversation, and common occurrences.

Upon every other stage the universal agent is love, by whose power all good and evil is distributed, and every action quickened or retarded. To bring a lover, a lady and a rival into the fable; to entangle them in contradictory obligations, perplex them with oppositions of interest, and harass them with violence of desires inconsistent with each other; to make them meet in rapture and part in agony; to fill their mouths with hyperbolical joy and outrageous sorrow; to distress them as nothing human ever was distressed; to deliver them as nothing human ever was delivered; is the business of a modern dramatist. For this probability is violated, life is misrepresented, and language is depraved. But love is only one of many passions; and as it has no great influence upon the sum of life, it has little operation in the dramas of a poet, who caught his ideas from the living world, and exhibited only what he saw before him. He knew, that any other passion, as it was regular or exorbitant, was a cause of happiness or calamity.

Characters thus ample and general were not easily discriminated and preserved, yet perhaps no poet ever kept his personages more distinct from each other. I will not say with *Pope*, that every speech may be assigned to the proper speaker, because many speeches there are which have nothing characteristic; but perhaps, though some may be equally adapted to every person, it will be difficult to find any that can be properly transferred from the present possessor to another claimant. The choice is right, when there is

reason for choice.

Other dramatists can only gain attention by hyperbolical or aggravated characters, by fabulous and unexampled excellence or depravity, as the writers of barbarous romances invigorated the reader by a giant and a dwarf; and he that should form his expectations of human affairs from the play, or from the tale, would be equally deceived. *Shakespeare* has no heroes; his scenes are occupied only by men, who act and speak as the reader thinks that he should himself have spoken or acted on the same occasion: Even where the agency is supernatural the dialogue is level with life. Other writers disguise the most natural passions and most frequent incidents; so that he who contemplates them in the book will not know them in the world: *Shakespeare* approximates the remote, and familiarizes the wonderful; the event which he represents will not happen, but if it were possible, its effects would probably be such as he has assigned; and it may be said, that he has not only shewn human nature as it acts in real exigencies, but as it would be found in trials, to which it cannot be exposed.

This therefore is the praise of *Shakespeare*, that his drama is the mirror of life; that he who has mazed his imagination, in following the phantoms which other writers raise up before him, may here be cured of his delirious extasies, by reading human sentiments in human language, by scenes from which a hermit may estimate the transactions of the world, and a confessor predict the progress of the passions.

His adherence to general nature has exposed him to the censure of criticks, who form their judgments upon narrow principles. *Dennis* and *Rhymers* think his *Romans* not sufficiently *Roman*; and *Voltaire* censures his kings as not completely royal. *Dennis* is offended, that *Menenius*, a senator of *Rome*, should play the buffoon; and *Voltaire* perhaps thinks decency violated when the *Danish* Usurper is represented as a drunkard. But *Shakespeare* always makes nature predominate over accident; and if he preserves the essential character, is not very careful of distinctions superinduced and adventitious. His story requires *Romans* or kings, but, he thinks only on men. He knew that *Rome*, like every other city, had men of all dispositions; and wanting a buffoon, he went into the senate-house for that which the senate-house would

certainly have afforded him. He was inclined to shew an usurper and a murderer not only odious but despicable, he therefore added drunkenness to his other qualities, knowing that kings love wine like other men, and that wine exerts its natural power upon kings. These are the petty cavils of petty minds; a poet overlooks the casual distinction of country and condition, as a painter, satisfied with the figure, neglects the drapery.

The censure which he has incurred by mixing comick and tragick scenes, as it extends to all his works, deserves more consideration. Let the fact be first stated, and then examined.

Shakespeare's plays are not in the rigorous and critical sense either tragedies or comedies, but compositions of a distinct kind; exhibiting the real state of sublunary nature, which partakes of good and evil, joy and sorrow, mingled with endless variety of proportion and innumerable modes of combination; and expressing the course of the world, in which the loss of one is the gain of another; in which, at the same time, the reveller is hasting to his wine, and the mourner burying his friend; in which the malignity of one is sometimes defeated by the frolick of another; and many mischiefs and many benefits are done and hindered without design.

Out of this chaos of mingled purposes and casualties the ancient poets, according to the laws which custom had prescribed, selected some the crimes of men, and some their absurdities; some the momentous vicissitudes of life, and some the lighter occurrences; some the terrors of distress, and some the gayeties of prosperity. Thus rose the two modes of imitation, known by the names of *tragedy* and *comedy*, compositions intended to promote different ends by contrary means, and considered as so little allied, that I do not recollect among the *Greeks* or *Romans* a single writer who attempted both.

Shakespeare has united the powers of exciting laughter and sorrow not only in one mind, but in one composition. Almost all his plays are divided between serious and ludicrous characters, and, in the successive evolutions of the design, sometimes produce seriousness and sorrow, and sometimes levity and laughter.

That this is a practice contrary to the rules of criticism will be readily allowed; but there is always an appeal open from criticism to nature. The end of writing is to instruct; the end of poetry is to instruct by pleasing. That the mingled drama may convey all the instruction of tragedy or comedy cannot be denied, because it includes both in its alterations of exhibition and approaches nearer than either to the appearance of life, by shewing how great machinations and slender designs may promote or obviate one another, and the high and the low co-operate in the general system by unavoidable concatenation.

It is objected, that by this change of scenes the passions are interrupted in their progression, and that the principal event, being not advanced by a due gradation of preparatory incidents, wants at last the power to move, which constitutes the perfection of dramattick poetry. This reasoning is so specious, that it is received as true even by those who in daily experience feel it to be false. The interchanges of mingled scenes seldom fail to produce the intended vicissitudes of passion. Fiction cannot move so much, but that the attention may be easily transferred; and though it must be allowed that pleasing melancholy be sometimes interrupted by unwelcome levity, yet let it be considered likewise, that melancholy is often not pleasing, and that the disturbance of one man may be the relief of another; that different auditors have different habitudes; and that, upon the whole, all pleasure consists in variety.

The players, who in their edition divided our authour's works into comedies, histories, and tragedies, seem not to have distinguished the three kinds by any very exact or definite ideas.

And action which ended happily to the principal persons, however serious or distressful through its intermediate incidents, in their opinion, constituted a comedy. This idea of a comedy continued long amongst us; and plays were written, which, by changing the catastrophe, were tragedies to-day, and comedies to-morrow.

Tragedy was not in those times a poem of more general dignity or elevation than comedy; it required only a calamitous conclusion, with which the

common criticism of that age was satisfied, whatever lighter pleasure it afforded in its progress.

History was a series of actions, with no other than chronological succession, independent on each other, and without any tendency to introduce or regulate the conclusion. It is not always very nicely distinguished from tragedy. There is not much nearer approach to unity of action in the tragedy of *Antony and Cleopatra*, than in the history of *Richard the Second*. But a history might be continued through many plays; as it had no plan, it had no limits.

Through all these denominations of the drama, *Shakespeare's* mode of composition is the same; an interchange of seriousness and merriment, by which the mind is softened at one time, and exhilarated at another. But whatever be his purpose, whether to gladden or depress, or to conduct the story, without vehemence or emotion, through tracts of easy and familiar dialogue, he never fails to attain his purpose; as he commands us, we laugh or mourn, or sit silent with quiet expectation, in tranquillity without indifference.

When *Shakespeare's* plan is understood, most of the criticisms of *Rhyme* and *Voltaire* vanish away. The play of *Hamlet* is opened, without impropriety, by two sentinels; *Iago* bellows at *Brabantio's* window, without injury to the scheme of the play, though in terms which a modern audience would not easily endure; the character of *Polonius* is seasonable and useful; and the Grave-diggers themselves may be heard with applause.

Shakespeare engaged in dramatick poetry with the world open before him; the rules of the ancients were yet known to few; but publick judgment was unformed; he had no example of such fame as might force him upon imitation, nor criticks of such authority as might restrain his extravagance: He therefore indulged his natural disposition, and his disposition, as *Rhyme* has remarked, led him to comedy. In tragedy he often writes, with great appearance of toil and study, what is written at last with little felicity; but in his comick scenes, he seems to produce without labour what no labour can improve. In tragedy he is always struggling after some occasion to be comick; but in comedy he seems to repose, or to luxuriate, as in a mode of

thinking congenial to his nature. In his tragick scenes there is always something wanting, but his comedy often surpasses expectation or desire. His comedy pleases by the thoughts and the language, and his tragedy for the greater part by incident and action. His tragedy seems to be skill, his comedy to be instinct.

The force of his comick scenes has suffered little diminution from the changes made by a century and a half, in manners or in words. As his personages act upon principles arising from genuine passion, very little modified by particular forms, their pleasures and vexations are communicable to all times and to all places; they are natural, and therefore durable; the adventitious peculiarities of personal habits, are only superficial dyes, bright and pleasing for a little while, yet soon fading to a dim tinct, without any remains of former lustre; but the discriminations of true passion are the colours of nature; they pervade the whole mass, and can only perish with the body that exhibits them. The accidental compositions of heterogeneous modes are dissolved by the chance which combined them; but the uniform simplicity of primitive qualities neither admits increase, nor suffers decay. The sand heap by one flood is scattered by another, but the rock always continues in its place. The stream of time, which is continually washing the dissoluble fabricks of other poets, passes without injury by the adamant of *Shakespeare*.

If there be, what I believe there is, in every nation, a stile which never becomes obsolete, a certain mode of phraseology so consonant and congenial to the analogy and principles of its respective language as to remain settled and unaltered; this style is probably to be sought in the common intercourse of life, among those who speak only to be understood, without ambition of elegance. The polite are always catching modish innovations, and the learned depart from established forms of speech, in hope of finding or making better; those who wish for distinction forsake the vulgar, when the vulgar is right; but there is a conversation above grossness and below refinement, where propriety resides, and where this poet seems to have gathered his comick dialogue. He is therefore more agreeable to the ears of the present age than any other authour equally remote, and among his other excellencies deserves to be studied as one of the original masters of our language.

These observations are to be considered not as unexceptionally constant, but as containing general and predominant truth. *Shakespeare's* familiar dialogue is affirmed to be smooth and clear, yet not wholly without ruggedness or difficulty; as a country may be eminently fruitful, though it has spots unfit for cultivation: His characters are praised as natural, though their sentiments are sometimes forced, and their actions improbable; as the earth upon the whole is spherical, though its surface is varied with protuberances and cavities.

Shakespeare with his excellencies has likewise faults, and faults sufficient to obscure and overwhelm any other merit. I shall shew them in the proportion in which they appear to me, without envious malignity or superstitious veneration. No question can be more innocently discussed than a dead poet's pretensions to renown; and little regard is due to that bigotry which sets candour higher than truth.

His first defect is that to which may be imputed most of the evil in books or in men. He sacrifices virtue to convenience, and is so much more careful to please than to instruct, that he seems to write without any moral purpose. From his writings indeed a system of social duty may be selected, for he that thinks reasonably must think morally; but his precepts and axioms drop casually from him; he makes no just distribution of good or evil, nor is always careful to shew in the virtuous a disapprobation of the wicked; he carries his persons indifferently through right and wrong, and at the close dismisses them without further care, and leaves their examples to operate by chance. This fault the barbarity of his age cannot extenuate; for it is always a writer's duty to make the world better, and justice is a virtue independent on time or place.

The plots are often so loosely formed, that a very slight consideration may improve them, and so carelessly pursued, that he seems not always fully to comprehend his own design. He omits opportunities of instructing or delighting which the train of his story seems to force upon him, and apparently rejects those exhibitions which would be more affecting, for the sake of those which are more easy.

It may be observed, that in many of his plays the latter part is evidently

neglected. When he found himself near the end of his work, and, in view of his reward, he shortened the labour to snatch the profit. He therefore remits his efforts where he should most vigorously exert them, and his catastrophe is improbably produced or imperfectly represented.

He had no regard to distinction of time or place, but gives to one age or nation, without scruple, the customs, institutions, and opinions of another, at the expence not only of likelihood, but of possibility. These faults *Pope* has endeavoured, with more zeal than judgment, to transfer to his imagined interpolators. We need not wonder to find *Hector* quoting *Aristotle*, when we see the loves of *Theseus* and *Hippolyta* combined with the *Gothick* mythology of fairies. *Shakespeare*, indeed, was not the only violator of chronology, for in the same age *Sidney*, who wanted not the advantages of learning, has, in his *Arcadia*, confounded the pastoral with the feudal times, the days of innocence, quiet and security, with those of turbulence, violence, and adventure.

In his comick scenes he is seldom very successful, when he engages his characters in reciprocations of smartness and contests of sarcasm; their jests are commonly gross, and their pleasantry licentious; neither his gentlemen nor his ladies have much delicacy, nor are sufficiently distinguished from his clowns by any appearance of refined manners. Whether he represented the real conversation of his time is not easy to determine; the reign of *Elizabeth* is commonly supposed to have been a time of stateliness, formality and reserve; yet perhaps the relaxations of that severity were not very elegant. There must, however, have been always some modes of gayety preferable to others, and a writer ought to chuse the best.

In tragedy his performance seems constantly to be worse, as his labour is more. The effusions of passion which exigence forces out are for the most part striking and energetick; but whenever he solicits his invention, or strains his faculties, the offspring of his throes is tumour, meanness, tediousness, and obscurity.

In narration he affects a disproportionate pomp of diction, and a wearisome train of circumlocution, and tells the incident imperfectly in many words,

which might have been more plainly delivered in few. Narration in dramatick poetry is naturally tedious, as it is unanimated and inactive, and obstructs the progress of the action; it should therefore always be rapid, and enlivened by frequent interruption. *Shakespeare* found it an encumbrance, and instead of lightening it by brevity, endeavoured to recommend it by dignity and splendour.

His declamations or set speeches are commonly cold and weak, for his power was the power of nature; when he endeavoured, like other tragick writers, to catch opportunities of amplification, and instead of inquiring what the occasion demanded, to show how much his stores of knowledge could supply, he seldom escapes without the pity or resentment of his reader.

It is incident to him to be now and then entangled with an unwieldy sentiment, which he cannot well express, and will not reject; he struggles with it a while, and if it continues stubborn, comprises it in words such as occur, and leaves it to be disentangled and evolved by those who have more leisure to bestow upon it.

Not that always where the language is intricate the thought is subtle, or the image always great where the line is bulky; the equality of words to things is very often neglected, and trivial sentiments and vulgar ideas disappoint the attention, to which they are recommended by sonorous epithets and swelling figures.

But the admirers of this great poet have never less reason to indulge their hopes of supreme excellence, than when he seems fully resolved to sink them in dejection, and mollify them with tender emotions by the fall of greatness, the danger of innocence, or the crosses of love. He is not long soft and pathetick without some idle conceit, or contemptible equivocation. He no sooner begins to move, than he counteracts himself; and terrour and pity, as they are rising in the mind, are checked and blasted by sudden frigidity.

A quibble is to *Shakespeare*, what luminous vapours are to the traveller; he follows it at all adventures; it is sure to lead him out of his way, and sure to engulf him in the mire. It has some malignant power over his mind, and its

fascinations are irresistible. Whatever be the dignity or profundity of his disquisition, whether he be enlarging knowledge or exalting affection, whether he be amusing attention with incidents, or enchainning it in suspense, let but a quibble spring up before him, and he leaves his work unfinished. A quibble is the golden apple for which he will always turn aside from his career, or stoop from his elevation. A quibble, poor and barren as it is, gave him such delight, that he was content to purchase it, by the sacrifice of reason, propriety and truth. A quibble was to him the fatal *Cleopatra* for which he lost the world, and was content to lose it.

It will be thought strange, that, in enumerating the defects of this writer, I have not yet mentioned his neglect of the unities: his violation of those laws which have been instituted and established by the joint authority of poets and critics.

For his other deviations from the art of writing I resign him to critical justice, without making any other demand in his favour, than that which must be indulged to all human excellence: that his virtues be rated with his failings: But, from the censure which this irregularity may bring upon him, I shall, with due reverence to that learning which I must oppose, adventure to try how I can defend him.

His histories, being neither tragedies nor comedies are not subject to any of their laws; nothing more is necessary to all the praise which they expect, than that the changes of action be so prepared as to be understood, that the incidents be various and affecting, and the characters consistent, natural, and distinct. No other unity is intended, and therefore none is to be sought.

In his other works he has well enough preserved the unity of action. He has not, indeed, an intrigue regularly perplexed and regularly unravelled: he does not endeavour to hide his design only to discover it, for this is seldom the order of real events, and *Shakespeare* is the poet of nature: But his plan has commonly what *Aristotle* requires, a beginning, a middle, and an end; one event is concatenated with another, and the conclusion follows by easy consequence. There are perhaps some incidents that might be spared, as in other poets there is much talk that only fills up time upon the stage; but the

general system makes gradual advances, and the end of the play is the end of expectation.

To the unities of time and place he has shewn no regard; and perhaps a nearer view of the principles on which they stand will diminish their value, and withdraw from them the veneration which, from the time of *Corneille*, they have very generally received, by discovering that they have given more trouble to the poet, than pleasure to the auditor.

The necessity of observing the unities of time and place arises from the supposed necessity of making the drama credible. The criticks hold it impossible, that an action of months or years can be possibly believed to pass in three hours; or that the spectator can suppose himself to sit in the theatre, while ambassadors go and return between distant kings while armies are levied and towns besieged, while an exile wanders and returns, or till he whom they saw courting his mistress, shall lament the untimely fall of his son. The mind revolts from evident falsehood, and fiction loses its force when it departs from the resemblance of reality.

From the narrow limitation of time necessarily arises the contraction of place. The spectator, who knows that he saw the first act at *Alexandria*, cannot suppose that he sees the next at *Rome*, at a distance to which not the dragons of *Medea* could, in so short a time, have transported him; he knows with certainty that he has not changed his place, and he knows that place cannot change itself; that what was a house cannot become a plain; that what was *Thebes* can never be *Persepolis*.

Such is the triumphant language with which a critick exults over the misery of an irregular poet, and exults commonly without resistance or reply. It is time therefore to tell him by the authority of *Shakespeare*, that he assumes, as an unquestionable principle, a position, which, while his breath is forming it into words, his understanding pronounces to be false. It is false, that any representation is mistake for reality; that any dramattick fable in its materiality was ever credible, or, for a single moment, was ever credited.

The objection arising from the impossibility of passing the first hour

at *Alexandria*, and the next at *Rome*, supposes, that when the play opens, the spectator really imagines himself at *Alexandria*, and believes that his walk to the theatre has been a voyage to *Egypt*, and that he lives in the days of *Antony* and *Cleopatra*. Surely he that imagines this may imagine more. He that can take the stage at one time for the palace of the *Ptolemies*, may take it in half an hour for the promontory of *Actium*. Delusion, if delusion be admitted, has no certain limitation; if the spectator can be once persuaded, that his old acquaintance are *Alexander* and *Cæsar*, that a room illuminated with candles is the plain of *Pharsalia*, or the bank of *Granicus*, he is in a state of elevation above the reach of reason, or of truth, and from the heights of empyrean poetry, may despise the circumscriptions of terrestrial nature. There is no reason why a mind thus wandering in extacy should count the clock, or why an hour should not be a century in that calenture of the brains that can make the stage a field.

The truth is, that the spectators are always in their senses, and know, from the first act to the last, that the stage is only a stage, and that the players are only players. They came to hear a certain number of lines recited with just gesture and elegant modulation. The lines relate to some action, and an action must be in some place; but the different actions that complete a story may be in places very remote from each other; and where is the absurdity of allowing that space to represent first *Athens*, and then *Sicily*, which was always known to be neither *Sicily* nor *Athens*, but a modern theatre?

By supposition, as place is introduced, times may be extended; the time required by the fable elapses for the most part between the acts; for, of so much of the action as is represented, the real and poetical duration is the same. If, in the first act, preparations for war against *Mithridates* are represented to be made in *Rome*, the event of the war may, without absurdity, be represented, in the catastrophe, as happening in *Pontus*; we know that there is neither war, nor preparation for war; we know that we are neither in *Rome* nor *Pontus*; that neither *Mithridates* nor *Lucullus* are before us. The drama exhibits successive imitations of successive actions; and why may not the second imitation represent an action that happened years after the first, if it be so connected with it, that nothing but time can be supposed to intervene? Time is, of all modes of existence, most obsequious to the imagination; a

lapse of years is as easily conceived as a passage of hours. In contemplation we easily contract the time of real actions, and therefore willingly permit it to be contracted when we only see their imitation.

It will be asked, how the drama moves, if it is not credited. It is credited with all the credit due to a drama. It is credited, whenever it moves, as a just picture of a real original; as representing to the auditor what he would himself feel, if he were to do or suffer what is there feigned to be suffered or to be done. The reflection that strikes the heart is not, that the evils before us are real evils, but that they are evils to which we ourselves may be exposed. If there be any fallacy, it is not that we fancy the players, but that we fancy ourselves unhappy for a moment; but we rather lament the possibility than suppose the presence of misery, as a mother weeps over her babe, when she remembers that death may take it from her. The delight of tragedy proceeds from our consciousness of fiction; if we thought murders and treasons real, they would please no more.

Imitations produce pain or pleasure, not because they are mistaken for realities, but because they bring realities to mind. When the imagination is recreated by a painted landscape, the trees are not supposed capable to give us shade, or the fountains coolness; but we consider, how we should be pleased with such fountains playing beside us, and such woods waving over us. We are agitated in reading the history of *Henry the Fifth*, yet no man takes his book for the field of *Agencourt*. A dramatick exhibition is a book recited with concomitants that encrease or diminish its effect. Familiar comedy is often more powerful in the theatre, than on the page; imperial tragedy is always less. The humour of *Petruchio* may be heightened by grimace; but what voice or what gesture can hope to add dignity or force to the soliloquy of *Cato*.

A play read, affects the mind like a play acted. It is therefore evident, that the action is not supposed to be real; and it follows, that between the acts a longer or shorter time may be allowed to pass, and that no more account of space or duration is to be taken by the auditor of a drama, than by the reader of a narrative, before whom may pass in an hour the life of a hero, or the revolutions of an empire.

Whether *Shakespeare* knew the unities, and rejected them by design, or deviated from them by happy ignorance, it is, I think, impossible to decide, and useless to enquire. We may reasonably suppose, that, when he rose to notice, he did not want the counsels and admonitions of scholars and criticks, and that he at last deliberately persisted in a practice, which he might have begun by chance. As nothing is essential to the fable, but unity of action, and as the unities of time and place arise evidently from false assumptions, and, by circumscribing the extent of the drama, lessen its variety, I cannot think it much to be lamented, that they were not known by him, or not observed: Nor, if such another poet could arise, should I very vehemently reproach him, that his first act passed at *Venice*, and his next in *Cyprus*. Such violations of rules merely positive, become the comprehensive genius of *Shakespeare*, and such censures are suitable to the minute and slender criticism of *Voltaire*:

Non usque adeo permiscuit imis
Longus summa dies, ut non, si voce Metelli
Serventur leges, malint a Cæsare tolli.

Yet when I speak thus slightly of dramattick rules, I cannot but recollect how much wit and learning may be produced against me; before such authorities I am afraid to stand, not that I think the present question one of those that are to be decided by mere authority, but because it is to be suspected, that these precepts have not been so easily received but for better reasons than I have yet been able to find. The result of my enquiries, in which it would be ludicrous to boast of impartiality, is, that the unities of time and place are not essential to a just drama, that though they may sometimes conduce to pleasure, they are always to be sacrificed to the nobler beauties of variety and instruction; and that a play, written with nice observation of critical rules, is to be contemplated as an elaborate curiosity, as the product of superfluous and ostentatious art, by which is shewn, rather what is possible, than what is necessary.

He that, without diminution of any other excellence, shall preserve all the unities unbroken, deserves the like applause with the architect, who shall display all the orders of architecture in a citadel; without any deduction from its strength; but the principal beauty of a citadel is to exclude the enemy; and

the greatest graces of a play, are to copy nature and instruct life.

Perhaps what I have here not dogmatically but deliberately written, may recal the principles of the drama to a new examination. I am almost frightened at my own temerity; and when I estimate the fame and the strength of those that maintain the contrary opinion, am ready to sink down in reverential silence; as *Aeneas* withdrew from the defence of *Troy*, when he saw *Neptune* shaking the wall, and *Juno* heading the besiegers.

Those whom my arguments cannot persuade to give their approbation to the judgment of *Shakespeare*, will easily, if they consider the condition of his life, make some allowance for his ignorance.

Every man's performances, to be rightly estimated, must be compared with the state of the age in which he lived, and with his own particular opportunities; and though to the reader a book be not worse or better for the circumstances of the authour, yet as there is always a silent reference of human works to human abilities, and as the enquiry, how far man may extend his designs, or how high he may rate his native force, is of far greater dignity than in what rank we shall place any particular performance, curiosity is always busy to discover the instruments, as well as to survey the workmanship, to know how much is to be ascribed to original powers, and how much to casual and adventitious help. The palaces of *Peru* or *Mexico* were certainly mean and incommodious habitations, if compared to the houses of *European* monarchs; yet who could forbear to view them with astonishment, who remembered that they were built without the use of iron?

The *English* nation, in the time of *Shakespeare*, was yet struggling to emerge from barbarity. The philology of *Italy* had been transplanted hither in the reign of *Henry* the Eighth; and the learned languages had been successfully cultivated by *Lilly*, *Linacer*, and *More*; by *Pole*, *Cheke*, and *Gardiner*; and afterwards by *Smith*, *Clerk*, *Haddon*, and *Ascham*. Greek was now taught to boys in the principal schools; and those who united elegance with learning, read, with great diligence, the *Italian* and *Spanish* poets. But literature was yet confined to professed scholars, or to men and women of high rank. The publick was gross and dark; and to be able to read and write, was an

accomplishment still valued for its rarity.

Nations, like individuals, have their infancy. A people newly awakened to literary curiosity, being yet unacquainted with the true state of things, knows not how to judge of that which is proposed as its resemblance. Whatever is remote from common appearances is always welcome to vulgar, as to childish credulity; and of a country unenlightened by learning, the whole people is the vulgar. The study of those who then aspired to plebeian learning was laid out upon adventures, giants, dragons, and enchantments. *The Death of Arthur* was the favourite volume.

The mind, which has feasted on the luxurious wonders of fiction, has no taste of the insipidity of truth. A play which imitated only the common occurrences of the world, would, upon the admirers of *Palmerin* and *Guy of Warwick*, have made little impression; he that wrote for such an audience was under the necessity of looking round for strange events and fabulous transactions, and that incredibility, by which maturer knowledge is offended, was the chief recommendation of writings, to unskilful curiosity.

Our authour's plots are generally borrowed from novels, and it is reasonable to suppose, that he chose the most popular, such as were read by many, and related by more; for his audience could not have followed him through the intricacies of the drama, had they not held the thread of the story in their hands.

The stories, which we now find only in remoter authours, were in his time accessible and familiar. The fable of *As you like it*, which is supposed to be copied from *Chaucer's Gamelyn*, was a little pamphlet of those times; and old Mr. *Cibber* remembered the tale of *Hamlet* in plain *English* prose, which the criticks have now to seek in *Saxo Grammaticus*.

His *English* histories he took from *English* chronicles and *English* ballads; and as the ancient writers were made known to his countrymen by versions, they supplied him with new subjects; he dilated some of *Plutarch's* lives into plays, when they had been translated by *North*.

His plots, whether historical or fabulous, are always crowded with incidents,

by which the attention of a rude people was more easily caught than by sentiment or argumentation; and such is the power of the marvellous even over those who despise it, that every man finds his mind more strongly seized by the tragedies of *Shakespeare* than of any other writer; others please us by particular speeches, but he always makes us anxious for the event, and has perhaps excelled all but *Homer* in securing the first purpose of a writer, by exciting restless and unquenchable curiosity and compelling him that reads his work to read it through. The shows and bustle with which his plays abound have the same original. As knowledge advances, pleasure passes from the eye to the ear, but returns, as it declines, from the ear to the eye. Those to whom our authour's labours were exhibited had more skill in pomps or processions than in poetical language, and perhaps wanted some visible and discriminated events, as comments on the dialogue. He knew how he should most please; and whether his practice is more agreeable to nature, or whether his example has prejudiced the nation, we still find that on our stage something must be done as well as said, and inactive declamation is very coldly heard, however musical or elegant, passionate or sublime.

Voltaire expresses his wonder, that our authour's extravagances are endured by a nation, which has seen the tragedy of *Cato*. Let him be answered, that *Addison* speaks the language of poets, and *Shakespeare*, of men. We find in *Cato* innumerable beauties which enamour us of its authour, but we see nothing that acquaints us with human sentiments or human actions; we place it with the fairest and the noblest progeny which judgment propagates by conjunction with learning, but *Othello* is the vigorous and vivacious offspring of observation impregnated by genius. *Cato* affords a splendid exhibition of artificial and fictitious manners, and delivers just and noble sentiments, in diction easy, elevated and harmonious, but its hopes and fears communicate no vibration to the heart; the composition refers us only to the writer; we pronounce the name of *Cato*, but we think on *Addison*.

The work of a correct and regular writer is a garden accurately formed and diligently planted, varied with shades, and scented with flowers; the composition of *Shakespeare* is a forest, in which oaks extend their branches, and pines tower in the air, interspersed sometimes with weeds and brambles, and sometimes giving shelter to myrtles and to roses; filling the eye with

awful pomp, and gratifying the mind with endless diversity. Other poets display cabinets of precious rarities, minutely finished, wrought into shape, and polished into brightness. *Shakespeare* opens a mine which contains gold and diamonds in unexhaustible plenty, though clouded by incrustations, debased by impurities, and mingled with a mass of meaner minerals.

It has been much disputed, whether *Shakespeare* owed his excellence to his own native force, or whether he had the common helps of scholastick education, the precepts of critical science, and the examples of ancient authours.

There has always prevailed a tradition, that *Shakespeare* wanted learning, that he had no regular education, nor much skill in the dead languages. *Johnson*, his friend, affirms, that *he had small Latin, and no Greek*; who, besides that he had no imaginable temptation to falsehood, wrote at a time when the character and acquisitions of *Shakespeare* were known to multitudes. His evidence ought therefore to decide the controversy, unless some testimony of equal force could be opposed.

Some have imagined, that they have discovered deep learning in many imitations of old writers; but the examples which I have known urged, were drawn from books translated in his time; or were such easy coincidences of thought, as will happen to all who consider the same subjects; or such remarks on life or axioms of morality as float in conversation, and are transmitted through the world in proverbial sentences.

I have found it remarked, that, in this important sentence, *Go before, I'll follow*, we read a translation of, *I prae, sequar*. I have been told, that when *Caliban*, after a pleasing dream, says, *I cry'd to sleep again*, the authour imitates *Anacreon*, who had, like every other man, the same wish on the same occasion.

There are a few passages which may pass for imitations, but so few, that the exception only confirms the rule; he obtained them from accidental quotations, or by oral communication, and as he used what he had, would have used more if he had obtained it.

The *Comedy of Errors* is confessedly taken from the *Menæchmi* of *Plautus*; from the only play of *Plautus* which was then in *English*. What can be more probable, than that he who copied that, would have copied more; but that those which were not translated were inaccessible?

Whether he knew the modern languages is uncertain. That his plays have some *French* scenes proves but little; he might easily procure them to be written, and probably, even though he had known the language in the common degree, he could not have written it without assistance. In the story of *Romeo and Juliet* he is observed to have followed the *English* translation, where it deviates from the *Italian*; but this on the other part proves nothing against his knowledge of the original. He was to copy, not what he knew himself, but what was known to his audience.

It is most likely that he had learned *Latin* sufficiently to make him acquainted with construction, but that he never advanced to an easy perusal of the *Roman* authors. Concerning his skill in modern languages, I can find no sufficient ground of determination; but as no imitations of *French* or *Italian* authors have been discovered, though the *Italian* poetry was then high in esteem, I am inclined to believe, that he read little more than *English*, and chose for his fables only such tales as he found translated.

That much knowledge is scattered over his works is very justly observed by *Pope*, but it is often such knowledge as books did not supply. He that will understand *Shakespeare*, must not be content to study him in the closet, he must look for his meaning sometimes among the sports of the field, and sometimes among the manufactures of the shop.

There is however proof enough that he was a very diligent reader, nor was our language then so indigent of books, but that he might very liberally indulge his curiosity without excursion into foreign literature. Many of the *Roman* authors were translated, and some of the *Greek*; the reformation had filled the kingdom with theological learning; most of the topics of human disquisition had found *English* writers; and poetry had been cultivated, not only with diligence, but success. This was a stock of knowledge sufficient for a mind so capable of appropriating and improving it.

But the greater part of his excellence was the product of his own genius. He found the *English* stage in a state of the utmost rudeness; no essays either in tragedy or comedy had appeared, from which it could be discovered to what degree of delight either one or other might be carried. Neither character nor dialogue were yet understood. *Shakespeare* may be truly said to have introduced them both amongst us, and in some of his happier scenes to have carried them both to the utmost height.

By what gradations of improvement he proceeded, is not easily known; for the chronology of his works is yet unsettled. *Rowe* is of opinion, that *perhaps we are not to look for his beginning, like those of other writers, in his least perfect works; art had so little, and nature so large a share in what he did, that for ought I know, says he, the performances of his youth, as they were the most vigorous, were the best.* But the power of nature is only the power of using to any certain purpose the materials which diligence procures, or opportunity supplies. Nature gives no man knowledge, and when images are collected by study and experience, can only assist in combining or applying them. *Shakespeare*, however favoured by nature, could impart only what he had learned; and as he must increase his ideals, like other mortals, by gradual acquisition, he, like them, grew wiser as he grew older, could display life better, as he knew it more, and instruct with more efficacy, as he was himself more amply instructed.

There is a vigilance of observation and accuracy of distinction which books and precepts cannot confer; from this almost all original and native excellence proceeds. *Shakespeare* must have looked upon mankind with perspicacity, in the highest degree curious and attentive. Other writers borrow their characters from preceding writers, and diversify them only by the accidental appendages of present manners; the dress is a little varied, but the body is the same. Our authour had both matter and form to provide; for except the characters of *Chaucer*, to whom I think he is not much indebted, there were no writers in *English*, and perhaps not many in other modern languages, which shewed life in its native colours.

The contest about the original benevolence or malignity of man had not yet commenced. Speculation had not yet attempted to analyse the mind, to trace

the passions to their sources, to unfold the seminal principles of vice and virtue, or sound the depths of the heart for the motives of action. All those enquiries, which from that time that human nature became the fashionable study, have been made sometimes with nice discernment, but often with idle subtilty, were yet unattempted. The tales, with which the infancy of learning was satisfied, exhibited only the superficial appearances of action, related the events but omitted the causes, and were formed for such as delighted in wonders rather than in truth. Mankind was not then to be studied in the closet; he that would know the world, was under the necessity of gleanng his own remarks, by mingling as he could in its business and amusements.

Boyle congratulated himself upon his high birth, because it favoured his curiosity, by facilitating his access. *Shakespeare* had no such advantage; he came to *London* a needy adventurer, and lived for a time by very mean employments. Many works of genius and learning have been performed in states of life, that appear very little favourable to thought or to enquiry; so many, that he who considers them is inclined to think that he sees enterprise and perseverance predominating over all external agency, and bidding help and hindrance vanish before them. The genius of *Shakespeare* was not to be depressed by the weight of poverty, nor limited by the narrow conversation to which men in want are inevitably condemned; the incumbrances of his fortune were shaken from his mind, *as dewdrops from a lion's mane*.

Though he had so many difficulties to encounter, and so little assistance to surmount them, he has been able to obtain an exact knowledge of many modes of life, and many casts of native dispositions; to vary them with great multiplicity; to mark them by nice distinctions; and to shew them in full view by proper combinations. In this part of his performances he had none to imitate, but has himself been imitated by all succeeding writers; and it may be doubted, whether from all his successors more maxims of theoretical knowledge, or more rules of practical prudence, can be collected, than he alone has given to his country.

Nor was his attention confined to the actions of men; he was an exact surveyor of the inanimate world; his descriptions have always some peculiarities, gathered by contemplating things as they really exist. It may be

observed, that the oldest poets of many nations preserve their reputation, and that the following generations of wit, after a short celebrity, sink into oblivion. The first, whoever they be, must take their sentiments and descriptions immediately from knowledge; the resemblance is therefore just, their descriptions are verified by every eye, and their sentiments acknowledged by every breast. Those whom their fame invites to the same studies, copy partly them, and partly nature, till the books of one age gain such authority, as to stand in the place of nature to another, and imitation, always deviating a little, becomes at last capricious and casual. *Shakespeare*, whether life or nature be his subject, shews plainly, that he has seen with his own eyes; he gives the image which he receives, not weakened or distorted by the intervention of any other mind; the ignorant feel his representations to be just, and the learned see that they are compleat.

Perhaps it would not be easy to find any authour, except *Homer*, who invented so much as *Shakespeare*, who so much advanced the studies which he cultivated, or effused so much novelty upon his age or country. The form, the characters, the language, and the shows of the *English* drama are his, *He seems*, says *Dennis*, *to have been the very original of our English tragical harmony, that is, the harmony of blank verse, diversified often by dissyllable and trissyllable terminations. For the diversity distinguishes it from heroick harmony, and by bringing it nearer to common use makes it more proper to gain attention, and more fit for action and dialogue. Such verse we make when we are writing prose; we make such verse in common conversation.*

I know not whether this praise is rigorously just. The dissyllable termination, which the critic rightly appropriates to the drama, is to be found, though, I think, not in *Gorboduc* which is confessedly before our author; yet in *Hieronnymo*, of which the date is not certain, but which there is reason to believe at least as old as his earliest plays. This however is certain, that he is the first who taught either tragedy or comedy to please, there being no theatrical piece of any older writer, of which the name is known, except to antiquaries and collectors of books, which are sought because they are scarce, and would not have been scarce, had they been much esteemed.

To him we must ascribe the praise, unless *Spenser* may divide it with him, of

having first discovered to how much smoothness and harmony the *English* language could be softened. He has speeches, perhaps sometimes scenes, which have all the delicacy of *Rowe*, without his effeminacy. He endeavours indeed commonly to strike by the force and vigour of his dialogue, but he never executes his purpose better, than when he tries to sooth by softness.

Yet it must be at last confessed, that as we owe every thing to him, he owes something to us; that, if much of his praise is paid by perception and judgement, much is likewise given by custom and veneration. We fix our eyes upon his graces, and turn them from his deformities, and endure in him what we should in another loath or despise. If we endured without praising, respect for the father of our drama might excuse us; but I have seen, in the book of some modern critick, a collection of anomalies, which shew that he has corrupted language by every mode of depravation, but which his admirer has accumulated as a monument of honour.

He has scenes of undoubted and perpetual excellence, but perhaps not one play, which, if it were now exhibited as the work of a contemporary writer, would be heard to the conclusion. I am indeed far from thinking, that his works were wrought to his own ideas of perfection; when they were such as would satisfy the audience, they satisfied the writer. It is seldom that authours, though more studious of fame than *Shakespeare*, rise much above the standard of their own age; to add a little of what is best will always be sufficient for present praise, and those who find themselves exalted into fame, are willing to credit their encomiasts, and to spare the labour of contending with themselves.

It does not appear, that *Shakespeare* thought his works worthy of posterity, that he levied any ideal tribute upon future times, or had any further prospect, than of present popularity and present profit. When his plays had been acted, his hope was at an end; he solicited no addition of honour from the reader. He therefore made no scruple to repeat the same jests in many dialogues, or to entangle different plots by the same knot of perplexity, which may be at least forgiven him, by those who recollect, that of *Congreve's* four comedies, two are concluded by a marriage in a mask, by a deception, which perhaps never

happened, and which, whether likely or not, he did not invent.

So careless was this great poet of future fame, that, though he retired to ease and plenty, while he was yet little *declined into the vale of years*, before he could be disgusted with fatigue, or disabled by infirmity, he made no collection of his works, nor desired to rescue those that had been already published from the depravations that obscured them, or secure to the rest a better destiny, by giving them to the world in their genuine state.

Of the plays which bear the name of *Shakespeare* in the late editions, the greater part were not published till about seven years after his death, and the few which appeared in his life are apparently thrust into the world without the care of the authour, and therefore probably without his knowledge.

Of all the publishers, clandestine or professed, their negligence and unskilfulness has by the late revisers been sufficiently shown. The faults of all are indeed numerous and gross, and have not only corrupted many passages perhaps beyond recovery, but have brought others into suspicion, which are only obscured by obsolete phraseology, or by the writer's unskilfulness and affectation. To alter is more easy than to explain, and temerity is a more common quality than diligence. Those who saw that they must employ conjecture to a certain degree, were willing to indulge it a little further. Had the author published his own works, we should have sat quietly down to disentangle his intricacies, and clear his obscurities; but now we tear what we cannot loose, and eject what we happen not to understand.

The faults are more than could have happened without the concurrence of many causes. The stile of *Shakespeare* was in itself ungrammatical, perplexed and obscure; his works were transcribed for the players by those who may be supposed to have seldom understood them; they were transmitted by copiers equally unskilful, who still multiplied errors; they were perhaps sometimes mutilated by the actors, for the sake of shortening the speeches; and were at last printed without correction of the press.

In this state they remained, not as Dr. *Warburton* supposes, because they were unregarded, but because the editor's art was not yet applied to modern

languages, and our ancestors were accustomed to so much negligence of *English* printers, that they could very patiently endure it. At last an edition was undertaken by *Rowe*; not because a poet was to be published by a poet, for *Rowe* seems to have thought very little on correction or explanation, but that our authour's works might appear like those of his fraternity, with the appendages of a life and recommendatory preface. *Rowe* has been clamorously blamed for not performing what he did not undertake, and it is time that justice be done him, by confessing, that though he seems to have had no thought of corruption beyond the printer's errors, yet he has made many emendations, if they were not made before, which his successors have received without acknowledgement, and which, if they had produced them, would have filled pages and pages with censures of the stupidity by which the faults were committed, with displays of the absurdities which they involved, with ostentatious expositions of the new reading, and self congratulations on the happiness of discovering it.

Of *Rowe*, as of all the editors, I have preserved the preface, and have likewise retained the authour's life, though not written with much elegance or spirit; it relates however what is now to be known, and therefore deserves to pass through all succeeding publications.

The nation had been for many years content enough with Mr. *Rowe*'s performance, when Mr. *Pope* made them acquainted with the true state of *Shakespeare*'s text, shewed that it was extremely corrupt, and gave reason to hope that there were means of reforming it. He collated the old copies, which none had thought to examine before, and restored many lines to their integrity; but, by a very compendious criticism, he rejected whatever he disliked, and thought more of amputation than of cure.

I know not why he is commended by Dr. *Warburton* for distinguishing the genuine from the spurious plays. In this choice he exerted no judgement of his own; the plays which he received, were given by *Hemings* and *Condell*, the first editors; and those which he rejected, though, according to the licentiousness of the press in those times, they were printed during *Shakespeare*'s life, with his name, had been omitted by his friends, and were never added to his works before the edition of 1664, from which they

were copied by the later printers.

This was a work which *Pope* seems to have thought unworthy of his abilities, being not able to suppress his contempt of *the dull duty of an editor*. He understood but half his undertaking. The duty of a collator is indeed dull, yet, like other tedious tasks, is very necessary; but an emendatory critick would ill discharge his duty, without qualities very different from dullness. In perusing a corrupted piece, he must have before him all possibilities of meaning, with all possibilities of expression. Such must be his comprehension of thought, and such his copiousness of language. Out of many readings possible, he must be able to select that which best suits with the state, opinions, and modes of language prevailing in every age, and with his authour's particular cast of thought, and turn of expression. Such must be his knowledge, and such his taste. Conjectural criticism demands more than humanity possesses, and he that exercises it with most praise has very frequent need of indulgence. Let us now be told no more of the dull duty of an editor.

Confidence is the common consequence of success. They whose excellence of any kind has been loudly celebrated, are ready to conclude, that their powers are universal. *Pope's* edition fell below his own expectations, and he was so much offended, when he was found to have left any thing for others to do, that he past the latter part of his life in a state of hostility with verbal criticism.

I have retained all his notes, that no fragment of so great a writer may be lost; his preface, valuable alike for elegance of composition and justness of remark, and containing a general criticism on his authour, so extensive, that little can be added, and so exact, that little can be disputed, every editor has an interest to suppress, but that every reader would demand its insertion.

Pope was succeeded by *Theobald*, a man of narrow comprehension and small acquisitions, with no native and intrinsic splendour of genius, with little of the artificial light of learning, but zealous for minute accuracy, and not negligent in pursuing it. He collated the ancient copies, and rectified many errors. A man so anxiously scrupulous might have been expected to do more, but what little he did was commonly right.

In his report of copies and editions he is not to be trusted, without examination. He speaks sometimes indefinitely of copies, when he has only one. In his enumeration of editions, he mentions the two first folios as of high, and the third folio as of middle authority; but the truth is, that the first is equivalent to all others, and that the rest only deviate from it by the printer's negligence. Whoever has any of the folios has all, excepting those diversities which mere reiteration of editions will produce. I collated them all at the beginning, but afterwards used only the first.

Of his notes I have generally retained those which he retained himself in his second edition, except when they were confuted by subsequent annotators, or were too minute to merit preservation. I have sometimes adopted his restoration of a comma, without inserting the panegyrick in which he celebrated himself for his achievement. The exuberant excrescence of his diction I have often lopped, his triumphant exultations over *Pope* and *Rowe* I have sometimes suppressed, and his contemptible ostentation I have frequently concealed; but I have in some places shewn him, as he would have shewn himself, for the reader's diversion, that the inflated emptiness of some notes may justify or excuse the contraction of the rest.

Theobald, thus weak and ignorant, thus mean and faithless, thus petulant and ostentatious, by the good luck of having *Pope* for his enemy, has escaped, and escaped alone, with reputation, from this undertaking. So willingly does the world support those who sollicit favour, against those who command reverence; and so easily is he praised, whom no man can envy.

Our authour fell then into the hands of Sir *Thomas Hanmer*, the *Oxford* editor, a man, in my opinion, eminently qualified by nature for such studies. He had, what is the first requisite to emendatory criticism, that intuition by which the poet's intention is immediately discovered, and that dexterity of intellect which despatches its work by the easiest means. He had undoubtedly read much; his acquaintance with customs, opinions, and traditions, seems to have been large; and he is often learned without shew. He seldom passes what he does not understand, without an attempt to find or to make a meaning, and sometimes hastily makes what a little more attention would have found. He is solicitous to reduce to grammar, what he could not be sure that his authour

intended to be grammatical. *Shakespeare* regarded more the series of ideas, than of words; and his language, not being designed for the reader's desk, was all that he desired it to be, if it conveyed his meaning to the audience.

Hanmer's care of the metre has been too violently censured. He found the measures reformed in so many passages, by the silent labours of some editors, with the silent acquiescence of the rest, that he thought himself allowed to extend a little further the license, which had already been carried so far without reprehension; and of his corrections in general, it must be confessed, that they are often just, and made commonly with the least possible violation of the text.

But, by inserting his emendations, whether invented or borrowed, into the page, without any notice of varying copies, he has appropriated the labour of his predecessors, and made his own edition of little authority. His confidence indeed, both in himself and others, was too great; he supposes all to be right that was done by *Pope* and *Theobald*; he seems not to suspect a critick of fallibility, and it was but reasonable that he should claim what he so liberally granted.

As he never writes without careful enquiry and diligent consideration, I have received all his notes, and believe that every reader will wish for more.

Of the last editor it is more difficult to speak. Respect is due to high place, tenderness to living reputation, and veneration to genius and learning; but he cannot be justly offended at that liberty of which he has himself so frequently given an example, nor very solicitous what is thought of notes, which he ought never to have considered as part of his serious employments, and which, I suppose, since the ardour of composition is remitted, he no longer numbers among his happy effusions.

The original and predominant error of his commentary, is acquiescence in his first thoughts; that precipitation which is produced by consciousness of quick discernment; and that confidence which presumes to do, by surveying the surface, what labour only can perform, by penetrating the bottom. His notes exhibit sometimes perverse interpretations, and sometimes improbable

conjectures; he at one time gives the authour more profundity of meaning, than the sentence admits, and at another discovers absurdities, where the sense is plain to every other reader. But his emendations are likewise often happy and just; and his interpretation of obscure passages learned and sagacious.

Of his notes, I have commonly rejected those, against which the general voice of the publick has exclaimed, or which their own incongruity immediately condemns, and which, I suppose, the authour himself would desire to be forgotten. Of the rest, to part I have given the highest approbation, by inserting the offered reading in the text; part I have left to the judgment of the reader, as doubtful, though specious; and part I have censured without reserve, but I am sure without bitterness of malice, and, I hope, without wantonness of insult.

It is no pleasure to me, in revising my volumes, to observe how much paper is wasted in confutation. Whoever considers the revolutions of learning, and the various questions of greater or less importance, upon which wit and reason have exercised their powers, must lament the unsuccessfulness of enquiry, and the slow advances of truth, when he reflects, that great part of the labour of every writer is only the destruction of those that went before him. The first care of the builder of a new system, is to demolish the fabricks which are standing. The chief desire of him that comments an authour, is to shew how much other commentators have corrupted and obscured him. The opinions prevalent in one age, as truths above the reach of controversy, are confuted and rejected in another, and rise again to reception in remoter times. Thus the human mind is kept in motion without progress. Thus sometimes truth and criour, and sometimes contrarieties of error, take each other's place by reciprocal invasion. The tide of seeming knowledge which is poured over one generation, retires and leaves another naked and barren; the sudden meteors of intelligence which for a while appear to shoot their beams into the regions of obscurity, on a sudden withdraw their lustre, and leave mortals again to grope their way.

These elevations and depressions of renown, and the contradictions to which all improvers of knowledge must for ever be exposed, since they are not

escaped by the highest and brightest of mankind, may surely be endured with patience by criticks and annotators, who can rank themselves but as the satellites of their authours. How canst thou beg for life, says *Achilles* to his captive, when thou knowest that thou art now to suffer only what must another day be suffered by *Achilles*?

Dr. *Warburton* had a name sufficient to confer celebrity on those who could exalt themselves into antagonists, and his notes have raised a clamour too loud to be distinct. His chief assailants are the authours of *the Canons of criticism* and of the *Review of Shakespeare's text*; of whom one ridicules his errors with airy petulance, suitable enough to the levity of the controversy; the other attacks them with gloomy malignity, as if he were dragging to justice an assassin or incendiary. The one stings like a fly, sucks a little blood, takes a gay flutter, and returns for more; the other bites like a viper, and would be glad to leave inflammations and gangrene behind him. When I think on one, with his confederates, I remember the danger of *Coriolanus*, who was afraid that *girls with spits, and boys with stones, should slay him in puny battle*; when the other crosses my imagination, I remember the prodigy in *Macbeth*,

An eagle tow'ring in his pride of place, Was by a mousing owl hawk'd at and kill'd.

Let me however do them justice. One is a wit, and one a scholar. They have both shown acuteness sufficient in the discovery of faults, and have both advanced some probable interpretations of obscure passages; but when they aspire to conjecture and emendation, it appears how falsely we all estimate our own abilities, and the little which they have been able to perform might have taught them more candour to the endeavours of others.

Before Dr. *Warburton's* edition, *Critical observations on Shakespeare* had been published by Mr. *Upton*, a man skilled in languages, and acquainted with books, but who seems to have had no great vigour of genius or nicety of taste. Many of his explanations are curious and useful, but he likewise, though he professed to oppose the licentious confidence of editors, and adhere to the old copies, is unable to restrain the rage of emendation, though his ardour is ill

seconded by his skill. Every cold empirick, when his heart is expanded by a successful experiment, swells into a theorist, and the laborious collator at some unlucky moment frolicks in conjecture.

Critical, historical and explanatory notes have been likewise published upon *Shakespeare* by Dr. *Grey*, whose diligent perusal of the old *English* writers has enabled him to make some useful observations. What he undertook he has well enough performed, but as he neither attempts judicial nor emendatory criticism, he employs rather his memory than his sagacity. It were to be wished that all would endeavour to imitate his modesty who have not been able to surpass his knowledge.

I can say with great sincerity of all my predecessors, what I hope will hereafter be said of me, that not one has left *Shakespeare* without improvement, nor is there one to whom I have not been indebted for assistance and information. Whatever I have taken from them it was my intention to refer to its original authour, and it is certain, that what I have not given to another, I believed when I wrote it to be my own. In some perhaps I have been anticipated; but if I am ever found to encroach upon the remarks of any other commentator, I am willing that the honour, be it more or less, should be transferred to the first claimant, for his right, and his alone, stands above dispute; the second can prove his pretensions only to himself, nor can himself always distinguish invention, with sufficient certainty, from recollection.

They have all been treated by me with candour, which they have not been careful of observing to one another. It is not easy to discover from what cause the acrimony of a scholiast can naturally proceed. The subjects to be discussed by him are of very email importance; they involve neither property nor liberty; nor favour the interest of sect or party. The various readings of copies, and different interpretations of a passage, seem to be questions that might exercise the wit, without engaging the passions. But, whether it be, that *small things make mean men proud*, and vanity catches small occasions; or that all contrariety of opinion, even in those that can defend it no longer, makes proud men angry; there is often found in commentaries a spontaneous strain of invective and contempt, more eager and venomous than is vented by

the most furious controvertist in politicks against those whom he is hired to defame.

Perhaps the lightness of the matter may conduce to the vehemence of the agency; when the truth to be investigated is so near to inexistence, as to escape attention, its bulk is to be enlarged by rage and exclamation: That to which all would be indifferent in its original state, may attract notice when the fate of a name is appended to it. A commentator has indeed great temptations to supply by turbulence what he wants of dignity, to beat his little gold to a spacious surface, to work that to foam which no art or diligence can exalt to spirit.

The notes which I have borrowed or written are either illustrative, by which difficulties are explained; or judicial by which faults and beauties are remarked; or emendatory, by which depravations are corrected.

The explanations transcribed from others, if I do not subjoin any other interpretation, I suppose commonly to be right, at least I intend by acquiescence to confess, that I have nothing better to propose.

After the labours of all the editors, I found many passages which appeared to me likely to obstruct the greater number of readers, and thought it my duty to facilitate their passage. It is impossible for an expositor not to write too little for some, and too much for others. He can only judge what is necessary by his own experience; and how long soever he may deliberate, will at last explain many lines which the learned will think impossible to be mistaken, and omit many for which the ignorant will want his help. These are censures merely relative, and must be quietly endured. I have endeavoured to be neither superfluously copious, nor scrupulously reserved, and hope that I have made my authour's meaning accessible to many who before were frighted from perusing him, and contributed something to the publick, by diffusing innocent and rational pleasure.

The compleat explanation of an authour not systematick and consequential, but desultory and vagrant, abounding in casual allusions and light hints, is not to be expected from any single scholiast. All personal reflections, when

names are suppressed, must be in a few years irrecoverably obliterated; and customs, too minute to attract the notice of law, such as modes of dress, formalities of conversation, rules of visits, disposition of furniture, and practices of ceremony, which naturally find places in familiar dialogue, are so fugitive and unsubstantial, that they are not easily retained or recovered. What can be known, will be collected by chance, from the recesses of obscure and obsolete papers, perused commonly with some other view. Of this knowledge every man has some, and none has much; but when an authour has engaged the publick attention, those who can add any thing to his illustration, communicate their discoveries, and time produces what had eluded diligence.

To time I have been obliged to resign many passages, which, though I did not understand them, will perhaps hereafter be explained, having, I hope, illustrated some, which others have neglected or mistaken, sometimes by short remarks, or marginal directions, such as every editor has added at his will, and often by comments more laborious than the matter will seem to deserve; but that which is most difficult is not always most important, and to an editor nothing is a trifle by which his authour is obscured.

The poetical beauties or defects I have not been very diligent to observe. Some plays have more, and some fewer judicial observations, not in proportion to their difference of merit, but because I gave this part of my design to chance and to caprice. The reader, I believe, is seldom pleased to find his opinion anticipated; it is natural to delight more in what we find or make, than in what we receive. Judgement, like other faculties, is improved by practice, and its advancement is hindered by submission to dictatorial decisions, as the memory grows torpid by the use of a table book. Some initiation is however necessary; of all skill, part is infused by precept, and part is obtained by habit; I have therefore shewn so much as may enable the candidate of criticism to discover the rest.

To the end of most plays, I have added short strictures, containing a general censure of faults, or praise of excellence; in which I know not how much I have concurred with the current opinion; tut I have not, by any affectation of singularity, deviated from it. Nothing is minutely and particularly examined,

and therefore it is to be supposed, that in the plays which are condemned there is much to be praised, and in these which are praised much to be condemned.

The part of criticism in which the whole succession of editors has laboured with the greatest diligence, which has occasioned the most arrogant ostentation, and excited the keenest acrimony, is the emendation of corrupted passages, to which the publick attention having been first drawn by the violence of contention between *Pope* and *Theobald*, has been continued by the persecution, which, with a kind of conspiracy, has been since raised against all the publishers of *Shakespeare*.

That many passages have passed in a state of depravation through all the editions is indubitably certain; of these the restoration is only to be attempted by collation of copies or sagacity of conjecture. The collator's province is safe and easy, the conjecturer's perilous and difficult. Yet as the greater part of the plays are extant only in one copy, the peril must not be avoided, nor the difficulty refused.

Of the readings which this emulation of amendment has hitherto produced, some from the labours of every publisher I have advanced into the text; those are to be considered as in my opinion sufficiently supported; some I have rejected without mention, as evidently erroneous; some I have left in the notes without censure or approbation, as resting in equipoise between objection and defence; and some, which seemed specious but not right, I have inserted with a subsequent animadversion.

Having classed the observations of others, I was at last to try what I could substitute for their mistakes, and how I could supply their omissions. I collated such copies as I could procure, and wished for more, but have not found the collectors of these rarities very communicative. Of the editions which chance or kindness put into my hands I have given an enumeration, that I may not be blamed for neglecting what I had not the power to do.

By examining the old copies, I soon found that the later publishers, with all their boasts of diligence, suffered many passages to stand unauthorised, and

contented themselves with *Rowe's* regulation of the text, even where they knew it to be arbitrary, and with a little consideration might have found it to be wrong. Some of these alterations are only the ejection of a word for one that appeared to him more elegant or more intelligible. These corruptions I have often silently rectified; for the history of our language, and the true force of our words, can only be preserved, by keeping the text of authours free from adulteration. Others, and those very frequent, smoothed the cadence, or regulated the measure; on these I have not exercised the same rigour; if only a word was transposed, or a particle Inserted or omitted, I have sometimes suffered the line to stand; for the inconstancy of the copies is such, as that some liberties may be easily permitted. But this practice I have not suffered to proceed far, having restored the primitive diction wherever it could for any reason be preferred.

The emendations, which comparison of copies supplied, I have inserted in the text; sometimes where the improvement was slight, without notice, and sometimes with an account of the reasons of the change.

Conjecture, though it be sometimes unavoidable, I have not wantonly nor licentiously indulged. It has been my settled principle, that the reading of the ancient books is probably true, and therefore is not to be disturbed for the sake of elegance, perspicuity, or mere improvement of the sense. For though much credit is not due to the fidelity, nor any to the judgement of the first publishers, yet they who had the copy before their eyes were more likely to read it right, than we who read it only by imagination. But it is evident that they have often made strange mistakes by ignorance or negligence, and that therefore something may be properly attempted by criticism, keeping the middle way between presumption and timidity.

Such criticism I have attempted to practice, and where any passage appeared inextricably perplexed, have endeavoured to discover how it may be recalled to sense, with least violence. But my first labour is, always to turn the old text on every side, and try if there be any interstice, through which light can find its way; nor would *Huetius* himself condemn me, as refusing the trouble of research, for the ambition of alteration. In this modest industry I have not been unsuccessful. I have rescued many lines from the violations of temerity,

and secured many scenes from the inroads of correction. I have adopted the *Romans* sentiment, that it is more honourable to save a citizen, than to kill an enemy, and have been more careful to protect than to attack.

I have preserved the common distribution of the plays into acts, though I believe it to be in almost all the plays void of authority. Some of those which are divided in the later editions have no division in the first folio, and some that are divided in the folio have no division in the preceding copies. The settled mode of the theatre requires four intervals in the play, but few, if any, of our authour's compositions can be properly distributed in that manner. An act is so much of the drama as passes without intervention of time or change of place. A pause makes a new act. In every real, and therefore in every imitative action, the intervals may be more or fewer, the restriction of five acts being accidental and arbitrary. This *Shakespeare* knew, and this he practised; his plays were written, and at first printed in one unbroken continuity, and ought now to be exhibited with short pauses, interposed as often as the scene is changed, or any considerable time is required to pass. This method would at once quell a thousand absurdities.

In restoring the author's works to their integrity, I have considered the punctuation as wholly in my power; for what could be their care of colons and commas, who corrupted words and sentences. Whatever could be done by adjusting points is therefore silently performed, in some plays with much diligence, in others with less; it is hard to keep a busy eye steadily fixed upon evanescent atoms, or a discursive mind upon evanescent truth.

The same liberty has been taken with a few particles, or other words of slight effect. I have sometimes inserted or omitted them without notice. I have done that sometimes, which the other editors have done always, and which indeed the state of the text may sufficiently justify.

The greater part of readers, instead of blaming us for passing trifles, will wonder that on mere trifles so much labour is expended, with such importance of debate, and such solemnity of diction. To these I answer with confidence, that they are judging of an art which they do not understand; yet cannot much reproach them with their ignorance, nor promise that they

would become in general, by learning criticism, more useful, happier or wiser.

As I practised conjecture more, I learned to trust it less; and after I had printed a few plays, resolved to insert none of my own readings in the text. Upon this caution I now congratulate myself, for every day encreases my doubt of my emendations.

Since I have confined my imagination to the margin, it must not be considered as very reprehensible, if I have suffered it to play some freaks in its own dominion. There is no danger in conjecture, if it be proposed as conjecture; and while the text remains uninjured, those changes may be safely offered, which are not considered even by him that offers them as necessary or safe.

If my readings are of little value, they have not been ostentatiously displayed or importunately obtruded. I could have written longer notes, for the art of writing notes is not of difficult attainment. The work is performed, first by railing at the stupidity, negligence, ignorance, and asinine tastelessness of the former editors, and shewing, from all that goes before and all that follows, the inelegance and absurdity of the old reading; then by proposing something which to superficial readers would seem specious, but which the editor rejects with indignation; then by producing the true reading, with a long paraphrase, and concluding with loud acclamations on the discovery, and a sober wish for the advancement and prosperity of genuine criticism.

All this may be done, and perhaps done sometimes without impropriety. But I have always suspected that the reading is right, which requires many words to prove it wrong; and the emendation wrong, that cannot without so much labour appear to be right. The justness of a happy restoration strikes at once, and the moral precept may be well applied to criticism, *quod dubitas ne feceris*.

To dread the shore which he sees spread with wrecks, is natural to the sailor. I had before my eye, so many critical adventures ended in miscarriage, that caution was forced upon me. I encountered in every page Wit struggling with

its own sophistry, and Learning confused by the multiplicity of its views. I was forced to censure those whom I admired, and could not but reflect, while I was dispossessing their emendations, how soon the same fate might happen to my own, and how many of the readings which I have corrected may be by some other editor defended and established.

Criticks, I saw, that other's names efface,
And fix their own, with labour, in the place;
Their own, like others, soon their place resign'd,
Or disappear'd, and left the first behind,

POPE.

That a conjectural critick should often be mistaken, cannot be wonderful, either to others or himself, if it be considered, that in his art there is no system, no principal and axiomatical truth that regulates subordinate positions. His chance of error is renewed at every attempt; an oblique view of the passage, a slight misapprehension of a phrase, a casual inattention to the parts connected, is sufficient to make him not only fails, but fail ridiculously; and when he succeeds best, he produces perhaps but one reading of many probable, and he that suggests another will always be able to dispute his claims.

It is an unhappy state, in which danger is hid under pleasure. The allurements of emendation are scarcely resistible. Conjecture has all the joy and all the pride of invention, and he that has once started a happy change, is too much delighted to consider what objections may rise against it.

Yet conjectural criticism has been of great use in the learned world; nor is it my intention to depreciate a study, that has exercised so many mighty minds, from the revival of learning to our own age, from the Bishop of *Aleriato* English *Bentley*. The criticks on ancient authours have, in the exercise of their sagacity, many assistances, which the editor of *Shakespeare* is condemned to want. They are employed upon grammatical and settled languages, whose construction contributes so much to perspicuity, that *Homer* has fewer passages unintelligible than *Chaucer*. The words have not only a known regimen, but invariable quantities, which direct and confine the choice. There

are commonly more manuscripts than one; and they do not often conspire in the same mistakes. Yet *Scaliger* could confess to *Salmasius* how little satisfaction his emendations gave him. *Illudunt nobis conjecturæ nostræ, quarum nos pudet, posteaquam in meliores codices incidimus.* And *Lipsius* could complain, that criticks were making faults, by trying to remove them, *Ut olim vitiis, ita nunc remediis laboratur.* And indeed, where mere conjecture is to be used, the emendations of *Scaliger* and *Lipsius*, notwithstanding their wonderful sagacity and erudition, are often vague and disputable, like mine or *Theobald's*.

Perhaps I may not be more censured for doing wrong, than for doing little; for raising in the publick expectations, which at last I have not answered. The expectation of ignorance is indefinite, and that of knowledge is often tyrannical. It is hard to satisfy those who know not what to demand, or those who demand by design what they think impossible to be done. I have indeed disappointed no opinion more than my own; yet I have endeavoured to perform my task with no slight solicitude. Not a single passage in the whole work has appeared to me corrupt, which I have not attempted to restore; or obscure, which I have not endeavoured to illustrate. In many I have failed like others, and from many, after all my efforts, I have retreated, and confessed the repulse. I have not passed over, with affected superiority, what is equally difficult to the reader and to myself, but where I could not instruct him, have owned my ignorance. I might easily have accumulated a mass of seeming learning upon easy scenes; but it ought not to be imputed to negligence, that, where nothing was necessary, nothing has been done, or that, where others have said enough, I have said no more.

Notes are often necessary, but they are necessary evils. Let him, that is yet unacquainted with the powers of *Shakespeare*, and who desires to feel the highest pleasure that the drama can give, read every play from the first scene to the last, with utter negligence of all his commentators. When his fancy is once on the wing, let it not stoop at correction or explanation. When his attention is strongly engaged, let it disdain alike to turn aside to the name of *Theobald* and of *Pope*. Let him read on through brightness and obscurity, through integrity and corruption; let him preserve his comprehension of the dialogue and his interest in the fable. And when the pleasures of novelty have

ceased, let him attempt exactness, and read the commentators.

Particular passages are cleared by notes, but the general effect of the work is weakened. The mind is refrigerated by interruption; the thoughts are diverted from the principal subject; the reader is weary, he suspects not why; and at last throws away the book, which he has too diligently studied.

Parts are not to be examined till the whole has been surveyed; there is a kind of intellectual remoteness necessary for the comprehension of any great work in its full design and its true proportions; a close approach shews the smaller niceties, but the beauty of the whole is discerned no longer. It is not very grateful to consider how little the succession of editors has added to this authour's power of pleasing. He was read, admired, studied, and imitated, while he was yet deformed with all the improprieties which ignorance and neglect could accumulate upon him; while the reading was yet not rectified, nor his allusions understood; yet then did *Dryden* pronounce "that *Shakespeare* was the man, who, of all modern and perhaps ancient poets, had the largest and most comprehensive soul." All the images of nature were still present to him, and he drew them not laboriously, but luckily: when he describes any thing, you more than see it, you feel it too. Those who accuse him to have wanted learning, give him the greater commendation: he was naturally learned: he needed not the spectacles of books to read nature; he looked inwards, and found her there. I cannot say he is every where alike; were he so, I should do him injury to compare him with the greatest of mankind. He is many times flat and insipid; his comick wit degenerating into clenches, his serious swelling into bombast. But he is always great, when some great occasion is presented to him: No man can say, he ever had a fit subject for his wit, and did not then raise himself as high above the rest of poets,

"Quantum lenta solent inter viburna cupressi."

It is to be lamented, that such a writer should want a commentary; that his language should become obsolete, or his sentiments obscure. But it is vain to carry wishes beyond the condition of human things; that which must happen to all, has happened to *Shakespeare*, by accident and time; and more than has

been suffered by any other writer since the use of types, has been suffered by him through his own negligence of fame, or perhaps by that superiority of mind, which despised its own performances, when it compared them with its powers, and judged those works unworthy to be preserved, which the criticks of following ages were to contend for the fame of restoring and explaining.

Among these candidates of inferiour fame, I am now to stand the judgment of the publick; and wish that I could confidently produce my commentary as equal to the encouragement which I have had the honour of receiving. Every work of this kind is by its nature deficient, and I should feel little solicitude about the sentence, were it to be pronounced only by the skilful and the learned.

INTRODUCTION TO THE PROPYLÄEN [A]

BY J.W. VON GOETHE. (1798)

The youth, when Nature and Art attract him, thinks that with a vigorous effort he can soon penetrate into the innermost sanctuary, the man, after long wanderings, finds himself still in the outer court.

Such an observation has suggested our title. It is only on the step, in the gateway, the entrance, the vestibule, the space between the outside and the inner chamber, between the sacred and the common, that we may ordinarily tarry with our friends.

If the word *Propylaeae* recalls particularly the structure through which was reached the citadel of Athens and the temple of Minerva, this is not inconsistent with our purpose; but the presumption of intending to produce here a similar work of art and splendor should not be laid to our charge. The name of the place may be understood as symbolizing what might have happened there; one may expect conversations and discussions such as would perhaps not be unworthy of that place.

Are not thinkers, scholars, artists, in their best hours allured to those regions, to dwell (at least in imagination) among a people to whom a perfection which we desire but never attain was natural, among whom in the course of time and life, a culture developed in a beautiful continuity, which to us appears only in passing fragments? What modern nation does not owe its artistic culture to the Greeks, and, in certain branches, what nation more than the German?

So much by way of excuse for the symbolic title, if indeed an excuse be

necessary. May the title be a reminder that we are to depart as little as possible from classic ground; may it, through its brevity and signification, modify the demands of the friends of art whom we hope to interest through the present work, which is to contain observations and reflections concerning Nature and Art by a harmonious circle of friends.

He who is called to be an artist will give careful heed to everything around him; objects and their parts will attract his attention, and by making practical use of such experience he will gradually train himself to observe more sharply. He will, in his early career, apply everything, so far as possible, to his own advantage; later he will gladly make himself serviceable to others. Thus we also hope to present and relate to our readers many things which we regard as useful and agreeable, things which, under various circumstances, have been noted by us during a number of years.

But who will not willingly agree that pure observation is more rare than is believed? We are apt to confuse our sensations, our opinion, our judgment, with what we experience, so that we do not remain long in the passive attitude of the observer, but soon go on to make reflections; and upon these no greater weight can be placed than may be more or less justified by the nature and quality of our individual intellects.

In this matter we are able to gain stronger confidence from our harmony with others, and from the knowledge that we do not think and work alone, but in common. The perplexing doubt whether our method of thought belongs only to us—a doubt which often comes over us when others express the direct opposite of our convictions—is softened, even dispelled, when we find ourselves in agreement with others; only then do we go on rejoicing with assurance in the possession of those principles which a long experience, on our own part and on the part of others, has gradually confirmed.

When several persons thus live united, so that they may call one another friends, because they have a common interest in bringing about their progressive cultivation and in advancing towards closely related aims, then they may be certain that they will meet again in the most varied ways, and that even the courses which seemed to separate them from one another will

nevertheless soon bring them happily together again.

Who has not experienced what advantages are afforded in such cases by conversation? But conversation is ephemeral; and while the results of a mutual development are imperishable, the memory of the means by which it was reached disappears. Letters preserve better the stages of a progress which friends achieve together; every moment of growth is fixed, and if the result attained affords us agreeable satisfaction, a look backward at the process of development is instructive since it permits its to hope for an unflagging advance in the future.

Short papers, in which are set down from time to time one's thoughts, convictions, and wishes, in order to find entertainment in one's past self after a lapse of time, are excellent auxiliary means for the development of oneself and of others, none of which should be neglected when one considers the brief period allotted to life and the many obstacles that stand in the way of every advance.

It is self evident that we are talking here particularly of an exchange of ideas between such friends as are striving for cultivation in the sphere of science and art; although life in the world of affairs and industry should not lack similar advantages.

In the arts and sciences, however, in addition to this close association among their votaries, a relation to the public is as favorable as it is necessary. Whatever of universal interest one thinks or accomplishes belongs to the world, and the world brings to maturity whatever it can utilize of the efforts of the individual. The desire for approval which the author feels is an impulse implanted by Nature to draw him toward something higher; he thinks he has attained the laurel wreath, but soon becomes aware that a more laborious training of every native talent is necessary in order to retain the public favor; though it may be attained for a short moment through fortune or accident also.

The relation of the author to his public is important in his early period; even in later days he cannot dispense with it. However little he may be fitted to

teach others, he wishes to share his thoughts with those whom he feels congenial, but who are scattered far and wide in the world. By this means he wishes to re-establish his relation with his old friends, to continue it with new ones, and to gain in the younger generation still others for the remainder of his life. He wishes to spare youth the circuitous paths upon which he himself went astray, and while observing and utilizing the advantages of the present, to maintain the memory of his praiseworthy earlier efforts.

With this serious view, a small society has been brought together; may cheerfulness attend our undertakings, and time may show whither we are bound.

The papers which we intend to present, though they are composed by several authors, will, it is hoped, never be contradictory in the main points, even though the methods of thought may not be the same in all. No two persons regard the world in exactly the same way, and different characters will often apply in different ways a principle which they all acknowledge. Indeed, a person is not always consistent with himself in his views and judgments: early convictions must give way to later ones. The individual opinions that a man holds and expresses may stand all tests or not; the main thing is that he continue on his way, true to himself and to others!

Much as the authors wish and hope to be in harmony with one another and with a large part of the public, they must not shut their eyes to the fact that from various quarters many a discord will ring out. They must expect this all the more since they differ from prevailing opinions in more than one point. Though far from wishing to dominate or change the way of thinking of a third person, still they will firmly express their own opinion, and, as circumstances dictate, will avoid or take tip a quarrel. On the whole, however, they will adhere to one creed, and especially will they repeat again and again those conditions which seem to them indispensable in the training of an artist. Whoever takes an interest in this matter, must be ready to take sides; otherwise he does not deserve to be effective anywhere.

If, therefore, we promise to present reflections and observations concerning Nature, we must at the same time indicate that these remarks will chiefly

have reference, first, to plastic art; then, to art in general; finally, to the general training of the artist.

The highest demand that is made on an artist is this: that he be true to Nature, study her, imitate her, and produce something that resembles her phenomena. How great, how enormous, this demand is, is not always kept in mind; and the true artist himself learns it by experience only, in the course of his progressive development. Nature is separated from Art by an enormous chasm, which genius itself is unable to bridge without external assistance.

All that we perceive around us is merely raw material; if it happens rarely enough that an artist, through instinct and taste, through practice and experiment, reaches the point of attaining the beautiful exterior of things, of selecting the best from the good before him, and of producing at least an agreeable appearance, it is still more rare, particularly in modern times, for an artist to penetrate into the depths of things as well as into the depths of his own soul, in order to produce in his works not only something light and superficially effective, but, as a rival of Nature, to produce something spiritually organic, and to give his work of art a content and a form through which it appears both natural and beyond Nature.

Man is the highest, the characteristic subject of plastic art; to understand him, to extricate oneself from the labyrinth of his anatomy, a general knowledge of organic nature is imperative. The artist should also acquaint himself theoretically with inorganic bodies and with the general operations of Nature, particularly if, as in the case of sound and color, they are adaptable to the purposes of art; but what a circuitous path he would be obliged to take if he wanted to seek laboriously in the schools of the anatomist, the naturalist, and the physicist, for that which serves his purposes! It is, indeed, a question whether he would find there what must be most important for him. Those men have the entirely different needs of their own pupils to satisfy, so that they cannot be expected to think of the limited and special needs of the artist. For that reason it is our intention to take a hand, and, even though we cannot see prospects of completing the necessary work ourselves, both to give a view of the whole and to begin the elaboration of details.

The human figure cannot be understood merely through observation of its surface; the interior must be laid bare, its parts must be separated, the connections perceived, the differences noted, action and reaction observed, the concealed, constant, and fundamental elements of the phenomena impressed on the mind, if one really wishes to contemplate and imitate what moves before our eyes in living waves as a beautiful, undivided whole. A glance at the surface of a living being confuses the observer; we may cite here, as in other cases, the true proverb, "One sees only what one knows" For just as a short-sighted man sees more clearly an object from which he draws back than one to which he draws near, because his intellectual vision comes to his aid, so the perfection of observation really depends on knowledge. How well an expert naturalist, who can also draw, imitates objects by recognizing and emphasizing the important and significant parts from which is derived the character of the whole!

Just as the artist is greatly helped by an exact knowledge of the separate parts of the human figure, which he must in the end regard again as a whole, so a general view, a side glance at related objects, is highly advantageous, provided the artist is capable of rising to Ideas and of grasping the close relationship of things apparently remote. Comparative anatomy has prepared a general conception of organic creatures; it leads us from form to form, and by observing organisms closely or distantly related, we rise above them all to see their characteristics in an ideal picture. If we keep this picture in mind, we find that in observing objects our attention takes a definite direction, that scattered facts can be learned and retained more easily by comparison, that in the practice of art we can finally vie with Nature only when we have learned from her, at least to some extent, her method of procedure in the creation of her works.

Furthermore, we would encourage the artist to gain knowledge also of the inorganic world; this can be done all the more easily since now we can conveniently and quickly acquire knowledge of the mineral kingdom. The painter needs some knowledge of stones in order to imitate their characteristics; the sculptor and architect, in order to utilize them; the cutter of precious stones cannot be without a knowledge of their nature; the connoisseur and amateur, too, will strive for such information.

Now that we have advised the artist to gain a conception of the general operations of Nature, in order to become acquainted with those which particularly interest him, partly to develop himself in more directions, partly to understand better that which concerns him; we shall add a few further remarks on this significant point.

Up to the present the painter has been able merely to wonder at the physicist's theory of colors, without gaining any advantage from it. The natural feeling of the artist, however, constant training, and a practical necessity led him into a way of his own. He felt the vivid contrasts out of the union of which harmony of color arises, he designated certain characteristics through approximate sensations, he had warm and cold colors, colors which express proximity, others which express distance, and what not; and thus in his own way he brought these phenomena closer to the most general laws of Nature. Perhaps the supposition is confirmed that the operations of Nature in colors, as well as magnetic, electric, and other operations, depend upon a mutual relation, a polarity, or whatever else we might call the twofold or manifold aspects of a distinct unity.

We shall make it our duty to present this matter in detail and in a form comprehensible to the artist; and we can be the more hopeful of doing something welcome to him, since we shall be concerned only with explaining and tracing to fundamental principles things which he has hitherto done by instinct.

So much for what we hope to impart in regard to Nature; now for what is most necessary in regard to Art.

Since the arrangement of this work proposes the presentation of single treatises, some of these only in part, and since it is not our desire to dissect a whole, but rather to build up a whole from many parts, it will be necessary to present, as soon as possible and in a general summary, those things which the reader will gradually find unfolded in our detailed elaborations. We shall, therefore, be occupied first with an essay on plastic art, in which the familiar rubrics will be presented according to our interpretation and method. Here it will be our main concern to emphasize the importance of every branch of Art,

and to show that the artist must not neglect a single one, as has unfortunately often happened, and still happens.

Hitherto we have regarded Nature as the treasure chamber of material in general; now, however, we reach the important point where it is shown how Art prepares its materials for itself.

When the artist takes any object of Nature, the object no longer belongs to Nature; indeed, we can say that the artist creates the object in that moment, by extracting from it all that is significant, characteristic, interesting, or rather by putting into it a higher value. In this way finer proportions, nobler forms, higher characteristics are, as it were, forced upon the human figure; the circle of regularity, perfection, signification, and completeness is drawn, in which Nature gladly places her best possessions even though elsewhere in her vast extent she easily degenerates into ugliness and loses herself in indifference.

The same is true of composite works of art, of their subject and content, whether the theme be fable or history. Happy the artist who makes no mistake in undertaking the work, who knows how to choose, or rather to determine what is suitable for art! He who wanders uneasily among scattered myths and far-stretching history in search of a theme, he who wishes to be significantly scholarly or allegorically interesting, will often be checked in the midst of his work by unexpected obstacles, or will miss his finest aim after the completion of the work. He who does not speak clearly to the senses, will not address himself clearly to the mind; and we regard this point as so important that we insert at the very outset a more extended discussion of it.

A theme having been happily found or invented, it is subjected to treatment which we would divide into the spiritual the sensuous, and the mechanical. The spiritual develops the subject according to its inner relations, it discovers subordinate motives; and, if we can at all judge the depth of an artistic genius by the choice of subject, we can recognize in his selection of themes his breadth, wealth, fullness, and power of attraction. The sensuous treatment we should define as that through which the work becomes thoroughly comprehensible to the senses, agreeable, delightful, and irresistible through

its gentle charm. The mechanical treatment, finally, is that which works upon given material through any bodily organ, and thus brings the work into existence and gives it reality.

While we hope to be useful to the artist in this way, and earnestly wish that he may avail himself of advice and of suggestions in his work, the disquieting observation is forced upon us that every undertaking, like every man, is likely to suffer just as much from its period as it is to derive occasional advantage from it, and in our own case we cannot altogether put aside the question concerning the reception we are likely to meet with.

Everything is subject to constant change, and since certain things cannot exist side by side, they displace one another. This is true of kinds of knowledge, of certain methods of instruction, of methods of representation, and of maxims. The aims of men remain nearly always the same: they still desire to become good artists or poets as they did centuries ago; but the means through which the goal is reached are not clear to everybody, and why should it be denied that nothing would be more agreeable than to be able to carry out joyfully a great design?

Naturally the public has a great influence upon Art, since in return for its approval and its money it demands work that may give satisfaction and immediate enjoyment; and the artist will for the most part be glad to adapt himself to it, for he also is a part of the public, he has received his training during the same years, he feels the same needs, strives in the same direction, and thus moves along happily with the multitude which supports him and which is invigorated by him. In this matter we see whole nations and epochs delighted by their artists, just as the artist sees himself reflected in his nation and his epoch, without either having even the slightest suspicion that their path might not be right, that their taste might be at least one-sided, their art on the decline, and their progress in the wrong direction.

Instead of proceeding to further generalities on this point, we shall make a remark which refers particularly to plastic art.

For the German artist, in fact for modern and northern artists in general, it is

difficult—indeed almost impossible—to make the transition from formless matter to form, and to maintain himself at that point, even should he succeed in reaching it. Let every artist who has lived for a time in Italy ask himself whether the presence of the best works of ancient and modern art have not aroused in him the incessant endeavour to study and imitate the human figure in its proportions, forms, and characteristics, to apply all diligence and care in the execution in order to approach those artistic works, so entirely complete in themselves, in order to produce a work which, in gratifying the sense, exalts the spirit to the greatest heights. Let him also admit, however, that after his return he must gradually relax his efforts, because he finds few persons who will really see, enjoy, and comprehend what is depicted, but, for the most part, finds only those who look at a work superficially, receive from it mere random impressions, and in some way of their own try to get out of it any kind of sensation and pleasure.

The worst picture can appeal to our senses and imagination by arousing their activity, setting them free, and leaving them to themselves, the best work of art also appeals to our senses, but in a higher language which, of course, we must understand; it enchains the feelings and imagination, it deprives us of caprice, we cannot deal with a perfect work at our will; we are forced to give ourselves up to it, in order to receive ourselves from it again, exalted and refined.

That these are no dreams we shall try to show gradually, in detail, and as clearly as possible, we shall call attention particularly to a contradiction in which the moderns are often involved. They call the ancients their teachers, they acknowledge in their works an unattainable excellence, yet they depart both in theory and practice far from the maxims which the ancients continually observed. In starting from this important point and in returning to it often, we shall find others about which something falls to be said.

One of the principal signs of the decay of art is the mixture of its various kinds. The arts themselves, as well as their branches, are related to one another, and have a certain tendency to unite, even to lose themselves in one another; but it is in this that the duty, the merit, the dignity of the real artist consists, namely, in being able to separate the field of art in which he works

from others, in placing every art and every branch of art on its own footing, and in isolating it as far as possible.

It has been noticed that all plastic art strives toward painting, all literary art toward the drama, and this observation may in the future give us occasion for important reflections.

The genuine law-giving artist strives for the truth of art, the lawless artist who follows a blind impulse strives for the reality of Nature; through the former, art reaches its highest summit, through the latter its lowest stage.

What holds good of art in general holds good also of the kinds of art. The sculptor must think and feel differently from the painter, indeed he must proceed when he wishes to produce a work in relief, in a different fashion from that which he will employ for a work in the round. By the raising of low reliefs higher and higher, by the making of various parts and figures stand out completely, and finally by the adding of buildings and landscapes, so that work was produced which was half painting and half puppet-show, true art steadily declined. Excellent artists of modern times have unfortunately pursued this course.

When in the future we express such maxims as we think sound, we should like, since they are deduced from works of art, to have them put to the test of practice by the artist. How rarely one can come to a theoretical agreement with anyone else on a fundamental principle. That which is applicable and useful, on the other hand, is decided upon much more quickly. How often we see artists in embarrassment over the choice of subjects, over the general type of composition adapted to their art, and the detailed arrangement; how often the painter over the choice of colors! Then is the time to test a principle, then will it be easier to decide whether it is bringing us closer to the great models and to everything that we value and love in them, or whether it leaves us entangled in the empirical confusion of an experience that has not been sufficiently thought out.

If such maxims hold good in training: the artist, in guiding him in many an embarrassment, they will serve also in the development, valuation, and

judgment of old and new works of art, and will in turn arise from an observation of these works. Indeed, it is all the more necessary to adhere to this, because, notwithstanding the universally praised excellences of antiquity, individuals and whole nations among the moderns often fail to recognize wherein lies the highest excellence of those works.

An exact test will protect us best from this evil. For that reason let us cite only one example to show what usually happens to the amateur in plastic art, so that we may make clear how necessary it is that criticism of ancient as well as modern works should be exact if it is to be of any use.

Upon him who has an eye for beauty, though untrained, even a blurred, imperfect plaster cast of an excellent antique will always have a great effect; for in such a reproduction there always remain the idea, the simplicity and greatness of form, in short, the general outlines; as much, at all events, as one could perceive with poor eyes at a distance.

It may be noticed that a strong inclination toward art is often enkindled by such quite imperfect reproductions. But the effect is like the object; it is rather that an obscure indefinite feeling is aroused, than that the object in all its worth and dignity really appears to such beginners in art. These are they who usually express the theory that too minute a critical investigation destroys the enjoyment, who are accustomed to oppose and resist regard for details.

If gradually, however, after further experience and training, they are confronted with a sharp cast instead of a blurred one, an original instead of a cast, their pleasure grows with their insight, and increases when the originals themselves, the perfect originals, finally become known to them.

The labyrinth of exact observations is willingly entered when the details as well as the whole are perfect; indeed one learns to realize that the excellences can be appreciated only in proportion as the defects are perceived. To discriminate the restoration from the genuine parts, and the copy from the original, to see in the smallest fragments the ruined glory of the whole—this is the joy of the finished expert; and there is a great difference between

observing and comprehending an imperfect whole with obscured vision, and a perfect whole with clear vision.

He who concerns himself with any branch of knowledge, should strive for the highest! Insight is different from practice, for in practical work everyone must soon resign himself to the fact that only a certain measure of strength is allotted to him; far more people, however, are capable of knowledge and insight. Indeed, one may well say that everyone is thus capable who can deny himself and subordinate himself to external objects, everyone who does not strive with rigid and narrow-minded obstinacy to impose upon the highest works of Nature and Art his own personality and his petty onesideness.

To speak of works of art fitly and with true benefit to oneself and others, the discussion should take place only in the presence of the works themselves. Everything depends on the objects being in view; on whether something absolutely definite is suggested by the word with which one hopes to illuminate the work of art; for, otherwise, nothing is thought of at all. This is why it so often happens that the writer on art dwells merely on generalities, through which, indeed, ideas and sensations are aroused in all readers, but no satisfaction is given to the man who, book in hand, steps in front of the work of art itself. Precisely on this account, however, we may in several essays be in a position to arouse rather than to satisfy the desire of the readers; for nothing is more natural than that they should wish to have before their eyes immediately an excellent work of art which is minutely dissected, in order to enjoy the whole which we are discussing, and, so far as the parts are concerned, to subject to their own judgment the opinion which they read.

While the authors, however, write on the assumption that their readers either have seen the works, or will see them in the future, yet they hope to do everything in their power for those who are in neither case. We shall mention reproductions, shall indicate where casts of antique works of art and antique works themselves are accessible, particularly to Germans; and thus try, as far as we can, to minister to the genuine love and knowledge of art.

A history of art can be based only upon the highest and most detailed comprehension of art; only when one knows the finest things that man can

produce can one trace the psychological and chronological course taken in art, as in other fields. This course began with a limited activity, busied about a dry and even gloomy imitation of the insignificant as well as the significant, whence developed a more amiable, more kindly feeling toward Nature, till finally, under favorable circumstances, accompanied by knowledge, regularity, seriousness, and severity, art rose to its height. There at last it became possible for the fortunate genius, surrounded by all these auxiliaries, to produce the charming and the complete.

Unfortunately, however, works of art with such ease of expression, which instil into man cheerfulness, freedom, and a pleasant feeling of his own personality, arouse in the striving artist the idea that the process of production is also agreeable. Since the pinnacle of what art and genius produce is an appearance of ease, the artists who come after are tempted to make things easy for themselves, and to work for the sake of appearances. Thus art gradually declines from its high position, as to the whole as well as details. But if we wish to gain a fair conception, we must come down to details of details, an occupation not always agreeable or charming, but by and by richly rewarded with a more certain view of the whole.

If the experience of observing ancient and mediæval works of art has shown us that certain maxims hold good we need these most of all in judging the most recent modern productions; for, since personal relations, love and hatred of individuals, favor or disfavor of the multitude so easily enter into the valuation of living or recently deceased artists, we are in all the more need of principles in order to pass judgment on our contemporaries. The inquiry can be conducted in two ways: by diminishing the influence of caprice; by bringing the question before a higher tribunal. The principle can be tested as well as its application; and even if we should not agree, the point in dispute can still be definitely and clearly pointed out.

Especially should we wish that the vivifying artist, in whose works we might perhaps have found something to remember, might test our judgments carefully in this way; for everyone who deserves this name is forced in our times to form, as a result of his work and his reflections, a theory, or at least a certain conception of theoretical means, by the use of which he gets along

tolerably well in a variety of cases. It will often be noticed, however, that in this way he sets up as laws such maxims as are in accordance with his talent, his inclination, and his convenience. He is subject to a fate that is common to all mankind. How many act in this very way in other fields! But we are not cultivating ourselves when we merely set in motion with ease and convenience that which lies in us. Every artist, like every man, is only an individual, and will always lean to one side. For that reason, man should pursue so far as possible, both theoretically and practically, that which is contrary to his nature. Let the easy-going seek what is serious and severe; let the stern keep before his eyes the light and agreeable; the strong, loveliness; the amiable, strength; and everyone will develop his own nature the more, the farther he seems to remove himself from it. Every art requires the whole man; the highest possible degree of art requires all mankind.

The practice of the plastic arts is mechanical, and the training of the artist rightly begins in his earliest youth with the mechanical side; the rest of his education, on the other hand, is often neglected, for it ought to be far more careful than the training of others who have opportunity of deriving advantage from life itself. Society soon makes a rough person courteous, a business life makes the most simple person prudent; literary labors, which through print come before a great public, find opposition and correction everywhere; only the plastic artist is, for the most part, limited to a lonely workshop; he has dealings almost solely with the man who orders and pays for his labor, with a public which frequently follows only certain morbid impressions, with connoisseurs who make him restless, with auctioneers who receive every new work with praise and estimates of value such as would fitly honor the most superlative production.

But it is time to conclude this introduction lest it anticipate and forestall the work, instead of merely preceding it. We have so far at least designated the point from which we intend to set out; how far our views can and will spread, must at first develop gradually. The theory and criticism of literary art will, we hope, soon occupy us; and whatever life, travel, and daily events suggest to us, shall not be excluded. In closing, let us say a word on an important concern of this moment.

For the training of the artist, for the enjoyment of the friend of art, it was from time immemorial of the greatest significance in what place the works of art happened to be. There was a time when, except for slight changes of location, they remained for the most part in one place; now, however, a great change has occurred, which will have important consequences for art in general and in particular. At present we have perhaps more cause than ever to regard Italy as a great storehouse of art—as it still was until recently. When it is possible to give a general review of it, then it will be shown what the world lost at the moment when so many parts were torn from this great and ancient whole.

What was destroyed in the very act of tearing away will probably remain a secret forever; but a description of the new storehouse that is being formed in Paris will be possible in a few years. Then the method by which an artist and a lover of art is to use France and Italy can be indicated; and a further important and fine question will arise: what are other nations, particularly Germany and England, to do in this period of scattering and loss, to make generally useful the manifold and widely strewn treasures of art—a task requiring the true cosmopolitan mind which is found perhaps nowhere purer than in the arts and sciences? And what are they to do to help to form an ideal storehouse, which in the course of time may perhaps happily compensate us for what the present moment tears away when it does not destroy?

So much in general of the purpose of a work in which we desire many earnest and friendly sympathizers.

[Footnote A: The Propylaen was a periodical founded in July, 1798, by Goethe and his friend Heinrich Meyer. During its short existence of three years, there were published in it, besides the writings of the editors, short contributions by Schiller and Humboldt. Its purpose was to spread sound ideas about the aims and methods of art, and in this notable introduction Goethe set forth with clearness and profundity his fundamental ideas on these subjects. The present translation has been made expressly for the Harvard Classics.]

PREFACES TO VARIOUS VOLUMES OF POEMS

BY WILLIAM WORDSWORTH[A]

ADVERTISEMENT TO LYRICAL BALLADS

(1798)

It is the honourable characteristic of Poetry that its materials are to be found in every subject which can interest the human mind. The evidence of this fact is to be sought, not in the writings of Critics, but in those of Poets themselves.

The majority of the following poems are to be considered as experiments. They were written chiefly with a view to ascertain how far the language of conversation in the middle and lower classes of society is adapted to the purposes of poetic pleasure. Readers accustomed to the gaudiness and inane phraseology of many modern writers, if they persist in reading this book to its conclusion, will perhaps frequently have to struggle with feelings of strangeness and awkwardness: they will look round for poetry, and will be induced to inquire by what species of courtesy these attempts can be permitted to assume that title. It is desirable that such readers, for their own sakes, should not suffer the solitary word Poetry, a word of very disputed meaning, to stand in the way of their gratification; but that, while they are perusing this book, they should ask themselves if it contains a natural delineation of human passions, human characters, and human incidents; and if the answer be favourable to the author's wishes, that they should consent to be pleased in spite of that most dreadful enemy to our pleasures, our own pre-established codes of decision.

Readers of superior judgement may disapprove of the style in which many of these pieces are executed; it must be expected that many lines and phrases will not exactly suit their taste. It will perhaps appear to them, that wishing to avoid the prevalent fault of the day, the author has sometimes descended too low, and that many of his expressions are too familiar, and not of sufficient dignity. It is apprehended that the more conversant the reader is with our elder writers, and with those in modern times who have been the most successful in painting manners and passions, the fewer complaints of this kind will he have to make.

An accurate taste in poetry, and in all the other arts, Sir Joshua Reynolds has observed, is an acquired talent, which can only be produced by severe thought, and a long continued intercourse with the best models of composition. This is mentioned not with so ridiculous a purpose as to prevent the most inexperienced reader from judging for himself; but merely to temper the rashness of decision, and to suggest that if poetry be a subject on which much time has not been bestowed, the judgement may be erroneous, and that in many cases it necessarily will be so.

The tale of *Goody Blake and Harry Gillis* founded on a well-authenticated fact which happened in Warwickshire. Of the other poems in the collection, it may be proper to say that they are either absolute inventions of the author, or facts which took place within his personal observation or that of his friends. The poem of *The Thorn*, as the reader will soon discover, is not supposed to be spoken in the author's own person: the character of the loquacious narrator will sufficiently show itself in the course of the story. *The Rime of the Ancyent Marinere* was professedly written in imitation of the style, as well as of the spirit of the elder poets; but with a few exceptions, the Author believes that the language adopted in it has been equally intelligible for these three last centuries. The lines entitled *Expostulation and Reply*, and those which follow, arose out of conversation with a friend who was somewhat unreasonably attached to modern books of moral philosophy.

[Footnote A: William Wordsworth (1770-1830), probably the greatest of the poets of the Romantic Movement in England, was also foremost in the

critical defence of that movement. The Prefaces and Essays printed here form a kind of manifesto of the reaction from the poetical traditions of the eighteenth century; and contain besides some of the soundest theorizing on the nature of poetry to be found in English. They afford an interesting comparison with the parallel protest in Victor Hugo's Preface to "Cromwell," to be found later in the volume.]

PREFACE TO LYRICAL BALLADS

(1800)

The first volume of these Poems has already been submitted to general perusal. It was published as an experiment, which, I hoped, might be of some use to ascertain, how far, by fitting to metrical arrangement a selection of the real language of men in a state of vivid sensation, that sort of pleasure and that quantity of pleasure may be imparted, which a Poet may rationally endeavour to impart.

I had formed no very inaccurate estimate of the probable effect of those Poems: I flattered myself that they who should be pleased with them would read them with more than common pleasure: and, on the other hand, I was well aware, that by those who should dislike them, they would be read with more than common dislike. The result has differed from my expectation in this only, that a greater number have been pleased than I ventured to hope I should please.

* * * * *

Several of my Friends are anxious for the success of these Poems, from a belief, that, if the views with which they were composed were indeed realized, a class of Poetry would be produced, well adapted to interest mankind permanently, and not unimportant in the quality, and in the multiplicity of its moral relations: and on this account they have advised me to prefix a systematic defence of the theory upon which the Poems were written. But I was unwilling to undertake the task, knowing that on this occasion the Reader would look coldly upon my arguments, since I might be

suspected of having been principally influenced by the selfish and foolish hope of *reasoning* him into an approbation of these particular Poems: and I was still more unwilling to undertake the task, because, adequately to display the opinions, and fully to enforce the arguments, would require a space wholly disproportionate to a preface. For, to treat the subject with the clearness and coherence of which it is susceptible, it would be necessary to give a full account of the present state of the public taste in this country, and to determine how far this taste is healthy or depraved; which, again, could not be determined, without pointing out in what manner language and the human mind act and re-act on each other, and without retracing the revolutions, not of literature alone, but likewise of society itself. I have therefore altogether declined to enter regularly upon this defence; yet I am sensible, that there would be something like impropriety in abruptly obtruding upon the Public, without a few words of introduction, Poems so materially different from those upon which general approbation is at present bestowed.

It is supposed that by the act of writing in verse an Author makes a formal engagement that he will gratify certain known habits of association; that he not only thus apprises the Reader that certain classes of ideas and expressions will be found in his book, but that others will be carefully excluded. This exponent or symbol held forth by metrical language must in different eras of literature have excited very different expectations: for example, in the age of Catullus, Terence, and Lucretius, and that of Statius or Claudian; and in our own country, in the age of Shakespeare and Beaumont and Fletcher, and that of Donne and Cowley, or Dryden, or Pope. I will not take upon me to determine the exact import of the promise which, by the act of writing in verse, an Author in the present day makes to his reader: but it will undoubtedly appear to many persons that I have not fulfilled the terms of an engagement thus voluntarily contracted. They who have been accustomed to the gaudiness and inane phraseology of many modern writers, if they persist in reading this book to its conclusion, will, no doubt, frequently have to struggle with feelings of strangeness and awkwardness they will look round for poetry, and will be induced to inquire by what species of courtesy these attempts can be permitted to assume that title. I hope therefore the reader will not censure me for attempting to state what I have proposed to myself to perform; and also (as far as the limits of a preface will permit) to

explain some of the chief reasons which have determined me in the choice of my purpose: that at least he may be spared any unpleasant feeling of disappointment, and that I myself may be protected from one of the most dishonourable accusations which can be brought against an Author; namely, that of an indolence which prevents him from endeavouring to ascertain what is his duty, or, when his duty is ascertained, prevents him from performing it.

The principal object, then, proposed in these Poems was to choose incidents and situations from common life, and to relate or describe them, throughout, as far as was possible in a selection of language really used by men, and, at the same time, to throw over them a certain colouring of imagination, whereby ordinary things should be presented to the mind in an unusual aspect; and, further, and above all, to make these incidents and situations interesting by tracing in them, truly though not ostentatiously, the primary laws of our nature: chiefly, as far as regards the manner in which we associate ideas in a state of excitement. Humble and rustic life was generally chosen, because, in that condition, the essential passions of the heart find a better soil in which they can attain their maturity, are less under restraint, and speak a plainer and more emphatic language; because in that condition of life our elementary feelings coexist in a state of greater simplicity, and, consequently, may be more accurately contemplated, and more forcibly communicated; because the manners of rural life germinate from those elementary feelings, and, from the necessary character of rural occupations, are more easily comprehended, and are more durable; and, lastly, because in that condition the passions of men are incorporated with the beautiful and permanent forms of nature. The language, too, of these men has been adopted (purified indeed from what appear to be its real defects, from all lasting and rational causes of dislike or disgust) because such men hourly communicate with the best objects from which the best part of language is originally derived; and because, from their rank in society and the sameness and narrow circle of their intercourse, being less under the influence of social vanity, they convey their feelings and notions in simple and unelaborated expressions. Accordingly, such a language, arising out of repeated experience and regular feelings, is a more permanent, and a far more philosophical language, than that which is frequently substituted for it by Poets, who think that they are conferring honour upon themselves and their art, in proportion as they

separate themselves from the sympathies of men, and indulge in arbitrary and capricious habits of expression, in order to furnish food for fickle tastes, and fickle appetites, of their own creation.[1]

I cannot, however, be insensible to the present outcry against the triviality and meanness, both of thought and language, which some of my contemporaries have occasionally introduced into their metrical compositions; and I acknowledge that this defect, where it exists, is more dishonourable to the Writer's own character than false refinement or arbitrary innovation, though I should contend at the same time, that it is far less pernicious in the sum of its consequences. From such verses the Poems in these volumes will be found distinguished at least by one mark of difference, that each of them has a *worthypurpose*. Not that I always began to write with a distinct purpose formerly conceived; but habits of meditation have, I trust, so prompted and regulated my feelings, that my descriptions of such objects as strongly excite those feelings, will be found to carry along with them *apurpose*. If this opinion be erroneous, I can have little right to the name of a Poet. For all good poetry is the spontaneous overflow of powerful feelings: and though this be true, Poems to which any value can be attached were never produced on any variety of subjects but by a man who, being possessed of more than usual organic sensibility, had also thought long and deeply. For our continued influxes of feeling are modified and directed by our thoughts, which are indeed the representatives of all our past feelings; and, as by contemplating the relation of these general representatives to each other, we discover what is really important to men, so, by the repetition and continuance of this act, our feelings will be connected with important subjects, till at length, if we be originally possessed of much sensibility, such habits of mind will be produced, that, by obeying blindly and mechanically the impulses of those habits, we shall describe objects, and utter sentiments, of such a nature, and in such connexion with each other, that the understanding of the Reader must necessarily be in some degree enlightened, and his affections strengthened and purified.

It has been said that each of these poems has a purpose. Another circumstance must be mentioned which distinguishes these Poems from the popular Poetry of the day; it is this, that the feeling therein developed gives

importance to the action and situation, and not the action and situation to the feeling.

A sense of false modesty shall not prevent me from asserting, that the Reader's attention is pointed to this mark of distinction, far less for the sake of these particular Poems than from the general importance of the subject. The subject is indeed important! For the human mind is capable of being excited without the application of gross and violent stimulants; and he must have a very faint perception of its beauty and dignity who does not know this, and who does not further know, that one being is elevated above another, in proportion as he possesses this capability. It has therefore appeared to me, that to endeavour to produce or enlarge this capability is one of the best services in which, at any period, a Writer can be engaged; but this service, excellent at all times, is especially so at the present day. For a multitude of causes, unknown to former times, are now acting with a combined force to blunt the discriminating powers of the mind, and, unfitting it for all voluntary exertion, to reduce it to a state of almost savage torpor. The most effective of these causes are the great national events which are daily taking place, and the increasing accumulation of men in cities, where the uniformity of their occupations produces a craving for extraordinary incident, which the rapid communication of intelligence hourly gratifies. To this tendency of life and manners the literature and theatrical exhibitions of the country have conformed themselves. The invaluable works of our elder writers, I had almost said the works of Shakespeare and Milton, are driven into neglect by frantic novels, sickly and stupid German Tragedies, and deluges of idle and extravagant stories in verse.—When I think upon this degrading thirst after outrageous stimulation, I am almost ashamed to have spoken of the feeble endeavour made in these volumes to counteract it; and, reflecting upon the magnitude of the general evil, I should be oppressed with no dishonourable melancholy, had I not a deep impression of certain inherent and indestructible qualities of the human mind, and likewise of certain powers in the great and permanent objects that act upon it, which are equally inherent and indestructible; and were there not added to this impression a belief, that the time is approaching when the evil will be systematically opposed, by men of greater powers, and with far more distinguished success.

Having dwelt thus long on the subjects and aim of these Poems, I shall request the Reader's permission to apprise him of a few circumstances relating to their *style*, in order, among other reasons, that he may not censure me for not having performed what I never attempted. The Reader will find that personifications of abstract ideas rarely occur in these volumes; and are utterly rejected, as an ordinary device to elevate the style, and raise it above prose. My purpose was to imitate, and, as far as possible, to adopt the very language of men; and assuredly such personifications do not make any natural or regular part of that language. They are, indeed, a figure of speech occasionally prompted by passion, and I have made use of them as such; but have endeavoured utterly to reject them as a mechanical device of style, or as a family language which Writers in metre seem to lay claim to by prescription. I have wished to keep the Reader in the company of flesh and blood, persuaded that by so doing I shall interest him. Others who pursue a different track will interest him likewise; I do not interfere with their claim, but wish to prefer a claim of my own. There will also be found in these volumes little of what is usually called poetic diction; as much pains has been taken to avoid it as is ordinarily taken to produce it; this has been done for the reason already alleged, to bring my language near to the language of men; and further, because the pleasure which I have proposed to myself to impart, is of a kind very different from that which is supposed by many persons to be the proper object of poetry. Without being culpably particular, I do not know how to give my Reader a more exact notion of the style in which it was my wish and intention to write, than by informing him that I have at all times endeavoured to look steadily at my subject; consequently, there is I hope in these Poems little falsehood of description, and my ideas are expressed in language fitted to their respective importance. Something must have been gained by this practice, as it is friendly to one property of all good poetry, namely, good sense: but it has necessarily cut me off from a large portion of phrases and figures of speech which from father to son have long been regarded as the common inheritance of Poets. I have also thought it expedient to restrict myself still further, having abstained from the use of many expressions, in themselves proper and beautiful, but which have been foolishly repeated by bad Poets, till such feelings of disgust are connected with them as it is scarcely possible by any art of association to overpower.

If in a poem there should be found a series of lines, or even a single line, in which the language, though naturally arranged, and according to the strict laws of metre, does not differ from that of prose, there is a numerous class of critics, who, when they stumble upon these prosaisms, as they call them, imagine that they have made a notable discovery, and exult over the Poet as over a man ignorant of his own profession. Now these men would establish a canon of criticism which the Reader will conclude he must utterly reject, if he wishes to be pleased with these volumes. And it would be a most easy task to prove to him, that not only the language of a large portion of every good poem, even of the most elevated character, must necessarily, except with reference to the metre, in no respect differ from that of good prose, but likewise that some of the most interesting parts of the best poems will be found to be strictly the language of prose when prose is well written. The truth of this assertion might be demonstrated by innumerable passages from almost all the poetical writings, even of Milton himself. To illustrate the subject in a general manner, I will here adduce a short composition of Gray, who was at the head of those who, by their reasonings, have attempted to widen the space of separation betwixt Prose and Metrical composition, and was more than any other man curiously elaborate in the structure of his own poetic diction.

In vain to me the smiling mornings shine,
And reddening Phoebus lifts his golden fire;
The birds in vain their amorous descant join,
Or cheerful fields resume their green attire.
These ears, alas! for other notes repine;
A different object do these eyes require;
My lonely anguish melts no heart but mine;
And in my breast the imperfect joys expire;
Yet morning smiles the busy race to cheer,
And new-born pleasure brings to happier men;
The fields to all their wonted tribute bear;
To warm their little loves the birds complain.
I fruitless mourn to him that cannot hear,
And weep the more because I weep in vain.

It will easily be perceived, that the only part of this Sonnet which is of any value is the lines printed in Italics; it is equally obvious, that, except in the rhyme, and in the use of the single word 'fruitless' for fruitlessly, which is so far a defect, the language of these lines does in no respect differ from that of prose.

By the foregoing quotation it has been shown that the language of Prose may yet be well adapted to Poetry; and it was previously asserted, that a large portion of the language of every good poem can in no respect differ from that of good Prose. We will go further. It may be safely affirmed, that there neither is, nor can be, any *essential* difference between the language of prose and metrical composition. We are fond of tracing the resemblance between Poetry and Painting, and, accordingly, we call them Sisters: but where shall we find bonds of connexion sufficiently strict to typify the affinity betwixt metrical and prose composition? They both speak by and to the same organs; the bodies in which both of them are clothed may be said to be of the same substance, their affections are kindred, and almost identical, not necessarily differing even in degree; Poetry[2] sheds no tears 'such as Angels weep,' but natural and human tears; she can boast of no celestial choir that distinguishes her vital juices from those of prose; the same human blood circulates through the veins of them both.

If it be affirmed that rhyme and metrical arrangement of themselves constitute a distinction which overturns what has just been said on the strict affinity of metrical language with that of prose, and paves the way for other artificial distinctions which the mind voluntarily admits, I answer that the language of such Poetry as is here recommended is, as far as is possible, a selection of the language really spoken by men; that this selection, wherever it is made with true taste and feeling, will of itself form a distinction far greater than would at first be imagined, and will entirely separate the composition from the vulgarity and meanness of ordinary life; and, if metre be superadded thereto, I believe that a dissimilitude will be produced altogether sufficient for the gratification of a rational mind. What other distinction would we have? Whence is it to come? And where is it to exist? Not, surely, where the Poet speaks through the mouths of his characters: it cannot be necessary here, either for elevation of style, or any of its supposed

ornaments: for, if the Poet's subject be judiciously chosen, it will naturally, and upon fit occasion, lead him to passions the language of which, if selected truly and judiciously, must necessarily be dignified and variegated, and alive with metaphors and figures. I forbear to speak of an incongruity which would shock the intelligent Reader, should the Poet interweave any foreign splendour of his own with that which the passion naturally suggests: it is sufficient to say that such addition is unnecessary. And, surely, it is more probable that those passages, which with propriety abound with metaphors and figures, will have their due effect, if, upon other occasions where the passions are of a milder character, the style also be subdued and temperate.

But, as the pleasure which I hope to give by the Poems now presented to the Reader must depend entirely on just notions upon this subject, and, as it is in itself of high importance to our taste and moral feelings, I cannot content myself with these detached remarks. And if, in what I am about to say, it shall appear to some that my labour is unnecessary, and that I am like a man fighting a battle without enemies, such persons may be reminded, that, whatever be the language outwardly holden by men, a practical faith in the opinions which I am wishing to establish is almost unknown. If my conclusions are admitted, and carried as far as they must be carried if admitted at all, our judgements concerning the works of the greatest Poets both ancient and modern will be far different from what they are at present, both when we praise, and when we censure: and our moral feelings influencing and influenced by these judgements will, I believe, be corrected and purified.

Taking up the subject, then, upon general grounds, let me ask, what is meant by the word Poet? What is a Poet? To whom does he address himself? And what language is to be expected from him?—He is a man speaking to men: a man, it is true, endowed with more lively sensibility, more enthusiasm and tenderness, who has a greater knowledge of human nature, and a more comprehensive soul, than are supposed to be common among mankind; a man pleased with his own passions and volitions, and who rejoices more than other men in the spirit of life that is in him; delighting to contemplate similar volitions and passions as manifested in the goings-on of the Universe, and habitually impelled to create them where he does not find them. To these

qualities he has added a disposition to be affected more than other men by absent things as if they were present; an ability of conjuring up in himself passions, which are indeed far from being the same as those produced by real events, yet (especially in those parts of the general sympathy which are pleasing and delightful) do more nearly resemble the passions produced by real events, than anything which, from the motions of their own minds merely, other men are accustomed to feel in themselves:—whence, and from practice, he has acquired a greater readiness and power in expressing what he thinks and feels, and especially those thoughts and feelings which, by his own choice, or from the structure of his own mind, arise in him without immediate external excitement.

But whatever portion of this faculty we may suppose even the greatest Poet to possess, there cannot be a doubt that the language which it will suggest to him, must often, in liveliness and truth, fall short of that which is uttered by men in real life, under the actual pressure of those passions, certain shadows of which the Poet thus produces, or feels to be produced, in himself.

However exalted a notion we would wish to cherish of the character of a Poet, it is obvious, that while he describes and imitates passions, his employment is in some degree mechanical, compared with the freedom and power of real and substantial action and suffering. So that it will be the wish of the Poet to bring his feelings near to those of the persons whose feelings he describes, nay, for short spaces of time, perhaps, to let himself slip into an entire delusion, and even confound and identify his own feelings with theirs; modifying only the language which is thus suggested to him by a consideration that he describes for a particular purpose, that of giving pleasure. Here, then, he will apply the principle of selection which has been already insisted upon. He will depend upon this for removing what would otherwise be painful or disgusting in the passion; he will feel that there is no necessity to trick out or to elevate nature: and, the more industriously he applies this principle, the deeper will be his faith that no words, which *his* fancy or imagination can suggest, will be to be compared with those which are the emanations of reality and truth.

But it may be said by those who do not object to the general spirit of these

remarks, that, as it is impossible for the Poet to produce upon all occasions language as exquisitely fitted for the passion as that which the real passion itself suggests, it is proper that he should consider himself as in the situation of a translator, who does not scruple to substitute excellencies of another kind for those which are unattainable by him; and endeavours occasionally to surpass his original, in order to make some amends for the general inferiority to which he feels that he must submit. But this would be to encourage idleness and unmanly despair. Further, it is the language of men who speak of what they do not understand; who talk of Poetry as of a matter of amusement and idle pleasure; who will converse with us as gravely about *ataste* for Poetry, as they express it, as if it were a thing as indifferent as a taste for rope-dancing, or Frontiniac or Sherry. Aristotle, I have been told, has said, that Poetry is the most philosophic of all writing: it is so: its object is truth, not individual and local, but general, and operative; not standing upon external testimony, but carried alive into the heart by passion; truth which is its own testimony, which gives competence and confidence to the tribunal to which it appeals, and receives them from the same tribunal. Poetry is the image of man and nature. The obstacles which stand in the way of the fidelity of the Biographer and Historian, and of their consequent utility, are incalculably greater than those which are to be encountered by the Poet who comprehends the dignity of his art. The Poet writes under one restriction only, namely, the necessity of giving immediate pleasure to a human Being possessed of that information which may be expected from him, not as a lawyer, a physician, a mariner, an astronomer, or a natural philosopher, but as a Man. Except this one restriction, there is no object standing between the Poet and the image of things; between this, and the Biographer and Historian, there are a thousand.

Nor let this necessity of producing immediate pleasure be considered as a degradation of the Poet's art. It is far otherwise. It is an acknowledgement of the beauty of the universe, an acknowledgement the more sincere, because not formal, but indirect; it is a task light and easy to him who looks at the world in the spirit of love: further, it is a homage paid to the native and naked dignity of man, to the grand elementary principle of pleasure, by which he knows, and feels, and lives, and moves. We have no sympathy but what is propagated by pleasure: I would not be misunderstood; but wherever we

sympathize with pain, it will be found that the sympathy is produced and carried on by subtle combinations with pleasure. We have no knowledge, that is, no general principles drawn from the contemplation of particular facts, but what has been built up by pleasure, and exists in us by pleasure alone. The Man of science, the Chemist and Mathematician, whatever difficulties and disgusts they may have had to struggle with, know and feel this. However painful may be the objects with which the Anatomist's knowledge is connected, he feels that his knowledge is pleasure; and where he has no pleasure he has no knowledge. What then does the Poet? He considers man and the objects that surround him as acting and re-acting upon each other, so as to produce an infinite complexity of pain and pleasure; he considers man in his own nature and in his ordinary life as contemplating this with a certain quantity of immediate knowledge, with certain convictions, intuitions, and deductions, which from habit acquire the quality of intuitions; he considers him as looking upon this complex scene of ideas and sensations, and finding everywhere objects that immediately excite in him sympathies which, from the necessities of his nature, are accompanied by an overbalance of enjoyment.

To this knowledge which all men carry about with them, and to these sympathies in which, without any other discipline than that of our daily life, we are fitted to take delight, the Poet principally directs his attention. He considers man and nature as essentially adapted to each other, and the mind of man as naturally the mirror of the fairest and most interesting properties of nature. And thus the Poet, prompted by this feeling of pleasure, which accompanies him through the whole course of his studies, converses with general nature, with affections akin to those, which, through labour and length of time, the Man of science has raised up in himself, by conversing with those particular parts of nature which are the objects of his studies. The knowledge both of the Poet and the Man of science is pleasure; but the knowledge of the one cleaves to us as a necessary part of our existence, our natural and unalienable inheritance; the other is a personal and individual acquisition, slow to come to us, and by no habitual and direct sympathy connecting us with our fellow-beings. The Man of science seeks truth as a remote and unknown benefactor; he cherishes and loves it in his solitude: the Poet, singing a song in which all human beings join with him, rejoices in the

presence of truth as our visible friend and hourly companion. Poetry is the breath and finer spirit of all knowledge; it is the impassioned expression which is in the countenance of all Science. Emphatically may it be said of the Poet, as Shakespeare hath said of man, 'that he looks before and after.' He is the rock of defence for human nature; an upholder and preserver, carrying everywhere with him relationship and love. In spite of difference of soil and climate, of language and manners, of laws and customs: in spite of things silently gone out of mind, and things violently destroyed; the Poet binds together by passion and knowledge the vast empire of human society, as it is spread over the whole earth, and over all time. The objects of the Poet's thoughts are everywhere; though the eyes and senses of man are, it is true, his favourite guides, yet he will follow wheresoever he can find an atmosphere of sensation in which to move his wings. Poetry is the first and last of all knowledge—it is as immortal as the heart of man. If the labours of Men of science should ever create any material revolution, direct or indirect, in our condition, and in the impressions which we habitually receive, the Poet will sleep then no more than at present; he will be ready to follow the steps of the Man of science, not only in those general indirect effects, but he will be at his side, carrying sensation into the midst of the objects of the science itself. The remotest discoveries of the Chemist, the Botanist, or Mineralogist, will be as proper objects of the Poet's art as any upon which it can be employed, if the time should ever come when these things shall be familiar to us, and the relations under which they are contemplated by the followers of these respective sciences shall be manifestly and palpably material to us as enjoying and suffering beings. If the time should ever come when what is now called science, thus familiarized to men, shall be ready to put on, as it were, a form of flesh and blood, the Poet will lend his divine spirit to aid the transfiguration, and will welcome the Being thus produced, as a dear and genuine inmate of the household of man.—It is not, then, to be supposed that any one, who holds that sublime notion of Poetry which I have attempted to convey, will break in upon the sanctity and truth of his pictures by transitory and accidental ornaments, and endeavour to excite admiration of himself by arts, the necessity of which must manifestly depend upon the assumed meanness of his subject.

What has been thus far said applies to Poetry in general; but especially to

those parts of composition where the Poet speaks through the mouths of his characters; and upon this point it appears to authorize the conclusion, that there are few persons of good sense, who would not allow that the dramatic parts of composition are defective, in proportion as they deviate from the real language of nature, and are coloured by a diction of the Poet's own, either peculiar to him as an individual Poet or belonging simply to Poets in general; to a body of men who, from the circumstance of their compositions being in metre, it is expected will employ a particular language.

It is not, then, in the dramatic parts of composition that we look for this distinction of language; but still it may be proper and necessary where the Poet speaks to us in his own person and character. To this I answer by referring the Reader to the description before given of a Poet. Among the qualities there enumerated as principally conducing to form a Poet, is implied nothing differing in kind from other men, but only in degree. The sum of what was said is, that the Poet is chiefly distinguished from other men by a greater promptness to think and feel without immediate external excitement, and a greater power in expressing such thoughts and feelings as are produced in him in that manner. But these passions and thoughts and feelings are the general passions and thoughts and feelings of men. And with what are they connected? Undoubtedly with our moral sentiments and animal sensations, and with the causes which excite these; with the operations of the elements, and the appearances of the visible universe; with storm and sunshine, with the revolutions of the seasons, with cold and heat, with loss of friends and kindred, with injuries and resentments, gratitude and hope, with fear and sorrow. These, and the like, are the sensations and objects which the Poet describes, as they are the sensations of other men, and the objects which interest them. The Poet thinks and feels in the spirit of human passions. How, then, can his language differ in any material degree from that of all other men who feel vividly and see clearly? It might be *proved* that it is impossible. But supposing that this were not the case, the Poet might then be allowed to use a peculiar language when expressing his feelings for his own gratification, or that of men like himself. But Poets do not write for Poets alone, but for men. Unless therefore we are advocates for that admiration which subsists upon ignorance, and that pleasure which arises from hearing what we do not understand, the Poet must descend from this supposed height; and, in order to

excite rational sympathy, he must express himself as other men express themselves. To this it may be added, that while he is only selecting from the real language of men, or, which amounts to the same thing, composing accurately in the spirit of such selection, he is treading upon safe ground, and we know what we are to expect from him. Our feelings are the same with respect to metre; for, as it may be proper to remind the Reader, the distinction of metre is regular and uniform, and not, like that which is produced by what is usually called POETIC DICTION, arbitrary, and subject to infinite caprices upon which no calculation whatever can be made. In the one case, the Reader is utterly at the mercy of the Poet, respecting what imagery or diction he may choose to connect with the passion; whereas, in the other, the metre obeys certain laws, to which the Poet and Reader both willingly submit because they are certain, and because no interference is made by them with the passion, but such as the concurring testimony of ages has shown to heighten and improve the pleasure which co-exists with it.

It will now be proper to answer an obvious question, namely, Why, professing these opinions, have I written in verse? To this, in addition to such answer as is included in what has been already said, I reply, in the first place, Because, however I may have restricted myself, there is still left open to me what confessedly constitutes the most valuable object of all writing, whether in prose or verse; the great and universal passions of men, the most general and interesting of their occupations, and the entire world of nature before me—to supply endless combinations of forms and imagery. Now, supposing for a moment that whatever is interesting in these objects may be as vividly described in prose, why should I be condemned for attempting to superadd to such description the charm which, by the consent of all nations, is acknowledged to exist in metrical language? To this, by such as are yet unconvinced, it may be answered that a very small part of the pleasure given by Poetry depends upon the metre, and that it is injudicious to write in metre, unless it be accompanied with the other artificial distinctions of style with which metre is usually accompanied, and that, by such deviation, more will be lost from the shock which will thereby be given to the Reader's associations than will be counterbalanced by any pleasure which he can derive from the general power of numbers. In answer to those who still contend for the necessity of accompanying metre with certain appropriate

colours of style in order to the accomplishment of its appropriate end, and who also, in my opinion, greatly underrate the power of metre in itself, it might, perhaps, as far as relates to these Volumes, have been almost sufficient to observe, that poems are extant, written upon more humble subjects, and in a still more naked and simple style, which have continued to give pleasure from generation to generation. Now, if nakedness and simplicity be a defect, the fact here mentioned affords a strong presumption that poems somewhat less naked and simple are capable of affording pleasure at the present day; and, what I wish *chiefly* to attempt, at present, was to justify myself for having written under the impression of this belief.

But various causes might be pointed out why, when the style is manly, and the subject of some importance, words metrically arranged will long continue to impart such a pleasure to mankind as he who proves the extent of that pleasure will be desirous to impart. The end of Poetry is to produce excitement in co-existence with an overbalance of pleasure; but, by the supposition, excitement is an unusual and irregular state of the mind; ideas and feelings do not, in that state, succeed each other in accustomed order. If the words, however, by which this excitement is produced be in themselves powerful, or the images and feelings have an undue proportion of pain connected with them, there is some danger that the excitement may be carried beyond its proper bounds. Now the co-presence of something regular, something to which the mind has been accustomed in various moods and in a less excited state, cannot but have great efficacy in tempering and restraining the passion by an inter-texture of ordinary feeling, and of feeling not strictly and necessarily connected with the passion. This is unquestionably true; and hence, though the opinion will at first appear paradoxical, from the tendency of metre to divest language, in a certain degree, of its reality, and thus to throw a sort of half-consciousness of unsubstantial existence over the whole composition, there can be little doubt but that more pathetic situations and sentiments, that is, those which have a greater proportion of pain connected with them, may be endured in metrical composition, especially in rhyme, than in prose. The metre of the old ballads is very artless; yet they contain many passages which would illustrate this opinion; and, I hope, if the following Poems be attentively perused, similar instances will be found in them. This opinion may be further illustrated by appealing to the Reader's

own experience of the reluctance with which he comes to the re-perusal of the distressful parts of *Clarissa Harlowe*, or *The Gamester*; while Shakespeare's writings, in the most pathetic scenes, never act upon us, as pathetic, beyond the bounds of pleasure—an effect which, in a much greater degree than might at first be imagined, is to be ascribed to small, but continual and regular impulses of pleasurable surprise from the metrical arrangement.—On the other hand (what it must be allowed will much more frequently happen) if the Poet's words should be incommensurate with the passion, and inadequate to raise the Reader to a height of desirable excitement, then (unless the Poet's choice of his metre has been grossly injudicious), in the feelings of pleasure which the Reader has been accustomed to connect with metre in general, and in the feeling, whether cheerful or melancholy, which he has been accustomed to connect with that particular movement of metre, there will be found something which will greatly contribute to impart passion to the words, and to effect the complex end which the Poet proposes to himself.

If I had undertaken a SYSTEMATIC defence of the theory here maintained, it would have been my duty to develop the various causes upon which the pleasure received from metrical language depends. Among the chief of these causes is to be reckoned a principle which must be well known to those who have made any of the Arts the object of accurate reflection; namely, the pleasure which the mind derives from the perception of similitude in dissimilitude. This principle is the great spring of the activity of our minds, and their chief feeder. From this principle the direction of the sexual appetite, and all the passions connected with it, take their origin: it is the life of our ordinary conversation; and upon the accuracy with which similitude in dissimilitude, and dissimilitude in similitude are perceived, depend our taste and our moral feelings. It would not be a useless employment to apply this principle to the consideration of metre, and to show that metre is hence enabled to afford much pleasure, and to point out in what manner that pleasure is produced. But my limits will not permit me to enter upon this subject, and I must content myself with a general summary.

I have said that poetry is the spontaneous overflow of powerful feelings: it takes its origin from emotion recollected in tranquillity: the emotion is

contemplated till, by a species of reaction, the tranquillity gradually disappears, and an emotion, kindred to that which was before the subject of contemplation, is gradually produced, and does itself actually exist in the mind. In this mood successful composition generally begins, and in a mood similar to this it is carried on; but the emotion, of whatever kind, and in whatever degree, from various causes, is qualified by various pleasures, so that in describing any passions whatsoever, which are voluntarily described, the mind will, upon the whole, be in a state of enjoyment. If Nature be thus cautious to preserve in a state of enjoyment a being so employed, the Poet ought to profit by the lesson held forth to him, and ought especially to take care, that, whatever passions he communicates to his Reader, those passions, if his Reader's mind be sound and vigorous, should always be accompanied with an overbalance of pleasure. Now the music of harmonious metrical language, the sense of difficulty overcome, and the blind association of pleasure which has been previously received from works of rhyme or metre of the same or similar construction, an indistinct perception perpetually renewed of language closely resembling that of real life, and yet, in the circumstance of metre, differing from it so widely—all these imperceptibly make up a complex feeling of delight, which is of the most important use in tempering the painful feeling always found intermingled with powerful descriptions of the deeper passions. This effect is always produced in pathetic and impassioned poetry; while, in lighter compositions, the ease and gracefulness with which the Poet manages his numbers are themselves confessedly a principal source of the gratification of the Reader. All that it is *necessary* to say, however, upon this subject, may be effected by affirming, what few persons will deny, that, of two descriptions, either of passions, manners, or characters, each of them equally well executed, the one in prose and the other in verse, the verse will be read a hundred times where the prose is read once.

Having thus explained a few of my reasons for writing in verse, and why I have chosen subjects from common life, and endeavoured to bring my language near to the real language of men, if I have been too minute in pleading my own cause, I have at the same time been treating a subject of general interest; and for this reason a few words shall be added with reference solely to these particular poems, and to some defects which will probably be

found in them. I am sensible that my associations must have sometimes been particular instead of general, and that, consequently, giving to things a false importance, I may have sometimes written upon unworthy subjects; but I am less apprehensive on this account, than that my language may frequently have suffered from those arbitrary connexions of feelings and ideas with particular words and phrases, from which no man can altogether protect himself. Hence I have no doubt, that, in some instances, feelings, even of the ludicrous, may be given to my Readers by expressions which appeared to me tender and pathetic. Such faulty expressions, were I convinced they were faulty at present, and that they must necessarily continue to be so, I would willingly take all reasonable pains to correct. But it is dangerous to make these alterations on the simple authority of a few individuals, or even of certain classes of men; for where the understanding of an Author is not convinced, or his feelings altered, this cannot be done without great injury to himself: for his own feelings are his stay and support; and, if he set them aside in one instance, he may be induced to repeat this act till his mind shall lose all confidence in itself, and become utterly debilitated. To this it may be added, that the critic ought never to forget that he is himself exposed to the same errors as the Poet, and, perhaps, in a much greater degree: for there can be no presumption in saying of most readers, that it is not probable they will be so well acquainted with the various stages of meaning through which words have passed, or with the fickleness or stability of the relations of particular ideas to each other; and, above all, since they are so much less interested in the subject, they may decide lightly and carelessly.

Long as the Reader has been detained, I hope he will permit me to caution him against a mode of false criticism which has been applied to Poetry, in which the language closely resembles that of life and nature. Such verses have been triumphed over in parodies, of which Dr. Johnson's stanza is a fair specimen:—

I put my hat upon my head
And walked into the Strand,
And there I met another man
Whose hat was in his hand.

Immediately under these lines let us place one of the most justly admired stanzas of the 'Babes in the Wood,'

These pretty Babes with hand in hand
Went wandering up and down;
But never more they saw the Man
Approaching from the Town.

In both these stanzas the words, and the order of the words, in no respect differ from the most unimpassioned conversation. There are words in both, for example, 'the Strand,' and 'the Town,' connected with none but the most familiar ideas; yet the one stanza we admit as admirable, and the other as a fair example of the superlatively contemptible. Whence arises this difference? Not from the metre, not from the language, not from the order of the words; but the *matter* expressed in Dr. Johnson's stanza is contemptible. The proper method of treating trivial and simple verses, to which Dr. Johnson's stanza would be a fair parallelism, is not to say, this is a bad kind of poetry, or, this is not poetry; but, this wants sense; it is neither interesting in itself nor can *lead* to anything interesting; the images neither originate in that sane state of feeling which arises out of thought, nor can excite thought or feeling in the Reader. This is the only sensible manner of dealing with such verses. Why trouble yourself about the species till you have previously decided upon the genus? Why take pains to prove than an ape is not a Newton, when it is self-evident that he is not a man?

One request I must make of my reader, which is, that in judging these Poems he would decide by his own feelings genuinely, and not by reflection upon what will probably be the judgement of others. How common is it to hear a person say, I myself do not object to this style of composition, or this or that expression, but, to such and such classes of people it will appear mean or ludicrous! This mode of criticism, so destructive of all sound unadulterated judgement, is almost universal: let the Reader then abide, independently, by his own feelings, and, if he finds himself affected, let him not suffer such conjectures to interfere with his pleasure.

If an Author, by any single composition, has impressed us with respect for his

talents, it is useful to consider this as affording a presumption, that on other occasions where we have been displeased, he, nevertheless, may not have written ill or absurdly; and further, to give him so much credit for this one composition as may induce us to review what has displeased us, with more care than we should otherwise have bestowed upon it. This is not only an act of justice, but, in our decisions upon poetry especially, may conduce, in a high degree, to the improvement of our own taste; for an *accurate* taste in poetry, and in all the other arts, as Sir Joshua Reynolds has observed, is an *acquired* talent, which can only be produced by thought and a long continued intercourse with the best models of composition. This is mentioned, not with so ridiculous a purpose as to prevent the most inexperienced Reader from judging for himself (I have already said that I wish him to judge for himself), but merely to temper the rashness of decision, and to suggest, that, if Poetry be a subject on which much time has not been bestowed, the judgement may be erroneous; and that, in many cases, it necessarily will be so.

Nothing would, I know, have so effectually contributed to further the end which I have in view, as to have shown of what kind the pleasure is, and how that pleasure is produced, which is confessedly produced by metrical composition essentially different from that which I have here endeavoured to recommend: for the Reader will say that he has been pleased by such composition; and what more can be done for him? The power of any art is limited; and he will suspect, that, if it be proposed to furnish him with new friends, that can be only upon condition of his abandoning his old friends. Besides, as I have said, the Reader is himself conscious of the pleasure which he has received from such composition, composition to which he has peculiarly attached the endearing name of Poetry; and all men feel an habitual gratitude, and something of an honourable bigotry, for the objects which have long continued to please them: we not only wish to be pleased, but to be pleased in that particular way in which we have been accustomed to be pleased. There is in these feelings enough to resist a host of arguments; and I should be the less able to combat them successfully, as I am willing to allow, that, in order entirely to enjoy the Poetry which I am recommending, it would be necessary to give up much of what is ordinarily enjoyed. But, would my limits have permitted me to point out how this pleasure is produced, many

obstacles might have been removed, and the Reader assisted in perceiving that the powers of language are not so limited as he may suppose; and that it is possible for poetry to give other enjoyments, of a purer, more lasting, and more exquisite nature. This part of the subject has not been altogether neglected, but it has not been so much my present aim to prove, that the interest excited by some other kinds of poetry is less vivid, and less worthy of the nobler powers of the mind, as to offer reasons for presuming, that if my purpose were fulfilled, a species of poetry would be produced, which is genuine poetry; in its nature well adapted to interest mankind permanently, and likewise important in the multiplicity and quality of its moral relations.

From what has been said, and from a perusal of the Poems, the Reader will be able clearly to perceive the object which I had in view: he will determine how far it has been attained; and, what is a much more important question, whether it be worth attaining: and upon the decision of these two questions will rest my claim to the approbation of the Public.

[Footnote 1: It is worth while here to observe, that the affecting parts of Chaucer are almost always expressed In language pure and universally intelligible even to this day.]

[Footnote 2: I here use the word 'Poetry' (though against my own judgement) as opposed to the word Prose, and synonymous with metrical composition. But much confusion has been introduced into criticism by this contradistinction of Poetry and Prose, instead of the more philosophical one of Poetry and Matter of Fact, or Science. The only strict antithesis to Prose is Metre; nor is this, in truth, *astri*ctantithesis, because lines and passages of metre so naturally occur in writing prose, that it would be scarcely possible to avoid them, even were it desirable.]

APPENDIX TO LYRICAL BALLADS

(1802)

Perhaps, as I have no right to expect that attentive perusal, without which, confined, as I have been, to the narrow limits of a preface, my meaning cannot be thoroughly understood, I am anxious to give an exact notion of the sense in which the phrase poetic diction has been used; and for this purpose, a few words shall here be added, concerning the origin and characteristics of the phraseology, which I have condemned under that name.

The earliest poets of all nations generally wrote from passion excited by real events; they wrote naturally, and as men: feeling powerfully as they did, their language was daring, and figurative. In succeeding times, Poets, and Men ambitious of the fame of Poets, perceiving the influence of such language, and desirous of producing the same effect without being animated by the same passion, set themselves to a mechanical adoption of these figures of speech, and made use of them, sometimes with propriety, but much more frequently applied them to feelings and thoughts with which they had no natural connexion whatsoever. A language was thus insensibly produced, differing materially from the real language of men in *any situation*. The Reader or Hearer of this distorted language found himself in a perturbed and unusual state of mind: when affected by the genuine language of passion he had been in a perturbed and unusual state of mind also: in both cases he was willing that his common judgement and understanding should be laid asleep, and he had no instinctive and infallible perception of the true to make him reject the false; the one served as a passport for the other. The emotion was in both cases delightful, and no wonder if he confounded the one with the other, and believed them both to be produced by the same, or similar causes.

Besides, the Poet spake to him in the character of a man to be looked up to, a man of genius and authority. Thus, and from a variety of other causes, this distorted language was received with admiration; and Poets, it is probable, who had before contented themselves for the most part with misapplying only expressions which at first had been dictated by real passion, carried the abuse still further, and introduced phrases composed apparently in the spirit of the original figurative language of passion, yet altogether of their own invention, and characterized by various degrees of wanton deviation from good sense and nature.

It is indeed true, that the language of the earliest Poets was felt to differ materially from ordinary language, because it was the language of extraordinary occasions; but it was really spoken by men, language which the Poet himself had uttered when he had been affected by the events which he described, or which he had heard uttered by those around him. To this language it is probable that metre of some sort or other was early superadded. This separated the genuine language of Poetry still further from common life, so that whoever read or heard the poems of these earliest Poets felt himself moved in a way in which he had not been accustomed to be moved in real life, and by causes manifestly different from those which acted upon him in real life. This was the great temptation to all the corruptions which have followed: under the protection of this feeling succeeding Poets constructed a phraseology which had one thing, it is true, in common with the genuine language of poetry, namely, that it was not heard in ordinary conversation; that it was unusual. But the first Poets, as I have said, spake a language which, though unusual, was still the language of men. This circumstance, however, was disregarded by their successors; they found that they could please by easier means: they became proud of modes of expression which they themselves had invented, and which were uttered only by themselves. In process of time metre became a symbol or promise of this unusual language, and whoever took upon him to write in metre, according as he possessed more or less of true poetic genius, introduced less or more of this adulterated phraseology into his compositions, and the true and the false were inseparately interwoven until, the taste of men becoming gradually perverted, this language was received as a natural language: and at length, by the influence of books upon men, did to a certain degree really become so.

Abuses of this kind were imported from one nation to another, and with the progress of refinement this diction became daily more and more corrupt, thrusting out of sight the plain humanities of nature by a motley masquerade of tricks, quaintnesses, hieroglyphics, and enigmas.

It would not be uninteresting to point out the causes of the pleasure given by this extravagant and absurd diction. It depends upon a great variety of causes, but upon none, perhaps, more than its influence in impressing a notion of the peculiarity and exaltation of the Poet's character, and in flattering the Reader's self-love by bringing him nearer to a sympathy with that character; an effect which is accomplished by unsettling ordinary habits of thinking, and thus assisting the Reader to approach to that perturbed and dizzy state of mind in which if he does not find himself, he imagines that he is *balked* of a peculiar enjoyment which poetry can and ought to bestow.

The sonnet quoted from Gray, in the Preface, except the lines printed in italics, consists of little else but this diction, though not of the worst kind; and indeed, if one may be permitted to say so, it is far too common in the best writers both ancient and modern. Perhaps in no way, by positive example could more easily be given a notion of what I mean by the phrase *poetic diction* than by referring to a comparison between the metrical paraphrase which we have of passages in the Old and New Testament, and those passages as they exist in our common Translation. See Pope's *Messiah* throughout; Prior's 'Did sweeter sounds adorn my flowing tongue,' &c. &c. 'Though I speak with the tongues of men and of angels,' &c. &c, 1st Corinthians, ch. xiii. By way of immediate example take the following of Dr. Johnson:

Turn on the prudent Ant thy heedless eyes,
Observe her labours, Sluggard, and be wise;
No stern command, no monitory voice,
Prescribes her duties, or directs her choice;
Yet, timely provident, she hastes away
To snatch the blessings of a plenteous day;
When fruitful Summer loads the teeming plain,
She crops the harvest, and she stores the grain.

How long shall sloth usurp thy useless hours,
Unnerve thy vigour, and enchain thy powers?
While artful shades thy downy couch enclose,
And soft solicitation courts repose,
Amidst the drowsy charms of dull delight,
Year chases year with unremitted flight,
Till Want now following, fraudulent and slow,
Shall spring to seize thee, like an ambush'd foe.

From this hubbub of words pass to the original 'Go to the Ant, thou Sluggard, consider her ways, and be wise: which having no guide, overseer, or ruler, provideth her meat in the summer, and gathereth her food in the harvest. How long wilt thou sleep, O Sluggard? when wilt thou arise out of thy sleep? Yet a little sleep, a little slumber, a little folding of the hands to sleep. So shall thy poverty come as one that travelleth, and thy want as an armed man' Proverbs, ch. vi.

One more quotation, and I have done. It is from Cowper's Verses supposed to be written by Alexander Selkirk:

Religion! what treasure untold
Resides in that heavenly word!
More precious than silver and gold,
Or all that this earth can afford
But the sound of the church-going bell
These valleys and rocks never heard,
Ne'er sighed at the sound of a knell,
Or smiled when a sabbath appeared
Ye winds, that have made me your sport
Convey to this desolate shore
Some cordial endearing report
Of a land I must visit no more
My friends, do they now and then send
A wish or a thought after me?
O tell me I yet have a friend,
Though a friend I am never to see

This passage is quoted as an instance of three different styles of composition. The first four lines are poorly expressed, some Critics would call the language prosaic; the fact is, it would be bad prose, so bad, that it is scarcely worse in metre. The epithet 'church-going' applied to a bell, and that by so chaste a writer as Cowper, is an instance of the strange abuses which Poets have introduced into their language, till they and their Readers take them as matters of course, if they do not single them out expressly as objects of admiration. The two lines 'Ne'er sighed at the sound,' &c., are, in my opinion, an instance of the language of passion wrested from its proper use, and, from the mere circumstance of the composition being in metre, applied upon an occasion that does not justify such violent expressions; and I should condemn the passage, though perhaps few Readers will agree with me, as vicious poetic diction. The last stanza is throughout admirably expressed: it would be equally good whether in prose or verse, except that the Reader has an exquisite pleasure in seeing such natural language so naturally connected with metre. The beauty of this stanza tempts me to conclude with a principle which ought never to be lost sight of, and which has been my chief guide in all I have said,—namely, that in works of *imagination and sentiment*, for of these only have I been treating, in proportion as ideas and feelings are valuable, whether the composition be in prose or in verse, they require and exact one and the same language. Metre is but adventitious to composition, and the phraseology for which that passport is necessary, even where it may be graceful at all will be little valued by the judicious.

PREFACE TO POEMS

(1815)

The powers requisite for the production of poetry are: first, those of Observation and Description,—i.e. the ability to observe with accuracy things as they are in themselves, and with fidelity to describe them, unmodified by any passion or feeling existing in the mind of the describer; whether the things depicted be actually present to the senses, or have a place only in the memory. This power, though indispensable to a Poet, is one which he employs only in submission to necessity, and never for a continuance of time: as its exercise supposes all the higher qualities of the mind to be passive, and in a state of subjection to external objects, much in the same way as a translator or engraver ought to be to his original. 2ndly, Sensibility,—which, the more exquisite it is, the wider will be the range of a poet's perceptions; and the more will he be incited to observe objects, both as they exist in themselves and as re-acted upon by his own mind. (The distinction between poetic and human sensibility has been marked in the character of the Poet delineated in the original preface.) 3rdly, Reflection,—which makes the Poet acquainted with the value of actions, images, thoughts, and feelings; and assists the sensibility in perceiving their connexion with each other. 4thly, Imagination and Fancy,—to modify, to create, and to associate. 5thly, Invention,—by which characters are composed out of materials supplied by observation; whether of the Poet's own heart and mind, or of external life and nature; and such incidents and situations produced as are most impressive to the imagination, and most fitted to do justice to the characters, sentiments, and passions, which the Poet undertakes to illustrate. And, lastly, Judgement, to decide how and where, and in what degree, each of these faculties ought to be exerted; so that the less shall not be sacrificed to the greater; nor the

greater, slighting the less, arrogate, to its own injury, more than its due. By judgement, also, is determined what are the laws and appropriate graces of every species of composition.[3]

The materials of Poetry, by these powers collected and produced, are cast, by means of various moulds, into divers forms. The moulds may be enumerated, and the forms specified, in the following order. 1st, The Narrative,—including the Epopoeia, the Historic Poem, the Tale, the Romance, the Mock-heroic, and, if the spirit of Homer will tolerate such neighbourhood, that dear production of our days, the metrical Novel. Of this Class, the distinguishing mark is, that the Narrator, however liberally his speaking agents be introduced, is himself the source from which everything primarily flows. Epic Poets, in order that their mode of composition may accord with the elevation of their subject, represent themselves *assinging* from the inspiration of the Muse, 'Anna virumquecano;' but this is a fiction, in modern times, of slight value: the *Iliad* or the *Paradise Lost* would gain little in our estimation by being chanted. The other poets who belong to this class are commonly content to *tell* their tale;—so that of the whole it may be affirmed that they neither require nor reject the accompaniment of music.

2ndly, The Dramatic,—consisting of Tragedy, Historic Drama, Comedy, and Masque, in which the Poet does not appear at all in his own person, and where the whole action is carried on by speech and dialogue of the agents; music being admitted only incidentally and rarely. The Opera may be placed here, inasmuch as it proceeds by dialogue; though depending, to the degree that it does, upon music, it has a strong claim to be ranked with the lyrical. The characteristic and Impassioned Epistle, of which Ovid and Pope have given examples, considered as a species of monodrama, may, without impropriety, be placed in this class.

3rdly, The Lyrical,—containing the Hymn, the Ode, the Elegy, the Song, and the Ballad; in all which, for the production of their *fulleffect*, an accompaniment of music is indispensable.

4thly, The Idyllium,—descriptive chiefly either of the processes and appearances of external nature, as the *Seasons* of Thomson; or of characters,

manners, and sentiments, as are Shenstone's *Schoolmistress*, *The Cotter's Saturday Night* of Burns, *The Twa Dogs* of the same Author; or of these in conjunction with the appearances of Nature, as most of the pieces of Theocritus, the *Allegro* and *Pensero* of Milton, Beattie's *Minstrel*, Goldsmith's *Deserted Village*. The Epitaph, the Inscription, the Sonnet, most of the epistles of poets writing in their own persons, and all loco-descriptive poetry, belonging to this class.

5thly, Didactic,—the principal object of which is direct instruction; as the Poem of Lucretius, the *Georgics* of Virgil, *The Fleece* of Dyer, Mason's *English Garden*, &c.

And, lastly, philosophical Satire, like that of Horace and Juvenal; personal and occasional Satire rarely comprehending sufficient of the general in the individual to be dignified with the name of poetry.

Out of the three last has been constructed a composite order, of which Young's *Night Thoughts*, and Cowper's *Task*, are excellent examples.

It is deducible from the above, that poems apparently miscellaneous, may with propriety be arranged either with reference to the powers of mind predominant in the production of them; or to the mould in which they are cast; or, lastly, to the subjects to which they relate. From each of these considerations, the following Poems have been divided into classes; which, that the work may more obviously correspond with the course of human life, and for the sake of exhibiting in it the three requisites of a legitimate whole, a beginning, a middle, and an end, have been also arranged, as far as it was possible, according to an order of time, commencing with Childhood, and terminating with Old Age, Death, and Immortality. My guiding wish was, that the small pieces of which these volumes consist, thus discriminated, might be regarded under a two-fold view; as composing an entire work within themselves, and as adjuncts to the philosophical Poem, *The Recluse*. This arrangement has long presented itself habitually to my own mind. Nevertheless, I should have preferred to scatter the contents of these volumes at random, if I had been persuaded that, by the plan adopted, anything material would be taken from the natural effect of the pieces, individually, on

the mind of the unreflecting Reader. I trust there is a sufficient variety in each class to prevent this; while, for him who reads with reflection, the arrangement will serve as a commentary unostentatiously directing his attention to my purposes, both particular and general. But, as I wish to guard against the possibility of misleading by this classification, it is proper first to remind the Reader, that certain poems are placed according to the powers of mind, in the Author's conception, predominant in the production of them; *predominant*, which implies the exertion of other faculties in less degree. Where there is more imagination than fancy in a poem, it is placed under the head of imagination, and *vice versa*. Both the above classes might without impropriety have been enlarged from that consisting of 'Poems founded on the Affections;' as might this latter from those, and from the class 'proceeding from Sentiment and Reflection.' The most striking characteristics of each piece, mutual illustration, variety, and proportion, have governed me throughout.

None of the other Classes, except those of Fancy and Imagination, require any particular notice. But a remark of general application may be made. All Poets, except the dramatic, have been in the practice of feigning that their works were composed to the music of the harp or lyre: with what degree of affectation this has done in modern times, I leave to the judicious to determine. For my own part, I have not been disposed to violate probability so far, or to make such a large demand upon the Reader's charity. Some of these pieces are essentially lyrical; and, therefore, cannot have their due force without a supposed musical accompaniment; but, in much the greatest part, as a substitute for the classic lyre or romantic harp, I require nothing more than an animated or impassioned recitation, adapted to the subject. Poems, however humble in their kind, if they be good in that kind, cannot read themselves; the law of long syllable and short must not be so inflexible,—the letter of metre must not be so impassive to the spirit of versification,—as to deprive the Reader of all voluntary power to modulate, in subordination to the sense, the music of the poem;—in the same manner as his mind is left at liberty, and even summoned, to act upon its thoughts and images. But, though the accompaniment of a musical instrument be frequently dispensed with, the true Poet does not therefore abandon his privilege distinct from that of the mere Proseman;

He murmurs near the running brooks
A music sweeter than their own.

Let us come now to the consideration of the words Fancy and Imagination, as employed in the classification of the following Poems. 'A man,' says an intelligent author, 'has imagination in proportion as he can distinctly copy in idea the impressions of sense: it is the faculty which *images* within the mind the phenomena of sensation. A man has fancy in proportion as he can call up, connect, or associate, at pleasure, those internal images ([Greek: phantazein] is to cause to appear) so as to complete ideal representations of absent objects. Imagination is the power of depicting, and fancy of evoking and combining. The imagination is formed by patient observation; the fancy by a voluntary activity in shifting the scenery of the mind. The more accurate the imagination, the more safely may a painter, or a poet, undertake a delineation, or a description, without the presence of the objects to be characterized. The more versatile the fancy, the more original and striking will be the decorations produced.'—*British Synonyms discriminated*, by W. Taylor.

Is not this as if a man should undertake to supply an account of a building, and be so intent upon what he had discovered of the foundation, as to conclude his task without once looking up at the superstructure? Here, as in other instances throughout the volume, the judicious Author's mind is enthralled by Etymology; he takes up the original word as his guide and escort, and too often does not perceive how soon he becomes its prisoner, without liberty to tread in any path but that to which it confines him. It is not easy to find out how imagination, thus explained, differs from distinct remembrance of images; or fancy from quick and vivid recollection of them: each is nothing more than a mode of memory. If the two words bear the above meaning, and no other, what term is left to designate that faculty of which the Poet is 'all compact;' he whose eyes glances from earth to heaven, whose spiritual attributes body forth what his pen is prompt in turning to shape; or what is left to characterize Fancy, as insinuating herself into the heart of objects with creative activity?—Imagination, in the sense of the word as giving title to a class of the following Poems, has no reference to images that are merely a faithful copy, existing in the mind, of absent external objects; but is a word of higher import, denoting operations of the mind upon

those objects, and processes of creation or of composition, governed by certain fixed laws. I proceed to illustrate my meaning by instances. A parrot *hangs* from the wires of his cage by his beak or by his claws; or a monkey from the bough of a tree by his paws or his tail. Each creature does so literally and actually. In the first Eclogue of Virgil, the shepherd, thinking of the time when he is to take leave of his farm, thus addresses his goats:—

Non ego vos posthac viridi projectus in antro Dumosapendereprocul de
rupe videbo. —half way down *Hangs* one who gathers samphire,

is the well-known expression of Shakespeare, delineating an ordinary image upon the cliffs of Dover. In these two instances is a slight exertion of the faculty which I denominate imagination, in the use of one word: neither the goats nor the samphire-gatherer do literally hang, as does the parrot or the monkey; but, presenting to the senses something of such an appearance, the mind in its activity, for its own gratification, contemplates them as hanging.

As when far off at sea a fleet descried
Hangs in the clouds, by equinoctial winds
Close sailing from Bengala, or the isles
Of Ternate or Tidore, whence merchants bring
Their spicy drugs; they on the trading flood
Through the wide Ethiopian to the Cape
Ply, stemming nightly toward the Pole; so seemed
Far off the flying Fiend.

Here is the full strength of the imagination involved in the word *hangs*, and exerted upon the whole image: First, the fleet, an aggregate of many ships, is represented as one mighty person, whose track, we know and feel, is upon the waters; but, taking advantage of its appearance to the senses, the Poet dares to represent it as *hanging in the clouds*, both for the gratification of the mind in contemplating the image itself, and in reference to the motion and appearance of the sublime objects to which it is compared.

From impressions of sight we will pass to those of sound; which, as they must necessarily be of a less definite character, shall be selected from these

volumes:

Over his own sweet voice the Stock-dove *broods*;

of the same bird,

His voice was *buried* among trees,
Yet to be come at by the breeze;

O, Cuckoo I shall I call thee *Bird*,
Or but a wandering *Voice*?

The stock-dove is said to *coo*, a sound well imitating the note of the bird; but, by the intervention of the metaphor *broods*, the affections are called in by the imagination to assist in marking the manner in which the bird reiterates and prolongs her soft note, as if herself delighting to listen to it, and participating of a still and quiet satisfaction, like that which may be supposed inseparable from the continuous process of incubation. 'His voice was buried among trees,' a metaphor expressing the love of *seclusion* by which this Bird is marked; and characterizing its note as not partaking of the shrill and the piercing, and therefore more easily deadened by the intervening shade; yet a note so peculiar and withal so pleasing, that the breeze, gifted with that love of the sound which the Poet feels, penetrates the shades in which it is entombed, and conveys it to the ear of the listener.

Shall I call thee Bird,
Or but a wandering *Voice*?

This concise interrogation characterizes the seeming ubiquity of the voice of the cuckoo, and dispossesses the creature almost of a corporeal existence; the Imagination being tempted to this exertion of her power by a consciousness in the memory that the cuckoo is almost perpetually heard throughout the season of spring, but seldom becomes an object of sight.

Thus far of images independent of each other, and immediately endowed by the mind with properties that do not inhere in them, upon an incitement from properties and qualities the existence of which is inherent and obvious. These

processes of imagination are carried on either by conferring additional properties upon an object, or abstracting from it some of those which it actually possesses, and thus enabling it to react upon the mind which hath performed the process, like a new existence.

I pass from the Imagination acting upon an individual image to a consideration of the same faculty employed upon images in a conjunction by which they modify each other. The Reader has already had a fine instance before him in the passage quoted from Virgil, where the apparently perilous situation of the goat, hanging upon the shaggy precipice, is contrasted with that of the shepherd contemplating it from the seclusion of the cavern in which he lies stretched at ease and in security. Take these images separately, and how unaffected the picture compared with that produced by their being thus connected with, and opposed to, each other!

As a huge stone is sometimes seen to lie
Couched on the bald top of an eminence,
Wonder to all who do the same espy
By what means it could thither come, and whence,
So that it seems a thing endued with sense,
Like a sea-beast crawled forth, which on a shelf
Of rock or sand repositeth, there to sun himself.

Such seemed this Man; not all alive or dead
Nor all asleep, in his extreme old age.

* * * * *

Motionless as a cloud the old Man stood,
That heareth not the loud winds when they call,
And moveth altogether if it move at all.

In these images, the conferring, the abstracting, and the modifying powers of the Imagination, immediately and mediately acting, are all brought into conjunction. The stone is endowed with something of the power of life to approximate it to the sea-beast; and the sea-beast stripped of some of its vital qualities to assimilate it to the stone; which intermediate image is thus treated

for the purpose of bringing the original image, that of the stone, to a nearer resemblance to the figure and condition of the aged Man; who is divested of so much of the indications of life and motion as to bring him to the point where the two objects unite and coalesce in just comparison. After what has been said, the image of the cloud need not be commented upon.

Thus far of an endowing or modifying power: but the Imagination also shapes and *creates*; and how? By innumerable processes; and in none does it more delight than in that of consolidating numbers into unity, and dissolving and separating unity into number,—alternations proceeding from, and governed by, a sublime consciousness of the soul in her own mighty and almost divine powers. Recur to the passage already cited from Milton. When the compact Fleet, as one Person, has been introduced 'sailing from Bengala,' 'They,' i.e. the 'merchants,' representing the fleet resolved into a multitude of ships, 'ply' their voyage towards the extremities of the earth: 'So' (referring to the word 'As' in the commencement) 'seemed the flying Fiend'; the image of his Person acting to recombine the multitude of ships into one body,—the point from which the comparison set out. 'So seemed,' and to whom seemed? To the heavenly Muse who dictates the poem, to the eye of the Poet's mind, and to that of the Reader, present at one moment in the wide Ethiopian, and the next in the solitudes, then first broken in upon, of the infernal regions!

Modo me Thebis, modo ponit Athenis.

Hear again this mighty Poet,—speaking of the Messiah going forth to expel from heaven the rebellious angels,

Attended by ten thousand thousand Saints
He onward came: far off his coming shone,—

the retinue of Saints, and the Person of the Messiah himself, lost almost and merged in the splendour of that indefinite abstraction 'His coming!'

As I do not mean here to treat this subject further than to throw some light upon the present Volumes, and especially upon one division of them, I shall spare myself and the Reader the trouble of considering the Imagination as it deals with thoughts and sentiments, as it regulates the composition of

characters, and determines the course of actions: I will not consider it (more than I have already done by implication) as that power which, in the language of one of my most esteemed Friends, 'draws all things to one; which makes things animate or inanimate, beings with their attributes, subjects with their accessories, take one colour and serve to one effect[4].' The grand storehouses of enthusiastic and meditative Imagination, of poetical, as contradistinguished from human and dramatic Imagination, are the prophetic and lyrical parts of the Holy Scriptures, and the works of Milton; to which I cannot forbear to add to those of Spenser. I select these writers in preference to those of ancient Greece and Rome, because the anthropomorphism of the Pagan religion subjected the minds of the greatest poets in those countries too much to the bondage of definite form; from which the Hebrews were preserved by their abhorrence of idolatry. This abhorrence was almost as strong in our great epic Poet, both from circumstances of his life, and from the constitution of his mind. However imbued the surface might be with classical literature, he was a Hebrew in soul; and all things tended in him towards the sublime. Spenser, of a gentler nature, maintained his freedom by aid of his allegorical spirit, at one time inciting him to create persons out of abstractions; and, at another, by a superior effort of genius, to give the universality and permanence of abstractions to his human beings, by means of attributes and emblems that belong to the highest moral truths and the purest sensations,—of which his character of Una is a glorious example. Of the human and dramatic Imagination the works of Shakespeare are an inexhaustible source.

I tax not you, ye Elements, with unkindness,
I never gave you kingdoms, call'd you Daughters!

And if, bearing in mind the many Poets distinguished by this prime quality, whose names I omit to mention; yet justified by recollection of the insults which the ignorant, the incapable, and the presumptuous, have heaped upon these and my other writings, I may be permitted to anticipate the judgment of posterity upon myself, I shall declare (censurable, I grant, if the notoriety of the fact above stated does not justify me) that I have given in these unfavourable times evidence of exertions of this faculty upon its worthiest objects, the external universe, the moral and religious sentiments of Man, his

natural affections, and his acquired passions; which have the same ennobling tendency as the productions of men, in this kind, worthy to be holden in undying remembrance.

To the mode in which Fancy has already been characterized as the power of evoking and combining, or, as my friend Mr. Coleridge has styled it, 'the aggregative and associative power,' my objection is only that the definition is too general. To aggregate and to associate, to evoke and to combine, belong as well to the Imagination as to the Fancy; but either the materials evoked and combined are different; or they are brought together under a different law, and for a different purpose. Fancy does not require that the materials which she makes use of should be susceptible of change in their constitution, from her touch; and, where they admit of modification, it is enough for her purpose if it be slight, limited, and evanescent. Directly the reverse of these, are the desires and demands of the Imagination. She recoils from everything but the plastic, the pliant, and the indefinite. She leaves it to Fancy to describe Queen Mab as coming,

In shape no bigger than an agate-stone
On the fore-finger of an alderman.

Having to speak of stature, she does not tell you that her gigantic Angel was as tall as Pompey's Pillar; much less that he was twelve cubits, or twelve hundred cubits high; or that his dimensions equalled those of Teneriffe or Atlas;—because these, and if they were a million times as high it would be the same, are bounded: The expression is, 'His stature reached the sky!' the illimitable firmament!—When the Imagination frames a comparison, if it does not strike on the first presentation, a sense of the truth of the likeness, from the moment that it is perceived, grows—and continues to grow—upon the mind; the resemblance depending less upon outline of form and feature, than upon expression and effect; less upon casual and outstanding, than upon inherent and internal, properties: moreover, the images invariably modify each other.—The law under which the processes of Fancy are carried on is as capricious as the accidents of things, and the effects are surprising, playful, ludicrous, amusing, tender, or pathetic, as the objects happen to be appositely produced or fortunately combined. Fancy depends upon the rapidity and

profusion with which she scatters her thoughts and images; trusting that their number, and the felicity with which they are linked together, will make amends for the want of individual value: or she prides herself upon the curious subtilty and the successful elaboration with which she can detect their lurking affinities. If she can win you over to her purpose, and impart to you her feelings, she cares not how unstable or transitory may be her influence, knowing that it will not be out of her power to resume it upon an apt occasion. But the Imagination is conscious of an indestructible dominion;—the Soul may fall away from it, not being able to sustain its grandeur; but, if once felt and acknowledged, by no act of any other faculty of the mind can it be relaxed, impaired, or diminished.—Fancy is given to quicken and to beguile the temporal part of our nature, Imagination to incite and to support the eternal.—Yet is it not the less true that Fancy, as she is an active, is also, under her own laws and in her own spirit, a creative faculty? In what manner Fancy ambitiously aims at a rivalry with Imagination, and Imagination stoops to work with the materials of Fancy, might be illustrated from the compositions of all eloquent writers, whether in prose or verse; and chiefly from those of our own Country. Scarcely a page of the impassioned parts of Bishop Taylor's Works can be opened that shall not afford examples.—Referring the Reader to those inestimable volumes, I will content myself with placing a conceit (ascribed to Lord Chesterfield) in contrast with a passage from the *Paradise Lost*:

The dews of the evening most carefully shun,
They are the tears of the sky for the loss of the sun.

After the transgression of Adam, Milton, with other appearances of sympathizing Nature, thus marks the immediate consequence,

Sky lowered, and, muttering thunder, some sad drops
Wept at completion of the mortal sin.

The associating link is the same in each instance: Dew and rain, not distinguishable from the liquid substance of tears, are employed as indications of sorrow. A flash of surprise is the effect in the former case; a flash of surprise, and nothing more; for the nature of things does not sustain

the combination. In the latter, the effects from the act, of which there is this immediate consequence and visible sign, are so momentous, that the mind acknowledges the justice and reasonableness of the sympathy in nature so manifested; and the sky weeps drops of water as if with human eyes, as 'Earth had before trembled from her entrails, and Nature given a second groan.'

Finally, I will refer to Cotton's *Ode upon Winter*, an admirable composition, though stained with some peculiarities of the age in which he lived, for a general illustration of the characteristics of Fancy. The middle part of this ode contains a most lively description of the entrance of Winter, with his retinue, as 'A palsied king,' and yet a military monarch,—advancing for conquest with his army; the several bodies of which, and their arms and equipments, are described with a rapidity of detail, and a profusion of *fanciful* comparisons, which indicate on the part of the poet extreme activity of intellect, and a correspondent hurry of delightful feeling. Winter retires from the foe into his fortress, where

a magazine

Of sovereign juice is cellared in;
Liquor that will the siege maintain
Should Phoebus ne'er return again.

Though myself a water drinker, I cannot resist the pleasure of transcribing what follows, as an instance still more happy of Fancy employed in the treatment of feeling than, in its preceding passages, the Poem supplies of her management of forms.

'Tis that, that gives the poet rage,
And thaws the gelid blood of age;
Matures the young, restores the old,
And makes the fainting coward bold.

It lays the careful head to rest,
Calms palpitations in the breast,
Renders our lives' misfortune sweet;

* * * * *

Then let the chill Sirocco blow,
And gird us round with hills of snow,
Or else go whistle to the shore,
And make the hollow mountains roar,

Whilst we together jovial sit
Careless, and crowned with mirth and wit,
Where, though bleak winds confine us home
Our fancies round the world shall roam.

We'll think of all the Friends we know,
And drink to all worth drinking to;
When having drunk all thine and mine,
We rather shall want healths than wine.

But where Friends fail us, we'll supply
Our friendships with our charity;
Men that remote in sorrows live,
Shall by our lusty brimmers thrive.

We'll drink the wanting into wealth,
And those that languish into health,
The afflicted into joy; th' opprest
Into security and rest.

The worthy in disgrace shall find
Favour return again more kind,
And in restraint who stifled lie,
Shall taste the air of liberty.

The brave shall triumph in success,
The lover shall have mistresses,
Poor unregarded Virtue, praise,
And the neglected Poet, bays.

Thus shall our healths do others good,

Whilst we ourselves do all we would;
For, freed from envy and from care,
What would we be but what we are?

When I sate down to write this Preface, it was my intention to have made it more comprehensive; but, thinking that I ought rather to apologize for detaining the reader so long, I will here conclude.

[Footnote 3: As sensibility to harmony of numbers, and the power of producing it, are invariably attendants upon the faculties above specified, nothing has been said upon those requisites.]

[Footnote 4: Charles Lamb upon the genius of Hogarth.]

ESSAY SUPPLEMENTARY TO PREFACE

(1815)

With the young of both sexes, Poetry is, like love, a passion; but, for much the greater part of those who have been proud of its power over their minds, a necessity soon arises of breaking the pleasing bondage; or it relaxes of itself;—the thoughts being occupied in domestic cares, or the time engrossed by business. Poetry then becomes only an occasional recreation; while to those whose existence passes away in a course of fashionable pleasure, it is a species of luxurious amusement. In middle and declining age, a scattered number of serious persons resort to poetry, as to religion, for a protection against the pressure of trivial employments, and as a consolation for the afflictions of life. And, lastly, there are many, who, having been enamoured of this art in their youth, have found leisure, after youth was spent, to cultivate general literature; in which poetry has continued to be comprehended *as a study*.

Into the above classes the Readers of poetry may be divided; Critics abound in them all; but from the last only can opinions be collected of absolute value, and worthy to be depended upon, as prophetic of the destiny of a new work. The young, who in nothing can escape delusion, are especially subject to it in their intercourse with Poetry. The cause, not so obvious as the fact is unquestionable, is the same as that from which erroneous judgements in this art, in the minds of men of all ages, chiefly proceed; but upon Youth it operates with peculiar force. The appropriate business of poetry (which, nevertheless, if genuine, is as permanent as pure science), her appropriate employment, her privilege and her *duty*, is to treat of things not as they *are*, but as they *appear*; not as they exist in themselves, but as they *seem* to exist to

the *senses*, and to the *passions*. What a world of delusion does this acknowledged obligation prepare for the inexperienced! what temptations to go astray are here held forth for them whose thoughts have been little disciplined by the understanding, and whose feelings revolt from the sway of reason!—When a juvenile Reader is in the height of his rapture with some vicious passage, should experience throw in doubts, or common sense suggest suspicions, a lurking consciousness that the realities of the Muse are but shows, and that her liveliest excitements are raised by transient shocks of conflicting feeling and successive assemblages of contradictory thoughts—is ever at hand to justify extravagance, and to sanction absurdity. But, it may be asked, as these illusions are unavoidable, and, no doubt, eminently useful to the mind as a process, what good can be gained by making observations, the tendency of which is to diminish the confidence of youth in its feelings, and thus to abridge its innocent and even profitable pleasures? The reproach implied in the question could not be warded off, if Youth were incapable of being delighted with what is truly excellent; or, if these errors always terminated of themselves in due season. But, with the majority, though their force be abated, they continue through life. Moreover, the fire of youth is too vivacious an element to be extinguished or damped by a philosophical remark; and, while there is no danger that what has been said will be injurious or painful to the ardent and the confident, it may prove beneficial to those who, being enthusiastic, are, at the same time, modest and ingenuous. The intimation may unite with their own misgivings to regulate their sensibility, and to bring in, sooner than it would otherwise have arrived, a more discreet and sound judgement.

If it should excite wonder that men of ability, in later life, whose understandings have been rendered acute by practice in affairs, should be so easily and so far imposed upon when they happen to take up a new work in verse, this appears to be the cause;—that, having discontinued their attention to poetry, whatever progress may have been made in other departments of knowledge, they have not, as to this art, advanced in true discernment beyond the age of youth. If, then, a new poem fall in their way, whose attractions are of that kind which would have enraptured them during the heat of youth, the judgement not being improved to a degree that they shall be disgusted, they are dazzled, and prize and cherish the faults for having had power to make

the present time vanish before them, and to throw the mind back, as by enchantment, into the happiest season of life. As they read, powers seem to be revived, passions are regenerated, and pleasures restored. The Book was probably taken up after an escape from the burden of business, and with a wish to forget the world, and all its vexations and anxieties. Having obtained this wish, and so much more, it is natural that they should make report as they have felt.

If Men of mature age, through want of practice, be thus easily beguiled into admiration of absurdities, extravagances, and misplaced ornaments, thinking it proper that their understandings should enjoy a holiday, while they are unbending their minds with verse, it may be expected that such Readers will resemble their former selves also in strength of prejudice, and an inaptitude to be moved by the unostentatious beauties of a pure style. In the higher poetry, an enlightened Critic chiefly looks for a reflection of the wisdom of the heart and the grandeur of the imagination. Wherever these appear, simplicity accompanies them, Magnificence herself, when legitimate, depending upon a simplicity of her own, to regulate her ornaments. But it is a well-known property of human nature, that our estimates are ever governed by comparisons, of which we are conscious with various degrees of distinctness. Is it not, then, inevitable (confining these observations to the effects of style merely) that an eye, accustomed to the glaring hues of diction by which such Readers are caught and excited, will for the most part be rather repelled than attracted by an original Work, the colouring of which is disposed according to a pure and refined scheme of harmony? It is in the fine arts as in the affairs of life, no man can *serve* (i.e. obey with zeal and fidelity) two Masters.

As Poetry is most just to its own divine origin when it administers the comforts and breathes the spirit of religion, they who have learned to perceive this truth, and who betake themselves to reading verse for sacred purposes, must be preserved from numerous illusions to which the two Classes of Readers, whom we have been considering, are liable. But, as the mind grows serious from the weight of life, the range of its passions is contracted accordingly; and its sympathies become so exclusive, that many species of high excellence wholly escape, or but languidly excite, its notice. Besides, men who read from religious or moral inclinations, even when the

subject is of that kind which they approve, are beset with misconceptions and mistakes peculiar to themselves. Attaching so much importance to the truths which interest them, they are prone to overrate the Authors by whom those truths are expressed and enforced. They come prepared to impart so much passion to the Poet's language, that they remain unconscious how little, in fact, they receive from it. And, on the other hand, religious faith is to him who holds it so momentous a thing, and error appears to be attended with such tremendous consequences, that, if opinions touching upon religion occur which the Reader condemns, he not only cannot sympathize with them, however animated the expression, but there is, for the most part, an end put to all satisfaction and enjoyment. Love, if it before existed, is converted into dislike; and the heart of the Reader is set against the Author and his book.—To these excesses, they, who from their professions ought to be the most guarded against them, are perhaps the most liable; I mean those sects whose religion, being from the calculating understanding, is cold and formal. For when Christianity, the religion of humility, is founded upon the proudest faculty of our nature, what can be expected but contradictions? Accordingly, believers of this cast are at one time contemptuous; at another, being troubled, as they are and must be, with inward misgivings, they are jealous and suspicious;—and at all seasons, they are under temptation to supply by the heat with which they defend their tenets, the animation which is wanting to the constitution of the religion itself.

Faith was given to man that his affections, detached from the treasures of time, might be inclined to settle upon those of eternity;—the elevation of his nature, which this habit produces on earth, being to him a presumptive evidence of a future state of existence; and giving him a title to partake of its holiness. The religious man values what he sees chiefly as an 'imperfect shadowing forth' of what he is incapable of seeing. The concerns of religion refer to indefinite objects, and are too weighty for the mind to support them without relieving itself by resting a great part of the burthen upon words and symbols. The commerce between Man and his Maker cannot be carried on but by a process where much is represented in little, and the Infinite Being accommodates himself to a finite capacity. In all this may be perceived the affinity between religion and poetry; between religion—making up the deficiencies of reason by faith; and poetry—passionate for the instruction of

reason; between religion—whose element is infinitude, and whose ultimate trust is the supreme of things, submitting herself to circumscription, and reconciled to substitutions; and poetry—ethereal and transcendent, yet incapable to sustain her existence without sensuous incarnation. In this community of nature may be perceived also the lurking incitements of kindred error;—so that we shall find that no poetry has been more subject to distortion, than that species, the argument and scope of which is religious; and no lovers of the art have gone farther astray than the pious and the devout.

Whither then shall we turn for that union of qualifications which must necessarily exist before the decisions of a critic can be of absolute value? For a mind at once poetical and philosophical; for a critic whose affections are as free and kindly as the spirit of society, and whose understanding is severe as that of dispassionate government? Where are we to look for that initiatory composure of mind which no selfishness can disturb? For a natural sensibility that has been tutored into correctness without losing anything of its quickness; and for active faculties, capable of answering the demands which an Author of original imagination shall make upon them, associated with a judgement that cannot be duped into admiration by aught that is unworthy of it?—among those and those only, who, never having suffered their youthful love of poetry to remit much of its force, have applied to the consideration of the laws of this art the best power of their understandings. At the same time it must be observed—that, as this Class comprehends the only judgements which are trustworthy, so does it include the most erroneous and perverse. For to be mistaught is worse than to be untaught; and no perverseness equals that which is supported by system, no errors are so difficult to root out as those which the understanding has pledged its credit to uphold. In this Class are contained censors, who, if they be pleased with what is good, are pleased with it only by imperfect glimpses, and upon false principles; who, should they generalize rightly, to a certain point, are sure to suffer for it in the end; who, if they stumble upon a sound rule, are fettered by misapplying it, or by straining it too far; being incapable of perceiving when it ought to yield to one of higher order. In it are found critics too petulant to be passive to a genuine poet, and too feeble to grapple with him; men, who take upon them to report of the course which *he* holds whom they are utterly unable to

accompany,—confounded if he turn quick upon the wing, dismayed if he soar steadily 'into the region';—men of palsied imaginations and indurated hearts; in whose minds all healthy action is languid, who therefore feed as the many direct them, or, with the many, are greedy after vicious provocatives;—judges, whose censure is auspicious, and whose praise ominous! In this class meet together the two extremes of best and worst.

The observations presented in the foregoing series are of too ungracious a nature to have been made without reluctance; and, were it only on this account, I would invite the reader to try them by the test of comprehensive experience. If the number of judges who can be confidently relied upon be in reality so small, it ought to follow that partial notice only, or neglect, perhaps long continued, or attention wholly inadequate to their merits—must have been the fate of most works in the higher departments of poetry; and that, on the other hand, numerous productions have blazed into popularity, and have passed away, leaving scarcely a trace behind them: it will be further found, that when Authors shall have at length raised themselves into general admiration and maintained their ground, errors and prejudices have prevailed concerning their genius and their works, which the few who are conscious of those errors and prejudices would deplore; if they were not recompensed by perceiving that there are select Spirits for whom it is ordained that their fame shall be in the world an existence like that of Virtue, which owes its being to the struggles it makes, and its vigour to the enemies whom it provokes;—a vivacious quality, ever doomed to meet with opposition, and still triumphing over it; and, from the nature of its dominion, incapable of being brought to the sad conclusion of Alexander, when he wept that there were no more worlds for him to conquer.

Let us take a hasty retrospect of the poetical literature of this Country for the greater part of the last two centuries, and see if the facts support these inferences.

Who is there that now reads the *Creation* of Dubartas? Yet all Europe once resounded with his praise; he was caressed by kings; and, when his Poem was translated into our language, the *Faery Queen* faded before it. The name of Spenser, whose genius is of a higher order than even that of Ariosto, is at this

day scarcely known beyond the limits of the British Isles. And if the value of his works is to be estimated from the attention now paid to them by his countrymen, compared with that which they bestow on those of some other writers, it must be pronounced small indeed.

The laurel, meed of mighty conquerors
And poetssage—

are his own words; but his wisdom has, in this particular, been his worst enemy: while its opposite, whether in the shape of folly or madness, has been *their* best friend. But he was a great power, and bears a high name: the laurel has been awarded to him.

A dramatic Author, if he write for the stage, must adapt himself to the taste of the audience, or they will not endure him; accordingly the mighty genius of Shakespeare was listened to. The people were delighted: but I am not sufficiently versed in stage antiquities to determine whether they did not flock as eagerly to the representation of many pieces of contemporary Authors, wholly undeserving to appear upon the same boards. Had there been a formal contest for superiority among dramatic writers, that Shakespeare, like his predecessors Sophocles and Euripides, would have often been subject to the mortification of seeing the prize adjudged to sorry competitors, becomes too probable, when we reflect that the admirers of Settle and Shadwell were, in a later age, as numerous, and reckoned as respectable, in point of talent, as those of Dryden. At all events, that Shakespeare stooped to accommodate himself to the People, is sufficiently apparent; and one of the most striking proofs of his almost omnipotent genius is, that he could turn to such glorious purpose those materials which the prepossessions of the age compelled him to make use of. Yet even this marvellous skill appears not to have been enough to prevent his rivals from having some advantage over him in public estimation; else how can we account for passages and scenes that exist in his works, unless upon a supposition that some of the grossest of them, a fact which in my own mind I have no doubt of, were foisted in by the Players, for the gratification of the many?

But that his Works, whatever might be their reception upon the stage, made

but little impression upon the ruling Intellects of the time, may be inferred from the fact that Lord Bacon, in his multifarious writings, nowhere either quotes or alludes to him.[5] His dramatic excellence enabled him to resume possession of the stage after the Restoration; but Dryden tells us that in his time two of the plays of Beaumont and Fletcher were acted for one of Shakespeare's. And so faint and limited was the perception of the poetic beauties of his dramas in the time of Pope, that, in his Edition of the Plays, with a view of rendering to the general reader a necessary service, he printed between inverted commas those passages which he thought most worthy of notice.

At this day, the French Critics have abated nothing of their aversion to this darling of our Nation: 'the English, with their bouffon de Shakespeare,' is as familiar an expression among them as in the time of Voltaire. Baron Grimm is the only French writer who seems to have perceived his infinite superiority to the first names of the French Theatre; an advantage which the Parisian Critic owed to his German blood and German education. The most enlightened Italians, though well acquainted with our language, are wholly incompetent to measure the proportions of Shakespeare. The Germans only, of foreign nations, are approaching towards a knowledge and feeling of what he is. In some respects they have acquired a superiority over the fellow countrymen of the Poet: for among us it is a current, I might say, an established opinion, that Shakespeare is justly praised when he is pronounced to be 'a wild irregular genius, in whom great faults are compensated by great beauties.' How long may it be before this misconception passes away, and it becomes universally acknowledged that the judgement of Shakespeare in the selection of his materials, and in the manner in which he has made them, heterogeneous as they often are, constitute a unity of their own, and contribute all to one great end, is not less admirable than his imagination, his invention, and his intuitive knowledge of human Nature?

There is extant a small Volume of miscellaneous poems, in which Shakespeare expresses his own feelings in his own person. It is not difficult to conceive that the Editor, George Steevens, should have been insensible to the beauties of one portion of that Volume, the Sonnets; though in no part of the writings of this Poet is found, in an equal compass, a greater number of

exquisite feelings felicitously expressed. But, from regard to the Critic's own credit, he would not have ventured to talk of an[6] act of parliament not being strong enough to compel the perusal of those little pieces, if he had not known that the people of England were ignorant of the treasures contained in them: and if he had not, moreover, shared the too common propensity of human nature to exult over a supposed fall into the mire of a genius whom he had been compelled to regard with admiration, as an inmate of the celestial regions—'there sitting where he durst not soar.'

Nine years before the death of Shakespeare, Milton was born, and early in life he published several small poems, which, though on their first appearance they were praised by a few of the judicious, were afterwards neglected to that degree, that Pope in his youth could borrow from them without risk of its being known. Whether these poems are at this day justly appreciated, I will not undertake to decide nor would it imply a severe reflection upon the mass of readers to suppose the contrary, seeing that a man of the acknowledged genius of Voss, the German poet, could suffer their spirit to evaporate, and could change their character, as is done in the translation made by him of the most popular of these pieces. At all events, it is certain that these Poems of Milton are now much read, and loudly praised, yet were they little heard of till more than 150 years after their publication, and of the Sonnets, Dr. Johnson, as appears from Boswell's *Life* of him, was in the habit of thinking and speaking as contemptuously as Steevens wrote upon those of Shakespeare.

About the time when the Pindaric odes of Cowley and his imitators, and the productions of that class of curious thinkers whom Dr. Johnson has strangely styled metaphysical Poets, were beginning to lose something of that extravagant admiration which they had excited, the *Paradise Lost* made its appearance. 'Fit audience find though few,' was the petition addressed by the Poet to his inspiring Muse. I have said elsewhere that he gained more than he asked, this I believe to be true, but Dr. Johnson has fallen into a gross mistake when he attempts to prove, by the sale of the work, that Milton's Countrymen were '*just* to it' upon its first appearance. Thirteen hundred Copies were sold in two years, an uncommon example, he asserts, of the prevalence of genius in opposition to so much recent enmity as Milton's public conduct had excited.

But be it remembered that, if Milton's political and religious opinions, and the manner in which he announced them, had raised him many enemies, they had procured him numerous friends, who, as all personal danger was passed away at the time of publication, would be eager to procure the master-work of a man whom they revered, and whom they would be proud of praising. Take, from the number of purchasers, persons of this class, and also those who wished to possess the Poem as a religious work, and but few I fear would be left who sought for it on account of its poetical merits. The demand did not immediately increase; 'for,' says Dr. Johnson, 'many more readers' (he means persons in the habit of reading poetry) 'than were supplied at first the Nation did not afford.' How careless must a writer be who can make this assertion in the face of so many existing title-pages to belie it! Turning to my own shelves, I find the folio of Cowley, seventh edition, 1681. A book near it is Flatman's Poems, fourth edition, 1686, Waller, fifth edition, same date. The Poems of Norris of Bemerton not long after went, I believe, through nine editions. What further demand there might be for these works I do not know; but I well remember that, twenty-five years ago, the booksellers' stalls in London swarmed with the folios of Cowley. This is not mentioned in disparagement of that able writer and amiable man; but merely to show that, if Milton's Works were not more read, it was not because readers did not exist at the time. The early editions of the *Paradise Lost* were printed in a shape which allowed them to be sold at a low price, yet only three thousand copies of the Work were sold in eleven years; and the Nation, says Dr. Johnson, had been satisfied from 1623 to 1664, that is, forty-one years, with only two editions of the Works of Shakespeare; which probably did not together make one thousand Copies; facts adduced by the critic to prove the 'paucity of Readers,'—There were readers in multitudes; but their money went for other purposes, as their admiration was fixed elsewhere. We are authorized, then, to affirm that the reception of the *Paradise Lost*, and the slow progress of its fame, are proofs as striking as can be desired that the positions which I am attempting to establish are not erroneous.[7]—How amusing to shape to one's self such a critique as a Wit of Charles's days, or a Lord of the Miscellanies or trading Journalist of King William's time, would have brought forth, if he had set his faculties industriously to work upon this Poem, everywhere impregnated with *original* excellence.

So strange indeed are the obliquities of admiration, that they whose opinions are much influenced by authority will often be tempted to think that there are no fixed principles[8] in human nature for this art to rest upon. I have been honoured by being permitted to peruse in MS. a tract composed between the period of the Revolution and the close of that century. It is the Work of an English Peer of high accomplishments, its object to form the character and direct the studies of his son. Perhaps nowhere does a more beautiful treatise of the kind exist. The good sense and wisdom of the thoughts, the delicacy of the feelings, and the charm of the style, are, throughout, equally conspicuous. Yet the Author, selecting among the Poets of his own country those whom he deems most worthy of his son's perusal, particularizes only Lord Rochester, Sir John Denham, and Cowley. Writing about the same time, Shaftesbury, an author at present unjustly depreciated, describes the English Muses as only yet lisping in their cradles.

The arts by which Pope, soon afterwards, contrived to procure to himself a more general and a higher reputation than perhaps any English Poet ever attained during his lifetime, are known to the judicious. And as well known is it to them, that the undue exertion of those arts is the cause why Pope has for some time held a rank in literature, to which, if he had not been seduced by an over-love of immediate popularity, and had confided more in his native genius, he never could have descended. He bewitched the nation by his melody, and dazzled it by his polished style and was himself blinded by his own success. Having wandered from humanity in his Eclogues with boyish inexperience, the praise, which these compositions obtained, tempted him into a belief that Nature was not to be trusted, at least in pastoral Poetry. To prove this by example, he put his friend Gay upon writing those Eclogues which their author intended to be burlesque. The instigator of the work, and his admirers, could perceive in them nothing but what was ridiculous. Nevertheless, though these Poems contain some detestable passages, the effect, as Dr Johnson well observes, 'of reality and truth became conspicuous even when the intention was to show them grovelling and degraded.' The Pastorals, ludicrous to such as prided themselves upon their refinement, in spite of those disgusting passages, 'became popular, and were read with delight, as just representations of rural manners and occupations.'

Something less than sixty years after the publication of the *Paradise Lost* appeared Thomson's *Winter*, which was speedily followed by his other Seasons. It is a work of inspiration, much of it is written from himself, and nobly from himself. How was it received? 'It was no sooner read,' says one of his contemporary biographers, 'than universally admired those only excepted who had not been used to feel, or to look for anything in poetry, beyond a point of satirical or epigrammatic wit, a smart antithesis richly trimmed with rhyme, or the softness of an elegiac complaint. To such his manly classical spirit could not readily commend itself, till, after a more attentive perusal, they had got the better of their prejudices, and either acquired or affected a truer taste. A few others stood aloof, merely because they had long before fixed the articles of their poetical creed, and resigned themselves to an absolute despair of ever seeing anything new and original. These were somewhat mortified to find their notions disturbed by the appearance of a poet, who seemed to owe nothing but to nature and his own genius. But, in a short time, the applause became unanimous, every one wondering how so many pictures, and pictures so familiar, should have moved them but faintly to what they felt in his descriptions. His digressions too, the overflowings of a tender benevolent heart, charmed the reader no less, leaving him in doubt, whether he should more admire the Poet or love the Man.'

This case appears to bear strongly against us—but we must distinguish between wonder and legitimate admiration. The subject of the work is the changes produced in the appearances of nature by the revolution of the year: and, by undertaking to write in verse, Thomson pledged himself to treat his subject as became a Poet. Now, it is remarkable that, excepting the nocturnal *Reverie of Lady Winchelsea*, and a passage or two in the *Windsor Forest* of Pope, the poetry of the period intervening between the publication of the *Paradise Lost* and the *Seasons* does not contain a single new image of external nature; and scarcely presents a familiar one from which it can be inferred that the eye of the Poet has been steadily fixed upon his object, much less that his feelings had urged him to work upon it in the spirit of genuine imagination. To what a low state knowledge of the most obvious and important phenomena had sunk, is evident from the style in which Dryden has executed a description of Night in one of his Tragedies, and Pope his translation of the celebrated moonlight scene in the *Iliad*. A blind man, in the

habit of attending accurately to descriptions casually dropped from the lips of those around him, might easily depict these appearances with more truth. Dryden's lines are vague, bombastic, and senseless;[9] those of Pope, though he had Homer to guide him, are throughout false and contradictory. The verses of Dryden, once highly celebrated, are forgotten; those of Pope still retain their hold upon public estimation,—nay, there is not a passage of descriptive poetry, which at this day finds so many and such ardent admirers. Strange to think of an enthusiast, as may have been the case with thousands, reciting those verses under the cope of a moonlight sky, without having his raptures in the least disturbed by a suspicion of their absurdity!—If these two distinguished writers could habitually think that the visible universe was of so little consequence to a poet, that it was scarcely necessary for him to cast his eyes upon it, we may be assured that those passages of the elder poets which faithfully and poetically describe the phenomena of nature, were not at that time holden in much estimation, and that there was little accurate attention paid to those appearances.

Wonder is the natural product of Ignorance; and as the soil was *in such good condition* at the time of the publication of the *Seasons* the crop was doubtless abundant. Neither individuals nor nations become corrupt all at once, nor are they enlightened in a moment. Thomson was an inspired poet, but he could not work miracles; in cases where the art of seeing had in some degree been learned, the teacher would further the proficiency of his pupils, but he could do little *more*; though so far does vanity assist men in acts of self-deception, that many would often fancy they recognized a likeness when they knew nothing of the original. Having shown that much of what his biographer deemed genuine admiration must in fact have been blind wonderment—how is the rest to be accounted for?—Thomson was fortunate in the very title of his poem, which seemed to bring it home to the prepared sympathies of every one: in the next place, notwithstanding his high powers, he writes a vicious style; and his false ornaments are exactly of that kind which would be most likely to strike the undiscerning. He likewise abounds with sentimental commonplaces, that, from the manner in which they were brought forward, bore an imposing air of novelty. In any well-used copy of the *Seasons* the book generally opens of itself with the rhapsody on love, or with one of the stories (perhaps 'Damon and Musidora'); these also are prominent in our collections

of Extracts, and are the parts of his Work which, after all, were probably most efficient in first recommending the author to general notice. Pope, repaying praises which he had received, and wishing to extol him to the highest, only styles him 'an elegant and philosophical Poet'; nor are we able to collect any unquestionable proofs that the true characteristics of Thomson's genius as an imaginative poet[10] were perceived, till the elder Warton, almost forty years after the publication of the *Seasons*, pointed them out by a note in his *Essay on the Life and Writings of Pope*. In the *Castle of Indolence* (of which Gray speaks so coldly) these characteristics were almost as conspicuously displayed, and in verse more harmonious and diction more pure. Yet that fine poem was neglected on its appearance, and is at this day the delight only of a few!

When Thomson died, Collins breathed forth his regrets in an Elegiac Poem, in which he pronounces a poetical curse upon *him* who should regard with insensibility the place where the Poet's remains were deposited. The Poems of the mourner himself have now passed through innumerable editions, and are universally known, but if, when Collins died, the same kind of imprecation had been pronounced by a surviving admirer, small is the number whom it would not have comprehended. The notice which his poems attained during his lifetime was so small, and of course the sale so insignificant, that not long before his death he deemed it right to repay to the bookseller the sum which he had advanced for them and threw the edition into the fire.

Next in importance to the *Seasons* of Thomson, though a considerable distance from that work in order of time, come the *Reliques of Ancient English Poetry*, collected, new-modelled, and in many instances (if such a contradiction in terms may be used) composed by the Editor, Dr Percy. This work did not steal silently into the world, as is evident from the number of legendary tales, that appeared not long after its publication, and had been modelled, as the authors persuaded themselves, after the old Ballad. The Compilation was, however ill suited to the then existing taste of city society, and Dr Johnson, 'mid the little senate to which he gave laws, was not sparing in his exertions to make it an object of contempt. The critic triumphed, the legendary imitators were deservedly disregarded, and as undeservedly, their ill imitated

models sank in this country into temporary neglect, while Burger and other able writers of Germany, were translating or imitating these Reliques, and composing, with the aid of inspiration thence derived, poems which are the delight of the German nation. Dr Percy was so abashed by the ridicule flung upon his labours from the ignorance and insensibility of the persons with whom he lived, that, though while he was writing under a mask he had not wanted resolution to follow his genius into the regions of true simplicity and genuine pathos (as is evinced by the exquisite ballad of *Sir Cauline* and by many other pieces), yet when he appeared in his own person and character as a poetical writer, he adopted, as in the tale of the *Hermit of Warkworth*, a diction scarcely in any one of its features distinguishable from the vague, the glossy, and unfeeling language of his day. I mention this remarkable fact[11] with regret, esteeming the genius of Dr. Percy in this kind of writing superior to that of any other man by whom in modern times it has been cultivated. That even Burger (to whom Klopstock gave, in my hearing, a commendation which he denied to Goethe and Schiller, pronouncing him to be a genuine poet, and one of the few among the Germans whose works would last) had not the fine sensibility of Percy, might be shown from many passages, in which he has deserted his original only to go astray. For example,

Now daye was gone, and night was come,
And all were fast asleepe,
All save the Lady Emeline,
Who sate in her bowre to weepe:

And soone she heard her true Love's voice
Low whispering at the walle,
Awake, awake, my dear Ladye,
'Tis I thy true love call

Which is thus tricked out and dilated;

Als nun die Nacht Gebirg' und Thal
Vermummt in Rabenschatten,
Und Hochburgs Lampen uberall
Schon ausgeflimmert hatten,

Und alles tief entschlafen war;
Doch nur das Fraulein immerdar,
Voll Fieberangst, noch wachte,
Und seinen Ritter dachte:
Da horch! Ein susser Liebeston
Kam leis, empor geflogen.
'Ho, Trudchen, ho! Da bin ich schon!
Frisch auf! Dich angezogen!'

But from humble ballads we must ascend to heroics.

All hail, Macpherson! hail to thee, Sire of Ossian! The Phantom was begotten by the snug embrace of an impudent Highlander upon a cloud of tradition—it travelled southward, where it was greeted with acclamation, and the thin Consistence took its course through Europe, upon the breath of popular applause. The Editor of the *Reliques* had indirectly preferred a claim to the praise of invention, by not concealing that his supplementary labours were considerable! how selfish his conduct, contrasted with that of the disinterested Gael, who, like Lear, gives his kingdom away, and is content to become a pensioner upon his own issue for a beggarly pittance!—Open this far-famed Book!—I have done so at random, and the beginning of the *Epic Poem Temora*, in eight Books, presents itself. 'The blue waves of Ullin roll in light. The green hills are covered with day. Trees shake their dusky heads in the breeze. Grey torrents pour their noisy streams. Two green hills with aged oaks surround a narrow plain. The blue course of a stream is there. On its banks stood Cairbar of Atha. His spear supports the king; the red eyes of his fear are sad. Cormac rises on his soul with all his ghastly wounds.' Precious memorandums from the pocket-book of the blind Ossian!

If it be unbecoming, as I acknowledge that for the most part it is, to speak disrespectfully of Works that have enjoyed for a length of time a widely-spread reputation, without at the same time producing irrefragable proofs of their unworthiness, let me be forgiven upon this occasion.—Having had the good fortune to be born and reared in a mountainous country, from my very childhood I have felt the falsehood that pervades the volumes imposed upon the world under the name of Ossian. From what I saw with my own eyes, I

knew that the imagery was spurious. In nature everything is distinct, yet nothing defined into absolute independent singleness. In Macpherson's work it is exactly the reverse; everything (that is not stolen) is in this manner defined, insulated, dislocated, deadened,—yet nothing distinct. It will always be so when words are substituted for things. To say that the characters never could exist, that the manners are impossible, and that a dream has more substance than the whole state of society, as there depicted, is doing nothing more than pronouncing a censure which Macpherson defied; when, with the steeps of Morven before his eyes, he could talk so familiarly of his Car-borne heroes;—of Morven, which, if one may judge from its appearance at the distance of a few miles, contains scarcely an acre of ground sufficiently accommodating for a sledge to be trailed along its surface.—Mr. Malcolm Laing has ably shown that the diction of this pretended translation is a motley assemblage from all quarters; but he is so fond of making out parallel passages as to call poor Macpherson to account for his '*ands*' and his '*buts*!' and he has weakened his argument by conducting it as if he thought that every striking resemblance was a *conscious* plagiarism. It is enough that the coincidences are too remarkable for its being probable or possible that they could arise in different minds without communication between them. Now as the Translators of the Bible, and Shakespeare, Milton, and Pope, could not be indebted to Macpherson, it follows that he must have owed his fine feathers to them; unless we are prepared gravely to assert, with Madame de Stael, that many of the characteristic beauties of our most celebrated English Poets are derived from the ancient Fingallian; in which case the modern translator would have been but giving back to Ossian his own.—It is consistent that Lucien Buonaparte, who could censure Milton for having surrounded Satan in the infernal regions with courtly and regal splendour, should pronounce the modern Ossian to be the glory of Scotland;—a country that has produced a Dunbar, a Buchanan, a Thomson, and a Burns! These opinions are of ill omen for the Epic ambition of him who has given them to the world.

Yet, much as those pretended treasures of antiquity have been admired, they have been wholly uninfluential upon the literature of the Country. No succeeding writer appears to have caught from them a ray of inspiration; no author, in the least distinguished, has ventured formally to imitate them—except the boy, Chatterton, on their first appearance. He had perceived, from

the successful trials which he himself had made in literary forgery, how few critics were able to distinguish between a real ancient medal and a counterfeit of modern manufacture; and he set himself to the work of filling a magazine with *Saxon Poems*,—counterparts of those of Ossian, as like his as one of his misty stars is to another. This incapability to amalgamate with the literature of the Island is, in my estimation, a decisive proof that the book is essentially unnatural; nor should I require any other to demonstrate it to be a forgery, audacious as worthless.—Contrast, in this respect, the effect of Macpherson's publication with the *Reliques* of Percy, so unassuming, so modest in their pretensions!—I have already stated how much Germany is indebted to this latter work; and for our own country, its poetry has been absolutely redeemed by it. I do not think that there is an able writer in verse of the present day who would not be proud to acknowledge his obligations to the *Reliques*; I know that it is so with my friends; and, for myself, I am happy in this occasion to make a public avowal of my own.

Dr. Johnson, more fortunate in his contempt of the labours of Macpherson than those of his modest friend, was solicited not long after to furnish Prefaces biographical and critical for the works of some of the most eminent English Poets. The booksellers took upon themselves to make the collection; they referred probably to the most popular miscellanies, and, unquestionably, to their books of accounts; and decided upon the claim of authors to be admitted into a body of the most eminent, from the familiarity of their names with the readers of that day, and by the profits, which, from the sale of his works, each had brought and was bringing to the Trade. The Editor was allowed a limited exercise of discretion, and the Authors whom he recommended are scarcely to be mentioned without a smile. We open the volume of Prefatory Lives, and to our astonishment the *first* name we find is that of Cowley!—What Is become of the morning-star of English Poetry? Where is the bright Elizabethan constellation? Or, if names be more acceptable than images, where is the ever to-be-honoured Chaucer? where is Spenser? where Sidney? and, lastly, where he, whose rights as a poet, contradistinguished from those which he is universally allowed to possess as a dramatist, we have vindicated,—where Shakespeare?—These, and a multitude of others not unworthy to be placed near them, their contemporaries and successors, we have *not*. But in their stead, we have

(could better be expected when precedence was to be settled by an abstract of reputation at any given period made, as in this case before us?) Roscommon, and Stepney, and Phillips, and Walsh, and Smith, and Duke, and King, and Spratt—Halifax, Granville, Sheffield, Congreve, Broome, and other reputed Magnates—metrical writers utterly worthless and useless, except for occasions like the present, when their productions are referred to as evidence what a small quantity of brain is necessary to procure a considerable stock of admiration, provided the aspirant will accommodate himself to the likings and fashions of his day.

As I do not mean to bring down this retrospect to our own times, it may with propriety be closed at the era of this distinguished event. From the literature of other ages and countries, proofs equally cogent might have been adduced, that the opinions announced in the former part of this Essay are founded upon truth. It was not an agreeable office, nor a prudent undertaking, to declare them; but their importance seemed to render it a duty. It may still be asked, where lies the particular relation of what has been said to these Volumes?—The question will be easily answered by the discerning Reader who is old enough to remember the taste that prevailed when some of these poems were first published, seventeen years ago; who has also observed to what degree the poetry of this Island has since that period been coloured by them; and who is further aware of the unremitting hostility with which, upon some principle or other, they have each and all been opposed. A sketch of my own notion of the constitution of Fame has been given; and, as far as concerns myself, I have cause to be satisfied. The love, the admiration, the indifference, the slight, the aversion, and even the contempt, with which these Poems have been received, knowing, as I do, the source within my own mind, from which they have proceeded, and the labour and pains, which, when labour and pains appeared needful, have been bestowed upon them, must all, if I think consistently, be received as pledges and tokens, bearing the same general impression, though widely different in value;—they are all proofs that for the present time I have not laboured in vain; and afford assurances, more or less authentic, that the products of my industry will endure.

If there be one conclusion more forcibly pressed upon us than another by the review which has been given of the fortunes and fate of poetical Works, it is

this—that every author, as far as he is great and at the same time *original*, has had the task of *creating* the taste by which he is to be enjoyed: so has it been, so will it continue to be. This remark was long since made to me by the philosophical Friend for the separation of whose poems from my own I have previously expressed my regret. The predecessors of an original Genius of a high order will have smoothed the way for all that he has in common with them;—and much he will have in common; but, for what is peculiarly his own, he will be called upon to clear and often to shape his own road:—he will be in the condition of Hannibal among the Alps.

And where lies the real difficulty of creating that taste by which a truly original poet is to be relished? Is it in breaking the bonds of custom, in overcoming the prejudices of false refinement, and displacing the aversions of inexperience? Or, if he labour for an object which here and elsewhere I have proposed to myself, does it consist in divesting the reader of the pride that induces him to dwell upon those points wherein men differ from each other, to the exclusion of those in which all men are alike, or the same; and in making him ashamed of the vanity that renders him insensible of the appropriate excellence which civil arrangements, less unjust than might appear, and Nature illimitable in her bounty, had conferred on men who may stand below him in the scale of society? Finally, does it lie in establishing that dominion over the spirits of readers by which they are to be humbled and humanized, in order that they may be purified and exalted?

If these ends are to be attained by the mere communication of *knowledge*, it does *not* lie here.—TASTE, I would remind the reader, like IMAGINATION, is a word which has been forced to extend its services far beyond the point to which philosophy would have confined them. It is a metaphor, taken from a *passive* sense of the human body, and transferred to things which are in their essence *not* passive,—to intellectual *acts and operations*. The word, Imagination, has been overstrained, from impulses honourable to mankind, to meet the demands of the faculty which is perhaps the noblest of our nature. In the instance of Taste, the process has been reversed; and from the prevalence of dispositions at once injurious and discreditable, being no other than that selfishness which is the child of apathy,—which, as Nations decline in productive and creative power, makes them value themselves upon a

presumed refinement of judging. Poverty of language is the primary cause of the use which we make of the word, Imagination; but the word, Taste, has been stretched to the sense which it bears in modern Europe by habits of self-conceit, inducing that inversion in the order of things whereby a passive faculty is made paramount among the faculties conversant with the fine arts. Proportion and congruity, the requisite knowledge being supposed, are subjects upon which taste may be trusted; it is competent to this office—for in its intercourse with these the mind is *passive*, and is affected painfully or pleasurably as by an instinct. But the profound and the exquisite in feeling, the lofty and universal in thought and imagination; or, in ordinary language, the pathetic and the sublime;—are neither of them, accurately speaking, objects of a faculty which could ever without a sinking in the spirit of Nations have been designated by the metaphor *Taste*. And why? Because without the exertion of a co-operating *power* in the mind of the reader, there can be no adequate sympathy with either of these emotions: without this auxiliary impulse, elevated or profound passion cannot exist.

Passion, it must be observed, is derived from a word which signifies *suffering*; but the connexion which suffering has with effort, with exertion, and *action*, is immediate and inseparable. How strikingly is this property of human nature exhibited by the fact that, in popular language, to be in a passion is to be angry! But,

Anger in hasty *words* or *blows*
Itself discharges on its foes.

To be moved, then, by a passion is to be excited, often to external, and always to internal, effort; whether for the continuance and strengthening of the passion, or for its suppression, accordingly as the course which it takes may be painful or pleasurable. If the latter, the soul must contribute to its support, or it never becomes vivid,—and soon languishes and dies. And this brings us to the point. If every great poet with whose writings men are familiar, in the highest exercise of his genius, before he can be thoroughly enjoyed, has to call forth and to communicate *power*, this service, in a still greater degree, falls upon an original writer, at his first appearance in the world.—Of genius the only proof is, the act of doing well what is worthy to

be done, and what was never done before: Of genius, in the fine arts, the only infallible sign is the widening the sphere of human sensibility, for the delight, honour, and benefit of human nature. Genius is the introduction of a new element into the intellectual universe: or, if that be not allowed, it is the application of powers to objects on which they had not before been exercised, or the employment of them in such a manner as to produce effects hitherto unknown. What is all this but an advance, or a conquest, made by the soul of the poet? Is it to be supposed that the reader can make progress of this kind, like an Indian prince or general—stretched on his palanquin, and borne by his slaves? No; he is invigorated and inspirited by his leader, in order that he may exert himself; for he cannot proceed in quiescence, he cannot be carried like a dead weight. Therefore to create taste is to call forth and bestow power, of which knowledge is the effect; and *there* lies the true difficulty.

As the pathetic participates of an *animal* sensation, it might seem—that, if the springs of this emotion were genuine, all men, possessed of competent knowledge of the facts and circumstances, would be instantaneously affected. And, doubtless, in the works of every true poet will be found passages of that species of excellence which is proved by effects immediate and universal. But there are emotions of the pathetic that are simple and direct, and others—that are complex and revolutionary; some—to which the heart yields with gentleness; others—against which it struggles with pride; these varieties are infinite as the combinations of circumstance and the constitutions of character. Remember, also, that the medium through which, in poetry, the heart is to be affected, is language; a thing subject to endless fluctuations and arbitrary associations. The genius of the poet melts these down for his purpose; but they retain their shape and quality to him who is not capable of exerting, within his own mind, a corresponding energy. There is also a meditative, as well as a human, pathos; an enthusiastic, as well as an ordinary, sorrow; a sadness that has its seat in the depths of reason, to which the mind cannot sink gently of itself—but to which it must descend by treading the steps of thought. And for the sublime,—if we consider what are the cares that occupy the passing day, and how remote is the practice and the course of life from the sources of sublimity, in the soul of Man, can it be wondered that there is little existing preparation for a poet charged with a new mission to extend its kingdom, and to augment and spread its

enjoyments?

Away, then, with the senseless iteration of the word *popular*, applied to new works in poetry, as if there were no test of excellence in this first of the fine arts but that all men should run after its productions, as if urged by an appetite, or constrained by a spell!—The qualities of writing best fitted for eager reception are either such as startle the world into attention by their audacity and extravagance; or they are chiefly of a superficial kind, lying upon the surfaces of manners; or arising out of a selection and arrangement of incidents, by which the mind is kept upon the stretch of curiosity, and the fancy amused without the trouble of thought. But In everything which is to send the soul into herself, to be admonished of her weakness, or to be made conscious of her power;—wherever life and nature are described as operated upon by the creative or abstracting virtue of the imagination; wherever the instinctive wisdom of antiquity and her heroic passions uniting, in the heart of the poet, with the meditative wisdom of later ages, have produced that accord of sublimated humanity which is at once a history of the remote past and a prophetic enunciation of the remotest future, *there*, the poet must reconcile himself for a season to few and scattered hearers.—Grand thoughts (and Shakespeare must often have sighed over this truth), as they are most naturally and most fitly conceived in solitude, so can they not be brought forth in the midst of plaudits without some violation of their sanctity. Go to a silent exhibition of the productions of the sister Art, and be convinced that the qualities which dazzle at first sight, and kindle the admiration of the multitude, are essentially different from those by which permanent influence is secured. Let us not shrink from following up these principles as far as they will carry us, and conclude with observing—that there never has been a period, and perhaps never will be, in which vicious poetry, of some kind or other, has not excited more zealous admiration, and been far more generally read, than good; but this advantage attends the good, that the *individual*, as well as the species, survives from age to age; whereas, of the depraved, though the species be immortal, the individual quickly *perishes*; the object of present admiration vanishes, being supplanted by some other as easily produced; which, though no better, brings with it at least the irritation of novelty,—with adaptation, more or less skilful, to the changing humours of the majority of those who are most at leisure to regard poetical works when

they first solicit their attention.

Is it the result of the whole, that, in the opinion of the Writer, the judgement of the People is not to be respected? The thought is most injurious; and, could the charge be brought against him, he would repel it with indignation. The People have already been justified, and their eulogium pronounced by implication, when it was said, above—that, of *good* poetry, the *individual*, as well as the species, *survives*. And how does it survive but through the People? What preserves it but their intellect and their wisdom?

—Past and future, are the wings
On whose support, harmoniously conjoined,
Moves the great Spirit of human knowledge—
MS.

The voice that issues from this Spirit is that Vox Populi which the Deity inspires. Foolish must he be who can mistake for this a local acclamation, or a transitory out-cry—transitory though it be for years, local though from a Nation. Still more lamentable is his error who can believe that there is anything of divine infallibility in the clamour of that small though loud portion of the community, ever governed by factitious influence, which, under the name of the PUBLIC, passes itself, upon the unthinking, for the PEOPLE. Towards the Public, the Writer hopes that he feels as much deference as it is entitled to: but to the People, philosophically characterized, and to the embodied spirit of their knowledge, so far as it exists and moves, at the present, faithfully supported by its two wings, the past and the future, his devout respect, his reverence, is due. He offers it willingly and readily; and, this done, takes leave of his Readers, by assuring them—that, if he were not persuaded that the contents of these Volumes, and the Work to which they are subsidiary, evince something of the 'Vision and the Faculty divine'; and that, both in words and things, they will operate in their degree, to extend the domain of sensibility for the delight, the honour, and the benefit of human nature, notwithstanding the many happy hours which he has employed in their composition, and the manifold comforts and enjoyments they have procured to him, he would not, if a wish could do it, save them from immediate destruction;—from becoming at this moment, to the world, as a

thing that had never been.

[Footnote 5: The learned Hakewill (a third edition of whose book bears date 1635), writing to refute the error 'touching Nature's perpetual and universal decay,' cites triumphantly the names of Ariosto, Tasso, Bartas, and Spenser, as instances that poetic genius had not degenerated; but he makes no mention of Shakespeare.]

[Footnote 6: This flippant insensibility was publicly reprehended by Mr. Coleridge in a course of Lectures upon Poetry given by him at the Royal Institution. For the various merits of thought and language in Shakespeare's *Sonnets*, see Nos. 27, 29, 30, 32, 33, 54, 64, 66, 68, 73, 76, 86, 91, 92, 93, 97, 98, 105, 107, 108, 109, 111, 113, 114, 116, 117, 129, and many others.]

[Footnote 7: Hughes is express upon this subject in his dedication of Spenser's Works to Lord Somers, he writes thus 'It was your Lordship's encouraging a beautiful edition of *Paradise Lost* that first brought that incomparable Poem to be generally known and esteemed.']

[Footnote 8: This opinion seems actually to have been entertained by Adam Smith, the worst critic, David Hume not excepted, that Scotland, a soil to which this sort of weed seems natural, has produced.]

[Footnote 9: CORTES, *alone in a night-gown*.

All things are hush'd as Nature's self lay dead;
The mountains seem to nod their drowsy head.
The little Birds in dreams their songs repeat,
And sleeping Flowers beneath the Night-dew sweat:
Even Lust and Envy sleep; yet Love denies
Rest to my soul, and slumber to my eyes.

DRYDEN'S *Indian Emperor*.]

[Footnote 10: Since these observations upon Thomson were written, I have

perused the second edition of his *Seasons*, and find that even *that* does not contain the most striking passages which Warton points out for admiration, these, with other improvements, throughout the whole work, must have been added at a later period.]

[Footnote 11: Shenstone, in his *Schoolmistress*, gives a still more remarkable instance of this timidity On its first appearance (see D'Israeli's 2d Series of the *Curiosities of Literature*) the Poem was accompanied with an absurd prose commentary, showing, as indeed some incongruous expressions in the text imply, that the whole was intended for burlesque. In subsequent editions, the commentary was dropped, and the People have since continued to read in seriousness, doing for the Author what he had not courage openly to venture upon for himself.]

PREFACE TO CROMWELL

BY VICTOR HUGO. (1827)[A]

The drama contained in the following pages has nothing to commend it to the attention or the good will of the public. It has not, to attract the interest of political disputants, the advantage of the veto of the official censorship, nor even, to win for it at the outset the literary sympathy of men of taste, the honour of having been formally rejected by an infallible reading committee.

It presents itself, therefore, to the public gaze, naked and friendless, like the infirm man of the Gospel—*solus, pauper, nudus*.

Not without some hesitation, moreover, did the author determine to burden his drama with a preface. Such things are usually of very little interest to the reader. He inquires concerning the talent of a writer rather than concerning his point of view; and in determining whether a work is good or bad, it matters little to him upon what ideas it is based, or in what sort of mind it germinated. One seldom inspects the cellars of a house after visiting its salons, and when one eats the fruit of a tree, one cares but little about its root.

On the other hand, notes and prefaces are sometimes a convenient method of adding to the weight of a book, and of magnifying, in appearance at least, the importance of a work; as a matter of tactics this is not dissimilar to that of the general who, to make his battle-front more imposing, puts everything, even his baggage-trains, in the line. And then, while critics fall foul of the preface and scholars of the notes, it may happen that the work itself will escape them, passing uninjured between their cross-fires, as an army extricates itself from a dangerous position between two skirmishes of outposts and rear-guards.

These reasons, weighty as they may seem, are not those which influenced the author. This volume did not need to be *inflated*, it was already too stout by far. Furthermore, and the author does not know why it is so, his prefaces, frank and ingenuous as they are, have always served rather to compromise him with the critics than to shield him. Far from being staunch and trusty bucklers, they have played him a trick like that played in a battle by an unusual and conspicuous uniform, which, calling attention to the soldier who wears it, attracts all the blows and is proof against none.

Considerations of an altogether different sort acted upon the author. It seemed to him that, although in fact, one seldom inspects the cellars of a building for pleasure, one is not sorry sometimes to examine its foundations. He will, therefore, give himself over once more, with a preface, to the wrath of the *feuilletonists*. *Che sara, sara*. He has never given much thought to the fortune of his works, and he is but little appalled by dread of the literary *what will people say*. In the discussion now raging, in which the theatre and the schools, the public and the academies, are at daggers drawn, one will hear, perhaps, not without some interest, the voice of a solitary *apprentice* of nature and truth, who has withdrawn betimes from the literary world, for pure love of letters, and who offers good faith in default of good taste, sincere conviction in default of talent, study in default of learning.

He will confine himself, however, to general considerations concerning the art, without the slightest attempt to smooth the path of his own work, without pretending to write an indictment or a plea, against or for any person whomsoever. An attack upon or defence of his book is of less importance to him than to anybody else. Nor is personal controversy agreeable to him. It is always a pitiful spectacle to see two hostile self-esteems crossing swords. He protests, therefore, beforehand against every interpretation of his ideas, every personal application of his words, saying with the Spanish fablist:—

Quien haga aplicaciones
Con su pan se lo coma.

In truth, several of the leading champions of "sound literary doctrines" have done him the honour to throw the gauntlet to him, even in his profound

obscurity—to him, a simple, imperceptible spectator of this curious contest. He will not have the presumption to pick it up. In the following pages will be found the observations with which he might oppose them—there will be found his sling and his stone; but others, if they choose, may hurl them at the head of the classical Goliaths.

This said, let us pass on.

Let us set out from a fact. The same type of civilization, or to use a more exact, although more extended expression, the same society, has not always inhabited the earth. The human race as a whole has grown, has developed, has matured, like one of ourselves. It was once a child, it was once a man; we are now looking on at its impressive old age. Before the epoch which modern society has dubbed "ancient," there was another epoch which the ancients called "fabulous," but which it would be more accurate to call "primitive." Behold then three great successive orders of things in civilization, from its origin down to our days. Now, as poetry is always superposed upon society, we propose to try to demonstrate, from the form of its society, what the character of the poetry must have been in those three great ages of the world—primitive times, ancient times, modern times.

In primitive times, when man awakes in a world that is newly created, poetry awakes with him. In the face of the marvellous things that dazzle and intoxicate him, his first speech is a hymn simply. He is still so close to God that all his meditations are ecstatic, all his dreams are visions. His bosom swells, he sings as he breathes. His lyre has but three strings—God, the soul, creation; but this threefold mystery envelopes everything, this threefold idea embraces everything. The earth is still almost deserted. There are families, but no nations; patriarchs, but no kings. Each race exists at its own pleasure; no property, no laws, no contentions, no wars. Everything belongs to each and to all. Society is a community. Man is restrained in nought. He leads that nomadic pastoral life with which all civilizations begin, and which is so well adapted to solitary contemplation, to fanciful reverie. He follows every suggestion, he goes hither and thither, at random. His thought, like his life, resembles a cloud that changes its shape and its direction according to the wind that drives it. Such is the first man, such is the first poet. He is young,

he is cynical. Prayer is his sole religion, the ode is his only form of poetry.

This ode, this poem of primitive times, is Genesis.

By slow degrees, however, this youth of the world passes away. All the spheres progress; the family becomes a tribe, the tribe becomes a nation. Each of these groups of men camps about a common centre, and kingdoms appear. The social instinct succeeds the nomadic instinct. The camp gives place to the city, the tent to the palace, the ark to the temple. The chiefs of these nascent states are still shepherds, it is true, but shepherds of nations; the pastoral staff has already assumed the shape of a sceptre. Everything tends to become stationary and fixed. Religion takes on a definite shape; prayer is governed by rites; dogma sets bounds to worship. Thus the priest and king share the paternity of the people; thus theocratic society succeeds the patriarchal community.

Meanwhile the nations are beginning to be packed too closely on the earth's surface. They annoy and jostle one another; hence the clash of empires—war. They overflow upon another; hence, the migrations of nations—voyages. Poetry reflects these momentous events; from ideas it proceeds to things. It sings of ages, of nations, of empires. It becomes epic, it gives birth to Homer.

Homer, in truth, dominates the society of ancient times. In that society, all is simple, all is epic. Poetry is religion, religion is law. The virginity of the earlier age is succeeded by the chastity of the later. A sort of solemn gravity is everywhere noticeable, in private manners no less than in public. The nations have retained nothing of the wandering life of the earlier time, save respect for the stranger and the traveller. The family has a fatherland; everything is connected therewith; it has the cult of the house and the cult of the tomb.

We say again, such a civilization can find its one expression only in the epic. The epic will assume diverse forms, but will never lose its specific character. Pindar is more priestlike than patriarchal, more epic than lyrical. If the chroniclers, the necessary accompaniments of this second age of the world, set about collecting traditions and begin to reckon by centuries, they labour to

no purpose—chronology cannot expel poesy; history remains an epic. Herodotus is a Homer.

But it is in the ancient tragedy, above all, that the epic breaks out at every turn. It mounts the Greek stage without losing aught, so to speak, of its immeasurable, gigantic proportions. Its characters are still heroes, demigods, gods; its themes are visions, oracles, fatality; its scenes are battles, funeral rites, catalogues. That which the rhapsodists formerly sang, the actors declaim—that is the whole difference.

There is something more. When the whole plot, the whole spectacle of the epic poem have passed to the stage, the Chorus takes all that remains. The Chorus annotates the tragedy, encourages the heroes, gives descriptions, summons and expels the daylight, rejoices, laments, sometimes furnishes the scenery, explains the moral bearing of the subject, flatters the listening assemblage. Now, what is the Chorus, this anomalous character standing between the spectacle and the spectator, if it be not the poet completing his epic?

The theatre of the ancients is, like their dramas, huge, pontifical, epic. It is capable of holding thirty thousand spectators; the plays are given in the open air, in bright sunlight; the performances last all day. The actors disguise their voices, wear masks, increase their stature; they make themselves gigantic, like their roles. The stage is immense. It may represent at the same moment both the interior and the exterior of a temple, a palace, a camp, a city. Upon it, vast spectacles are displayed. There is—we cite only from memory—Prometheus on his mountain; there is Antigone, at the top of a tower, seeking her brother Polynices in the hostile army (*The Phœnicians*); there is Evadne hurling herself from a cliff into the flames where the body of Capaneus is burning (*The Suppliants* of Euripides); there is a ship sailing into port and landing fifty princesses with their retinues (*The Suppliants* of Æschylus). Architecture, poetry, everything assumes a monumental character. In all antiquity there is nothing more solemn, more majestic. Its history and its religion are mingled on its stage. Its first actors are priests; its scenic performances are religious ceremonies, national festivals.

One last observation, which completes our demonstration of the epic character of this epoch: in the subjects which it treats, no less than in the forms it adopts, tragedy simply re-echoes the epic. All the ancient tragic authors derive their plots from Homer. The same fabulous exploits, the same catastrophes, the same heroes. One and all drink from the Homeric stream. The Iliad and Odyssey are always in evidence. Like Achilles dragging Hector at his chariot-wheel, the Greek tragedy circles about Troy.

But the age of the epic draws near its end. Like the society that it represents, this form of poetry wears itself out revolving upon itself. Rome reproduces Greece, Virgil copies Homer, and, as if to make a becoming end, epic poetry expires in the last parturition.

It was time. Another era is about to begin, for the world and for poetry.

A spiritual religion, supplanting the material and external paganism, makes its way to the heart of the ancient society, kills it, and deposits, in that corpse of a decrepit civilization, the germ of modern civilization. This religion as complete, because it is true; between its dogma and its cult, it embraces a deep-rooted moral. Arid first of all, as a fundamental truth, it teaches man that he has two lives to live, one ephemeral, the other immortal; one on earth, the other in heaven. It shows him that he, like his destiny, is twofold: that there is in him an animal and an intellect, a body and a soul; in a word, that he is the point of intersection, the common link of the two chains of beings which embrace all creation—of the chain of material beings and the chain of incorporeal beings; the first starting from the rock to arrive at man, the second starting from man to end at God.

A portion of these truths had perhaps been suspected by certain wise men of ancient times, but their full, broad, luminous revelation dates from the Gospels. The pagan schools walked in darkness, feeling their way, clinging to falsehoods as well as to truths in their haphazard journeying. Some of their philosophers occasionally cast upon certain subjects feeble gleams which illuminated but one side and made the darkness of the other side more profound. Hence all the phantoms created by ancient philosophy. None but divine wisdom was capable of substituting an even and all-embracing light

for all those flickering rays of human wisdom. Pythagoras, Epicurus, Socrates, Plato, are torches: Christ is the glorious light of day.

Nothing could be more material, indeed, than the ancient theogony. Far from proposing, as Christianity does, to separate the spirit from the body, it ascribes form and features to everything, even to impalpable essences, even to the intelligence. In it everything is visible, tangible, fleshly. Its gods need a cloud to conceal themselves from men's eyes. They eat, drink, and sleep. They are wounded and their blood flows; they are maimed, and lo! they limp forever after. That religion has gods and halves of gods. Its thunderbolts are forged on an anvil, and among other things three rays of twisted rain (*tres imbris torti radios*) enter into their composition. Its Jupiter suspends the world by a golden chain; its sun rides in a four-horse chariot; its hell is a precipice the brink of which is marked on the globe; its heaven is a mountain.

Thus paganism, which moulded all creations from the same clay, minimizes divinity and magnifies man. Homer's heroes are of almost the same stature as his gods. Ajax defies Jupiter, Achilles is the peer of Mars. Christianity on the contrary, as we have seen, draws a broad line of division between spirit and matter. It places an abyss between the soul and the body, an abyss between man and God.

At this point—to omit nothing from the sketch upon which we have ventured—we will call attention to the fact that, with Christianity, and by its means, there entered into the mind of the nations a new sentiment, unknown to the ancients and marvellously developed among moderns, a sentiment which is more than gravity and less than sadness—melancholy. In truth, might not the heart of man, hitherto deadened by religions purely hierarchical and sacerdotal, awake and feel springing to life within it some unexpected faculty, under the breath of a religion that is human because it is divine, a religion which makes of the poor man's prayer, the rich man's wealth, a religion of equality, liberty and charity? Might it not see all things in a new light, since the Gospel had shown it the soul through the senses, eternity behind life?

Moreover, at that very moment the world was undergoing so complete a

revolution that it was impossible that there should not be a revolution in men's minds. Hitherto the catastrophes of empires had rarely reached the hearts of the people; it was kings who fell, majesties that vanished, nothing more. The lightning struck only in the upper regions, and, as we have already pointed out, events seemed to succeed one another with all the solemnity of the epic. In the ancient society, the individual occupied so lowly a place that, to strike him, adversity must needs descend to his family. So that he knew little of misfortune outside of domestic sorrows. It was an almost unheard of thing that the general disasters of the state should disarrange his life. But the instant that Christian society became firmly established, the ancient continent was thrown into confusion. Everything was pulled up by the roots. Events, destined to destroy ancient Europe and to construct a new Europe, trod upon one another's heels in their ceaseless rush, and drove the nations pell-mell, some into the light, others into darkness. So much uproar ensued that it was impossible that some echoes of it should not reach the hearts of the people. It was more than an echo, it was a reflex blow. Man, withdrawing within himself in presence of these imposing vicissitudes, began to take pity upon mankind, to reflect upon the bitter disillusionments of life. Of this sentiment, which to Cato the heathen was despair, Christianity fashioned melancholy.

At the same time was born the spirit of scrutiny and curiosity. These great catastrophes were also great spectacles, impressive cataclysms. It was the North hurling itself upon the South; the Roman world changing shape; the last convulsive throes of a whole universe in the death agony. As soon as that world was dead, lo! clouds of rhetoricians, grammarians, sophists, swooped down like insects on its immense body. People saw them swarming and heard them buzzing in that seat of putrefaction. They vied with one another in scrutinizing, commenting, disputing. Each limb, each muscle, each fibre of the huge prostrate body was twisted and turned in every direction. Surely it must have been a keen satisfaction to those anatomists of the mind, to be able, at their debut, to make experiments on a large scale; to have a dead society to dissect, for their first "subject."

Thus we see melancholy and meditation, the demons of analysis and controversy, appear at the same moment, and, as it were, hand-in-hand. At one extremity of this era of transition is Longinus, at the other St. Augustine.

We must beware of casting a disdainful eye upon that epoch wherein all that has since borne fruit was contained in germs; upon that epoch whose least eminent writers, if we may be pardoned a vulgar but expressive phrase, made fertilizer for the harvest that was to follow. The Middle Ages were grafted on the Lower Empire.

Behold, then, a new religion, a new society; upon this twofold foundation there must inevitably spring up a new poetry. Previously— we beg pardon for setting forth a result which the reader has probably already foreseen from what has been said above—previously, following therein the course pursued by the ancient polytheism and philosophy, the purely epic muse of the ancients had studied nature in only a single aspect, casting aside without pity almost everything in art which, in the world subjected to its imitation, had not relation to a certain, type of beauty. A type which was magnificent at first, but, as always happens with everything systematic, became in later times false, trivial and conventional. Christianity leads poetry to the truth. Like it, the modern muse will see things in a higher and broader light. It will realize that everything in creation is not humanly *beautiful*, that the ugly exists beside the beautiful, the unshapely beside the graceful, the grotesque on the reverse of the sublime, evil with good, darkness with light. It will ask itself if the narrow and relative sense of the artist should prevail over the infinite, absolute sense of the Creator; if it is for man to correct God; if a mutilated nature will be the more beautiful for the mutilation; if art has the right to duplicate, so to speak, man, life, creation; if things will progress better when their muscles and their vigour have been taken from them; if, in short, to be incomplete is the best way to be harmonious. Then it is that, with its eyes fixed upon events that are both laughable and redoubtable, and under the influence of that spirit of Christian melancholy and philosophical criticism which we described a moment ago, poetry will take a great step, a decisive step, a step which, like the upheaval of an earthquake, will change the whole face of the intellectual world. It will set about doing as nature does, mingling in its creations—but without confounding them—darkness and light, the grotesque and the sublime; in other words, the body and the soul, the beast and the intellect; for the starting-point of religion is always the starting-point of poetry. All things are connected.

Thus, then, we see a principle unknown to the ancients, a new type, introduced in poetry; and as an additional element in anything modifies the whole of the thing, a new form of the art is developed. This type is the grotesque; its new form is comedy.

And we beg leave to dwell upon this point; for we have now indicated the significant feature, the fundamental difference which, in our opinion, separates modern from ancient art, the present form from the defunct form; or, to use less definite but more popular terms, *romantic literature* from *classical literature*.

"At last!" exclaim the people who for some time past *have seen what we were coming at*, "at last we have you—you are caught in the act. So then you put forward the ugly as a type for imitation, you make the *grotesque* element of art. But the graces; but good taste! Don't you know that art should correct nature? that we must *noble* art? that we must *select*? Did the ancients ever exhibit the ugly or the grotesque? Did they ever mingle comedy and tragedy? The example of the ancients, gentlemen! And Aristotle, too, and Boileau, and La Haire Upon my word!"

These arguments are sound, doubtless, and, above all, of extraordinary novelty. But it is not our place to reply to them. We are constructing no system here—God protect us from systems! We are stating a fact. We are a historian, not a critic. Whether the fact is agreeable or not matters little, it is a fact. Let us resume, therefore, and try to prove that it is of the fruitful union of the grotesque and the sublime types that modern genius is born—so complex, so diverse in its forms, so inexhaustible in its creations, and therein directly opposed to the uniform simplicity of the genius of the ancients, let us show that that is the point from which we must set out to establish the real and radical difference between the two forms of literature.

Not that it is strictly true that comedy and the grotesque were entirely unknown to the ancients. In fact, such a thing would be impossible. Nothing grows without a root, the germ of the second epoch always exists in the first. In the *Iliad* Thersites and Vulcan furnish comedy, one to the mortals, the other to the gods. There is too much nature and originality in the Greek

tragedy for there not to be an occasional touch of comedy in it. For example, to cite only what we happen to recall, the scene between Menelaus and the portress of the palace. (*Helen*, Act I), and the scene of the Phrygian (*Orestes*, Act IV) The Tritons, the Satyrs, the Cyclops are grotesque, Polyphemus is a terrifying, Silenus a farcical grotesque.

But one feels that this part of the art is still in its infancy. The epic, which at this period imposes its form on everything, the epic weighs heavily upon it and stifles it. The ancient grotesque is timid and forever trying to keep out of sight. It is plain that it is not on familiar ground, because it is not in its natural surroundings. It conceals itself as much as it can. The Satyrs, the Tritons, and the Sirens are hardly abnormal in form. The Fates and the Harpies are hideous in their attributes rather than in feature; the Furies are beautiful, and are called *Eumenides*, that is to say, *gentle, beneficent*. There is a veil of grandeur or of divinity over other grotesques. Polyphemus is a giant, Midas a king, Silenus a god.

Thus comedy is almost imperceptible in the great epic *ensemble* of ancient times. What is the barrow of Thespis beside the Olympian chariots? What are Aristophanes and Plautus, beside the Homeric colossi, Æschylus, Sophocles, Euripides? Homer bears them along with him, as Hercules bore the pygmies, hidden in his lion's skin!

In the idea of men of modern times, however, the grotesque plays an enormous part. It is found everywhere; on the one hand it creates the abnormal and the horrible, on the other the comic and the burlesque. It fastens upon religion a thousand original superstitions, upon poetry a thousand picturesque fancies. It is the grotesque which scatters lavishly, in air, water, earth, fire, those myriads of intermediary creatures which we find all alive in the popular traditions of the Middle Ages; it is the grotesque which impels the ghastly antics of the witches' revels, which gives Satan his horns, his cloven foot and his bat's wings. It is the grotesque, still the grotesque, which now casts into the Christian hell the frightful faces which the severe genius of Dante and Milton will evoke, and again peoples it with those laughter-moving figures amid which Callot, the burlesque Michelangelo, will disport himself. If it passes from the world of imagination

to the real world, it unfolds an inexhaustible supply of parodies of mankind. Creations of its fantasy are the Scaramouches, Crispins and Harlequins, grinning silhouettes of man, types altogether unknown to serious-minded antiquity, although they originated in classic Italy. It is the grotesque, lastly, which, colouring the same drama with the fancies of the North and of the South in turn, exhibits Sganarelle capering about Don Juan and Mephistopheles crawling about Faust.

And how free and open it is in its bearing! how boldly it brings into relief all the strange forms which the preceding age had timidly wrapped in swaddling-clothes! Ancient poetry, compelled to provide the lame Vulcan with companions, tried to disguise their deformity by distributing it, so to speak, upon gigantic proportions. Modern genius retains this myth of the supernatural smiths, but gives it an entirely different character and one which makes it even more striking; it changes the giants to dwarfs and makes gnomes of the Cyclops. With like originality, it substitutes for the somewhat commonplace Lernaean hydra all the local dragons of our national legends—the gargoyle of Rouen, the *gra-ouillio* of Metz, the *chair sallée* of Troyes, the *drée* of Montlhéry, the *tarasque* of Tarascon—monsters of forms so diverse, whose outlandish names are an additional attribute. All these creations draw from their own nature that energetic and significant expression before which antiquity seems sometimes to have recoiled. Certain it is that the Greek Eumenides are much less horrible, and consequently less *true*, than the witches in *Macbeth*. Pluto is not the devil.

In our opinion a most novel book might be written upon the employment of the grotesque in the arts. One might point out the powerful effects the moderns have obtained from that fruitful type, upon which narrow-minded criticism continues to wage war even in our own day. It may be that we shall be led by our subject to call attention in passing to some features of this vast picture. We will simply say here that, as a means of contrast with the sublime, the grotesque is, in our view, the richest source that nature can offer art. Rubens so understood it, doubtless, when it pleased him to introduce the hideous features of a court dwarf amid his exhibitions of royal magnificence, coronations and splendid ceremonial. The universal beauty which the ancients solemnly laid upon everything, is not without monotony; the same

impression repeated again and again may prove fatiguing at last. Sublime upon sublime scarcely presents a contrast, and we need a little rest from everything, even the beautiful. On the other hand, the grotesque seems to be a halting-place, a mean term, a starting-point whence one rises toward the beautiful with a fresher and keener perception. The salamander gives relief to the water-sprite; the gnome heightens the charm of the sylph.

And it would be true also to say that contact with the abnormal has imparted to the modern sublime a something purer, grander, more sublime, in short, than the beautiful of the ancients; and that is as it should be. When art is consistent with itself, it guides everything more surely to its goal. If the Homeric Elysium is a long, long way from the ethereal charm, the angelic pleasureableness of Milton's Paradise, it is because under Eden there is a hell far more terrible than the heathen Tartarus. Do you think that Francesca da Rimini and Beatrice would be so enchanting in a poet who should not confine us in the Tower of Hunger and compel us to share Ugolino's revolting repast? Dante would have less charm, if he had less power. Have the fleshly naiads, the muscular Tritons, the wanton Zephyrs, the diaphanous transparency of our water-sprites and sylphs? Is it not because the modern imagination does not fear to picture the ghastly forms of vampires, ogres, ghouls, snake-charmers and jinns prowling about graveyards, that it can give to its fairies that incorporeal shape, that purity of essence, of which the heathen nymphs fall so far short? The antique Venus is beautiful, admirable, no doubt; but what has imparted to Jean Goujon's faces that weird, tender, ethereal delicacy? What has given them that unfamiliar suggestion of life and grandeur, if not the proximity of the rough and powerful sculptures of the Middle Ages?

If the thread of our argument has not been broken in the reader's mind by these necessary digressions—which in truth, might be developed much further—he has realized, doubtless, how powerfully the grotesque—that germ of comedy, fostered by the modern muse—grew in extent and importance as soon as it was transplanted to a soil more propitious than paganism and the Epic. In truth, in the new poetry, while the sublime represents the soul as it is, purified by Christian morality, the grotesque plays the part of the human beast. The former type, delivered of all impure alloy,

has as its attributes all the charms, all the graces, all the beauties; it must be able some day to create Juliet, Desdemona, Ophelia. The latter assumes all the absurdities, all the infirmities, all the blemishes. In this partition of mankind and of creation, to it fall the passions, vices, crimes; it is sensuous, fawning, greedy, miserly, false, incoherent, hypocritical; it is, in turn, Iago, Tartuffe, Basile, Polonius, Harpagon, Bartholo, Falstaff, Scapin, Figaro. The beautiful has but one type, the ugly has a thousand. The fact is that the beautiful, humanly speaking, is merely form considered in its simplest aspect in its most perfect symmetry, in its most entire harmony with our make-up. Thus the *ensemble* that it offers us is always complete, but restricted like ourselves. What we call the ugly, on the contrary, is a detail of a great whole which eludes us, and which is in harmony, not with man but with all creation. That is why it constantly presents itself to us in new but incomplete aspects.

It is interesting to study the first appearance and the progress of the grotesque in modern times. At first, it is an invasion, an irruption, an overflow, as of a torrent that has burst its banks. It rushes through the expiring Latin literature, imparts some coloring to Persius, Petronius and Juvenal, and leaves behind it the *Golden Ass* of Apuleius. Thence it diffuses itself through the imaginations of the new nations that are remodelling Europe. It abounds in the work of the fabulists, the chroniclers, the romancists. We see it make its way from the South to the North. It disports itself in the dreams of the Teutonic nations, and at the same time vivifies with its breath the admirable Spanish *romancers*, a veritable Iliad of the age of chivalry. For example, it is the grotesque which describes thus, in the *Roman de la Rose*, an august ceremonial, the election of a king:—

"A long-shanked knave they chose, I wis,
Of all their men the boniest."

More especially it imposes its characteristic qualities upon that wonderful architecture which, in the Middle Ages, takes the place of all the arts. It affixes its mark on the façades of cathedrals, frames its hells and purgatories in the ogive arches of great doorways, portrays them in brilliant hues on window-glass, exhibits its monsters, its bull-dogs, its imps about capitals, along friezes, on the edges of roofs. It flaunts itself in numberless shapes on

the wooden façades of houses, on the stone façades of châteaux, on the marble façades of palaces. From the arts it makes its way into the national manners, and while it stirs applause from the people for the *graciosos* of comedy, it gives to the kings court-jesters. Later, in the age of etiquette, it will show us Scarron on the very edge of Louis the Fourteenth's bed. Meanwhile it decorates coats of-arms, and draws upon knight, shields the symbolic hieroglyphs of feudalism. From the manners, it makes its way into the laws, numberless strange customs at test its passage through the institutions of the Middle Ages. Just as it represented Thespis, smeared with wine-lees, leaping in her tomb it dances with the *Basoche* on the famous marble table which served at the same time as a stage for the popular farces and for the royal banquets. Finally, having made its way into the arts, the manners, and the laws, it enters even the Church. In every Catholic city we see it organizing some one of those curious ceremonies, those strange processions, wherein religion is attended by all varieties of superstition—the sublime attended by all the forms of the grotesque. To paint it in one stroke, so great is its vigour, its energy, its creative sap, at the dawn of letters, that it casts, at the outset, upon the threshold of modern poetry, three burlesque Homers: Ariosto in Italy, Cervantes in Spain, Rabelais in France.

It would be mere surplusage to dwell further upon the influence of the grotesque in the third civilization. Every thing tends to show its close creative alliance with the beautiful in the so called "romantic" period. Even among the simplest popular legends there are none which do not somewhere, with an admirable instinct, solve this mystery of modern art. Antiquity could not have produced *Beauty and the Beast*.

It is true that at the period at which we have arrived the predominance of the grotesque over the sublime in literature is clearly indicated. But it is a spasm of reaction, an eager thirst for novelty, which is but temporary, it is an initial wave which gradually recedes. The type of the beautiful will soon resume its rights and its role, which is not to exclude the other principle, but to prevail over it. It is time that the grotesque should be content with a corner of the picture in Murillo's loyal frescoes, in the sacred pages of Veronese, content to be introduced in two marvellous *Last Judgments*, in which art will take a just pride, in the scene of fascination and horror with which Michelangelo will

embellish the Vatican, in those awe-inspiring representations of the fall of man which Rubens will throw upon the arches of the Cathedral of Antwerp. The time has come when the balance between the two principles is to be established. A man, a poet-king, *poeta sovrano*, as Dante calls Homer, is about to adjust everything. The two rival genii combine their flames, and thence issues Shakespeare.

We have now reached the poetic culmination of modern times. Shakespeare is the drama; and the drama, which with the same breath moulds the grotesque and the sublime, the terrible and the absurd, tragedy and comedy—the drama is the distinguishing characteristic of the third epoch of poetry, of the literature of the present day.

Thus, to sum up hurriedly the facts that we have noted thus far, poetry has three periods, each of which corresponds to an epoch of civilization: the ode, the epic, and the drama. Primitive times are lyrical, ancient times epical, modern times dramatic. The ode sings of eternity, the epic imparts solemnity to history, the drama depicts life. The characteristic of the first poetry is ingenuousness, of the second, simplicity, of the third, truth. The rhapsodists mark the transition from the lyric to the epic poets, as do the romancists that from the lyric to the dramatic poets. Historians appear in the second period, chroniclers and critics in the third. The characters of the ode are colossi—Adam, Cain, Noah; those of the epic are giants—Achilles, Atreus, Orestes; those of the drama are men—Hamlet, Macbeth, Othello. The ode lives upon the ideal, the epic upon the grandiose, the drama upon the real. Lastly, this threefold poetry flows from three great sources—The Bible, Homer, Shakespeare.

Such then—and we confine ourselves herein to noting a single result—such are the diverse aspects of thought in the different epochs of mankind and of civilization. Such are its three faces, in youth, in manhood, in old age. Whether one examines one literature by itself or all literatures *en masse*, one will always reach the same result: the lyric poets before the epic poets, the epic poets before the dramatic poets. In France, Malherbe before Chapelain, Chapelain before Corneille; in ancient Greece, Orpheus before Homer, Homer before Æschylus; in the first of all books, *Genesis* before *Kings*,

Kings before *Job*; or to come back to that monumental scale of all ages of poetry, which we ran over a moment since, The Bible before the *Iliad*, the *Iliad* before Shakespeare.

In a word, civilization begins by singing of its dreams, then narrates its doings, and, lastly, sets about describing what it thinks. It is, let us say in passing, because of this last, that the drama, combining the most opposed qualities, may be at the same time full of profundity and full of relief, philosophical and picturesque.

It would be logical to add here that everything in nature and in life passes through these three phases, the lyric, the epic, and the dramatic, because everything is born, acts, and dies. If it were not absurd to confound the fantastic conceits of the imagination with the stern deductions of the reasoning faculty, a poet might say that the rising of the sun, for example, is a hymn, noon-day a brilliant epic, and sunset a gloomy drama wherein day and night, life and death, contend for mastery. But that would be poetry—folly, perhaps— and *what does it prove?*

Let us hold to the facts marshalled above; let us supplement them, too, by an important observation, namely that we have in no wise pretended to assign exclusive limits to the three epochs of poetry, but simply to set forth their predominant characteristics. The Bible, that divine lyric monument, contains in germ, as we suggested a moment ago, an epic and a drama—*Kings* and *Job*. In the Homeric poems one is conscious of a clinging reminiscence of lyric poetry and of a beginning of dramatic poetry. Ode and drama meet in the epic. There is a touch of all in each; but in each there exists a generative element to which all the other elements give place, and which imposes its own character upon the whole.

The drama is complete poetry. The ode and the epic contain it only in germ; it contains both of them in a state of high development, and epitomizes both. Surely, he who said: "The French have not the epic brain," said a true and clever thing; if he had said, "The moderns," the clever remark would have been profound. It is beyond question, however, that there is epic genius in that marvellous *Athalie*, so exalted and so simple in its sublimity that the royal

century was unable to comprehend it. It is certain, too, that the series of Shakespeare's chronicle dramas presents a grand epic aspect. But it is lyric poetry above all that befits the drama; it never embarrasses it, adapts itself to all its caprices, disports itself in all forms, sometimes sublime as in Ariel, sometimes grotesque as in Caliban. Our era being above all else dramatic, is for that very reason eminently lyric. There is more than one connection between the beginning and the end; the sunset has some features of the sunrise; the old man becomes a child once more. But this second childhood is not like the first; it is as melancholy as the other is joyous. It is the same with lyric poetry. Dazzling, dreamy, at the dawn of civilization it reappears, solemn and pensive, at its decline. The Bible opens joyously with *Genesis* and comes to a close with the threatening *Apocalypse*. The modern ode is still inspired, but is no longer ignorant. It meditates more than it scrutinizes; its musing is melancholy. We see, by its painful labour, that the muse has taken the drama for her mate.

To make clear by a metaphor the ideas that we have ventured to put forth, we will compare early lyric poetry to a placid lake which reflects the clouds and stars; the epic is the stream which flows from the lake, and rushes on, reflecting its banks, forests, fields and cities, until it throws itself into the ocean of the drama. Like the lake, the drama reflects the sky; like the stream, it reflects its banks; but it alone has tempests and measureless depths.

The drama, then, is the goal to which everything in modern poetry leads. *Paradise Lost* is a drama before it is an epic. As we know, it first presented itself to the poet's imagination in the first of these forms, and as a drama it always remains in the reader's memory, so prominent is the old dramatic framework still beneath Milton's epic structure! When Dante had finished his terrible *Inferno*, when he had closed its doors and nought remained save to give his work a name, the unerring instinct of his genius showed him that that multiform poem was an emanation of the drama, not of the epic; and on the front of that gigantic monument, he wrote with his pen of bronze: *Divina Commedia*.

Thus we see that the only two poets of modern times who are of Shakespeare's stature follow him in unity of design. They coincide with him

in imparting a dramatic tinge to all our poetry, like him, they blend the grotesque with the sublime, and, far from standing by themselves in the great literary *ensemble* that rests upon Shakespeare, Dante and Milton are, in some sort, the two supporting abutments of the edifice of which he is the central pillar, the buttresses of the arch of which he is the keystone.

Permit us, at this point, to recur to certain ideas already suggested, which, however, it is necessary to emphasize. We have arrived, and now we must set out again.

On the day when Christianity said to man "Thou art twofold, thou art made up of two beings, one perishable, the other immortal, one carnal, the other ethereal, one enslaved by appetites, cravings and passions, the other borne aloft on the wings of enthusiasm and reverie—in a word, the one always stooping toward the earth, its mother, the other always darting up toward heaven, its fatherland"—on that day the drama was created. Is it in truth, anything other than that contrast of every day, that struggle of every moment, between two opposing principles which are ever face to face in life, and which dispute possession of man from the cradle to the tomb?

The poetry born of Christianity, the poetry of our time, is, therefore, the drama, the real results from the wholly natural combination of two types, the sublime and the grotesque, which meet in the drama, as they meet in life and in creation. For true poetry, complete poetry, consists in the harmony of contraries. Hence, it is time to say aloud—and it is here above all that exceptions prove the rule—that everything that exists in nature exists in art.

On taking one's stand at this point of view, to pass judgment on our petty conventional rules, to disentangle all those scholastic labyrinths, to solve all those trivial problems which the critics of the last two centuries have laboriously built up about the art, one is struck by the promptitude with which the question of the modern stage is made clear and distinct. The drama has but to take a step to break all the spider's webs with which the militia of Lilliput have attempted to fetter its sleep.

And so, let addle-pated pedants (one does not exclude the other) claim that

the deformed, the ugly, the grotesque should never be imitated in art; one replies that the grotesque is comedy, and that comedy apparently makes a part of art. Tartuffe is not handsome, Pourceaugnac is not noble, but Pourceaugnac and Tartuffe are admirable flashes of art.

If, driven back from this entrenchment to their second line of custom-houses, they renew their prohibition of the grotesque coupled with the sublime, of comedy melted into tragedy, we prove to them that, in the poetry of Christian nations, the first of these two types represents the human beast, the second the soul. These two stalks of art, if we prevent their branches from mingling, if we persistently separate them, will produce by way of fruit, on the one hand abstract vices and absurdities, on the other, abstract crime, heroism and virtue. The two types, thus isolated and left to themselves, will go each its own way, leaving the real between them, at the left hand of one, at the right hand of the other. Whence it follows that after all these abstractions there will remain something to represent—man; after these tragedies and comedies, something to create—the drama.

In the drama, as it may be conceived at least, if not executed, all things are connected and follow one another as in real life. The body plays its part no less than the mind; and men and events, set in motion by this twofold agent, pass across the stage, burlesque and terrible in turn, and sometimes both at once. Thus the judge will say: "Off with his head and let us go to dinner!" Thus the Roman Senate will deliberate over Domitian's turbot. Thus Socrates, drinking the hemlock and discoursing on the immortal soul and the only God, will interrupt himself to suggest that a cook be sacrificed to *Æsculapius*. Thus Elizabeth will swear and talk Latin. Thus Richelieu will submit to Joseph the Capuchin, and Louis XI to his barber, Maître Olivier le Diable. Thus Cromwell will say: "I have Parliament in my bag and the King in my pocket"; or, with the hand that signed the death sentence of Charles the First, smear with ink the face of a regicide who smilingly returns the compliment. Thus Cæsar, in his triumphal car, will be afraid of overturning. For men of genius, however great they be, have always within them a touch of the beast which mocks at their intelligence. Therein they are akin to mankind in general, for therein they are dramatic. "It is but a step from the sublime to the ridiculous," said Napoleon, when he was convinced that he was mere man; and that

outburst of a soul on fire illumines art and history at once; that cry of anguish is the résumé of the drama and of life.

It is a striking fact that all these contrasts are met with in the poets themselves, taken as men. By dint of meditating upon existence, of laying stress upon its bitter irony, of pouring floods of sarcasm and raillery upon our infirmities, the very men who make us laugh so heartily become profoundly sad. These Democrituses are Heraclituses as well. Beaumarchais was surly, Molière gloomy, Shakespeare melancholy.

The fact is, then, that the grotesque is one of the supreme beauties of the drama. It is not simply an appropriate element of it, but is oftentimes a necessity. Sometimes it appears in homogeneous masses, in entire characters, as Daudin, Prusias, Trissotin, Brid'oison, Juliet's nurse; sometimes impregnated with terror, as Richard III, Bégears, Tartuffe, Mephistopheles; sometimes, too, with a veil of grace and refinement, as Figaro, Osric, Mercutio, Don Juan. It finds its way in everywhere; for just as the most commonplace have their occasional moments of sublimity, so the most exalted frequently pay tribute to the trivial and ridiculous. Thus, often impalpable, often imperceptible, it is always present on the stage, even when it says nothing, even when it keeps out of sight. Thanks to it, there is no thought of monotony. Sometimes it injects laughter, sometimes horror, into tragedy. It will bring Romeo face to face with the apothecary, Macbeth with the witches, Hamlet with the grave-diggers. Sometimes it may, without discord, as in the scene between King Lear and his jester, mingle its shrill voice with the most sublime, the most dismal, the dreamiest music of the soul.

That is what Shakespeare alone among all has succeeded in doing, in a fashion of his own, which it would be no less fruitless than impossible to imitate—Shakespeare, the god of the stage, in whom, as in a trinity, the three characteristic geniuses of our stage, Corneille, Molière, Beaumarchais, seem united.

We see how quickly the arbitrary distinction between the species of poetry vanishes before common sense and taste. No less easily one might demolish

the alleged rule of the two unities. We say *two* and not *three* unities, because unity of plot or of *ensemble*, the only true and well founded one, was long ago removed from the sphere of discussion.

Distinguished contemporaries, foreigners and Frenchmen, have already attacked, both in theory and in practice that fundamental law of the pseudo-Aristotelian code. Indeed, the combat was not likely to be a long one. At the first blow it cracked, so worm eaten was that timber of the old scholastic hovel!

The strange thing is that the slaves of routine pretend to rest their rule of the two unities on probability, whereas reality is the very thing that destroys it. Indeed, what could be more improbable and absurd than this porch or peristyle or ante-chamber—vulgar places where our tragedies are obliging enough to develop themselves; whither conspirators come, no one knows whence, to declaim against the tyrant, and the tyrant to declaim against the conspirators, each in turn, as if they had said to one another in bucolic phrase

Alternis cantemus, amant alterna Camenæ.

Where did anyone ever see a porch or peristyle of that sort? What could be more opposed—we will not say to the truth, for the scholastics hold it very cheap, but to probability? The result is that everything that is too characteristic, too intimate, too local, to happen in the ante chamber or on the street-corner—that is to say, the whole drama—takes place in the wings. We see on the stage only the elbows of the plot, so to speak; its hands are somewhere else. Instead of scenes we have narrative, instead of tableaux, descriptions. Solemn-faced characters, placed, as in the old chorus, between the drama and ourselves, tell us what is going on in the temple, in the palace, on the public square, until we are tempted many a time to call out to them: "Indeed! then take us there! It must be very entertaining—a fine sight!" To which they would reply no doubt: "It is quite possible that it might entertain or interest you, but that isn't the question; we are the guardians of the dignity of the French Melpomene." And there you are!

"But," someone will say, "this rule that you discard is borrowed from the Greek drama." Wherein, pray, do the Greek stage and drama resemble our stage and drama? Moreover, we have already shown that the vast extent of the ancient stage enabled it to include a whole locality, so that the poet could, according to the exigencies of the plot, transport it at his pleasure from one part of the stage to another, which is practically equivalent to a change of stage-setting. Curious contradiction! the Greek theatre, restricted as it was to a national and religious object, was much more free than ours, whose only object is the enjoyment, and, if you please, the instruction, of the spectator. The reason is that the one obeys only the laws that are suited to it, while the other takes upon itself conditions of existence which are absolutely foreign to its essence. One is artistic, the other artificial.

People are beginning to understand in our day that exact localization is one of the first elements of reality. The speaking or acting characters are not the only ones who engrave on the minds of the spectators a faithful representation of the facts. The place where this or that catastrophe took place becomes a terrible and inseparable witness thereof; and the absence of silent characters of this sort would make the greatest scenes of history incomplete in the drama. Would the poet dare to murder Rizzio elsewhere than in Mary Stuart's chamber? to stab Henri IV elsewhere than in Rue de la Ferronnerie, all blocked with drays and carriages? to burn Jeanne d'Arc elsewhere than in the Vieux-Marché? to despatch the Duc de Guise elsewhere than in that chateau of Blois where his ambition roused a popular assemblage to frenzy? to behead Charles I and Louis XVI elsewhere than in those ill-omened localities whence Whitehall or the Tuileries may be seen, as if their scaffolds were appurtenances of their palaces?

Unity of time rests on no firmer foundation than unity of place. A plot forcibly confined within twenty-four hours is as absurd as one confined within a peristyle. Every plot has its proper duration as well as its appropriate place. Think of administering the same dose of time to all events! of applying the same measure to everything! You would laugh at a cobbler who should attempt to put the same shoe on every foot. To cross unity of time and unity of place like the bars of a cage, and pedantically to introduce therein, in the name of Aristotle, all the deeds, all the nations, all the figures which

Providence sets before us in such vast numbers in real life,—to proceed thus is to mutilate men and things, to cause history to make wry faces. Let us say, rather, that everything will die in the operation, and so the dogmatic mutilators reach their ordinary result: what was alive in the chronicles is dead in tragedy. That is why the cage of the unities often contains only a skeleton.

And then, if twenty-four hours can be comprised in two, it is a logical consequence that four hours may contain forty-eight. Thus Shakespeare's unity must be different from Corneille's. 'Tis pity!

But these are the wretched quibbles with which mediocrity, envy and routine has pestered genius for two centuries past! By such means the flight of our greatest poets has been cut short. Their wings have been clipped with the scissors of the unities. And what has been given us in exchange for the eagle feathers stolen from Corneille and Racine? Campistron.

We imagine that someone may say: "There is something in too frequent changes of scene which confuses and fatigues the spectator, and which produces a bewildering effect on his attention; it may be, too, that manifold transitions from place to place, from one time to another time, demand explanations which repel the attention; one should also avoid leaving, in the midst of a plot, gaps which prevent the different parts of the drama from adhering closely to one another, and which, moreover, puzzle the spectator because he does not know what there may be in those gaps." But these are precisely the difficulties which art has to meet. These are some of the obstacles peculiar to one subject or another, as to which it would be impossible to pass judgment once for all. It is for genius to overcome, not for treatises or poetry to evade them.

A final argument, taken from the very bowels of the art, would of itself suffice to show the absurdity of the rule of the two unities. It is the existence of the third unity, unity of plot—the only one that is universally admitted, because it results from a fact: neither the human eye nor the human mind can grasp more than one *ensemble* at one time. This one is as essential as the other two are useless. It is the one which fixes the view-point of the drama; now, by that very fact, it excludes the other two. There can no more be three

unities in the drama than three horizons in a picture. But let us be careful not to confound unity with simplicity of plot. The former does not in any way exclude the secondary plots on which the principal plot may depend. It is necessary only that these parts, being skilfully subordinated to the general plan, shall tend constantly toward the central plot and group themselves about it at the various stages, or rather on the various levels of the drama. Unity of plot is the stage law of perspective.

"But," the customs-officers of thought will cry, "great geniuses have submitted to these rules which you spurn!" Unfortunately, yes. But what would those admirable men have done if they had been left to themselves? At all events they did not accept your chains without a struggle. You should have seen how Pierre Corneille, worried and harassed at his first step in the art on account of his marvellous work, *Le Cid*, struggled under Mairet, Claveret, d'Aubignac and Scudéri! How he denounced to posterity the violent attacks of those men, who, he says, made themselves "all white with Aristotle!" You should read how they said to him—and we quote from books of the time: "Young man, you must learn before you teach; and unless one is a Scaliger or a Heinsius that is intolerable!" Thereupon Corneille rebels and asks if their purpose is to force him "much below Claveret." Here Scudéri waxes indignant at such a display of pride, and reminds the "thrice great author of *Le Cid* of the modest words in which Tasso, the greatest man of his age, began his apology for the finest of his works against the bitterest and most unjust censure perhaps that will ever be pronounced. M. Corneille," he adds, "shows in his replies that he is as far removed from that author's moderation as from his merit." The young man so *justly and gently reproved* dares to protest; thereupon Scudéri returns to the charge; he calls to his assistance the *Eminent Academy*; "Pronounce, O my Judges, a decree worthy of your eminence, which will give all Europe to know that *Le Cid* is not the chef-d'oeuvre of the greatest man in France, but the least judicious performance of M. Corneille himself. You are bound to do it, both for your own private renown; and for that of our people in general, who are concerned in this matter; inasmuch as foreigners who may see this precious masterpiece—they who have possessed a Tasso or a Guarini—might think that our greatest masters were no more than apprentices."

These few instructive lines contain the everlasting tactics of envious routine against growing talent—tactics which are still followed in our own day, and which, for example, added such a curious page to the youthful essays of Lord Byron. Scudéri gives us its quintessence. In like manner the earlier works of a man of genius are always preferred to the newer ones, in order to prove that he is going down instead of up—*Melite* and *La Galerie du Palais* placed above *Le Cid*. And the names of the dead are always thrown at the heads of the living—Corneille stoned with Tasso and Guarini (Guarini!), as, later, Racine will be stoned with Corneille, Voltaire with Racine, and as to-day, everyone who shows signs of rising is stoned with Corneille, Racine and Voltaire. These tactics, as will be seen, are well-worn; but they must be effective as they are still in use. However, the poor devil of a great man still breathed. Here we cannot help but admire the way in which Scudéri, the bully of this tragic-comedy, forced to the wall, blackguards and maltreats him, how pitilessly he unmasks his classical artillery, how he shows the author of *Le Cid* "what the episodes should be, according to Aristotle, who tells us in the tenth and sixteenth chapters of his *Poetics*"; how he crushes Corneille, in the name of the same Aristotle "in the eleventh chapter of his *Art of Poetry*, wherein we find the condemnation of *Le Cid*"; in the name of Plato, "in the tenth book of his *Republic*"; in the name of Marcellinus, "as may be seen in the twenty-seventh book"; in the name of "the tragedies of Niobe and Jephthah"; in the name of the "*Ajax* of Sophocles"; in the name of "the example of Euripides"; in the name of "Heinsius, chapter six of the *Constitution of Tragedy*"; and the younger Scaliger in his poems"; and finally, in the name of the Canonists and Jurisconsults, under the title "Nuptials." The first arguments were addressed to the Academy, the last one was aimed at the Cardinal. After the pin-pricks the blow with a club. A judge was needed to decide the question. Chapelain gave judgment. Corneille saw that he was doomed; the lion was muzzled, or, as was said at the time, the crow (*Corneille*) was plucked. Now comes the painful side of this grotesque performance: after he had been thus quenched at his first flash, this genius, thoroughly modern, fed upon the Middle Ages and Spain, being compelled to lie to himself and to hark back to ancient times, drew for us that Castilian Rome, which is sublime beyond question, but in which, except perhaps in *Nicomede*, which was so ridiculed by the eighteenth century for its dignified and simple colouring, we find neither the real Rome nor the true

Corneille.

Racine was treated to the same persecution, but did not make the same resistance. Neither in his genius nor in his character was there any of Corneille's lofty asperity. He submitted in silence and sacrificed to the scorn of his time his enchanting elegy of *Esther*, his magnificent epic, *Athalie*. So that we can but believe that, if he had not been paralyzed as he was by the prejudices of his epoch, if he had come in contact less frequently with the classic cramp-fish, he would not have failed to introduce Locuste in his drama between Narcisse and Neron, and above all things would not have relegated to the wings the admirable scene of the banquet at which Seneca's pupil poisons Britannicus in the cup of reconciliation. But can we demand of the bird that he fly under the receiver of an air-pump? What a multitude of beautiful scenes the *people of taste* have cost us, from Scudéri to La Harpe! A noble work might be composed of all that their scorching breath has withered in its germ. However, our great poets have found a way none the less to cause their genius to blaze forth through all these obstacles. Often the attempt to confine them behind walls of dogmas and rules is vain. Like the Hebrew giant they carry their prison doors with them to the mountains.

But still the same refrain is repeated, and will be, no doubt, for a long while to come: "Follow the rules! Copy the models! It was the rules that shaped the models." One moment! In that case there are two sorts of models, those which are made according to the rules, and, prior to them, those according to which the rules were made. Now, in which of these two categories should genius seek a place for itself? Although it is always disagreeable to come in contact with pedants, is it not a thousand times better to give them lessons than to receive lessons from them? And then—copy! Is the reflection equal to the light? Is the satellite which travels unceasingly in the same circle equal to the central creative planet? With all his poetry Virgil is no more than the moon of Homer.

And whom are we to copy, I pray to know? The ancients? We have just shown that their stage has nothing in common with ours. Moreover, Voltaire, who will have none of Shakespeare, will have none of the Greeks, either. Let him tell us why: "The Greeks ventured to produce scenes no less revolting to

us. Hippolyte, crushed by his fall, counts his wounds and utters doleful cries. Philoctetes falls in his paroxysms of pain; black blood flows from his wound. Oedipus, covered with the blood that still drops from the sockets of the eyes he has torn out, complains bitterly of gods and men. We hear the shrieks of Clytemnestra, murdered by her own son, and Electra, on the stage, cries: 'Strike! spare her not! she did not spare our father,' Prometheus is fastened to a rock by nails driven through his stomach and his arms. The Furies reply to Clytemnestra's bleeding shade with inarticulate roars. Art was in its infancy in the time of Æschylus as it was in London in Shakespeare's time."

Whom shall we copy, then? The moderns? What! Copy copies! God forbid!

"But," someone else will object, "according to your conception of the art, you seem to look for none but great poets, to count always upon genius." Art certainly does not count upon mediocrity. It prescribes no rules for it, it knows nothing of it; in fact, mediocrity has no existence so far as art is concerned; art supplies wings, not crutches. Alas! D'Aubignac followed rules, Campistron copied models. What does it matter to art? It does not build its palaces for ants. It lets them make their ant-hill, without taking the trouble to find out whether they have built their burlesque imitation of its palace upon its foundation.

The critics of the scholastic school place their poets in a strange position. On the one hand they cry incessantly: "Copy the models!" On the other hand they have a habit of declaring that "the models are inimitable"! Now, if their craftsman, by dint of hard work, succeeds in forcing through this dangerous defile some colourless tracing of the masters, these ungrateful wretches, after examining the new *refaccimiento*, exclaim sometimes: "This doesn't resemble anything!" and sometimes: "This resembles everything!" And by virtue of a logic made for the occasion each of these formulæ is a criticism.

Let us then speak boldly. The time for it has come, and it would be strange if, in this age, liberty, like the light, should penetrate everywhere except to the one place where freedom is most natural—the domain of thought. Let us take the hammer to theories and poetic systems. Let us throw down the old plastering that conceals the facade of art. There are neither rules nor models;

or, rather, there are no other rules than the general laws of nature, which soar above the whole field of art, and the special rules which result from the conditions appropriate to the subject of each composition. The former are of the essence, eternal, and do not change; the latter are variable, external, and are used but once. The former are the framework that supports the house; the latter the scaffolding which is used in building it, and which is made anew for each building. In a word, the former are the flesh and bones, the latter the clothing, of the drama. But these rules are not written in the treatises on poetry. Richelet has no idea of their existence. Genius, which divines rather than learns, devises for each work the general rules from the general plan of things, the special rules from the separate *ensemble* of the subject treated; not after the manner of the chemist, who lights the fire under his furnace, heats his crucible, analyzes and destroys; but after the manner of the bee, which flies on its golden wings, lights on each flower and extracts its honey, leaving it as brilliant and fragrant as before.

The poet—let us insist on this point—should take counsel therefore only of nature, truth, and inspiration which is itself both truth and nature. "Quando he," says Lope de Vega,

"Quando he de escribir una comedia,
Encierro los preceptos con seis llaves."

To secure these precepts "six keys" are none too many, in very truth. Let the poet beware especially of copying anything whatsoever—Shakespeare no more than Molière, Schiller no more than Corneille. If genuine talent could abdicate its own nature in this matter, and thus lay aside its original personality, to transform itself into another, it would lose everything by playing this role of its own double. It is as if a god should turn valet. We must draw our inspiration from the original sources. It is the same sap, distributed through the soil, that produces all the trees of the forest, so different in bearing power, in fruit, in foliage. It is the same nature that fertilizes and nourishes the most diverse geniuses. The poet is a tree that may be blown about by all winds and watered by every fall of dew; and bears his works as his fruit, as the *fablier* of old bore his fables. Why attach one's self to a master, or graft one's self upon a model? It were better to be a bramble or a thistle,

fed by the same earth as the cedar and the palm, than the fungus or the lichen of those noble trees. The bramble lives, the fungus vegetates. Moreover, however great the cedar and the palm may be, it is not with the sap one sucks from them that one can become great one's self. A giant's parasite will be at best a dwarf. The oak, colossus that it is, can produce and sustain nothing more than the mistletoe.

Let there be no misunderstanding: if some of our poets have succeeded in being great, even when copying, it is because, while forming themselves on the antique model, they have often listened to the voice of nature and to their own genius—it is because they have been themselves in some one respect. Their branches became entangled in those of the near-by tree, but their roots were buried deep in the soil of art. They were the ivy, not the mistletoe. Then came imitators of the second rank, who, having neither roots in the earth, nor genius in their souls, had to confine themselves to imitation. As Charles Nodier says: "After the school of Athens, the school of Alexandria." Then there was a deluge of mediocrity; then there came a swarm of those treatises on poetry, so annoying to true talent, so convenient for mediocrity. We were told that everything was done, and God was forbidden to create more Molières or Corneilles. Memory was put in place of imagination. Imagination itself was subjected to hard-and-fast rules, and aphorisms were made about it: "To imagine," says La Harpe, with his naive assurance, "is in substance to remember, that is all."

But nature! Nature and truth!—And here, in order to prove that, far from demolishing art, the new ideas aim only to reconstruct it more firmly and on a better foundation, let us try to point out the impassable limit which in our opinion, separates reality according to art from reality according to nature. It is careless to confuse them as some ill-informed partisans of *romanticism* do. Truth in art cannot possibly be, as several writers have claimed, *absolute reality*. Art cannot produce the thing itself. Let us imagine, for example, one of those unreflecting promoters of absolute nature, of nature viewed apart from art, at the performance of a romantic play, say *Le Cid*. "What's that?" he will ask at the first word. "The Cid speaks in verse? It isn't *natural* to speak in verse."—"How would you have him speak, pray?"—"In prose." Very good. A moment later, "How's this!" he will

continue, if he is consistent; "the Cid is speaking French!"—"Well?"—"Nature demands that he speak his own language; he can't speak anything but Spanish."

We shall fail entirely to understand, but again—very good. You imagine that this is all? By no means: before the tenth sentence in Castilian, he is certain to rise and ask if the Cid who is speaking is the real Cid, in flesh and blood. By what right does the actor, whose name is Pierre or Jacques, take the name of the Cid? That is *false*. There is no reason why he should not go on to demand that the sun should be substituted for the footlights, *real* trees and *real* houses for those deceitful wings. For, once started on that road, logic has you by the collar, and you cannot stop.

We must admit, therefore, or confess ourselves ridiculous, that the domains of art and of nature are entirely distinct. Nature and art are two things—were it not so, one or the other would not exist. Art, in addition to its idealistic side, has a terrestrial, material side. Let it do what it will, it is shut in between grammar and prosody, between Vaugelas and Richelet. For its most capricious creations, it has formulas, methods of execution, a complete apparatus to set in motion. For genius there are delicate instruments, for mediocrity, tools.

It seems to us that someone has already said that the drama is a mirror wherein nature is reflected. But if it be an ordinary mirror, a smooth and polished surface, it will give only a dull image of objects, with no relief-faithful, but colourless; everyone knows that colour and light are lost in a simple reflection. The drama, therefore, must be a concentrating mirror, which, instead of weakening, concentrates and condenses the coloured rays, which makes of a mere gleam a light, and of a light a flame. Then only is the drama acknowledged by art.

The stage is an optical point. Everything that exists in the world—in history, in life, in man—should be and can be reflected therein, but under the magic wand of art. Art turns the leaves of the ages, of nature, studies chronicles, strives to reproduce actual facts (especially in respect to manners and peculiarities, which are much less exposed to doubt and contradiction than

are concrete facts), restores what the chroniclers have lopped off, harmonises what they have collected, divines and supplies their omissions, fills their gaps with imaginary scenes which have the colour of the time, groups what they have left scattered about, sets in motion anew the threads of Providence which work the human marionettes, clothes the whole with a form at once poetical and natural, and imparts to it that vitality of truth and brilliancy which gives birth to illusion, that prestige of reality which arouses the enthusiasm of the spectator, and of the poet first of all, for the poet is sincere. Thus the aim of art is almost divine: to bring to life again if it is writing history, to create if it is writing poetry.

It is a grand and beautiful sight to see this broad development of a drama wherein art powerfully seconds nature; of a drama wherein the plot moves on to the conclusion with a firm and unembarrassed step, without diffuseness and without undue compression; of a drama, in short, wherein the poet abundantly fulfills the multifold object of art, which is to open to the spectator a double prospect, to illuminate at the same time the interior and the exterior of mankind: the exterior by their speech and their acts, the interior, by asides and monologues; to bring together, in a word, in the same picture, the drama of life and the drama of conscience.

It will readily be imagined that, for a work of this kind, if the poet must *choose* (and he must), he should choose, not the *beautiful*, but the *characteristic*. Not that it is advisable to "make local colour," as they say to-day; that is, to add as an afterthought a few discordant touches here and there to a work that is at best utterly conventional and false. The local colour should not be on the surface of the drama, but in its substance, in the very heart of the work, whence it spreads of itself, naturally, evenly, and, so to speak, into every corner of the drama, as the sap ascends from the root to the tree's topmost leaf. The drama should be thoroughly impregnated with this colour of the time, which should be, in some sort, in the air, so that one detects it only on entering the theatre, and that on going forth one finds one's self in a different period and atmosphere. It requires some study, some labour, to attain this end; so much the better. It is well that the avenues of art should be obstructed by those brambles from which everybody recoils except those of powerful will. Besides, it is this very study, fostered by an ardent

inspiration, which will ensure the drama against a vice that kills it—the *commonplace*. To be commonplace is the failing of short-sighted, short-breathed poets. In this tableau of the stage, each figure must be held down to its most prominent, most individual, most precisely defined characteristic. Even the vulgar and the trivial should have an accent of their own. Like God, the true poet is present in every part of his work at once. Genius resembles the die which stamps the king's effigy on copper and golden coins alike.

We do not hesitate—and this will demonstrate once more to honest men how far we are from seeking to discredit the art—we do not hesitate to consider verse as one of the means best adapted to protect the drama from the scourge we have just mentioned, as one of the most powerful dams against the irruption of the commonplace, which, like democracy, is always flowing between full banks in men's minds. And at this point we beg the younger literary generation, already so rich in men and in works, to allow us to point out an error into which it seems to have fallen—an error too fully justified, indeed, by the extraordinary aberrations of the old school. The new century is at that growing age at which one can readily set one's self right.

There has appeared of late, like a penultimate branching-out of the old classical trunk, or, better still, like one of those excrescences, those polypi, which decrepitude develops, and which are a sign of decomposition much more than a proof of life—there has appeared a strange school of dramatic poetry. This school seems to us to have had for its master and its fountain-head the poet who marks the transition from the eighteenth to the nineteenth century, the man of wearisome description and periphrases—that Delille who, they say, toward the close of his life, boasted, after the fashion of the Homeric catalogues, of having *made* twelve camels, four dogs, three horses, including Job's, six tigers, two cats, a chess-board, a backgammon-board, a checker-board, a billiard-table, several winters, many summers, a multitude of springs, fifty sunsets, and so many daybreaks that he had lost count of them.

Now, Delille went into tragedy. He is the father (he, and not Racine, God save the mark!) of an alleged school of refinement and taste which flourished until recently. Tragedy is not to this school what it was to Will Shakespeare,

say, a source of emotions of every sort, but a convenient frame for the solution of a multitude of petty descriptive problems which it propounds as it goes along. This muse, far from spurning, as the true French classic school does, the trivial and degrading things of life, eagerly seeks them out and brings them together. The grotesque, shunned as undesirable company by the tragedy of Louis the Fourteenth's day, cannot pass unnoticed before her. *It must be described*, that is to say, ennobled. A scene in the guard-house, a popular uprising, the fish-market, the galleys, the wine-shop, the *poule au pot* of Henri Quatre, are treasure-trove in her eyes. She seizes upon this canaille, washes it clean, and sews her tinsel and spangles over its villainies; *purpureus assuitur pannus*. Her object seems to be to deliver patents of nobility to all these *roturiers* of the drama; and each of these patents under the great seal is a speech.

This muse, as may be imagined, is of a rare prudery. Wonted as she is to the caresses of periphrasis, plain-speaking, if she should occasionally be exposed to it, would horrify her. It does not accord with her dignity to speak naturally. She *underlines* old Corneille for his blunt way of speaking, as in,—

"*A heap of men ruined by debt and crimes.*"

"*Chimène, who'd have thought it? Rodrigue, who'd have said it?*"

"*When their Flaminius haggled with Hannibal.*"

"*Oh! do not embroil me with the Republic.*"

She still has her "Tout beau, monsieur!" on her heart. And it needed many "seigneurs" and "madames" to procure forgiveness for our admirable Racine for his monosyllabic "dogs!" and for so brutally bestowing Claudius in Agrippina's bed.

This Melpomene, as she is called, would shudder at the thought of touching a chronicle. She leaves to the costumer the duty of learning the period of the dramas she writes. In her eyes history is bad form and bad taste. How, for example, can one tolerate kings and queens who swear? They must be elevated from mere regal dignity to tragic dignity. It was in a promotion of

this sort that she exalted Henri IV. It was thus that the people's king, purified by M. Legouvé, found his "ventre-saint-gris" ignominiously banished from his mouth by two sentences, and that he was reduced, like the girl in the old *fabliau*, to the necessity of letting fall from those royal lips only pearls and sapphires and rubies: the apotheosis of falsity, in very truth.

The fact is that nothing is so commonplace as this conventional refinement and nobility. Nothing original, no imagination, no invention in this style; simply what one has seen everywhere—rhetoric, bombast, commonplaces, flowers of college eloquence, poetry after the style of Latin verses. The poets of this school are eloquent after the manner of stage princes and princesses, always sure of finding in the costumer's labelled cases, cloaks and pinchbeck crowns, which have no other disadvantage than that of having been used by everybody. If these poets never turn the leaves of the Bible, it is not because they have not a bulky book of their own, the *Dictionnaire de rimes*. That is the source of their poetry—*fontes aquarum*.

It will be seen that, in all this, nature and truth get along as best they can. It would be great good luck if any remnants of either should survive in this cataclysm of false art, false style, false poetry. This is what has caused the errors of several of our distinguished reformers. Disgusted by the stiffness, the ostentation, the *pomposo*, of this alleged dramatic poetry, they have concluded that the elements of our poetic language were incompatible with the natural and the true. The Alexandrine had wearied them so often, that they condemned it without giving it a hearing, so to speak, and decided, a little hastily, perhaps, that the drama should be written in prose.

They were mistaken. If in fact the false is predominant in the style as well as in the action of certain French tragedies, it is not the verses that should be held responsible therefore, but the versifiers. It was needful to condemn, not the form employed, but those who employed it: the workmen, not the tool.

To convince one's self how few obstacles the nature of our poetry places in the way of the free expression of all that is true, we should study our verse, not in Racine, perhaps, but often in Corneille and always in Molière. Racine, a divine poet, is elegiac, lyric, epic; Molière is dramatic. It is time to deal

sternly with the criticisms heaped upon that admirable style by the wretched taste of the last century, and to proclaim aloud that Molière occupies the topmost pinnacle of our drama, not only as a poet, but also as a writer. *Palmas vere habet iste duas.*

In his work the verse surrounds the idea, becomes of its very essence, compresses and develops it at once, imparts to it a more slender, more definite, more complete form, and gives us, in some sort, an extract thereof. Verse is the optical form of thought. That is why it is especially adapted to the perspective of the stage. Constructed in a certain way, it communicates its relief to things which, but for it, would be considered insignificant and trivial. It makes the tissue of style finer and firmer. It is the knot which stays the thread. It is the girdle which holds up the garment and gives it all its folds. What could nature and the true lose, then, by entering into verse? We ask the question of our prose-writers themselves—what do they lose in Molière's poetry? Does wine—we beg pardon for another trivial illustration—does wine cease to be wine when it is bottled?

If we were entitled to say what, in our opinion, the style of dramatic poetry should be, we would declare for a free, outspoken, sincere verse, which dares say everything without prudery, express its meaning without seeking for words; which passes naturally from comedy to tragedy, from the sublime to the grotesque; by turns practical and poetical, both artistic and inspired, profound and impulsive, of wide range and true; verse which is apt opportunely to displace the caesura, in order to disguise the monotony of Alexandrines; more inclined to the *enjambement* that lengthens the line, than to the inversion of phrases that confuses the sense; faithful to rhyme, that enslaved queen, that supreme charm of our poetry, that creator of our metre; verse that is inexhaustible in the verity of its turns of thought, unfathomable in its secrets of composition and of grace; assuming, like Proteus, a thousand forms without changing its type and character; avoiding long speeches; taking delight in dialogue; always hiding behind the characters of the drama; intent, before everything, on being in its place, and when it falls to its lot to be *beautiful*, being so only by chance, as it were, in spite of itself and unconsciously; lyric, epic, dramatic, at need; capable of running through the whole gamut of poetry, of skipping from high notes to low, from the most

exalted to the most trivial ideas, from the most extravagant to the most solemn, from the most superficial to the most abstract, without ever passing beyond the limits of a spoken scene; in a word, such verse as a man would write whom a fairy had endowed with Corneille's mind and Molière's brain. It seems to us that such verse would be *as fine as prose*.

There would be nothing in common between poetry of this sort and that of which we made *apost mortem* examination just now. The distinction will be easy to point out if a certain man of talent, to whom the author of this book is under personal obligation, will allow us to borrow his clever phrase: the other poetry was descriptive, this would be picturesque.

Let us repeat, verse on the stage should lay aside all self-love, all exigence, all coquetry. It is simply a form, and a form which should admit everything, which has no laws to impose on the drama, but on the contrary should receive everything from it, to be transmitted to the spectator—French, Latin, texts of laws, royal oaths, popular phrases, comedy, tragedy, laughter, tears, prose and poetry. Woe to the poet whose verse does not speak out! But this form is a form of bronze which encases the thought in its metre beneath which the drama is indestructible, which engraves it more deeply on the actor's mind, warns him of what he omits and of what he adds, prevents him from changing his role, from substituting himself for the author, makes each word sacred, and causes what the poet has said to remain vivid a long while in the hearer's memory. The idea, when steeped in verse, suddenly assumes a more incisive, more brilliant quality.

One feels that prose, which is necessarily more timid, obliged to wean the drama from anything like epic or lyric poetry, reduced to dialogue and to matter-of-fact, is a long way from possessing these resources. It has much narrower wings. And then, too, it is much more easy of access; mediocrity is at its ease in prose; and for the sake of a few works of distinction such as have appeared of late, the art would very soon be overloaded with abortions and embryos. Another faction of the reformers incline to drama written in both prose and verse, as Shakespeare composed it. This method has its advantages. There might, however, be some incongruity in the transitions from one form to the other; and when a tissue is homogeneous it is much

stouter. However, whether the drama should be written in prose is only a secondary question. The rank of a work is certain to be fixed, not according to its form, but according to its intrinsic value. In questions of this sort, there is only one solution. There is but one weight that can turn the scale in the balance of art—that is genius.

Meanwhile, the first, the indispensable merit of a dramatic writer, whether he write in prose or verse, is correctness. Not a mere superficial correctness, the merit or defect of the descriptive school, which makes Lhomond and Restaut the two wings of its Pegasus; but that intimate, deep-rooted, deliberate correctness, which is permeated with the genius of a language, which has sounded its roots and searched its etymology; always unfettered, because it is sure of its footing, and always more in harmony with the logic of the language. Our Lady Grammar leads the one in leading-strings; the other holds grammar in leash. It can venture anything, can create or invent its style; it has a right to do so. For, whatever certain men may have said who did not think what they were saying, and among whom we must place, notably, him who writes these lines, the French tongue is not *fixed* and never will be. A language does not become fixed. The human intellect is always on the march, or, if you prefer, in movement, and languages with it. Things are made so. When the body changes, how could the coat not change? The French of the nineteenth century can no more be the French of the eighteenth, than that is the French of the seventeenth, or than the French of the seventeenth is that of the sixteenth. Montaigne's language is not Rabelais's, Pascal's is not Montaigne's, Montesquieu's is not Pascal's. Each of the four languages, taken by itself, is admirable because it is original. Every age has its own ideas; it must have also words adapted to those ideas. Languages are like the sea, they move to and fro incessantly. At certain times they leave one shore of the world of thought and overflow another. All that their waves thus abandon dries up and vanishes. It is in this wise that ideas vanish, that words disappear. It is the same with human tongues as with everything. Each age adds and takes away something. What can be done? It is the decree of fate. In vain, therefore, should we seek to petrify the mobile physiognomy of our idiom in a fixed form. In vain do our literary Joshuas cry out to the language to stand still; languages and the sun do not stand still. The day when they become *fixed*, they are dead.—That is why the French of a certain

contemporary school is a dead language.

Such are, substantially, but without the more elaborate development which would make the evidence in their favour more complete, the *present* ideas of the author of this book concerning the drama. He is far, however, from presuming to put forth his first dramatic essay as an emanation of these ideas, which, on the contrary, are themselves, it may be, simply results of its execution. It would be very convenient for him, no doubt, and very clever, to rest his book on his preface, and to defend each by the other. He prefers less cleverness and more frankness. He proposes, therefore, to be the first to point out the extreme tenuity of the thread connecting this preface with his drama. His first plan, dictated by his laziness, was to give the work to the public entirely unattended *del demonio sin las cuernas*, as Yriarte said. It was only after he had duly brought it to a close, that at the solicitations of a few friends, blinded by their friendship, no doubt, he determined to reckon with himself in a preface—to draw, so to speak, a map of the poetic voyage he had made, to take account of the acquisitions, good or bad, that he had brought home, and of the new aspects in which the domain of art had presented itself to his mind. Someone will take advantage of this admission, doubtless to repeat the reproach already uttered by a critic in Germany, that he has written "a treatise in defence of his poetry." What does it matter? In the first place he was much more inclined to demolish treatises on poetry than to write them. And then, would it not be better always to write treatises based on a poem, than to write poems based on a treatise? But no, we repeat that he has neither the talent to create nor the presumption to put forth systems. "Systems," cleverly said Voltaire, "are like rats which pass through twenty holes, only to find at last two or three which will not let them through." It would have been, therefore, to undertake a useless task and one much beyond his strength. What he has pleaded, on the contrary, is the freedom of art against the despotism of systems, codes and rules. It is his habit to follow at all risks whatever he takes for his inspiration, and to change moulds as often as he changes metals. Dogmatism in the arts is what he shuns before everything. God forbid that he should aspire to be numbered among those men, be they romanticists or classicists, who compose *works according to their own systems*, who condemn themselves to have but one form in their minds, to be forever *proving something*, to follow other laws than those of their

temperaments and then natures. The artificial work of these men, however talented they may be, has no existence so far as art is concerned. It is a theory, not poetry.

Having attempted, in all that has gone before, to point out what, in our opinion, was the origin of the drama, what its character is, and what its style should be, the time has come to descend from these exalted general considerations upon the art to the particular case which has led us to put them forth. It remains for us to discourse to the reader of our work, of this *Cromwell*; and as it is not a subject in which we take pleasure, we will say very little about it in very few words.

Oliver Cromwell is one of those historical characters who are at once very famous and very little known. Most of his biographers—and among them there are some who are themselves historical—have left that colossal figure incomplete. It would seem that they dared not assemble all the characteristic features of that strange and gigantic prototype of the religious reformation, of the political revolution of England. Almost all of them have confined themselves to reproducing on a larger scale the simple and ominous profile drawn by Bossuet from his Catholic and monarchical standpoint, from his episcopal pulpit supported by the throne of Louis XIV.

Like everybody else, the author of this book went no further than that. The name of Oliver Cromwell suggested to him simply the bare conception of a fanatical regicide and a great captain. Only on prowling among the chronicles of the times, which he did with delight, and on looking through the English memoirs of the seventeenth century, was he surprised to find that a wholly new Cromwell was gradually exposed to his gaze. It was no longer simply Bossuet's Cromwell the soldier, Cromwell the politician; it was a complex, heterogenous, multiple being, made up of all sorts of contraries—a mixture of much that was evil and much that was good, of genius and pettiness; a sort of Tiberius-Dandin, the tyrant of Europe and the plaything of his family; an old regicide, who delighted to humiliate the ambassadors of all the kings of Europe, and was tormented by his young royalist daughter; austere and gloomy in his manners, yet keeping four court jesters about him; given to the composition of wretched verses; sober, simple, frugal, yet a stickler for

etiquette; a rough soldier and a crafty politician; skilled in theological disputation and very fond of it; a dull, diffuse, obscure orator, but clever in speaking the language of anybody whom he wished to influence; a hypocrite and a fanatic; a visionary swayed by phantoms of his childhood, believing in astrologers and banishing them; suspicious to excess, always threatening, rarely sanguinary; a strict observer of Puritan rules, and solemnly wasting several hours a day in buffoonery; abrupt and contemptuous with his intimates, caressing with the secretaries whom he feared, holding his remorse at bay with sophistry, paltering with his conscience, inexhaustible in adroitness, in tricks, in resources; mastering his imagination by his intelligence; grotesque and sublime; in a word, one of those men who are "square at the base," as they were described by Napoleon, himself their chief, in his mathematically exact and poetically figurative language.

He who writes these lines, in presence of this rare and impressive *ensemble*, felt that Bossuet's impassioned sketch was no longer sufficient for him. He began to walk about that lofty figure, and he was seized by a powerful temptation to depict the giant in all his aspects. It was a rich soil. Beside the man of war and the statesman, it remained to draw the theologian, the pedant, the wretched poet, the seer of visions, the buffoon, the father, the husband, the human Proteus—in a word, the twofold Cromwell, *homo et vir*.

There is one period of his life, especially, in which this strange personality exhibits itself in all its forms. It is not as one might think at first blush, the period of the trial of Charles I, instinct as that is with depressing and terrible interest; but it is the moment when the ambitious mortal boldly attempted to pluck the fruit of that monarch's death; it is the moment when Cromwell, having attained what would have been to any other man the zenith of fortune—master of England, whose innumerable factions knelt silently at his feet; master of Scotland, of which he had made a satrapy, and of Ireland, which he had turned into a prison; master of Europe through his diplomacy and his fleets—seeks to fulfil the dream of his earliest childhood, the last ambition of his life; to make himself king. History never had a more impressive lesson in a more impressive drama. First of all, the Protector arranges to be urged to assume the crown: the august farce begins by addresses from municipalities, from counties; then there comes an act of Parliament. Cromwell, the

anonymous author of the play, pretends to be displeased; we see him put out a hand toward the sceptre, then draw it back; by a devious path he draws near the throne from which he has swept the legitimate dynasty. At last he makes up his mind, suddenly; by his command Westminster is decked with flags, the dais is built, the crown is ordered from the jewelers, the day is appointed for the ceremony.—Strange dénouement! On that very day, in presence of the populace, the troops, the House of Commons, in the great hall of Westminster, on that dais from which he expected to descend as king, suddenly, as if aroused by a shock, he seems to awaken at the sight of the crown, asks if he is dreaming, and what the meaning is of all this regal pomp, and in a speech that lasts three hours declines the kingly title.

Was it because his spies had warned him of two conspiracies formed by Cavaliers and Puritans in concert, which were intended, taking advantage of this misstep, to break out on the same day? Was it an inward revolution caused by the silence or the murmurs of the populace, discomposed to see their regicide ascend the throne? Or was it simply the sagacity of genius, the instinct of a far-seeing, albeit unbridled ambition, which realizes how one step forward changes a man's position and attitude, and which dares not expose its plebeian structure to the wind of unpopularity? Was it all these at once? This is a question which no contemporaneous document answers satisfactorily. So much the better: the poet's liberty is the more complete, and the drama is the gainer by the latitude which history affords it. It will be seen that here the latitude is ample and unique; this is, in truth, the decisive hour, the turning-point in Cromwell's life. It is the moment when his chimera escapes from him, when the present kills the future, when, to use an expressive colloquialism, his destiny *misses fire*. All of Cromwell is at stake in the comedy being played between England and himself.

Such then is the man and such the period of which we have tried to give an idea in this book.

The author has allowed himself to be seduced by the childlike diversion of touching the keys of that great harpsichord. Unquestionably, more skillful hands might have evoked a thrilling and profound melody—not of those which simply caress the ear—but of those intimate harmonies which stir the

whole man to the depths of his being, as if each key of the key-board were connected with a fibre of the heart. He has surrendered to the desire to depict all those fanaticisms, all those superstitions—maladies to which religion is subject at certain epochs; to the longing to "make playthings of all these men," as Hamlet says. To set in array about and below Cromwell, himself the centre and pivot of that court, of that people, of that little world, which attracts all to his cause and inspires all with his vigour, that twofold conspiracy devised by two factions which detest each other, but join hands to overthrow the man who blocks their path, but which unite simply without blending; and that Puritan faction, of divers minds, fanatical, gloomy, unselfish, choosing for leader the most insignificant of men for such a great part, the egotistical and cowardly Lambert; and the faction of the Cavaliers, featherheaded, merry, unscrupulous, reckless, devoted, led by the man who, aside from his devotion to the cause, was least fitted to represent it, the stern and upright Ormond; and those ambassadors, so humble and fawning before the soldier of fortune; and the court itself, an extraordinary mixture of upstarts and great nobles vying with one another in baseness; and the four jesters whom the contemptuous neglect of history permitted me to invent; and Cromwell's family, each member of which is as a thorn in his flesh; and Thurloe, the Protector's Achates; and the Jewish rabbi, Israel Ben-Manasseh, spy, usurer, and astrologer, vile on two sides, sublime on the third; and Rochester, the unique Rochester, absurd and clever, refined and crapulous, always cursing, always in love, and always tipsy, as he himself boasted to Bishop Burnet—wretched poet and gallant gentleman, vicious and ingenuous, staking his head and indifferent whether he wins the game provided it amuses him—in a word, capable of everything, of ruse and recklessness, calculation and folly, villainy and generosity; and the morose Carr, of whom history describes but one trait, albeit a most characteristic and suggestive one; and those other fanatics, of all ranks and varieties: Harrison, the thieving fanatic; Barebones the shopkeeping fanatic; Syndercomb, the bravo; Garland the tearful and pious assassin; gallant Colonel Overton, intelligent but a little declamatory; the austere and unbending Ludlow, who left his ashes and his epitaph at Lausanne; and lastly, "Milton and a few other men of mind," as we read in a pamphlet of 1675 (*Cromwell the Politician*), which reminds one of "a certain Dante" of the Italian chronicle.

We omit many less important characters, of each of whom, however, the actual life is known, and each of whom has his marked individuality, and all of whom contributed to the fascination which this vast historical scene exerted upon the author's imagination. From that scene he constructed this drama. He moulded it in verse, because he preferred to do so. One will discover on reading it how little thought he gave to his work while writing this preface—with what disinterestedness, for instance, he contended against the dogma of the unities. His drama does not leave London; it begins on June 25, 1657, at three in the morning, and ends on the 26th at noon. Observe that he has almost followed the classic formula, as the professors of poetry lay it down to-day. They need not, however, thank him for it. With the permission of history, not of Aristotle, the author constructed his drama thus; and because, when the interest is the same, he prefers a compact subject to a widely diffused one.

It is evident that, in its present proportions, this drama could not be given at one of our theatrical performances. It is too long. The reader will perhaps comprehend, none the less, that every part of it was written for the stage. It was on approaching his subject to study it that the author recognized, or thought that he recognized, the impossibility of procuring the performance of a faithful reproduction of it on our stage, in the exceptional position it now occupies, between the academic Charybdis and the administrative Scylla, between the literary juries and the political censorship. He was required to choose: either the wheedling, tricky, false tragedy, which may be acted, or the audaciously true drama, which is prohibited. The first was not worth the trouble of writing, so he preferred to attempt the second. That is why, hopeless of ever being put on the stage, he abandoned himself, freely and submissively, to the whims of composition, to the pleasure of painting with a freer hand, to the developments which his subject demanded, and which, even if they keep his drama off the stage, have at all events the advantage of making it almost complete from the historical standpoint. However, the reading committees are an obstacle of the second class only. If it should happen that the dramatic censorship, realizing how far this harmless, conscientious and accurate picture of Cromwell and his time is removed from our own age, should sanction its production on the stage, in that case, but only in that case, the author might perhaps extract from this drama a play

which would venture to show itself on the boards, and would be hissed.

Until then he will continue to hold aloof from the theatre. And even then he will leave his cherished and tranquil retirement soon enough, for the agitation and excitement of this new world. God grant that he may never repent of having exposed the unspotted obscurity of his name and his person to the shoals, the squalls and tempests of the pit, and above all (for what does a mere failure matter?) to the wretched bickerings of the wings; of having entered that shifting, foggy, stormy atmosphere, where ignorance dogmatizes, where envy hisses, where cabals cringe and crawl, where the probity of talent has so often been misrepresented, where the noble innocence of genius is sometimes so out of place, where mediocrity triumphs in lowering to its level the superiority which obscures it, where one finds so many small men for a single great one, so many nobodies for one Talma, so many myrmidons for one Achilles! This sketch will seem ill-tempered perhaps, and far from flattering; but does it not fully mark out the distance that separates our stage, the abode of intrigues and uproar, from the solemn serenity of the ancient stage?

Whatever may happen, he feels bound to warn in advance that small number of persons whom such a production might attract, that a play made up of excerpts from *Cromwell* would occupy no less time than is ordinarily occupied by a theatrical performance. It is difficult for a romantic theatre to maintain itself otherwise. Surely, if people desire something different from the tragedies in which one or two characters, abstract types of a purely metaphysical idea, stalk solemnly about on a narrow stage occupied only by a few confidants, colourless reflections of the heroes, employed to fill the gaps in a simple, unified, single-stringed plot; if that sort of thing has grown tiresome, a whole evening is not too much time to devote to delineating with some fullness a man among men, a whole critical period: the one, with his peculiar temperament, his genius which adapts itself thereto, his beliefs which dominate them both, his passions which throw out of gear his temperament, his genius and his beliefs, his tastes which give colour to his passions, his habits which regulate his tastes and muzzle his passions, and with the innumerable procession of men of every sort whom these various elements keep in constant commotion about him; the other, with its manners,

its laws, its fashions, its wit, its attainments, its superstitions, its events, and its people, whom all these first causes in turn mould like soft wax. It is needless to say that such a picture will be of huge proportions. Instead of one personality, like that with which the abstract drama of the old school is content, there will be twenty, forty, fifty,—who knows how many?—of every size and of every degree of importance. There will be a crowd of characters in the drama. Would it not be niggardly to assign it two hours only, and give up the rest of the performance to opera-comique or farce? to cut Shakespeare for Bobèche?—And do not imagine that, if the plot is well adjusted, the multitude of characters set in motion will cause fatigue to the spectator or confusion in the drama. Shakespeare, abounding in petty details, is at the same time, and for that very reason, imposing by the grandeur of the *ensemble*. It is the oak which casts a most extensive shadow with its myriads of slender leaves.

Let us hope that people in France will ere long become accustomed to devote a whole evening to a single play. In England and Germany there are plays that last six hours. The Greeks, about whom we hear so much, the Greeks—and after the fashion of Scudéri we will cite at this point the classicist Dacier, in the seventh chapter of his *Poetics*—the Greeks sometimes went so far as to have twelve or sixteen plays acted in a single day. Among a people who are fond of spectacles the attention is more lively than is commonly believed. The *Mariage de Figaro*, the connecting link of Beaumarchais's great trilogy, occupies the whole evening, and who was ever bored or fatigued by it? Beaumarchais was worthy to venture on the first step toward that goal of modern art at which it will be impossible to arrive in two hours, that profound, insatiable interest which results from a vast, lifelike and multiform plot. "But," someone will say, "this performance, consisting of a single play, would be monotonous, would seem terribly long"—Not so. On the contrary it would lose its present monotony and tediousness. For what is done now? The spectator's entertainment is divided into two or three sharply defined parts. At first he is given two hours of serious enjoyment, then one hour of hilarious enjoyment, these, with the hour of entr'actes, which we do not include in the enjoyment make four hours. What would the romantic drama do? It would mingle and blend artistically these two kinds of enjoyment. It would lead the audience constantly from sobriety to laughter, from mirthful excitement to

heart breaking emotion, "from grave to gay, from pleasant to severe." For, as we have already proved, the drama is the grotesque in conjunction with the sublime, the soul within the body, it is tragedy beneath comedy. Do you not see that, by affording you repose from one impression by means of another, by sharpening the tragic upon the comic, the merry upon the terrible, and at need calling in the charms of the opera, these performances, while presenting but one play, would be worth a multitude of others? The romantic stage would make a piquant, savoury, diversified dish of that which, on the classic stage, is a drug divided into two pills.

The author has soon come to the end of what he had to say to the reader. He has no idea how the critics will greet this drama and these thoughts, summarily set forth, stripped of their corollaries and ramifications, put together *currente calamo*, and in haste to have done with them. Doubtless they will appear to "the disciples of La Harpe" most impudent and strange. But if perchance, naked and undeveloped as they are, they should have the power to start upon the road of truth this public whose education is so far advanced, and whose minds so many notable writings, of criticism or of original thought, books or newspapers, have already matured for art, let the public follow that impulsion, caring naught whether it comes from a man unknown, from a voice with no authority, from a work of little merit. It is a copper bell which summons the people to the true temple and the true God.

There is to-day the old literary régime as well as the old political régime. The last century still weighs upon the present one at almost every point. It is notably oppressive in the matter of criticism. For instance, you find living men who repeat to you this definition of taste let fall by Voltaire: "Taste in poetry is no different from what it is in women's clothes." Taste, then, is coquetry. Remarkable words, which depict marvellously the painted, *moucheté*, powdered poetry of the eighteenth century—that literature in paniers, pompons and falbalas. They give an admirable résumé of an age with which the loftiest geniuses could not come in contact without becoming petty, in one respect or another; of an age when Montesquieu was able and apt to produce *Le Temple de Gnide*, Voltaire *Le Temple du Goût*, Jean-Jacques *Le Devin du Village*.

Taste is the common sense of genius. This is what will soon be demonstrated by another school of criticism, powerful, outspoken, well-informed,—a school of the century which is beginning to put forth vigorous shoots under the dead and withered branches of the old school. This youthful criticism, as serious as the other is frivolous, as learned as the other is ignorant, has already established organs that are listened to, and one is sometimes surprised to find, even in the least important sheets, excellent articles emanating from it. Joining hands with all that is fearless and superior in letters, it will deliver us from two scourges: tottering *classicism*, and false *romanticism*, which has the presumption to show itself at the feet of the true. For modern genius already has its shadow, its copy, its parasite, its *classic*, which forms itself upon it, smears itself with its colours, assumes its livery, picks up its crumbs, and, like *the sorcerer's pupil*, puts in play, with words retained by the memory, elements of theatrical action of which it has not the secret. Thus it does idiotic things which its master many a time has much difficulty in making good. But the thing that must be destroyed first of all is the old false taste. Present-day literature must be cleansed of its rust. In vain does the rust eat into it and tarnish it. It is addressing a young, stern, vigorous generation, which does not understand it. The train of the eighteenth century is still dragging in the nineteenth; but we, we young men who have seen Bonaparte, are not the ones who will carry it.

We are approaching, then, the moment when we shall see the new criticism prevail, firmly established upon a broad and deep foundation. People generally will soon understand that writers should be judged, not according to rules and species, which are contrary to nature and art, but according to the immutable principles of the art of composition, and the special laws of their individual temperaments. The sound judgment of all men will be ashamed of the criticism which broke Pierre Corneille on the wheel, gagged Jean Racine, and which ridiculously rehabilitated John Milton only by virtue of the epic code of Père le Bossu. People will consent to place themselves at the author's standpoint, to view the subject with his eyes, in order to judge a work intelligently. They will lay aside—and it is M. de Chateaubriand who speaks—"the paltry criticism of defects for the noble and fruitful criticism of beauties." It is time that all acute minds should grasp the thread that frequently connects what we, following our special whim, call "defects" with

what we call "beauty." Defects—at all events those which we call by that name—are often the inborn, necessary, inevitable conditions of good qualities.

Scit genius, natale comes qul temperat astrum.

Who ever saw a medal without its reverse? a talent that had not some shadow with its brilliancy, some smoke with its flame? Such a blemish can be only the inseparable consequence of such beauty. This rough stroke of the brush, which offends my eye at close range, completes the effect and gives relief to the whole picture. Efface one and you efface the other. Originality is made up of such things. Genius is necessarily uneven. There are no high mountains without deep ravines. Fill up the valley with the mountain and you will have nothing but a steppe, a plateau, the plain of Les Sablons instead of the Alps, swallows and not eagles.

We must also take into account the weather, the climate, the local influences. The Bible, Homer, hurt us sometimes by their very sublimities. Who would want to part with a word of either of them? Our infirmity often takes fright at the inspired bold flights of genius, for lack of power to swoop down upon objects with such vast intelligence. And then, once again, there are *defects* which take root only in masterpieces; it is given only to certain geniuses to have certain defects. Shakespeare is blamed for his abuse of metaphysics, of wit, of redundant scenes, of obscenities, for his employment of the mythological nonsense in vogue in his time, for exaggeration, obscurity, bad taste, bombast, asperities of style. The oak, that giant tree which we were comparing to Shakespeare just now, and which has more than one point of resemblance to him, the oak has an unusual shape, gnarled branches, dark leaves, and hard, rough bark; but it is the oak.

And it is because of these qualities that it is the oak. If you would have a smooth trunk, straight branches, satiny leaves, apply to the pale birch, the hollow elder, the weeping willow; but leave the mighty oak in peace. Do not stone that which gives you shade.

The author of this book knows as well as any one the numerous and gross

faults of his works. If it happens too seldom that he corrects them, it is because it is repugnant to him to return to a work that has grown cold. Moreover, what has he ever done that is worth that trouble? The labor that he would throw away in correcting the imperfections of his books, he prefers to use in purging his intellect of its defects. It is his method to correct one work only in another work.

However, no matter what treatment may be accorded his book, he binds himself not to defend it, in whole or in part. If his drama is worthless, what is the use of upholding it? If it is good, why defend it? Time will do the book justice or will wreak justice upon it. Its success for the moment is the affair of the publisher alone. If then the wrath of the critics is aroused by the publication of this essay, he will let them do their worst. What reply should he make to them? He is not one of those who speak, as the Castilian poet says, "through the mouths of their wounds."

Por la boca de su herida.

One last word. It may have been noticed that in this somewhat long journey through so many different subjects, the author has generally refrained from resting his personal views upon texts or citations of authorities. It is not, however, because he did not have them at his hand.

"If the poet establishes things that are impossible according to the rules of his art, he makes a mistake unquestionably; but it ceases to be a mistake when by this means he has reached the end that he aimed at; for he has found what he sought,"—"They take for nonsense whatever the weakness of their intellects does not allow them to understand. They are especially prone to call absurd those wonderful passages in which the poet, in order the better to enforce his argument, departs, if we may so express it, from his argument. In fact, the precept which makes it a rule sometimes to disregard rules, is a mystery of the art which it is not easy to make men understand who are absolutely without taste and whom a sort of abnormality of mind renders insensible to those things which ordinarily impress men."

Who said the first? Aristotle. Who said the last? Boileau. By these two

specimens you will see that the author of this drama might, as well as another, have shielded himself with proper names and taken refuge behind others' reputations. But he preferred to leave that style of argument to those who deem it unanswerable, universal and all-powerful. As for himself, he prefers reasons to authorities; he has always cared more for arms than for coats-of-arms.

October, 1827.

[Footnote A: Victor Hugo (1802-1883) the chief of the romantic school in France, issued in the Preface to "Cromwell" the manifesto of the movement. Poet, dramatist, and novelist, Hugo remained through a long life the most conspicuous man of letters in France; and in the document here printed he laid down the principles which revolutionized the literary world of his time.]

PREFACE TO LEAVES OF GRASS

BY WALT WHITMAN. (1855)[A]

America does not repel the past or what it has produced under its forms or amid other politics or the idea of castes or the old religions ... accepts the lesson with calmness ... is not so impatient as has been supposed that the slough still sticks to opinions and manners and literature while the life which served its requirements has passed into the new life of the new forms ... perceives that the corpse is slowly borne from the eating and sleeping rooms of the house ... perceives that it waits a little while in the door ... that it was fittest for its days ... that its action has descended to the stalwart and well shaped heir who approaches ... and that he shall be fittest for his days.

The Americans of all nations at any time upon the earth, have probably the fullest poetical nature. The United States themselves are essentially the greatest poem. In the history of the earth hitherto the largest and most stirring appear tame and orderly to their ampler largeness and stir. Here at last is something in the doings of man that corresponds with the broadcast doings of the day and night. Here is not merely a nation but a teeming nation of nations. Here is action untied from strings necessarily blind to particulars and details magnificently moving in vast masses. Here is the hospitality which forever indicates heroes.... Here are the roughs and beards and space and ruggedness and nonchalance that the soul loves. Here the performance disdaining the trivial unapproached in the tremendous audacity of its crowds and groupings and the push of its perspective spreads with crampless and flowing breadth and showers its prolific and splendid extravagance. One sees it must indeed own the riches of the summer and winter, and need never be bankrupt while corn grows from the ground or the orchards drop apples or the bays contain

fish or men beget children upon women.

Other states indicate themselves in their deputies ... but the genius of the United States is not best or most in its executives or legislatures, nor in its ambassadors or authors or colleges or churches or parlors, nor even in its newspapers or inventors ... but always most in the common people. Their manners speech dress friendship—the freshness and candor of their physiognomy—the picturesque looseness of their carriage ... their deathless attachment to freedom—their aversion to anything indecorous or soft or mean—the practical acknowledgment of the citizens of one state by the citizens of all other states—the fierceness of their roused resentment—their curiosity and welcome of novelty—their self-esteem and wonderful sympathy—their susceptibility to a slight—the air they have of persons who never knew how it felt to stand in the presence of superiors—the fluency of their speech—their delight in music, the sure symptom of manly tenderness and native elegance of soul ... their good temper and open handedness—the terrible significance of their elections—the President's taking off his hat to them, not they to him—these too are unrhymed poetry. It awaits the gigantic and generous treatment worthy of it.

The largeness of nature or the nation were monstrous without a corresponding largeness and generosity of the spirit of the citizen. Not nature nor swarming states nor streets and steamships nor prosperous business nor farms nor capital nor learning may suffice for the ideal of man ... nor suffice the poet. No reminiscences may suffice either. A live nation can always cut a deep mark and can have the best authority the cheapest ... namely from its own soul. This is the sum of the profitable uses of individuals or states and of present action and grandeur and of the subjects of poets.—As if it were necessary to trot back generation after generation to the eastern records! As if the beauty and sacredness of the demonstrable must fall behind that of the mythical! As if men do not make their mark out of any times! As if the opening of the western continent by discovery and what has transpired since in North and South America were less than the small theatre of the antique or the aimless sleepwalking of the middle ages! The pride of the United States leaves the wealth and finesse of the cities and all returns of commerce and agriculture and all the magnitude of geography or shows of exterior victory to

enjoy the breed of full sized men or one full sized man unconquerable and simple.

The American poets are to enclose old and new for America is the race of races. Of them a bard is to be commensurate with a people. To him the other continents arrive as contributions ... he gives them reception for their sake and his own sake. His spirit responds to his country's spirit ... he incarnates its geography and natural life and rivers and lakes. Mississippi with annual freshets and changing chutes, Missouri and Columbia and Ohio and St. Lawrence with the Falls and beautiful masculine Hudson, do not embouchure where they spend themselves more than they embouchure into him. The blue breadth over the inland sea of Virginia and Maryland and the sea off Massachusetts and Maine and over Manhattan bay and over Champlain and Erie and over Ontario and Huron and Michigan and Superior, and over the Texan and Mexican and Floridian and Cuban seas, and over the seas off California and Oregon, is not tallied by the blue breadth of the waters below more than the breadth of above and below is tallied by him. When the long Atlantic coast stretches longer and the Pacific coast stretches longer he easily stretches with them north or south. He spans between them also from east to west and reflects what is between them. On him rise solid growths that offset the growths of pine and cedar and hemlock and live oak and locust and chestnut and cypress and hickory and limetree and cottonwood and tuliptree and cactus and wildvine and tamarind and persimmon ... and tangles as tangled as any canebrake or swamp ... and forests coated with transparent ice, and icicles hanging from boughs and crackling in the wind ... and sides and peaks of mountains ... and pasturage sweet and free as savannah or upland or prairie ... with flights and songs and screams that answer those of the wild pigeon and high-hold and orchard-oriole and coot and surf-duck and red-shouldered-hawk and fish-hawk and white ibis and Indian-hen and cat-owl and water-pheasant and qua-bird and pied-sheldrake and blackbird and mockingbird and buzzard and condor and night-heron and eagle. To him the hereditary countenance descends both mother's and father's. To him enter the essences of the real things and past and present events—of the enormous diversity of temperature and agriculture and mines—the tribes of red aborigines—the weather-beaten vessels entering new ports or making landings on rocky coasts—the first settlements north or south—the rapid

stature and muscle—the haughty defiance of '76, and the war and peace and formation of the constitution ... the Union always surrounded by blatherers and always calm and impregnable—the perpetual coming of immigrants—the wharf-hem'd cities and superior marine—the unsurveyed interior—the loghouses and clearings and wild animals and hunters and trappers ... the free commerce—the fisheries and whaling and gold-digging—the endless gestation of new states—the convening of Congress every December, the members duly coming up from all climates and the uttermost parts ... the noble character of the young mechanics and of all free American workmen and workwomen ... the general ardor and friendliness and enterprise—the perfect equality of the female with the male ... the large amativeness—the fluid movement of the population—the factories and mercantile life and laborsaving machinery—the Yankee swap—the New York firemen and the target excursion—the Southern plantation life—the character of the northeast and of the northwest and southwest—slavery and the tremulous spreading of hands to protect it, and the stern opposition to it which shall never cease till it ceases or the speaking of tongues and the moving of lips cease. For such the expression of the American poet is to be transcendent and new. It is to be indirect and not direct or descriptive or epic. Its quality goes through these to much more. Let the age and wars of other nations be chanted and their eras and characters be illustrated and that finish the verse. Not so the great psalm of the republic. Here the theme is creative and has vista. Here comes one among the well beloved stonecutters and plans with decision and science and sees the solid and beautiful forms of the future where there are now no solid forms.

Of all nations the United States with veins full of poetical stuff most need poets and will doubtless have the greatest and use them the greatest. Their Presidents shall not be their common referee so much as their poets shall. Of all mankind the great poet is the equable man. Not in him but off from him things are grotesque or eccentric or fail of their sanity. Nothing out of its place is good and nothing in its place is bad. He bestows on every object or quality its fit proportions neither more nor less. He is the arbiter of the diverse and he is the key. He is the equalizer of his age and land ... he supplies what wants supplying and checks what wants checking. If peace is the routine out of him speaks the spirit of peace, large, rich, thrifty, building

vast and populous cities, encouraging agriculture and the arts and commerce—lighting the study of man, the soul, immortality—federal, state or municipal government, marriage, health, freetrade, intertravel by land and sea ... nothing too close, nothing too far off ... the stars not too far off. In war he is the most deadly force of the war. Who recruits him recruits horse and foot ... he fetches parks of artillery the best that engineer ever knew. If the time becomes slothful and heavy he knows how to arouse it ... he can make every word he speaks draw blood. Whatever stagnates in the flat of custom or obedience or legislation he never stagnates. Obedience does not master him, he masters it. High up out of reach he stands turning a concentrated light ... he turns the pivot with his finger ... he baffles the swiftest runners as he stands and easily overtakes and envelopes them. The time straying towards infidelity and confections and persiflage he withholds by his steady faith ... he spreads out his dishes ... he offers the sweet firmfibred meat that grows men and women. His brain is the ultimate brain. He is no arguer ... he is judgment. He judges not as the judge judges but as the sun falling around a helpless thing. As he sees the farthest he has the most faith. His thoughts are the hymns of the praise of things. In the talk on the soul and eternity and God off of his equal plane he is silent. He sees eternity less like a play with a prologue and dénouement ... he sees eternity in men and women ... he does not see men or women as dreams or dots. Faith is the antiseptic of the soul ... it pervades the common people and preserves them ... they never give up believing and expecting and trusting. There is that indescribable freshness and unconsciousness about an illiterate person that humbles and mocks the power of the noblest expressive genius. The poet sees for a certainty how one not a great artist may be just as sacred and perfect as the greatest artist.... The power to destroy or remould is freely used by him, but never the power of attack. What is past is past. If he does not expose superior models and prove himself by every step he takes he is not what is wanted. The presence of the greatest poet conquers ... not parleying or struggling or any prepared attempts. Now he has passed that way see after him! There is not left any vestige of despair or misanthropy or cunning or exclusiveness or the ignominy of a nativity or color or delusion of hell or the necessity of hell ... and no man thenceforward shall be degraded for ignorance or weakness or sin.

The greatest poet hardly knows pettiness or triviality. If he breathes into anything that was before thought small it dilates with the grandeur and life of the universe. He is a seer ... he is individual ... he is complete in himself ... the others are as good as he, only he sees it and they do not. He is not one of the chorus ... he does not stop for any regulation ... he is the president of regulation. What the eyesight does to the rest he does to the rest. Who knows the curious mystery of the eyesight? The other senses corroborate themselves, but this is removed from any proof but its own and foreruns the identities of the spiritual world. A single glance of it mocks all the investigations of man and all the instruments and books of the earth and all reasoning. What is marvellous? what is unlikely? what is impossible or baseless or vague? after you have once just opened the space of a peachpit and given audience to far and near and to the sunset and had all things enter with electric swiftness softly and duly without contusion or jostling or jam.

The land and sea, the animals fishes and birds, the sky of heavens and the orbs, the forests mountains and rivers, are not small themes ... but folks expect of the poet to indicate more than the beauty and dignity which always attach to dumb real objects,... they expect him to indicate the path between reality and their souls. Men and women perceive the beauty well enough ... probably as well as he. The passionate tenacity of hunters, woodmen, early risers, cultivators of gardens and orchards and fields, the love of healthy women for the manly form, seafaring persons, drivers of horses, the passion for light and the open air, all is an old varied sign of the unfailing perception of beauty and of a residence of the poetic in outdoor people. They can never be assisted by poets to perceive ... some may but they never can. The poetic quality is not marshalled in rhyme or uniformity or abstract addresses to things nor in melancholy complaints or good precepts, but is the life of these and much else and is in the soul. The profit of rhyme is that it drops seeds of a sweeter and more luxuriant rhyme, and of uniformity that it conveys itself into its own roots in the ground out of sight. The rhyme and uniformity of perfect poems show the free growth of metrical laws and bud from them as unerringly and loosely as lilacs and roses on a bush, and take shapes as compact as the shapes of chestnuts and oranges and melons and pears, and shed the perfume impalpable to form. The fluency and ornaments of the finest poems or music or orations or recitations are not independent but

dependent. All beauty comes from beautiful blood and a beautiful brain. If the greatnesses are in conjunction in a man or woman it is enough ... the fact will prevail through the universe ... but the gaggery and gilt of a million years will not prevail. Who troubles himself about his ornaments or fluency is lost. This is what you shall do: Love the earth and sun and the animals, despise riches, give alms to every one that asks, stand up for the stupid and crazy, devote your income and labor to others, hate tyrants, argue not concerning God, have patience and indulgence toward the people, take off your hat to nothing known or unknown or to any man or number of men, go freely with powerful uneducated persons and with the young and with the mothers of families, read these leaves in the open air every season of every year of your life, re-examine all you have been told at school or church or in any book, dismiss whatever insults your own soul; and your very flesh shall be a great poem and have the richest fluency not only in its words but in the silent lines of its lips and face and between the lashes of your eyes and in every motion and joint of your body.... The poet shall not spend his time in unneeded work. He shall know that the ground is always ready ploughed and manured ... others may not know it but he shall. He shall go directly to the creation. His trust shall master the trust of everything he touches ... and shall master all attachment.

The known universe has one complete lover and that is the greatest poet. He consumes an eternal passion and is indifferent which chance happens and which possible contingency of fortune or misfortune and persuades daily and hourly his delicious pay. What baulks or breaks others is fuel for his burning progress to contact and amorous joy. Other proportions of the reception of pleasure dwindle to nothing to his proportions. All expected from heaven or from the highest he is rapport with in the sight of the daybreak or a scene of the winter woods or the presence of children playing or with his arm round the neck of a man or woman. His love above all love has leisure and expanse ... he leaves room ahead of himself. He is no irresolute or suspicious lover ... he is sure ... he scorns intervals. His experience and the showers and thrills are not for nothing. Nothing can jar him ... suffering and darkness cannot—death and fear cannot. To him complaint and jealousy and envy are corpses buried and rotten in the earth ... he saw them buried. The sea is not surer of the shore or the shore of the sea than he is of the fruition of his love and of all

perfection and beauty.

The fruition of beauty is no chance of hit or miss ... it is inevitable as life ... it is as exact and plumb as gravitation. From the eyesight proceeds another eyesight and from the hearing proceeds another hearing and from the voice proceeds another voice eternally curious of the harmony of things with man. To these respond perfections not only in the committees that were supposed to stand for the rest but in the rest themselves just the same. These understand the law of perfection in masses and floods ... that its finish is to each for itself and onward from itself ... that it is profuse and impartial ... that there is not a minute of the light or dark nor an acre of the earth and sea without it—nor any direction of the sky nor any trade or employment nor any turn of events. This is the reason that about the proper expression of beauty there is precision and balance ... one part does not need to be thrust above another. The best singer is not the one who has the most lithe and powerful organ ... the pleasure of poems is not in them that take the handsomest measure and similes and sound.

Without effort and without exposing in the least how it is done the greatest poet brings the spirit of any or all events and passions and scenes and persons some more and some less to bear on your individual character as you hear or read. To do this well is to compete with the laws that pursue and follow time. What is the purpose must surely be there and the clue of it must be there ... and the faintest indication is the indication of the best and then becomes the clearest indication. Past and present and future are not disjoined but joined. The greatest poet forms the consistence of what is to be from what has been and is. He drags the dead out of their coffins and stands them again on their feet ... he says to the past, Rise and walk before me that I may realize you. He learns the lesson ... he places himself where the future becomes present. The greatest poet does not only dazzle his rays over character and scenes and passions ... he finally ascends and finishes all ... he exhibits the pinnacles that no man can tell what they are for or what is beyond ... he glows a moment on the extremest verge. He is most wonderful in his last half-hidden smile or frown ... by that flash of the moment of parting the one that sees it shall be encouraged or terrified afterward for many years. The greatest poet does not moralize or make applications of morals ... he knows the soul. The

soul has that measureless pride which consists in never acknowledging any lessons but its own. But it has sympathy as measureless as its pride and the one balances the other and neither can stretch too far while it stretches in company with the other. The inmost secrets of art sleep with the twain. The greatest poet has lain close betwixt both and they are vital in his style and thoughts.

The art of art, the glory of expression and the sunshine of the light of letters is simplicity. Nothing is better than simplicity ... nothing can make up for excess or for the lack of definiteness. To carry on the heave of impulse and pierce intellectual depths and give all subjects their articulations are powers neither common nor very uncommon. But to speak in literature with the perfect rectitude and insouciance of the movements of animals and the unimpeachableness of the sentiment of trees in the woods and grass by the roadside is the flawless triumph of art. If you have looked on him who has achieved it you have looked on one of the masters of the artists of all nations and times. You shall not contemplate the flight of the gray gull over the bay or the mettlesome action of the blood horse or the tall leaning of sunflowers on their stalk or the appearance of the sun journeying through heaven or the appearance of the moon afterward with any more satisfaction than you shall contemplate him. The greatest poet has less a marked style and is more the channel of thoughts and things without increase or diminution and is the free channel of himself. He swears to his art, I will not be meddlesome, I will not have in my writing any elegance or effect or originality to hang in the way between me and the rest like curtains. I will have nothing hang in the way not the richest curtains. What I tell I tell for precisely what it is. Let who may exalt or startle or fascinate or soothe I will have purposes as health or heat or snow has and be as regardless of observation. What I experience or portray shall go from my composition without a shred of my composition. You shall stand by my side and look in the mirror with me.

The old red blood and stainless gentility of great poets will be proved by their unconstraint. A heroic person walks at his ease through and out of that custom or precedent or authority that suits him not. Of the traits of the brotherhood of writers savans musicians inventors and artists, nothing is finer than silent defiance advancing from new free forms. In the need of poems

philosophy politics mechanism science behavior, the craft of art, an appropriate native grand-opera, shipcraft; or any craft, he is greatest for ever and for ever who contributes the greatest original practical example. The cleanest expression is that which finds no sphere worthy of itself and makes one. The messages of great poets to each man and woman are, Come to us on equal terms, Only then can you understand us, We are no better than you, What we enclose you enclose, What we enjoy you may enjoy. Did you suppose there could be only one Supreme? We affirm there can be unnumbered Supremes, and that one does not countervail another any more than one eyesight countervails another ... and that men can be good or grand only of the consciousness of their supremacy within them. What do you think is the grandeur of storms and dismemberments and the deadliest battles and wrecks and the wildest fury of the elements and the power of the sea and the motion of nature and the throes of human desires and dignity and hate and love? It is that something in the soul which says, Rage on, Whirl on, I tread master here and everywhere, Master of the spasms of the sky and of the shatter of the sea, Master of nature and passion and death, And of all terror and all pain.

The American bards shall be marked for generosity and affection and for encouraging competitors.... They shall be kosmos ... without monopoly or secrecy ... glad to pass anything to any one ... hungry for equals night and day. They shall not be careful of riches and privilege ... they shall be riches and privilege ... they shall perceive who the most affluent man is. The most affluent man is he that confronts all the shows he sees by equivalents out of the stronger wealth of himself. The American bard shall delineate no class of persons nor one or two out of the strata of interests nor love most nor truth most nor the soul most nor the body most ... and not be for the eastern states more than the western or the northern states more than the southern.

Exact science and its practical movements are no checks on the greatest poet but always his encouragement and support. The outset and remembrance are there ... there the arms that lifted him first and brace him best ... there he returns after all his goings and comings. The sailor and traveller ... the anatomist chemist astronomer geologist phrenologist spiritualist mathematician historian and lexicographer are not poets, but they are the

lawgivers of poets and their construction underlies the structure of every perfect poem. No matter what rises or is uttered they sent the seed of the conception of it ... of them and by them stand the visible proofs of souls ... always of their fatherstuff must be begotten the sinewy races of bards. If there shall be love and content between the father and the son and if the greatness of the son is the exuding of the greatness of the father there shall be love between the poet and the man of demonstrable science. In the beauty of poems are the tuft and final applause of science.

Great is the faith of the flush of knowledge and of the investigation of the depths of qualities and things. Cleaving and circling here swells the soul of the poet yet is president of itself always. The depths are fathomless and therefore calm. The innocence and nakedness are resumed ... they are neither modest nor immodest. The whole theory of the special and supernatural and all that was twined with it or educed out of it departs as a dream. What has ever happened ... what happens and whatever may or shall happen, the vital laws enclose all ... they are sufficient for any case and for all cases ... none to be hurried or retarded ... any miracle of affairs or persons inadmissible in the vast clear scheme where every motion and every spear of grass and the frames and spirits of men and women and all that concerns them are unspeakably perfect miracles all referring to all and each distinct and in its place. It is also not consistent with the reality of the soul to admit that there is anything in the known universe more divine than men and women.

Men and women and the earth and all upon it are simply to be taken as they are, and the investigation of their past and present and future shall be unintermitted and shall be done with perfect candor. Upon this basis philosophy speculates ever looking towards the poet, ever regarding the eternal tendencies of all toward happiness never inconsistent with what is clear to the senses and to the soul. For the eternal tendencies of all toward happiness make the only point of sane philosophy. Whatever comprehends less than that ... whatever is less than the laws of light and of astronomical motion ... or less than the laws that follow the thief the liar the glutton and the drunkard through this life and doubtless afterward ... or less than vast stretches of time or the slow formation of density or the patient upheaving of strata—is of no account. Whatever would put God in a poem or system of

philosophy as contending against some being or influence is also of no account. Sanity and ensemble characterize the great master ... spoilt in one principle all is spoilt. The great master has nothing to do with miracles. He sees health for himself in being one of the mass ... he sees the hiatus in singular eminence. To the perfect shape comes common ground. To be under the general law is great, for that is to correspond with it. The master knows that he is unspeakably great and that all are unspeakably great ... that nothing for instance is greater than to conceive children and bring them up well ... that to be is just as great as to perceive or tell.

In the make of the great masters the idea of political liberty is indispensable. Liberty takes the adherence of heroes wherever men and women exist ... but never takes any adherence or welcome from the rest more than from poets. They are the voice and exposition of liberty. They out of ages are worthy the grand idea ... to them it is confided and they must sustain it. Nothing has precedence of it and nothing can warp or degrade it. The attitude of great poets is to cheer up slaves and horrify despots. The turn of their necks, the sound of their feet, the motions of their wrists, are full of hazard to the one and hope to the other. Come nigh them awhile and though they neither speak nor advise you shall learn the faithful American lesson. Liberty is poorly served by men whose good intent is quelled from one failure or two failures or any number of failures, or from the casual indifference or ingratitude of the people, or from the sharp show of the tushes of power, or the bringing to bear soldiers and cannon or any penal statutes. Liberty relies upon itself, invites no one, promises nothing, sits in calmness and light, is positive and composed, and knows no discouragement. The battle rages with many a loud alarm and frequent advance and retreat ... the enemy triumphs ... the prison, the handcuffs, the iron necklace and anklet, the scaffold, garrote and leadballs do their work ... the cause is asleep ... the strong throats are choked with their own blood ... the young men drop their eyelashes toward the ground when they pass each other ... and is liberty gone out of that place? No never. When liberty goes it is not the first to go nor the second or third to go ... it awaits for all the rest to go ... it is the last.... When the memories of the old martyrs are faded utterly away ... when the large names of patriots are laughed at in the public halls from the lips of the orators ... when the boys are no more christened after the same but christened after tyrants and traitors instead ...

when the laws of the free are grudgingly permitted and the laws for informers and bloodmoney are sweet to the taste of the people ... when I and you walk abroad upon the earth stung with compassion at the sight of numberless brothers answering our equal friendship and calling no man master—and when we are elated with noble joy at the sight of slaves ... when the soul retires in the cool communion of the night and surveys its experience and has much extasy over the word and deed that put back a helpless innocent person into the gripe of the gripers or into any cruel inferiority ... when those in all parts of these states who could easier realize the true American character but do not yet—when the swarms of cringers, suckers, doughfaces, lice of politics, planners of sly involutions for their own preferment to city offices or state legislatures or the judiciary or congress or the presidency, obtain a response of love and natural deference from the people whether they get the offices or no ... when it is better to be a bound booby and rogue in office at a high salary than the poorest free mechanic or farmer with his hat unmoved from his head and firm eyes and a candid and generous heart ... and when servility by town or state or the federal government or any oppression on a large scale or small scale can be tried on without its own punishment following duly after in exact proportion against the smallest chance of escape ... or rather when all life and all the souls of men and women are discharged from any part of the earth—then only shall the instinct of liberty be discharged from that part of the earth.

As the attributes of the poets of the kosmos concentrate in the real body and soul and in the pleasure of things they possess the superiority of genuineness over all fiction and romance. As they emit themselves facts are showered over with light ... the daylight is lit with more volatile light ... also the deep between the setting and rising sun goes deeper many fold. Each precise object or condition or combination or process exhibits a beauty ... the multiplication table its—old age its—the carpenter's trade its—the grand opera its—the hugehulled cleanshaped New-York clipper at sea under steam or full sail gleams with unmatched beauty.... the American circles and large harmonies of government gleam with theirs ... and the commonest definite intentions and actions with theirs. The poets of the kosmos advance through all interpositions and coverings and turmoils and stratagems to first principles. They are of use ... they dissolve poverty from its need and riches from its

conceit. You large proprietor, they say, shall not realize or perceive more than any one else. The owner of the library is not he who holds a legal title to it having bought and paid for it. Any one and every one is owner of the library who can read the same through all the varieties of tongues and subjects and styles, and in whom they enter with ease and take residence and force toward paternity and maternity, and make supple and powerful and rich and large.... These American states strong and healthy and accomplished shall receive no pleasure from violations of natural models and must not permit them. In paintings or mouldings or carvings in mineral or wood, or in the illustrations of books and newspapers, or in any comic or tragic prints, or in the patterns of woven stuffs or anything to beautify rooms or furniture or costumes, or to put upon cornices or monuments or on the prows or sterns of ships, or to put anywhere before the human eye indoors or out, that which distorts honest shapes or which creates unearthly beings or places or contingencies, is a nuisance and revolt. Of the human form especially, it is so great it must never be made ridiculous. Of ornaments to a work nothing outré can be allowed ... but those ornaments can be allowed that conform to the perfect facts of the open air, and that flow out of the nature of the work and come irrepressibly from it and are necessary to the completion of the work. Most works are most beautiful without ornament ... Exaggerations will be revenged in human physiology. Clean and vigorous children are jetted and conceived only in those communities where the models of natural forms are public every day ... Great genius and the people of these states must never be demeaned to romances. As soon as histories are properly told there is no more need of romances.

The great poets are also to be known by the absence in them of tricks and by the justification of perfect personal candor. Then folks echo a new cheap joy and a divine voice leaping from their brains: How beautiful is candor! All faults may be forgiven of him who has perfect candor. Henceforth let no man of us lie, for we have seen that openness wins the inner and outer world and that there is no single exception, and that never since our earth gathered itself in a mass have deceit or subterfuge or prevarication attracted its smallest particle or the faintest tinge of a shade—and that through the enveloping wealth and rank of a state or the whole republic of states a sneak or sly person shall be discovered and despised ... and that the soul has never once

been fooled and never can be fooled ... and thrift without the loving nod of the soul is only a foetid puff ... and there never grew up in any of the continents of the globe nor upon any planet or satellite or star, nor upon the asteroids, nor in any part of ethereal space, nor in the midst of density, nor under the fluid wet of the sea, nor in that condition which precedes the birth of babes, nor at any time during the changes of life, nor in that condition that follows what we term death, nor in any stretch of abeyance or action afterward of vitality, nor in any process of formation or reformation anywhere, a being whose instinct hated the truth.

Extreme caution or prudence, the soundest organic health, large hope and comparison and fondness for women and children, large alimentiveness and destructiveness and causality, with a perfect sense of the oneness of nature and the propriety of the same spirit applied to human affairs ... these are called up of the float of the brain of the world to be parts of the greatest poet from his birth out of his mother's womb and from her birth out of her mother's. Caution seldom goes far enough. It has been thought that the prudent citizen was the citizen who applied himself to solid gains and did well for himself and for his family and completed a lawful life without debt or crime. The greatest poet sees and admits these economies as he sees the economies of food and sleep, but has higher notions of prudence than to think he gives much when he gives a few slight attentions at the latch of the gate. The premises of the prudence of life are not the hospitality of it or the ripeness and harvest of it. Beyond the independence of a little sum laid aside for burial-money, and of a few clapboards around and shingles overhead on a lot of American soil owned, and the easy dollars that supply the year's plain clothing and meals, the melancholy prudence of the abandonment of such a great being as a man is to the toss and pallor of years of money-making with all their scorching days and icy nights and all their stifling deceits and underhanded dodgings, or infinitesimals of parlors, or shameless stuffing while others starve ... and all the loss of the bloom and odor of the earth and of the flowers and atmosphere and of the sea, and of the true taste of the women and men you pass or have to do with in youth or middle age, and the issuing sickness and desperate revolt at the close of a life without elevation or naivete, and the ghastly chatter of a death without serenity or majesty, is the great fraud upon modern civilization and forethought, blotching the surface

and system which civilization undeniably drafts, and moistening with tears the immense features it spreads and spreads with such velocity before the reached kisses of the soul.... Still the right explanation remains to be made about prudence. The prudence of the mere wealth and respectability of the most esteemed life appears too faint for the eye to observe at all when little and large alike drop quietly aside at the thought of the prudence suitable for immortality. What is wisdom that fills the thinness of a year or seventy or eighty years to wisdom spaced out by ages and coming back at a certain time with strong reinforcements and rich presents and the clear faces of wedding-guests as far as you can look in every direction, running gaily toward you? Only the soul is of itself ... all else has reference to what ensues. All that a person does or thinks is of consequence. Not a move can a man or woman make that effects him or her in a day or a month or any part of the direct lifetime or the hour of death but the same affects him or her onward afterward through the indirect lifetime. The indirect is always as great and real as the direct. The spirit receives from the body just as much as it gives to the body. Not one name of word or deed ... not of venereal sores or discolorations ... not the privacy of the onanist ... not of the putrid veins of gluttons or rumdrinkers ... not speculation or cunning or betrayal or murder ... no serpentine poison of those that seduce women ... not the foolish yielding of women ... not prostitution ... not of any depravity of young men ... not of the attainment of gain by discreditable means ... not any nastiness of appetite ... not any harshness of officers to men or judges to prisoners or fathers to sons or sons to fathers or of husbands to wives or bosses to their boys ... not of greedy looks or malignant wishes ... nor any of the wiles practised by people upon themselves ... ever is or ever can be stamped on the programme but it is duly realized and returned, and that returned in further performances ... and they returned again. Nor can the push of charity or personal force ever be anything else than the profoundest reason, whether it bring argument to hand or no. No specification is necessary ... to add or subtract or divide is in vain. Little or big, learned or unlearned, white or black, legal or illegal, sick or well, from the first inspiration down the windpipe to the last expiration out of it, all that a male or female does that is vigorous and benevolent and clean is so much sure profit to him or her in the unshakable order of the universe and through the whole scope of it for ever. If the savage or felon is wise it is well ... if the greatest poet or savan is wise it is simply the same ... if the

President or chief justice is wise it is the same ... if the young mechanic or farmer is wise it is no more or less ... if the prostitute is wise it is no more nor less. The interest will come round ... all will come round. All the best actions of war and peace ... all help given to relatives and strangers and the poor and old and sorrowful and young children and widows and the sick, and to all shunned persons ... all furtherance of fugitives and of the escape of slaves ... all the self-denial that stood steady and aloof on wrecks and saw others take the seats of the boats ... all offering of substance or life for the good old cause, or for a friend's sake or opinion's sake ... all pains of enthusiasts scoffed at by their neighbors ... all the vast sweet love and precious sufferings of mothers ... all honest men baffled in strifes recorded or unrecorded ... all the grandeur and good of the few ancient nations whose fragments of annals we inherit ... and all the good of the hundreds of far mightier and more ancient nations unknown to us by name or date or location ... all that was ever manfully begun, whether it succeeded or no ... all that has at any time been well suggested out of the divine heart of man or by the divinity of his mouth or by the shaping of his great hands ... and all that is well thought or done this day on any part of the surface of the globe ... or on any of the wandering stars or fixed stars by those there as we are here ... or that is henceforth to be well thought or done by you whoever you are, or by any one—these singly and wholly inured at their time and inure now and will inure always to the identities from which they sprung or shall spring ... Did you guess any of them lived only its moment? The world does not so exist ... no parts palpable or impalpable so exist ... no result exists now without being from its long antecedent result, and that from its antecedent, and so backward without the farthest mentionable spot coming a bit nearer the beginning than any other spot.... Whatever satisfies the soul is truth. The prudence of the greatest poet answers at last the craving and glut of the soul, is not contemptuous of less ways of prudence if they conform to its ways, puts off nothing, permits no let-up for its own case or any case, has no particular sabbath or judgment-day, divides not the living from the dead or the righteous from the unrighteous, is satisfied with the present, matches every thought or act by its correlative, knows no possible forgiveness or deputed atonement ... knows that the young man who composedly perilled his life and lost it has done exceeding well for himself, while the man who has not perilled his life and retains to old age in riches and ease has perhaps achieved

nothing for himself worth mentioning ... and that only that person has no great prudence to learn who has learnt to prefer real longlived things, and favors body and soul the same, and perceives the indirect assuredly following the direct, and what evil or good he does leaping onward and waiting to meet him again—and who in his spirit in any emergency whatever neither hurries or avoids death.

The direct trial of him who would be the greatest poet is to-day. If he does not flood himself with the immediate age as with vast oceanic tides ... and if he does not attract his own land body and soul to himself, and hang on its neck with incomparable love and plunge his Semitic muscle into its merits and demerits ... and if he be not himself the age transfigured ... and if to him is not opened the eternity which gives similitude to all periods and locations and processes and animate and inanimate forms, and which is the bond of time, and rises up from its inconceivable vagueness and infiniteness in the swimming shape of to-day, and is held by the ductile anchors of life, and makes the present spot the passage from what was to what shall be, and commits itself to the representation of this wave of an hour and this one of the sixty beautiful children of the wave—let him merge in the general run and wait his development.... Still the final test of poems or any character or work remains. The prescient poet projects himself centuries ahead and judges performer or performance after the changes of time. Does it live through them? Does it still hold on untired? Will the same style and the direction of genius to similar points be satisfactory now? Has no new discovery in science or arrival at superior planes of thought and judgment and behavior fixed him or his so that either can be looked down upon? Have the marches of tens and hundreds and thousands of years made willing detours to the right hand and the left hand for his sake? Is he beloved long and long after he is buried? Does the young man think often of him? and the young woman think often of him? and do the middle aged and the old think of him?

A great poem is for ages and ages in common, and for all degrees and complexions, and all departments and sects, and for a woman as much as a man and a man as much as a woman. A great poem is no finish to a man or woman but rather a beginning. Has any one fancied he could sit at last under some due authority and rest satisfied with explanations and realize and be

content and full? To no such terminus does the greatest poet bring ... he brings neither cessation or sheltered fatness and ease. The touch of him tells in action. Whom he takes he takes with firm sure grasp into live regions previously unattained ... thenceforward is no rest ... they see the space and ineffable sheen that turn the old spots and lights into dead vacuums. The companion of him beholds the birth and progress of stars and learns one of the meanings. Now there shall be a man cohered out of tumult and chaos ... the elder encourages the younger and shows him how ... they too shall launch off fearlessly together till the new world fits an orbit for itself and looks unabashed on the lesser orbits of the stars and sweeps through the ceaseless rings and shall never be quiet again.

There will soon be no more priests. Their work is done. They may wait awhile ... perhaps a generation or two ... dropping off by degrees. A superior breed shall take their place ... the gangs of kosmos and prophets *en masse* shall take their place. A new order shall arise and they shall be the priests of man, and every man shall be his own priest. The churches built under their umbrage shall be the churches of men and women. Through the divinity of themselves shall the kosmos and the new breed of poets be interpreters of men and women and of all events and things. They shall find their inspiration in real objects to-day, symptoms of the past and future.... They shall not deign to defend immortality or God or the perfection of things or liberty or the exquisite beauty and reality of the soul. They shall arise in America and be responded to from the remainder of the earth.

The English language befriends the grand American expression ... it is brawny enough and limber and full enough ... on the tough stock of a race who through all change of circumstance was never without the idea of political liberty, which is the animus of all liberty, it has attracted the terms of daintier and gayer and subtler and more elegant tongues. It is the powerful language of resistance ... it is the dialect of common sense. It is the speech of the proud and melancholy races and of all who aspire. It is the chosen tongue to express growth faith self-esteem freedom justice equality friendliness amplitude prudence decision and courage. It is the medium that shall well nigh express the inexpressible.

No great literature nor any like style of behavior or oratory or social intercourse or household arrangements or public institutions or the treatment of bosses of employed people, nor executive detail or detail of the army and navy, nor spirit of legislation or courts or police or tuition or architecture or songs or amusements or the costumes of young men, can long elude the jealous and passionate instinct of American standards. Whether or no the sign appears from the mouths of the people, it throbs a live interrogation in every freeman's and freewoman's heart after that which passes by or this built to remain. Is it uniform with my country? Are its disposals without ignominious distinctions? Is it for the ever growing communes of brothers and lovers, large, well-united, proud beyond the old models, generous beyond all models? Is it something grown fresh out of the fields or drawn from the sea for use to me today here? I know that what answers for me an American must answer for any individual or nation that serves for a part of my materials. Does this answer? or is it without reference to universal needs? or sprung of the needs of the less developed society of special ranks? or old needs of pleasure overlaid by modern science or forms? Does this acknowledge liberty with audible and absolute acknowledgment, and set slavery at nought for life and death? Will it help breed one goodshaped and wellhung man, and a woman to be his perfect and independent mate? Does it improve manners? Is it for the nursing of the young of the republic? Does it solve readily with the sweet milk of the nipples of the breasts of the mother of many children? Has it too the old ever-fresh forbearance and impartiality? Does it look for the same love on the last born and on those hardening toward stature, and on the errant, and on those who disdain all strength of assault outside their own?

The poems distilled from other poems will probably pass away. The coward will surely pass away. The expectation of the vital and great can only be satisfied by the demeanor of the vital and great. The swarms of the polished deprecating and reflectors and the polite float off and leave no remembrance. America prepares with composure and goodwill for the visitors that have sent word. It is not intellect that is to be their warrant and welcome. The talented, the artist, the ingenious, the editor, the statesman, the erudite ... they are not unappreciated ... they fall in their place and do their work. The soul of the nation also does its work. No disguise can pass on it ... no disguise can conceal from it. It rejects none, it permits all. Only towards as good as itself

and toward the like of itself will it advance half-way. An individual is as superb as a nation when he has the qualities which make a superb nation. The soul of the largest and wealthiest and proudest nation may well go half-way to meet that of its poets. The signs are effectual. There is no fear of mistake. If the one is true the other is true. The proof of a poet is that his country absorbs him as affectionately as he has absorbed it.

[Footnote A: Walt Whitman (1819-1892), the most original of American poets, was born in West Hills, Long Island, educated in the Brooklyn Public Schools, and apprenticed to a printer. As a youth he taught in a country school, and later went into journalism in New York, Brooklyn, and New Orleans. The first edition of "Leaves of Grass" appeared in 1855, with the remarkable preface here printed. During the war he acted as a volunteer nurse in the army hospitals, and, when it closed, he became a clerk in the government service at Washington. He continued to write almost till his death.]

INTRODUCTION TO THE HISTORY OF ENGLISH LITERATURE

BY HIPPOLYTE ADOLPHE TAINE. (1863)[A]

I

History, within a hundred years in Germany, and within sixty years in France, has undergone a transformation owing to a study of literatures.

The discovery has been made that a literary work is not a mere play of the imagination, the isolated caprice of an excited brain, but a transcript of contemporary manners and customs and the sign of a particular state of intellect. The conclusion derived from this is that, through literary monuments, we can retrace the way in which men felt and thought many centuries ago. This method has been tried and found successful.

We have meditated over these ways of feeling and thinking and have accepted them as facts of prime significance. We have found that they were dependent on most important events, that they explain these, and that these explain them, and that henceforth it was necessary to give them their place in history, and one of the highest. This place has been assigned to them, and hence all is changed in history—the aim, the method, the instrumentalities, and the conceptions of laws and of causes. It is this change as now going on, and which must continue to go on, that is here attempted to be set forth.

On turning over the large stiff pages of a folio volume, or the yellow leaves of a manuscript, in short, a poem, a code of laws, a confession of faith, what is your first comment? You say to yourself that the work before you is not of its own creation. It is simply a mold like a fossil shell, an imprint similar to

one of those forms embedded in a stone by an animal which once lived and perished. Beneath the shell was an animal and behind the document there was a man. Why do you study the shell unless to form some idea of the animal? In the same way do you study the document in order to comprehend the man; both shell and document are dead fragments and of value only as indications of the complete living being. The aim is to reach this being; this is what you strive to reconstruct. It is a mistake to study the document as if it existed alone by itself. That is treating things merely as a pedant, and you subject yourself to the illusions of a book-worm. At bottom mythologies and languages are not existences; the only realities are human beings who have employed words and imagery adapted to their organs and to suit the original cast of their intellects. A creed is nothing in itself. Who made it? Look at this or that portrait of the sixteenth century, the stern, energetic features of an archbishop or of an English martyr. Nothing exists except through the individual; it is necessary to know the individual himself. Let the parentage of creeds be established, or the classification of poems, or the growth of constitutions, or the transformations of idioms, and we have only cleared the ground. True history begins when the historian has discerned beyond the mists of ages the living, active man, endowed with passions, furnished with habits, special in voice, feature, gesture and costume, distinctive and complete, like anybody that you have just encountered in the street. Let us strive then, as far as possible, to get rid of this great interval of time which prevents us from observing the man with our eyes, *the eyes of our own head*. What revelations do we find in the calendared leaves of a modern poem? A modern poet, a man like De Musset, Victor Hugo, Lamartine, or Heine, graduated from a college and traveled, wearing a dress-coat and gloves, favored by ladies, bowing fifty times and uttering a dozen witticisms in an evening, reading daily newspapers, generally occupying an apartment on the second story, not over-cheerful on account of his nerves, and especially because, in this dense democracy in which we stifle each other, the discredit of official rank exaggerates his pretensions by raising his importance, and, owing to the delicacy of his personal sensations, leading him to regard himself as a Deity. Such is what we detect behind modern *meditations and sonnets*.

Again, behind a tragedy of the seventeenth century there is a poet, one, for

example, like Racine, refined, discreet, a courtier, a fine talker, with majestic perruque and ribboned shoes, a monarchist and zealous Christian, "God having given him the grace not to blush in any society on account of zeal for his king or for the Gospel," clever in interesting the monarch, translating into proper French "the *gaulois* of Amyot," deferential to the great, always knowing how to keep his place in their company, assiduous and respectful at Marly as at Versailles, amid the formal creations of a decorative landscape and the reverential bows, graces, intrigues, and fineness of the braided seigniors Who get up early every morning to obtain the reversion of an office, together with the charming ladies who count on their fingers the pedigrees which entitle them to a seat on a footstool. On this point consult Saint-Simon and the engravings of Perelle, the same as you have just consulted Balzac and the water-color drawings of Eugene Lami.

In like manner, on reading a Greek tragedy, our first care is to figure to ourselves the Greeks, that is to say, men who lived half-naked in the gymnasiums or on a public square under a brilliant sky, in full view of the noblest and most delicate landscape, busy in rendering their bodies strong and agile, in conversing together, in arguing, in voting, in carrying out patriotic piracies, and yet idle and temperate, the furniture of their houses consisting of three earthen jars and their food of two pots of anchovies preserved in oil, served by slaves who afford them the time to cultivate their minds and to exercise their limbs, with no other concern than that of having the most beautiful city, the most beautiful processions, the most beautiful ideas, and the most beautiful men. In this respect, a statue like the "Meleager" or the "Theseus" of the Parthenon, or again a sight of the blue and lustrous Mediterranean, resembling a silken tunic out of which islands arise like marble bodies, together with a dozen choice phrases selected from the works of Plato and Aristophanes, teach us more than any number of dissertations and commentaries.

And so again, in order to understand an Indian Purana, one must begin by imagining the father of a family who, "having seen a son on his son's knees," follows the law and, with ax and pitcher, seeks solitude under a banyan tree, talks no more, multiplies his fastings, lives naked with four fires around him under the fifth fire, that terrible sun which endlessly devours and resuscitates

all living things; who fixes his imagination in turn for weeks at a time on the foot of Brahma, then on his knee, on his thigh, on his navel, and so on, until, beneath the strain of this intense meditation, hallucinations appear, when all the forms of being, mingling together and transformed into each other, oscillate to and fro in this vertiginous brain until the motionless man, with suspended breath and fixed eyeballs, beholds the universe melting away like vapor over the vacant immensity of the Being in which he hopes for absorption. In this case the best of teachings would be a journey in India; but, for lack of a better one, take the narratives of travelers along with works in geography, botany, and ethnology. In any event, there must be the same research. A language, a law, a creed, is never other than an abstraction; the perfect thing is found in the active man, the visible corporeal figure which eats, walks, fights, and labors. Set aside the theories of constitutions and their results, of religions and their systems, and try to observe men in their workshops or offices, in their fields along with their own sky and soil, with their own homes, clothes, occupations and repasts, just as you see them when, on landing in England or in Italy, you remark their features and gestures, their roads and their inns, the citizen on his promenades and the workman taking a drink. Let us strive as much as possible to supply the place of the actual, personal, sensible observation that is no longer practicable, this being the only way in which we can really know the man; let us make the past present; to judge of an object it must be present; no experience can be had of what is absent. Undoubtedly, this sort of reconstruction is always imperfect; only an imperfect judgment can be based on it; but let us do the best we can; incomplete knowledge is better than none at all, or than knowledge which is erroneous, and there is no other way of obtaining knowledge approximatively of bygone times than by *seeing* approximatively the men of former times.

Such is the first step in history. This step was taken in Europe at the end of the last century when the imagination took fresh flight under the auspices of Lessing and Walter Scott, and a little later in France under Chateaubriand, Augustin Thierry, Michelet, and others. We now come to the second step.

II

On observing the visible man with your own eyes what do you try to find in him? The invisible man. These words which your ears catch, those gestures, those airs of the head, his attire and sensible operations of all kinds, are, for you, merely so many expressions; these express something, a soul. An inward man is hidden beneath the outward man, and the latter simply manifests the former. You have observed the house in which he lives, his furniture, his costume, in order to discover his habits and tastes, the degree of his refinement or rusticity, his extravagance or economy, his follies or his cleverness. You have listened to his conversation and noted the inflexions of his voice, the attitudes he has assumed, so as to judge of his spirit, self-abandonment or gayety, his energy or his rigidity. You consider his writings, works of art, financial and political schemes, with a view to measure the reach and limits of his intelligence, his creative power and self-command, to ascertain the usual order, kind, and force of his conceptions, in what way he thinks and how he resolves. All these externals are so many avenues converging to one center, and you follow these only to reach that center; here is the real man, namely, that group of faculties and of sentiments which produces the rest. Behold a new world, an infinite world; for each visible action involves an infinite train of reasonings and emotions, new or old sensations which have combined to bring this into light and which, like long ledges of rock sunk deep in the earth, have cropped out above the surface and attained their level. It is this subterranean world which forms the second aim, the special object of the historian. If his critical education suffices, he is able to discriminate under every ornament in architecture, under every stroke of the brush in a picture, under each phrase of literary composition, the particular sentiment out of which the ornament, the stroke, and the phrase have sprung; he is a spectator of the inward drama which has developed itself

in the breast of the artist or writer; the choice of words, the length or shortness of the period, the species of metaphor, the accent of a verse, the chain of reasoning—all are to him an indication; while his eyes are reading the text his mind and soul are following the steady flow and ever-changing series of emotions and conceptions from which this text has issued; he is working out its *psychology*. Should you desire to study this operation, regard the promoter and model of all the high culture of the epoch, Goethe, who, before composing his "Iphigenia" spent days in making drawings of the most perfect statues and who, at last, his eyes filled with the noble forms of antique scenery and his mind penetrated by the harmonious beauty of antique life, succeeded in reproducing internally, with such exactness, the habits and yearnings of Greek imagination as to provide us with an almost twin sister of the "Antigone" of Sophocles and of the goddesses of Phidias. This exact and demonstrated divination of bygone sentiments has, in our days, given a new life to history. There was almost complete ignorance of this in the last century; men of every race and of every epoch were represented as about alike, the Greek, the barbarian, the Hindoo, the man of the Renaissance and the man of the eighteenth century, cast in the same mold and after the same pattern, and after a certain abstract conception which served for the whole human species. There was a knowledge of man but not of men. There was no penetration into the soul itself; nothing of the infinite diversity and wonderful complexity of souls had been detected; it was not known that the moral organization of a people or of an age is as special and distinct as the physical structure of a family of plants or of an order of animals. History to-day, like zoölogy, has found its anatomy, and whatever branch of it is studied, whether philology, languages or mythologies, it is in this way that labor must be given to make it produce new fruit. Among so many writers who, since Herder, Ottfried Müller, and Goethe have steadily followed and rectified this great effort, let the reader take two historians and two works, one "The Life and Letters of Cromwell" by Carlyle, and the other the "Port Royal" of Sainte-Beuve. He will see how precisely, how clearly, and how profoundly we detect the soul of a man beneath his actions and works; how, under an old general and in place of an ambitious man vulgarly hypocritical, we find one tormented by the disordered reveries of a gloomy imagination, but practical in instinct and faculties, thoroughly English and strange and incomprehensible to whoever has not studied the climate and the race; how,

with about a hundred scattered letters and a dozen or more mutilated speeches, we follow him from his farm and his team to his general's tent and to his Protector's throne, in his transformation and in his development, in his struggles of conscience and in his statesman's resolutions, in such a way that the mechanism of his thought and action becomes visible and the ever renewed and fitful tragedy, within which wracked this great gloomy soul, passes like the tragedies of Shakespeare into the souls of those who behold them. We see how, behind convent disputes and the obstinacy of nuns, we recover one of the great provinces of human psychology; how fifty or more characters, rendered invisible through the uniformity of a narration careful of the proprieties, came forth in full daylight, each standing out clear in its countless diversities; how, underneath theological dissertations and monotonous sermons, we discern the throbbings of ever-breathing hearts, the excitements and depressions of the religious life, the unforeseen reaction and pell-mell stir of natural feeling, the infiltrations of surrounding society, the intermittent triumphs of grace, presenting so many shades of difference that the fullest description and most flexible style can scarcely garner in the vast harvest which the critic has caused to germinate in this abandoned field. And the same elsewhere. Germany, with its genius, so pliant, so broad, so prompt in transformations, so fitted for the reproduction of the remotest and strangest states of human thought; England, with its matter-of-fact mind, so suited to the grappling with moral problems, to making them clear by figures, weights, and measures, by geography and statistics, by texts and common sense; France, at length, with its Parisian culture and drawing-room habits, with its unceasing analysis of characters and of works, with its ever ready irony at detecting weaknesses, with its skilled finesse in discriminating shades of thought—all have plowed over the same ground, and we now begin to comprehend that no region of history exists in which this deep sub-soil should not be reached if we would secure adequate crops between the furrows.

Such is the second step, and we are now in train to follow it out. Such is the proper aim of contemporary criticism. No one has done this work so judiciously and on so grand a scale as Sainte-Beuve; in this respect, we are all his pupils; literary, philosophic, and religious criticism in books, and even in the newspapers, is to-day entirely changed by his method. Ulterior evolution

must start from this point. I have often attempted to expose what this evolution is; in my opinion, it is a new road open to history and which I shall strive to describe more in detail.

III

After having observed in a man and noted down one, two, three, and then a multitude of sentiments, do these suffice and does your knowledge of him seem complete? Does a memorandum book constitute a psychology? It is not a psychology, and here, as elsewhere, the search for causes must follow the collection of facts. It matters not what the facts may be, whether physical or moral, they always spring from causes; there are causes for ambition, for courage, for veracity, as well as for digestion, for muscular action, and for animal heat. Vice and virtue are products like vitriol and sugar; every complex fact grows out of the simple facts with which it is affiliated and on which it depends. We must therefore try to ascertain what simple facts underlie moral qualities the same as we ascertain those that underlie physical qualities, and, for example, let us take the first fact that comes to hand, a religious system of music, that of a Protestant church. A certain inward cause has inclined the minds of worshipers toward these grave, monotonous melodies, a cause much greater than its effect; that is to say, a general conception of the veritable outward forms of worship which man owes to God; it is this general conception which has shaped the architecture of the temple, cast out statues, dispensed with paintings, effaced ornaments, shortened ceremonies, confined the members of a congregation to high pews which cut off the view, and governed the thousand details of decoration, posture, and all other externals. This conception itself again proceeds from a more general cause, an idea of human conduct in general, inward and outward, prayers, actions, dispositions of every sort that man is bound to maintain toward the Deity; it is this which has enthroned the doctrine of grace, lessened the importance of the clergy, transformed the sacraments, suppressed observances, and changed the religion of discipline into one of morality. This conception, in its turn, depends on a third one, still more

general, that of moral perfection as this is found in a perfect God, the impeccable judge, the stern overseer, who regards every soul as sinful, meriting punishment, incapable of virtue or of salvation, except through a stricken conscience which He provokes and the renewal of the heart which He brings about. Here is the master conception, consisting of duty erected into the absolute sovereign of human life, and which prostrates all other ideals at the feet of the moral ideal. Here we reach what is deepest in man; for, to explain this conception, we must consider the race he belongs to, say the German, the Northman, the formation and character of his intellect, his ways in general of thinking and feeling, that tardiness and frigidity of sensation which keeps him from rashly and easily falling tunder the empire of sensual enjoyments, that bluntness of taste, that irregularity and those outbursts of conception which arrest in him the birth of refined and harmonious forms and methods; that disdain of appearances, that yearning for truth, that attachment to abstract, bare ideas which develop conscience in him at the expense of everything else. Here the search comes to an end. We have reached a certain primitive disposition, a particular trait belonging to sensations of all kinds, to every conception peculiar to an age or to a race, to characteristics inseparable from every idea and feeling that stir in the human breast. Such are the grand causes, for these are universal and permanent causes, present in every case and at every moment, everywhere and always active, indestructible, and inevitably dominant in the end, since, whatever accidents cross their path being limited and partial, end in yielding to the obscure and incessant repetition of their energy; so that the general structure of things and all the main features of events are their work, all religions and philosophies, all poetic and industrial systems, all forms of society and of the family, all, in fine, being imprints bearing the stamp of their seal.

IV

There is, then, a system in human ideas and sentiments, the prime motor of which consists in general traits, certain characteristics of thought and feeling common to men belonging to a particular race, epoch, or country. Just as crystals in mineralogy, whatever their diversity, proceed from a few simple physical forms, so do civilizations in history, however these may differ, proceed from a few spiritual forms. One is explained by a primitive geometrical element as the other is explained by a primitive psychological element. In order to comprehend the entire group of mineralogical species we must first study a regular solid in the general, its facets and angles, and observe in this abridged form the innumerable transformations of which it is susceptible. In like manner, if we would comprehend the entire group of historic varieties we must consider beforehand a human soul in the general, with its two or three fundamental faculties, and, in this abridgment, observe the principal forms it may present. This sort of ideal tableau, the geometrical as well as psychological, is not very complex, and we soon detect the limitations of organic conditions to which civilizations, the same as crystals, are forcibly confined. What do we find in man at the point of departure? Images or representations of objects, namely, that which floats before him internally, lasts a certain time, is effaced, and then returns after contemplating this or that tree or animal, in short, some sensible object. This forms the material basis of the rest and the development of this material basis is twofold, speculative or positive, just as these representations end in *ageneral conception* or in *anactive resolution*. Such is man, summarily abridged. It is here, within these narrow confines, that human diversities are encountered, now in the matter itself and again in the primordial twofold development. However insignificant in the elements they are of vast significance in the mass, while the slightest change in the factors leads to gigantic changes in the

results. According as the representation is distinct, as if stamped by a coining-press, or confused and blurred; according as it concentrates in itself a larger or smaller number of the characters of an object; according as it is violent and accompanied with impulsions or tranquil and surrounded with calmness, so are all the operations and the whole running-gear of the human machine entirely transformed. In like manner, again, according as the ulterior development of the representation varies, so does the whole development of the man vary. If the general conception in which this ends is merely a dry notation in Chinese fashion, language becomes a kind of algebra, religion and poetry are reduced to a minimum, philosophy is brought down to a sort of moral and practical common sense, science to a collection of recipes, classifications, and utilitarian mnemonics, the mind itself taking a whole positive turn. If, on the contrary, the general conception in which the representation culminates is a poetic and figurative creation, a living symbol, as with the Aryan races, language becomes a sort of shaded and tinted epic in which each word stands as a personage, poesy and religion assume magnificent and inexhaustible richness, and metaphysics develops with breadth and subtlety without any consideration of positive bearings; the whole intellect, notwithstanding the deviation and inevitable weaknesses of the effort, is captivated by the beautiful and sublime, thus conceiving an ideal type which, through its nobleness and harmony, gathers to itself all the affections and enthusiasms of humanity. If, on the other hand, the general conception in which the representation culminates is poetic but abrupt, is reached not gradually but by sudden intuition, if the original operation is not a regular development but a violent explosion—then, as with the semitic races, metaphysical power is wanting; the religious conception becomes that of a royal God, consuming and solitary; science cannot take shape, the intellect grows rigid and too headstrong to reproduce the delicate ordering of nature; poetry cannot give birth to aught but a series of vehement, grandiose exclamations, while language no longer renders the concatenation of reasoning and eloquence, man being reduced to lyric enthusiasm, to ungovernable passion, and to narrow and fanatical action. It is in this interval between the particular representation and the universal conception that the germs of the greatest human differences are found. Some races, like the classic, for example, pass from the former to the latter by a graduated scale of ideas regularly classified and more and more general; others, like the

Germanic, traverse the interval in leaps, with uniformity and after prolonged and uncertain groping. Others, like the Romans and the English, stop at the lowest stages; others, like the Hindoos and Germans, mount to the uppermost.

If, now, after considering the passage from the representation to the idea, we regard the passage from the representation to the resolution, we find here elementary differences of like importance and of the same order, according as the impression is vivid, as in Southern climes, or faint, as in Northern climes, as it ends in instantaneous action as with barbarians, or tardily as with civilized nations, as it is capable or not of growth, of inequality, of persistence and of association. The entire system of human passion, all the risks of public peace and security, all labor and action, spring from these sources. It is the same with the other primordial differences; their effects embrace an entire civilization, and may be likened to those algebraic formulæ which, within narrow bounds, describe beforehand the curve of which these form the law. Not that this law always prevails to the end; sometimes, perturbations arise, but, even when this happens, it is not because the law is defective, but because it has not operated alone. New elements have entered into combination with old ones; powerful foreign forces have interfered to oppose primitive forces. The race has emigrated, as with the ancient Aryans, and the change of climate has led to a change in the whole intellectual economy and structure of society. A people has been conquered like the Saxon nation, and the new political structure has imposed on its customs, capacities, and desires which it did not possess. The nation has established itself permanently in the midst of downtrodden and threatening subjects, as with the ancient Spartans, while the necessity of living, as in an armed encampment, has violently turned the whole moral and social organization in one unique direction. At all events, the mechanism of human history is like this. We always find the primitive mainspring consisting of some widespread tendency of soul and intellect, either innate and natural to the race or acquired by it and due to some circumstance forced upon it. These great given mainsprings gradually produce their effects, that is to say, at the end of a few centuries they place the nation in a new religious, literary, social, and economic state; a new condition which, combined with their renewed effort, produces another condition, sometimes a good one, sometimes a bad one,

now slowly, now rapidly, and so on; so that the entire development of each distinct civilization may be considered as the effect of one permanent force which, at every moment, varies its work by modifying the circumstances where it acts.

V

Three different sources contribute to the production of this elementary moral state, *race*, *environment*, and *epoch*. What we call *race* consists of those innate and hereditary dispositions which man brings with him into the world and which are generally accompanied with marked differences of temperament and of bodily structure. They vary in different nations.

Naturally, there are varieties of men as there are varieties of cattle and horses, some brave and intelligent, and others timid and of limited capacity; some capable of superior conceptions and creations, and others reduced to rudimentary ideas and contrivances; some specially fitted for certain works, and more richly furnished with certain instincts, as we see in the better endowed species of dogs, some for running and others for fighting, some for hunting and others for guarding houses and flocks. We have here a distinct force; so distinct that, in spite of the enormous deviations which both the other motors impress upon it, we still recognize, and which a race like the Aryan people, scattered from the Ganges to the Hebrides, established under all climates, ranged along every degree of civilization, transformed by thirty centuries of revolutions, shows nevertheless in its languages, in its religions, in its literatures, and in its philosophies, the community of blood and of intellect which still to-day binds together all its offshoots. However they may differ, their parentage is not lost; barbarism, culture and grafting, differences of atmosphere and of soil, fortunate or unfortunate occurrences, have operated in vain; the grand characteristics of the original form have lasted, and we find that the two or three leading features of the primitive imprint are again apparent under the subsequent imprints with which time has overlaid them. There is nothing surprising in this extraordinary tenacity. Although the immensity of the distance allows us to catch only a glimpse in a dubious light

of the origin of species,[1] the events of history throw sufficient light on events anterior to history to explain the almost unshaken solidity of primordial traits. At the moment of encountering them, fifteen, twenty, and thirty centuries before our era, in an Aryan, Egyptian, or Chinese, they represent the work of a much greater number of centuries, perhaps the work of many myriads of centuries. For, as soon as an animal is born it must adapt itself to its surroundings; it breathes in another way, it renews itself differently, it is otherwise stimulated according as the atmosphere, the food, and the temperature are different. A different climate and situation create different necessities and hence activities of a different kind; and hence, again, a system of different habits, and, finally, a system of different aptitudes and instincts. Man, thus compelled to put himself in equilibrium with circumstances, contracts a corresponding temperament and character, and his character, like his temperament, are acquisitions all the more stable because of the outward impression being more deeply imprinted in him by more frequent repetitions and transmitted to his offspring by more ancient heredity. So that at each moment of time the character of a people may be considered as a summary of all antecedent actions and sensations; that is to say, as a quantity and as a weighty mass, not infinite,[2] since all things in nature are limited, but disproportionate to the rest and almost impossible to raise, since each minute of an almost infinite past has contributed to render it heavier, and, in order to turn the scale, it would require, on the other side, a still greater accumulation of actions and sensations. Such is the first and most abundant source of these master faculties from which historic events are derived; and we see at once that if it is powerful it is owing to its not being a mere source, but a sort of lake, and like a deep reservoir wherein other sources have poured their waters for a multitude of centuries.

When we have thus verified the internal structure of a race we must consider the *environment* in which it lives. For man is not alone in the world; nature envelops him and other men surround him; accidental and secondary folds come and overspread the primitive and permanent fold, while physical or social circumstances derange or complete the natural groundwork surrendered to them. At one time climate has had its effect. Although the history of Aryan nations can be only obscurely traced from their common country to their final abodes, we can nevertheless affirm that the profound

difference which is apparent between the Germanic races on the one hand, and the Hellenic and Latin races on the other, proceeds in great part from the differences between the countries in which they have established themselves—the former in cold and moist countries, in the depths of gloomy forests and swamps, or on the borders of a wild ocean, confined to melancholic or rude sensations, inclined to drunkenness and gross feeding, leading a militant and carnivorous life; the latter, on the contrary, living amidst the finest scenery, alongside of a brilliant, sparkling sea inviting navigation and commerce, exempt from the grosser cravings of the stomach, disposed at the start to social habits and customs, to political organization, to the sentiments and faculties which develop the art of speaking, the capacity for enjoyment and invention in the sciences, in art, and in literature. At another time, political events have operated, as in the two Italian civilizations: the first one tending wholly to action, to conquest, to government, and to legislation, through the primitive situation of a city of refuge, a *frontieremporium*, and of an armed aristocracy which, importing and enrolling foreigners and the vanquished under it, sets two hostile bodies facing each other, with no outlet for its internal troubles and rapacious instincts but systematic warfare; the second one, excluded from unity and political ambition on a grand scale by the permanency of its municipal system, by the cosmopolite situation of its pope and by the military intervention of neighboring states, and following the bent of its magnificent and harmonious genius, is wholly carried over to the worship of voluptuousness and beauty. Finally, at another time, social conditions have imposed their stamp as, eighteen centuries ago, by Christianity, and twenty-five centuries ago, by Buddhism, when, around the Mediterranean as in Hindostan, the extreme effects of Aryan conquest and organization led to intolerable oppression, the crushing of the individual, utter despair, the whole world under the ban of a curse, with the development of metaphysics and visions, until man, in this dungeon of despondency, feeling his heart melt, conceived of abnegation, charity, tender love, gentleness, humility, human brotherhood, here in the idea of universal nothingness and there under that of the fatherhood of God. Look around at the regulative instincts and faculties implanted in a race; in brief, the turn of mind according to which it thinks and acts at the present day; we shall find most frequently that its work is due to one of these prolonged situations, to these enveloping circumstances, to these persistent gigantic pressures brought

to bear on a mass of men who, one by one, and all collectively, from one generation to another, have been unceasingly bent and fashioned by them, in Spain a crusade of eight centuries against the Mohammedans, prolonged yet longer even to the exhaustion of the nation through the expulsion of the Moors, through the spoliation of the Jews, through the establishment of the Inquisition, through the Catholic wars; in England, a political establishment of eight centuries which maintains man erect and respectful, independent and obedient, all accustomed to struggling together in a body under the sanction of law; in France, a Latin organization which, at first imposed on docile barbarians, than leveled to the ground under the universal demolition, forms itself anew under the latent workings of national instinct, developing under hereditary monarchs and ending in a sort of equalized, centralized, administrative republic under dynasties exposed to revolutions. Such are the most efficacious among the observable causes which mold the primitive man; they are to nations what education, pursuit, condition, and abode are to individuals, and seem to comprise all, since the external forces which fashion human matter, and by which the outward acts on the inward, are comprehended in them.

There is, nevertheless, a third order of causes, for, with the forces within and without, there is the work these have already produced together, which work itself contributes toward producing the ensuing work; beside the permanent impulsion and the given environment there is the acquired momentum. When national character and surrounding circumstances operate it is not on *atabula rasa*, but on one already bearing imprints. According as this *tabula* is taken at one or at another moment so is the imprint different, and this suffices to render the total effect different. Consider, for example, two moments of a literature or of an art, French tragedy under Corneille and under Voltaire, and Greek drama under Æschylus and under Euripides, Latin poetry under Lucretius and under Claudian, and Italian painting under Da Vinci and under Guido. Assuredly, there is no change of general conception at either of these two extreme points; ever the same human type must be portrayed or represented in action; the cast of the verse, the dramatic structure, the physical form have all persisted. But there is this among these differences, that one of the artists is a precursor and the other a successor, that the first one has no model and the second one has a model; that the former sees things

face to face, and that the latter sees them through the intermediation of the former, that many departments of art have become more perfect, that the simplicity and grandeur of the impression have diminished, that what is pleasing and refined in form has augmented—in short, that the first work has determined the second. In this respect, it is with a people as with a plant; the same sap at the same temperature and in the same soil produces, at different stages of its successive elaborations, different developments, buds, flowers, fruits, and seeds, in such a way that the condition of the following is always that of the preceding and is born of its death. Now, if you no longer regard a brief moment, as above, but one of those grand periods of development which embraces one or many centuries like the Middle Ages, or our last classic period, the conclusion is the same. A certain dominating conception has prevailed throughout; mankind, during two hundred years, during five hundred years, have represented to themselves a certain ideal figure of man, in mediæval times the knight and the monk, in our classic period the courtier and refined talker; this creative and universal conception has monopolized the entire field of action and thought, and, after spreading its involuntary systematic works over the world, it languished and then died out, and now a new idea has arisen, destined to a like domination and to equally multiplied creations. Note here that the latter depends in part on the former, and that it is the former, which, combining its effect with those of national genius and surrounding circumstances, will impose their bent and their direction on new-born things. It is according to this law that great historic currents are formed, meaning by this, the long rule of a form of intellect or of a master idea, like that period of spontaneous creations called the Renaissance, or that period of oratorical classifications called the Classic Age, or that series of mystic systems called the Alexandrine and Christian epoch, or that series of mythological efflorescences found at the origins of Germany, India, and Greece. Here as elsewhere, we are dealing merely with a mechanical problem: the total effect is a compound wholly determined by the grandeur and direction of the forces which produce it. The sole difference which separates these moral problems from physical problems lies in this, that in the former the directions and grandeur cannot be estimated by or stated in figures with the same precision as in the latter. If a want, a faculty, is a quantity capable of degrees, the same as pressure or weight, this quantity is not measurable like that of the pressure or weight. We cannot fix it in an

exact or approximative formula; we can obtain or give of it only a literary impression; we are reduced to nothing and citing the prominent facts which make it manifest and which nearly, or roughly, indicate about what grade on the scale it must be ranged at. And yet, notwithstanding the methods of notation are not the same in the moral sciences as in the physical sciences, nevertheless, as matter is the same in both, and is equally composed of forces, directions, and magnitudes, we can still show that in one as in the other, the final effect takes place according to the same law. This is great or small according as the fundamental forces are great or small and act more or less precisely in the same sense, according as the distinct effects of race, environment and epoch combine to enforce each other or combine to neutralize each other. Thus are explained the long impotences and the brilliant successes which appear irregularly and with no apparent reason in the life of a people; the causes of these consist in internal concordances and contrarieties. There was one of these concordances when, in the seventeenth century, the social disposition and conversational spirit innate in France encountered drawing-room formalities and the moment of oratorical analysis; when, in the nineteenth century, the flexible, profound genius of Germany encountered the age of philosophic synthesis and of cosmopolite criticism. One of these contrarieties happened when, in the seventeenth century, the blunt, isolated genius of England awkwardly tried to don the new polish of urbanity, and when, in the sixteenth century, the lucid, prosaic French intellect tried to gestate a living poesy. It is this secret concordance of creative forces which produced the exquisite courtesy and noble cast of literature under Louis XIV. and Bossuet, and the grandiose metaphysics and broad critical sympathy under Hegel and Goethe. It is this secret contrariety of creative forces which produced the literary incompleteness, the licentious plays, the abortive drama of Dryden and Wycherly, the poor Greek importations, the gropings, the minute beauties and fragments of Ronsard and the Pleiad. We may confidently affirm that the unknown creations toward which the current of coming ages is bearing up will spring from and be governed by these primordial forces; that, if these forces could be measured and computed we might deduce from them, as from a formula, the characters of future civilization; and that if, notwithstanding the evident rudeness of our notations, and the fundamental inexactitude of our measures, we would nowadays form some idea of our general destinies, we must base our

conjectures on an examination of these forces. For, in enumerating them, we run through the full circle of active forces; and when the race, the environment, and the moment have been considered,—that is to say the inner mainspring, the pressure from without, and the impulsion already acquired,—we have exhausted not only all real causes but again all possible causes of movement.

VI

There remains to be ascertained in what way these causes, applied to a nation or to a century, distribute their effects. Like a spring issuing from an elevated spot and diffusing its waters, according to the height, from ledge to ledge, until it finally reaches the low ground, so does the tendency of mind or soul in a people, due to race, epoch, or environment, diffuse itself in different proportions, and by regular descent, over the different series of facts which compose its civilization.[3] In preparing the geographical map of a country, starting at its watershed, we see the slopes, just below this common point, dividing themselves into five or six principal basins, and then each of the latter into several others, and so on until the whole country, with its thousands of inequalities of surface, is included in the ramifications of this network. In like manner, in preparing the psychological map of the events and sentiments belonging to a certain human civilization, we find at the start five or six well determined provinces—religion, art, philosophy, the state, the family, and industries; next, in each of these provinces, natural departments, and then finally, in each of these departments, still smaller territories until we arrive at those countless details of life which we observe daily in ourselves and around us. If, again, we examine and compare together these various groups of facts we at once find that they are composed of parts and that all have parts in common. Let us take first the three principal products of human intelligence—religion, art, and philosophy. What is a philosophy but a conception of nature and of its primordial causes under the form of abstractions and formulas? What underlies a religion and an art if not a conception of this same nature, and of these same primordial causes, under the form of more or less determinate symbols, and of more or less distinct personages, with this difference, that in the first case we believe that they exist, and in the second case that they do not exist. Let the reader consider

some of the great creations of the intellect in India, in Scandinavia, in Persia, in Rome, in Greece, and he will find that art everywhere is a sort of philosophy become sensible, religion a sort of poem regarded as true, and philosophy a sort of art and religion, desiccated and reduced to pure abstractions. There is, then, in the center of each of these groups a common element, the conception of the world and its origin, and if they differ amongst each other it is because each combines with the common element a distinct element; here the power of abstraction, there the faculty of personifying with belief, and, finally, the talent for personifying without belief. Let us now take the two leading products of human association, the Family and the State. What constitutes the State other than the sentiment of obedience by which a multitude of men collect together under the authority of a chief? And what constitutes the Family other than the sentiment of obedience by which a wife and children act together under the direction of a father and husband? The Family is a natural, primitive, limited state, as the State is an artificial, ulterior, and expanded Family, while beneath the differences which arise from the number, origin, and condition of its members, we distinguish, in the small as in the large community, a like fundamental disposition of mind which brings them together and unites them. Suppose, now, that this common element receives from the environment, the epoch, and the race peculiar characteristics, and it is clear that *all the groups into which it enters will be proportionately modified*. If the sentiment of obedience is merely one of fear, [4] you encounter, as in most of the Oriental states, the brutality of despotism, a prodigality of vigorous punishments, the exploitation of the subject, servile habits, insecurity of property, impoverished production, female slavery, and the customs of the harem. If the sentiment of obedience is rooted in the instinct of discipline, sociability, and honor, you find, as in France, a complete military organization, a superb administrative hierarchy, a weak public spirit with outbursts of patriotism, the unhesitating docility of the subject along with the hot-headedness of the revolutionist, the obsequiousness of the courtier along with the reserve of the gentleman, the charm of refined conversation along with home and family bickerings, conjugal equality together with matrimonial incompatibilities under the necessary constraints of the law. If, finally, the sentiment of obedience is rooted in the instinct of subordination and in the idea of duty, you perceive, as in Germanic nations, the security and contentment of the household, the

firm foundations of domestic life, the slow and imperfect development of worldly matters, innate respect for established rank, superstitious reverence for the past, maintenance of social inequalities, natural and habitual deference to the law. Similarly in a race, just as there is a difference of aptitude for general ideas, so will its religion, art, and philosophy be different. If man is naturally fitted for broader universal conceptions and inclined at the same time to their derangement, through the nervous irritability of an over-excited organization, we find, as in India, a surprising richness of gigantic religious creations, a splendid bloom of extravagant transparent epics, a strange concatenation of subtle, imaginative philosophic systems, all so intimately associated and so interpenetrated with a common sap, that we at once recognize them, by their amplitude, by their color, and by their disorder, as productions of the same climate and of the same spirit. If, on the contrary, the naturally sound and well-balanced man is content to restrict his conceptions to narrow bounds in order to cast them in more precise forms, we see, as in Greece, a theology of artists and narrators, special gods that are soon separated from objects and almost transformed at once into substantial personages, the sentiment of universal unity nearly effaced and scarcely maintained in the vague notion of destiny, a philosophy, rather than subtle and compact, grandiose and systematic, narrow metaphysically[5] but incomparable in its logic, sophistry, and morality, a poesy and arts superior to anything we have seen in lucidity, naturalness, proportion, truth, and beauty. If, finally, man is reduced to narrow conceptions deprived of any speculative subtlety, and at the same time finds that he is absorbed and completely hardened by practical interests, we see, as in Rome, rudimentary deities, mere empty names, good for denoting the petty details of agriculture, generation, and the household, veritable marriage and farming labels, and, therefore, a null or borrowed mythology, philosophy, and poesy. Here, as elsewhere, comes in the law of mutual dependencies.[6] A civilization is a living unit, the parts of which hold together the same as the parts of an organic body. Just as in an animal, the instincts, teeth, limbs, bones, and muscular apparatus are bound together in such a way that a variation of one determines a corresponding variation in the others, and out of which a skillful naturalist, with a few bits, imagines and reconstructs an almost complete body, so, in a civilization, do religion, philosophy, the family scheme, literature and the arts form a system in which each local change involves a general change, so that

an experienced historian, who studies one portion apart from the others, sees beforehand and partially predicts the characteristics of the rest. There is nothing vague in this dependence. The regulation of all this in the living body consists, first, of the tendency to manifest a certain primordial type, and, next, the necessity of its possessing organs which can supply its wants and put itself in harmony with itself in order to live. The regulation in a civilization consists in the presence in each great human creation of an elementary producter equally present in other surrounding creations, that is, some faculty and aptitude, some efficient and marked disposition, which, with its own peculiar character, introduces this with that into all operations in which it takes part, and which, according to its variations, causes variation in all the works in which it coöperates.

VII

Having reached this point we can obtain a glimpse of the principal features of human transformations, and can now search for the general laws which regulate not only events, but classes of events; not only this religion or that literature, but the whole group of religions or of literatures. If, for example, it is admitted that a religion is a metaphysical poem associated with belief; if it is recognized, besides, that there are certain races and certain environments in which belief, poetic faculty, and metaphysical faculty display themselves in common with unwonted vigor; if we consider that Christianity and Buddhism were developed at periods of grand systematizations and in the midst of sufferings like the oppression which stirred up the fanatics of Cevennes; if, on the other hand, it is recognized that primitive religions are born at the dawn of human reason, during the richest expansion of human imagination, at times of the greatest naïveté and of the greatest credulity; if we consider, again, that Mohammedanism appeared along with the advent of poetic prose and of the conception of material unity, amongst a people destitute of science and at the moment of a sudden development of the intellect—we might conclude that religion is born and declines, is reformed and transformed, according as circumstances fortify and bring together, with more or less precision and energy, its three generative instincts; and we would then comprehend why religion is endemic in India among specially exalted imaginative and philosophic intellects; why it blooms out so wonderfully and so grandly in the Middle Ages, in an oppressive society, amongst new languages and literature; why it develops again in the sixteenth century with a new character and an heroic enthusiasm, at the time of an universal renaissance and at the awakening of the Germanic races; why it swarms out in so many bizarre sects in the rude democracy of America and under the bureaucratic despotism of Russia; why, in fine, it is seen spreading out in the

Europe of to-day in such different proportions and with such special traits, according to such differences of race and of civilizations. And so for every kind of human production, for letters, music, the arts of design, philosophy, the sciences, state industries, and the rest. Each has some moral tendency for its direct cause, or a concurrence of moral tendencies; given the cause, it appears; the cause withdrawn, it disappears; the weakness or intensity of the cause is the measure of its own weakness or intensity. It is bound to that like any physical phenomenon to its condition, like dew to the chilliness of a surrounding atmosphere, like dilatation to heat. Couples exist in the moral world as they exist in the physical world, as rigorously linked together and as universally diffused. Whatever in one case produces, alters, or suppresses the first term, produces, alters, and suppresses the second term as a necessary consequence. Whatever cools the surrounding atmosphere causes the fall of dew. Whatever develops credulity, along with poetic conceptions of the universe, engenders religion. Thus have things come about, and thus will they continue to come about. As soon as the adequate and necessary condition of one of these vast apparitions becomes known to us our mind has a hold on the future as well as on the past. We can confidently state under what circumstances it will reappear, foretell without rashness many portions of its future history, and sketch with precaution some of the traits of its ulterior development.

VIII

History has reached this point at the present day, or rather it is nearly there, on the threshold of this inquest. The question as now stated is this: Given a literature, a philosophy, a society, an art, a certain group of arts, what is the moral state of things which produces it? And what are the conditions of race, epoch, and environment the best adapted to produce this moral state? There is a distinct moral state for each of these formations and for each of their branches; there is one for art in general as well as for each particular art; for architecture, painting, sculpture, music, and poetry, each with a germ of its own in the large field of human psychology; each has its own law, and it is by virtue of this law that we see each shoot up, apparently haphazard, singly and alone, amidst the miscarriages of their neighbors, like painting in Flanders and Holland in the seventeenth century, like poetry in England in the sixteenth century, like music in Germany in the eighteenth century. At this moment, and in these countries, the conditions for one art and not for the others are fulfilled, and one branch only has bloomed out amidst the general sterility. It is these laws of human vegetation which history must now search for; it is this special psychology of each special formation which must be got at; it is the composition of a complete table of these peculiar conditions that must now be worked out. There is nothing more delicate and nothing more difficult. Montesquieu undertook it, but in his day the interest in history was too recent for him to be successful; nobody, indeed, had any idea of the road that was to be followed, and even at the present day we scarcely begin to obtain a glimpse of it. Just as astronomy, at bottom, is a mechanical problem, and physiology, likewise, a chemical problem, so is history, at bottom, *a problem of psychology*. There is a particular system of inner impressions and operations which fashions the artist, the believer, the musician, the painter, the nomad, the social man; for each of these, the filiation, intensity,

and interdependence of ideas and of emotions are different; each has his own moral history, and his own special organization, along with some master tendency and with some dominant trait. To explain each of these would require a chapter devoted to a profound internal analysis, and that is a work that can scarcely be called sketched out at the present day. But one man, Stendhal, through a certain turn of mind and a peculiar education, has attempted it, and even yet most of his readers find his works paradoxical and obscure. His talent and ideas were too premature. His admirable insight, his profound sayings carelessly thrown out, the astonishing precision of his notes and logic, were not understood; people were not aware that, under the appearances and talk of a man of the world, he explained the most complex of internal mechanisms; that his finger touched the great mainspring, that he brought scientific processes to bear in the history of the heart, the art of employing figures, of decomposing, of deducing, that he was the first to point out fundamental causes such as nationalities, climates, and temperaments, in short, that he treated sentiments as they should be treated, that is to say, as a naturalist and physicist, by making classifications and estimating forces. On account of all this he was pronounced dry and eccentric and allowed to live in isolation, composing novels, books of travel and taking notes, for which he counted upon, and has obtained, about a dozen or so of readers. And yet his works are those in which we of the present day may find the most satisfactory efforts that have been made to clear the road I have just striven to describe. Nobody has taught one better how to observe with one's own eyes, first, to regard humanity around us and life as it is, and next, old and authentic documents, how to read more than merely the black and white of the page, how to detect under old print and the scrawl of the text the veritable sentiment and the train of thought, the mental state in which the words were penned. In his writings, as in those of Sainte Beuve and in those of the German critics the reader will find how much is to be derived from a literary document, if this document is rich and we know how to interpret it, we will find in the psychology of a particular soul, often that of an age, and sometimes that of a race. In this respect, a great poem, a good novel, the confessions of a superior man, are more instructive than a mass of historians and histories, I would give fifty volumes of charters and a hundred diplomatic files for the memoirs of Cellini, the epistles of Saint Paul, the table talk of Luther, or the comedies of Aristophanes. Herein lies the value of literary

productions. They are instructive because they are beautiful, their usefulness increases with their perfection and if they provide us with documents, it is because they are monuments. The more visible a book renders sentiments the more literary it is, for it is the special office of literature to take note of sentiments. The more important the sentiments noted in a book the higher its rank in literature, for it is by representing what sort of a life a nation or an epoch leads, that a writer rallies to himself the sympathies of a nation or of an epoch. Hence, among the documents which bring before our eyes the sentiments of preceding generations, a literature, and especially a great literature, is incomparably the best. It resembles those admirable instruments of remarkable sensitiveness which physicists make use of to detect and measure the most profound and delicate changes that occur in a human body. There is nothing approaching this in constitutions or religions; the articles of a code or of a catechism do no more than depict mind in gross and without finesse; if there are any documents which show life and spirit in politics and in creeds, they are the eloquent discourses of the pulpit and the tribune, memoirs and personal confessions, all belonging to literature, so that, outside of itself, literature embodies whatever is good elsewhere. It is mainly in studying literatures that we are able to produce moral history, and arrive at some knowledge of the psychological laws on which events depend.

I have undertaken to write a history of a literature and to ascertain the psychology of a people; in selecting this one, it is not without a motive. A people had to be taken possessing a vast and complete literature, which is rarely found. There are few nations which, throughout their existence, have thought and written well in the full sense of the word. Among the ancients, Latin literature is null at the beginning, and afterward borrowed and an imitation. Among the moderns, German literature is nearly a blank for two centuries.[7] Italian and Spanish literatures come to an end in the middle of the seventeenth century. Ancient Greece, and modern France and England, alone offer a complete series of great and expressive monuments. I have chosen the English because, as this still exists and is open to direct observation, it can be better studied than that of an extinct civilization of which fragments only remain; and because, being different, it offers better than that of France very marked characteristics in the eyes of a Frenchman. Moreover, outside of what is peculiar to English civilization, apart from a

spontaneous development, it presents a forced deviation due to the latest and most effective conquest to which the country was subject; the three given conditions out of which it issues—race, climate, and the Norman conquest—are clearly and distinctly visible in its literary monuments; so that we study in this history the two most potent motors of human transformation, namely, nature and constraint, and we study them, without any break or uncertainty, in a series of authentic and complete monuments. I have tried to define these primitive motors, to show their gradual effects, and explain how their insensible operation has brought religious and literary productions into full light, and how the inward mechanism is developed by which the barbarous Saxon became the Englishman of the present day.

[Footnote A: Hippolyte Adolphe Taine (b. 1828; d. 1893) was one of the most distinguished French critics of the nineteenth century. He held the chair of esthetics at the *École des Beaux Arts*, and wrote a large number of works in history, travel, and literary criticism. His "History of English Literature" is the most brilliant book on the subject ever written by a foreigner, and in this introduction he expounds the method of criticism which has come to be associated with his name, and in accordance with which he seeks to interpret the characteristics of English authors.]

[Footnote 1: Darwin, "The Origin of Species." Prosper Lucas, "De l'Hérédité."]

[Footnote 2: Spinoza, "Ethics," part iv., axiom.]

[Footnote 3: For this scale of coordinate effects consult, "Langues Sémitiques," by Renan, ch I, "Comparison des civilisations Grecque et Romaine," vol I, ch I, 3d ed, by Mommsen, "Consequences de la démocratie," vol III., by Tocqueville.]

[Footnote 4: "L'Esprit des Lois," by Montesquieu; the essential principles of the three governments.]

[Footnote 5: The birth of the Alexandrine philosophy is due to contact with the Orient. Aristotle's metaphysical views stand alone. Moreover, with him as

with Plato, they afford merely a glimpse. By way of contrast see systematic power in Plotinus, Proclus, Schelling, and Hegel, or again in the admirable boldness of Brahmanic and Buddhist speculation.]

[Footnote 6: I have very often made attempts to state this law, especially in the preface to "Essais de Critique et d'Histoire."]

[Footnote 7: From 1550 to 1750.]

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THE ADVANCEMENT OF LEARNING

INTRODUCTION.

“The TVVOO Bookes of Francis Bacon. Of the proficiencie and aduancement of Learning, divine and humane. To the King. At London. Printed for Henrie Tomes, and are to be sould at his shop at Graies Inne Gate in Holborne. 1605.” That was the original title-page of the book now in the reader’s hand - a living book that led the way to a new world of thought. It was the book in which Bacon, early in the reign of James the First, prepared the way for a full setting forth of his New Organon, or instrument of knowledge.

The Organon of Aristotle was a set of treatises in which Aristotle had written the doctrine of propositions. Study of these treatises was a chief occupation of young men when they passed from school to college, and proceeded from Grammar to Logic, the second of the Seven Sciences. Francis Bacon as a youth of sixteen, at Trinity College, Cambridge, felt the unfruitfulness of this method of search after truth. He was the son of Sir Nicholas Bacon, Queen Elizabeth’s Lord Keeper, and was born at York House, in the Strand, on the 22nd of January, 1561. His mother was the Lord Keeper’s second wife, one of two sisters, of whom the other married Sir William Cecil, afterwards Lord Burleigh. Sir Nicholas Bacon had six children by his former marriage, and by his second wife two sons, Antony and Francis, of whom Antony was about two years the elder. The family home was at York Place, and at Gorhambury, near St. Albans, from which town, in its ancient and its modern style, Bacon afterwards took his titles of Verulam and St. Albans.

Antony and Francis Bacon went together to Trinity College, Cambridge, when Antony was fourteen years old and Francis twelve. Francis remained at Cambridge only until his sixteenth year; and Dr. Rawley, his chaplain in after-years, reports of him that “whilst he was commorant in the University, about sixteen years of age (as his lordship hath been pleased to impart unto myself), he first fell into dislike of the philosophy of Aristotle; not for the worthlessness of the author, to whom he would ascribe all high attributes, but for the unfruitfulness of the way, being a philosophy (as his lordship used to say) only strong for disputatious and contentions, but barren of the production of works for the benefit of the life of man; in which mind he continued to his dying day.” Bacon was sent as a youth of sixteen to Paris with the ambassador Sir Amyas Paulet, to begin his training for the public service; but his father’s death, in February, 1579, before he had completed the provision he was making for his youngest children, obliged him to return to London, and, at the age of eighteen, to settle down at Gray’s Inn to the study of law as a profession. He was admitted to the outer bar in June, 1582, and about that time, at the age of twenty-one, wrote a sketch of his conception of a New Organon that should lead man to more fruitful knowledge, in a little Latin tract, which he called “Temporis Partus Maximus” (“The Greatest Birth of Time”).

In November, 1584, Bacon took his seat in the House of Commons as member for Melcombe Regis, in Dorsetshire. In October, 1586, he sat for Taunton. He was member afterwards for Liverpool; and he was one of those who petitioned for the speedy execution of Mary Queen of Scots. In October, 1589, he obtained the reversion of the office of Clerk of the Council in the Star Chamber, which was worth £1,600 or £2,000 a year; but for the succession to this office he had to wait until 1608. It had not yet fallen to him when he wrote his “Two Books of the Advancement of Learning.” In the Parliament that met in February, 1593, Bacon sat as member for Middlesex. He raised difficulties of procedure in the way of the grant of a treble subsidy, by just objection to the joining of the Lords with the Commons in a money grant, and a desire to extend the time allowed for payment from three years to six; it was, in fact, extended to four years. The Queen was offended. Francis Bacon and his brother Antony had attached themselves to the young Earl of Essex, who was their friend and patron. The

office of Attorney-General became vacant. Essex asked the Queen to appoint Francis Bacon. The Queen gave the office to Sir Edward Coke, who was already Solicitor-General, and by nine years Bacon's senior. The office of Solicitor-General thus became vacant, and that was sought for Francis Bacon. The Queen, after delay and hesitation, gave it, in November, 1595, to Serjeant Fleming. The Earl of Essex consoled his friend by giving him "a piece of land" - Twickenham Park - which Bacon afterwards sold for £1,800 - equal, say, to £12,000 in present buying power. In 1597 Bacon was returned to Parliament as member for Ipswich, and in that year he was hoping to marry the rich widow of Sir William Hatton, Essex helping; but the lady married, in the next year, Sir Edward Coke. It was in 1597 that Bacon published the First Edition of his Essays. That was a little book containing only ten essays in English, with twelve "Meditationes Sacrae," which were essays in Latin on religious subjects. From 1597 onward to the end of his life, Bacon's Essays were subject to continuous addition and revision. The author's Second Edition, in which the number of the Essays was increased from ten to thirty-eight, did not appear until November or December, 1612, seven years later than these two books on the "Advancement of Learning;" and the final edition of the Essays, in which their number was increased from thirty-eight to fifty-eight, appeared only in 1625; and Bacon died on the 9th of April, 1626. The edition of the Essays published in 1597, under Elizabeth, marked only the beginning of a course of thought that afterwards flowed in one stream with his teachings in philosophy.

In February, 1601, there was the rebellion of Essex. Francis Bacon had separated himself from his patron after giving him advice that was disregarded. Bacon, now Queen's Counsel, not only appeared against his old friend, but with excess of zeal, by which, perhaps, he hoped to win back the Queen's favour, he twice obtruded violent attacks upon Essex when he was not called upon to speak. On the 25th of February, 1601, Essex was beheaded. The genius of Bacon was next employed to justify that act by "A Declaration of the Practices and Treasons attempted and committed by Robert late Earle of Essex and his Complices." But James of Scotland, on whose behalf Essex had intervened, came to the throne by the death of Elizabeth on the 24th of March, 1603. Bacon was among the crowd of men who were made knights by James I., and he had to justify himself under the

new order of things by writing “Sir Francis Bacon his Apologie in certain Imputations concerning the late Earle of Essex.” He was returned to the first Parliament of James I. by Ipswich and St. Albans, and he was confirmed in his office of King’s Counsel in August, 1604; but he was not appointed to the office of Solicitor-General when it became vacant in that year.

That was the position of Francis Bacon in 1605, when he published this work, where in his First Book he pointed out the discredits of learning from human defects of the learned, and emptiness of many of the studies chosen, or the way of dealing with them. This came, he said, especially by the mistaking or misplacing of the last or furthest end of knowledge, as if there were sought in it “a couch whereupon to rest a searching and restless spirit; or a terrace for a wandering and variable mind to walk up and down with a fair prospect; or a tower of state for a proud mind to raise itself upon; or a fort or commanding ground for strife and contention; or a shop for profit or sale; and not a rich storehouse for the glory of the Creator and the relief of man’s estate.” The rest of the First Book was given to an argument upon the Dignity of Learning; and the Second Book, on the Advancement of Learning, is, as Bacon himself described it, “a general and faithful perambulation of learning, with an inquiry what parts thereof lie fresh and waste, and not improved and converted by the industry of man; to the end that such a plot made and recorded to memory may both minister light to any public designation and also serve to excite voluntary endeavours.” Bacon makes, by a sort of exhaustive analysis, a ground-plan of all subjects of study, as an intellectual map, helping the right inquirer in his search for the right path. The right path is that by which he has the best chance of adding to the stock of knowledge in the world something worth labouring for; and the true worth is in labour for “the glory of the Creator and the relief of man’s estate.”

H. M.

THE FIRST BOOK OF FRANCIS BACON; OF THE PROFICIENCE AND
ADVANCEMENT OF LEARNING, DIVINE AND HUMAN.

To the King.

There were under the law, excellent King, both daily sacrifices and freewill offerings; the one proceeding upon ordinary observance, the other upon a devout cheerfulness: in like manner there belongeth to kings from their servants both tribute of duty and presents of affection. In the former of these I hope I shall not live to be wanting, according to my most humble duty and the good pleasure of your Majesty's employments: for the latter, I thought it more respective to make choice of some oblation which might rather refer to the propriety and excellency of your individual person, than to the business of your crown and state.

Wherefore, representing your Majesty many times unto my mind, and beholding you not with the inquisitive eye of presumption, to discover that which the Scripture telleth me is inscrutable, but with the observant eye of duty and admiration, leaving aside the other parts of your virtue and fortune, I have been touched - yea, and possessed - with an extreme wonder at those your virtues and faculties, which the philosophers call intellectual; the largeness of your capacity, the faithfulness of your memory, the swiftness of your apprehension, the penetration of your judgment, and the facility and order of your elocution: and I have often thought that of all the persons living that I have known, your Majesty were the best instance to make a man of Plato's opinion, that all knowledge is but remembrance, and that the mind of man by Nature knoweth all things, and hath but her own native and original notions (which by the strangeness and darkness of this tabernacle of the body are sequestered) again revived and restored: such a light of Nature I have observed in your Majesty, and such a readiness to take flame and blaze from the least occasion presented, or the least spark of another's knowledge delivered. And as the Scripture saith of the wisest king, "That his heart was as the sands of the sea;" which, though it be one of the largest bodies, yet it consisteth of the smallest and finest portions; so hath God given your Majesty a composition of understanding admirable, being able to compass and

comprehend the greatest matters, and nevertheless to touch and apprehend the least; whereas it should seem an impossibility in Nature for the same instrument to make itself fit for great and small works. And for your gift of speech, I call to mind what Cornelius Tacitus saith of Augustus Cæsar: *Augusto profluens, et quæ principem deceret, eloquentia fuit*. For if we note it well, speech that is uttered with labour and difficulty, or speech that savoureth of the affectation of art and precepts, or speech that is framed after the imitation of some pattern of eloquence, though never so excellent; all this hath somewhat servile, and holding of the subject. But your Majesty's manner of speech is, indeed, prince-like, flowing as from a fountain, and yet streaming and branching itself into Nature's order, full of facility and felicity, imitating none, and inimitable by any. And as in your civil estate there appeareth to be an emulation and contention of your Majesty's virtue with your fortune; a virtuous disposition with a fortunate regiment; a virtuous expectation (when time was) of your greater fortune, with a prosperous possession thereof in the due time; a virtuous observation of the laws of marriage, with most blessed and happy fruit of marriage; a virtuous and most Christian desire of peace, with a fortunate inclination in your neighbour princes thereunto: so likewise in these intellectual matters there seemeth to be no less contention between the excellency of your Majesty's gifts of Nature and the universality and perfection of your learning. For I am well assured that this which I shall say is no amplification at all, but a positive and measured truth; which is, that there hath not been since Christ's time any king or temporal monarch which hath been so learned in all literature and erudition, divine and human. For let a man seriously and diligently revolve and peruse the succession of the Emperors of Rome, of which Cæsar the Dictator (who lived some years before Christ) and Marcus Antoninus were the best learned, and so descend to the Emperors of Græcia, or of the West, and then to the lines of France, Spain, England, Scotland, and the rest, and he shall find this judgment is truly made. For it seemeth much in a king if, by the compendious extractions of other men's wits and labours, he can take hold of any superficial ornaments and shows of learning, or if he countenance and prefer learning and learned men; but to drink, indeed, of the true fountains of learning - nay, to have such a fountain of learning in himself, in a king, and in a king born - is almost a miracle. And the more, because there is met in your Majesty a rare conjunction, as well of divine and sacred

literature as of profane and human; so as your Majesty standeth invested of that triplicity, which in great veneration was ascribed to the ancient Hermes: the power and fortune of a king, the knowledge and illumination of a priest, and the learning and universality of a philosopher. This propriety inherent and individual attribute in your Majesty deserveth to be expressed not only in the fame and admiration of the present time, nor in the history or tradition of the ages succeeding, but also in some solid work, fixed memorial, and immortal monument, bearing a character or signature both of the power of a king and the difference and perfection of such a king.

Therefore I did conclude with myself that I could not make unto your Majesty a better oblation than of some treatise tending to that end, whereof the sum will consist of these two parts: the former concerning the excellency of learning and knowledge, and the excellency of the merit and true glory in the augmentation and propagation thereof; the latter, what the particular acts and works are which have been embraced and undertaken for the advancement of learning; and again, what defects and undervalues I find in such particular acts: to the end that though I cannot positively or affirmatively advise your Majesty, or propound unto you framed particulars, yet I may excite your princely cogitations to visit the excellent treasure of your own mind, and thence to extract particulars for this purpose agreeable to your magnanimity and wisdom.

I. (1) In the entrance to the former of these - to clear the way and, as it were, to make silence, to have the true testimonies concerning the dignity of learning to be better heard, without the interruption of tacit objections - I think good to deliver it from the discredits and disgraces which it hath received, all from ignorance, but ignorance severally disguised; appearing sometimes in the zeal and jealousy of divines, sometimes in the severity and arrogancy of politics, and sometimes in the errors and imperfections of learned men themselves.

(2) I hear the former sort say that knowledge is of those things which are to be accepted of with great limitation and caution; that the aspiring to overmuch knowledge was the original temptation and sin whereupon ensued the fall of man; that knowledge hath in it somewhat of the serpent, and,

therefore, where it entereth into a man it makes him swell; *Scientia inflat*; that Solomon gives a censure, “That there is no end of making books, and that much reading is weariness of the flesh;” and again in another place, “That in spacious knowledge there is much contristation, and that he that increaseth knowledge increaseth anxiety;” that Saint Paul gives a caveat, “That we be not spoiled through vain philosophy;” that experience demonstrates how learned men have been arch-heretics, how learned times have been inclined to atheism, and how the contemplation of second causes doth derogate from our dependence upon God, who is the first cause.

(3) To discover, then, the ignorance and error of this opinion, and the misunderstanding in the grounds thereof, it may well appear these men do not observe or consider that it was not the pure knowledge of Nature and universality, a knowledge by the light whereof man did give names unto other creatures in Paradise as they were brought before him according unto their proprieties, which gave the occasion to the fall; but it was the proud knowledge of good and evil, with an intent in man to give law unto himself, and to depend no more upon God’s commandments, which was the form of the temptation. Neither is it any quantity of knowledge, how great soever, that can make the mind of man to swell; for nothing can fill, much less extend the soul of man, but God and the contemplation of God; and, therefore, Solomon, speaking of the two principal senses of inquisition, the eye and the ear, affirmeth that the eye is never satisfied with seeing, nor the ear with hearing; and if there be no fulness, then is the continent greater than the content: so of knowledge itself and the mind of man, whereto the senses are but reporters, he defineth likewise in these words, placed after that calendar or ephemerides which he maketh of the diversities of times and seasons for all actions and purposes, and concludeth thus: “God hath made all things beautiful, or decent, in the true return of their seasons. Also He hath placed the world in man’s heart, yet cannot man find out the work which God worketh from the beginning to the end” - declaring not obscurely that God hath framed the mind of man as a mirror or glass, capable of the image of the universal world, and joyful to receive the impression thereof, as the eye joyeth to receive light; and not only delighted in beholding the variety of things and vicissitude of times, but raised also to find out and discern the ordinances and decrees which throughout all those changes are infallibly

observed. And although he doth insinuate that the supreme or summary law of Nature (which he calleth “the work which God worketh from the beginning to the end”) is not possible to be found out by man, yet that doth not derogate from the capacity of the mind; but may be referred to the impediments, as of shortness of life, ill conjunction of labours, ill tradition of knowledge over from hand to hand, and many other inconveniences, whereunto the condition of man is subject. For that nothing parcel of the world is denied to man’s inquiry and invention, he doth in another place rule over, when he saith, “The spirit of man is as the lamp of God, wherewith He searcheth the inwardness of all secrets.” If, then, such be the capacity and receipt of the mind of man, it is manifest that there is no danger at all in the proportion or quantity of knowledge, how large soever, lest it should make it swell or out-compass itself; no, but it is merely the quality of knowledge, which, be it in quantity more or less, if it be taken without the true corrective thereof, hath in it some nature of venom or malignity, and some effects of that venom, which is ventosity or swelling. This corrective spice, the mixture whereof maketh knowledge so sovereign, is charity, which the Apostle immediately addeth to the former clause; for so he saith, “Knowledge bloweth up, but charity buildeth up;” not unlike unto that which he delivereth in another place: “If I spake,” saith he, “with the tongues of men and angels, and had not charity, it were but as a tinkling cymbal.” Not but that it is an excellent thing to speak with the tongues of men and angels, but because, if it be severed from charity, and not referred to the good of men and mankind, it hath rather a sounding and unworthy glory than a meriting and substantial virtue. And as for that censure of Solomon concerning the excess of writing and reading books, and the anxiety of spirit which redoundeth from knowledge, and that admonition of St. Paul, “That we be not seduced by vain philosophy,” let those places be rightly understood; and they do, indeed, excellently set forth the true bounds and limitations whereby human knowledge is confined and circumscribed, and yet without any such contracting or coarctation, but that it may comprehend all the universal nature of things; for these limitations are three: the first, “That we do not so place our felicity in knowledge, as we forget our mortality;” the second, “That we make application of our knowledge, to give ourselves repose and contentment, and not distaste or repining;” the third, “That we do not presume by the contemplation of Nature to attain to the mysteries of God.”

For as touching the first of these, Solomon doth excellently expound himself in another place of the same book, where he saith: “I saw well that knowledge recedeth as far from ignorance as light doth from darkness; and that the wise man’s eyes keep watch in his head, whereas this fool roundeth about in darkness: but withal I learned that the same mortality involveth them both.” And for the second, certain it is there is no vexation or anxiety of mind which resulteth from knowledge otherwise than merely by accident; for all knowledge and wonder (which is the seed of knowledge) is an impression of pleasure in itself; but when men fall to framing conclusions out of their knowledge, applying it to their particular, and ministering to themselves thereby weak fears or vast desires, there groweth that carefulness and trouble of mind which is spoken of; for then knowledge is no more *Lumen siccum*, whereof Heraclitus the profound said, *Lumen siccum optima anima*; but it becometh *Lumen madidum*, or *maceratum*, being steeped and infused in the humours of the affections. And as for the third point, it deserveth to be a little stood upon, and not to be lightly passed over; for if any man shall think by view and inquiry into these sensible and material things to attain that light, whereby he may reveal unto himself the nature or will of God, then, indeed, is he spoiled by vain philosophy; for the contemplation of God’s creatures and works produceth (having regard to the works and creatures themselves) knowledge, but having regard to God no perfect knowledge, but wonder, which is broken knowledge. And, therefore, it was most aptly said by one of Plato’s school, “That the sense of man carrieth a resemblance with the sun, which (as we see) openeth and revealeth all the terrestrial globe; but then, again, it obscureth and concealeth the stars and celestial globe: so doth the sense discover natural things, but it darkeneth and shutteth up divine.” And hence it is true that it hath proceeded, that divers great learned men have been heretical, whilst they have sought to fly up to the secrets of the Deity by this waxen wings of the senses. And as for the conceit that too much knowledge should incline a man to atheism, and that the ignorance of second causes should make a more devout dependence upon God, which is the first cause; first, it is good to ask the question which Job asked of his friends: “Will you lie for God, as one man will lie for another, to gratify him?” For certain it is that God worketh nothing in Nature but by second causes; and if they would have it otherwise believed, it is mere imposture, as it were in favour towards God, and nothing else but to offer to the Author of truth the unclean sacrifice

of a lie. But further, it is an assured truth, and a conclusion of experience, that a little or superficial knowledge of philosophy may incline the mind of men to atheism, but a further proceeding therein doth bring the mind back again to religion. For in the entrance of philosophy, when the second causes, which are next unto the senses, do offer themselves to the mind of man, if it dwell and stay there it may induce some oblivion of the highest cause; but when a man passeth on further and seeth the dependence of causes and the works of Providence; then, according to the allegory of the poets, he will easily believe that the highest link of Nature's chain must needs be tied to the foot of Jupiter's chair. To conclude, therefore, let no man upon a weak conceit of sobriety or an ill-applied moderation think or maintain that a man can search too far, or be too well studied in the book of God's word, or in the book of God's works, divinity or philosophy; but rather let men endeavour an endless progress or proficiencie in both; only let men beware that they apply both to charity, and not to swelling; to use, and not to ostentation; and again, that they do not unwisely mingle or confound these learnings together.

II. (1) And as for the disgraces which learning receiveth from politics, they be of this nature: that learning doth soften men's minds, and makes them more unapt for the honour and exercise of arms; that it doth mar and pervert men's dispositions for matter of government and policy, in making them too curious and irresolute by variety of reading, or too peremptory or positive by strictness of rules and axioms, or too immoderate and overweening by reason of the greatness of examples, or too incompatible and differing from the times by reason of the dissimilitude of examples; or at least, that it doth divert men's travails from action and business, and bringeth them to a love of leisure and privateness; and that it doth bring into states a relaxation of discipline, whilst every man is more ready to argue than to obey and execute. Out of this conceit Cato, surnamed the Censor, one of the wisest men indeed that ever lived, when Carneades the philosopher came in embassage to Rome, and that the young men of Rome began to flock about him, being allured with the sweetness and majesty of his eloquence and learning, gave counsel in open senate that they should give him his despatch with all speed, lest he should infect and enchant the minds and affections of the youth, and at unawares bring in an alteration of the manners and customs of the state. Out of the same conceit or humour did Virgil, turning his pen to the advantage of

his country and the disadvantage of his own profession, make a kind of separation between policy and government, and between arts and sciences, in the verses so much renowned, attributing and challenging the one to the Romans, and leaving and yielding the other to the Grecians: *Tu regere imperio popules, Romane, memento, Hæ tibi erunt artes, &c.* So likewise we see that Anytus, the accuser of Socrates, laid it as an article of charge and accusation against him, that he did, with the variety and power of his discourses and disputations, withdraw young men from due reverence to the laws and customs of their country, and that he did profess a dangerous and pernicious science, which was to make the worse matter seem the better, and to suppress truth by force of eloquence and speech.

(2) But these and the like imputations have rather a countenance of gravity than any ground of justice: for experience doth warrant that, both in persons and in times, there hath been a meeting and concurrence in learning and arms, flourishing and excelling in the same men and the same ages. For as 'for men, there cannot be a better nor the like instance as of that pair, Alexander the Great and Julius Cæsar, the Dictator; whereof the one was Aristotle's scholar in philosophy, and the other was Cicero's rival in eloquence; or if any man had rather call for scholars that were great generals, than generals that were great scholars, let him take Epaminondas the Theban, or Xenophon the Athenian; whereof the one was the first that abated the power of Sparta, and the other was the first that made way to the overthrow of the monarchy of Persia. And this concurrence is yet more visible in times than in persons, by how much an age is greater object than a man. For both in Egypt, Assyria, Persia, Græcia, and Rome, the same times that are most renowned for arms are, likewise, most admired for learning, so that the greatest authors and philosophers, and the greatest captains and governors, have lived in the same ages. Neither can it otherwise be: for as in man the ripeness of strength of the body and mind cometh much about an age, save that the strength of the body cometh somewhat the more early, so in states, arms and learning, whereof the one correspondeth to the body, the other to the soul of man, have a concurrence or near sequence in times.

(3) And for matter of policy and government, that learning, should rather hurt, than enable thereunto, is a thing very improbable; we see it is accounted

an error to commit a natural body to empiric physicians, which commonly have a few pleasing receipts whereupon they are confident and adventurous, but know neither the causes of diseases, nor the complexions of patients, nor peril of accidents, nor the true method of cures; we see it is a like error to rely upon advocates or lawyers which are only men of practice, and not grounded in their books, who are many times easily surprised when matter falleth out besides their experience, to the prejudice of the causes they handle: so by like reason it cannot be but a matter of doubtful consequence if states be managed by empiric statesmen, not well mingled with men grounded in learning. But contrariwise, it is almost without instance contradictory that ever any government was disastrous that was in the hands of learned governors. For howsoever it hath been ordinary with politic men to extenuate and disable learned men by the names of *pedantes*; yet in the records of time it appeareth in many particulars that the governments of princes in minority (notwithstanding the infinite disadvantage of that kind of state) - have nevertheless excelled the government of princes of mature age, even for that reason which they seek to traduce, which is that by that occasion the state hath been in the hands of *pedantes*: for so was the state of Rome for the first five years, which are so much magnified, during the minority of Nero, in the hands of Seneca, a *pedenti*; so it was again, for ten years' space or more, during the minority of Gordianus the younger, with great applause and contentation in the hands of Misiheus, a *pedanti*: so was it before that, in the minority of Alexander Severus, in like happiness, in hands not much unlike, by reason of the rule of the women, who were aided by the teachers and preceptors. Nay, let a man look into the government of the Bishops of Rome, as by name, into the government of Pius Quintus and Sextus Quintus in our times, who were both at their entrance esteemed but as pedantical friars, and he shall find that such Popes do greater things, and proceed upon truer principles of state, than those which have ascended to the papacy from an education and breeding in affairs of state and courts of princes; for although men bred in learning are perhaps to seek in points of convenience and accommodating for the present, which the Italians call *ragioni di stato*, whereof the same Pius Quintus could not hear spoken with patience, terming them inventions against religion and the moral virtues; yet on the other side, to recompense that, they are perfect in those same plain grounds of religion, justice, honour, and moral virtue, which if they be well and watchfully

pursued, there will be seldom use of those other, no more than of physic in a sound or well-dieted body. Neither can the experience of one man's life furnish examples and precedents for the event of one man's life. For as it happeneth sometimes that the grandchild, or other descendant, resembleth the ancestor more than the son; so many times occurrences of present times may sort better with ancient examples than with those of the later or immediate times; and lastly, the wit of one man can no more countervail learning than one man's means can hold way with a common purse.

(4) And as for those particular seducements or indispositions of the mind for policy and government, which learning is pretended to insinuate; if it be granted that any such thing be, it must be remembered withal that learning ministereth in every of them greater strength of medicine or remedy than it offereth cause of indisposition or infirmity. For if by a secret operation it make men perplexed and irresolute, on the other side by plain precept it teacheth them when and upon what ground to resolve; yea, and how to carry things in suspense, without prejudice, till they resolve. If it make men positive and regular, it teacheth them what things are in their nature demonstrative, and what are conjectural, and as well the use of distinctions and exceptions, as the latitude of principles and rules. If it mislead by disproportion or dissimilitude of examples, it teacheth men the force of circumstances, the errors of comparisons, and all the cautions of application; so that in all these it doth rectify more effectually than it can pervert. And these medicines it conveyeth into men's minds much more forcibly by the quickness and penetration of examples. For let a man look into the errors of Clement VII., so lively described by Guicciardini, who served under him, or into the errors of Cicero, painted out by his own pencil in his Epistles to Atticus, and he will fly apace from being irresolute. Let him look into the errors of Phocion, and he will beware how he be obstinate or inflexible. Let him but read the fable of Ixion, and it will hold him from being vaporous or imaginative. Let him look into the errors of Cato II., and he will never be one of the Antipodes, to tread opposite to the present world.

(5) And for the conceit that learning should dispose men to leisure and privateness, and make men slothful: it were a strange thing if that which accustometh the mind to a perpetual motion and agitation should induce

slothfulness, whereas, contrariwise, it may be truly affirmed that no kind of men love business for itself but those that are learned; for other persons love it for profit, as a hireling that loves the work for the wages; or for honour, as because it beareth them up in the eyes of men, and refresheth their reputation, which otherwise would wear; or because it putteth them in mind of their fortune, and giveth them occasion to pleasure and displeasure; or because it exerciseth some faculty wherein they take pride, and so entertaineth them in good-humour and pleasing conceits towards themselves; or because it advanceth any other their ends. So that as it is said of untrue valours, that some men's valours are in the eyes of them that look on, so such men's industries are in the eyes of others, or, at least, in regard of their own designments; only learned men love business as an action according to nature, as agreeable to health of mind as exercise is to health of body, taking pleasure in the action itself, and not in the purchase, so that of all men they are the most indefatigable, if it be towards any business which can hold or detain their mind.

(6) And if any man be laborious in reading and study, and yet idle in business and action, it groweth from some weakness of body or softness of spirit, such as Seneca speaketh of: *Quidam tam sunt umbratiles, ut putent in turbido esse quicquid in luce est*; and not of learning: well may it be that such a point of a man's nature may make him give himself to learning, but it is not learning that breedeth any such point in his nature.

(7) And that learning should take up too much time or leisure: I answer, the most active or busy man that hath been or can be, hath (no question) many vacant times of leisure while he expecteth the tides and returns of business (except he be either tedious and of no despatch, or lightly and unworthily ambitious to meddle in things that may be better done by others), and then the question is but how those spaces and times of leisure shall be filled and spent; whether in pleasure or in studies; as was well answered by Demosthenes to his adversary Æschines, that was a man given to pleasure, and told him "That his orations did smell of the lamp." "Indeed," said Demosthenes, "there is a great difference between the things that you and I do by lamp-light." So as no man need doubt that learning will expel business, but rather it will keep and defend the possession of the mind against idleness and pleasure, which

otherwise at unawares may enter to the prejudice of both.

(8) Again, for that other conceit that learning should undermine the reverence of laws and government, it is assuredly a mere depravation and calumny, without all shadow of truth. For to say that a blind custom of obedience should be a surer obligation than duty taught and understood, it is to affirm that a blind man may tread surer by a guide than a seeing man can by a light. And it is without all controversy that learning doth make the minds of men gentle, generous, manageable, and pliant to government; whereas ignorance makes them churlish, thwart, and mutinous: and the evidence of time doth clear this assertion, considering that the most barbarous, rude, and unlearned times have been most subject to tumults, seditious, and changes.

(9) And as to the judgment of Cato the Censor, he was well punished for his blasphemy against learning, in the same kind wherein he offended; for when he was past threescore years old, he was taken with an extreme desire to go to school again, and to learn the Greek tongue, to the end to peruse the Greek authors; which doth well demonstrate that his former censure of the Grecian learning was rather an affected gravity, than according to the inward sense of his own opinion. And as for Virgil's verses, though it pleased him to brave the world in taking to the Romans the art of empire, and leaving to others the arts of subjects, yet so much is manifest - that the Romans never ascended to that height of empire till the time they had ascended to the height of other arts. For in the time of the two first Cæsars, which had the art of government in greatest perfection, there lived the best poet, Virgilius Maro; the best historiographer, Titus Livius; the best antiquary, Marcus Varro; and the best or second orator, Marcus Cicero, that to the memory of man are known. As for the accusation of Socrates, the time must be remembered when it was prosecuted; which was under the Thirty Tyrants, the most base, bloody, and envious persons that have governed; which revolution of state was no sooner over but Socrates, whom they had made a person criminal, was made a person heroical, and his memory accumulate with honours divine and human; and those discourses of his which were then termed corrupting of manners, were after acknowledged for sovereign medicines of the mind and manners, and so have been received ever since till this day. Let this, therefore, serve for answer to politiques, which in their humorous severity, or in their feigned

gravity, have presumed to throw imputations upon learning; which redargution nevertheless (save that we know not whether our labours may extend to other ages) were not needful for the present, in regard of the love and reverence towards learning which the example and countenance of two so learned princes, Queen Elizabeth and your Majesty, being as Castor and Pollux, *lucida sidera*, stars of excellent light and most benign influence, hath wrought in all men of place and authority in our nation.

III. (1) Now therefore we come to that third sort of discredit or diminution of credit that groweth unto learning from learned men themselves, which commonly cleaveth fastest: it is either from their fortune, or from their manners, or from the nature of their studies. For the first, it is not in their power; and the second is accidental; the third only is proper to be handled: but because we are not in hand with true measure, but with popular estimation and conceit, it is not amiss to speak somewhat of the two former. The derogations therefore which grow to learning from the fortune or condition of learned men, are either in respect of scarcity of means, or in respect of privateness of life and meanness of employments.

(2) Concerning want, and that it is the case of learned men usually to begin with little, and not to grow rich so fast as other men, by reason they convert not their labours chiefly to lucre and increase, it were good to leave the commonplace in commendation of povery to some friar to handle, to whom much was attributed by Machiavel in this point when he said, “That the kingdom of the clergy had been long before at an end, if the reputation and reverence towards the poverty of friars had not borne out the scandal of the superfluities and excesses of bishops and prelates.” So a man might say that the felicity and delicacy of princes and great persons had long since turned to rudeness and barbarism, if the poverty of learning had not kept up civility and honour of life; but without any such advantages, it is worthy the observation what a reverent and honoured thing poverty of fortune was for some ages in the Roman state, which nevertheless was a state without paradoxes. For we see what Titus Livius saith in his introduction: *Cæterum aut me amor negotii suscepti fallit aut nulla unquam respublica nec major, nec sanctior, nec bonis exemplis ditior fuit; nec in quam tam sero avaritia luxuriaque immigraverint; nec ubi tantus ac tam diu paupertati ac parsimoniae honos fuerit.* We see

likewise, after that the state of Rome was not itself, but did degenerate, how that person that took upon him to be counsellor to Julius Cæsar after his victory where to begin his restoration of the state, maketh it of all points the most summary to take away the estimation of wealth: *Verum hæc et omnia mala pariter cum honore pecuniæ desinent; si neque magistratus, neque alia vulgo cupienda, venalia erunt.* To conclude this point: as it was truly said that *Paupertas est virtutis fortuna*, though sometimes it come from vice, so it may be fitly said that, though some times it may proceed from misgovernment and accident. Surely Solomon hath pronounced it both in censure, *Qui festinat ad divitias non erit insons*; and in precept, “Buy the truth, and sell it not; and so of wisdom and knowledge;” judging that means were to be spent upon learning, and not learning to be applied to means. And as for the privateness or obscureness (as it may be in vulgar estimation accounted) of life of contemplative men, it is a theme so common to extol a private life, not taxed with sensuality and sloth, in comparison and to the disadvantage of a civil life, for safety, liberty, pleasure, and dignity, or at least freedom from indignity, as no man handleth it but handleth it well; such a consonancy it hath to men’s conceits in the expressing, and to men’s consents in the allowing. This only I will add, that learned men forgotten in states and not living in the eyes of men, are like the images of Cassius and Brutus in the funeral of Junia, of which, not being represented as many others were, Tacitus saith, *Eo ipso præfulgebant quod non visebantur.*

(3) And for meanness of employment, that which is most traduced to contempt is that the government of youth is commonly allotted to them; which age, because it is the age of least authority, it is transferred to the disesteeming of those employments wherein youth is conversant, and which are conversant about youth. But how unjust this traducement is (if you will reduce things from popularity of opinion to measure of reason) may appear in that we see men are more curious what they put into a new vessel than into a vessel seasoned; and what mould they lay about a young plant than about a plant corroborate; so as this weakest terms and times of all things use to have the best applications and helps. And will you hearken to the Hebrew rabbins? “Your young men shall see visions, and your old men shall dream dreams:” say they, youth is the worthier age, for that visions are nearer apparitions of God than dreams? And let it be noted that howsoever the

condition of life of *pedantes* hath been scorned upon theatres, as the ape of tyranny; and that the modern looseness or negligence hath taken no due regard to the choice of schoolmasters and tutors; yet the ancient wisdom of the best times did always make a just complaint, that states were too busy with their laws and too negligent in point of education: which excellent part of ancient discipline hath been in some sort revived of late times by the colleges of the Jesuits; of whom, although in regard of their superstition I may say, *Quo meliores, eo deteriores*; yet in regard of this, and some other points concerning human learning and moral matters, I may say, as Agesilaus said to his enemy Pharnabazus, *Talis quum sis, utunam noster esses*. And that much touching the discredits drawn from the fortunes of learned men.

(4) As touching the manners of learned men, it is a thing personal and individual: and no doubt there be amongst them, as in other professions, of all temperatures: but yet so as it is not without truth which is said, that *Abeunt studia in mores*, studies have an influence and operation upon the manners of those that are conversant in them.

(5) But upon an attentive and indifferent review, I for my part cannot find any disgrace to learning can proceed from the manners of learned men; not inherent to them as they are learned; except it be a fault (which was the supposed fault of Demosthenes, Cicero, Cato II., Seneca, and many more) that because the times they read of are commonly better than the times they live in, and the duties taught better than the duties practised, they contend sometimes too far to bring things to perfection, and to reduce the corruption of manners to honesty of precepts or examples of too great height. And yet hereof they have caveats enough in their own walks. For Solon, when he was asked whether he had given his citizens the best laws, answered wisely, “Yea, of such as they would receive.” and Plato, finding that his own heart could not agree with the corrupt manners of his country, refused to bear place or office, saying, “That a man’s country was to be used as his parents were, that is, with humble persuasions, and not with contestations.” And Cæsar’s counsellor put in the same caveat, *Non ad vetera instituta revocans quæ jampridem corruptis moribus ludibrio sunt*; and Cicero noteth this error directly in Cato II. when he writes to his friend Atticus, *Cato optime sentit, sed nocet interdum reipublicæ; loquitur enim tanquam in republicâ Platonis*,

non tanquam in fœce Romuli. And the same Cicero doth excuse and expound the philosophers for going too far and being too exact in their prescripts when he saith, *Isti ipse præceptores virtutis et magistri videntur fines officiorum paulo longius quam natura vellet protulisse, ut cum ad ultimum animo contendissemus, ibi tamen, ubi oportet, consisteremus:* and yet himself might have said, *Monitis sum minor ipse meis;* for it was his own fault, though not in so extreme a degree.

(6) Another fault likewise much of this kind hath been incident to learned men, which is, that they have esteemed the preservation, good, and honour of their countries or masters before their own fortunes or safeties. For so saith Demosthenes unto the Athenians: “If it please you to note it, my counsels unto you are not such whereby I should grow great amongst you, and you become little amongst the Grecians; but they be of that nature as they are sometimes not good for me to give, but are always good for you to follow.” And so Seneca, after he had consecrated that *Quinquennium Neronis* to the eternal glory of learned governors, held on his honest and loyal course of good and free counsel after his master grew extremely corrupt in his government. Neither can this point otherwise be, for learning endueth men’s minds with a true sense of the frailty of their persons, the casualty of their fortunes, and the dignity of their soul and vocation, so that it is impossible for them to esteem that any greatness of their own fortune can be a true or worthy end of their being and ordainment, and therefore are desirous to give their account to God, and so likewise to their masters under God (as kings and the states that they serve) in those words, *Ecce tibi lucrefeci*, and not *Ecce mihi lucrefeci*; whereas the corrupter sort of mere politiques, that have not their thoughts established by learning in the love and apprehension of duty, nor never look abroad into universality, do refer all things to themselves, and thrust themselves into the centre of the world, as if all lines should meet in them and their fortunes, never caring in all tempests what becomes of the ship of state, so they may save themselves in the cockboat of their own fortune; whereas men that feel the weight of duty and know the limits of self-love use to make good their places and duties, though with peril; and if they stand in seditious and violent alterations, it is rather the reverence which many times both adverse parts do give to honesty, than any versatile advantage of their own carriage. But for this point of tender sense

and fast obligation of duty which learning doth endue the mind withal, howsoever fortune may tax it, and many in the depth of their corrupt principles may despise it, yet it will receive an open allowance, and therefore needs the less disproof or excuse.

(7) Another fault incident commonly to learned men, which may be more properly defended than truly denied, is that they fail sometimes in applying themselves to particular persons, which want of exact application ariseth from two causes - the one, because the largeness of their mind can hardly confine itself to dwell in the exquisite observation or examination of the nature and customs of one person, for it is a speech for a lover, and not for a wise man, *Satis magnum alter alteri theatrum sumus*. Nevertheless I shall yield that he that cannot contract the sight of his mind as well as disperse and dilate it, wanteth a great faculty. But there is a second cause, which is no inability, but a rejection upon choice and judgment. For the honest and just bounds of observation by one person upon another extend no further but to understand him sufficiently, whereby not to give him offence, or whereby to be able to give him faithful counsel, or whereby to stand upon reasonable guard and caution in respect of a man's self. But to be speculative into another man to the end to know how to work him, or wind him, or govern him, proceedeth from a heart that is double and cloven, and not entire and ingenuous; which as in friendship it is want of integrity, so towards princes or superiors is want of duty. For the custom of the Levant, which is that subjects do forbear to gaze or fix their eyes upon princes, is in the outward ceremony barbarous, but the moral is good; for men ought not, by cunning and bent observations, to pierce and penetrate into the hearts of kings, which the Scripture hath declared to be inscrutable.

(8) There is yet another fault (with which I will conclude this part) which is often noted in learned men, that they do many times fail to observe decency and discretion in their behaviour and carriage, and commit errors in small and ordinary points of action, so as the vulgar sort of capacities do make a judgment of them in greater matters by that which they find wanting in them in smaller. But this consequence doth oft deceive men, for which I do refer them over to that which was said by Themistocles, arrogantly and uncivilly being applied to himself out of his own mouth, but, being applied to the

general state of this question, pertinently and justly, when, being invited to touch a lute, he said, "He could not fiddle, but he could make a small town a great state." So no doubt many may be well seen in the passages of government and policy which are to seek in little and punctual occasions. I refer them also to that which Plato said of his master Socrates, whom he compared to the gallipots of apothecaries, which on the outside had apes and owls and antiques, but contained within sovereign and precious liquors and confections; acknowledging that, to an external report, he was not without superficial levities and deformities, but was inwardly replenished with excellent virtues and powers. And so much touching the point of manners of learned men.

(9) But in the meantime I have no purpose to give allowance to some conditions and courses base and unworthy, wherein divers professors of learning have wronged themselves and gone too far; such as were those trencher philosophers which in the later age of the Roman state were usually in the houses of great persons, being little better than solemn parasites, of which kind, Lucian maketh a merry description of the philosopher that the great lady took to ride with her in her coach, and would needs have him carry her little dog, which he doing officiously and yet uncomely, the page scoffed and said, "That he doubted the philosopher of a Stoic would turn to be a Cynic." But, above all the rest, this gross and palpable flattery whereunto many not unlearned have abased and abused their wits and pens, turning (as Du Bartas saith) Hecuba into Helena, and Faustina into Lucretia, hath most diminished the price and estimation of learning. Neither is the modern dedication of books and writings, as to patrons, to be commended, for that books (such as are worthy the name of books) ought to have no patrons but truth and reason. And the ancient custom was to dedicate them only to private and equal friends, or to entitle the books with their names; or if to kings and great persons, it was to some such as the argument of the book was fit and proper for; but these and the like courses may deserve rather reprehension than defence.

(10) Not that I can tax or condemn the morigeration or application of learned men to men in fortune. For the answer was good that Diogenes made to one that asked him in mockery, "How it came to pass that philosophers were the

followers of rich men, and not rich men of philosophers?” He answered soberly, and yet sharply, “Because the one sort knew what they had need of, and the other did not.” And of the like nature was the answer which Aristippus made, when having a petition to Dionysius, and no ear given to him, he fell down at his feet, whereupon Dionysius stayed and gave him the hearing, and granted it; and afterwards some person, tender on the behalf of philosophy, reproved Aristippus that he would offer the profession of philosophy such an indignity as for a private suit to fall at a tyrant’s feet; but he answered, “It was not his fault, but it was the fault of Dionysius, that had his ears in his feet.” Neither was it accounted weakness, but discretion, in him that would not dispute his best with Adrianus Cæsar, excusing himself, “That it was reason to yield to him that commanded thirty legions.” These and the like, applications, and stooping to points of necessity and convenience, cannot be disallowed; for though they may have some outward baseness, yet in a judgment truly made they are to be accounted submissions to the occasion and not to the person.

IV. (1) Now I proceed to those errors and vanities which have intervened amongst the studies themselves of the learned, which is that which is principal and proper to the present argument; wherein my purpose is not to make a justification of the errors, but by a censure and separation of the errors to make a justification of that which is good and sound, and to deliver that from the aspersion of the other. For we see that it is the manner of men to scandalise and deprave that which retaineth the state and virtue, by taking advantage upon that which is corrupt and degenerate, as the heathens in the primitive Church used to blemish and taint the Christians with the faults and corruptions of heretics. But nevertheless I have no meaning at this time to make any exact animadversion of the errors and impediments in matters of learning, which are more secret and remote from vulgar opinion, but only to speak unto such as do fall under or near unto a popular observation.

(2) There be therefore chiefly three vanities in studies, whereby learning hath been most traduced. For those things we do esteem vain which are either false or frivolous, those which either have no truth or no use; and those persons we esteem vain which are either credulous or curious; and curiosity is either in matter or words: so that in reason as well as in experience there

fall out to be these three distempers (as I may term them) of learning - the first, fantastical learning; the second, contentious learning; and the last, delicate learning; vain imaginations, vain altercations, and vain affectations; and with the last I will begin. Martin Luther, conducted, no doubt, by a higher Providence, but in discourse of reason, finding what a province he had undertaken against the Bishop of Rome and the degenerate traditions of the Church, and finding his own solitude, being in nowise aided by the opinions of his own time, was enforced to awake all antiquity, and to call former times to his succours to make a party against the present time. So that the ancient authors, both in divinity and in humanity, which had long time slept in libraries, began generally to be read and revolved. This, by consequence, did draw on a necessity of a more exquisite travail in the languages original, wherein those authors did write, for the better understanding of those authors, and the better advantage of pressing and applying their words. And thereof grew, again, a delight in their manner of style and phrase, and an admiration of that kind of writing, which was much furthered and precipitated by the enmity and opposition that the propounders of those primitive but seeming new opinions had against the schoolmen, who were generally of the contrary part, and whose writings were altogether in a differing style and form; taking liberty to coin and frame new terms of art to express their own sense, and to avoid circuit of speech, without regard to the pureness, pleasantness, and (as I may call it) lawfulness of the phrase or word. And again, because the great labour then was with the people (of whom the Pharisees were wont to say, *Execrabilis ista turba, quæ non novit legem*), for the winning and persuading of them, there grew of necessity in chief price and request eloquence and variety of discourse, as the fittest and forciblest access into the capacity of the vulgar sort; so that these four causes concurring - the admiration of ancient authors, the hate of the schoolmen, the exact study of languages, and the efficacy of preaching - did bring in an affectionate study of eloquence and copy of speech, which then began to flourish. This grew speedily to an excess; for men began to hunt more after words than matter - more after the choiceness of the phrase, and the round and clean composition of the sentence, and the sweet falling of the clauses, and the varying and illustration of their works with tropes and figures, than after the weight of matter, worth of subject, soundness of argument, life of invention, or depth of judgment. Then grew the flowing and watery vein of Osorius, the Portugal bishop, to be

in price. Then did Sturmius spend such infinite and curious pains upon Cicero the Orator and Hermogenes the Rhetorician, besides his own books of Periods and Imitation, and the like. Then did Car of Cambridge and Ascham with their lectures and writings almost deify Cicero and Demosthenes, and allure all young men that were studious unto that delicate and polished kind of learning. Then did Erasmus take occasion to make the scoffing echo, *Decem annos consumpsi in legendo Cicerone*; and the echo answered in Greek, *One, Asine*. Then grew the learning of the schoolmen to be utterly despised as barbarous. In sum, the whole inclination and bent of those times was rather towards copy than weight.

(3) Here therefore [is] the first distemper of learning, when men study words and not matter; whereof, though I have represented an example of late times, yet it hath been and will be *secundum majus et minus* in all time. And how is it possible but this should have an operation to discredit learning, even with vulgar capacities, when they see learned men's works like the first letter of a patent or limited book, which though it hath large flourishes, yet it is but a letter? It seems to me that Pygmalion's frenzy is a good emblem or portraiture of this vanity; for words are but the images of matter, and except they have life of reason and invention, to fall in love with them is all one as to fall in love with a picture.

(4) But yet notwithstanding it is a thing not hastily to be condemned, to clothe and adorn the obscurity even of philosophy itself with sensible and plausible elocution. For hereof we have great examples in Xenophon, Cicero, Seneca, Plutarch, and of Plato also in some degree; and hereof likewise there is great use, for surely, to the severe inquisition of truth and the deep progress into philosophy, it is some hindrance because it is too early satisfactory to the mind of man, and quencheth the desire of further search before we come to a just period. But then if a man be to have any use of such knowledge in civil occasions, of conference, counsel, persuasion, discourse, or the like, then shall he find it prepared to his hands in those authors which write in that manner. But the excess of this is so justly contemptible, that as Hercules, when he saw the image of Adonis, Venus' minion, in a temple, said in disdain, *Nil sacri es*; so there is none of Hercules' followers in learning - that is, the more severe and laborious sort of inquirers into truth - but will

despise those delicacies and affectations, as indeed capable of no divineness. And thus much of the first disease or distemper of learning.

(5) The second which followeth is in nature worse than the former: for as substance of matter is better than beauty of words, so contrariwise vain matter is worse than vain words: wherein it seemeth the reprehension of St. Paul was not only proper for those times, but propheticall for the times following; and not only respective to divinity, but extensive to all knowledge: *Devita profanas vocum novitates, et oppositiones falsi nominis scientiæ*. For he assigneth two marks and badges of suspected and falsified science: the one, the novelty and strangeness of terms; the other, the strictness of positions, which of necessity doth induce oppositions, and so questions and altercations. Surely, like as many substances in nature which are solid do putrefy and corrupt into worms; - so it is the property of good and sound knowledge to putrefy and dissolve into a number of subtle, idle, unwholesome, and (as I may term them) vermiculate questions, which have indeed a kind of quickness and life of spirit, but no soundness of matter or goodness of quality. This kind of degenerate learning did chiefly reign amongst the schoolmen, who having sharp and strong wits, and abundance of leisure, and small variety of reading, but their wits being shut up in the cells of a few authors (chiefly Aristotle their dictator) as their persons were shut up in the cells of monasteries and colleges, and knowing little history, either of nature or time, did out of no great quantity of matter and infinite agitation of wit spin out unto us those laborious webs of learning which are extant in their books. For the wit and mind of man, if it work upon matter, which is the contemplation of the creatures of God, worketh according to the stuff and is limited thereby; but if it work upon itself, as the spider worketh his web, then it is endless, and brings forth indeed cobwebs of learning, admirable for the fineness of thread and work, but of no substance or profit.

(6) This same unprofitable subtilty or curiosity is of two sorts: either in the subject itself that they handle, when it is a fruitless speculation or controversy (whereof there are no small number both in divinity and philosophy), or in the manner or method of handling of a knowledge, which amongst them was this - upon every particular position or assertion to frame objections, and to those objections, solutions; which solutions were for the most part not

confutations, but distinctions: whereas indeed the strength of all sciences is, as the strength of the old man's faggot, in the bond. For the harmony of a science, supporting each part the other, is and ought to be the true and brief confutation and suppression of all the smaller sort of objections. But, on the other side, if you take out every axiom, as the sticks of the faggot, one by one, you may quarrel with them and bend them and break them at your pleasure: so that, as was said of Seneca, *Verborum minutiis rerum frangit pondera*, so a man may truly say of the schoolmen, *Quæstionum minutiis scientiarum frangunt soliditatem*. For were it not better for a man in fair room to set up one great light, or branching candlestick of lights, than to go about with a small watch-candle into every corner? And such is their method, that rests not so much upon evidence of truth proved by arguments, authorities, similitudes, examples, as upon particular confutations and solutions of every scruple, cavillation, and objection; breeding for the most part one question as fast as it solveth another; even as in the former resemblance, when you carry the light into one corner, you darken the rest; so that the fable and fiction of Scylla seemeth to be a lively image of this kind of philosophy or knowledge; which was transformed into a comely virgin for the upper parts; but then *Candida succinctam latrantibus inguina monstris*: so the generalities of the schoolmen are for a while good and proportionable; but then when you descend into their distinctions and decisions, instead of a fruitful womb for the use and benefit of man's life, they end in monstrous altercations and barking questions. So as it is not possible but this quality of knowledge must fall under popular contempt, the people being apt to condemn truths upon occasion of controversies and altercations, and to think they are all out of their way which never meet; and when they see such digladiation about subtleties, and matters of no use or moment, they easily fall upon that judgment of Dionysius of Syracuse, *Verba ista sunt senum otiosorum*.

(7) Notwithstanding, certain it is that if those schoolmen to their great thirst of truth and unwearied travail of wit had joined variety and universality of reading and contemplation, they had proved excellent lights, to the great advancement of all learning and knowledge; but as they are, they are great undertakers indeed, and fierce with dark keeping. But as in the inquiry of the divine truth, their pride inclined to leave the oracle of God's word, and to

vanish in the mixture of their own inventions; so in the inquisition of nature, they ever left the oracle of God's works, and adored the deceiving and deformed images which the unequal mirror of their own minds, or a few received authors or principles, did represent unto them. And thus much for the second disease of learning.

(8) For the third vice or disease of learning, which concerneth deceit or untruth, it is of all the rest the foulest; as that which doth destroy the essential form of knowledge, which is nothing but a representation of truth: for the truth of being and the truth of knowing are one, differing no more than the direct beam and the beam reflected. This vice therefore brancheth itself into two sorts; delight in deceiving and aptness to be deceived; imposture and credulity; which, although they appear to be of a diverse nature, the one seeming to proceed of cunning and the other of simplicity, yet certainly they do for the most part concur: for, as the verse noteth -

“Percontatorem fugito, nam garrulus idem est,”

an inquisitive man is a prattler; so upon the like reason a credulous man is a deceiver: as we see it in fame, that he that will easily believe rumours will as easily augment rumours and add somewhat to them of his own; which Tacitus wisely noteth, when he saith, *Fingunt simul creduntque*: so great an affinity hath fiction and belief.

(9) This facility of credit and accepting or admitting things weakly authorised or warranted is of two kinds according to the subject: for it is either a belief of history, or, as the lawyers speak, matter of fact; or else of matter of art and opinion. As to the former, we see the experience and inconvenience of this error in ecclesiastical history; which hath too easily received and registered reports and narrations of miracles wrought by martyrs, hermits, or monks of the desert, and other holy men, and their relics, shrines, chapels and images: which though they had a passage for a time by the ignorance of the people, the superstitious simplicity of some and the politic toleration of others holding them but as divine poesies, yet after a period of time, when the mist

began to clear up, they grew to be esteemed but as old wives' fables, impostures of the clergy, illusions of spirits, and badges of Antichrist, to the great scandal and detriment of religion.

(10) So in natural history, we see there hath not been that choice and judgment used as ought to have been; as may appear in the writings of Plinius, Cardanus, Albertus, and divers of the Arabians, being fraught with much fabulous matter, a great part not only untried, but notoriously untrue, to the great derogation of the credit of natural philosophy with the grave and sober kind of wits: wherein the wisdom and integrity of Aristotle is worthy to be observed, that, having made so diligent and exquisite a history of living creatures, hath mingled it sparingly with any vain or feigned matter; and yet on the other side hath cast all prodigious narrations, which he thought worthy the recording, into one book, excellently discerning that matter of manifest truth, such whereupon observation and rule was to be built, was not to be mingled or weakened with matter of doubtful credit; and yet again, that rarities and reports that seem incredible are not to be suppressed or denied to the memory of men.

(11) And as for the facility of credit which is yielded to arts and opinions, it is likewise of two kinds; either when too much belief is attributed to the arts themselves, or to certain authors in any art. The sciences themselves, which have had better intelligence and confederacy with the imagination of man than with his reason, are three in number: astrology, natural magic, and alchemy; of which sciences, nevertheless, the ends or pretences are noble. For astrology pretendeth to discover that correspondence or concatenation which is between the superior globe and the inferior; natural magic pretendeth to call and reduce natural philosophy from variety of speculations to the magnitude of works; and alchemy pretendeth to make separation of all the unlike parts of bodies which in mixtures of natures are incorporate. But the derivations and prosecutions to these ends, both in the theories and in the practices, are full of error and vanity; which the great professors themselves have sought to veil over and conceal by enigmatical writings, and referring themselves to auricular traditions and such other devices, to save the credit of impostures. And yet surely to alchemy this right is due, that it may be compared to the husbandman whereof Æsop makes the fable; that, when he

died, told his sons that he had left unto them gold buried underground in his vineyard; and they digged over all the ground, and gold they found none; but by reason of their stirring and digging the mould about the roots of their vines, they had a great vintage the year following: so assuredly the search and stir to make gold hath brought to light a great number of good and fruitful inventions and experiments, as well for the disclosing of nature as for the use of man's life.

(12) And as for the overmuch credit that hath been given unto authors in sciences, in making them dictators, that their words should stand, and not consuls, to give advice; the damage is infinite that sciences have received thereby, as the principal cause that hath kept them low at a stay without growth or advancement. For hence it hath come, that in arts mechanical the first deviser comes shortest, and time addeth and perfecteth; but in sciences the first author goeth furthest, and time leeseth and corrupteth. So we see artillery, sailing, printing, and the like, were grossly managed at the first, and by time accommodated and refined; but contrariwise, the philosophies and sciences of Aristotle, Plato, Democritus, Hippocrates, Euclides, Archimedes, of most vigour at the first, and by time degenerate and imbased: whereof the reason is no other, but that in the former many wits and industries have contributed in one; and in the latter many wits and industries have been spent about the wit of some one, whom many times they have rather depraved than illustrated; for, as water will not ascend higher than the level of the first spring-head from whence it descendeth, so knowledge derived from Aristotle, and exempted from liberty of examination, will not rise again higher than the knowledge of Aristotle. And, therefore, although the position be good, *Oportet discentem credere*, yet it must be coupled with this, *Oportet edoctum judicare*; for disciples do owe unto masters only a temporary belief and a suspension of their own judgment till they be fully instructed, and not an absolute resignation or perpetual captivity; and therefore, to conclude this point, I will say no more, but so let great authors have their due, as time, which is the author of authors, be not deprived of his due - which is, further and further to discover truth. Thus have I gone over these three diseases of learning; besides the which there are some other rather peccant humours than formed diseases, which, nevertheless, are not so secret and intrinsic, but that they fall under a popular observation and traducement, and, therefore, are not

to be passed over.

V. (1) The first of these is the extreme affecting of two extremities: the one antiquity, the other novelty; wherein it seemeth the children of time do take after the nature and malice of the father. For as he devoureth his children, so one of them seeketh to devour and suppress the other; while antiquity envieth there should be new additions, and novelty cannot be content to add but it must deface; surely the advice of the prophet is the true direction in this matter, *State super vias antiquas, et videte quænam sit via recta et bona et ambulate in ea*. Antiquity deserveth that reverence, that men should make a stand thereupon and discover what is the best way; but when the discovery is well taken, then to make progression. And to speak truly, *Antiquitas sæculi juvenus mundi*. These times are the ancient times, when the world is ancient, and not those which we account ancient *ordine retrogrado*, by a computation backward from ourselves.

(2) Another error induced by the former is a distrust that anything should be now to be found out, which the world should have missed and passed over so long time: as if the same objection were to be made to time that Lucian maketh to Jupiter and other the heathen gods; of which he wondereth that they begot so many children in old time, and begot none in his time; and asketh whether they were become septuagenary, or whether the law *Papia*, made against old men's marriages, had restrained them. So it seemeth men doubt lest time is become past children and generation; wherein contrariwise we see commonly the levity and unconstancy of men's judgments, which, till a matter be done, wonder that it can be done; and as soon as it is done, wonder again that it was no sooner done: as we see in the expedition of Alexander into Asia, which at first was prejudged as a vast and impossible enterprise; and yet afterwards it pleaseth Livy to make no more of it than this, *Nil aliud quàm bene ausus vana contemnere*. And the same happened to Columbus in the western navigation. But in intellectual matters it is much more common, as may be seen in most of the propositions of Euclid; which till they be demonstrate, they seem strange to our assent; but being demonstrate, our mind accepteth of them by a kind of relation (as the lawyers speak), as if we had known them before.

(3) Another error, that hath also some affinity with the former, is a conceit that of former opinions or sects after variety and examination the best hath still prevailed and suppressed the rest; so as if a man should begin the labour of a new search, he were but like to light upon somewhat formerly rejected, and by rejection brought into oblivion; as if the multitude, or the wisest for the multitude's sake, were not ready to give passage rather to that which is popular and superficial than to that which is substantial and profound for the truth is, that time seemeth to be of the nature of a river or stream, which carrieth down to us that which is light and blown up, and sinketh and drowneth that which is weighty and solid.

(4) Another error, of a diverse nature from all the former, is the over-early and peremptory reduction of knowledge into arts and methods; from which time commonly sciences receive small or no augmentation. But as young men, when they knit and shape perfectly, do seldom grow to a further stature, so knowledge, while it is in aphorisms and observations, it is in growth; but when it once is comprehended in exact methods, it may, perchance, be further polished, and illustrate and accommodated for use and practice, but it increaseth no more in bulk and substance.

(5) Another error which doth succeed that which we last mentioned is, that after the distribution of particular arts and sciences, men have abandoned universality, or *philosophia prima*, which cannot but cease and stop all progression. For no perfect discovery can be made upon a flat or a level; neither is it possible to discover the more remote and deeper parts of any science if you stand but upon the level of the same science, and ascend not to a higher science.

(6) Another error hath proceeded from too great a reverence, and a kind of adoration of the mind and understanding of man; by means whereof, men have withdrawn themselves too much from the contemplation of nature, and the observations of experience, and have tumbled up and down in their own reason and conceits. Upon these intellectualists, which are notwithstanding commonly taken for the most sublime and divine philosophers, Heraclitus gave a just censure, saying: - "Men sought truth in their own little worlds, and not in the great and common world;" for they disdain to spell, and so by

degrees to read in the volume of God's works; and contrariwise by continual meditation and agitation of wit do urge and, as it were, invoke their own spirits to divine and give oracles unto them, whereby they are deservedly deluded.

(7) Another error that hath some connection with this latter is, that men have used to infect their meditations, opinions, and doctrines with some conceits which they have most admired, or some sciences which they have most applied, and given all things else a tincture according to them, utterly untrue and improper. So hath Plato intermingled his philosophy with theology, and Aristotle with logic; and the second school of Plato, Proclus and the rest, with the mathematics; for these were the arts which had a kind of primogeniture with them severally. So have the alchemists made a philosophy out of a few experiments of the furnace; and Gilbertus our countryman hath made a philosophy out of the observations of a loadstone. So Cicero, when reciting the several opinions of the nature of the soul, he found a musician that held the soul was but a harmony, saith pleasantly, *Hic ab arte sua non recessit, &c.* But of these conceits Aristotle speaketh seriously and wisely when he saith, *Qui respiciunt ad pauca de facili pronunciant.*

(8) Another error is an impatience of doubt, and haste to assertion without due and mature suspension of judgment. For the two ways of contemplation are not unlike the two ways of action commonly spoken of by the ancients: the one plain and smooth in the beginning, and in the end impassable; the other rough and troublesome in the entrance, but after a while fair and even. So it is in contemplation: if a man will begin with certainties, he shall end in doubts; but if he will be content to begin with doubts, he shall end in certainties.

(9) Another error is in the manner of the tradition and delivery of knowledge, which is for the most part magistral and peremptory, and not ingenuous and faithful; in a sort as may be soonest believed, and not easiest examined. It is true, that in compendious treatises for practice that form is not to be disallowed; but in the true handling of knowledge men ought not to fall either on the one side into the vein of Velleius the Epicurean, *Nil tam metuens quam ne dubitare aliqua de revideretur*: nor, on the other side, into Socrates, his

ironical doubting of all things; but to propound things sincerely with more or less asseveration, as they stand in a man's own judgment proved more or less.

(10) Other errors there are in the scope that men propound to themselves, whereunto they bend their endeavours; for, whereas the more constant and devote kind of professors of any science ought to propound to themselves to make some additions to their science, they convert their labours to aspire to certain second prizes: as to be a profound interpreter or commentor, to be a sharp champion or defender, to be a methodical compounder or abridger, and so the patrimony of knowledge cometh to be sometimes improved, but seldom augmented.

(11) But the greatest error of all the rest is the mistaking or misplacing of the last or furthest end of knowledge. For men have entered into a desire of learning and knowledge, sometimes upon a natural curiosity and inquisitive appetite; sometimes to entertain their minds with variety and delight; sometimes for ornament and reputation; and sometimes to enable them to victory of wit and contradiction; and most times for lucre and profession; and seldom sincerely to give a true account of their gift of reason to the benefit and use of men: as if there were sought in knowledge a couch whereupon to rest a searching and restless spirit; or a terrace for a wandering and variable mind to walk up and down with a fair prospect; or a tower of state, for a proud mind to raise itself upon; or a fort or commanding ground, for strife and contention; or a shop, for profit or sale; and not a rich storehouse for the glory of the Creator and the relief of man's estate. But this is that which will indeed dignify and exalt knowledge, if contemplation and action may be more nearly and straitly conjoined and united together than they have been: a conjunction like unto that of the two highest planets, Saturn, the planet of rest and contemplation; and Jupiter, the planet of civil society and action, howbeit, I do not mean, when I speak of use and action, that end before-mentioned of the applying of knowledge to lucre and profession; for I am not ignorant how much that diverteth and interrupteth the prosecution and advancement of knowledge, like unto the golden ball thrown before Atalanta, which, while she goeth aside and stoopeth to take up, the race is hindered,

“Declinat cursus, aurumque volubile tollit.” {1}

Neither is my meaning, as was spoken of Socrates, to call philosophy down from heaven to converse upon the earth - that is, to leave natural philosophy aside, and to apply knowledge only to manners and policy. But as both heaven and earth do conspire and contribute to the use and benefit of man, so the end ought to be, from both philosophies to separate and reject vain speculations, and whatsoever is empty and void, and to preserve and augment whatsoever is solid and fruitful; that knowledge may not be as a courtesan, for pleasure and vanity only, or as a bond-woman, to acquire and gain to her master's use; but as a spouse, for generation, fruit, and comfort.

(12) Thus have I described and opened, as by a kind of dissection, those peccant humours (the principal of them) which have not only given impediment to the proficiencie of learning, but have given also occasion to the traducement thereof: wherein, if I have been too plain, it must be remembered, *fidelia vulnera amantis, sed dolosa oscula malignantis*. This I think I have gained, that I ought to be the better believed in that which I shall say pertaining to commendation; because I have proceeded so freely in that which concerneth censure. And yet I have no purpose to enter into a laudative of learning, or to make a hymn to the Muses (though I am of opinion that it is long since their rites were duly celebrated), but my intent is, without varnish or amplification justly to weigh the dignity of knowledge in the balance with other things, and to take the true value thereof by testimonies and arguments, divine and human.

VI. (1) First, therefore, let us seek the dignity of knowledge in the archetype or first platform, which is in the attributes and acts of God, as far as they are revealed to man and may be observed with sobriety; wherein we may not seek it by the name of learning, for all learning is knowledge acquired, and all knowledge in God is original, and therefore we must look for it by another name, that of wisdom or sapience, as the Scriptures call it.

(2) It is so, then, that in the work of the creation we see a double emanation of virtue from God; the one referring more properly to power, the other to

wisdom; the one expressed in making the subsistence of the matter, and the other in disposing the beauty of the form. This being supposed, it is to be observed that for anything which appeareth in the history of the creation, the confused mass and matter of heaven and earth was made in a moment, and the order and disposition of that chaos or mass was the work of six days; such a note of difference it pleased God to put upon the works of power, and the works of wisdom; wherewith concurreth, that in the former it is not set down that God said, "Let there be heaven and earth," as it is set down of the works following; but actually, that God made heaven and earth: the one carrying the style of a manufacture, and the other of a law, decree, or counsel.

(3) To proceed, to that which is next in order from God, to spirits: we find, as far as credit is to be given to the celestial hierarchy of that supposed Dionysius, the senator of Athens, the first place or degree is given to the angels of love, which are termed seraphim; the second to the angels of light, which are termed cherubim; and the third, and so following places, to thrones, principalities, and the rest, which are all angels of power and ministry; so as this angels of knowledge and illumination are placed before the angels of office and domination.

(4) To descend from spirits and intellectual forms to sensible and material forms, we read the first form that was created was light, which hath a relation and correspondence in nature and corporal things to knowledge in spirits and incorporal things.

(5) So in the distribution of days we see the day wherein God did rest and contemplate His own works was blessed above all the days wherein He did effect and accomplish them.

(6) After the creation was finished, it is set down unto us that man was placed in the garden to work therein; which work, so appointed to him, could be no other than work of contemplation; that is, when the end of work is but for exercise and experiment, not for necessity; for there being then no reluctance of the creature, nor sweat of the brow, man's employment must of consequence have been matter of delight in the experiment, and not matter of labour for the use. Again, the first acts which man performed in Paradise

consisted of the two summary parts of knowledge; the view of creatures, and the imposition of names. As for the knowledge which induced the fall, it was, as was touched before, not the natural knowledge of creatures, but the moral knowledge of good and evil; wherein the supposition was, that God's commandments or prohibitions were not the originals of good and evil, but that they had other beginnings, which man aspired to know, to the end to make a total defection from God and to depend wholly upon himself.

(7) To pass on: in the first event or occurrence after the fall of man, we see (as the Scriptures have infinite mysteries, not violating at all the truth of this story or letter) an image of the two estates, the contemplative state and the active state, figured in the two persons of Abel and Cain, and in the two simplest and most primitive trades of life; that of the shepherd (who, by reason of his leisure, rest in a place, and lying in view of heaven, is a lively image of a contemplative life), and that of the husbandman, where we see again the favour and election of God went to the shepherd, and not to the tiller of the ground.

(8) So in the age before the flood, the holy records within those few memorials which are there entered and registered have vouchsafed to mention and honour the name of the inventors and authors of music and works in metal. In the age after the flood, the first great judgment of God upon the ambition of man was the confusion of tongues; whereby the open trade and intercourse of learning and knowledge was chiefly imbarred.

(9) To descend to Moses the lawgiver, and God's first pen: he is adorned by the Scriptures with this addition and commendation, "That he was seen in all the learning of the Egyptians," which nation we know was one of the most ancient schools of the world: for so Plato brings in the Egyptian priest saying unto Solon, "You Grecians are ever children; you have no knowledge of antiquity, nor antiquity of knowledge." Take a view of the ceremonial law of Moses; you shall find, besides the prefiguration of Christ, the badge or difference of the people of God, the exercise and impression of obedience, and other divine uses and fruits thereof, that some of the most learned Rabbins have travailed profitably and profoundly to observe, some of them a natural, some of them a moral sense, or reduction of many of the ceremonies

and ordinances. As in the law of the leprosy, where it is said, “If the whiteness have overspread the flesh, the patient may pass abroad for clean; but if there be any whole flesh remaining, he is to be shut up for unclean;” one of them noteth a principle of nature, that putrefaction is more contagious before maturity than after; and another noteth a position of moral philosophy, that men abandoned to vice do not so much corrupt manners, as those that are half good and half evil. So in this and very many other places in that law, there is to be found, besides the theological sense, much aspersion of philosophy.

(10) So likewise in that excellent book of Job, if it be revolved with diligence, it will be found pregnant and swelling with natural philosophy; as for example, cosmography, and the roundness of the world, *Qui extendit aquilonem super vacuum, et appendit terram super nihilum*; wherein the pensileness of the earth, the pole of the north, and the finiteness or convexity of heaven are manifestly touched. So again, matter of astronomy: *Spiritus ejus ornavit cælos, et obstetricante manu ejus eductus est Coluber tortuoses*. And in another place, *Nunquid conjungere valebis micantes stellas Pleiadas, aut gyrum Arcturi poteris dissipare?* Where the fixing of the stars, ever standing at equal distance, is with great elegancy noted. And in another place, *Qui facit Arcturum, et Oriona, et Hyadas, et interiora Austri*; where again he takes knowledge of the depression of the southern pole, calling it the secrets of the south, because the southern stars were in that climate unseen. Matter of generation: *Annon sicut lac mulsisti me, et sicut caseum coagulasti me?* &c. Matter of minerals: *Habet argentum venarum suarum principia; et auro locus est in quo conflatur, ferrum de terra tollitur, et lapis solutus calore in æs vertitur*; and so forwards in that chapter.

(11) So likewise in the person of Solomon the king, we see the gift or endowment of wisdom and learning, both in Solomon’s petition and in God’s assent thereunto, preferred before all other terrene and temporal felicity. By virtue of which grant or donative of God Solomon became enabled not only to write those excellent parables or aphorisms concerning divine and moral philosophy, but also to compile a natural history of all verdure, from the cedar upon the mountain to the moss upon the wall (which is but a rudiment between putrefaction and an herb), and also of all things that breathe or

move. Nay, the same Solomon the king, although he excelled in the glory of treasure and magnificent buildings, of shipping and navigation, of service and attendance, of fame and renown, and the like, yet he maketh no claim to any of those glories, but only to the glory of inquisition of truth; for so he saith expressly, “The glory of God is to conceal a thing, but the glory of the king is to find it out;” as if, according to the innocent play of children, the Divine Majesty took delight to hide His works, to the end to have them found out; and as if kings could not obtain a greater honour than to be God’s playfellows in that game; considering the great commandment of wits and means, whereby nothing needeth to be hidden from them.

(12) Neither did the dispensation of God vary in the times after our Saviour came into the world; for our Saviour himself did first show His power to subdue ignorance, by His conference with the priests and doctors of the law, before He showed His power to subdue nature by His miracles. And the coming of this Holy Spirit was chiefly figured and expressed in the similitude and gift of tongues, which are but *vehicula scientiæ*.

(13) So in the election of those instruments, which it pleased God to use for the plantation of the faith, notwithstanding that at the first He did employ persons altogether unlearned, otherwise than by inspiration, more evidently to declare His immediate working, and to abase all human wisdom or knowledge; yet nevertheless that counsel of His was no sooner performed, but in the next vicissitude and succession He did send His divine truth into the world, waited on with other learnings, as with servants or handmaids: for so we see St. Paul, who was only learned amongst the Apostles, had his pen most used in the Scriptures of the New Testament.

(14) So again we find that many of the ancient bishops and fathers of the Church were excellently read and studied in all the learning of this heathen; insomuch that the edict of the Emperor Julianus (whereby it was interdicted unto Christians to be admitted into schools, lectures, or exercises of learning) was esteemed and accounted a more pernicious engine and machination against the Christian Faith than were all the sanguinary prosecutions of his predecessors; neither could the emulation and jealousy of Gregory, the first of that name, Bishop of Rome, ever obtain the opinion of piety or devotion;

but contrariwise received the censure of humour, malignity, and pusillanimity, even amongst holy men; in that he designed to obliterate and extinguish the memory of heathen antiquity and authors. But contrariwise it was the Christian Church, which, amidst the inundations of the Scythians on the one side from the north-west, and the Saracens from the east, did preserve in the sacred lap and bosom thereof the precious relics even of heathen learning, which otherwise had been extinguished, as if no such thing had ever been.

(15) And we see before our eyes, that in the age of ourselves and our fathers, when it pleased God to call the Church of Rome to account for their degenerate manners and ceremonies, and sundry doctrines obnoxious and framed to uphold the same abuses; at one and the same time it was ordained by the Divine Providence that there should attend withal a renovation and new spring of all other knowledges. And on the other side we see the Jesuits, who partly in themselves, and partly by the emulation and provocation of their example, have much quickened and strengthened the state of learning; we see (I say) what notable service and reparation they have done to the Roman see.

(16) Wherefore, to conclude this part, let it be observed, that there be two principal duties and services, besides ornament and illustration, which philosophy and human learning do perform to faith and religion. The one, because they are an effectual inducement to the exaltation of the glory of God. For as the Psalms and other Scriptures do often invite us to consider and magnify the great and wonderful works of God, so if we should rest only in the contemplation of the exterior of them as they first offer themselves to our senses, we should do a like injury unto the majesty of God, as if we should judge or construe of the store of some excellent jeweller by that only which is set out toward the street in his shop. The other, because they minister a singular help and preservative against unbelief and error. For our Saviour saith, “You err, not knowing the Scriptures, nor the power of God;” laying before us two books or volumes to study, if we will be secured from error: first the Scriptures, revealing the will of God, and then the creatures expressing His power; whereof the latter is a key unto the former: not only opening our understanding to conceive the true sense of the Scriptures by the

general notions of reason and rules of speech, but chiefly opening our belief, in drawing us into a due meditation of the omnipotency of God, which is chiefly signed and engraven upon His works. Thus much therefore for divine testimony and evidence concerning the true dignity and value of learning.

VII. (1) As for human proofs, it is so large a field, as in a discourse of this nature and brevity it is fit rather to use choice of those things which we shall produce, than to embrace the variety of them. First, therefore, in the degrees of human honour amongst the heathen, it was the highest to obtain to a veneration and adoration as a God. This unto the Christians is as the forbidden fruit. But we speak now separately of human testimony, according to which - that which the Grecians call *apotheosis*, and the Latins *relatio inter divos* - was the supreme honour which man could attribute unto man, specially when it was given, not by a formal decree or act of state (as it was used among the Roman Emperors), but by an inward assent and belief. Which honour, being so high, had also a degree or middle term; for there were reckoned above human honours, honours heroical and divine: in the attribution and distribution of which honours we see antiquity made this difference; that whereas founders and uniters of states and cities, lawgivers, extirpers of tyrants, fathers of the people, and other eminent persons in civil merit, were honoured but with the titles of worthies or demigods, such as were Hercules, Theseus, Minus, Romulus, and the like; on the other side, such as were inventors and authors of new arts, endowments, and commodities towards man's life, were ever consecrated amongst the gods themselves, as was Ceres, Bacchus, Mercurius, Apollo, and others. And justly; for the merit of the former is confined within the circle of an age or a nation, and is like fruitful showers, which though they be profitable and good, yet serve but for that season, and for a latitude of ground where they fall; but the other is, indeed, like the benefits of heaven, which are permanent and universal. The former again is mixed with strife and perturbation, but the latter hath the true character of Divine Presence, coming in *aura leni*, without noise or agitation.

(2) Neither is certainly that other merit of learning, in repressing the inconveniences which grow from man to man, much inferior to the former, of relieving the necessities which arise from nature, which merit was lively set

forth by the ancients in that feigned relation of Orpheus' theatre, where all beasts and birds assembled, and, forgetting their several appetites - some of prey, some of game, some of quarrel - stood all sociably together listening unto the airs and accords of the harp, the sound whereof no sooner ceased, or was drowned by some louder noise, but every beast returned to his own nature; wherein is aptly described the nature and condition of men, who are full of savage and unreclaimed desires, of profit, of lust, of revenge; which as long as they give ear to precepts, to laws, to religion, sweetly touched with eloquence and persuasion of books, of sermons, of harangues, so long is society and peace maintained; but if these instruments be silent, or that sedition and tumult make them not audible, all things dissolve into anarchy and confusion.

(3) But this appeareth more manifestly when kings themselves, or persons of authority under them, or other governors in commonwealths and popular estates, are endued with learning. For although he might be thought partial to his own profession that said "Then should people and estates be happy when either kings were philosophers, or philosophers kings;" yet so much is verified by experience, that under learned princes and governors there have been ever the best times: for howsoever kings may have their imperfections in their passions and customs, yet, if they be illuminate by learning, they have those notions of religion, policy, and morality, which do preserve them and refrain them from all ruinous and peremptory errors and excesses, whispering evermore in their ears, when counsellors and servants stand mute and silent. And senators or counsellors, likewise, which be learned, to proceed upon more safe and substantial principles, than counsellors which are only men of experience; the one sort keeping dangers afar off, whereas the other discover them not till they come near hand, and then trust to the agility of their wit to ward or avoid them.

(4) Which felicity of times under learned princes (to keep still the law of brevity, by using the most eminent and selected examples) doth best appear in the age which passed from the death of Domitianus the emperor until the reign of Commodus; comprehending a succession of six princes, all learned, or singular favourers and advancers of learning, which age for temporal respects was the most happy and flourishing that ever the Roman Empire

(which then was a model of the world) enjoyed - a matter revealed and prefigured unto Domitian in a dream the night before he was slain: for he thought there was grown behind upon his shoulders a neck and a head of gold, which came accordingly to pass in those golden times which succeeded; of which princes we will make some commemoration; wherein, although the matter will be vulgar, and may be thought fitter for a declamation than agreeable to a treatise infolded as this is, yet, because it is pertinent to the point in hand - *Neque semper arcum tendit Apollo* - and to name them only were too naked and cursory, I will not omit it altogether. The first was Nerva, the excellent temper of whose government is by a glance in Cornelius Tacitus touched to the life: *Postquam divus Nerva res oluim insociabiles miscuisset, imperium et libertatem*. And in token of his learning, the last act of his short reign left to memory was a missive to his adopted son, Trajan, proceeding upon some inward discontent at the ingratitude of the times, comprehended in a verse of Homer's -

“Telis, Phœbe, tuis, lacrymas ulciscere nostras.”

(5) Trajan, who succeeded, was for his person not learned; but if we will hearken to the speech of our Saviour, that saith, “He that receiveth a prophet in the name of a prophet shall have a prophet's reward,” he deserveth to be placed amongst the most learned princes; for there was not a greater admirer of learning or benefactor of learning, a founder of famous libraries, a perpetual advancer of learned men to office, and familiar converser with learned professors and preceptors who were noted to have then most credit in court. On the other side how much Trajan's virtue and government was admired and renowned, surely no testimony of grave and faithful history doth more lively set forth than that legend tale of Gregorius Magnum, Bishop of Rome, who was noted for the extreme envy he bare towards all heathen excellency; and yet he is reported, out of the love and estimation of Trajan's moral virtues, to have made unto God passionate and fervent prayers for the delivery of his soul out of hell, and to have obtained it, with a caveat that he should make no more such petitions. In this prince's time also the persecutions against the Christians received intermission upon the certificate

of Plinius Secundus, a man of excellent learning and by Trajan advanced.

(6) Adrian, his successor, was the most curious man that lived, and the most universal inquirer: insomuch as it was noted for an error in his mind that he desired to comprehend all things, and not to reserve himself for the worthiest things, falling into the like humour that was long before noted in Philip of Macedon, who, when he would needs overrule and put down an excellent musician in an argument touching music, was well answered by him again - "God forbid, sir," saith he, "that your fortune should be so bad as to know these things better than I." It pleased God likewise to use the curiosity of this emperor as an inducement to the peace of His Church in those days; for having Christ in veneration, not as a God or Saviour, but as a wonder or novelty, and having his picture in his gallery matched with Apollonius (with whom in his vain imagination he thought its had some conformity), yet it served the turn to allay the bitter hatred of those times against the Christian name, so as the Church had peace during his time. And for his government civil, although he did not attain to that of Trajan's in glory of arms or perfection of justice, yet in deserving of the weal of the subject he did exceed him. For Trajan erected many famous monuments and buildings, insomuch as Constantine the Great in emulation was wont to call him *Parietaria*, "wall-flower," because his name was upon so many walls; but his buildings and works were more of glory and triumph than use and necessity. But Adrian spent his whole reign, which was peaceable, in a perambulation or survey of the Roman Empire, giving order and making assignation where he went for re-edifying of cities, towns, and forts decayed, and for cutting of rivers and streams, and for making bridges and passages, and for policing of cities and commonalties with new ordinances and constitutions, and granting new franchises and incorporations; so that his whole time was a very restoration of all the lapses and decays of former times.

(7) Antoninus Pius, who succeeded him, was a prince excellently learned, and had the patient and subtle wit of a schoolman, insomuch as in common speech (which leaves no virtue untaxed) he was called *Cymini Sector*, a carver or a divider of cummin seed, which is one of the least seeds. Such a patience he had and settled spirit to enter into the least and most exact differences of causes, a fruit no doubt of the exceeding tranquillity and

serenity of his mind, which being no ways charged or encumbered, either with fears, remorse, or scruples, but having been noted for a man of the purest goodness, without all fiction or affectation, that hath reigned or lived, made his mind continually present and entire. He likewise approached a degree nearer unto Christianity, and became, as Agrippa said unto St. Paul, “half a Christian,” holding their religion and law in good opinion, and not only ceasing persecution, but giving way to the advancement of Christians.

(5) There succeeded him the first *Divi fratres*, the two adoptive brethren - Lucius Commodus Verus, son to Ælius Verus, who delighted much in the softer kind of learning, and was wont to call the poet Martial his Virgil; and Marcus Aurelius Antoninus: whereof the latter, who obscured his colleague and survived him long, was named the “Philosopher,” who, as he excelled all the rest in learning, so he excelled them likewise in perfection of all royal virtues; insomuch as Julianus the emperor, in his book entitled *Cærsares*, being as a pasquil or satire to deride all his predecessors, feigned that they were all invited to a banquet of the gods, and Silenus the jester sat at the nether end of the table and bestowed a scoff on everyone as they came in; but when Marcus Philosophus came in, Silenus was gravelled and out of countenance, not knowing where to carp at him, save at the last he gave a glance at his patience towards his wife. And the virtue of this prince, continued with that of his predecessor, made the name of Antoninus so sacred in the world, that though it were extremely dishonoured in Commodus, Caracalla, and Heliogabalus, who all bare the name, yet, when Alexander Severus refused the name because he was a stranger to the family, the Senate with one acclamation said, *Quomodo Augustus, sic et Antoninus*. In such renown and veneration was the name of these two princes in those days, that they would have had it as a perpetual addition in all the emperors’ style. In this emperor’s time also the Church for the most part was in peace; so as in this sequence of six princes we do see the blessed effects of learning in sovereignty, painted forth in the greatest table of the world.

(9) But for a tablet or picture of smaller volume (not presuming to speak of your Majesty that liveth), in my judgment the most excellent is that of Queen Elizabeth, your immediate predecessor in this part of Britain; a prince that, if Plutarch were now alive to write lives by parallels, would trouble him, I

think, to find for her a parallel amongst women. This lady was endued with learning in her sex singular, and rare even amongst masculine princes - whether we speak of learning, of language, or of science, modern or ancient, divinity or humanity - and unto the very last year of her life she accustomed to appoint set hours for reading, scarcely any young student in a university more daily or more dully. As for her government, I assure myself (I shall not exceed if I do affirm) that this part of the island never had forty-five years of better times, and yet not through the calmness of the season, but through the wisdom of her regiment. For if there be considered, of the one side, the truth of religion established, the constant peace and security, the good administration of justice, the temperate use of the prerogative, not slackened, nor much strained; the flourishing state of learning, sortable to so excellent a patroness; the convenient estate of wealth and means, both of crown and subject; the habit of obedience, and the moderation of discontents; and there be considered, on the other side, the differences of religion, the troubles of neighbour countries, the ambition of Spain, and opposition of Rome, and then that she was solitary and of herself; these things, I say, considered, as I could not have chosen an instance so recent and so proper, so I suppose I could not have chosen one more remarkable or eminent to the purpose now in hand, which is concerning the conjunction of learning in the prince with felicity in the people.

(10) Neither hath learning an influence and operation only upon civil merit and moral virtue, and the arts or temperature of peace and peaceable government; but likewise it hath no less power and efficacy in enablement towards martial and military virtue and prowess, as may be notably represented in the examples of Alexander the Great and Cæsar the Dictator (mentioned before, but now in fit place to be resumed), of whose virtues and acts in war there needs no note or recital, having been the wonders of time in that kind; but of their affections towards learning and perfections in learning it is pertinent to say somewhat.

(11) Alexander was bred and taught under Aristotle, the great philosopher, who dedicated divers of his books of philosophy unto him; he was attended with Callisthenes and divers other learned persons, that followed him in camp, throughout his journeys and conquests. What price and estimation he

had learning in doth notably appear in these three particulars: first, in the envy he used to express that he bare towards Achilles, in this, that he had so good a trumpet of his praises as Homer's verses; secondly, in the judgment or solution he gave touching that precious cabinet of Darius, which was found among his jewels (whereof question was made what thing was worthy to be put into it, and he gave his opinion for Homer's works); thirdly, in his letter to Aristotle, after he had set forth his books of nature, wherein he expostulateth with him for publishing the secrets or mysteries of philosophy; and gave him to understand that himself esteemed it more to excel other men in learning and knowledge than in power and empire. And what use he had of learning doth appear, or rather shine, in all his speeches and answers, being full of science and use of science, and that in all variety.

(12) And herein again it may seem a thing scholastical, and somewhat idle to recite things that every man knoweth; but yet, since the argument I handle leadeth me thereunto, I am glad that men shall perceive I am as willing to flatter (if they will so call it) an Alexander, or a Cæsar, or an Antoninus, that are dead many hundred years since, as any that now liveth; for it is the displaying of the glory of learning in sovereignty that I propound to myself, and not a humour of declaiming in any man's praises. Observe, then, the speech he used of Diogenes, and see if it tend not to the true state of one of the greatest questions of moral philosophy: whether the enjoying of outward things, or the contemning of them, be the greatest happiness; for when he saw Diogenes so perfectly contented with so little, he said to those that mocked at his condition, "were I not Alexander, I would wish to be Diogenes." But Seneca inverteth it, and saith, "*Plus erat, quod hic nollet accipere, quàm quod ille posset dare.*" There were more things which Diogenes would have refused than those were which Alexander could have given or enjoyed.

(13) Observe, again, that speech which was usual with him, - "That he felt his mortality chiefly in two things, sleep and lust;" and see if it were not a speech extracted out of the depth of natural philosophy, and liker to have come out of the mouth of Aristotle or Democritus than from Alexander.

(14) See, again, that speech of humanity and poesy, when, upon the bleeding of his wounds, he called unto him one of his flatterers, that was wont to

ascribe to him divine honour, and said, “Look, this is very blood; this is not such a liquor as Homer speaketh of, which ran from Venus’ hand when it was pierced by Diomedes.”

(15) See likewise his readiness in reprehension of logic in the speech he used to Cassander, upon a complaint that was made against his father Antipater; for when Alexander happened to say, “Do you think these men would have come from so far to complain except they had just cause of grief?” and Cassander answered, “Yea, that was the matter, because they thought they should not be disproved;” said Alexander, laughing, “See the subtleties of Aristotle, to take a matter both ways, *pro et contra*, &c.”

(16) But note, again, how well he could use the same art which he reprehended to serve his own humour: when bearing a secret grudge to Callisthenes, because he was against the new ceremony of his adoration, feasting one night where the same Callisthenes was at the table, it was moved by some after supper, for entertainment sake, that Callisthenes, who was an eloquent man, might speak of some theme or purpose at his own choice; which Callisthenes did, choosing the praise of the Macedonian nation for his discourse, and performing the same with so good manner as the hearers were much ravished; whereupon Alexander, nothing pleased, said, “It was easy to be eloquent upon so good a subject; but,” saith he, “turn your style, and let us hear what you can say against us;” which Callisthenes presently undertook, and did with that sting and life that Alexander interrupted him, and said, “The goodness of the cause made him eloquent before, and despite made him eloquent then again.”

(17) Consider further, for tropes of rhetoric, that excellent use of a metaphor or translation, wherewith he taxeth Antipater, who was an imperious and tyrannous governor; for when one of Antipater’s friends commended him to Alexander for his moderation, that he did not degenerate as his other lieutenants did into the Persian pride, in uses of purple, but kept the ancient habit of Macedon, of black. “True,” saith Alexander; “but Antipater is all purple within.” Or that other, when Parmenio came to him in the plain of Arbela and showed him the innumerable multitude of his enemies, specially as they appeared by the infinite number of lights as it had been a new

firmament of stars, and thereupon advised him to assail them by night; whereupon he answered, "That he would not steal the victory."

(18) For matter of policy, weigh that significant distinction, so much in all ages embraced, that he made between his two friends Hephæstion and Craterus, when he said, "That the one loved Alexander, and the other loved the king:" describing the principal difference of princes' best servants, that some in affection love their person, and other in duty love their crown.

(19) Weigh also that excellent taxation of an error, ordinary with counsellors of princes, that they counsel their masters according to the model of their own mind and fortune, and not of their masters. When upon Darius' great offers Parmenio had said, "Surely I would accept these offers were I as Alexander;" saith Alexander, "So would I were I as Parmenio."

(20) Lastly, weigh that quick and acute reply which he made when he gave so large gifts to his friends and servants, and was asked what he did reserve for himself, and he answered, "Hope." Weigh, I say, whether he had not cast up his account aright, because *hope* must be the portion of all that resolve upon great enterprises; for this was Cæsar's portion when he went first into Gaul, his estate being then utterly overthrown with largesses. And this was likewise the portion of that noble prince, howsoever transported with ambition, Henry Duke of Guise, of whom it was usually said that he was the greatest usurer in France, because he had turned all his estate into obligations.

(21) To conclude, therefore, as certain critics are used to say hyperbolically, "That if all sciences were lost they might be found in Virgil," so certainly this may be said truly, there are the prints and footsteps of learning in those few speeches which are reported of this prince, the admiration of whom, when I consider him not as Alexander the Great, but as Aristotle's scholar, hath carried me too far.

(22) As for Julius Cæsar, the excellency of his learning needeth not to be argued from his education, or his company, or his speeches; but in a further degree doth declare itself in his writings and works: whereof some are extant and permanent, and some unfortunately perished. For first, we see there is

left unto us that excellent history of his own wars, which he entitled only a Commentary, wherein all succeeding times have admired the solid weight of matter, and the real passages and lively images of actions and persons, expressed in the greatest propriety of words and perspicuity of narration that ever was; which that it was not the effect of a natural gift, but of learning and precept, is well witnessed by that work of his entitled *De Analogia*, being a grammatical philosophy, wherein he did labour to make this same *Vox ad placitum* to become *Vox ad licitum*, and to reduce custom of speech to congruity of speech; and took as it were the pictures of words from the life of reason.

(23) So we receive from him, as a monument both of his power and learning, the then reformed computation of the year; well expressing that he took it to be as great a glory to himself to observe and know the law of the heavens, as to give law to men upon the earth.

(24) So likewise in that book of his, *Anti-Cato*, it may easily appear that he did aspire as well to victory of wit as victory of war: undertaking therein a conflict against the greatest champion with the pen that then lived, Cicero the orator.

(25) So, again, in his book of Apophthegms, which he collected, we see that he esteemed it more honour to make himself but a pair of tables, to take the wise and pithy words of others, than to have every word of his own to be made an apophthegm or an oracle, as vain princes, by custom of flattery, pretend to do. And yet if I should enumerate divers of his speeches, as I did those of Alexander, they are truly such as Solomon noteth, when he saith, *Verba sapientum tanquam aculei, et tanquam clavi in altum defixi*: whereof I will only recite three, not so delectable for elegancy, but admirable for vigour and efficacy.

(26) As first, it is reason he be thought a master of words, that could with one word appease a mutiny in his army, which was thus: The Romans, when their generals did speak to their army, did use the word *Milites*, but when the magistrates spake to the people they did use the word *Quirites*. The soldiers were in tumult, and seditiously prayed to be cashiered; not that they so meant,

but by expostulation thereof to draw Cæsar to other conditions; wherein he being resolute not to give way, after some silence, he began his speech, *Ego Quirites*, which did admit them already cashiered - wherewith they were so surprised, crossed, and confused, as they would not suffer him to go on in his speech, but relinquished their demands, and made it their suit to be again called by the name of *Milites*.

(27) The second speech was thus: Cæsar did extremely affect the name of king; and some were set on as he passed by in popular acclamation to salute him king. Whereupon, finding the cry weak and poor, he put it off thus, in a kind of jest, as if they had mistaken his surname: *Non Rex sum, sed Cæsar*; a speech that, if it be searched, the life and fulness of it can scarce be expressed. For, first, it was a refusal of the name, but yet not serious; again, it did signify an infinite confidence and magnanimity, as if he presumed Cæsar was the greater title, as by his worthiness it is come to pass till this day. But chiefly it was a speech of great allurements toward his own purpose, as if the state did strive with him but for a name, whereof mean families were vested; for *Rex* was a surname with the Romans, as well as *King* is with us.

(28) The last speech which I will mention was used to Metellus, when Cæsar, after war declared, did possess himself of this city of Rome; at which time, entering into the inner treasury to take the money there accumulate, Metellus, being tribune, forbade him. Whereto Cæsar said, "That if he did not desist, he would lay him dead in the place." And presently taking himself up, he added, "Young man, it is harder for me to speak it than to do it - *Adolescens, durius est mihi hoc dicere quàm facere*." A speech compounded of the greatest terror and greatest clemency that could proceed out of the mouth of man.

(29) But to return and conclude with him, it is evident himself knew well his own perfection in learning, and took it upon him, as appeared when upon occasion that some spake what a strange resolution it was in Lucius Sylla to resign his dictators, he, scoffing at him to his own advantage, answered, "That Sylla could not skill of letters, and therefore knew not how to dictate."

(30) And here it were fit to leave this point, touching the concurrence of

military virtue and learning (for what example should come with any grace after those two of Alexander and Cæsar?), were it not in regard of the rareness of circumstance, that I find in one other particular, as that which did so suddenly pass from extreme scorn to extreme wonder: and it is of Xenophon the philosopher, who went from Socrates' school into Asia in the expedition of Cyrus the younger against King Artaxerxes. This Xenophon at that time was very young, and never had seen the wars before, neither had any command in the army, but only followed the war as a voluntary, for the love and conversation of Proxenus, his friend. He was present when Falinus came in message from the great king to the Grecians, after that Cyrus was slain in the field, and they, a handful of men, left to themselves in the midst of the king's territories, cut off from their country by many navigable rivers and many hundred miles. The message imported that they should deliver up their arms and submit themselves to the king's mercy. To which message, before answer was made, divers of the army conferred familiarly with Falinus; and amongst the rest Xenophon happened to say, "Why, Falinus, we have now but these two things left, our arms and our virtue; and if we yield up our arms, how shall we make use of our virtue?" Whereto Falinus, smiling on him, said, "If I be not deceived, young gentleman, you are an Athenian, and I believe you study philosophy, and it is pretty that you say; but you are much abused if you think your virtue can withstand the king's power." Here was the scorn; the wonder followed: which was that this young scholar or philosopher, after all the captains were murdered in parley by treason, conducted those ten thousand foot, through the heart of all the king's high countries, from Babylon to Græcia in safety, in despite of all the king's forces, to the astonishment of the world, and the encouragement of the Grecians in times succeeding to make invasion upon the kings of Persia, as was after purposed by Jason the Thessalian, attempted by Agesilaus the Spartan, and achieved by Alexander the Macedonian, all upon the ground of the act of that young scholar.

VIII. (1) To proceed now from imperial and military virtue to moral and private virtue; first, it is an assured truth, which is contained in the verses:-

"Scilicet ingenuas didicisse fideliter artes

Emollit mores nec sinit esse feros.”

It taketh away the wildness and barbarism and fierceness of men’s minds; but indeed the accent had need be upon *fideliter*; for a little superficial learning doth rather work a contrary effect. It taketh away all levity, temerity, and insolency, by copious suggestion of all doubts and difficulties, and acquainting the mind to balance reasons on both sides, and to turn back the first offers and conceits of the mind, and to accept of nothing but examined and tried. It taketh away vain admiration of anything, which is the root of all weakness. For all things are admired, either because they are new, or because they are great. For novelty, no man that wadeth in learning or contemplation thoroughly but will find that printed in his heart, *Nil novi super terram*. Neither can any man marvel at the play of puppets, that goeth behind the curtain, and adviseth well of the motion. And for magnitude, as Alexander the Great, after that he was used to great armies, and the great conquests of the spacious provinces in Asia, when he received letters out of Greece, of some fights and services there, which were commonly for a passage or a fort, or some walled town at the most, he said: - “It seemed to him that he was advertised of the battles of the frogs and the mice, that the old tales went of.” So certainly, if a man meditate much upon the universal frame of nature, the earth with men upon it (the divineness of souls except) will not seem much other than an ant-hill, whereas some ants carry corn, and some carry their young, and some go empty, and all to and fro a little heap of dust. It taketh away or mitigateth fear of death or adverse fortune, which is one of the greatest impediments of virtue and imperfections of manners. For if a man’s mind be deeply seasoned with the consideration of the mortality and corruptible nature of things, he will easily concur with Epictetus, who went forth one day and saw a woman weeping for her pitcher of earth that was broken, and went forth the next day and saw a woman weeping for her son that was dead, and thereupon said, “*Heri vidi fragilem frangi, hodie vidi mortalem mori.*” And, therefore, Virgil did excellently and profoundly couple the knowledge of causes and the conquest of all fears together, as *concomitantia*.

“Felix, qui potuit rerum cognoscere causas,
Quique metus omnes, et inexorabile fatum
Subjecit pedibus, strepitumque Acherontis avari.”

(2) It were too long to go over the particular remedies which learning doth minister to all the diseases of the mind: sometimes purging the ill humours, sometimes opening the obstructions, sometimes helping digestion, sometimes increasing appetite, sometimes healing the wounds and exulcerations thereof, and the like; and, therefore, I will conclude with that which hath *rationem totius* - which is, that it disposeth the constitution of the mind not to be fixed or settled in the defects thereof, but still to be capable and susceptible of growth and reformation. For the unlearned man knows not what it is to descend into himself, or to call himself to account, nor the pleasure of that *suavissima vita, indies sentire se fieri meliorem*. The good parts he hath he will learn to show to the full, and use them dexterously, but not much to increase them. The faults he hath he will learn how to hide and colour them, but not much to amend them; like an ill mower, that mows on still, and never whets his scythe. Whereas with the learned man it fares otherwise, that he doth ever intermix the correction and amendment of his mind with the use and employment thereof. Nay, further, in general and in sum, certain it is that *Veritas* and *Bonitas* differ but as the seal and the print; for truth prints goodness, and they be the clouds of error which descend in the storms of passions and perturbations.

(3) From moral virtue let us pass on to matter of power and commandment, and consider whether in right reason there be any comparable with that wherewith knowledge investeth and crowneth man's nature. We see the dignity of the commandment is according to the dignity of the commanded; to have commandment over beasts as herdmen have, is a thing contemptible; to have commandment over children as schoolmasters have, is a matter of small honour; to have commandment over galley-slaves is a disparagement rather than an honour. Neither is the commandment of tyrants much better, over people which have put off the generosity of their minds; and, therefore, it was ever holden that honours in free monarchies and commonwealths had a sweetness more than in tyrannies, because the commandment extendeth more

over the wills of men, and not only over their deeds and services. And therefore, when Virgil putteth himself forth to attribute to Augustus Cæsar the best of human honours, he doth it in these words:-

“Victorque volentes
Per populos dat jura, viamque affectat Olympo.”

But yet the commandment of knowledge is yet higher than the commandment over the will; for it is a commandment over the reason, belief, and understanding of man, which is the highest part of the mind, and giveth law to the will itself. For there is no power on earth which setteth up a throne or chair of estate in the spirits and souls of men, and in their cogitations, imaginations, opinions, and beliefs, but knowledge and learning. And therefore we see the detestable and extreme pleasure that arch-heretics, and false prophets, and impostors are transported with, when they once find in themselves that they have a superiority in the faith and conscience of men; so great as if they have once tasted of it, it is seldom seen that any torture or persecution can make them relinquish or abandon it. But as this is that which the author of the Revelation calleth the depth or profoundness of Satan, so by argument of contraries, the just and lawful sovereignty over men’s understanding, by force of truth rightly interpreted, is that which approacheth nearest to the similitude of the divine rule.

(4) As for fortune and advancement, the beneficence of learning is not so confined to give fortune only to states and commonwealths, as it doth not likewise give fortune to particular persons. For it was well noted long ago, that Homer hath given more men their livings, than either Sylla, or Cæsar, or Augustus ever did, notwithstanding their great largesses and donatives, and distributions of lands to so many legions. And no doubt it is hard to say whether arms or learning have advanced greater numbers. And in case of sovereignty we see, that if arms or descent have carried away the kingdom, yet learning hath carried the priesthood, which ever hath been in some competition with empire.

(5) Again, for the pleasure and delight of knowledge and learning, it far surpasseth all other in nature. For, shall the pleasures of the affections so exceed the pleasure of the sense, as much as the obtaining of desire or victory exceedeth a song or a dinner? and must not of consequence the pleasures of the intellect or understanding exceed the pleasures of the affections? We see in all other pleasures there is satiety, and after they be used, their verdure departeth, which showeth well they be but deceits of pleasure, and not pleasures; and that it was the novelty which pleased, and not the quality. And, therefore, we see that voluptuous men turn friars, and ambitious princes turn melancholy. But of knowledge there is no satiety, but satisfaction and appetite are perpetually interchangeable; and, therefore, appeareth to be good in itself simply, without fallacy or accident. Neither is that pleasure of small efficacy and contentment to the mind of man, which the poet Lucretius describeth elegantly:-

“Suave mari magno, turbantibus æquora ventis, &c.”

“It is a view of delight,” saith he, “to stand or walk upon the shore side, and to see a ship tossed with tempest upon the sea; or to be in a fortified tower, and to see two battles join upon a plain. But it is a pleasure incomparable, for the mind of man to be settled, landed, and fortified in the certainty of truth; and from thence to descry and behold the errors, perturbations, labours, and wanderings up and down of other men.

(6) Lastly, leaving the vulgar arguments, that by learning man excelleth man in that wherein man excelleth beasts; that by learning man ascendeth to the heavens and their motions, where in body he cannot come; and the like: let us conclude with the dignity and excellency of knowledge and learning in that whereunto man's nature doth most aspire, which is immortality, or continuance; for to this tendeth generation, and raising of houses and families; to this tend buildings, foundations, and monuments; to this tendeth the desire of memory, fame, and celebration; and in effect the strength of all other human desires. We see then how far the monuments of wit and learning are more durable than the monuments of power or of the hands. For

have not the verses of Homer continued twenty-five hundred years, or more, without the loss of a syllable or letter; during which the infinite palaces, temples, castles, cities, have been decayed and demolished? It is not possible to have the true pictures or statues of Cyrus, Alexander, Cæsar, no nor of the kings or great personages of much later years; for the originals cannot last, and the copies cannot but leese of the life and truth. But the images of men's wits and knowledges remain in books, exempted from the wrong of time and capable of perpetual renovation. Neither are they fitly to be called images, because they generate still, and cast their seeds in the minds of others, provoking and causing infinite actions and opinions in succeeding ages. So that if the invention of the ship was thought so noble, which carrieth riches and commodities from place to place, and consociateth the most remote regions in participation of their fruits, how much more are letters to be magnified, which as ships pass through the vast seas of time, and make ages so distant to participate of the wisdom, illuminations, and inventions, the one of the other? Nay, further, we see some of the philosophers which were least divine, and most immersed in the senses, and denied generally the immortality of the soul, yet came to this point, that whatsoever motions the spirit of man could act and perform without the organs of the body, they thought might remain after death, which were only those of the understanding and not of the affection; so immortal and incorruptible a thing did knowledge seem unto them to be. But we, that know by divine revelation that not only the understanding but the affections purified, not only the spirit but the body changed, shall be advanced to immortality, do disclaim in these rudiments of the senses. But it must be remembered, both in this last point, and so it may likewise be needful in other places, that in probation of the dignity of knowledge or learning, I did in the beginning separate divine testimony from human, which method I have pursued, and so handled them both apart.

(7) Nevertheless I do not pretend, and I know it will be impossible for me, by any pleading of mine, to reverse the judgment, either of Æsop's cock, that preferred the barleycorn before the gem; or of Midas, that being chosen judge between Apollo, president of the Muses, and Pan, god of the flocks, judged for plenty; or of Paris, that judged for beauty and love against wisdom and power; or of Agrippina, *occidat matrem, modo imperet*, that preferred empire with any condition never so detestable; or of Ulysses, *qui vetulam prætulit*

immortalitati, being a figure of those which prefer custom and habit before all excellency, or of a number of the like popular judgments. For these things must continue as they have been; but so will that also continue whereupon learning hath ever relied, and which faileth not: *Justificata est sapientia a filiis suis*.

THE SECOND BOOK.

To the King.

1. It might seem to have more convenience, though it come often otherwise to pass (excellent King), that those which are fruitful in their generations, and have in themselves the foresight of immortality in their descendants, should likewise be more careful of the good estate of future times, unto which they know they must transmit and commend over their dearest pledges. Queen Elizabeth was a sojourner in the world in respect of her unmarried life, and was a blessing to her own times; and yet so as the impression of her good government, besides her happy memory, is not without some effect which doth survive her. But to your Majesty, whom God hath already blessed with so much royal issue, worthy to continue and represent you for ever, and whose youthful and fruitful bed doth yet promise many the like renovations, it is proper and agreeable to be conversant not only in the transitory parts of good government, but in those acts also which are in their nature permanent and perpetual. Amongst the which (if affection do not transport me) there is not any more worthy than the further endowment of the world with sound and fruitful knowledge. For why should a few received authors stand up like Hercules' columns, beyond which there should be no sailing or discovering, since we have so bright and benign a star as your Majesty to conduct and prosper us? To return therefore where we left, it remaineth to consider of what kind those acts are which have been undertaken and performed by kings and others for the increase and advancement of learning, wherein I purpose to speak actively, without digressing or dilating.

2. Let this ground therefore be laid, that all works are over common by amplitude of reward, by soundness of direction, and by the conjunction of labours. The first multiplieth endeavour, the second preventeth error, and the third supplieth the frailty of man. But the principal of these is direction, for *claudus in via antevertit cursorem extra viam*; and Solomon excellently setteth it down, “If the iron be not sharp, it requireth more strength, but wisdom is that which prevaieth,” signifying that the invention or election of the mean is more effectual than any enforcement or accumulation of endeavours. This I am induced to speak, for that (not derogating from the noble intention of any that have been deservers towards the state of learning), I do observe nevertheless that their works and acts are rather matters of magnificence and memory than of progression and proficience, and tend rather to augment the mass of learning in the multitude of learned men than to rectify or raise the sciences themselves.

3. The works or acts of merit towards learning are conversant about three objects - the places of learning, the books of learning, and the persons of the learned. For as water, whether it be the dew of heaven or the springs of the earth, doth scatter and leese itself in the ground, except it be collected into some receptacle where it may by union comfort and sustain itself; and for that cause the industry of man hath made and framed springheads, conduits, cisterns, and pools, which men have accustomed likewise to beautify and adorn with accomplishments of magnificence and state, as well as of use and necessity; so this excellent liquor of knowledge, whether it descend from divine inspiration, or spring from human sense, would soon perish and vanish to oblivion, if it were not preserved in books, traditions, conferences, and places appointed, as universities, colleges, and schools, for the receipt and comforting of the same.

4. The works which concern the seats and places of learning are four - foundations and buildings, endowments with revenues, endowments with franchises and privileges, institutions and ordinances for government - all tending to quietness and privateness of life, and discharge of cares and troubles; much like the stations which Virgil prescribeth for the hiving of bees:

“Principio sedes apibus statioque petenda,
Quo neque sit ventis aditus, &c.”

5. The works touching books are two - first, libraries, which are as the shrines where all the relics of the ancient saints, full of true virtue, and that without delusion or imposture, are preserved and reposed; secondly, new editions of authors, with more correct impressions, more faithful translations, more profitable glosses, more diligent annotations, and the like.

6. The works pertaining to the persons of learned men (besides the advancement and countenancing of them in general) are two - the reward and designation of readers in sciences already extant and invented; and the reward and designation of writers and inquirers concerning any parts of learning not sufficiently laboured and prosecuted.

7. These are summarily the works and acts wherein the merits of many excellent princes and other worthy personages, have been conversant. As for any particular commemorations, I call to mind what Cicero said when he gave general thanks, *Difficile non aliquem, ingratum quenquam præterire*. Let us rather, according to the Scriptures, look unto that part of the race which is before us, than look back to that which is already attained.

8. First, therefore, amongst so many great foundations of colleges in Europe, I find strange that they are all dedicated to professions, and none left free to arts and sciences at large. For if men judge that learning should be referred to action, they judge well; but in this they fall into the error described in the ancient fable, in which the other parts of the body did suppose the stomach had been idle, because it neither performed the office of motion, as the limbs do, nor of sense, as the head doth; but yet notwithstanding it is the stomach that digesteth and distributeth to all the rest. So if any man think philosophy and universality to be idle studies, he doth not consider that all professions are from thence served and supplied. And this I take to be a great cause that hath hindered the progression of learning, because these fundamental knowledges have been studied but in passage. For if you will have a tree

bear more fruit than it hath used to do, it is not anything you can do to the boughs, but it is the stirring of the earth and putting new mould about the roots that must work it. Neither is it to be forgotten, that this dedicating of foundations and dotations to professory learning hath not only had a malign aspect and influence upon the growth of sciences, but hath also been prejudicial to states, and governments. For hence it proceedeth that princes find a solitude in regard of able men to serve them in causes of estate, because there is no education collegiate which is free, where such as were so disposed might give themselves in histories, modern languages, books of policy and civil discourse, and other the like enablements unto service of estate.

9. And because founders of colleges do plant, and founders of lectures do water, it followeth well in order to speak of the defect which is in public lectures; namely, in the smallness, and meanness of the salary or reward which in most places is assigned unto them, whether they be lectures of arts, or of professions. For it is necessary to the progression of sciences that readers be of the most able and sufficient men; as those which are ordained for generating and propagating of sciences, and not for transitory use. This cannot be, except their condition and endowment be such as may content the ablest man to appropriate his whole labour and continue his whole age in that function and attendance; and therefore must have a proportion answerable to that mediocrity or competency of advancement, which may be expected from a profession or the practice of a profession. So as, if you will have sciences flourish, you must observe David's military law, which was, "That those which stayed with the carriage should have equal part with those which were in the action;" else will the carriages be ill attended. So readers in sciences are indeed the guardians of the stores and provisions of sciences, whence men in active courses are furnished, and therefore ought to have equal entertainment with them; otherwise if the fathers in sciences be of the weakest sort or be ill maintained,

"Et patrum invalidi referent jejunia nati."

10. Another defect I note, wherein I shall need some alchemist to help me, who call upon men to sell their books, and to build furnaces; quitting and forsaking Minerva and the Muses as barren virgins, and relying upon Vulcan. But certain it is, that unto the deep, fruitful, and operative study of many sciences, specialty natural philosophy and physic, books be not only the instrumentals; wherein also the beneficence of men hath not been altogether wanting. For we see spheres, globes, astrolabes, maps, and the like, have been provided as appurtenances to astronomy and cosmography, as well as books. We see likewise that some places instituted for physic have annexed the commodity of gardens for simples of all sorts, and do likewise command the use of dead bodies for anatomies. But these do respect but a few things. In general, there will hardly be any main proficience in the disclosing of nature, except there be some allowance for expenses about experiments; whether they be experiments appertaining to Vulcanus or Dædalus, furnace or engine, or any other kind. And therefore as secretaries and spials of princes and states bring in bills for intelligence, so you must allow the spials and intelligencers of nature to bring in their bills; or else you shall be ill advertised.

11. And if Alexander made such a liberal assignation to Aristotle of treasure for the allowance of hunters, fowlers, fishers, and the like, that he might compile a history of nature, much better do they deserve it that travail in arts of nature.

12. Another defect which I note is an intermission or neglect in those which are governors in universities, of consultation, and in princes or superior persons, of visitation: to enter into account and consideration, whether the readings, exercises, and other customs appertaining unto learning, anciently begun and since continued, be well instituted or no; and thereupon to ground an amendment or reformation in that which shall be found inconvenient. For it is one of your Majesty's own most wise and princely maxims, "That in all usages and precedents, the times be considered wherein they first began; which if they were weak or ignorant, it derogateth from the authority of the usage, and leaveth it for suspect." And therefore inasmuch as most of the usages and orders of the universities were derived from more obscure times, it is the more requisite they be re-examined. In this kind I will give an

instance or two, for example sake, of things that are the most obvious and familiar. The one is a matter, which though it be ancient and general, yet I hold to be an error; which is, that scholars in universities come too soon and too unripe to logic and rhetoric, arts fitter for graduates than children and novices. For these two, rightly taken, are the gravest of sciences, being the arts of arts; the one for judgment, the other for ornament. And they be the rules and directions how to set forth and dispose matter: and therefore for minds empty and unfraught with matter, and which have not gathered that which Cicero calleth *sylva* and *supellex*, stuff and variety, to begin with those arts (as if one should learn to weigh, or to measure, or to paint the wind) doth work but this effect, that the wisdom of those arts, which is great and universal, is almost made contemptible, and is degenerate into childish sophistry and ridiculous affectation. And further, the untimely learning of them hath drawn on by consequence the superficial and unprofitable teaching and writing of them, as fitteth indeed to the capacity of children. Another is a lack I find in the exercises used in the universities, which do snake too great a divorce between invention and memory. For their speeches are either premeditate, in *verbis conceptis*, where nothing is left to invention, or merely extemporal, where little is left to memory. Whereas in life and action there is least use of either of these, but rather of intermixtures of premeditation and invention, notes and memory. So as the exercise fitteth not the practice, nor the image the life; and it is ever a true rule in exercises, that they be framed as near as may be to the life of practice; for otherwise they do pervert the motions and faculties of the mind, and not prepare them. The truth whereof is not obscure, when scholars come to the practices of professions, or other actions of civil life; which when they set into, this want is soon found by themselves, and sooner by others. But this part, touching the amendment of the institutions and orders of universities, I will conclude with the clause of Cæsar's letter to Oppius and Balbes, *Hoc quemadmodum fieri possit, nonnulla mihi in mentem veniunt, et multa reperiri possunt: de iis rebus rogo vos ut cogitationem suscipiatis.*

13. Another defect which I note ascendeth a little higher than the precedent. For as the proficiencie of learning consisteth much in the orders and institutions of universities in the same states and kingdoms, so it would be yet more advanced, if there were more intelligence mutual between the

universities of Europe than now there is. We see there be many orders and foundations, which though they be divided under several sovereignties and territories, yet they take themselves to have a kind of contract, fraternity, and correspondence one with the other, insomuch as they have provincials and generals. And surely as nature createth brotherhood in families, and arts mechanical contract brotherhoods in communalities, and the anointment of God superinduceth a brotherhood in kings and bishops, so in like manner there cannot but be a fraternity in learning and illumination, relating to that paternity which is attributed to God, who is called the Father of illuminations or lights.

14. The last defect which I will note is, that there hath not been, or very rarely been, any public designation of writers or inquirers concerning such parts of knowledge as may appear not to have been already sufficiently laboured or undertaken; unto which point it is an inducement to enter into a view and examination what parts of learning have been prosecuted, and what omitted. For the opinion of plenty is amongst the causes of want, and the great quantity of books maketh a show rather of superfluity than lack; which surcharge nevertheless is not to be remedied by making no more books, but by making more good books, which, as the serpent of Moses, might devour the serpents of the enchanters.

15. The removing of all the defects formerly enumerate, except the last, and of the active part also of the last (which is the designation of writers), are *opera basilica*; towards which the endeavours of a private man may be but as an image in a crossway, that may point at the way, but cannot go it. But the inducing part of the latter (which is the survey of learning) may be set forward by private travail. Wherefore I will now attempt to make a general and faithful perambulation of learning, with an inquiry what parts thereof lie fresh and waste, and not improved and converted by the industry of man, to the end that such a plot made and recorded to memory may both minister light to any public designation, and, also serve to excite voluntary endeavours. Wherein, nevertheless, my purpose is at this time to note only omissions and deficiencies, and not to make any redargution of errors or incomplete prosecutions. For it is one thing to set forth what ground lieth unmanured, and another thing to correct ill husbandry in that which is

manured.

In the handling and undertaking of which work I am not ignorant what it is that I do now move and attempt, nor insensible of mine own weakness to sustain my purpose. But my hope is, that if my extreme love to learning carry me too far, I may obtain the excuse of affection; for that “It is not granted to man to love and to be wise.” But I know well I can use no other liberty of judgment than I must leave to others; and I for my part shall be indifferently glad either to perform myself, or accept from another, that duty of humanity - *Nam qui erranti comiter monstrat viam*, &c. I do foresee likewise that of those things which I shall enter and register as deficiencies and omissions, many will conceive and censure that some of them are already done and extant; others to be but curiosities, and things of no great use; and others to be of too great difficulty, and almost impossibility to be compassed and effected. But for the two first, I refer myself to the particulars. For the last, touching impossibility, I take it those things are to be held possible which may be done by some person, though not by every one; and which may be done by many, though not by any one; and which may be done in the succession of ages, though not within the hourglass of one man’s life; and which may be done by public designation, though not by private endeavour. But, notwithstanding, if any man will take to himself rather that of Solomon, “*Dicit piger, Leo est in via*,” than that of Virgil, “*Possunt quia posse videntur*,” I shall be content that my labours be esteemed but as the better sort of wishes; for as it asketh some knowledge to demand a question not impertinent, so it requireth some sense to make a wish not absurd.

I. (1) The parts of human learning have reference to the three parts of man’s understanding, which is the seat of learning: history to his memory, poesy to his imagination, and philosophy to his reason. Divine learning receiveth the same distribution; for, the spirit of man is the same, though the revelation of oracle and sense be diverse. So as theology consisteth also of history of the Church; of parables, which is divine poesy; and of holy doctrine or precept. For as for that part which seemeth supernumerary, which is prophecy, it is but divine history, which hath that prerogative over human, as the narration may be before the fact as well as after.

(2) History is natural, civil, ecclesiastical, and literary; whereof the first three I allow as extant, the fourth I note as deficient. For no man hath propounded to himself the general state of learning to be described and represented from age to age, as many have done the works of Nature, and the state, civil and ecclesiastical; without which the history of the world seemeth to me to be as the statue of Polyphemus with his eye out, that part being wanting which doth most show the spirit and life of the person. And yet I am not ignorant that in divers particular sciences, as of the jurisconsults, the mathematicians, the rhetoricians, the philosophers, there are set down some small memorials of the schools, authors, and books; and so likewise some barren relations touching the invention of arts or usages. But a just story of learning, containing the antiquities and originals of knowledges and their sects, their inventions, their traditions, their diverse administrations and managings, their flourishings, their oppositions, decays, depressions, oblivions, removes, with the causes and occasions of them, and all other events concerning learning, throughout the ages of the world, I may truly affirm to be wanting; the use and end of which work I do not so much design for curiosity or satisfaction of those that are the lovers of learning, but chiefly for a more serious and grave purpose, which is this in few words, that it will make learned men wise in the use and administration of learning. For it is not Saint Augustine's nor Saint Ambrose's works that will make so wise a divine as ecclesiastical history thoroughly read and observed, and the same reason is of learning.

(3) History of Nature is of three sorts; of Nature in course, of Nature erring or varying, and of Nature altered or wrought; that is, history of creatures, history of marvels, and history of arts. The first of these no doubt is extant, and that in good perfection; the two latter are bandied so weakly and unprofitably as I am moved to note them as deficient. For I find no sufficient or competent collection of the works of Nature which have a digression and deflexion from the ordinary course of generations, productions, and motions; whether they be singularities of place and region, or the strange events of time and chance, or the effects of yet unknown properties, or the instances of exception to general kinds. It is true I find a number of books of fabulous experiments and secrets, and frivolous impostures for pleasure and strangeness; but a substantial and severe collection of the heteroclitics or irregulars of Nature, well examined and described, I find not, specially not with due rejection of

fables and popular errors. For as things now are, if an untruth in Nature be once on foot, what by reason of the neglect of examination, and countenance of antiquity, and what by reason of the use of the opinion in similitudes and ornaments of speech, it is never called down.

(4) The use of this work, honoured with a precedent in Aristotle, is nothing less than to give contentment to the appetite of curious and vain wits, as the manner of Mirabilaries is to do; but for two reasons, both of great weight: the one to correct the partiality of axioms and opinions, which are commonly framed only upon common and familiar examples; the other because from the wonders of Nature is the nearest intelligence and passage towards the wonders of art, for it is no more but by following and, as it were, hounding Nature in her wanderings, to be able to lead her afterwards to the same place again. Neither am I of opinion, in this history of marvels, that superstitious narrations of sorceries, witchcrafts, dreams, divinations, and the like, where there is an assurance and clear evidence of the fact, be altogether excluded. For it is not yet known in what cases and how far effects attributed to superstition do participate of natural causes; and, therefore, howsoever the practice of such things is to be condemned, yet from the speculation and consideration of them light may be taken, not only for the discerning of the offences, but for the further disclosing of Nature. Neither ought a man to make scruple of entering into these things for inquisition of truth, as your Majesty hath showed in your own example, who, with the two clear eyes of religion and natural philosophy, have looked deeply and wisely into these shadows, and yet proved yourself to be of the nature of the sun, which passeth through pollutions and itself remains as pure as before. But this I hold fit, that these narrations, which have mixture with superstition, be sorted by themselves, and not to be mingled with the narrations which are merely and sincerely natural. But as for the narrations touching the prodigies and miracles of religions, they are either not true or not natural; and, therefore, impertinent for the story of Nature.

(5) For history of Nature, wrought or mechanical, I find some collections made of agriculture, and likewise of manual arts; but commonly with a rejection of experiments familiar and vulgar; for it is esteemed a kind of dishonour unto learning to descend to inquiry or meditation upon matters

mechanical, except they be such as may be thought secrets, rarities, and special subtleties; which humour of vain and supercilious arrogancy is justly derided in Plato, where he brings in Hippias, a vaunting sophist, disputing with Socrates, a true and unfeigned inquisitor of truth; where, the subject being touching beauty, Socrates, after his wandering manner of inductions, put first an example of a fair virgin, and then of a fair horse, and then of a fair pot well glazed, whereat Hippias was offended, and said, "More than for courtesy's sake, he did think much to dispute with any that did allege such base and sordid instances." Whereunto Socrates answereth, "You have reason, and it becomes you well, being a man so trim in your vestments," &c., and so goeth on in an irony. But the truth is, they be not the highest instances that give the securest information, as may be well expressed in the tale so common of the philosopher that, while he gazed upwards to the stars, fell into the water; for if he had looked down he might have seen the stars in the water, but looking aloft he could not see the water in the stars. So it cometh often to pass that mean and small things discover great, better than great can discover the small; and therefore Aristotle noteth well, "That the nature of everything is best seen in his smallest portions." And for that cause he inquireth the nature of a commonwealth, first in a family, and the simple conjugations of man and wife, parent and child, master and servant, which are in every cottage. Even so likewise the nature of this great city of the world, and the policy thereof, must be first sought in mean concordances and small portions. So we see how that secret of Nature, of the turning of iron touched with the loadstone towards the north, was found out in needles of iron, not in bars of iron.

(6) But if my judgment be of any weight, the use of history mechanical is of all others the most radical and fundamental towards natural philosophy; such natural philosophy as shall not vanish in the fume of subtle, sublime, or delectable speculation, but such as shall be operative to the endowment and benefit of man's life. For it will not only minister and suggest for the present many ingenious practices in all trades, by a connection and transferring of the observations of one art to the use of another, when the experiences of several mysteries shall fall under the consideration of one man's mind; but further, it will give a more true and real illumination concerning causes and axioms than is hitherto attained. For like as a man's disposition is never well known

till he be crossed, nor Proteus ever changed shapes till he was straitened and held fast; so the passages and variations of nature cannot appear so fully in the liberty of nature as in the trials and vexations of art.

II. (1) For civil history, it is of three kinds; not unfitly to be compared with the three kinds of pictures or images. For of pictures or images we see some are unfinished, some are perfect, and some are defaced. So of histories we may find three kinds: memorials, perfect histories, and antiquities; for memorials are history unfinished, or the first or rough drafts of history; and antiquities are history defaced, or some remnants of history which have casually escaped the shipwreck of time.

(2) Memorials, or preparatory history, are of two sorts; whereof the one may be termed commentaries, and the other registers. Commentaries are they which set down a continuance of the naked events and actions, without the motives or designs, the counsels, the speeches, the pretexts, the occasions, and other passages of action. For this is the true nature of a commentary (though Cæsar, in modesty mixed with greatness, did for his pleasure apply the name of a commentary to the best history of the world). Registers are collections of public acts, as decrees of council, judicial proceedings, declarations and letters of estate, orations, and the like, without a perfect continuance or contexture of the thread of the narration.

(3) Antiquities, or remnants of history, are, as was said, *tanquam tabula naufragii*: when industrious persons, by an exact and scrupulous diligence and observation, out of monuments, names, words, proverbs, traditions, private records and evidences, fragments of stories, passages of books that concern not story, and the like, do save and recover somewhat from the deluge of time.

(4) In these kinds of unperfect histories I do assign no deficiency, for they are *tanquam imperfecte mista*; and therefore any deficiency in them is but their nature. As for the corruptions and moths of history, which are epitomes, the use of them deserveth to be banished, as all men of sound judgment have confessed, as those that have fretted and corroded the sound bodies of many excellent histories, and wrought them into base and unprofitable dregs.

(5) History, which may be called just and perfect history, is of three kinds, according to the object which it propoundeth, or pretendeth to represent: for it either representeth a time, or a person, or an action. The first we call chronicles, the second lives, and the third narrations or relations. Of these, although the first be the most complete and absolute kind of history, and hath most estimation and glory, yet the second excelleth it in profit and use, and the third in verity and sincerity. For history of times representeth the magnitude of actions, and the public faces and deportments of persons, and passeth over in silence the smaller passages and motions of men and matters. But such being the workmanship of God, as He doth hang the greatest weight upon the smallest wires, *maxima è minimis, suspendens*, it comes therefore to pass, that such histories do rather set forth the pomp of business than the true and inward resorts thereof. But lives, if they be well written, propounding to themselves a person to represent, in whom actions, both greater and smaller, public and private, have a commixture, must of necessity contain a more true, native, and lively representation. So again narrations and relations of actions, as the war of Peloponnesus, the expedition of Cyrus Minor, the conspiracy of Catiline, cannot but be more purely and exactly true than histories of times, because they may choose an argument comprehensible within the notice and instructions of the writer: whereas he that undertaketh the story of a time, specially of any length, cannot but meet with many blanks and spaces, which he must be forced to fill up out of his own wit and conjecture.

(6) For the history of times, I mean of civil history, the providence of God hath made the distribution. For it hath pleased God to ordain and illustrate two exemplar states of the world for arms, learning, moral virtue, policy, and laws; the state of Græcia and the state of Rome; the histories whereof occupying the middle part of time, have more ancient to them histories which may by one common name be termed the antiquities of the world; and after them, histories which may be likewise called by the name of modern history.

(7) Now to speak of the deficiencies. As to the heathen antiquities of the world it is in vain to note them for deficient. Deficient they are no doubt, consisting most of fables and fragments; but the deficiency cannot be holpen; for antiquity is like fame, *caput inter nubila condit*, her head is muffled from

our sight. For the history of the exemplar states, it is extant in good perfection. Not but I could wish there were a perfect course of history for Græcia, from Theseus to Philopœmen (what time the affairs of Græcia drowned and extinguished in the affairs of Rome), and for Rome from Romulus to Justinianus, who may be truly said to be *ultimus Romanorum*. In which sequences of story the text of Thucydides and Xenophon in the one, and the texts of Livius, Polybius, Sallustius, Cæsar, Appianus, Tacitus, Herodianus in the other, to be kept entire, without any diminution at all, and only to be supplied and continued. But this is a matter of magnificence, rather to be commended than required; and we speak now of parts of learning supplemental, and not of supererogation.

(8) But for modern histories, whereof there are some few very worthy, but the greater part beneath mediocrity, leaving the care of foreign stories to foreign states, because I will not be *curiosus in aliena republica*, I cannot fail to represent to your Majesty the unworthiness of the history of England in the main continuance thereof, and the partiality and obliquity of that of Scotland in the latest and largest author that I have seen: supposing that it would be honour for your Majesty, and a work very memorable, if this island of Great Britain, as it is now joined in monarchy for the ages to come, so were joined in one history for the times passed, after the manner of the sacred history, which draweth down the story of the ten tribes and of the two tribes as twins together. And if it shall seem that the greatness of this work may make it less exactly performed, there is an excellent period of a much smaller compass of time, as to the story of England; that is to say, from the uniting of the Roses to the uniting of the kingdoms; a portion of time wherein, to my understanding, there hath been the rarest varieties that in like number of successions of any hereditary monarchy hath been known. For it beginneth with the mixed adoption of a crown by arms and title; an entry by battle, an establishment by marriage; and therefore times answerable, like waters after a tempest, full of working and swelling, though without extremity of storm; but well passed through by the wisdom of the pilot, being one of the most sufficient kings of all the number. Then followeth the reign of a king, whose actions, howsoever conducted, had much intermixture with the affairs of Europe, balancing and inclining them variably; in whose time also began that great alteration in the state ecclesiastical, an action which seldom cometh

upon the stage. Then the reign of a minor; then an offer of a usurpation (though it was but as *febris ephemera*). Then the reign of a queen matched with a foreigner; then of a queen that lived solitary and unmarried, and yet her government so masculine, as it had greater impression and operation upon the states abroad than it any ways received from thence. And now last, this most happy and glorious event, that this island of Britain, divided from all the world, should be united in itself, and that oracle of rest given to Æneas, *antiquam exquirite matrem*, should now be performed and fulfilled upon the nations of England and Scotland, being now reunited in the ancient mother name of Britain, as a full period of all instability and peregrinations. So that as it cometh to pass in massive bodies, that they have certain trepidations and waverings before they fix and settle, so it seemeth that by the providence of God this monarchy, before it was to settle in your majesty and your generations (in which I hope it is now established for ever), it had these prelusive changes and varieties.

(9) For lives, I do find strange that these times have so little esteemed the virtues of the times, as that the writings of lives should be no more frequent. For although there be not many sovereign princes or absolute commanders, and that states are most collected into monarchies, yet are there many worthy personages that deserve better than dispersed report or barren eulogies. For herein the invention of one of the late poets is proper, and doth well enrich the ancient fiction. For he feigneth that at the end of the thread or web of every man's life there was a little medal containing the person's name, and that Time waited upon the shears, and as soon as the thread was cut caught the medals, and carried them to the river of Lathe; and about the bank there were many birds flying up and down, that would get the medals and carry them in their beak a little while, and then let them fall into the river. Only there were a few swans, which if they got a name would carry it to a temple where it was consecrate. And although many men, more mortal in their affections than in their bodies, do esteem desire of name and memory but as a vanity and ventosity,

“Animi nil magnæ laudis egentes;”

which opinion cometh from that root, *Non prius laudes contempsimus, quam laudanda facere desivimus*: yet that will not alter Solomon's judgment, *Memoria justi cum laudibus, at impiorum nomen putrescet*: the one flourisheth, the other either consumeth to present oblivion, or turneth to an ill odour. And therefore in that style or addition, which is and hath been long well received and brought in use, *felicis memoriae, pia memoriae, bonae memoriae*, we do acknowledge that which Cicero saith, borrowing it from Demosthenes, that *bona fama propria possessio defunctorum*; which possession I cannot but note that in our times it lieth much waste, and that therein there is a deficiency.

(10) For narrations and relations of particular actions, there were also to be wished a greater diligence therein; for there is no great action but hath some good pen which attends it. And because it is an ability not common to write a good history, as may well appear by the small number of them; yet if particularity of actions memorable were but tolerably reported as they pass, the compiling of a complete history of times might be the better expected, when a writer should arise that were fit for it: for the collection of such relations might be as a nursery garden, whereby to plant a fair and stately garden when time should serve.

(11) There is yet another partition of history which Cornelius Tacitus maketh, which is not to be forgotten, specially with that application which he accoupleth it withal, annals and journals: appropriating to the former matters of estate, and to the latter acts and accidents of a meaner nature. For giving but a touch of certain magnificent buildings, he addeth, *Cum ex dignitate populi Romani repertum sit, res illustres annalibus, talia diurnis urbis actis mandare*. So as there is a kind of contemplative heraldry, as well as civil. And as nothing doth derogate from the dignity of a state more than confusion of degrees, so it doth not a little imbase the authority of a history to intermingle matters of triumph, or matters of ceremony, or matters of novelty, with matters of state. But the use of a journal hath not only been in the history of time, but likewise in the history of persons, and chiefly of actions; for princes in ancient time had, upon point of honour and policy both, journals kept, what passed day by day. For we see the chronicle which was

read before Ahasuerus, when he could not take rest, contained matter of affairs, indeed, but such as had passed in his own time and very lately before. But the journal of Alexander's house expressed every small particularity, even concerning his person and court; and it is yet a use well received in enterprises memorable, as expeditions of war, navigations, and the like, to keep diaries of that which passeth continually.

(12) I cannot likewise be ignorant of a form of writing which some grave and wise men have used, containing a scattered history of those actions which they have thought worthy of memory, with politic discourse and observation thereupon: not incorporate into the history, but separately, and as the more principal in their intention; which kind of ruminated history I think more fit to place amongst books of policy, whereof we shall hereafter speak, than amongst books of history. For it is the true office of history to represent the events themselves together with the counsels, and to leave the observations and conclusions thereupon to the liberty and faculty of every man's judgment. But mixtures are things irregular, whereof no man can define.

(13) So also is there another kind of history manifoldly mixed, and that is history of cosmography: being compounded of natural history, in respect of the regions themselves; of history civil, in respect of the habitations, regiments, and manners of the people; and the mathematics, in respect of the climates and configurations towards the heavens: which part of learning of all others in this latter time hath obtained most proficience. For it may be truly affirmed to the honour of these times, and in a virtuous emulation with antiquity, that this great building of the world had never through-lights made in it, till the age of us and our fathers. For although they had knowledge of the antipodes,

“Nosque ubi primus equis Oriens afflavit anhelis,
Illic sera rubens accendit lumina Vesper,”

yet that might be by demonstration, and not in fact; and if by travel, it requireth the voyage but of half the globe. But to circle the earth, as the

heavenly bodies do, was not done nor enterprised till these later times: and therefore these times may justly bear in their word, not only *plus ultra*, in precedence of the ancient *non ultra*, and *imitabile fulmen*, in precedence of the ancient *non imitabile fulmen*,

“Demens qui nimbos et non imitabile fulmen,” &c.

but likewise *imitabile cælum*; in respect of the many memorable voyages after the manner of heaven about the globe of the earth.

(14) And this proficience in navigation and discoveries may plant also an expectation of the further proficience and augmentation of all sciences; because it may seem they are ordained by God to be coevals, that is, to meet in one age. For so the prophet Daniel speaking of the latter times foretelleth, *Plurimi pertransibunt, et multiplex erit scientia*: as if the openness and through-passage of the world and the increase of knowledge were appointed to be in the same ages; as we see it is already performed in great part: the learning of these later times not much giving place to the former two periods or returns of learning, the one of the Grecians, the other of the Romans.

III. (1) History ecclesiastical receiveth the same divisions with history civil: but further in the propriety thereof may be divided into the history of the Church, by a general name; history of prophecy; and history of providence. The first describeth the times of the militant Church, whether it be fluctuant, as the ark of Noah, or movable, as the ark in the wilderness, or at rest, as the ark in the Temple: that is, the state of the Church in persecution, in remove, and in peace. This part I ought in no sort to note as deficient; only I would that the virtue and sincerity of it were according to the mass and quantity. But I am not now in hand with censures, but with omissions.

(2) The second, which is history of prophecy, consisteth of two relatives - the prophecy and the accomplishment; and, therefore, the nature of such a work ought to be, that every prophecy of the Scripture be sorted with the event fulfilling the same throughout the ages of the world, both for the better

confirmation of faith and for the better illumination of the Church touching those parts of prophecies which are yet unfulfilled: allowing, nevertheless, that latitude which is agreeable and familiar unto divine prophecies, being of the nature of their Author, with whom a thousand years are but as one day, and therefore are not fulfilled punctually at once, but have springing and germinant accomplishment throughout many ages, though the height or fulness of them may refer to some one age. This is a work which I find deficient, but is to be done with wisdom, sobriety, and reverence, or not at all.

(3) The third, which is history of Providence, containeth that excellent correspondence which is between God's revealed will and His secret will; which though it be so obscure, as for the most part it is not legible to the natural man - no, nor many times to those that behold it from the tabernacle - yet, at some times it pleaseth God, for our better establishment and the confuting of those which are as without God in the world, to write it in such text and capital letters, that, as the prophet saith, "He that runneth by may read it" - that is, mere sensual persons, which hasten by God's judgments, and never bend or fix their cogitations upon them, are nevertheless in their passage and race urged to discern it. Such are the notable events and examples of God's judgments, chastisements, deliverances, and blessings; and this is a work which has passed through the labour of many, and therefore I cannot present as omitted.

(4) There are also other parts of learning which are appendices to history. For all the exterior proceedings of man consist of words and deeds, whereof history doth properly receive and retain in memory the deeds; and if words, yet but as inducements and passages to deeds; so are there other books and writings which are appropriate to the custody and receipt of words only, which likewise are of three sorts - orations, letters, and brief speeches or sayings. Orations are pleadings, speeches of counsel, laudatives, invectives, apologies, reprehensions, orations of formality or ceremony, and the like. Letters are according to all the variety of occasions, advertisements, advises, directions, propositions, petitions, commendatory, expostulatory, satisfactory, of compliment, of pleasure, of discourse, and all other passages of action. And such as are written from wise men, are of all the words of man, in my judgment, the best; for they are more natural than orations and public

speeches, and more advised than conferences or present speeches. So again letters of affairs from such as manage them, or are privy to them, are of all others the best instructions for history, and to a diligent reader the best histories in themselves. For apophthegms, it is a great loss of that book of Cæsar's; for as his history, and those few letters of his which we have, and those apophthegms which were of his own, excel all men's else, so I suppose would his collection of apophthegms have done; for as for those which are collected by others, either I have no taste in such matters or else their choice hath not been happy. But upon these three kinds of writings I do not insist, because I have no deficiencies to propound concerning them.

(5) Thus much therefore concerning history, which is that part of learning which answereth to one of the cells, domiciles, or offices of the mind of man, which is that of the memory.

IV. (1) Poesy is a part of learning in measure of words, for the most part restrained, but in all other points extremely licensed, and doth truly refer to the imagination; which, being not tied to the laws of matter, may at pleasure join that which nature hath severed, and sever that which nature hath joined, and so make unlawful matches and divorces of things - *Pictoribus atque poetis*, &c. It is taken in two senses in respect of words or matter. In the first sense, it is but a character of style, and belongeth to arts of speech, and is not pertinent for the present. In the latter, it is - as hath been said - one of the principal portions of learning, and is nothing else but feigned history, which may be styled as well in prose as in verse.

(2) The use of this feigned history hath been to give some shadow of satisfaction to the mind of man in those points wherein the nature of things doth deny it, the world being in proportion inferior to the soul; by reason whereof there is, agreeable to the spirit of man, a more ample greatness, a more exact goodness, and a more absolute variety, than can be found in the nature of things. Therefore, because the acts or events of true history have not that magnitude which satisfieth the mind of man, poesy feigneth acts and events greater and more heroical. Because true history propoundeth the successes and issues of actions not so agreeable to the merits of virtue and vice, therefore poesy feigns them more just in retribution, and more

according to revealed Providence. Because true history representeth actions and events more ordinary and less interchanged, therefore poesy endueth them with more rareness and more unexpected and alternative variations. So as it appeareth that poesy serveth and conferreth to magnanimity, morality and to delectation. And therefore, it was ever thought to have some participation of divineness, because it doth raise and erect the mind, by submitting the shows of things to the desires of the mind; whereas reason doth buckle and bow the mind unto the nature of things. And we see that by these insinuations and congruities with man's nature and pleasure, joined also with the agreement and consort it hath with music, it hath had access and estimation in rude times and barbarous regions, where other learning stood excluded.

(3) The division of poesy which is aptest in the propriety thereof (besides those divisions which are common unto it with history, as feigned chronicles, feigned lives, and the appendices of history, as feigned epistles, feigned orations, and the rest) is into poesy narrative, representative, and allusive. The narrative is a mere imitation of history, with the excesses before remembered, choosing for subjects commonly wars and love, rarely state, and sometimes pleasure or mirth. Representative is as a visible history, and is an image of actions as if they were present, as history is of actions in nature as they are (that is) past. Allusive, or parabolical, is a narration applied only to express some special purpose or conceit; which latter kind of parabolical wisdom was much more in use in the ancient times, as by the fables of Æsop, and the brief sentences of the seven, and the use of hieroglyphics may appear. And the cause was (for that it was then of necessity to express any point of reason which was more sharp or subtle than the vulgar in that manner) because men in those times wanted both variety of examples and subtlety of conceit. And as hieroglyphics were before letters, so parables were before arguments; and nevertheless now and at all times they do retain much life and rigour, because reason cannot be so sensible nor examples so fit.

(4) But there remaineth yet another use of poesy parabolical, opposite to that which we last mentioned; for that tendeth to demonstrate and illustrate that which is taught or delivered, and this other to retire and obscure it - that is,

when the secrets and mysteries of religion, policy, or philosophy, are involved in fables or parables. Of this in divine poesy we see the use is authorised. In heathen poesy we see the exposition of fables doth fall out sometimes with great felicity: as in the fable that the giants being overthrown in their war against the gods, the earth their mother in revenge thereof brought forth Fame:

“Illam terra parens, ira irritat Deorum,
Extremam, ut perhibent, Cæo Enceladoque soroem,
Progenit.”

Expounded that when princes and monarchs have suppressed actual and open rebels, then the malignity of people (which is the mother of rebellion) doth bring forth libels and slanders, and taxations of the states, which is of the same kind with rebellion but more feminine. So in the fable that the rest of the gods having conspired to bind Jupiter, Pallas called Briareus with his hundred hands to his aid: expounded that monarchies need not fear any curbing of their absoluteness by mighty subjects, as long as by wisdom they keep the hearts of the people, who will be sure to come in on their side. So in the fable that Achilles was brought up under Chiron, the centaur, who was part a man and part a beast, expounded ingeniously but corruptly by Machiavel, that it belongeth to the education and discipline of princes to know as well how to play the part of a lion in violence, and the fox in guile, as of the man in virtue and justice. Nevertheless, in many the like encounters, I do rather think that the fable was first, and the exposition devised, than that the moral was first, and thereupon the fable framed; for I find it was an ancient vanity in Chrysippus, that troubled himself with great contention to fasten the assertions of the Stoics upon the fictions of the ancient poets; but yet that all the fables and fictions of the poets were but pleasure and not figure, I interpose no opinion. Surely of these poets which are now extant, even Homer himself (notwithstanding he was made a kind of scripture by the later schools of the Grecians), yet I should without any difficulty pronounce that his fables had no such inwardness in his own meaning. But what they might have upon a more original tradition is not

easy to affirm, for he was not the inventor of many of them.

(5) In this third part of learning, which is poesy, I can report no deficiency; for being as a plant that cometh of the lust of the earth, without a formal seed, it hath sprung up and spread abroad more than any other kind. But to ascribe unto it that which is due, for the expressing of affections, passions, corruptions, and customs, we are beholding to poets more than to the philosophers' works; and for wit and eloquence, not much less than to orators' harangues. But it is not good to stay too long in the theatre. Let us now pass on to the judicial place or palace of the mind, which we are to approach and view with more reverence and attention.

V. (1) The knowledge of man is as the waters, some descending from above, and some springing from beneath: the one informed by the light of nature, the other inspired by divine revelation. The light of nature consisteth in the notions of the mind and the reports of the senses; for as for knowledge which man receiveth by teaching, it is cumulative and not original, as in a water that besides his own spring-head is fed with other springs and streams. So then, according to these two differing illuminations or originals, knowledge is first of all divided into divinity and philosophy.

(2) In philosophy the contemplations of man do either penetrate unto God, or are circumferred to nature, or are reflected or reverted upon himself. Out of which several inquiries there do arise three knowledges - divine philosophy, natural philosophy, and human philosophy or humanity. For all things are marked and stamped with this triple character - the power of God, the difference of nature and the use of man. But because the distributions and partitions of knowledge are not like several lines that meet in one angle, and so touch but in a point, but are like branches of a tree that meet in a stem, which hath a dimension and quantity of entireness and continuance before it come to discontinue and break itself into arms and boughs; therefore it is good, before we enter into the former distribution, to erect and constitute one universal science, by the name of *philosophia prima*, primitive or summary philosophy, as the main and common way, before we come where the ways part and divide themselves; which science whether I should report as deficient or no, I stand doubtful. For I find a certain rhapsody of natural

theology, and of divers parts of logic; and of that part of natural philosophy which concerneth the principles, and of that other part of natural philosophy which concerneth the soul or spirit - all these strangely commixed and confused; but being examined, it seemeth to me rather a depredation of other sciences, advanced and exalted unto some height of terms, than anything solid or substantive of itself. Nevertheless I cannot be ignorant of the distinction which is current, that the same things are handled but in several respects. As for example, that logic considereth of many things as they are in notion, and this philosophy as they are in nature - the one in appearance, the other in existence; but I find this difference better made than pursued. For if they had considered quantity, similitude, diversity, and the rest of those extern characters of things, as philosophers, and in nature, their inquiries must of force have been of a far other kind than they are. For doth any of them, in handling quantity, speak of the force of union, how and how far it multiplieth virtue? Doth any give the reason why some things in nature are so common, and in so great mass, and others so rare, and in so small quantity? Doth any, in handling similitude and diversity, assign the cause why iron should not move to iron, which is more like, but move to the loadstone, which is less like? Why in all diversities of things there should be certain participles in nature which are almost ambiguous to which kind they should be referred? But there is a mere and deep silence touching the nature and operation of those common adjuncts of things, as in nature; and only a resuming and repeating of the force and use of them in speech or argument. Therefore, because in a writing of this nature I avoid all subtlety, my meaning touching this original or universal philosophy is thus, in a plain and gross description by negative: "That it be a receptacle for all such profitable observations and axioms as fall not within the compass of any of the special parts of philosophy or sciences, but are more common and of a higher stage."

(3) Now that there are many of that kind need not be doubted. For example: Is not the rule, *Si inæqualibus æqualia addas, omnia erunt inæqualia*, an axiom as well of justice as of the mathematics? and is there not a true coincidence between commutative and distributive justice, and arithmetical and geometrical proportion? Is not that other rule, *Quæ in eodem tertio conveniunt, et inter se conveniunt*, a rule taken from the mathematics, but so potent in logic as all syllogisms are built upon it? Is not the observation,

Omnia mutantur, nil interit, a contemplation in philosophy thus, that the *quantum* of nature is eternal? in natural theology thus, that it requireth the same omnipotency to make somewhat nothing, which at the first made nothing somewhat? according to the Scripture, *Didici quod omnia opera, quæ fecit Deus, perseverent in perpetuum; non possumus eis quicquam addere nec auferre*. Is not the ground, which Machiavel wisely and largely discourseth concerning governments, that the way to establish and preserve them is to reduce them *ad principia* - a rule in religion and nature, as well as in civil administration? Was not the Persian magic a reduction or correspondence of the principles and architectures of nature to the rules and policy of governments? Is not the precept of a musician, to fall from a discord or harsh accord upon a concord or sweet accord, alike true in affection? Is not the trope of music, to avoid or slide from the close or cadence, common with the trope of rhetoric of deceiving expectation? Is not the delight of the quavering upon a stop in music the same with the playing of light upon the water?

“Splendet tremulo sub lumine pontus.”

Are not the organs of the senses of one kind with the organs of reflection, the eye with a glass, the ear with a cave or strait, determined and bounded? Neither are these only similitudes, as men of narrow observation may conceive them to be, but the same footsteps of nature, treading or printing upon several subjects or matters. This science therefore (as I understand it) I may justly report as deficient; for I see sometimes the profounder sort of wits, in handling some particular argument, will now and then draw a bucket of water out of this well for their present use; but the spring-head thereof seemeth to me not to have been visited, being of so excellent use both for the disclosing of nature and the abridgment of art.

VI. (1) This science being therefore first placed as a common parent like unto Berecynthia, which had so much heavenly issue, *omnes cœlicolas, omnes supera alta tenetes*; we may return to the former distribution of the three philosophies - divine, natural, and human. And as concerning divine philosophy or natural theology, it is that knowledge or rudiment of

knowledge concerning God which may be obtained by the contemplation of His creatures; which knowledge may be truly termed divine in respect of the object, and natural in respect of the light. The bounds of this knowledge are, that it sufficeth to convince atheism, but not to inform religion; and therefore there was never miracle wrought by God to convert an atheist, because the light of nature might have led him to confess a God; but miracles have been wrought to convert idolaters and the superstitious, because no light of nature extendeth to declare the will and true worship of God. For as all works do show forth the power and skill of the workman, and not his image, so it is of the works of God, which do show the omnipotency and wisdom of the Maker, but not His image. And therefore therein the heathen opinion differeth from the sacred truth: for they supposed the world to be the image of God, and man to be an extract or compendious image of the world; but the Scriptures never vouchsafe to attribute to the world that honour, as to be the image of God, but only *the work of His hands*; neither do they speak of any other image of God but man. Wherefore by the contemplation of nature to induce and enforce the acknowledgment of God, and to demonstrate His power, providence, and goodness, is an excellent argument, and hath been excellently handled by divers, but on the other side, out of the contemplation of nature, or ground of human knowledges, to induce any verity or persuasion concerning the points of faith, is in my judgment not safe; *Da fidei quæ fidei sunt*. For the heathen themselves conclude as much in that excellent and divine fable of the golden chain, “That men and gods were not able to draw Jupiter down to the earth; but, contrariwise, Jupiter was able to draw them up to heaven.” So as we ought not to attempt to draw down or submit the mysteries of God to our reason, but contrariwise to raise and advance our reason to the divine truth. So as in this part of knowledge, touching divine philosophy, I am so far from noting any deficiency, as I rather note an excess; whereunto I have digressed because of the extreme prejudice which both religion and philosophy hath received and may receive by being commixed together; as that which undoubtedly will make an heretical religion, and an imaginary and fabulous philosophy.

(2) Otherwise it is of the nature of angels and spirits, which is an appendix of theology, both divine and natural, and is neither inscrutable nor interdicted. For although the Scripture saith, “Let no man deceive you in sublime

discourse touching the worship of angels, pressing into that he knoweth not,” &c., yet notwithstanding if you observe well that precept, it may appear thereby that there be two things only forbidden - adoration of them, and opinion fantastical of them, either to extol them further than appertaineth to the degree of a creature, or to extol a man’s knowledge of them further than he hath ground. But the sober and grounded inquiry, which may arise out of the passages of Holy Scriptures, or out of the gradations of nature, is not restrained. So of degenerate and revolted spirits, the conversing with them or the employment of them is prohibited, much more any veneration towards them; but the contemplation or science of their nature, their power, their illusions, either by Scripture or reason, is a part of spiritual wisdom. For so the apostle saith, “We are not ignorant of his stratagems.” And it is no more unlawful to inquire the nature of evil spirits, than to inquire the force of poisons in nature, or the nature of sin and vice in morality. But this part touching angels and spirits I cannot note as deficient, for many have occupied themselves in it; I may rather challenge it, in many of the writers thereof, as fabulous and fantastical.

VII. (1) Leaving therefore divine philosophy or natural theology (not divinity or inspired theology, which we reserve for the last of all as the haven and sabbath of all man’s contemplations) we will now proceed to natural philosophy. If then it be true that Democritus said, “That the truth of nature lieth hid in certain deep mines and caves;” and if it be true likewise that the alchemists do so much inculcate, that Vulcan is a second nature, and imitateth that dexterously and compendiously, which nature worketh by ambages and length of time, it were good to divide natural philosophy into the mine and the furnace, and to make two professions or occupations of natural philosophers - some to be pioneers and some smiths; some to dig, and some to refine and hammer. And surely I do best allow of a division of that kind, though in more familiar and scholastical terms: namely, that these be the two parts of natural philosophy - the inquisition of causes, and the production of effects; speculative and operative; natural science, and natural prudence. For as in civil matters there is a wisdom of discourse, and a wisdom of direction; so is it in natural. And here I will make a request, that for the latter (or at least for a part thereof) I may revive and reintegrate the misapplied and abused name of natural magic, which in the true sense is but

natural wisdom, or natural prudence; taken according to the ancient acception, purged from vanity and superstition. Now although it be true, and I know it well, that there is an intercourse between causes and effects, so as both these knowledges, speculative and operative, have a great connection between themselves; yet because all true and fruitful natural philosophy hath a double scale or ladder, ascendent and descendent, ascending from experiments to the invention of causes, and descending from causes to the invention of new experiments; therefore I judge it most requisite that these two parts be severally considered and handled.

(2) Natural science or theory is divided into physic and metaphysic; wherein I desire it may be conceived that I use the word metaphysic in a differing sense from that that is received. And in like manner, I doubt not but it will easily appear to men of judgment, that in this and other particulars, wheresoever my conception and notion may differ from the ancient, yet I am studious to keep the ancient terms. For hoping well to deliver myself from mistaking, by the order and perspicuous expressing of that I do propound, I am otherwise zealous and affectionate to recede as little from antiquity, either in terms or opinions, as may stand with truth and the proficiencie of knowledge. And herein I cannot a little marvel at the philosopher Aristotle, that did proceed in such a spirit of difference and contradiction towards all antiquity; undertaking not only to frame new words of science at pleasure, but to confound and extinguish all ancient wisdom; insomuch as he never nameth or mentioneth an ancient author or opinion, but to confute and reprove; wherein for glory, and drawing followers and disciples, he took the right course. For certainly there cometh to pass, and hath place in human truth, that which was noted and pronounced in the highest truth:- *Veni in nomine partis, nec recipits me; si quis venerit in nomine suo eum recipietis*. But in this divine aphorism (considering to whom it was applied, namely, to antichrist, the highest deceiver), we may discern well that the coming in a man's own name, without regard of antiquity or paternity, is no good sign of truth, although it be joined with the fortune and success of an *eum recipietis*. But for this excellent person Aristotle, I will think of him that he learned that humour of his scholar, with whom it seemeth he did emulate; the one to conquer all opinions, as the other to conquer all nations. Wherein, nevertheless, it may be, he may at some men's hands, that are of a bitter disposition, get a like title

as his scholar did:-

“Felix terrarum prædo, non utile mundo
Editus exemplum, &c.”

So,

“Felix doctrinæ prædo.”

But to me, on the other side, that do desire as much as lieth in my pen to ground a sociable intercourse between antiquity and proficience, it seemeth best to keep way with antiquity *usque ad aras*; and, therefore, to retain the ancient terms, though I sometimes alter the uses and definitions, according to the moderate proceeding in civil government; where, although there be some alteration, yet that holdeth which Tacitus wisely noteth, *eadem magistratuum vocabula*.

(3) To return, therefore, to the use and acception of the term metaphysic as I do now understand the word; it appeareth, by that which hath been already said, that I intend *philosophia prima*, summary philosophy and metaphysic, which heretofore have been confounded as one, to be two distinct things. For the one I have made as a parent or common ancestor to all knowledge; and the other I have now brought in as a branch or descendant of natural science. It appeareth likewise that I have assigned to summary philosophy the common principles and axioms which are promiscuous and indifferent to several sciences; I have assigned unto it likewise the inquiry touching the operation or the relative and adventive characters of essences, as quantity, similitude, diversity, possibility, and the rest, with this distinction and provision; that they be handled as they have efficacy in nature, and not logically. It appeareth likewise that natural theology, which heretofore hath been handled confusedly with metaphysic, I have enclosed and bounded by itself. It is therefore now a question what is left remaining for metaphysic;

wherein I may without prejudice preserve thus much of the conceit of antiquity, that physic should contemplate that which is inherent in matter, and therefore transitory; and metaphysic that which is abstracted and fixed. And again, that physic should handle that which supposeth in nature only a being and moving; and metaphysic should handle that which supposeth further in nature a reason, understanding, and platform. But the difference, perspicuously expressed, is most familiar and sensible. For as we divided natural philosophy in general into the inquiry of causes and productions of effects, so that part which concerneth the inquiry of causes we do subdivide according to the received and sound division of causes. The one part, which is physic, inquireth and handleth the material and efficient causes; and the other, which is metaphysic, handleth the formal and final causes.

(4) Physic (taking it according to the derivation, and not according to our idiom for medicine) is situate in a middle term or distance between natural history and metaphysic. For natural history describeth the variety of things; physic the causes, but variable or respective causes; and metaphysic the fixed and constant causes.

“Limus ut hic durescit, et hæc ut cera liquescit,
Uno eodemque igni.”

Fire is the cause of induration, but respective to clay; fire is the cause of colliquation, but respective to wax. But fire is no constant cause either of induration or colliquation; so then the physical causes are but the efficient and the matter. Physic hath three parts, whereof two respect nature united or collected, the third contemplateth nature diffused or distributed. Nature is collected either into one entire total, or else into the same principles or seeds. So as the first doctrine is touching the contexture or configuration of things, as *de mundo, de universitate rerum*. The second is the doctrine concerning the principles or originals of things. The third is the doctrine concerning all variety and particularity of things; whether it be of the differing substances, or their differing qualities and natures; whereof there needeth no enumeration, this part being but as a gloss or paraphrase that attendeth upon

the text of natural history. Of these three I cannot report any as deficient. In what truth or perfection they are handled, I make not now any judgment; but they are parts of knowledge not deserted by the labour of man.

(5) For metaphysic, we have assigned unto it the inquiry of formal and final causes; which assignation, as to the former of them, may seem to be nugatory and void, because of the received and inveterate opinion, that the inquisition of man is not competent to find out essential forms or true differences; of which opinion we will take this hold, that the invention of forms is of all other parts of knowledge the worthiest to be sought, if it be possible to be found. As for the possibility, they are ill discoverers that think there is no land, when they can see nothing but sea. But it is manifest that Plato, in his opinion of ideas, as one that had a wit of elevation situate as upon a cliff, did descry that forms were the true object of knowledge; but lost the real fruit of his opinion, by considering of forms as absolutely abstracted from matter, and not confined and determined by matter; and so turning his opinion upon theology, wherewith all his natural philosophy is infected. But if any man shall keep a continual watchful and severe eye upon action, operation, and the use of knowledge, he may advise and take notice what are the forms, the disclosures whereof are fruitful and important to the state of man. For as to the forms of substances (man only except, of whom it is said, *Formavit hominem de limo terræ, et spiravit in faciem ejus spiraculum vitæ*, and not as of all other creatures, *Producant aquæ, producat terra*), the forms of substances I say (as they are now by compounding and transplanting multiplied) are so perplexed, as they are not to be inquired; no more than it were either possible or to purpose to seek in gross the forms of those sounds which make words, which by composition and transposition of letters are infinite. But, on the other side, to inquire the form of those sounds or voices which make simple letters is easily comprehensible; and being known induceth and manifesteth the forms of all words, which consist and are compounded of them. In the same manner to inquire the form of a lion, of an oak, of gold; nay, of water, of air, is a vain pursuit; but to inquire the forms of sense, of voluntary motion, of vegetation, of colours, of gravity and levity, of density, of tenuity, of heat, of cold, and all other natures and qualities, which, like an alphabet, are not many, and of which the essences (upheld by matter) of all creatures do consist; to inquire, I say, the true forms of these, is that

part of metaphysic which we now define of. Not but that physic doth make inquiry and take consideration of the same natures; but how? Only as to the material and efficient causes of them, and not as to the forms. For example, if the cause of whiteness in snow or froth be inquired, and it be rendered thus, that the subtle intermixture of air and water is the cause, it is well rendered; but, nevertheless, is this the form of whiteness? No; but it is the efficient, which is ever but *vehiculum formæ*. This part of metaphysic I do not find laboured and performed; whereat I marvel not; because I hold it not possible to be invented by that course of invention which hath been used; in regard that men (which is the root of all error) have made too untimely a departure, and too remote a recess from particulars.

(6) But the use of this part of metaphysic, which I report as deficient, is of the rest the most excellent in two respects: the one, because it is the duty and virtue of all knowledge to abridge the infinity of individual experience, as much as the conception of truth will permit, and to remedy the complaint of *vita brevis, ars longa*; which is performed by uniting the notions and conceptions of sciences. For knowledges are as pyramids, whereof history is the basis. So of natural philosophy, the basis is natural history; the stage next the basis is physic; the stage next the vertical point is metaphysic. As for the vertical point, *opus quod operatur Deus à principio usque ad finem*, the summary law of nature, we know not whether man's inquiry can attain unto it. But these three be the true stages of knowledge, and are to them that are depraved no better than the giants' hills:-

“Ter sunt conati imponere Pelio Ossam,
Scilicet atque Ossæ frondsum involvere Olympum.”

But to those which refer all things to the glory of God, they are as the three acclamations, *Sante, sancte, sancte!* holy in the description or dilatation of His works; holy in the connection or concatenation of them; and holy in the union of them in a perpetual and uniform law. And, therefore, the speculation was excellent in Parmenides and Plato, although but a speculation in them, that all things by scale did ascend to unity. So then always that

knowledge is worthiest which is charged with least multiplicity, which appeareth to be metaphysic; as that which considereth the simple forms or differences of things, which are few in number, and the degrees and coordinations whereof make all this variety. The second respect, which valueth and commendeth this part of metaphysic, is that it doth enfranchise the power of man unto the greatest liberty and possibility of works and effects. For physic carrieth men in narrow and restrained ways, subject to many accidents and impediments, imitating the ordinary flexuous courses of nature. But *latae undique sunt sapientibus viae*; to sapience (which was anciently defined to be *rerum divinarum et humanarum scientia*) there is ever a choice of means. For physical causes give light to new invention in *simili materia*. But whosoever knoweth any form, knoweth the utmost possibility of superinducing that nature upon any variety of matter; and so is less restrained in operation, either to the basis of the matter, or the condition of the efficient; which kind of knowledge Solomon likewise, though in a more divine sense, elegantly describeth: *non arctabuntur gressus tui, et currens non habebis offendiculum*. The ways of sapience are not much liable either to particularity or chance.

(7) The second part of metaphysic is the inquiry of final causes, which I am moved to report not as omitted, but as misplaced. And yet if it were but a fault in order, I would not speak of it; for order is matter of illustration, but pertaineth not to the substance of sciences. But this misplacing hath caused a deficiency, or at least a great improficiency in the sciences themselves. For the handling of final causes, mixed with the rest in physical inquiries, hath intercepted the severe and diligent inquiry of all real and physical causes, and given men the occasion to stay upon these satisfactory and specious causes, to the great arrest and prejudice of further discovery. For this I find done not only by Plato, who ever anchoreth upon that shore, but by Aristotle, Galen, and others which do usually likewise fall upon these flats of discoursing causes. For to say that “the hairs of the eyelids are for a quickset and fence about the sight;” or that “the firmness of the skins and hides of living creatures is to defend them from the extremities of heat or cold;” or that “the bones are for the columns or beams, whereupon the frames of the bodies of living creatures are built;” or that “the leaves of trees are for protecting of the fruit;” or that “the clouds are for watering of the earth;” or that “the solidness

of the earth is for the station and mansion of living creatures;” and the like, is well inquired and collected in metaphysic, but in physic they are impertinent. Nay, they are, indeed, but *remoras* and hindrances to stay and slug the ship from further sailing; and have brought this to pass, that the search of the physical causes hath been neglected and passed in silence. And, therefore, the natural philosophy of Democritus and some others, who did not suppose a mind or reason in the frame of things, but attributed the form thereof able to maintain itself to infinite essays or proofs of Nature, which they term fortune, seemeth to me (as far as I can judge by the recital and fragments which remain unto us) in particularities of physical causes more real and better inquired than that of Aristotle and Plato; whereof both intermingled final causes, the one as a part of theology, and the other as a part of logic, which were the favourite studies respectively of both those persons; not because those final causes are not true and worthy to be inquired, being kept within their own province, but because their excursions into the limits of physical causes hath bred a vastness and solitude in that tract. For otherwise, keeping their precincts and borders, men are extremely deceived if they think there is an enmity or repugnancy at all between them. For the cause rendered, that “the hairs about the eyelids are for the safeguard of the sight,” doth not impugn the cause rendered, that “pilosity is incident to orifices of moisture - *muscosi fontes*, &c.” Nor the cause rendered, that “the firmness of hides is for the armour of the body against extremities of heat or cold,” doth not impugn the cause rendered, that “contraction of pores is incident to the outwardest parts, in regard of their adjacence to foreign or unlike bodies;” and so of the rest, both causes being true and compatible, the one declaring an intention, the other a consequence only. Neither doth this call in question or derogate from Divine Providence, but highly confirm and exalt it. For as in civil actions he is the greater and deeper politique that can make other men the instruments of his will and ends, and yet never acquaint them with his purpose, so as they shall do it and yet not know what they do, than he that imparteth his meaning to those he employeth; so is the wisdom of God more admirable, when Nature intendeth one thing and Providence draweth forth another, than if He had communicated to particular creatures and motions the characters and impressions of His Providence. And thus much for metaphysic; the latter part whereof I allow as extant, but wish it confined to his proper place.

VIII. (1) Nevertheless, there remaineth yet another part of natural philosophy, which is commonly made a principal part, and holdeth rank with phisic special and metaphysic, which is mathematic; but I think it more agreeable to the nature of things, and to the light of order, to place it as a branch of metaphysic. For the subject of it being quantity, not quantity indefinite, which is but a relative, and belongeth to *philosophia prima* (as hath been said), but quantity determined or proportionable, it appeareth to be one of the essential forms of things, as that that is causative in Nature of a number of effects; insomuch as we see in the schools both of Democritus and of Pythagoras that the one did ascribe figure to the first seeds of things, and the other did suppose numbers to be the principles and originals of things. And it is true also that of all other forms (as we understand forms) it is the most abstracted and separable from matter, and therefore most proper to metaphysic; which hath likewise been the cause why it hath been better laboured and inquired than any of the other forms, which are more immersed in matter. For it being the nature of the mind of man (to the extreme prejudice of knowledge) to delight in the spacious liberty of generalities, as in a champaign region, and not in the inclosures of particularity, the mathematics of all other knowledge were the goodliest fields to satisfy that appetite. But for the placing of this science, it is not much material: only we have endeavoured in these our partitions to observe a kind of perspective, that one part may cast light upon another.

(2) The mathematics are either pure or mixed. To the pure mathematics are those sciences belonging which handle quantity determinate, merely severed from any axioms of natural philosophy; and these are two, geometry and arithmetic, the one handling quantity continued, and the other dissevered. Mixed hath for subject some axioms or parts of natural philosophy, and considereth quantity determined, as it is auxiliary and incident unto them. For many parts of Nature can neither be invented with sufficient subtlety, nor demonstrated with sufficient perspicuity, nor accommodated unto use with sufficient dexterity, without the aid and intervening of the mathematics, of which sort are perspective, music, astronomy, cosmography, architecture, engineery, and divers others. In the mathematics I can report no deficiency, except it be that men do not sufficiently understand this excellent use of the

pure mathematics, in that they do remedy and cure many defects in the wit and faculties intellectual. For if the wit be too dull, they sharpen it; if too wandering, they fix it; if too inherent in the sense, they abstract it. So that as tennis is a game of no use in itself, but of great use in respect it maketh a quick eye and a body ready to put itself into all postures, so in the mathematics that use which is collateral and intervenient is no less worthy than that which is principal and intended. And as for the mixed mathematics, I may only make this prediction, that there cannot fail to be more kinds of them as Nature grows further disclosed. Thus much of natural science, or the part of Nature speculative.

(3) For natural prudence, or the part operative of natural philosophy, we will divide it into three parts - experimental, philosophical, and magical; which three parts active have a correspondence and analogy with the three parts speculative, natural history, physic, and metaphysic. For many operations have been invented, sometimes by a casual incidence and occurrence, sometimes by a purposed experiment; and of those which have been found by an intentional experiment, some have been found out by varying or extending the same experiment, some by transferring and compounding divers experiments the one into the other, which kind of invention an empiric may manage. Again, by the knowledge of physical causes there cannot fail to follow many indications and designations of new particulars, if men in their speculation will keep one eye upon use and practice. But these are but coastings along the shore, *premendo littus iniquum*; for it seemeth to me there can hardly be discovered any radical or fundamental alterations and innovations in Nature, either by the fortune and essays of experiments, or by the light and direction of physical causes. If, therefore, we have reported metaphysic deficient, it must follow that we do the like of natural magic, which hath relation thereunto. For as for the natural magic whereof now there is mention in books, containing certain credulous and superstitious conceits and observations of sympathies and antipathies, and hidden proprieties, and some frivolous experiments, strange rather by disguisement than in themselves, it is as far differing in truth of Nature from such a knowledge as we require as the story of King Arthur of Britain, or Hugh of Bourdeaux, differs from Cæsar's Commentaries in truth of story; for it is manifest that Cæsar did greater things *de vero* than those imaginary heroes

were feigned to do. But he did them not in that fabulous manner. Of this kind of learning the fable of Ixion was a figure, who designed to enjoy Juno, the goddess of power, and instead of her had copulation with a cloud, of which mixture were begotten centaurs and chimeras. So whosoever shall entertain high and vaporous imaginations, instead of a laborious and sober inquiry of truth, shall beget hopes and beliefs of strange and impossible shapes. And, therefore, we may note in these sciences which hold so much of imagination and belief, as this degenerate natural magic, alchemy, astrology, and the like, that in their propositions the description of the means is ever more monstrous than the pretence or end. For it is a thing more probable that he that knoweth well the natures of weight, of colour, of pliant and fragile in respect of the hammer, of volatile and fixed in respect of the fire, and the rest, may superinduce upon some metal the nature and form of gold by such mechanic as longeth to the production of the natures afore rehearsed, than that some grains of the medicine projected should in a few moments of time turn a sea of quicksilver or other material into gold. So it is more probable that he that knoweth the nature of arefaction, the nature of assimilation of nourishment to the thing nourished, the manner of increase and clearing of spirits, the manner of the depredations which spirits make upon the humours and solid parts, shall by ambages of diets, bathings, anointings, medicines, motions, and the like, prolong life, or restore some degree of youth or vivacity, than that it can be done with the use of a few drops or scruples of a liquor or receipt. To conclude, therefore, the true natural magic, which is that great liberty and latitude of operation which dependeth upon the knowledge of forms, I may report deficient, as the relative thereof is. To which part, if we be serious and incline not to vanities and plausible discourse, besides the deriving and deducing the operations themselves from metaphysic, there are pertinent two points of much purpose, the one by way of preparation, the other by way of caution. The first is, that there be made a calendar, resembling an inventory of the estate of man, containing all the inventions (being the works or fruits of Nature or art) which are now extant, and whereof man is already possessed; out of which doth naturally result a note what things are yet held impossible, or not invented, which calendar will be the more artificial and serviceable if to every reputed impossibility you add what thing is extant which cometh the nearest in degree to that impossibility; to the end that by these optatives and potentials man's inquiry may be the

more awake in deducing direction of works from the speculation of causes. And secondly, that these experiments be not only esteemed which have an immediate and present use, but those principally which are of most universal consequence for invention of other experiments, and those which give most light to the invention of causes; for the invention of the mariner's needle, which giveth the direction, is of no less benefit for navigation than the invention of the sails which give the motion.

(4) Thus have I passed through natural philosophy and the deficiencies thereof; wherein if I have differed from the ancient and received doctrines, and thereby shall move contradiction, for my part, as I affect not to dissent, so I purpose not to contend. If it be truth,

“Non canimus surdis, respondent omnia sylvæ,”

the voice of Nature will consent, whether the voice of man do or no. And as Alexander Borgia was wont to say of the expedition of the French for Naples, that they came with chalk in their hands to mark up their lodgings, and not with weapons to fight; so I like better that entry of truth which cometh peaceably with chalk to mark up those minds which are capable to lodge and harbour it, than that which cometh with pugnacity and contention.

(5) But there remaineth a division of natural philosophy according to the report of the inquiry, and nothing concerning the matter or subject: and that is positive and considerative, when the inquiry reporteth either an assertion or a doubt. These doubts or *non liquets* are of two sorts, particular and total. For the first, we see a good example thereof in Aristotle's Problems which deserved to have had a better continuance; but so nevertheless as there is one point whereof warning is to be given and taken. The registering of doubts hath two excellent uses: the one, that it saveth philosophy from errors and falsehoods; when that which is not fully appearing is not collected into assertion, whereby error might draw error, but reserved in doubt; the other, that the entry of doubts are as so many suckers or sponges to draw use of knowledge; insomuch as that which if doubts had not preceded, a man should

never have advised, but passed it over without note, by the suggestion and solicitation of doubts is made to be attended and applied. But both these commodities do scarcely countervail and inconvenience, which will intrude itself if it be not debarred; which is, that when a doubt is once received, men labour rather how to keep it a doubt still, than how to solve it, and accordingly bend their wits. Of this we see the familiar example in lawyers and scholars, both which, if they have once admitted a doubt, it goeth ever after authorised for a doubt. But that use of wit and knowledge is to be allowed, which laboureth to make doubtful things certain, and not those which labour to make certain things doubtful. Therefore these calendars of doubts I commend as excellent things; so that there he this caution used, that when they be thoroughly sifted and brought to resolution, they be from thenceforth omitted, discarded, and not continued to cherish and encourage men in doubting. To which calendar of doubts or problems I advise be annexed another calendar, as much or more material which is a calendar of popular errors: I mean chiefly in natural history, such as pass in speech and conceit, and are nevertheless apparently detected and convicted of untruth, that man's knowledge be not weakened nor embased by such dross and vanity. As for the doubts or *non liquets* general or in total, I understand those differences of opinions touching the principles of nature, and the fundamental points of the same, which have caused the diversity of sects, schools, and philosophies, as that of Empedocles, Pythagoras, Democritus, Parmenides, and the rest. For although Aristotle, as though he had been of the race of the Ottomans, thought he could not reign except the first thing he did he killed all his brethren; yet to those that seek truth and not magistrality, it cannot but seem a matter of great profit, to see before them the several opinions touching the foundations of nature. Not for any exact truth that can be expected in those theories; for as the same phenomena in astronomy are satisfied by this received astronomy of the diurnal motion, and the proper motions of the planets, with their eccentrics and epicycles, and likewise by the theory of Copernicus, who supposed the earth to move, and the calculations are indifferently agreeable to both, so the ordinary face and view of experience is many times satisfied by several theories and philosophies; whereas to find the real truth requireth another manner of severity and attention. For as Aristotle saith, that children at the first will call every woman mother, but afterward they come to distinguish according to truth, so experience, if it be in

childhood, will call every philosophy mother, but when it cometh to ripeness it will discern the true mother. So as in the meantime it is good to see the several glosses and opinions upon Nature, whereof it may be everyone in some one point hath seen clearer than his fellows, therefore I wish some collection to be made painfully and understandingly *de antiquis philosophiis*, out of all the possible light which remaineth to us of them: which kind of work I find deficient. But here I must give warning, that it be done distinctly and severedly; the philosophies of everyone throughout by themselves, and not by titles packed and faggoted up together, as hath been done by Plutarch. For it is the harmony of a philosophy in itself, which giveth it light and credence; whereas if it be singled and broken, it will seem more foreign and dissonant. For as when I read in Tacitus the actions of Nero or Claudius, with circumstances of times, inducements, and occasions, I find them not so strange; but when I read them in Suetonius Tranquillus, gathered into titles and bundles and not in order of time, they seem more monstrous and incredible: so is it of any philosophy reported entire, and dismembered by articles. Neither do I exclude opinions of latter times to be likewise represented in this calendar of sects of philosophy, as that of Theophrastus Paracelsus, eloquently reduced into an harmony by the pen of Severinus the Dane; and that of Tilesius, and his scholar Donius, being as a pastoral philosophy, full of sense, but of no great depth; and that of Fracastorius, who, though he pretended not to make any new philosophy, yet did use the absoluteness of his own sense upon the old; and that of Gilbertus our countryman, who revived, with some alterations and demonstrations, the opinions of Xenophanes; and any other worthy to be admitted.

(6) Thus have we now dealt with two of the three beams of man's knowledge; that is *radius directus*, which is referred to nature, *radius refractus*, which is referred to God, and cannot report truly because of the inequality of the medium. There resteth *radius reflexus*, whereby man beholdeth and contemplateth himself.

IX. (1) We come therefore now to that knowledge whereunto the ancient oracle directeth us, which is the knowledge of ourselves; which deserveth the more accurate handling, by how much it toucheth us more nearly. This knowledge, as it is the end and term of natural philosophy in the intention of

man, so notwithstanding it is but a portion of natural philosophy in the continent of Nature. And generally let this be a rule, that all partitions of knowledges be accepted rather for lines and veins than for sections and separations; and that the continuance and entireness of knowledge be preserved. For the contrary hereof hath made particular sciences to become barren, shallow, and erroneous, while they have not been nourished and maintained from the common fountain. So we see Cicero, the orator, complained of Socrates and his school, that he was the first that separated philosophy and rhetoric; whereupon rhetoric became an empty and verbal art. So we may see that the opinion of Copernicus, touching the rotation of the earth, which astronomy itself cannot correct, because it is not repugnant to any of the *phenomena*, yet natural philosophy may correct. So we see also that the science of medicine if it be destituted and forsaken by natural philosophy, it is not much better than an empirical practice. With this reservation, therefore, we proceed to human philosophy or humanity, which hath two parts: the one considereth man segregate or distributively, the other congregate or in society; so as human philosophy is either simple and particular, or conjugate and civil. Humanity particular consisteth of the same parts whereof man consisteth: that is, of knowledges which respect the body, and of knowledges that respect the mind. But before we distribute so far, it is good to constitute. For I do take the consideration in general, and at large, of human nature to be fit to be emancipate and made a knowledge by itself, not so much in regard of those delightful and elegant discourses which have been made of the dignity of man, of his miseries, of his state and life, and the like adjuncts of his common and undivided nature; but chiefly in regard of the knowledge concerning the sympathies and concordances between the mind and body, which being mixed cannot be properly assigned to the sciences of either.

(2) This knowledge hath two branches: for as all leagues and amities consist of mutual intelligence and mutual offices, so this league of mind and body hath these two parts: how the one discloseth the other, and how the one worketh upon the other; discovery and impression. The former of these hath begotten two arts, both of prediction or prenotion; whereof the one is honoured with the inquiry of Aristotle, and the other of Hippocrates. And although they have of later time been used to be coupled with superstitions

and fantastical arts, yet being purged and restored to their true state, they have both of them a solid ground in Nature, and a profitable use in life. The first is physiognomy, which discovereth the disposition of the mind by the lineaments of the body. The second is the exposition of natural dreams, which discovereth the state of the body by the imaginations of the mind. In the former of these I note a deficiency. For Aristotle hath very ingeniously and diligently handled the features of the body, but not the gestures of the body, which are no less comprehensible by art, and of greater use and advantage. For the lineaments of the body do disclose the disposition and inclination of the mind in general; but the motions of the countenance and parts do not only so, but do further disclose the present humour and state of the mind and will. For as your majesty saith most aptly and elegantly, "As the tongue speaketh to the ear so the gesture speaketh to the eye." And, therefore, a number of subtle persons, whose eyes do dwell upon the faces and fashions of men, do well know the advantage of this observation, as being most part of their ability; neither can it be denied, but that it is a great discovery of dissimulations, and a great direction in business.

(3) The latter branch, touching impression, hath not been collected into art, but hath been handled dispersedly; and it hath the same relation or *antistrophe* that the former hath. For the consideration is double - either how and how far the humours and affects of the body do alter or work upon the mind, or, again, how and how far the passions or apprehensions of the mind do alter or work upon the body. The former of these hath been inquired and considered as a part and appendix of medicine, but much more as a part of religion or superstition. For the physician prescribeth cures of the mind in frenzies and melancholy passions, and pretendeth also to exhibit medicines to exhilarate the mind, to control the courage, to clarify the wits, to corroborate the memory, and the like; but the scruples and superstitions of diet and other regiment of the body in the sect of the Pythagoreans, in the heresy of the Manichees, and in the law of Mahomet, do exceed. So likewise the ordinances in the ceremonial law, interdicting the eating of the blood and the fat, distinguishing between beasts clean and unclean for meat, are many and strict; nay, the faith itself being clear and serene from all clouds of ceremony, yet retaineth the use of fastlings, abstinences, and other macerations and humiliations of the body, as things real, and not figurative. The root and life

of all which prescripts is (besides the ceremony) the consideration of that dependency which the affections of the mind are submitted unto upon the state and disposition of the body. And if any man of weak judgment do conceive that this suffering of the mind from the body doth either question the immortality, or derogate from the sovereignty of the soul, he may be taught, in easy instances, that the infant in the mother's womb is compatible with the mother, and yet separable; and the most absolute monarch is sometimes led by his servants, and yet without subjection. As for the reciprocal knowledge, which is the operation of the conceits and passions of the mind upon the body, we see all wise physicians, in the prescriptions of their regiments to their patients, do ever consider *accidentia animi*, as of great force to further or hinder remedies or recoveries: and more specially it is an inquiry of great depth and worth concerning imagination, how and how far it altereth the body proper of the imaginant; for although it hath a manifest power to hurt, it followeth not it hath the same degree of power to help. No more than a man can conclude, that because there be pestilent airs, able suddenly to kill a man in health, therefore there should be sovereign airs, able suddenly to cure a man in sickness. But the inquisition of this part is of great use, though it needeth, as Socrates said, "a Delian diver," being difficult and profound. But unto all this knowledge *de communi vinculo*, of the concordances between the mind and the body, that part of inquiry is most necessary which considereth of the seats and domiciles which the several faculties of the mind do take and occupate in the organs of the body; which knowledge hath been attempted, and is controverted, and deserveth to be much better inquired. For the opinion of Plato, who placed the understanding in the brain, animosity (which he did unfitly call anger, having a greater mixture with pride) in the heart, and concupiscence or sensuality in the liver, deserveth not to be despised, but much less to be allowed. So, then, we have constituted (as in our own wish and advice) the inquiry touching human nature entire, as a just portion of knowledge to be handled apart.

X. (1) The knowledge that concerneth man's body is divided as the good of man's body is divided, unto which it referreth. The good of man's body is of four kinds - health, beauty, strength, and pleasure: so the knowledges are medicine, or art of cure; art of decoration, which is called cosmetic; art of activity, which is called athletic; and art voluptuary, which Tacitus truly

calleth *eruditus luxus*. This subject of man's body is, of all other things in nature, most susceptible of remedy; but then that remedy is most susceptible of error; for the same subtlety of the subject doth cause large possibility and easy failing, and therefore the inquiry ought to be the more exact.

(2) To speak, therefore, of medicine, and to resume that we have said, ascending a little higher: the ancient opinion that man was *microcosmus* - an abstract or model of the world - hath been fantastically strained by Paracelsus and the alchemists, as if there were to be found in man's body certain correspondences and parallels, which should have respect to all varieties of things, as stars, planets, minerals, which are extant in the great world. But thus much is evidently true, that of all substances which nature hath produced, man's body is the most extremely compounded. For we see herbs and plants are nourished by earth and water; beasts for the most part by herbs and fruits; man by the flesh of beasts, birds, fishes, herbs, grains, fruits, water, and the manifold alterations, dressings, and preparations of these several bodies before they come to be his food and aliment. Add hereunto that beasts have a more simple order of life, and less change of affections to work upon their bodies, whereas man in his mansion, sleep, exercise, passions, hath infinite variations: and it cannot be denied but that the body of man of all other things is of the most compounded mass. The soul, on the other side, is the simplest of substances, as is well expressed:

“Purumque reliquit
Æthereum sensum atque aurā simplicis ignem.”

So that it is no marvel though the soul so placed enjoy no rest, if that principle be true, that *Motus rerum est rapidus extra locum, placidus in loco*. But to the purpose. This variable composition of man's body hath made it as an instrument easy to distemper; and, therefore, the poets did well to conjoin music and medicine in Apollo, because the office of medicine is but to tune this curious harp of man's body and to reduce it to harmony. So, then, the subject being so variable hath made the art by consequent more conjectural; and the art being conjectural hath made so much the more place to be left for

imposture. For almost all other arts and sciences are judged by acts or masterpieces, as I may term them, and not by the successes and events. The lawyer is judged by the virtue of his pleading, and not by the issue of the cause; this master in this ship is judged by the directing his course aright, and not by the fortune of the voyage; but the physician, and perhaps this politique, hath no particular acts demonstrative of his ability, but is judged most by the event, which is ever but as it is taken: for who can tell, if a patient die or recover, or if a state be preserved or ruined, whether it be art or accident? And therefore many times the impostor is prized, and the man of virtue taxed. Nay, we see [the] weakness and credulity of men is such, as they will often refer a mountebank or witch before a learned physician. And therefore the poets were clear-sighted in discerning this extreme folly when they made Æsculapius and Circe, brother and sister, both children of the sun, as in the verses -

“Ipse repertorem medicinæ talis et artis
Fulmine Phœbigenam Stygias detrusit ad undas.”

And again -

“Dives inaccessos ubi Solis filia lucos,” &c.

For in all times, in the opinion of the multitude, witches and old women and impostors, have had a competition with physicians. And what followeth? Even this, that physicians say to themselves, as Solomon expresseth it upon a higher occasion, “If it befall to me as befalleth to the fools, why should I labour to be more wise?” And therefore I cannot much blame physicians that they use commonly to intend some other art or practice, which they fancy more than their profession; for you shall have of them antiquaries, poets, humanists, statesmen, merchants, divines, and in every of these better seen than in their profession; and no doubt upon this ground that they find that mediocrity and excellency in their art maketh no difference in profit or

reputation towards their fortune: for the weakness of patients, and sweetness of life, and nature of hope, maketh men depend upon physicians with all their defects. But, nevertheless, these things which we have spoken of are courses begotten between a little occasion and a great deal of sloth and default; for if we will excite and awake our observation, we shall see in familiar instances what a predominant faculty the subtlety of spirit hath over the variety of matter or form. Nothing more variable than faces and countenances, yet men can bear in memory the infinite distinctions of them; nay, a painter, with a few shells of colours, and the benefit of his eye, and habit of his imagination, can imitate them all that ever have been, are, or may be, if they were brought before him. Nothing more variable than voices, yet men can likewise discern them personally: nay, you shall have a *buffon* or *pantomimus* will express as many as he pleaseth. Nothing more variable than the differing sounds of words; yet men have found the way to reduce them to a few simple letters. So that it is not the insufficiency or incapacity of man's mind, but it is the remote standing or placing thereof that breedeth these mazes and incomprehensions; for as the sense afar off is full of mistaking, but is exact at hand, so is it of the understanding, the remedy whereof is, not to quicken or strengthen the organ, but to go nearer to the object; and therefore there is no doubt but if the physicians will learn and use the true approaches and avenues of nature, they may assume as much as the poet saith:

“Et quoniam variant morbi, variabimus artes;
Mille mali species, mille salutis erunt.”

Which that they should do, the nobleness of their art doth deserve: well shadowed by the poets, in that they made Æsculapius to be the son of [the] sun, the one being the fountain of life, the other as the second-stream; but infinitely more honoured by the example of our Saviour, who made the body of man the object of His miracles, as the soul was the object of His doctrine. For we read not that ever He vouchsafed to do any miracle about honour or money (except that one for giving tribute to Cæsar), but only about the preserving, sustaining, and healing the body of man.

(3) Medicine is a science which hath been (as we have said) more professed than laboured, and yet more laboured than advanced; the labour having been, in my judgment, rather in circle than in progression. For I find much iteration, but small addition. It considereth causes of diseases, with the occasions or impulsions; the diseases themselves, with the accidents; and the cures, with the preservations. The deficiencies which I think good to note, being a few of many, and those such as are of a more open and manifest nature, I will enumerate and not place.

(4) The first is the discontinuance of the ancient and serious diligence of Hippocrates, which used to set down a narrative of the special cases of his patients, and how they proceeded, and how they were judged by recovery or death. Therefore having an example proper in the father of the art, I shall not need to allege an example foreign, of the wisdom of the lawyers, who are careful to report new cases and decisions, for the direction of future judgments. This continuance of medicinal history I find deficient; which I understand neither to be so infinite as to extend to every common case, nor so reserved as to admit none but wonders: for many things are new in this manner, which are not new in the kind; and if men will intend to observe, they shall find much worthy to observe.

(5) In the inquiry which is made by anatomy, I find much deficiency: for they inquire of the parts, and their substances, figures, and collocations; but they inquire not of the diversities of the parts, the secrecies of the passages, and the seats or nestling of the humours, nor much of the footsteps and impressions of diseases. The reason of which omission I suppose to be, because the first inquiry may be satisfied in the view of one or a few anatomies; but the latter, being comparative and casual, must arise from the view of many. And as to the diversity of parts, there is no doubt but the facture or framing of the inward parts is as full of difference as the outward, and in that is the cause continent of many diseases; which not being observed, they quarrel many times with the humours, which are not in fault; the fault being in the very frame and mechanic of the part, which cannot be removed by medicine alterative, but must be accommodated and palliated by diets and medicines familiar. And for the passages and pores, it is true which was anciently noted, that the more subtle of them appear not in anatomies,

because they are shut and latent in dead bodies, though they be open and manifest in life: which being supposed, though the inhumanity of *anatomia vivorum* was by Celsus justly reprov'd; yet in regard of the great use of this observation, the inquiry need not by him so slightly to have been relinquish'd altogether, or referred to the casual practices of surgery; but might have been well diverted upon the dissection of beasts alive, which notwithstanding the dissimilitude of their parts may sufficiently satisfy this inquiry. And for the humours, they are commonly pass'd over in anatomies as purgaments; whereas it is most necessary to observe, what cavities, nests, and receptacles the humours do find in the parts, with the differing kind of the humour so lodg'd and receiv'd. And as for the footsteps of diseases, and their devastations of the inward parts, impostumations, exulcerations, discontinuations, putrefactions, consumptions, contractions, extensions, convulsions, dislocations, obstructions, repletions, together with all preternatural substances, as stones, carnosities, excrescences, worms, and the like; they ought to have been exactly observed by multitude of anatomies, and the contribution of men's several experiences, and carefully set down both historically according to the appearances, and artificially with a reference to the diseases and symptoms which result'd from them, in case where the anatomy is of a defunct patient; whereas now upon opening of bodies they are pass'd over slightly and in silence.

(6) In the inquiry of diseases, they do abandon the cures of many, some as in their nature incurable, and others as past the period of cure; so that Sylla and the Triumvirs never proscrib'd so many men to die, as they do by their ignorant edicts: whereof numbers do escape with less difficulty than they did in the Roman prescriptions. Therefore I will not doubt to note as a deficiency, that they inquire not the perfect cures of many diseases, or extremities of diseases; but pronouncing them incurable do enact a law of neglect, and exempt ignorance from discredit.

(7) Nay further, I esteem it the office of a physician not only to restore health, but to mitigate pain and dolours; and not only when such mitigation may conduce to recovery, but when it may serve to make a fair and easy passage. For it is no small felicity which Augustus Cæsar was wont to wish to himself, that same *Euthanasia*; and which was specially noted in the death of

Antoninus Pius, whose death was after the fashion, and semblance of a kindly and pleasant sheep. So it is written of Epicurus, that after his disease was judged desperate, he drowned his stomach and senses with a large draught and ingurgitation of wine; whereupon the epigram was made, *Hinc Stygias ebrius hausit aquas*; he was not sober enough to taste any bitterness of the Stygian water. But the physicians contrariwise do make a kind of scruple and religion to stay with the patient after the disease is deplored; whereas in my judgment they ought both to inquire the skill, and to give the attendances, for the facilitating and assuaging of the pains and agonies of death.

(5) In the consideration of the cures of diseases, I find a deficiency in the receipts of propriety, respecting the particular cures of diseases: for the physicians have frustrated the fruit of tradition and experience by their magistralities, in adding and taking out and changing *quid pro qua* in their receipts, at their pleasures; commanding so over the medicine, as the medicine cannot command over the disease. For except it be treacle and *mithridatum*, and of late *diascordium*, and a few more, they tie themselves to no receipts severely and religiously. For as to the confections of sale which are in the shops, they are for readiness and not for propriety. For they are upon general intentions of purging, opening, comforting, altering, and not much appropriate to particular diseases. And this is the cause why empirics and old women are more happy many times in their cures than learned physicians, because they are more religious in holding their medicines. Therefore here is the deficiency which I find, that physicians have not, partly out of their own practice, partly out of the constant probations reported in books, and partly out of the traditions of empirics, set down and delivered over certain experimental medicines for the cure of particular diseases, besides their own conjectural and magistral descriptions. For as they were the men of the best composition in the state of Rome, which either being consuls inclined to the people, or being tribunes inclined to the senate; so in the matter we now handle, they be the best physicians, which being learned incline to the traditions of experience, or being empirics incline to the methods of learning.

(9) In preparation of medicines I do find strange, specially considering how mineral medicines have been extolled, and that they are safer for the outward

than inward parts, that no man hath sought to make an imitation by art of natural baths and medicinable fountains: which nevertheless are confessed to receive their virtues from minerals; and not so only, but discerned and distinguished from what particular mineral they receive tincture, as sulphur, vitriol, steel, or the like; which nature, if it may be reduced to compositions of art, both the variety of them will be increased, and the temper of them will be more commanded.

(10) But lest I grow to be more particular than is agreeable either to my intention or to proportion, I will conclude this part with the note of one deficiency more, which seemeth to me of greatest consequence: which is, that the prescripts in use are too compendious to attain their end; for, to my understanding, it is a vain and flattering opinion to think any medicine can be so sovereign or so happy, as that the receipt or miss of it can work any great effect upon the body of man. It were a strange speech which spoken, or spoken oft, should reclaim a man from a vice to which he were by nature subject. It is order, pursuit, sequence, and interchange of application, which is mighty in nature; which although it require more exact knowledge in prescribing, and more precise obedience in observing, yet is recompensed with the magnitude of effects. And although a man would think, by the daily visitations of the physicians, that there were a pursuance in the cure, yet let a man look into their prescripts and ministrations, and he shall find them but inconstancies and every day's devices, without any settled providence or project. Not that every scrupulous or superstitious prescript is effectual, no more than every straight way is the way to heaven; but the truth of the direction must precede severity of observance.

(11) For cosmetic, it hath parts civil, and parts effeminate: for cleanness of body was ever esteemed to proceed from a due reverence to God, to society, and to ourselves. As for artificial decoration, it is well worthy of the deficiencies which it hath; being neither fine enough to deceive, nor handsome to use, nor wholesome to please.

(12) For athletic, I take the subject of it largely, that is to say, for any point of ability whereunto the body of man may be brought, whether it be of activity, or of patience; whereof activity hath two parts, strength and swiftness; and

patience likewise hath two parts, hardness against wants and extremities, and endurance of pain or torment; whereof we see the practices in tumblers, in savages, and in those that suffer punishment. Nay, if there be any other faculty which falls not within any of the former divisions, as in those that dive, that obtain a strange power of containing respiration, and the like, I refer it to this part. Of these things the practices are known, but the philosophy that concerneth them is not much inquired; the rather, I think, because they are supposed to be obtained, either by an aptness of nature, which cannot be taught, or only by continual custom, which is soon prescribed which though it be not true, yet I forbear to note any deficiencies; for the Olympian games are down long since, and the mediocrity of these things is for use; as for the excellency of them it serveth for the most part but for mercenary ostentation.

(13) For arts of pleasure sensual, the chief deficiency in them is of laws to repress them. For as it hath been well observed, that the arts which flourish in times while virtue is in growth, are military; and while virtue is in state, are liberal; and while virtue is in declination, are voluptuary: so I doubt that this age of the world is somewhat upon the descent of the wheel. With arts voluptuary I couple practices jocular; for the deceiving of the senses is one of the pleasures of the senses. As for games of recreation, I hold them to belong to civil life and education. And thus much of that particular human philosophy which concerns the body, which is but the tabernacle of the mind.

XI. (1) For human knowledge which concerns the mind, it hath two parts; the one that inquireth of the substance or nature of the soul or mind, the other that inquireth of the faculties or functions thereof. Unto the first of these, the considerations of the original of the soul, whether it be native or adventive, and how far it is exempted from laws of matter, and of the immortality thereof, and many other points, do appertain: which have been not more laboriously inquired than variously reported; so as the travail therein taken seemeth to have been rather in a maze than in a way. But although I am of opinion that this knowledge may be more really and soundly inquired, even in nature, than it hath been, yet I hold that in the end it must be hounded by religion, or else it will be subject to deceit and delusion. For as the substance of the soul in the creation was not extracted out of the mass of heaven and

earth by the benediction of a *producat*, but was immediately inspired from God, so it is not possible that it should be (otherwise than by accident) subject to the laws of heaven and earth, which are the subject of philosophy; and therefore the true knowledge of the nature and state of the soul must come by the same inspiration that gave the substance. Unto this part of knowledge touching the soul there be two appendices; which, as they have been handled, have rather vapoured forth fables than kindled truth: divination and fascination.

(2) Divination hath been anciently and fitly divided into artificial and natural: whereof artificial is, when the mind maketh a prediction by argument, concluding upon signs and tokens; natural is, when the mind hath a presentation by an internal power, without the inducement of a sign. Artificial is of two sorts: either when the argument is coupled with a derivation of causes, which is rational; or when it is only grounded upon a coincidence of the effect, which is experimental: whereof the latter for the most part is superstitious, such as were the heathen observations upon the inspection of sacrifices, the flights of birds, the swarming of bees; and such as was the Chaldean astrology, and the like. For artificial divination, the several kinds thereof are distributed amongst particular knowledges. The astronomer hath his predictions, as of conjunctions, aspects, eclipses, and the like. The physician hath his predictions, of death, of recovery, of the accidents and issues of diseases. The politique hath his predictions; *O urbem venalem, et cito perituram, si emptorem invenerit!* which stayed not long to be performed, in Sylla first, and after in Cæsar: so as these predictions are now impertinent, and to be referred over. But the divination which springeth from the internal nature of the soul is that which we now speak of; which hath been made to be of two sorts, primitive and by influxion. Primitive is grounded upon the supposition that the mind, when it is withdrawn and collected into itself, and not diffused into the organs of the body, hath some extent and latitude of prenotion; which therefore appeareth most in sleep, in ecstasies, and near death, and more rarely in waking apprehensions; and is induced and furthered by those abstinences and observances which make the mind most to consist in itself. By influxion, is grounded upon the conceit that the mind, as a mirror or glass, should take illumination from the foreknowledge of God and spirits: unto which the same regiment doth likewise conduce. For the

retiring of the mind within itself is the state which is most susceptible of divine influxions; save that it is accompanied in this case with a fervency and elevation (which the ancients noted by fury), and not with a repose and quiet, as it is in the other.

(3) Fascination is the power and act of imagination intensive upon other bodies than the body of the imaginant, for of that we spake in the proper place. Wherein the school of Paracelsus, and the disciples of pretended natural magic, have been so intemperate, as they have exalted the power of the imagination to be much one with the power of miracle-working faith. Others, that draw nearer to probability, calling to their view the secret passages of things, and specially of the contagion that passeth from body to body, do conceive it should likewise be agreeable to nature that there should be some transmissions and operations from spirit to spirit without the mediation of the senses; whence the conceits have grown (now almost made civil) of the mastering spirit, and the force of confidence, and the like. Incident unto this is the inquiry how to raise and fortify the imagination; for if the imagination fortified have power, then it is material to know how to fortify and exalt it. And herein comes in crookedly and dangerously a palliation of a great part of ceremonial magic. For it may be pretended that ceremonies, characters, and charms do work, not by any tacit or sacramental contract with evil spirits, but serve only to strengthen the imagination of him that useth it; as images are said by the Roman Church to fix the cogitations and raise the devotions of them that pray before them. But for mine own judgment, if it be admitted that imagination hath power, and that ceremonies fortify imagination, and that they be used sincerely and intentionally for that purpose; yet I should hold them unlawful, as opposing to that first edict which God gave unto man, *In sudore vultus comedes panem tuum*. For they propound those noble effects, which God hath set forth unto man to be bought at the price of labour, to be attained by a few easy and slothful observances. Deficiencies in these knowledges I will report none, other than the general deficiency, that it is not known how much of them is verity, and how much vanity.

XII. (1) The knowledge which respecteth the faculties of the mind of man is of two kinds - the one respecting his understanding and reason, and the other

his will, appetite, and affection; whereof the former produceth position or decree, the latter action or execution. It is true that the imagination is an agent or *nuncius* in both provinces, both the judicial and the ministerial. For sense sendeth over to imagination before reason have judged, and reason sendeth over to imagination before the decree can be acted. For imagination ever precedeth voluntary motion. Saving that this Janus of imagination hath differing faces: for the face towards reason hath the print of truth, but the face towards action hath the print of good; which nevertheless are faces,

“Quales decet esse sororum.”

Neither is the imagination simply and only a messenger; but is invested with, or at least wise usurpeth no small authority in itself, besides the duty of the message. For it was well said by Aristotle, “That the mind hath over the body that commandment, which the lord hath over a bondman; but that reason hath over the imagination that commandment which a magistrate hath over a free citizen,” who may come also to rule in his turn. For we see that, in matters of faith and religion, we raise our imagination above our reason, which is the cause why religion sought ever access to the mind by similitudes, types, parables, visions, dreams. And again, in all persuasions that are wrought by eloquence, and other impressions of like nature, which do paint and disguise the true appearance of things, the chief recommendation unto reason is from the imagination. Nevertheless, because I find not any science that doth properly or fitly pertain to the imagination, I see no cause to alter the former division. For as for poesy, it is rather a pleasure or play of imagination than a work or duty thereof. And if it be a work, we speak not now of such parts of learning as the imagination produceth, but of such sciences as handle and consider of the imagination. No more than we shall speak now of such knowledges as reason produceth (for that extendeth to all philosophy), but of such knowledges as do handle and inquire of the faculty of reason: so as poesy had his true place. As for the power of the imagination in nature, and the manner of fortifying the same, we have mentioned it in the doctrine *De Anima*, whereunto most fitly it belongeth. And lastly, for imaginative or insinuating reason, which is the subject of rhetoric, we think it

best to refer it to the arts of reason. So therefore we content ourselves with the former division, that human philosophy, which respecteth the faculties of the mind of man, hath two parts, rational and moral.

(2) The part of human philosophy which is rational is of all knowledges, to the most wits, the least delightful, and seemeth but a net of subtlety and spinosity. For as it was truly said, that knowledge is *pabulum animi*; so in the nature of men's appetite to this food most men are of the taste and stomach of the Israelites in the desert, that would fain have returned *ad ollas carnium*, and were weary of manna; which, though it were celestial, yet seemed less nutritive and comfortable. So generally men taste well knowledges that are drenched in flesh and blood, civil history, morality, policy, about the which men's affections, praises, fortunes do turn and are conversant. But this same *lumen siccum* doth parch and offend most men's watery and soft natures. But to speak truly of things as they are in worth, rational knowledges are the keys of all other arts, for as Aristotle saith aptly and elegantly, "That the hand is the instrument of instruments, and the mind is the form of forms;" so these be truly said to be the art of arts. Neither do they only direct, but likewise confirm and strengthen; even as the habit of shooting doth not only enable to shoot a nearer shoot, but also to draw a stronger bow.

(3) The arts intellectual are four in number, divided according to the ends whereunto they are referred - for man's labour is to invent that which is sought or propounded; or to judge that which is invented; or to retain that which is judged; or to deliver over that which is retained. So as the arts must be four - art of inquiry or invention; art of examination or judgment; art of custody or memory; and art of elocution or tradition.

XIII. (1) Invention is of two kinds much differing - the one of arts and sciences, and the other of speech and arguments. The former of these I do report deficient; which seemeth to me to be such a deficiency as if, in the making of an inventory touching the state of a defunct, it should be set down that there is no ready money. For as money will fetch all other commodities, so this knowledge is that which should purchase all the rest. And like as the West Indies had never been discovered if the use of the mariner's needle had not been first discovered, though the one be vast regions, and the other a

small motion; so it cannot be found strange if sciences be no further discovered, if the art itself of invention and discovery hath been passed over.

(2) That this part of knowledge is wanting, to my judgment standeth plainly confessed; for first, logic doth not pretend to invent sciences, or the axioms of sciences, but passeth it over with a *cuique in sua arte credendum*. And Celsus acknowledgeth it gravely, speaking of the empirical and dogmatical sects of physicians, “That medicines and cures were first found out, and then after the reasons and causes were discoursed; and not the causes first found out, and by light from them the medicines and cures discovered.” And Plato in his “Theætetus” noteth well, “That particulars are infinite, and the higher generalities give no sufficient direction; and that the pith of all sciences, which maketh the artsman differ from the inexpert, is in the middle propositions, which in every particular knowledge are taken from tradition and experience.” And therefore we see, that they which discourse of the inventions and originals of things refer them rather to chance than to art, and rather to beasts, birds, fishes, serpents, than to men.

“Dictamnum genetrix Cretæa carpit ab Ida,
Puberibus caulem foliis et flore camantem
Purpureo; non illa feris incognita capris
Gramina, cum tergo volucres hæserè sagittæ.”

So that it was no marvel (the manner of antiquity being to consecrate inventors) that the Egyptians had so few human idols in their temples, but almost all brute:

“Omnigenumque Deum monstra, et latrator Anubis,
Contra Neptunum, et Venerem, contraque Minervam, &c.”

And if you like better the tradition of the Grecians, and ascribe the first inventions to men, yet you will rather believe that Prometheus first stroke the

flints, and marvelled at the spark, than that when he first stroke the flints he expected the spark; and therefore we see the West Indian Prometheus had no intelligence with the European, because of the rareness with them of flint, that gave the first occasion. So as it should seem, that hitherto men are rather beholden to a wild goat for surgery, or to a nightingale for music, or to the ibis for some part of physic, or to the pot-lid that flew open for artillery, or generally to chance or anything else than to logic for the invention of arts and sciences. Neither is the form of invention which Virgil describeth much other:

“Ut varias usus meditando extunderet artes
Paulatim.”

For if you observe the words well, it is no other method than that which brute beasts are capable of, and do put in ure; which is a perpetual intending or practising some one thing, urged and imposed by an absolute necessity of conservation of being. For so Cicero saith very truly, *Usus uni rei deditus et naturam et artem sæpe vincit*. And therefore if it be said of men,

“Labor omnia vincit
Improbis, et duris urgens in rebus egestas,”

it is likewise said of beasts, *Quis psittaco docuit suum χαιρε?* Who taught the raven in a drought to throw pebbles into a hollow tree, where she spied water, that the water might rise so as she might come to it? Who taught the bee to sail through such a vast sea or air, and to find the way from a field in a flower a great way off to her hive? Who taught the ant to bite every grain of corn that she burieth in her hill, lest it should take root and grow? Add then the word *extundere*, which importeth the extreme difficulty, and the word *paulatim*, which importeth the extreme slowness, and we are where we were, even amongst the Egyptians’ gods; there being little left to the faculty of reason, and nothing to the duty or art, for matter of invention.

(3) Secondly, the induction which the logicians speak of, and which seemeth familiar with Plato, whereby the principles of sciences may be pretended to be invented, and so the middle propositions by derivation from the principles; their form of induction, I say, is utterly vicious and incompetent; wherein their error is the fouler, because it is the duty of art to perfect and exalt nature; but they contrariwise have wronged, abused, and traduced nature. For he that shall attentively observe how the mind doth gather this excellent dew of knowledge, like unto that which the poet speaketh of, *Aërei mellis cælestia dona*, distilling and contriving it out of particulars natural and artificial, as the flowers of the field and garden, shall find that the mind of herself by nature doth manage and act an induction much better than they describe it. For to conclude upon an enumeration of particulars, without instance contradictory, is no conclusion, but a conjecture; for who can assure (in many subjects) upon those particulars which appear of a side, that there are not other on the contrary side which appear not? As if Samuel should have rested upon those sons of Jesse which were brought before him, and failed of David which was in the field. And this form (to say truth), is so gross, as it had not been possible for wits so subtle as have managed these things to have offered it to the world, but that they hasted to their theories and dogmaticals, and were imperious and scornful toward particulars; which their manner was to use but as *lictores* and *viatores*, for sergeants and whifflers, *ad summovendam turbam*, to make way and make room for their opinions, rather than in their true use and service. Certainly it is a thing may touch a man with a religious wonder, to see how the footsteps of seducement are the very same in divine and human truth; for, as in divine truth man cannot endure to become as a child, so in human, they reputed the attending the inductions (whereof we speak), as if it were a second infancy or childhood.

(4) Thirdly, allow some principles or axioms were rightly induced, yet, nevertheless, certain it is that middle propositions cannot be deduced from them in subject of nature by syllogism - that is, by touch and reduction of them to principles in a middle term. It is true that in sciences popular, as moralities, laws, and the like, yea, and divinity (because it pleaseth God to apply Himself to the capacity of the simplest), that form may have use; and in natural philosophy likewise, by way of argument or satisfactory reason, *Quæ*

assensum parit operis effæta est; but the subtlety of nature and operations will not be enchained in those bonds. For arguments consist of propositions, and propositions of words, and words are but the current tokens or marks of popular notions of things; which notions, if they be grossly and variably collected out of particulars, it is not the laborious examination either of consequences of arguments, or of the truth of propositions, that can ever correct that error, being (as the physicians speak) in the first digestion. And, therefore, it was not without cause, that so many excellent philosophers became sceptics and academics, and denied any certainty of knowledge or comprehension; and held opinion that the knowledge of man extended only to appearances and probabilities. It is true that in Socrates it was supposed to be but a form of irony, *Scientiam dissimulando simulavit*; for he used to disable his knowledge, to the end to enhance his knowledge; like the humour of Tiberius in his beginnings, that would reign, but would not acknowledge so much. And in the later academy, which Cicero embraced, this opinion also of *acatalepsia* (I doubt) was not held sincerely; for that all those which excelled in copy of speech seem to have chosen that sect, as that which was fittest to give glory to their eloquence and variable discourses; being rather like progresses of pleasure than journeys to an end. But assuredly many scattered in both academies did hold it in subtlety and integrity. But here was their chief error: they charged the deceit upon the senses; which in my judgment (notwithstanding all their cavillations) are very sufficient to certify and report truth, though not always immediately, yet by comparison, by help of instrument, and by producing and urging such things as are too subtle for the sense to some effect comprehensible by the sense, and other like assistance. But they ought to have charged the deceit upon the weakness of the intellectual powers, and upon the manner of collecting and concluding upon the reports of the senses. This I speak, not to disable the mind of man, but to stir it up to seek help; for no man, be he never so cunning or practised, can make a straight line or perfect circle by steadiness of hand, which may be easily done by help of a ruler or compass.

(5) This part of invention, concerning the invention of sciences, I purpose (if God give me leave) hereafter to propound, having digested it into two parts: whereof the one I term *experientia literata*, and the other *interpretatio naturæ*; the former being but a degree and rudiment of the latter. But I will

not dwell too long, nor speak too great upon a promise.

(6) The invention of speech or argument is not properly an invention; for to invent is to discover that we know not, and not to recover or resummon that which we already know; and the use of this invention is no other but, out of the knowledge whereof our mind is already possessed to draw forth or call before us that which may be pertinent to the purpose which we take into our consideration. So as to speak truly, it is no invention, but a remembrance or suggestion, with an application; which is the cause why the schools do place it after judgment, as subsequent and not precedent. Nevertheless, because we do account it a chase as well of deer in an enclosed park as in a forest at large, and that it hath already obtained the name, let it be called invention; so as it be perceived and discerned, that the scope and end of this invention is readiness and present use of our knowledge, and not addition or amplification thereof.

(7) To procure this ready use of knowledge there are two courses, preparation and suggestion. The former of these seemeth scarcely a part of knowledge, consisting rather of diligence than of any artificial erudition. And herein Aristotle wittily, but hurtfully, doth deride the sophists near his time, saying, "They did as if one that professed the art of shoemaking should not teach how to make up a shoe, but only exhibit in a readiness a number of shoes of all fashions and sizes." But yet a man might reply, that if a shoemaker should have no shoes in his shop, but only work as he is bespoke, he should be weakly customed. But our Saviour, speaking of divine knowledge, saith, "That the kingdom of heaven is like a good householder, that bringeth forth both new and old store;" and we see the ancient writers of rhetoric do give it in precept, that pleaders should have the places, whereof they have most continual use, ready handled in all the variety that may be; as that, to speak for the literal interpretation of the law against equity, and contrary; and to speak for presumptions and inferences against testimony, and contrary. And Cicero himself, being broken unto it by great experience, delivereth it plainly, that whatsoever a man shall have occasion to speak of (if he will take the pains), he may have it in effect premeditate and handled *in thesi*. So that when he cometh to a particular he shall have nothing to do, but to put to names, and times, and places, and such other circumstances of individuals.

We see likewise the exact diligence of Demosthenes; who, in regard of the great force that the entrance and access into causes hath to make a good impression, had ready framed a number of prefaces for orations and speeches. All which authorities and precedents may overweigh Aristotle's opinion, that would have us change a rich wardrobe for a pair of shears.

(8) But the nature of the collection of this provision or preparatory store, though it be common both to logic and rhetoric, yet having made an entry of it here, where it came first to be spoken of, I think fit to refer over the further handling of it to rhetoric.

(9) The other part of invention, which I term suggestion, doth assign and direct us to certain marks, or places, which may excite our mind to return and produce such knowledge as it hath formerly collected, to the end we may make use thereof. Neither is this use (truly taken) only to furnish argument to dispute, probably with others, but likewise to minister unto our judgment to conclude aright within ourselves. Neither may these places serve only to apprompt our invention, but also to direct our inquiry. For a faculty of wise interrogating is half a knowledge. For as Plato saith, "Whosoever seeketh, knoweth that which he seeketh for in a general notion; else how shall he know it when he hath found it?" And, therefore, the larger your anticipation is, the more direct and compendious is your search. But the same places which will help us what to produce of that which we know already, will also help us, if a man of experience were before us, what questions to ask; or, if we have books and authors to instruct us, what points to search and revolve; so as I cannot report that this part of invention, which is that which the schools call topics, is deficient.

(10) Nevertheless, topics are of two sorts, general and special. The general we have spoken to; but the particular hath been touched by some, but rejected generally as inartificial and variable. But leaving the humour which hath reigned too much in the schools (which is, to be vainly subtle in a few things which are within their command, and to reject the rest), I do receive particular topics; that is, places or directions of invention and inquiry in every particular knowledge, as things of great use, being mixtures of logic with the matter of sciences. For in these it holdeth *ars inveniendi adolescit cum*

inventis; for as in going of a way, we do not only gain that part of the way which is passed, but we gain the better sight of that part of the way which remaineth, so every degree of proceeding in a science giveth a light to that which followeth; which light, if we strengthen by drawing it forth into questions or places of inquiry, we do greatly advance our pursuit.

XIV. (1) Now we pass unto the arts of judgment, which handle the natures of proofs and demonstrations, which as to induction hath a coincidence with invention; for all inductions, whether in good or vicious form, the same action of the mind which inventeth, judgeth - all one as in the sense. But otherwise it is in proof by syllogism, for the proof being not immediate, but by mean, the invention of the mean is one thing, and the judgment of the consequence is another; the one exciting only, the other examining. Therefore, for the real and exact form of judgment, we refer ourselves to that which we have spoken of interpretation of Nature.

(2) For the other judgment by syllogism, as it is a thing most agreeable to the mind of man, so it hath been vehemently and excellently laboured. For the nature of man doth extremely covet to have somewhat in his understanding fixed and unmovable, and as a rest and support of the mind. And, therefore, as Aristotle endeavoureth to prove, that in all motion there is some point quiescent; and as he elegantly expoundeth the ancient fable of Atlas (that stood fixed, and bare up the heaven from falling) to be meant of the poles or axle-tree of heaven, whereupon the conversion is accomplished, so assuredly men have a desire to have an Atlas or axle-tree within to keep them from fluctuation, which is like to a perpetual peril of falling. Therefore men did hasten to set down some principles about which the variety of their disputatious might turn.

(3) So, then, this art of judgment is but the reduction of propositions to principles in a middle term. The principles to be agreed by all and exempted from argument; the middle term to be elected at the liberty of every man's invention; the reduction to be of two kinds, direct and inverted: the one when the proposition is reduced to the principle, which they term a probation ostensive; the other, when the contradictory of the proposition is reduced to the contradictory of the principle, which is that which they call *per*

incommodum, or pressing an absurdity; the number of middle terms to be as the proposition standeth degrees more or less removed from the principle.

(4) But this art hath two several methods of doctrine, the one by way of direction, the other by way of caution: the former frameth and setteth down a true form of consequence, by the variations and deflections from which errors and inconsequences may be exactly judged. Toward the composition and structure of which form it is incident to handle the parts thereof, which are propositions, and the parts of propositions, which are simple words. And this is that part of logic which is comprehended in the Analytics.

(5) The second method of doctrine was introduced for expedite use and assurance sake, discovering the more subtle forms of sophisms and illaqueations with their redargutions, which is that which is termed *elenches*. For although in the more gross sorts of fallacies it happeneth (as Seneca maketh the comparison well) as in juggling feats, which, though we know not how they are done, yet we know well it is not as it seemeth to be; yet the more subtle sort of them doth not only put a man besides his answer, but doth many times abuse his judgment.

(6) This part concerning *elenches* is excellently handled by Aristotle in precept, but more excellently by Plato in example; not only in the persons of the sophists, but even in Socrates himself, who, professing to affirm nothing, but to infirm that which was affirmed by another, hath exactly expressed all the forms of objection, fallace, and redargution. And although we have said that the use of this doctrine is for redargution, yet it is manifest the degenerate and corrupt use is for caption and contradiction, which passeth for a great faculty, and no doubt is of very great advantage, though the difference be good which was made between orators and sophisters, that the one is as the greyhound, which hath his advantage in the race, and the other as the hare, which hath her advantage in the turn, so as it is the advantage of the weaker creature.

(7) But yet further, this doctrine of *elenches* hath a more ample latitude and extent than is perceived; namely, unto divers parts of knowledge, whereof some are laboured and other omitted. For first, I conceive (though it may

seem at first somewhat strange) that that part which is variably referred, sometimes to logic, sometimes to metaphysic, touching the common adjuncts of essences, is but an *elenche*; for the great sophism of all sophisms being equivocation or ambiguity of words and phrase, specially of such words as are most general and intervene in every inquiry, it seemeth to me that the true and fruitful use (leaving vain subtleties and speculations) of the inquiry of majority, minority, priority, posteriority, identity, diversity, possibility, act, totality, parts, existence, privation, and the like, are but wise cautions against ambiguities of speech. So, again, the distribution of things into certain tribes, which we call categories or predicaments, are but cautions against the confusion of definitions and divisions.

(8) Secondly, there is a seducement that worketh by the strength of the impression, and not by the subtlety of the illaqueation - not so much perplexing the reason, as overruling it by power of the imagination. But this part I think more proper to handle when I shall speak of rhetoric.

(9) But lastly, there is yet a much more important and profound kind of fallacies in the mind of man, which I find not observed or inquired at all, and think good to place here, as that which of all others appertaineth most to rectify judgment, the force whereof is such as it doth not dazzle or snare the understanding in some particulars, but doth more generally and inwardly infect and corrupt the state thereof. For the mind of man is far from the nature of a clear and equal glass, wherein the beams of things should reflect according to their true incidence; nay, it is rather like an enchanted glass, full of superstition and imposture, if it be not delivered and reduced. For this purpose, let us consider the false appearances that are imposed upon us by the general nature of the mind, beholding them in an example or two; as first, in that instance which is the root of all superstition, namely, that to the nature of the mind of all men it is consonant for the affirmative or active to affect more than the negative or privative. So that a few times hitting or presence countervails oftentimes failing or absence, as was well answered by Diagoras to him that showed him in Neptune's temple the great number of pictures of such as had escaped shipwreck, and had paid their vows to Neptune, saying, "Advise now, you that think it folly to invoke Neptune in tempest." "Yea, but," saith Diagoras, "where are they painted that are drowned?" Let us

behold it in another instance, namely, that the spirit of man, being of an equal and uniform substance, doth usually suppose and feign in nature a greater equality and uniformity than is in truth. Hence it cometh that the mathematicians cannot satisfy themselves except they reduce the motions of the celestial bodies to perfect circles, rejecting spiral lines, and labouring to be discharged of eccentrics. Hence it cometh that whereas there are many things in Nature as it were *monodica, sui juris*, yet the cogitations of man do feign unto them relatives, parallels, and conjugates, whereas no such thing is; as they have feigned an element of fire to keep square with earth, water, and air, and the like. Nay, it is not credible, till it be opened, what a number of fictions and fantasies the similitude of human actions and arts, together with the making of man *communis mensura*, have brought into natural philosophy; not much better than the heresy of the Anthropomorphites, bred in the cells of gross and solitary monks, and the opinion of Epicurus, answerable to the same in heathenism, who supposed the gods to be of human shape. And, therefore, Velleius the Epicurean needed not to have asked why God should have adorned the heavens with stars, as if He had been an *ædilis*, one that should have set forth some magnificent shows or plays. For if that great Work-master had been of a human disposition, He would have cast the stars into some pleasant and beautiful works and orders like the frets in the roofs of houses; whereas one can scarce find a posture in square, or triangle, or straight line, amongst such an infinite number, so differing a harmony there is between the spirit of man and the spirit of Nature.

(10) Let us consider again the false appearances imposed upon us by every man's own individual nature and custom in that feigned supposition that Plato maketh of the cave; for certainly if a child were continued in a grot or cave under the earth until maturity of age, and came suddenly abroad, he would have strange and absurd imaginations. So, in like manner, although our persons live in the view of heaven, yet our spirits are included in the caves of our own complexions and customs, which minister unto us infinite errors and vain opinions if they be not recalled to examination. But hereof we have given many examples in one of the errors, or peccant humours, which we ran briefly over in our first book.

(11) And lastly, let us consider the false appearances that are imposed upon

us by words, which are framed and applied according to the conceit and capacities of the vulgar sort; and although we think we govern our words, and prescribe it well *loquendum ut vulgus sentiendum ut sapientes*, yet certain it is that words, as a Tartar's bow, do shoot back upon the understanding of the wisest, and mightily entangle and pervert the judgment. So as it is almost necessary in all controversies and disputations to imitate the wisdom of the mathematicians, in setting down in the very beginning the definitions of our words and terms, that others may know how we accept and understand them, and whether they concur with us or no. For it cometh to pass, for want of this, that we are sure to end there where we ought to have begun, which is, in questions and differences about words. To conclude, therefore, it must be confessed that it is not possible to divorce ourselves from these fallacies and false appearances because they are inseparable from our nature and condition of life; so yet, nevertheless, the caution of them (for all elenches, as was said, are but cautions) doth extremely import the true conduct of human judgment. The particular elenches or cautions against these three false appearances I find altogether deficient.

(12) There remaineth one part of judgment of great excellency which to mine understanding is so slightly touched, as I may report that also deficient; which is the application of the differing kinds of proofs to the differing kinds of subjects. For there being but four kinds of demonstrations, that is, by the immediate consent of the mind or sense, by induction, by syllogism, and by congruity, which is that which Aristotle calleth demonstration in orb or circle, and not *a notioribus*, every of these hath certain subjects in the matter of sciences, in which respectively they have chieftest use; and certain others, from which respectively they ought to be excluded; and the rigour and curiosity in requiring the more severe proofs in some things, and chiefly the facility in contenting ourselves with the more remiss proofs in others, hath been amongst the greatest causes of detriment and hindrance to knowledge. The distributions and assignations of demonstrations according to the analogy of sciences I note as deficient.

XV. (1) The custody or retaining of knowledge is either in writing or memory; whereof writing hath two parts, the nature of the character and the order of the entry. For the art of characters, or other visible notes of words or

things, it hath nearest conjugation with grammar, and, therefore, I refer it to the due place; for the disposition and collocation of that knowledge which we preserve in writing, it consisteth in a good digest of common-places, wherein I am not ignorant of the prejudice imputed to the use of common-place books, as causing a retardation of reading, and some sloth or relaxation of memory. But because it is but a counterfeit thing in knowledges to be forward and pregnant, except a man be deep and full, I hold the entry of common-places to be a matter of great use and essence in studying, as that which assureth copy of invention, and contracteth judgment to a strength. But this is true, that of the methods of common-places that I have seen, there is none of any sufficient worth, all of them carrying merely the face of a school and not of a world; and referring to vulgar matters and pedantical divisions, without all life or respect to action.

(2) For the other principal part of the custody of knowledge, which is memory, I find that faculty in my judgment weakly inquired of. An art there is extant of it; but it seemeth to me that there are better precepts than that art, and better practices of that art than those received. It is certain the art (as it is) may be raised to points of ostentation prodigious; but in use (as is now managed) it is barren, not burdensome, nor dangerous to natural memory, as is imagined, but barren, that is, not dexterous to be applied to the serious use of business and occasions. And, therefore, I make no more estimation of repeating a great number of names or words upon once hearing, or the pouring forth of a number of verses or rhymes *extempore*, or the making of a satirical simile of everything, or the turning of everything to a jest, or the falsifying or contradicting of everything by cavil, or the like (whereof in the faculties of the mind there is great copy, and such as by device and practice may be exalted to an extreme degree of wonder), than I do of the tricks of tumblers, funambuloes, baladines; the one being the same in the mind that the other is in the body, matters of strangeness without worthiness.

(3) This art of memory is but built upon two intentions; the one prenotion, the other emblem. Prenotion dischargeth the indefinite seeking of that we would remember, and directeth us to seek in a narrow compass, that is, somewhat that hath congruity with our place of memory. Emblem reduceth conceits intellectual to images sensible, which strike the memory more; out of which

axioms may be drawn much better practice than that in use; and besides which axioms, there are divers more touching help of memory not inferior to them. But I did in the beginning distinguish, not to report those things deficient, which are but only ill managed.

XVI. (1) There remaineth the fourth kind of rational knowledge, which is transitive, concerning the expressing or transferring our knowledge to others, which I will term by the general name of tradition or delivery. Tradition hath three parts: the first concerning the organ of tradition; the second concerning the method of tradition; and the third concerning the illustration of tradition.

(2) For the organ of tradition, it is either speech or writing; for Aristotle saith well, “Words are the images of cogitations, and letters are the images of words.” But yet it is not of necessity that cogitations be expressed by the medium of words. For whatsoever is capable of sufficient differences, and those perceptible by the sense, is in nature competent to express cogitations. And, therefore, we see in the commerce of barbarous people that understand not one another’s language, and in the practice of divers that are dumb and deaf, that men’s minds are expressed in gestures, though not exactly, yet to serve the turn. And we understand further, that it is the use of China and the kingdoms of the High Levant to write in characters real, which express neither letters nor words in gross, but things or notions; insomuch as countries and provinces which understand not one another’s language can nevertheless read one another’s writings, because the characters are accepted more generally than the languages do extend; and, therefore, they have a vast multitude of characters, as many, I suppose, as radical words.

(3) These notes of cogitations are of two sorts: the one when the note hath some similitude or congruity with the notion; the other *ad placitum*, having force only by contract or acceptation. Of the former sort are hieroglyphics and gestures. For as to hieroglyphics (things of ancient use and embraced chiefly by the Egyptians, one of the most ancient nations), they are but as continued impresses and emblems. And as for gestures, they are as transitory hieroglyphics, and are to hieroglyphics as words spoken are to words written, in that they abide not; but they have evermore, as well as the other, an affinity with the things signified. As Periander, being consulted with how to preserve

a tyranny newly usurped, bid the messenger attend and report what he saw him do; and went into his garden and topped all the highest flowers, signifying that it consisted in the cutting off and keeping low of the nobility and grandees. *Ad placitum*, are the characters real before mentioned, and words: although some have been willing by curious inquiry, or rather by apt feigning, to have derived imposition of names from reason and intendment; a speculation elegant, and, by reason it searcheth into antiquity, reverent, but sparingly mixed with truth, and of small fruit. This portion of knowledge touching the notes of things and cogitations in general, I find not inquired, but deficient. And although it may seem of no great use, considering that words and writings by letters do far excel all the other ways; yet because this part concerneth, as it were, the mint of knowledge (for words are the tokens current and accepted for conceits, as moneys are for values, and that it is fit men be not ignorant that moneys may be of another kind than gold and silver), I thought good to propound it to better inquiry.

(4) Concerning speech and words, the consideration of them hath produced the science of grammar. For man still striveth to reintegrate himself in those benedictions, from which by his fault he hath been deprived; and as he hath striven against the first general curse by the invention of all other arts, so hath he sought to come forth of the second general curse (which was the confusion of tongues) by the art of grammar; whereof the use in a mother tongue is small, in a foreign tongue more; but most in such foreign tongues as have ceased to be vulgar tongues, and are turned only to learned tongues. The duty of it is of two natures: the one popular, which is for the speedy and perfect attaining languages, as well for intercourse of speech as for understanding of authors; the other philosophical, examining the power and nature of words, as they are the footsteps and prints of reason: which kind of analogy between words and reason is handled *sparsim*, brokenly though not entirely; and, therefore, I cannot report it deficient, though I think it very worthy to be reduced into a science by itself.

(5) Unto grammar also belongeth, as an appendix, the consideration of the accidents of words; which are measure, sound, and elevation or accent, and the sweetness and harshness of them: whence hath issued some curious observations in rhetoric, but chiefly poesy, as we consider it, in respect of the

verse and not of the argument. Wherein though men in learned tongues do tie themselves to the ancient measures, yet in modern languages it seemeth to me as free to make new measures of verses as of dances; for a dance is a measured pace, as a verse is a measured speech. In these things this sense is better judge than the art:

“Cœnæ fercula nostræ
Mallem convivis quam placuisse cocis.”

And of the servile expressing antiquity in an unlike and an unfit subject, it is well said, “*Quod tempore antiquum videtur, id incongruitate est maxime novum.*”

(6) For ciphers, they are commonly in letters or alphabets, but may be in words. The kinds of ciphers (besides the simple ciphers, with changes, and intermixtures of nulls and non-significants) are many, according to the nature or rule of the infolding, wheel-ciphers, key-ciphers, doubles, &c. But the virtues of them, whereby they are to be preferred, are three; that they be not laborious to write and read; that they be impossible to decipher; and, in some cases, that they be without suspicion. The highest degree whereof is to write *omnia per omnia*; which is undoubtedly possible, with a proportion quintuple at most of the writing infolding to the writing infolded, and no other restraint whatsoever. This art of ciphering hath for relative an art of deciphering, by supposition unprofitable, but, as things are, of great use. For suppose that ciphers were well managed, there be multitudes of them which exclude the decipherer. But in regard of the rawness and unskilfulness of the hands through which they pass, the greatest matters are many times carried in the weakest ciphers.

(7) In the enumeration of these private and retired arts it may be thought I seek to make a great muster-roll of sciences, naming them for show and ostentation, and to little other purpose. But let those, which are skilful in them, judge whether I bring them in only for appearance, or whether in that which I speak of them (though in few words) there be not some seed of

proficiency. And this must be remembered, that as there be many of great account in their countries and provinces, which, when they come up to the seat of the estate, are but of mean rank and scarcely regarded; so these arts, being here placed with the principal and supreme sciences, seem petty things: yet to such as have chosen them to spend their labours and studies in them, they seem great matters.

XVII. (1) For the method of tradition, I see it hath moved a controversy in our time. But as in civil business, if there be a meeting, and men fall at words, there is commonly an end of the matter for that time, and no proceeding at all; so in learning, where there is much controversy, there is many times little inquiry. For this part of knowledge of method seemeth to me so weakly inquired as I shall report it deficient.

(2) Method hath been placed, and that not amiss, in logic, as a part of judgment. For as the doctrine of syllogisms comprehendeth the rules of judgment upon that which is invented, so the doctrine of method containeth the rules of judgment upon that which is to be delivered; for judgment precedeth delivery, as it followeth invention. Neither is the method or the nature of the tradition material only to the use of knowledge, but likewise to the progression of knowledge: for since the labour and life of one man cannot attain to perfection of knowledge, the wisdom of the tradition is that which inspireth the felicity of continuance and proceeding. And therefore the most real diversity of method is of method referred to use, and method referred to progression: whereof the one may be termed magistral, and the other of probation.

(3) The latter whereof seemeth to be *via deserta et interclusa*. For as knowledges are now delivered, there is a kind of contract of error between the deliverer and the receiver. For he that delivereth knowledge desireth to deliver it in such form as may be best believed, and not as may be best examined; and he that receiveth knowledge desireth rather present satisfaction than expectant inquiry; and so rather not to doubt, than not to err: glory making the author not to lay open his weakness, and sloth making the disciple not to know his strength.

(4) But knowledge that is delivered as a thread to be spun on ought to be delivered and intimated, if it were possible, in the same method wherein it was invented: and so is it possible of knowledge induced. But in this same anticipated and prevented knowledge, no man knoweth how he came to the knowledge which he hath obtained. But yet, nevertheless, *secundum majus et minus*, a man may revisit and descend unto the foundations of his knowledge and consent; and so transplant it into another, as it grew in his own mind. For it is in knowledges as it is in plants: if you mean to use the plant, it is no matter for the roots - but if you mean to remove it to grow, then it is more assured to rest upon roots than slips: so the delivery of knowledges (as it is now used) is as of fair bodies of trees without the roots; good for the carpenter, but not for the planter. But if you will have sciences grow, it is less matter for the shaft or body of the tree, so you look well to the taking up of the roots. Of which kind of delivery the method of the mathematics, in that subject, hath some shadow: but generally I see it neither put in use nor put in inquisition, and therefore note it for deficient.

(5) Another diversity of method there is, which hath some affinity with the former, used in some cases by the discretion of the ancients, but disgraced since by the impostures of many vain persons, who have made it as a false light for their counterfeit merchandises; and that is enigmatical and disclosed. The pretence whereof is, to remove the vulgar capacities from being admitted to the secrets of knowledges, and to reserve them to selected auditors, or wits of such sharpness as can pierce the veil.

(6) Another diversity of method, whereof the consequence is great, is the delivery of knowledge in aphorisms, or in methods; wherein we may observe that it hath been too much taken into custom, out of a few axioms or observations upon any subject, to make a solemn and formal art, filling it with some discourses, and illustrating it with examples, and digesting it into a sensible method. But the writing in aphorisms hath many excellent virtues, whereto the writing in method doth not approach.

(7) For first, it trieth the writer, whether he be superficial or solid: for aphorisms, except they should be ridiculous, cannot be made but of the pith and heart of sciences; for discourse of illustration is cut off; recitals of

examples are cut off; discourse of connection and order is cut off; descriptions of practice are cut off. So there remaineth nothing to fill the aphorisms but some good quantity of observation; and therefore no man can suffice, nor in reason will attempt, to write aphorisms, but he that is sound and grounded. But in methods,

“Tantum series juncturaque pollet,
Tantum de medio sumptis accedit honoris,”

as a man shall make a great show of an art, which, if it were disjointed, would come to little. Secondly, methods are more fit to win consent or belief, but less fit to point to action; for they carry a kind of demonstration in orb or circle, one part illuminating another, and therefore satisfy. But particulars being dispersed do best agree with dispersed directions. And lastly, aphorisms, representing a knowledge broken, do invite men to inquire further; whereas methods, carrying the show of a total, do secure men, as if they were at furthest.

(8) Another diversity of method, which is likewise of great weight, is the handling of knowledge by assertions and their proofs, or by questions and their determinations. The latter kind whereof, if it be immoderately followed, is as prejudicial to the proceeding of learning as it is to the proceeding of an army to go about to besiege every little fort or hold. For if the field be kept, and the sum of the enterprise pursued, those smaller things will come in of themselves: indeed a man would not leave some important piece enemy at his back. In like manner, the use of confutation in the delivery of sciences ought to be very sparing; and to serve to remove strong preoccupations and prejudgments, and not to minister and excite disputations and doubts.

(9) Another diversity of method is, according to the subject or matter which is handled. For there is a great difference in delivery of the mathematics, which are the most abstracted of knowledges, and policy, which is the most immersed. And howsoever contention hath been moved, touching a uniformity of method in multiformity of matter, yet we see how that opinion,

besides the weakness of it, hath been of ill desert towards learning, as that which taketh the way to reduce learning to certain empty and barren generalities; being but the very husks and shells of sciences, all the kernel being forced out and expulsed with the torture and press of the method. And, therefore, as I did allow well of particular topics for invention, so I do allow likewise of particular methods of tradition.

(10) Another diversity of judgment in the delivery and teaching of knowledge is, according unto the light and presuppositions of that which is delivered. For that knowledge which is new, and foreign from opinions received, is to be delivered in another form than that that is agreeable and familiar; and therefore Aristotle, when he thinks to tax Democritus, doth in truth commend him, where he saith “If we shall indeed dispute, and not follow after similitudes,” &c. For those whose conceits are seated in popular opinions need only but to prove or dispute; but those whose conceits are beyond popular opinions, have a double labour; the one to make themselves conceived, and the other to prove and demonstrate. So that it is of necessity with them to have recourse to similitudes and translations to express themselves. And therefore in the infancy of learning, and in rude times when those conceits which are now trivial were then new, the world was full of parables and similitudes; for else would men either have passed over without mark, or else rejected for paradoxes that which was offered, before they had understood or judged. So in divine learning, we see how frequent parables and tropes are, for it is a rule, that whatsoever science is not consonant to presuppositions must pray in aid of similitudes.

(11) There be also other diversities of methods vulgar and received: as that of resolution or analysis, of constitution or systasis, of concealment or cryptic, &c., which I do allow well of, though I have stood upon those which are least handled and observed. All which I have remembered to this purpose, because I would erect and constitute one general inquiry (which seems to me deficient) touching the wisdom of tradition.

(12) But unto this part of knowledge, concerning method, doth further belong not only the architecture of the whole frame of a work, but also the several beams and columns thereof; not as to their stuff, but as to their quantity and

figure. And therefore method considereth not only the disposition of the argument or subject, but likewise the propositions: not as to their truth or matter, but as to their limitation and manner. For herein Ramus merited better a great deal in reviving the good rules of propositions - Καθολον πρωτον, κυτα παντος &c. - than he did in introducing the canker of epitomes; and yet (as it is the condition of human things that, according to the ancient fables, “the most precious things have the most pernicious keepers”) it was so, that the attempt of the one made him fall upon the other. For he had need be well conducted that should design to make axioms convertible, if he make them not withal circular, and non-promovent, or incurring into themselves; but yet the intention was excellent.

(13) The other considerations of method, concerning propositions, are chiefly touching the utmost propositions, which limit the dimensions of sciences: for every knowledge may be fitly said, besides the profundity (which is the truth and substance of it, that makes it solid), to have a longitude and a latitude; accounting the latitude towards other sciences, and the longitude towards action; that is, from the greatest generality to the most particular precept. The one giveth rule how far one knowledge ought to intermeddle within the province of another, which is the rule they call Καθ'αυτο; the other giveth rule unto what degree of particularity a knowledge should descend: which latter I find passed over in silence, being in my judgment the more material. For certainty there must be somewhat left to practice; but how much is worthy the inquiry? We see remote and superficial generalities do but offer knowledge to scorn of practical men; and are no more aiding to practice than an Ortelius' universal map is to direct the way between London and York. The better sort of rules have been not unfitly compared to glasses of steel unpolished, where you may see the images of things, but first they must be filed: so the rules will help if they be laboured and polished by practice. But how crystalline they may be made at the first, and how far forth they may be polished aforehand, is the question, the inquiry whereof seemeth to me deficient.

(14) There hath been also laboured and put in practice a method, which is not a lawful method, but a method of imposture: which is, to deliver knowledges in such manner as men may speedily come to make a show of learning, who have it not. Such was the travail of Raymundus Lullius in making that art

which bears his name; not unlike to some books of typocosmy, which have been made since; being nothing but a mass of words of all arts, to give men countenance, that those which use the terms might be thought to understand the art; which collections are much like a fripper's or broker's shop, that hath ends of everything, but nothing of worth.

XVIII. (1) Now we descend to that part which concerneth the illustration of tradition, comprehended in that science which we call rhetoric, or art of eloquence, a science excellent, and excellently well laboured. For although in true value it is inferior to wisdom (as it is said by God to Moses, when he disabled himself for want of this faculty, "Aaron shall be thy speaker, and thou shalt be to him as God"), yet with people it is the more mighty; for so Solomon saith, *Sapiens corde appellabitur prudens, sed dulcis eloquio majora reperiet*, signifying that profoundness of wisdom will help a man to a name or admiration, but that it is eloquence that prevaieth in an active life. And as to the labouring of it, the emulation of Aristotle with the rhetoricians of his time, and the experience of Cicero, hath made them in their works of rhetoric exceed themselves. Again, the excellency of examples of eloquence in the orations of Demosthenes and Cicero, added to the perfection of the precepts of eloquence, hath doubled the progression in this art; and therefore the deficiencies which I shall note will rather be in some collections, which may as handmaids attend the art, than in the rules or use of the art itself.

(2) Notwithstanding, to stir the earth a little about the roots of this science, as we have done of the rest, the duty and office of rhetoric is to apply reason to imagination for the better moving of the will. For we see reason is disturbed in the administration thereof by three means - by illaqueation or sophism, which pertains to logic; by imagination or impression, which pertains to rhetoric; and by passion or affection, which pertains to morality. And as in negotiation with others, men are wrought by cunning, by importunity, and by vehemency; so in this negotiation within ourselves, men are undermined by inconsequences, solicited and importuned by impressions or observations, and transported by passions. Neither is the nature of man so unfortunately built, as that those powers and arts should have force to disturb reason, and not to establish and advance it. For the end of logic is to teach a form of argument to secure reason, and not to entrap it; the end of morality is to

procure the affections to obey reason, and not to invade it; the end of rhetoric is to fill the imagination to second reason, and not to oppress it; for these abuses of arts come in but *ex oblique*, for caution.

(3) And therefore it was great injustice in Plato, though springing out of a just hatred to the rhetoricians of his time, to esteem of rhetoric but as a voluptuary art, resembling it to cookery, that did mar wholesome meats, and help unwholesome by variety of sauces to the pleasure of the taste. For we see that speech is much more conversant in adorning that which is good than in colouring that which is evil; for there is no man but speaketh more honestly than he can do or think; and it was excellently noted by Thucydides, in Cleon, that because he used to hold on the bad side in causes of estate, therefore he was ever inveighing against eloquence and good speech, knowing that no man can speak fair of courses sordid and base. And therefore, as Plato said elegantly, “That virtue, if she could be seen, would move great love and affection;” so seeing that she cannot be showed to the sense by corporal shape, the next degree is to show her to the imagination in lively representation; for to show her to reason only in subtlety of argument was a thing ever derided in Chrysippus and many of the Stoics, who thought to thrust virtue upon men by sharp disputations and conclusions, which have no sympathy with the will of man.

(4) Again, if the affections in themselves were pliant and obedient to reason, it were true there should be no great use of persuasions and insinuations to the will, more than of naked proposition and proofs; but in regard of the continual mutinies and seditious of the affections -

“Video meliora, proboque,
Deteriora sequor,”

reason would become captive and servile, if eloquence of persuasions did not practise and win the imagination from the affections’ part, and contract a confederacy between the reason and imagination against the affections; for the affections themselves carry ever an appetite to good, as reason doth. The

difference is, that the affection beholdeth merely the present; reason beholdeth the future and sum of time. And, therefore, the present filling the imagination more, reason is commonly vanquished; but after that force of eloquence and persuasion hath made things future and remote appear as present, then upon the revolt of the imagination reason prevaieth.

(5) We conclude, therefore, that rhetoric can be no more charged with the colouring of the worst part, than logic with sophistry, or morality with vice; for we know the doctrines of contraries are the same, though the use be opposite. It appeareth also that logic differeth from rhetoric, not only as the fist from the palm - the one close, the other at large - but much more in this, that logic handleth reason exact and in truth, and rhetoric handleth it as it is planted in popular opinions and manners. And therefore Aristotle doth wisely place rhetoric as between logic on the one side, and moral or civil knowledge on the other, as participating of both; for the proofs and demonstrations of logic are toward all men indifferent and the same, but the proofs and persuasions of rhetoric ought to differ according to the auditors:

“Orpheus in sylvis, inter delphinas Arion.”

Which application in perfection of idea ought to extend so far that if a man should speak of the same thing to several persons, he should speak to them all respectively and several ways; though this politic part of eloquence in private speech it is easy for the greatest orators to want: whilst, by the observing their well-graced forms of speech, they leese the volubility of application; and therefore it shall not be amiss to recommend this to better inquiry, not being curious whether we place it here or in that part which concerneth policy.

(6) Now therefore will I descend to the deficiencies, which, as I said, are but attendances; and first, I do not find the wisdom and diligence of Aristotle well pursued, who began to make a collection of the popular signs and colours of good and evil, both simple and comparative, which are as the sophisms of rhetoric (as I touched before). For example -

“Sophisma.

Quod laudatur, bonum: quod vituperatur, malum.

Redargutio.

Laudat venales qui vult extrudere merces.”

Malum est, malum est (inquit emptor): sed cum recesserit, tum gloriabitur!

The defects in the labour of Aristotle are three - one, that there be but a few of many; another, that there elenches are not annexed; and the third, that he conceived but a part of the use of them: for their use is not only in probation, but much more in impression. For many forms are equal in signification which are differing in impression, as the difference is great in the piercing of that which is sharp and that which is flat, though the strength of the percussion be the same. For there is no man but will be a little more raised by hearing it said, “Your enemies will be glad of this” -

“Hoc Ithacus velit, et magno mercentur Atridæ.”

than by hearing it said only, “This is evil for you.”

(7) Secondly, I do resume also that which I mentioned before, touching provision or preparatory store for the furniture of speech and readiness of invention, which appeareth to be of two sorts: the one in resemblance to a shop of pieces unmade up, the other to a shop of things ready made up; both to be applied to that which is frequent and most in request. The former of these I will call *antitheta*, and the latter *formulae*.

(8) *Antitheta* are theses argued *pro et contra*, wherein men may be more large and laborious; but (in such as are able to do it) to avoid prolixity of entry, I wish the seeds of the several arguments to be cast up into some brief and acute sentences, not to be cited, but to be as skeins or bottoms of thread, to be unwinded at large when they come to be used; supplying authorities and examples by reference.

“Pro verbis legis.

Non est interpretatio, sed divinatio, quæ recedit a litera:
Cum receditur a litera, judex transit in legislatorem.

Pro sententia legis.

Ex omnibus verbis est eliciendus sensus qui interpretatur singula.”

(9) *Formulæ* are but decent and apt passages or conveyances of speech, which may serve indifferently for differing subjects; as of preface, conclusion, digression, transition, excusation, &c. For as in buildings there is great pleasure and use in the well casting of the staircases, entries, doors, windows, and the like; so in speech, the conveyances and passages are of special ornament and effect.

“A conclusion in a deliberative.

So may we redeem the faults passed, and prevent the inconveniences future.”

XIX. (1) There remain two appendices touching the tradition of knowledge, the one critical, the other pedantical. For all knowledge is either delivered by teachers, or attained by men’s proper endeavours: and therefore as the principal part of tradition of knowledge concerneth chiefly writing of books, so the relative part thereof concerneth reading of books; whereunto appertain incidently these considerations. The first is concerning the true correction and edition of authors; wherein nevertheless rash diligence hath done great prejudice. For these critics have often presumed that that which they understand not is false set down: as the priest that, where he found it written of St. Paul *Demissus est per sportam*, mended his book, and made it *Demissus est per portam*; because *sporta* was a hard word, and out of his reading: and surely their errors, though they be not so palpable and ridiculous, yet are of the same kind. And therefore, as it hath been wisely noted, the most corrected copies are commonly the least correct.

The second is concerning the exposition and explication of authors, which resteth in annotations and commentaries: wherein it is over usual to blanch the obscure places and discourse upon the plain.

The third is concerning the times, which in many cases give great light to true interpretations.

The fourth is concerning some brief censure and judgment of the authors; that men thereby may make some election unto themselves what books to read.

And the fifth is concerning the syntax and disposition of studies; that men may know in what order or pursuit to read.

(2) For pedantical knowledge, it containeth that difference of tradition which is proper for youth; whereunto appertain divers considerations of great fruit.

As first, the timing and seasoning of knowledges; as with what to initiate them, and from what for a time to refrain them.

Secondly, the consideration where to begin with the easiest, and so proceed to the more difficult; and in what courses to press the more difficult, and then to turn them to the more easy; for it is one method to practise swimming with bladders, and another to practise dancing with heavy shoes.

A third is the application of learning according unto the propriety of the wits; for there is no defect in the faculties intellectual, but seemeth to have a proper cure contained in some studies: as, for example, if a child be bird-witted, that is, hath not the faculty of attention, the mathematics giveth a remedy thereunto; for in them, if the wit be caught away but a moment, one is new to begin. And as sciences have a propriety towards faculties for cure and help, so faculties or powers have a sympathy towards sciences for excellency or speedy profiting: and therefore it is an inquiry of great wisdom, what kinds of wits and natures are most apt and proper for what sciences.

Fourthly, the ordering of exercises is matter of great consequence to hurt or

help: for, as is well observed by Cicero, men in exercising their faculties, if they be not well advised, do exercise their faults and get ill habits as well as good; so as there is a great judgment to be had in the continuance and intermission of exercises. It were too long to particularise a number of other considerations of this nature, things but of mean appearance, but of singular efficacy. For as the wronging or cherishing of seeds or young plants is that that is most important to their thriving, and as it was noted that the first six kings being in truth as tutors of the state of Rome in the infancy thereof was the principal cause of the immense greatness of that state which followed, so the culture and manurance of minds in youth hath such a forcible (though unseen) operation, as hardly any length of time or contention of labour can countervail it afterwards. And it is not amiss to observe also how small and mean faculties gotten by education, yet when they fall into great men or great matters, do work great and important effects: whereof we see a notable example in Tacitus of two stage players, Percennius and Vibulenus, who by their faculty of playing put the Pannonian armies into an extreme tumult and combustion. For there arising a mutiny amongst them upon the death of Augustus Cæsar, Blæsus the lieutenant had committed some of the mutineers, which were suddenly rescued; whereupon Vibulenus got to be heard speak, which he did in this manner:- “These poor innocent wretches appointed to cruel death, you have restored to behold the light; but who shall restore my brother to me, or life unto my brother, that was sent hither in message from the legions of Germany, to treat of the common cause? and he hath murdered him this last night by some of his fencers and ruffians, that he hath about him for his executioners upon soldiers. Answer, Blæsus, what is done with his body? The mortalest enemies do not deny burial. When I have performed my last duties to the corpse with kisses, with tears, command me to be slain besides him; so that these my fellows, for our good meaning and our true hearts to the legions, may have leave to bury us.” With which speech he put the army into an infinite fury and uproar: whereas truth was he had no brother, neither was there any such matter; but he played it merely as if he had been upon the stage.

(3) But to return: we are now come to a period of rational knowledges; wherein if I have made the divisions other than those that are received, yet would I not be thought to disallow all those divisions which I do not use. For

there is a double necessity imposed upon me of altering the divisions. The one, because it differeth in end and purpose, to sort together those things which are next in nature, and those things which are next in use. For if a secretary of estate should sort his papers, it is like in his study or general cabinet he would sort together things of a nature, as treaties, instructions, &c. But in his boxes or particular cabinet he would sort together those that he were like to use together, though of several natures. So in this general cabinet of knowledge it was necessary for me to follow the divisions of the nature of things; whereas if myself had been to handle any particular knowledge, I would have respected the divisions fittest for use. The other, because the bringing in of the deficiencies did by consequence alter the partitions of the rest. For let the knowledge extant (for demonstration sake) be fifteen. Let the knowledge with the deficiencies be twenty; the parts of fifteen are not the parts of twenty; for the parts of fifteen are three and five; the parts of twenty are two, four, five, and ten. So as these things are without contradiction, and could not otherwise be.

XX. (1) We proceed now to that knowledge which considereth of the appetite and will of man: whereof Solomon saith, *Ante omnia, fili, custodi cor tuum: nam inde procedunt actiones vitæ*. In the handling of this science, those which have written seem to me to have done as if a man, that professed to teach to write, did only exhibit fair copies of alphabets and letters joined, without giving any precepts or directions for the carriage of the hand and framing of the letters. So have they made good and fair exemplars and copies, carrying the draughts and portraitures of good, virtue, duty, felicity; propounding them well described as the true objects and scopes of man's will and desires. But how to attain these excellent marks, and how to frame and subdue the will of man to become true and conformable to these pursuits, they pass it over altogether, or slightly and unprofitably. For it is not the disputing that moral virtues are in the mind of man by habit and not by nature, or the distinguishing that generous spirits are won by doctrines and persuasions, and the vulgar sort by reward and punishment, and the like scattered glances and touches, that can excuse the absence of this part.

(2) The reason of this omission I suppose to be that hidden rock whereupon both this and many other barks of knowledge have been cast away; which is,

that men have despised to be conversant in ordinary and common matters, the judicious direction whereof nevertheless is the wisest doctrine (for life consisteth not in novelties nor subtleties), but contrariwise they have compounded sciences chiefly of a certain resplendent or lustrous mass of matter, chosen to give glory either to the subtlety of disputation, or to the eloquence of discourses. But Seneca giveth an excellent check to eloquence, *Nocet illis eloquentia, quibus non rerum cupiditatem facit, sed sui*. Doctrine should be such as should make men in love with the lesson, and not with the teacher; being directed to the auditor's benefit, and not to the author's commendation. And therefore those are of the right kind which may be concluded as Demosthenes concludes his counsel, *Quæ si feceritis, non oratorem dumtaxat in præsentia laudabitis, sed vosmetipsos etiam non ita multo post statu rerum vestrarum meliore*.

(3) Neither needed men of so excellent parts to have despaired of a fortune, which the poet Virgil promised himself, and indeed obtained, who got as much glory of eloquence, wit, and learning in the expressing of the observations of husbandry, as of the heroical acts of Æneas:

“Nec sum animi dubius, verbis ea vincere magnum
Quam sit, et angustis his addere rebus honorem.”

And surely, if the purpose be in good earnest, not to write at leisure that which men may read at leisure, but really to instruct and suborn action and active life, these Georgics of the mind, concerning the husbandry and tillage thereof, are no less worthy than the heroical descriptions of virtue, duty, and felicity. Wherefore the main and primitive division of moral knowledge seemeth to be into the exemplar or platform of good, and the regiment or culture of the mind: the one describing the nature of good, the other prescribing rules how to subdue, apply, and accommodate the will of man thereunto.

(4) The doctrine touching the platform or nature of good considereth it either simple or compared; either the kinds of good, or the degrees of good; in the

latter whereof those infinite disputations which were touching the supreme degree thereof, which they term felicity, beatitude, or the highest good, the doctrines concerning which were as the heathen divinity, are by the Christian faith discharged. And as Aristotle saith, "That young men may be happy, but not otherwise but by hope;" so we must all acknowledge our minority, and embrace the felicity which is by hope of the future world.

(5) Freed therefore and delivered from this doctrine of the philosopher's heaven, whereby they feigned a higher elevation of man's nature than was (for we see in what height of style Seneca writeth, *Vere magnum, habere fragilitatem hominis, securitatem Dei*), we may with more sobriety and truth receive the rest of their inquiries and labours. Wherein for the nature of good positive or simple, they have set it down excellently in describing the forms of virtue and duty, with their situations and postures; in distributing them into their kinds, parts, provinces, actions, and administrations, and the like: nay further, they have commended them to man's nature and spirit with great quickness of argument and beauty of persuasions; yea, and fortified and entrenched them (as much as discourse can do) against corrupt and popular opinions. Again, for the degrees and comparative nature of good, they have also excellently handled it in their triplicity of good, in the comparisons between a contemplative and an active life, in the distinction between virtue with reluctance and virtue secured, in their encounters between honesty and profit, in their balancing of virtue with virtue, and the like; so as this part deserveth to be reported for excellently laboured.

(6) Notwithstanding, if before they had come to the popular and received notions of virtue and vice, pleasure and pain, and the rest, they had stayed a little longer upon the inquiry concerning the roots of good and evil, and the strings of those roots, they had given, in my opinion, a great light to that which followed; and specially if they had consulted with nature, they had made their doctrines less prolix and more profound: which being by them in part omitted and in part handled with much confusion, we will endeavour to resume and open in a more clear manner.

(7) There is formed in everything a double nature of good - the one, as everything is a total or substantive in itself; the other, as it is a part or

member of a greater body; whereof the latter is in degree the greater and the worthier, because it tendeth to the conservation of a more general form. Therefore we see the iron in particular sympathy moveth to the loadstone; but yet if it exceed a certain quantity, it forsaketh the affection to the loadstone, and like a good patriot moveth to the earth, which is the region and country of massy bodies; so may we go forward, and see that water and massy bodies move to the centre of the earth; but rather than to suffer a divulsion in the continuance of nature, they will move upwards from the centre of the earth, forsaking their duty to the earth in regard of their duty to the world. This double nature of good, and the comparative thereof, is much more engraven upon man, if he degenerate not, unto whom the conservation of duty to the public ought to be much more precious than the conservation of life and being; according to that memorable speech of Pompeius Magnus, when being in commission of purveyance for a famine at Rome, and being dissuaded with great vehemency and instance by his friends about him, that he should not hazard himself to sea in an extremity of weather, he said only to them, *Necesse est ut eam, non ut vivam*. But it may be truly affirmed that there was never any philosophy, religion, or other discipline, which did so plainly and highly exalt the good which is communicative, and depress the good which is private and particular, as the Holy Faith; well declaring that it was the same God that gave the Christian law to men, who gave those laws of nature to inanimate creatures that we spake of before; for we read that the elected saints of God have wished themselves anathematised and razed out of the book of life, in an ecstasy of charity and infinite feeling of communion.

(8) This being set down and strongly planted, doth judge and determine most of the controversies wherein moral philosophy is conversant. For first, it decideth the question touching the preferment of the contemplative or active life, and decideth it against Aristotle. For all the reasons which he bringeth for the contemplative are private, and respecting the pleasure and dignity of a man's self (in which respects no question the contemplative life hath the pre-eminence), not much unlike to that comparison which Pythagoras made for the gracing and magnifying of philosophy and contemplation, who being asked what he was, answered, "That if Hiero were ever at the Olympian games, he knew the manner, that some came to try their fortune for the prizes, and some came as merchants to utter their commodities, and some

came to make good cheer and meet their friends, and some came to look on; and that he was one of them that came to look on.” But men must know, that in this theatre of man’s life it is reserved only for God and angels to be lookers on. Neither could the like question ever have been received in the Church, notwithstanding their *Pretiosa in oculis Domini mors sanctorum ejus*, by which place they would exalt their civil death and regular professions, but upon this defence, that the monastical life is not simple contemplative, but performeth the duty either of incessant prayers and supplications, which hath been truly esteemed as an office in the Church, or else of writing or taking instructions for writing concerning the law of God, as Moses did when he abode so long in the mount. And so we see Enoch, the seventh from Adam, who was the first contemplative and walked with God, yet did also endow the Church with prophecy, which Saint Jude citeth. But for contemplation which should be finished in itself, without casting beams upon society, assuredly divinity knoweth it not.

(9) It decideth also the controversies between Zeno and Socrates, and their schools and successions, on the one side, who placed felicity in virtue simply or attended, the actions and exercises whereof do chiefly embrace and concern society; and on the other side, the Cyrenaics and Epicureans, who placed it in pleasure, and made virtue (as it is used in some comedies of errors, wherein the mistress and the maid change habits) to be but as a servant, without which pleasure cannot be served and attended; and the reformed school of the Epicureans, which placed it in serenity of mind and freedom from perturbation; as if they would have deposed Jupiter again, and restored Saturn and the first age, when there was no summer nor winter, spring nor autumn, but all after one air and season; and Herillus, which placed felicity in extinguishment of the disputes of the mind, making no fixed nature of good and evil, esteeming things according to the clearness of the desires, or the reluctance; which opinion was revived in the heresy of the Anabaptists, measuring things according to the motions of the spirit, and the constancy or wavering of belief; all which are manifest to tend to private repose and contentment, and not to point of society.

(10) It censureth also the philosophy of Epictetus, which presupposeth that felicity must be placed in those things which are in our power, lest we be

liable to fortune and disturbance; as if it were not a thing much more happy to fail in good and virtuous ends for the public, than to obtain all that we can wish to ourselves in our proper fortune: as Consalvo said to his soldiers, showing them Naples, and protesting he had rather die one foot forwards, than to have his life secured for long by one foot of retreat. Whereunto the wisdom of that heavenly leader hath signed, who hath affirmed that “a good conscience is a continual feast;” showing plainly that the conscience of good intentions, howsoever succeeding, is a more continual joy to nature than all the provision which can be made for security and repose.

(11) It censureth likewise that abuse of philosophy which grew general about the time of Epictetus, in converting it into an occupation or profession; as if the purpose had been, not to resist and extinguish perturbations, but to fly and avoid the causes of them, and to shape a particular kind and course of life to that end; introducing such a health of mind, as was that health of body of which Aristotle speaketh of Herodicus, who did nothing all his life long but intend his health; whereas if men refer themselves to duties of society, as that health of body is best which is ablest to endure all alterations and extremities, so likewise that health of mind is most proper which can go through the greatest temptations and perturbations. So as Diogenes’ opinion is to be accepted, who commended not them which abstained, but them which sustained, and could refrain their mind *in præcipitio*, and could give unto the mind (as is used in horsemanship) the shortest stop or turn.

(12) Lastly, it censureth the tenderness and want of application in some of the most ancient and reverend philosophers and philosophical men, that did retire too easily from civil business, for avoiding of indignities and perturbations; whereas the resolution of men truly moral ought to be such as the same Consalvo said the honour of a soldier should be, *e telâ crassiore*, and not so fine as that everything should catch in it and endanger it.

XXI. (1) To resume private or particular good, it falleth into the division of good active and passive; for this difference of good (not unlike to that which amongst the Romans was expressed in the familiar or household terms of *promus* and *condus*) is formed also in all things, and is best disclosed in the two several appetites in creatures; the one to preserve or continue themselves,

and the other to dilate or multiply themselves, whereof the latter seemeth to be the worthier; for in nature the heavens, which are the more worthy, are the agent, and the earth, which is the less worthy, is the patient. In the pleasures of living creatures, that of generation is greater than that of food. In divine doctrine, *beatius est dare quam accipere*. And in life, there is no man's spirit so soft, but esteemeth the effecting of somewhat that he hath fixed in his desire, more than sensuality, which priority of the active good is much upheld by the consideration of our estate to be mortal and exposed to fortune. For if we might have a perpetuity and certainty in our pleasures, the state of them would advance their price. But when we see it is but *magni æstimamus mori tardius*, and *ne glorieris de crastino, nescis partum diei*, it maketh us to desire to have somewhat secured and exempted from time, which are only our deeds and works; as it is said, *Opera eorum sequuntur eos*. The pre-eminence likewise of this active good is upheld by the affection which is natural in man towards variety and proceeding, which in the pleasures of the sense, which is the principal part of passive good, can have no great latitude. *Cogita quamdiu eadem feceris; cibus, somnus, ludus per hunc circulum curritur; mori velle non tantum fortis, aut miser, aut prudens, sed etiam fastidiosus potest*. But in enterprises, pursuits, and purposes of life, there is much variety; whereof men are sensible with pleasure in their inceptions, progressions, recoils, reintegrations, approaches and attainings to their ends. So as it was well said, *Vita sine proposito languida et vaga est*. Neither hath this active good an identity with the good of society, though in some cases it hath an incidence into it. For although it do many times bring forth acts of beneficence, yet it is with a respect private to a man's own power, glory, amplification, continuance; as appeareth plainly, when it findeth a contrary subject. For that gigantic state of mind which possesseth the troublers of the world, such as was Lucius Sylla and infinite other in smaller model, who would have all men happy or unhappy as they were their friends or enemies, and would give form to the world, according to their own humours (which is the true theomachy), pretendeth and aspireth to active good, though it recedeth furthest from good of society, which we have determined to be the greater.

(2) To resume passive good, it receiveth a subdivision of conservative and effective. For let us take a brief review of that which we have said: we have

spoken first of the good of society, the intention whereof embraceth the form of human nature, whereof we are members and portions, and not our own proper and individual form; we have spoken of active good, and supposed it as a part of private and particular good. And rightly, for there is impressed upon all things a triple desire or appetite proceeding from love to themselves: one of preserving and continuing their form; another of advancing and perfecting their form; and a third of multiplying and extending their form upon other things: whereof the multiplying, or signature of it upon other things, is that which we handled by the name of active good. So as there remaineth the conserving of it, and perfecting or raising of it, which latter is the highest degree of passive good. For to preserve in state is the less, to preserve with advancement is the greater. So in man,

“*Igneus est ollis vigor, et cælestis origo.*”

His approach or assumption to divine or angelical nature is the perfection of his form; the error or false imitation of which good is that which is the tempest of human life; while man, upon the instinct of an advancement, formal and essential, is carried to seek an advancement local. For as those which are sick, and find no remedy, do tumble up and down and change place, as if by a remove local they could obtain a remove internal, so is it with men in ambition, when failing of the mean to exalt their nature, they are in a perpetual estuation to exalt their place. So then passive good is, as was said, either conservative or perfective.

(3) To resume the good of conservation or comfort, which consisteth in the fruition of that which is agreeable to our natures; it seemeth to be most pure and natural of pleasures, but yet the softest and lowest. And this also receiveth a difference, which hath neither been well judged of, nor well inquired; for the good of fruition or contentment is placed either in the sincereness of the fruition, or in the quickness and vigour of it; the one superinduced by equality, the other by vicissitude; the one having less mixture of evil, the other more impression of good. Whether of these is the greater good is a question controverted; but whether man's nature may not be

capable of both is a question not inquired.

(4) The former question being debated between Socrates and a sophist, Socrates placing felicity in an equal and constant peace of mind, and the sophist in much desiring and much enjoying, they fell from argument to ill words: the sophist saying that Socrates' felicity was the felicity of a block or stone; and Socrates saying that the sophist's felicity was the felicity of one that had the itch, who did nothing but itch and scratch. And both these opinions do not want their supports. For the opinion of Socrates is much upheld by the general consent even of the epicures themselves, that virtue beareth a great part in felicity; and if so, certain it is, that virtue hath more use in clearing perturbations than in compassing desires. The sophist's opinion is much favoured by the assertion we last spake of, that good of advancement is greater than good of simple preservation; because every obtaining a desire hath a show of advancement, as motion though in a circle hath a show of progression.

(5) But the second question, decided the true way, maketh the former superfluous. For can it be doubted, but that there are some who take more pleasure in enjoying pleasures than some other, and yet, nevertheless, are less troubled with the loss or leaving of them? So as this same, *Non uti ut non appetas, non appetere ut non metuas, sunt animi pusilli et diffidentis*. And it seemeth to me that most of the doctrines of the philosophers are more fearful and cautious than the nature of things requireth. So have they increased the fear of death in offering to cure it. For when they would have a man's whole life to be but a discipline or preparation to die, they must needs make men think that it is a terrible enemy, against whom there is no end of preparing. Better saith the poet:-

“Qui finem vitæ extremum inter munera ponat
Naturæ.”

So have they sought to make men's minds too uniform and harmonical, by not breaking them sufficiently to contrary motions; the reasons whereof I

suppose to be, because they themselves were men dedicated to a private, free, and unapplied course of life. For as we see, upon the lute or like instrument, a ground, though it be sweet and have show of many changes, yet breaketh not the hand to such strange and hard stops and passages, as a set song or voluntary; much after the same manner was the diversity between a philosophical and civil life. And, therefore, men are to imitate the wisdom of jewellers: who, if there be a grain, or a cloud, or an ice which may be ground forth without taking too much of the stone, they help it; but if it should lessen and abate the stone too much, they will not meddle with it: so ought men so to procure serenity as they destroy not magnanimity.

(6) Having therefore deduced the good of man which is private and particular, as far as seemeth fit, we will now return to that good of man which respecteth and beholdeth society, which we may term duty; because the term of duty is more proper to a mind well framed and disposed towards others, as the term of virtue is applied to a mind well formed and composed in itself; though neither can a man understand virtue without some relation to society, nor duty without an inward disposition. This part may seem at first to pertain to science civil and politic; but not if it be well observed. For it concerneth the regiment and government of every man over himself, and not over others. And as in architecture the direction of framing the posts, beams, and other parts of building, is not the same with the manner of joining them and erecting the building; and in mechanicals, the direction how to frame an instrument or engine is not the same with the manner of setting it on work and employing it; and yet, nevertheless, in expressing of the one you incidently express the aptness towards the other; so the doctrine of conjugation of men in society differeth from that of their conformity thereunto.

(7) This part of duty is subdivided into two parts: the common duty of every man, as a man or member of a state; the other, the respective or special duty of every man in his profession, vocation, and place. The first of these is extant and well laboured, as hath been said. The second likewise I may report rather dispersed than deficient; which manner of dispersed writing in this kind of argument I acknowledge to be best. For who can take upon him to write of the proper duty, virtue, challenge, and right of every several

vocation, profession, and place? For although sometimes a looker on may see more than a gamester, and there be a proverb more arrogant than sound, "That the vale best discovereth the hill;" yet there is small doubt but that men can write best and most really and materially in their own professions; and that the writing of speculative men of active matter for the most part doth seem to men of experience, as Phormio's argument of the wars seemed to Hannibal, to be but dreams and dotage. Only there is one vice which accompanieth them that write in their own professions, that they magnify them in excess. But generally it were to be wished (as that which would make learning indeed solid and fruitful) that active men would or could become writers.

(8) In which kind I cannot but mention, *honoris causa*, your Majesty's excellent book touching the duty of a king; a work richly compounded of divinity, morality, and policy, with great aspersion of all other arts; and being in some opinion one of the most sound and healthful writings that I have read: not distempered in the heat of invention, nor in the coldness of negligence; not sick of dizziness, as those are who leese themselves in their order, nor of convulsions, as those which cramp in matters impertinent; not savouring of perfumes and paintings, as those do who seek to please the reader more than nature beareth; and chiefly well disposed in the spirits thereof, being agreeable to truth and apt for action; and far removed from that natural infirmity, whereunto I noted those that write in their own professions to be subject - which is, that they exalt it above measure. For your Majesty hath truly described, not a king of Assyria or Persia in their extern glory, but a Moses or a David, pastors of their people. Neither can I ever leese out of my remembrance what I heard your Majesty in the same sacred spirit of government deliver in a great cause of judicature, which was, "That kings ruled by their laws, as God did by the laws of nature; and ought as rarely to put in use their supreme prerogative as God doth His power of working miracles." And yet notwithstanding in your book of a free monarchy, you do well give men to understand, that you know the plenitude of the power and right of a king, as well as the circle of his office and duty. Thus have I presumed to allege this excellent writing of your Majesty, as a prime or eminent example of tractates concerning special and respective duties; wherein I should have said as much, if it had been written a thousand years

since. Neither am I moved with certain courtly decencies, which esteem it flattery to praise in presence. No, it is flattery to praise in absence - that is, when either the virtue is absent, or the occasion is absent; and so the praise is not natural, but forced, either in truth or in time. But let Cicero be read in his oration *pro Marcello*, which is nothing but an excellent table of Cæsar's virtue, and made to his face; besides the example of many other excellent persons, wiser a great deal than such observers; and we will never doubt, upon a full occasion, to give just praises to present or absent.

(9) But to return; there belongeth further to the handling of this part, touching the duties of professions and vocations, a relative or opposite, touching the frauds, cautels, impostures, and vices of every profession, which hath been likewise handled; but how? rather in a satire and cynically, than seriously and wisely; for men have rather sought by wit to deride and traduce much of that which is good in professions, than with judgment to discover and sever that which is corrupt. For, as Solomon saith, he that cometh to seek after knowledge with a mind to scorn and censure shall be sure to find matter for his humour, but no matter for his instruction: *Quærenti derisori scientiam ipsa se abscondit; sed studioso fit obviam*. But the managing of this argument with integrity and truth, which I note as deficient, seemeth to me to be one of the best fortifications for honesty and virtue that can be planted. For, as the fable goeth of the basilisk - that if he see you first, you die for it; but if you see him first, he dieth - so is it with deceits and evil arts, which, if they be first espied they leese their life; but if they prevent, they endanger. So that we are much beholden to Machiavel and others, that write what men do, and not what they ought to do. For it is not possible to join serpentine wisdom with the columbine innocency, except men know exactly all the conditions of the serpent; his baseness and going upon his belly, his volubility and lubricity, his envy and sting, and the rest - that is, all forms and natures of evil. For without this, virtue lieth open and unfenced. Nay, an honest man can do no good upon those that are wicked, to reclaim them, without the help of the knowledge of evil. For men of corrupted minds presuppose that honesty groweth out of simplicity of manners, and believing of preachers, schoolmasters, and men's exterior language. So as, except you can make them perceive that you know the utmost reaches of their own corrupt opinions, they despise all morality. *Non recipit stultus verba*

prudentiæ, nisi ea dixeris quæ, versantur in corde ejus.

(10) Unto this part, touching respective duty, doth also appertain the duties between husband and wife, parent and child, master and servant. So likewise the laws of friendship and gratitude, the civil bond of companies, colleges, and politic bodies, of neighbourhood, and all other proportionate duties; not as they are parts of government and society, but as to the framing of the mind of particular persons.

(11) The knowledge concerning good respecting society doth handle it also, not simply alone, but comparatively; whereunto belongeth the weighing of duties between person and person, case and case, particular and public. As we see in the proceeding of Lucius Brutus against his own sons, which was so much extolled, yet what was said?

“Infelix, utcunque ferent ea fata minores.”

So the case was doubtful, and had opinion on both sides. Again, we see when M. Brutus and Cassius invited to a supper certain whose opinions they meant to feel, whether they were fit to be made their associates, and cast forth the question touching the killing of a tyrant being a usurper, they were divided in opinion; some holding that servitude was the extreme of evils, and others that tyranny was better than a civil war: and a number of the like cases there are of comparative duty. Amongst which that of all others is the most frequent, where the question is of a great deal of good to ensue of a small injustice. Which Jason of Thessalia determined against the truth: *Aliqua sunt injuste facienda, ut multa juste fieri possint*. But the reply is good: *Auctorem præsentis justitiæ habes, sponsorem futuræ non habes*. Men must pursue things which are just in present, and leave the future to the Divine Providence. So then we pass on from this general part touching the exemplar and description of good.

XXII. (1) Now, therefore, that we have spoken of this fruit of life, it remaineth to speak of the husbandry that belongeth thereunto, without which

part the former seemeth to be no better than a fair image or statue, which is beautiful to contemplate, but is without life and motion; whereunto Aristotle himself subscribeth in these words: *Necesse est scilicet de virtute dicere, et quid sit, et ex quibus gignatur. Inutile enim fere fuerit virtutem quidem nosse, acquirendæ autem ejus modos et vias ignorare. Non enim de virtute tantum, qua specie sit, quærendum est, sed et quomodo sui copiam faciat: utrumque enim volumeus, et rem ipsam nosse, et ejus compotes fieri: hoc autem ex voto non succedet, nisi sciamus et ex quibus et quomodo.* In such full words and with such iteration doth he inculcate this part. So saith Cicero in great commendation of Cato the second, that he had applied himself to philosophy, *Non ita disputandi causa, sed ita vivendi.* And although the neglect of our times, wherein few men do hold any consultations touching the reformation of their life (as Seneca excellently saith, *De partibus vitæ quisque deliberat, de summa nemo*), may make this part seem superfluous; yet I must conclude with that aphorism of Hippocrates, *Qui gravi morbo correpti dolores non sentiunt, iis mens ægrotat.* They need medicine, not only to assuage the disease, but to awake the sense. And if it be said that the cure of men's minds belongeth to sacred divinity, it is most true; but yet moral philosophy may be preferred unto her as a wise servant and humble handmaid. For as the Psalm saith, "That the eyes of the handmaid look perpetually towards the mistress," and yet no doubt many things are left to the discretion of the handmaid to discern of the mistress' will; so ought moral philosophy to give a constant attention to the doctrines of divinity, and yet so as it may yield of herself (within due limits) many sound and profitable directions.

(2) This part, therefore, because of the excellency thereof, I cannot but find exceeding strange that it is not reduced to written inquiry; the rather, because it consisteth of much matter, wherein both speech and action is often conversant; and such wherein the common talk of men (which is rare, but yet cometh sometimes to pass) is wiser than their books. It is reasonable, therefore, that we propound it in the more particularity, both for the worthiness, and because we may acquit ourselves for reporting it deficient, which seemeth almost incredible, and is otherwise conceived and presupposed by those themselves that have written. We will, therefore, enumerate some heads or points thereof, that it may appear the better what it

is, and whether it be extant.

(3) First, therefore, in this, as in all things which are practical we ought to cast up our account, what is in our power, and what not; for the one may be dealt with by way of alteration, but the other by way of application only. The husbandman cannot command neither the nature of the earth nor the seasons of the weather; no more can the physician the constitution of the patient nor the variety of accidents. So in the culture and cure of the mind of man, two things are without our command: points of Nature, and points of fortune. For to the basis of the one, and the conditions of the other, our work is limited and tied. In these things, therefore, it is left unto us to proceed by application

“Vincenda est omnis fortuna ferendo.”

and so likewise,

“Vincenda est omnis Natura ferendo.”

But when that we speak of suffering, we do not speak of a dull and neglected suffering, but of a wise and industrious suffering, which draweth and contriveth use and advantage out of that which seemeth adverse and contrary; which is that properly which we call accommodating or applying. Now the wisdom of application resteth principally in the exact and distinct knowledge of the precedent state or disposition, unto which we do apply; for we cannot fit a garment except we first take measure of the body.

(4) So, then, the first article of this knowledge is to set down sound and true distributions and descriptions of the several characters and tempers of men’s natures and dispositions, specially having regard to those differences which are most radical in being the fountains and causes of the rest, or most frequent in concurrence or commixture; wherein it is not the handling of a few of them in passage, the better to describe the mediocrities of virtues, that

can satisfy this intention. For if it deserve to be considered, that there are minds which are proportioned to great matters, and others to small (which Aristotle handleth, or ought to have bandied, by the name of magnanimity), doth it not deserve as well to be considered that there are minds proportioned to intend many matters, and others to few? So that some can divide themselves: others can perchance do exactly well, but it must be but in few things at once; and so there cometh to be a narrowness of mind, as well as a pusillanimity. And again, that some minds are proportioned to that which may be dispatched at once, or within a short return of time; others to that which begins afar off, and is to be won with length of pursuit:-

“Jam tum tenditqus foveatque.”

So that there may be fitly said to be a longanimity, which is commonly also ascribed to God as a magnanimity. So further deserved it to be considered by Aristotle, “That there is a disposition in conversation (supposing it in things which do in no sort touch or concern a man’s self) to soothe and please, and a disposition contrary to contradict and cross;” and deserveth it not much better to be considered. “That there is a disposition, not in conversation or talk, but in matter of more serious nature (and supposing it still in things merely indifferent), to take pleasure in the good of another; and a disposition contrariwise, to take distaste at the good of another?” which is that properly which we call good nature or ill nature, benignity or malignity; and, therefore, I cannot sufficiently marvel that this part of knowledge, touching the several characters of natures and dispositions, should be omitted both in morality and policy, considering it is of so great ministry and suppeditation to them both. A man shall find in the traditions of astrology some pretty and apt divisions of men’s natures, according to the predominances of the planets: lovers of quiet, lovers of action, lovers of victory, lovers of honour, lovers of pleasure, lovers of arts, lovers of change, and so forth. A man shall find in the wisest sort of these relations which the Italians make touching conclaves, the natures of the several cardinals handsomely and lively painted forth. A man shall meet with in every day’s conference the denominations of sensitive, dry, formal, real, humorous, certain, *huomo di prima impressione*,

huomo di ultima impressione, and the like; and yet, nevertheless, this kind of observations wandereth in words, but is not fixed in inquiry. For the distinctions are found (many of them), but we conclude no precepts upon them: wherein our fault is the greater, because both history, poesy, and daily experience are as goodly fields where these observations grow; whereof we make a few posies to hold in our hands, but no man bringeth them to the confectionary that receipts might be made of them for use of life.

(5) Of much like kind are those impressions of Nature, which are imposed upon the mind by the sex, by the age, by the region, by health and sickness, by beauty and deformity, and the like, which are inherent and not extern; and again, those which are caused by extern fortune, as sovereignty, nobility, obscure birth, riches, want, magistracy, privateness, prosperity, adversity, constant fortune, variable fortune, rising *per saltum*, *per gradus*, and the like. And, therefore, we see that Plautus maketh it a wonder to see an old man beneficent, *benignitas hujis ut adolescentuli est*. Saint Paul concludeth that severity of discipline was to be used to the Cretans, *increpa eos dure*, upon the disposition of their country, *Cretensus semper mendaces, malæ bestiae, ventres*. Sallust noteth that it is usual with kings to desire contradictories: *Sed plerumque regiae voluntates, ut vehementes sunt, sic mobiles, sæpeque ipsæ sibi advers*. Tacitus observeth how rarely raising of the fortune mendeth the disposition: *solus Vespasianus mutatus in melius*. Pindarus maketh an observation, that great and sudden fortune for the most part defeateth men *qui magnam felicitatem concoquere non possunt*. So the Psalm showeth it is more easy to keep a measure in the enjoying of fortune, than in the increase of fortune; *Divitiæ si affluent, nolite cor apponere*. These observations and the like I deny not but are touched a little by Aristotle as in passage in his Rhetorics, and are handled in some scattered discourses; but they were never incorporate into moral philosophy, to which they do essentially appertain; as the knowledge of this diversity of grounds and moulds doth to agriculture, and the knowledge of the diversity of complexions and constitutions doth to the physician, except we mean to follow the indiscretion of empirics, which minister the same medicines to all patients.

(6) Another article of this knowledge is the inquiry touching the affections; for as in medicining of the body, it is in order first to know the divers

complexions and constitutions; secondly, the diseases; and lastly, the cures: so in medicining of the mind, after knowledge of the divers characters of men's natures, it followeth in order to know the diseases and infirmities of the mind, which are no other than the perturbations and distempers of the affections. For as the ancient politiques in popular estates were wont to compare the people to the sea, and the orators to the winds; because as the sea would of itself be calm and quiet, if the winds did not move and trouble it; so the people would be peaceable and tractable if the seditious orators did not set them in working and agitation: so it may be fitly said, that the mind in the nature thereof would be temperate and stayed, if the affections, as winds, did not put it into tumult and perturbation. And here again I find strange, as before, that Aristotle should have written divers volumes of Ethics, and never handled the affections which is the principal subject thereof; and yet in his Rhetorics, where they are considered but collaterally and in a second degree (as they may be moved by speech), he findeth place for them, and handleth them well for the quantity; but where their true place is he pretermitteth them. For it is not his disputations about pleasure and pain that can satisfy this inquiry, no more than he that should generally handle the nature of light can be said to handle the nature of colours; for pleasure and pain are to the particular affections as light is to particular colours. Better travails, I suppose, had the Stoics taken in this argument, as far as I can gather by that which we have at second hand. But yet it is like it was after their manner, rather in subtlety of definitions (which in a subject of this nature are but curiosities), than in active and ample descriptions and observations. So likewise I find some particular writings of an elegant nature, touching some of the affections: as of anger, of comfort upon adverse accidents, of tenderness of countenance, and other. But the poets and writers of histories are the best doctors of this knowledge; where we may find painted forth, with great life, how affections are kindled and incited; and how pacified and refrained; and how again contained from act and further degree; how they disclose themselves; how they work; how they vary; how they gather and fortify: how they are enwrapped one within another; and how they do fight and encounter one with another; and other the like particularities. Amongst the which this last is of special use in moral and civil matters; how, I say, to set affection against affection, and to master one by another; even as we used to hunt beast with beast, and fly bird with bird, which otherwise percase we

could not so easily recover: upon which foundation is erected that excellent use of *præmium* and *pæna*, whereby civil states consist: employing the predominant affections of fear and hope, for the suppressing and bridling the rest. For as in the government of states it is sometimes necessary to bridle one faction with another, so it is in the government within.

(7) Now come we to those points which are within our own command, and have force and operation upon the mind, to affect the will and appetite, and to alter manners: wherein they ought to have handled custom, exercise, habit, education, example, imitation, emulation, company, friends, praise, reproof, exhortation, fame, laws, books, studies: these as they have determinate use in moralities, from these the mind suffereth, and of these are such receipts and regiments compounded and described, as may serve to recover or preserve the health and good estate of the mind, as far as pertaineth to human medicine: of which number we will insist upon some one or two, as an example of the rest, because it were too long to prosecute all; and therefore we do resume custom and habit to speak of.

(8) The opinion of Aristotle seemeth to me a negligent opinion, that of those things which consist by Nature, nothing can be changed by custom; using for example, that if a stone be thrown ten thousand times up it will not learn to ascend; and that by often seeing or hearing we do not learn to see or hear the better. For though this principle be true in things wherein Nature is peremptory (the reason whereof we cannot now stand to discuss), yet it is otherwise in things wherein Nature admitteth a latitude. For he might see that a strait glove will come more easily on with use; and that a wand will by use bend otherwise than it grew; and that by use of the voice we speak louder and stronger; and that by use of enduring heat or cold we endure it the better, and the like: which latter sort have a nearer resemblance unto that subject of manners he handleth, than those instances which he allegeth. But allowing his conclusion, that virtues and vices consist in habit, he ought so much the more to have taught the manner of superinducing that habit: for there be many precepts of the wise ordering the exercises of the mind, as there is of ordering the exercises of the body, whereof we will recite a few.

(9) The first shall be, that we beware we take not at the first either too high a

strain or too weak: for if too high, in a diffident nature you discourage, in a confident nature you breed an opinion of facility, and so a sloth; and in all natures you breed a further expectation than can hold out, and so an insatisfaction in the end: if too weak, of the other side, you may not look to perform and overcome any great task.

(10) Another precept is to practise all things chiefly at two several times, the one when the mind is best disposed, the other when it is worst disposed; that by the one you may gain a great step, by the other you may work out the knots and stonds of the mind, and make the middle times the more easy and pleasant.

(11) Another precept is that which Aristotle mentioneth by the way, which is to bear ever towards the contrary extreme of that whereunto we are by nature inclined; like unto the rowing against the stream, or making a wand straight by bending him contrary to his natural crookedness.

(12) Another precept is that the mind is brought to anything better, and with more sweetness and happiness, if that whereunto you pretend be not first in the intention, but *tanquam aliud agendo*, because of the natural hatred of the mind against necessity and constraint. Many other axioms there are touching the managing of exercise and custom, which being so conducted doth prove indeed another nature; but, being governed by chance, doth commonly prove but an ape of Nature, and bringeth forth that which is lame and counterfeit.

(13) So if we should handle books and studies, and what influence and operation they have upon manners, are there not divers precepts of great caution and direction appertaining thereunto? Did not one of the fathers in great indignation call poesy *vinum dæmonum*, because it increaseth temptations, perturbations, and vain opinions? Is not the opinion of Aristotle worthy to be regarded, wherein he saith, “That young men are no fit auditors of moral philosophy, because they are not settled from the boiling heat of their affections, nor attempered with time and experience”? And doth it not hereof come, that those excellent books and discourses of the ancient writers (whereby they have persuaded unto virtue most effectually, by representing her in state and majesty, and popular opinions against virtue in their

parasites' coats fit to be scorned and derided), are of so little effect towards honesty of life, because they are not read and revolved by men in their mature and settled years, but confined almost to boys and beginners? But is it not true also, that much less young men are fit auditors of matters of policy, till they have been thoroughly seasoned in religion and morality; lest their judgments be corrupted, and made apt to think that there are no true differences of things, but according to utility and fortune, as the verse describes it, *Prosperum et felix scelus virtus vocatur*; and again, *Ille crucem pretium sceleris tulit, hic diadema*: which the poets do speak satirically and in indignation on virtue's behalf; but books of policy do speak it seriously and positively; for so it pleaseth Machiavel to say, "That if Cæsar had been overthrown, he would have been more odious than ever was Catiline," as if there had been no difference, but in fortune, between a very fury of lust and blood, and the most excellent spirit (his ambition reserved) of the world? Again, is there not a caution likewise to be given of the doctrines of moralities themselves (some kinds of them), lest they make men too precise, arrogant, incompatible; as Cicero saith of Cato, *In Marco Catone hæc bona quæ videmus divina et egregia, ipsius scitote esse propria; quæ nonnunquam requirimus ea sunt omnia non a natura, sed a magistro*? Many other axioms and advices there are touching those proprieties and effects, which studies do infuse and instil into manners. And so, likewise, is there touching the use of all those other points, of company, fame, laws, and the rest, which we recited in the beginning in the doctrine of morality.

(14) But there is a kind of culture of the mind that seemeth yet more accurate and elaborate than the rest, and is built upon this ground; that the minds of all men are at some times in a state more perfect, and at other times in a state more depraved. The purpose, therefore, of this practice is to fix and cherish the good hours of the mind, and to obliterate and take forth the evil. The fixing of the good hath been practised by two means, vows or constant resolutions, and observances or exercises; which are not to be regarded so much in themselves, as because they keep the mind in continual obedience. The obliteration of the evil hath been practised by two means, some kind of redemption or expiation of that which is past, and an inception or account *de novo* for the time to come. But this part seemeth sacred and religious, and justly; for all good moral philosophy (as was said) is but a handmaid to

religion.

(15) Wherefore we will conclude with that last point, which is of all other means the most compendious and summary, and again, the most noble and effectual to the reducing of the mind unto virtue and good estate; which is, the electing and propounding unto a man's self good and virtuous ends of his life, such as may be in a reasonable sort within his compass to attain. For if these two things be supposed, that a man set before him honest and good ends, and again, that he be resolute, constant, and true unto them; it will follow that he shall mould himself into all virtue at once. And this indeed is like the work of nature; whereas the other course is like the work of the hand. For as when a carver makes an image, he shapes only that part whereupon he worketh; as if he be upon the face, that part which shall be the body is but a rude stone still, till such times as he comes to it. But contrariwise when nature makes a flower or living creature, she formeth rudiments of all the parts at one time. So in obtaining virtue by habit, while a man practiseth temperance, he doth not profit much to fortitude, nor the like but when he dedicateth and applieth himself to good ends, look, what virtue soever the pursuit and passage towards those ends doth commend unto him, he is invested of a precedent disposition to conform himself thereunto. Which state of mind Aristotle doth excellently express himself, that it ought not to be called virtuous, but divine. His words are these: *Immanitati autem consentaneum est opponere eam, quæ supra humanitatem est, heroicam sive divinam virtutem*; and a little after, *Nam ut feræ neque vitium neque virtus est, swic neque Dei: sed hic quidem status altius quiddam virtute est, ille aliud quiddam a vitio*. And therefore we may see what celsitude of honour Plinius Secundus attributeth to Trajan in his funeral oration, where he said, "That men needed to make no other prayers to the gods, but that they would continue as good lords to them as Trajan had been;" as if he had not been only an imitation of divine nature, but a pattern of it. But these be heathen and profane passages, having but a shadow of that divine state of mind, which religion and the holy faith doth conduct men unto, by imprinting upon their souls charity, which is excellently called the bond of perfection, because it comprehendeth and fasteneth all virtues together. And as it is elegantly said by Menander of vain love, which is but a false imitation of divine love, *Amor melior Sophista lævo ad humanam vitam* - that love teacheth a man to

carry himself better than the sophist or preceptor; which he calleth left-handed, because, with all his rules and preceptions, he cannot form a man so dexterously, nor with that facility to prize himself and govern himself, as love can do: so certainly, if a man's mind be truly inflamed with charity, it doth work him suddenly into greater perfection than all the doctrine of morality can do, which is but a sophist in comparison of the other. Nay, further, as Xenophon observed truly, that all other affections, though they raise the mind, yet they do it by distorting and uncomeliness of ecstasies or excesses; but only love doth exalt the mind, and nevertheless at the same instant doth settle and compose it: so in all other excellences, though they advance nature, yet they are subject to excess. Only charity admitteth no excess. For so we see, aspiring to be like God in power, the angels transgressed and fell; *Ascendam, et ero similis altissimo*: by aspiring to be like God in knowledge, man transgressed and fell; *Eritis sicut Dii, scientes bonum et malum*: but by aspiring to a similitude of God in goodness or love, neither man nor angel ever transgressed, or shall transgress. For unto that imitation we are called: *Diligite inimicos vestros, benefacite eis qui oderunt vos, et orate pro persequentibus et calumniantibus vos, ut sitis filii Patris vestri qui in cœlis est, qui solem suum oriri facit super bonos et malos, et pluit super justos et injustos*. So in the first platform of the divine nature itself, the heathen religion speaketh thus, *Optimus Maximus*: and the sacred Scriptures thus, *Miscericordia ejus super omnia opera ejus*.

(16) Wherefore I do conclude this part of moral knowledge, concerning the culture and regiment of the mind; wherein if any man, considering the arts thereof which I have enumerated, do judge that my labour is but to collect into an art or science that which hath been pretermitted by others, as matter of common sense and experience, he judgeth well. But as Philocrates sported with Demosthenes, “You may not marvel (Athenians) that Demosthenes and I do differ; for he drinketh water, and I drink wine;” and like as we read of an ancient parable of the two gates of sleep -

“Sunt geminæ somni portæ: quarum altera fertur
Cornea, qua veris facilis datur exitus umbris:
Altera candenti perfecta nitens elephanto,

Sed falsa ad cœlum mittunt insomnia manes:”

so if we put on sobriety and attention, we shall find it a sure maxim in knowledge, that the more pleasant liquor (“of wine”) is the more vaporous, and the braver gate (“of ivory”) sendeth forth the falser dreams.

(17) But we have now concluded that general part of human philosophy, which contemplateth man segregate, and as he consisteth of body and spirit. Wherein we may further note, that there seemeth to be a relation or conformity between the good of the mind and the good of the body. For as we divided the good of the body into health, beauty, strength, and pleasure, so the good of the mind, inquired in rational and moral knowledges, tendeth to this, to make the mind sound, and without perturbation; beautiful, and graced with decency; and strong and agile for all duties of life. These three, as in the body, so in the mind, seldom meet, and commonly sever. For it is easy to observe, that many have strength of wit and courage, but have neither health from perturbations, nor any beauty or decency in their doings; some again have an elegancy and fineness of carriage which have neither soundness of honesty nor substance of sufficiency; and some again have honest and reformed minds, that can neither become themselves nor manage business; and sometimes two of them meet, and rarely all three. As for pleasure, we have likewise determined that the mind ought not to be reduced to stupid, but to retain pleasure; confined rather in the subject of it, than in the strength and vigour of it.

XXIII. (1) Civil knowledge is conversant about a subject which of all others is most immersed in matter, and hardliest reduced to axiom. Nevertheless, as Cato the Censor said, “That the Romans were like sheep, for that a man were better drive a flock of them, than one of them; for in a flock, if you could get but some few go right, the rest would follow:” so in that respect moral philosophy is more difficile than policy. Again, moral philosophy propoundeth to itself the framing of internal goodness; but civil knowledge requireth only an external goodness; for that as to society sufficeth. And therefore it cometh oft to pass that there be evil times in good governments: for so we find in the Holy story, when the kings were good, yet it is added,

Sed adhuc poulus non direxerat cor suum ad Dominum Deum patrum suorum. Again, states, as great engines, move slowly, and are not so soon put out of frame: for as in Egypt the seven good years sustained the seven bad, so governments for a time well grounded do bear out errors following; but the resolution of particular persons is more suddenly subverted. These respects do somewhat qualify the extreme difficulty of civil knowledge.

(2) This knowledge hath three parts, according to the three summary actions of society; which are conversation, negotiation, and government. For man seeketh in society comfort, use, and protection; and they be three wisdoms of divers natures which do often sever - wisdom of the behaviour, wisdom of business, and wisdom of state.

(3) The wisdom of conversation ought not to be over much affected, but much less despised; for it hath not only an honour in itself, but an influence also into business and government. The poet saith, *Nec vultu destrue verba tuo*: a man may destroy the force of his words with his countenance; so may he of his deeds, saith Cicero, recommending to his brother affability and easy access; *Nil interest habere ostium apertum, vultum clausum*: it is nothing won to admit men with an open door, and to receive them with a shut and reserved countenance. So we see Atticus, before the first interview between Cæsar and Cicero, the war depending, did seriously advise Cicero touching the composing and ordering of his countenance and gesture. And if the government of the countenance be of such effect, much more is that of the speech, and other carriage appertaining to conversation; the true model whereof seemeth to me well expressed by Livy, though not meant for this purpose: *Ne aut arrogans videar, aut obnoxius; quorum alterum est alienæ libertatis obliti, alterum suæ*: the sum of behaviour is to retain a man's own dignity, without intruding upon the liberty of others. On the other side, if behaviour and outward carriage be intended too much, first it may pass into affectation, and then *Quid deformius quam scenam in vitam transferre* - to act a man's life? But although it proceed not to that extreme, yet it consumeth time, and employeth the mind too much. And therefore as we use to advise young students from company keeping, by saying, *Amici fures temporis*: so certainly the intending of the discretion of behaviour is a great thief of meditation. Again, such as are accomplished in that form of urbanity please

themselves in it, and seldom aspire to higher virtue; whereas those that have defect in it do seek comeliness by reputation; for where reputation is, almost everything becometh; but where that is not, it must be supplied by *puntos* and compliments. Again, there is no greater impediment of action than an over-curious observance of decency, and the guide of decency, which is time and season. For as Solomon saith, *Qui respicit ad ventos, non seminat; et qui respicit ad nubes, non metet*: a man must make his opportunity, as oft as find it. To conclude, behaviour seemeth to me as a garment of the mind, and to have the conditions of a garment. For it ought to be made in fashion; it ought not to be too curious; it ought to be shaped so as to set forth any good making of the mind and hide any deformity; and above all, it ought not to be too strait or restrained for exercise or motion. But this part of civil knowledge hath been elegantly handled, and therefore I cannot report it for deficient.

(4) The wisdom touching negotiation or business hath not been hitherto collected into writing, to the great derogation of learning and the professors of learning. For from this root springeth chiefly that note or opinion, which by us is expressed in adage to this effect, that there is no great concurrence between learning and wisdom. For of the three wisdoms which we have set down to pertain to civil life, for wisdom of behaviour, it is by learned men for the most part despised, as an inferior to virtue and an enemy to meditation; for wisdom of government, they acquit themselves well when they are called to it, but that happeneth to few; but for the wisdom of business, wherein man's life is most conversant, there be no books of it, except some few scattered advertisements, that have no proportion to the magnitude of this subject. For if books were written of this as the other, I doubt not but learned men with mean experience would far excel men of long experience without learning, and outshoot them in their own bow.

(5) Neither needeth it at all to be doubted, that this knowledge should be so variable as it falleth not under precept; for it is much less infinite than science of government, which we see is laboured and in some part reduced. Of this wisdom it seemeth some of the ancient Romans in the saddest and wisest times were professors; for Cicero reporteth, that it was then in use for senators that had name and opinion for general wise men, as Coruncanius, Curius, Lælius, and many others, to walk at certain hours in the Place, and to

give audience to those that would use their advice; and that the particular citizens would resort unto them, and consult with them of the marriage of a daughter, or of the employing of a son, or of a purchase or bargain, or of an accusation, and every other occasion incident to man's life. So as there is a wisdom of counsel and advice even in private causes, arising out of a universal insight into the affairs of the world; which is used indeed upon particular causes propounded, but is gathered by general observation of causes of like nature. For so we see in the book which Q. Cicero writeth to his brother, *De petitione consulatus* (being the only book of business that I know written by the ancients), although it concerned a particular action then on foot, yet the substance thereof consisteth of many wise and politic axioms, which contain not a temporary, but a perpetual direction in the case of popular elections. But chiefly we may see in those aphorisms which have place amongst divine writings, composed by Solomon the king, of whom the Scriptures testify that his heart was as the sands of the sea, encompassing the world and all worldly matters, we see, I say, not a few profound and excellent cautions, precepts, positions, extending to much variety of occasions; whereupon we will stay a while, offering to consideration some number of examples.

(6) *Sed et cunctis sermonibus qui dicuntur ne accommodes aurem tuam, ne forte audias servum tuum maledicentem tibi.* Here is commended the provident stay of inquiry of that which we would be loth to find: as it was judged great wisdom in Pompeius Magnus that he burned Sertorius' papers unperused.

Vir sapiens, si cum stulto contenderit, sive irascatur, sive rideat, non inveniet requiem. Here is described the great disadvantage which a wise man hath in undertaking a lighter person than himself; which is such an engagement as, whether a man turn the matter to jest, or turn it to heat, or howsoever he change copy, he can no ways quit himself well of it.

Qui delicate a pueritia nutrit servum suum, postea sentiet eum contumacem. Here is signified, that if a man begin too high a pitch in his favours, it doth commonly end in unkindness and unthankfulness.

Vidisti virum velocem in opere suo? coram regibus stabit, nec erit inter ignobiles. Here is observed, that of all virtues for rising to honour, quickness of despatch is the best; for superiors many times love not to have those they employ too deep or too sufficient, but ready and diligent.

Vidi cunctos viventes qui ambulant sub sole, cum adolescente secundo qui consurgit pro eo. Here is expressed that which was noted by Sylla first, and after him by Tiberius. *Plures adorant solem orientem quam occidentem vel meridianum.*

Si spiritus potestatem habentis ascenderit super te, locum tuum ne demiseris; quia curatio faciet cessare peccata maxima. Here caution is given, that upon displeasure, retiring is of all courses the unfittest; for a man leaveth things at worst, and depriveth himself of means to make them better.

Erat civitas parva, et pauci in ea viri: venit contra eam rex magnus, et vallavit eam, instruxitque munitones per gyrum, et perfecta est obsidio; inventusque est in ea vir pauper et sapiens, et liberavit eam per sapientiam suam; et nullus deinceps recordatus est huminis illius pauperis. Here the corruption of states is set forth, that esteem not virtue or merit longer than they have use of it.

Millis responsio frangit iram. Here is noted that silence or rough answer exasperateth; but an answer present and temperate pacifieth.

Iter pigrorum quasi sepes spinarum. Here is lively represented how laborious sloth proveth in the end; for when things are deferred till the last instant, and nothing prepared beforehand, every step findeth a briar or impediment, which catcheth or stoppeth.

Melior est finis orationis quam principium. Here is taxed the vanity of formal speakers, that study more about prefaces and inducements, than upon the conclusions and issues of speech.

Qui cognoscit in iudicio faciem, non bene facit; iste et pro buccella panis deseret veritatem. Here is noted, that a judge were better be a briber than a

respector of persons; for a corrupt judge offendeth not so lightly as a facile.

Vir pauper calumnians pauperes similis est imbri vehementi, in quo paratur fames. Here is expressed the extremity of necessitous extortions, figured in the ancient fable of the full and the hungry horseleech.

Fons turbatus pede, et vena corrupta, est justus cadens coram impio. Here is noted, that one judicial and exemplar iniquity in the face of the world doth trouble the fountains of justice more than many particular injuries passed over by connivance.

Qui subtrahit aliquid a patre et a matre, et dicit hoc non esse peccatum, particeps est homicidii. Here is noted that, whereas men in wronging their best friends use to extenuate their fault, as if they might presume or be bold upon them, it doth contrariwise indeed aggravate their fault, and turneth it from injury to impiety.

Noli esse amicus homini iracundo, nec ambulato cum homine furioso. Here caution is given, that in the election of our friends we do principally avoid those which are impatient, as those that will espouse us to many factions and quarrels.

Qui conturbat domum suam, possidebit ventum. Here is noted, that in domestical separations and breaches men do promise to themselves quieting of their mind and contentment; but still they are deceived of their expectation, and it turneth to wind.

Filius sapiens lætificat patrem: filius vero stultus mæstitia est matri suæ. Here is distinguished, that fathers have most comfort of the good proof of their sons; but mothers have most discomfort of their ill proof, because women have little discerning of virtue, but of fortune.

Qui celat delictum, quærit amicitiam; sed qui altero sermone repetit, separat fœderatos. Here caution is given, that reconciliation is better managed by an amnesty, and passing over that which is past, than by apologies and excuses.

In omni opere bono erit abundantia; ubi autem verba sunt plurima, ibi frequenter egestas. Here is noted, that words and discourse aboundeth most where there is idleness and want.

Primus in sua causa justus: sed venit altera pars, et inquiret in eum. Here is observed, that in all causes the first tale possesseth much; in sort, that the prejudice thereby wrought will be hardly removed, except some abuse or falsity in the information be detected.

Verba bilinguis quasi simplicia, et ipsa perveniunt ad interiora ventris. Here is distinguished, that flattery and insinuation, which seemeth set and artificial, sinketh not far; but that entereth deep which hath show of nature, liberty, and simplicity.

Qui erudit derisorem, ipse sibi injuriam facit; et qui arguit impium, sibi maculam generat. Here caution is given how we tender reprehension to arrogant and scornful natures, whose manner is to esteem it for contumely, and accordingly to return it.

Da sapienti occasionem, et addetur ei sapientia. Here is distinguished the wisdom brought into habit, and that which is but verbal and swimming only in conceit; for the one upon the occasion presented is quickened and redoubled, the other is amazed and confused.

Quomodo in aquis resplendent vultus prospicientium, sic corda hominum manifesta sunt prudentibus. Here the mind of a wise man is compared to a glass, wherein the images of all diversity of natures and customs are represented; from which representation proceedeth that application,

“Qui sapit, innumeris moribus aptus erit.”

(7) Thus have I stayed somewhat longer upon these sentences politic of Solomon than is agreeable to the proportion of an example; led with a desire to give authority to this part of knowledge, which I noted as deficient, by so

excellent a precedent; and have also attended them with brief observations, such as to my understanding offer no violence to the sense, though I know they may be applied to a more divine use: but it is allowed, even in divinity, that some interpretations, yea, and some writings, have more of the eagle than others; but taking them as instructions for life, they might have received large discourse, if I would have broken them and illustrated them by deducements and examples.

(8) Neither was this in use only with the Hebrews, but it is generally to be found in the wisdom of the more ancient times; that as men found out any observation that they thought was good for life, they would gather it and express it in parable or aphorism or fable. But for fables, they were vicegerents and supplies where examples failed: now that the times abound with history, the aim is better when the mark is alive. And therefore the form of writing which of all others is fittest for this variable argument of negotiation and occasions is that which Machiavel chose wisely and aptly for government; namely, discourse upon histories or examples. For knowledge drawn freshly and in our view out of particulars, knoweth the way best to particulars again. And it hath much greater life for practice when the discourse attendeth upon the example, than when the example attendeth upon the discourse. For this is no point of order, as it seemeth at first, but of substance. For when the example is the ground, being set down in a history at large, it is set down with all circumstances, which may sometimes control the discourse thereupon made, and sometimes supply it, as a very pattern for action; whereas the examples alleged for the discourse's sake are cited succinctly, and without particularity, and carry a servile aspect towards the discourse which they are brought in to make good.

(9) But this difference is not amiss to be remembered, that as history of times is the best ground for discourse of government, such as Machiavel handleth, so histories of lives is the most popular for discourse of business, because it is more conversant in private actions. Nay, there is a ground of discourse for this purpose fitter than them both, which is discourse upon letters, such as are wise and weighty, as many are of Cicero *ad Atticum*, and others. For letters have a great and more particular representation of business than either chronicles or lives. Thus have we spoken both of the matter and form of this

part of civil knowledge, touching negotiation, which we note to be deficient.

(10) But yet there is another part of this part, which differeth as much from that whereof we have spoken as *sapere* and *sibi sapere*, the one moving as it were to the circumference, the other to the centre. For there is a wisdom of counsel, and again there is a wisdom of pressing a man's own fortune; and they do sometimes meet, and often sever. For many are wise in their own ways that are weak for government or counsel; like ants, which is a wise creature for itself, but very hurtful for the garden. This wisdom the Romans did take much knowledge of: *Nam pol sapiens* (saith the comical poet) *fingit fortunam sibi*; and it grew to an adage, *Faber quisque fortunæ propriæ*; and Livy attributed it to Cato the first, *In hoc viro tanta vis animi et ingenii inerat, ut quocunque loco natus esset sibi ipse fortunam facturum videretur*.

(11) This conceit or position, if it be too much declared and professed, hath been thought a thing impolitic and unlucky, as was observed in Timotheus the Athenian, who, having done many great services to the state in his government, and giving an account thereof to the people as the manner was, did conclude every particular with this clause, "And in this fortune had no part." And it came so to pass, that he never prospered in anything he took in hand afterwards. For this is too high and too arrogant, savouring of that which Ezekiel saith of Pharaoh, *Dicis, Fluvius est deus et ego feci memet ipsum*; or of that which another prophet speaketh, that men offer sacrifices to their nets and snares; and that which the poet expresseth,

"*Dextra mihi Deus, et telum quod missile libro,
Nunc adsint!*"

For these confidences were ever unhallowed, and unblessed; and, therefore, those that were great politiques indeed ever ascribed their successes to their felicity and not to their skill or virtue. For so Sylla surnamed himself Felix, not Magnus. So Cæsar said to the master of the ship, *Cæsarem portas et fortunam ejus*.

(12) But yet, nevertheless, these positions, *Faber quisque fortunæ suæ: Sapiens dominabitur astris: In via virtuti null est via*, and the like, being taken and used as spurs to industry, and not as stirrups to insolency, rather for resolution than for the presumption or outward declaration, have been ever thought sound and good; and are no question imprinted in the greatest minds, who are so sensible of this opinion as they can scarce contain it within. As we see in Augustus Cæsar (who was rather diverse from his uncle than inferior in virtue), how when he died he desired his friends about him to give him a *plaudite*, as if he were conscious to himself that he had played his part well upon the stage. This part of knowledge we do report also as deficient; not but that it is practised too much, but it hath not been reduced to writing. And, therefore, lest it should seem to any that it is not comprehensible by axiom, it is requisite, as we did in the former, that we set down some heads or passages of it.

(13) Wherein it may appear at the first a new and unwonted argument to teach men how to raise and make their fortune; a doctrine wherein every man perchance will be ready to yield himself a disciple, till he see the difficulty: for fortune layeth as heavy impositions as virtue; and it is as hard and severe a thing to be a true politique, as to be truly moral. But the handling hereof concerneth learning greatly, both in honour and in substance. In honour, because pragmatik men may not go away with an opinion that learning is like a lark, that can mount and sing, and please herself, and nothing else; but may know that she holdeth as well of the hawk, that can soar aloft, and can also descend and strike upon the prey. In substance, because it is the perfect law of inquiry of truth, that nothing be in the globe of matter, which should not be likewise in the globe of crystal or form; that is, that there be not anything in being and action which should not be drawn and collected into contemplation and doctrine. Neither doth learning admire or esteem of this architecture of fortune otherwise than as of an inferior work, for no man's fortune can be an end worthy of his being, and many times the worthiest men do abandon their fortune willingly for better respects: but nevertheless fortune as an organ of virtue and merit deserveth the consideration.

(14) First, therefore, the precept which I conceive to be most summary towards the prevailing in fortune, is to obtain that window which Momus did

require; who seeing in the frame of man's heart such angles and recesses, found fault there was not a window to look into them; that is, to procure good informations of particulars touching persons, their natures, their desires and ends, their customs and fashions, their helps and advantages, and whereby they chiefly stand, so again their weaknesses and disadvantages, and where they lie most open and obnoxious, their friends, factions, dependences; and again their opposites, enviers, competitors, their moods and times, *Sola viri molles aditus et tempora noras*; their principles, rules, and observations, and the like: and this not only of persons but of actions; what are on foot from time to time, and how they are conducted, favoured, opposed, and how they import, and the like. For the knowledge of present actions is not only material in itself, but without it also the knowledge of persons is very erroneous: for men change with the actions; and whilst they are in pursuit they are one, and when they return to their nature they are another. These informations of particulars, touching persons and actions, are as the minor propositions in every active syllogism; for no excellency of observations (which are as the major propositions) can suffice to ground a conclusion, if there be error and mistaking in the minors.

(15) That this knowledge is possible, Solomon is our surety, who saith, *Consilium in corde viri tanquam aqua profunda; sed vir prudens exhauriet illud*. And although the knowledge itself falleth not under precept because it is of individuals, yet the instructions for the obtaining of it may.

(16) We will begin, therefore, with this precept, according to the ancient opinion, that the sinews of wisdom are slowness of belief and distrust; that more trust be given to countenances and deeds than to words; and in words rather to sudden passages and surprised words than to set and purposed words. Neither let that be feared which is said, *Fronti nulla fides*, which is meant of a general outward behaviour, and not of the private and subtle motions and labours of the countenance and gesture; which, as Q. Cicero elegantly saith, is *Animi janua*, "the gate of the mind." None more close than Tiberius, and yet Tacitus saith of Gallus, *Etenim vultu offensionem conjectaverat*. So again, noting the differing character and manner of his commending Germanicus and Drusus in the Senate, he saith, touching his fashion wherein he carried his speech of Germanicus, thus: *Magis in speciem*

adornatis verbis, quam ut penitus sentire crederetur; but of Drusus thus: *Paucioribus sed intentior, et fida oratione*; and in another place, speaking of his character of speech when he did anything that was gracious and popular, he saith, “That in other things he was *velut eluctantium verborum*,” but then again, *solutius loquebatur quando subveniret*. So that there is no such artificer of dissimulation, nor no such commanded countenance (*vultus jussus*), that can sever from a feigned tale some of these fashions, either a more slight and careless fashion, or more set and formal, or more tedious and wandering, or coming from a man more drily and hardly.

(17) Neither are deeds such assured pledges as that they may be trusted without a judicious consideration of their magnitude and nature: *Fraus sibi in parvis fidem præstruit ut majore emolumento fallat*; and the Italian thinketh himself upon the point to be bought and sold, when he is better used than he was wont to be without manifest cause. For small favours, they do but lull men to sleep, both as to caution and as to industry; and are, as Demosthenes calleth them, *Alimenta socordiae*. So again we see how false the nature of some deeds are, in that particular which Mutianus practised upon Antonius Primus, upon that hollow and unfaithful reconcilement which was made between them; whereupon Mutianus advanced many of the friends of Antonius, *Simul amicis ejus præfecturas et tribunatus largitur*: wherein, under pretence to strengthen him, he did desolate him, and won from him his dependents.

(18) As for words, though they be like waters to physicians, full of flattery and uncertainty, yet they are not to be despised specially with the advantage of passion and affection. For so we see Tiberius, upon a stinging and incensing speech of Agrippina, came a step forth of his dissimulation when he said, “You are hurt because you do not reign;” of which Tacitus saith, *Audita hæc raram occulti pectoris vocem elicuere: correptamque Græco versu admonuit, ideo lædi quia non regnaret*. And, therefore, the poet doth elegantly call passions tortures that urge men to confess their secrets:-

“Vino torus et ira.”

And experience showeth there are few men so true to themselves and so settled but that, sometimes upon heat, sometimes upon bravery, sometimes upon kindness, sometimes upon trouble of mind and weakness, they open themselves; specially if they be put to it with a counter-dissimulation, according to the proverb of Spain, *Di mentira, y sacar as verdad*: “Tell a lie and find a truth.”

(19) As for the knowing of men which is at second hand from reports: men’s weaknesses and faults are best known from their enemies, their virtues and abilities from their friends, their customs and times from their servants, their conceits and opinions from their familiar friends, with whom they discourse most. General fame is light, and the opinions conceived by superiors or equals are deceitful; for to such men are more masked: *Verior fama e domesticis emanat*.

(20) But the soundest disclosing and expounding of men is by their natures and ends, wherein the weakest sort of men are best interpreted by their natures, and the wisest by their ends. For it was both pleasantly and wisely said (though I think very untruly) by a nuncio of the Pope, returning from a certain nation where he served as lidger; whose opinion being asked touching the appointment of one to go in his place, he wished that in any case they did not send one that was too wise; because no very wise man would ever imagine what they in that country were like to do. And certainly it is an error frequent for men to shoot over, and to suppose deeper ends and more compass reaches than are: the Italian proverb being elegant, and for the most part true:-

“Di danari, di senno, e di fede,
C’è ne manco che non credi.”

“There is commonly less money, less wisdom, and less good faith than men do account upon.”

(21) But princes, upon a far other reason, are best interpreted by their natures, and private persons by their ends. For princes being at the top of human desires, they have for the most part no particular ends whereto they aspire, by distance from which a man might take measure and scale of the rest of their actions and desires; which is one of the causes that maketh their hearts more inscrutable. Neither is it sufficient to inform ourselves in men's ends and natures of the variety of them only, but also of the predominancy, what humour reigneth most, and what end is principally sought. For so we see, when Tigellinus saw himself outstripped by Petronius Turpilianus in Nero's humours of pleasures, *metus ejus rimatur*, he wrought upon Nero's fears, whereby he broke the other's neck.

(22) But to all this part of inquiry the most compendious way resteth in three things; the first, to have general acquaintance and inwardness with those which have general acquaintance and look most into the world; and specially according to the diversity of business, and the diversity of persons, to have privacy and conversation with some one friend at least which is perfect and well-intelligenced in every several kind. The second is to keep a good mediocrity in liberty of speech and secrecy; in most things liberty; secrecy where it importeth; for liberty of speech inviteth and provoketh liberty to be used again, and so bringeth much to a man's knowledge; and secrecy on the other side induceth trust and inwardness. The last is the reducing of a man's self to this watchful and serene habit, as to make account and purpose, in every conference and action, as well to observe as to act. For as Epictetus would have a philosopher in every particular action to say to himself, *Et hoc volo, et etiam institutum servare*; so a politic man in everything should say to himself, *Et hoc volo, ac etiam aliquid addiscere*. I have stayed the longer upon this precept of obtaining good information because it is a main part by itself, which answereth to all the rest. But, above all things, caution must be taken that men have a good stay and hold of themselves, and that this much knowing do not draw on much meddling; for nothing is more unfortunate than light and rash intermeddling in many matters. So that this variety of knowledge tendeth in conclusion but only to this, to make a better and freer choice of those actions which may concern us, and to conduct them with the less error and the more dexterity.

(23) The second precept concerning this knowledge is, for men to take good information touching their own person, and well to understand themselves; knowing that, as St. James saith, though men look oft in a glass, yet they do suddenly forget themselves; wherein as the divine glass is the Word of God, so the politic glass is the state of the world, or times wherein we live, in the which we are to behold ourselves.

(24) For men ought to take an impartial view of their own abilities and virtues; and again of their wants and impediments; accounting these with the most, and those other with the least; and from this view and examination to frame the considerations following.

(25) First, to consider how the constitution of their nature sorteth with the general state of the times; which if they find agreeable and fit, then in all things to give themselves more scope and liberty; but if differing and dissonant, then in the whole course of their life to be more close retired, and reserved; as we see in Tiberius, who was never seen at a play, and came not into the senate in twelve of his last years; whereas Augustus Cæsar lived ever in men's eyes, which Tacitus observeth, *alia Tiberio morum via*.

(26) Secondly, to consider how their nature sorteth with professions and courses of life, and accordingly to make election, if they be free; and, if engaged, to make the departure at the first opportunity; as we see was done by Duke Valentine, that was designed by his father to a sacerdotal profession, but quitted it soon after in regard of his parts and inclination; being such, nevertheless, as a man cannot tell well whether they were worse for a prince or for a priest.

(27) Thirdly, to consider how they sort with those whom they are like to have competitors and concurrents; and to take that course wherein there is most solitude, and themselves like to be most eminent; as Cæsar Julius did, who at first was an orator or pleader; but when he saw the excellency of Cicero, Hortensius, Catulus, and others for eloquence, and saw there was no man of reputation for the wars but Pompeius, upon whom the state was forced to rely, he forsook his course begun towards a civil and popular greatness, and transferred his designs to a martial greatness.

(28) Fourthly, in the choice of their friends and dependents, to proceed according to the composition of their own nature; as we may see in Cæsar, all whose friends and followers were men active and effectual, but not solemn, or of reputation.

(29) Fifthly, to take special heed how they guide themselves by examples, in thinking they can do as they see others do; whereas perhaps their natures and carriages are far differing. In which error it seemeth Pompey was, of whom Cicero saith that he was wont often to say, *Sylla potuit, ego non potero?* Wherein he was much abused, the natures and proceedings of himself and his example being the unlikeliest in the world; the one being fierce, violent, and pressing the fact; the other solemn, and full of majesty and circumstance, and therefore the less effectual.

But this precept touching the politic knowledge of ourselves hath many other branches, whereupon we cannot insist.

(30) Next to the well understanding and discerning of a man's self, there followeth the well opening and revealing a man's self; wherein we see nothing more usual than for the more able man to make the less show. For there is a great advantage in the well setting forth of a man's virtues, fortunes, merits; and again, in the artificial covering of a man's weaknesses, defects, disgraces; staying upon the one, sliding from the other; cherishing the one by circumstances, gracing the other by exposition, and the like. Wherein we see what Tacitus saith of Mutianus, who was the greatest politique of his time, *Omnium quæ dixerat feceratque arte quadam ostentator*, which requireth indeed some art, lest it turn tedious and arrogant; but yet so, as ostentation (though it be to the first degree of vanity) seemeth to me rather a vice in manners than in policy; for as it is said, *Audacter calumniare, semper aliquid hæret*; so, except it be in a ridiculous degree of deformity, *Audacter te vendita, semper aliquid hæret*. For it will stick with the more ignorant and inferior sort of men, though men of wisdom and rank do smile at it and despise it; and yet the authority won with many doth countervail the disdain of a few. But if it be carried with decency and government, as with a natural, pleasant, and ingenious fashion; or at times when it is mixed with some peril

and unsafety (as in military persons); or at times when others are most envied; or with easy and careless passage to it and from it, without dwelling too long, or being too serious; or with an equal freedom of taxing a man's self, as well as gracing himself; or by occasion of repelling or putting down others' injury or insolency; it doth greatly add to reputation: and surely not a few solid natures, that want this ventosity and cannot sail in the height of the winds, are not without some prejudice and disadvantage by their moderation.

(31) But for these flourishes and enhancements of virtue, as they are not perchance unnecessary, so it is at least necessary that virtue be not disvalued and embased under the just price, which is done in three manners - by offering and obtruding a man's self, wherein men think he is rewarded when he is accepted; by doing too much, which will not give that which is well done leave to settle, and in the end induceth satiety; and by finding too soon the fruit of a man's virtue, in commendation, applause, honour, favour; wherein if a man be pleased with a little, let him hear what is truly said: *Cave ne insuetus rebus majoribus videaris, si hæc te res parva sicuti magna delectat.*

(32) But the covering of defects is of no less importance than the valuing of good parts; which may be done likewise in three manners - by caution, by colour, and by confidence. Caution is when men do ingeniously and discreetly avoid to be put into those things for which they are not proper; whereas contrariwise bold and unquiet spirits will thrust themselves into matters without difference, and so publish and proclaim all their wants. Colour is when men make a way for themselves to have a construction made of their faults or wants, as proceeding from a better cause or intended for some other purpose. For of the one it is well said,

“Sæpe latet vitium proximitate boni,”

and therefore whatsoever want a man hath, he must see that he pretend the virtue that shadoweth it; as if he be dull, he must affect gravity; if a coward, mildness; and so the rest. For the second, a man must frame some probable

cause why he should not do his best, and why he should dissemble his abilities; and for that purpose must use to dissemble those abilities which are notorious in him, to give colour that his true wants are but industries and dissimulations. For confidence, it is the last but the surest remedy - namely, to depress and seem to despise whatsoever a man cannot attain; observing the good principle of the merchants, who endeavour to raise the price of their own commodities, and to beat down the price of others. But there is a confidence that passeth this other, which is to face out a man's own defects, in seeming to conceive that he is best in those things wherein he is failing; and, to help that again, to seem on the other side that he hath least opinion of himself in those things wherein he is best: like as we shall see it commonly in poets, that if they show their verses, and you except to any, they will say, "That that line cost them more labour than any of the rest;" and presently will seem to disable and suspect rather some other line, which they know well enough to be the best in the number. But above all, in this righting and helping of a man's self in his own carriage, he must take heed he show not himself dismantled and exposed to scorn and injury, by too much dulceness, goodness, and facility of nature; but show some sparkles of liberty, spirit, and edge. Which kind of fortified carriage, with a ready rescussing of a man's self from scorns, is sometimes of necessity imposed upon men by somewhat in their person or fortune; but it ever succeedeth with good felicity.

(33) Another precept of this knowledge is by all possible endeavour to frame the mind to be pliant and obedient to occasion; for nothing hindereth men's fortunes so much as this: *Idem manebat, neque idem decebat* - men are where they were, when occasions turn: and therefore to Cato, whom Livy maketh such an architect of fortune, he addeth that he had *versatile ingenium*. And thereof it cometh that these grave solemn wits, which must be like themselves and cannot make departures, have more dignity than felicity. But in some it is nature to be somewhat vicious and enwrapped, and not easy to turn. In some it is a conceit that is almost a nature, which is, that men can hardly make themselves believe that they ought to change their course, when they have found good by it in former experience. For Machiavel noted wisely how Fabius Maximus would have been temporising still, according to his old bias, when the nature of the war was altered and required hot pursuit. In some other it is want of point and penetration in their judgment, that they do

not discern when things have a period, but come in too late after the occasion; as Demosthenes compareth the people of Athens to country fellows, when they play in a fence school, that if they have a blow, then they remove their weapon to that ward, and not before. In some other it is a lothness to lose labours passed, and a conceit that they can bring about occasions to their ply; and yet in the end, when they see no other remedy, then they come to it with disadvantage; as Tarquinius, that gave for the third part of Sibylla's books the treble price, when he might at first have had all three for the simple. But from whatsoever root or cause this restiveness of mind proceedeth, it is a thing most prejudicial; and nothing is more politic than to make the wheels of our mind concentric and voluble with the wheels of fortune.

(34) Another precept of this knowledge, which hath some affinity with that we last spoke of, but with difference, is that which is well expressed, *Fatis accede deisque*, that men do not only turn with the occasions, but also run with the occasions, and not strain their credit or strength to over-hard or extreme points; but choose in their actions that which is most passable: for this will preserve men from foil, not occupy them too much about one matter, win opinion of moderation, please the most, and make a show of a perpetual felicity in all they undertake: which cannot but mightily increase reputation.

(35) Another part of this knowledge seemeth to have some repugnancy with the former two, but not as I understand it; and it is that which Demosthenes uttereth in high terms: *Et quemadmodum receptum est, ut exercitum ducat imperator, sic et a cordatis viris res ipsæ ducendæ; ut quæipsis videntur, ea gerantur, et non ipsi eventus persequi cogantur*. For if we observe we shall find two differing kinds of sufficiency in managing of business: some can make use of occasions aptly and dexterously, but plot little; some can urge and pursue their own plots well, but cannot accommodate nor take in; either of which is very imperfect without the other.

(36) Another part of this knowledge is the observing a good mediocrity in the declaring or not declaring a man's self: for although depth of secrecy, and making way (*qualis est via navis in mari*, which the French calleth *sourdes menées*, when men set things in work without opening themselves at all), be sometimes both prosperous and admirable; yet many times *dissimulatio*

errores parit, qui dissimulatorem ipsum illaqueant. And therefore we see the greatest politiques have in a natural and free manner professed their desires, rather than been reserved and disguised in them. For so we see that Lucius Sylla made a kind of profession, “that he wished all men happy or unhappy, as they stood his friends or enemies.” So Cæsar, when he went first into Gaul, made no scruple to profess “that he had rather be first in a village than second at Rome.” So again, as soon as he had begun the war, we see what Cicero saith of him, *Alter* (meaning of Cæsar) *non recusat, sed quodammodo postulat, ut (ut est) sic appelletur tyrannus.* So we may see in a letter of Cicero to Atticus, that Augustus Cæsar, in his very entrance into affairs, when he was a darling of the senate, yet in his harangues to the people would swear, *Ita parentis honores consequi liceat* (which was no less than the tyranny), save that, to help it, he would stretch forth his hand towards a statue of Cæsar’s that was erected in the place: and men laughed and wondered, and said, “Is it possible?” or, “Did you ever hear the like?” and yet thought he meant no hurt; he did it so handsomely and ingenuously. And all these were prosperous: whereas Pompey, who tended to the same ends, but in a more dark and dissembling manner as Tacitus saith of him, *Occultior non melior*, wherein Sallust concurrereth, *Ore probo, animo inverecondo*, made it his design, by infinite secret engines, to cast the state into an absolute anarchy and confusion, that the state might cast itself into his arms for necessity and protection, and so the sovereign power be put upon him, and he never seen in it: and when he had brought it (as he thought) to that point when he was chosen consul alone, as never any was, yet he could make no great matter of it, because men understood him not; but was fain in the end to go the beaten track of getting arms into his hands, by colour of the doubt of Cæsar’s designs: so tedious, casual, and unfortunate are these deep dissimulations: whereof it seemeth Tacitus made this judgment, that they were a cunning of an inferior form in regard of true policy; attributing the one to Augustus, the other to Tiberius; where, speaking of Livia, he saith, *Et cum artibus mariti simulatione filii bene composita*: for surely the continual habit of dissimulation is but a weak and sluggish cunning, and not greatly politic.

(37) Another precept of this architecture of fortune is to accustom our minds to judge of the proportion or value of things, as they conduce and are material to our particular ends; and that to do substantially and not superficially. For

we shall find the logical part (as I may term it) of some men's minds good, but the mathematical part erroneous; that is, they can well judge of consequences, but not of proportions and comparison, preferring things of show and sense before things of substance and effect. So some fall in love with access to princes, others with popular fame and applause, supposing they are things of great purchase, when in many cases they are but matters of envy, peril, and impediment. So some measure things according to the labour and difficulty or assiduity which are spent about them; and think, if they be ever moving, that they must needs advance and proceed; as Cæsar saith in a despising manner of Cato the second, when he describeth how laborious and indefatigable he was to no great purpose, *Hæc omnia magno studio agebat*. So in most things men are ready to abuse themselves in thinking the greatest means to be best, when it should be the fittest.

(38) As for the true marshalling of men's pursuits towards their fortune, as they are more or less material, I hold them to stand thus. First the amendment of their own minds. For the removal of the impediments of the mind will sooner clear the passages of fortune than the obtaining fortune will remove the impediments of the mind. In the second place I set down wealth and means; which I know most men would have placed first, because of the general use which it beareth towards all variety of occasions. But that opinion I may condemn with like reason as Machiavel doth that other, that moneys were the sinews of the wars; whereas (saith he) the true sinews of the wars are the sinews of men's arms, that is, a valiant, populous, and military nation: and he voucheth aptly the authority of Solon, who, when Cræsus showed him his treasury of gold, said to him, that if another came that had better iron, he would be master of his gold. In like manner it may be truly affirmed that it is not moneys that are the sinews of fortune, but it is the sinews and steel of men's minds, wit, courage, audacity, resolution, temper, industry, and the like. In the third place I set down reputation, because of the peremptory tides and currents it hath; which, if they be not taken in their due time, are seldom recovered, it being extreme hard to play an after-game of reputation. And lastly I place honour, which is more easily won by any of the other three, much more by all, than any of them can be purchased by honour. To conclude this precept, as there is order and priority in matter, so is there in time, the preposterous placing whereof is one of the commonest errors: while

men fly to their ends when they should intend their beginnings, and do not take things in order of time as they come on, but marshal them according to greatness and not according to instance; not observing the good precept, *Quod nunc instat agamus*.

(39) Another precept of this knowledge is not to embrace any matters which do occupy too great a quantity of time, but to have that sounding in a man's ears, *Sed fugit interea fugit irreparabile tempus*: and that is the cause why those which take their course of rising by professions of burden, as lawyers, orators, painful divines, and the like, are not commonly so politic for their own fortune, otherwise than in their ordinary way, because they want time to learn particulars, to wait occasions, and to devise plots.

(40) Another precept of this knowledge is to imitate nature, which doth nothing in vain; which surely a man may do if he do well interlace his business, and bend not his mind too much upon that which he principally intendeth. For a man ought in every particular action so to carry the motions of his mind, and so to have one thing under another, as if he cannot have that he seeketh in the best degree, yet to have it in a second, or so in a third; and if he can have no part of that which he purposed, yet to turn the use of it to somewhat else; and if he cannot make anything of it for the present, yet to make it as a seed of somewhat in time to come; and if he can contrive no effect or substance from it, yet to win some good opinion by it, or the like. So that he should exact an account of himself of every action, to reap somewhat, and not to stand amazed and confused if he fail of that he chiefly meant: for nothing is more impolitic than to mind actions wholly one by one. For he that doth so loseth infinite occasions which intervene, and are many times more proper and propitious for somewhat that he shall need afterwards, than for that which he urgeth for the present; and therefore men must be perfect in that rule, *Hæc oportet facere, et illa non imittere*.

(41) Another precept of this knowledge is, not to engage a man's self peremptorily in anything, though it seem not liable to accident; but ever to have a window to fly out at, or a way to retire: following the wisdom in the ancient fable of the two frogs, which consulted when their plash was dry whither they should go; and the one moved to go down into a pit, because it

was not likely the water would dry there; but the other answered, “True, but if it do, how shall we get out again?”

(42) Another precept of this knowledge is that ancient precept of Bias, construed not to any point of perfidiousness, but to caution and moderation, *Et ama tanquam inimicus futurus et odi tanquam amaturus*. For it utterly betrayeth all utility for men to embark themselves too far into unfortunate friendships, troublesome spleens, and childish and humorous envies or emulations.

(43) But I continue this beyond the measure of an example; led, because I would not have such knowledges, which I note as deficient, to be thought things imaginative or in the air, or an observation or two much made of, but things of bulk and mass, whereof an end is more hardly made than a beginning. It must be likewise conceived, that in these points which I mention and set down, they are far from complete tractates of them, but only as small pieces for patterns. And lastly, no man I suppose will think that I mean fortunes are not obtained without all this ado; for I know they come tumbling into some men’s laps; and a number obtain good fortunes by diligence in a plain way, little intermeddling, and keeping themselves from gross errors.

(44) But as Cicero, when he setteth down an idea of a perfect orator, doth not mean that every pleader should be such; and so likewise, when a prince or a courtier hath been described by such as have handled those subjects, the mould hath used to be made according to the perfection of the art, and not according to common practice: so I understand it, that it ought to be done in the description of a politic man, I mean politic for his own fortune.

(45) But it must be remembered all this while, that the precepts which we have set down are of that kind which may be counted and called *Bonæ Artes*. As for evil arts, if a man would set down for himself that principle of Machiavel, “That a man seek not to attain virtue itself, but the appearance only thereof; because the credit of virtue is a help, but the use of it is cumber:” or that other of his principles, “That he presuppose that men are not fitly to be wrought otherwise but by fear; and therefore that he seek to have

every man obnoxious, low, and in straits,” which the Italians call *seminar spine*, to sow thorns: or that other principle, contained in the verse which Cicero citeth, *Cadant amici, dummodo inimici intercidant*, as the triumvirs, which sold every one to other the lives of their friends for the deaths of their enemies: or that other protestation of L. Catilina, to set on fire and trouble states, to the end to fish in droumy waters, and to unwrap their fortunes, *Ego si quid in fortunis meis excitatum sit incendium, id non aqua sed ruina restinguam*: or that other principle of Lysander, “That children are to be deceived with comfits, and men with oaths:” and the like evil and corrupt positions, whereof (as in all things) there are more in number than of the good: certainly with these dispensations from the laws of charity and integrity, the pressing of a man’s fortune may be more hasty and compendious. But it is in life as it is in ways, the shortest way is commonly the foulest, and surely the fairer way is not much about.

(46) But men, if they be in their own power, and do bear and sustain themselves, and be not carried away with a whirlwind or tempest of ambition, ought in the pursuit of their own fortune to set before their eyes not only that general map of the world, “That all things are vanity and vexation of spirit,” but many other more particular cards and directions: chiefly that, that being without well-being is a curse, and the greater being the greater curse; and that all virtue is most rewarded and all wickedness most punished in itself: according as the poet saith excellently:

“Quæ vobis, quæ digna, viri pro laudibus istis
Præmia posse rear solvi? pulcherrima primum
Dii *moresque* dabunt vestri.”

And so of the contrary. And secondly they ought to look up to the Eternal Providence and Divine Judgment, which often subverteth the wisdom of evil plots and imaginations, according to that scripture, “He hath conceived mischief, and shall bring forth a vain thing.” And although men should refrain themselves from injury and evil arts, yet this incessant and Sabbathless pursuit of a man’s fortune leaveth not tribute which we owe to

God of our time; who (we see) demandeth a tenth of our substance, and a seventh, which is more strict, of our time: and it is to small purpose to have an erected face towards heaven, and a perpetual grovelling spirit upon earth, eating dust as doth the serpent, *Atque affigit humo divinæ particulam auræ*. And if any man flatter himself that he will employ his fortune well, though he should obtain it ill, as was said concerning Augustus Cæsar, and after of Septimius Severus, “That either they should never have been born, or else they should never have died,” they did so much mischief in the pursuit and ascent of their greatness, and so much good when they were established; yet these compensations and satisfactions are good to be used, but never good to be purposed. And lastly, it is not amiss for men, in their race towards their fortune, to cool themselves a little with that conceit which is elegantly expressed by the Emperor Charles V., in his instructions to the king his son, “That fortune hath somewhat of the nature of a woman, that if she be too much wooed she is the farther off.” But this last is but a remedy for those whose tastes are corrupted: let men rather build upon that foundation which is as a corner-stone of divinity and philosophy, wherein they join close, namely that same *Primum quærite*. For divinity saith, *Primum quærite regnum Dei, et ista omnia adjicientur vobis*: and philosophy saith, *Primum quærite bona animi; cætera aut aderunt, aut non oberunt*. And although the human foundation hath somewhat of the sands, as we see in M. Brutus, when he broke forth into that speech,

“Te colui (Virtus) ut rem; ast tu nomen inane es;”

yet the divine foundation is upon the rock. But this may serve for a taste of that knowledge which I noted as deficient.

(47) Concerning government, it is a part of knowledge secret and retired in both these respects in which things are deemed secret; for some things are secret because they are hard to know, and some because they are not fit to utter. We see all governments are obscure and invisible:

“Totamque infusa per artus
Mens agitat molem, et magno se corpore miscet.”

Such is the description of governments. We see the government of God over the world is hidden, insomuch as it seemeth to participate of much irregularity and confusion. The government of the soul in moving the body is inward and profound, and the passages thereof hardly to be reduced to demonstration. Again, the wisdom of antiquity (the shadows whereof are in the poets) in the description of torments and pains, next unto the crime of rebellion, which was the giants’ offence, doth detest the offence of futility, as in Sisyphus and Tantalus. But this was meant of particulars: nevertheless even unto the general rules and discourses of policy and government there is due a reverent and reserved handling.

(48) But contrariwise in the governors towards the governed, all things ought as far as the frailty of man permitteth to be manifest and revealed. For so it is expressed in the Scriptures touching the government of God, that this globe, which seemeth to us a dark and shady body, is in the view of God as crystal: *Et in conspectu sedis tanquam mare vitreum simile crystallo*. So unto princes and states, and specially towards wise senates and councils, the natures and dispositions of the people, their conditions and necessities, their factions and combinations, their animosities and discontents, ought to be, in regard of the variety of their intelligences, the wisdom of their observations, and the height of their station where they keep sentinel, in great part clear and transparent. Wherefore, considering that I write to a king that is a master of this science, and is so well assisted, I think it decent to pass over this part in silence, as willing to obtain the certificate which one of the ancient philosophers aspired unto; who being silent, when others contended to make demonstration of their abilities by speech, desired it might be certified for his part, “That there was one that knew how to hold his peace.”

(49) Notwithstanding, for the more public part of government, which is laws, I think good to note only one deficiency; which is, that all those which have written of laws have written either as philosophers or as lawyers, and none as statesmen. As for the philosophers, they make imaginary laws for imaginary

commonwealths, and their discourses are as the stars, which give little light because they are so high. For the lawyers, they write according to the states where they live what is received law, and not what ought to be law; for the wisdom of a law-maker is one, and of a lawyer is another. For there are in nature certain fountains of justice whence all civil laws are derived but as streams; and like as waters do take tinctures and tastes from the soils through which they run, so do civil laws vary according to the regions and governments where they are planted, though they proceed from the same fountains. Again, the wisdom of a law-maker consisteth not only in a platform of justice, but in the application thereof; taking into consideration by what means laws may be made certain, and what are the causes and remedies of the doubtfulness and uncertainty of law; by what means laws may be made apt and easy to be executed, and what are the impediments and remedies in the execution of laws; what influence laws touching private right of *meum* and *tuum* have into the public state, and how they may be made apt and agreeable; how laws are to be penned and delivered, whether in texts or in Acts, brief or large, with preambles or without; how they are to be pruned and reformed from time to time, and what is the best means to keep them from being too vast in volume, or too full of multiplicity and crossness; how they are to be expounded, when upon causes emergent and judicially discussed, and when upon responses and conferences touching general points or questions; how they are to be pressed, rigorously or tenderly; how they are to be mitigated by equity and good conscience, and whether discretion and strict law are to be mingled in the same courts, or kept apart in several courts; again, how the practice, profession, and erudition of law is to be censured and governed; and many other points touching the administration and (as I may term it) animation of laws. Upon which I insist the less, because I purpose (if God give me leave), having begun a work of this nature in aphorisms, to propound it hereafter, noting it in the meantime for deficient.

(50) And for your Majesty's laws of England, I could say much of their dignity, and somewhat of their defect; but they cannot but excel the civil laws in fitness for the government, for the civil law was *non hos quæsitum munus in usus*; it was not made for the countries which it governeth. Hereof I cease to speak because I will not intermingle matter of action with matter of general learning.

XXIV. Thus have I concluded this portion of learning touching civil knowledge; and with civil knowledge have concluded human philosophy; and with human philosophy, philosophy in general. And being now at some pause, looking back into that I have passed through, this writing seemeth to me (*si nunquam fallit imago*), as far as a man can judge of his own work, not much better than that noise or sound which musicians make while they are in tuning their instruments, which is nothing pleasant to hear, but yet is a cause why the music is sweeter afterwards. So have I been content to tune the instruments of the Muses, that they may play that have better hands. And surely, when I set before me the condition of these times, in which learning hath made her third visitation or circuit in all the qualities thereof; as the excellency and vivacity of the wits of this age; the noble helps and lights which we have by the travails of ancient writers; the art of printing, which communicateth books to men of all fortunes; the openness of the world by navigation, which hath disclosed multitudes of experiments, and a mass of natural history; the leisure wherewith these times abound, not employing men so generally in civil business, as the states of Græcia did, in respect of their popularity, and the state of Rome, in respect of the greatness of their monarchy; the present disposition of these times at this instant to peace; the consumption of all that ever can be said in controversies of religion, which have so much diverted men from other sciences; the perfection of your Majesty's learning, which as a phoenix may call whole volleys of wits to follow you; and the inseparable propriety of time, which is ever more and more to disclose truth; I cannot but be raised to this persuasion, that this third period of time will far surpass that of the Grecian and Roman learning; only if men will know their own strength and their own weakness both; and take, one from the other, light of invention, and not fire of contradiction; and esteem of the inquisition of truth as of an enterprise, and not as of a quality or ornament; and employ wit and magnificence to things of worth and excellency, and not to things vulgar and of popular estimation. As for my labours, if any man shall please himself or others in the reprehension of them, they shall make that ancient and patient request, *Verbera, sed audi*: let men reprehend them, so they observe and weigh them. For the appeal is lawful (though it may be it shall not be needful) from the first cogitations of men to their second, and from the nearer times to the times further off. Now let us

come to that learning, which both the former times were not so blessed as to know, sacred and inspired divinity, the Sabbath and port of all men's labours and peregrinations.

XXV. (1) The prerogative of God extendeth as well to the reason as to the will of man: so that as we are to obey His law, though we find a reluctance in our will, so we are to believe His word, though we find a reluctance in our reason. For if we believe only that which is agreeable to our sense we give consent to the matter, and not to the author; which is no more than we would do towards a suspected and discredited witness; but that faith which was accounted to Abraham for righteousness was of such a point as whereat Sarah laughed, who therein was an image of natural reason.

(2) Howbeit (if we will truly consider of it) more worthy it is to believe than to know as we now know. For in knowledge man's mind suffereth from sense: but in belief it suffereth from spirit, such one as it holdeth for more authorised than itself and so suffereth from the worthier agent. Otherwise it is of the state of man glorified; for then faith shall cease, and we shall know as we are known.

(3) Wherefore we conclude that sacred theology (which in our idiom we call divinity) is grounded only upon the word and oracle of God, and not upon the light of nature: for it is written, *Cæli enarrant gloriam Dei*; but it is not written, *Cæli enarrant voluntatem Dei*: but of that it is said, *Ad legem et testimonium: si non fecerint secundum verbum istud, &c.* This holdeth not only in those points of faith which concern the great mysteries of the Deity, of the creation, of the redemption, but likewise those which concern the law moral, truly interpreted: "Love your enemies: do good to them that hate you; be like to your heavenly Father, that suffereth His rain to fall upon the just and unjust." To this it ought to be applauded, *Nec vox hominem sonat*: it is a voice beyond the light of nature. So we see the heathen poets, when they fall upon a libertine passion, do still expostulate with laws and moralities, as if they were opposite and malignant to nature: *Et quod natura remittit, invida jura negant*. So said Dendamis the Indian unto Alexander's messengers, that he had heard somewhat of Pythagoras, and some other of the wise men of Græcia, and that he held them for excellent men: but that they had a fault,

which was that they had in too great reverence and veneration a thing they called law and manners. So it must be confessed that a great part of the law moral is of that perfection whereunto the light of nature cannot aspire: how then is it that man is said to have, by the light and law of nature, some notions and conceits of virtue and vice, justice and wrong, good and evil? Thus, because the light of nature is used in two several senses: the one, that which springeth from reason, sense, induction, argument, according to the laws of heaven and earth; the other, that which is imprinted upon the spirit of man by an inward instinct, according to the law of conscience, which is a sparkle of the purity of his first estate: in which latter sense only he is participant of some light and discerning touching the perfection of the moral law; but how? sufficient to check the vice but not to inform the duty. So then the doctrine of religion, as well moral as mystical, is not to be attained but by inspiration and revelation from God.

(4) The use notwithstanding of reason in spiritual things, and the latitude thereof, is very great and general: for it is not for nothing that the apostle calleth religion “our reasonable service of God;” insomuch as the very ceremonies and figures of the old law were full of reason and signification, much more than the ceremonies of idolatry and magic, that are full of non-significants and surd characters. But most specially the Christian faith, as in all things so in this, deserveth to be highly magnified; holding and preserving the golden mediocrity in this point between the law of the heathen and the law of Mahomet, which have embraced the two extremes. For the religion of the heathen had no constant belief or confession, but left all to the liberty of agent; and the religion of Mahomet on the other side interdicteth argument altogether: the one having the very face of error, and the other of imposture; whereas the Faith doth both admit and reject disputation with difference.

(5) The use of human reason in religion is of two sorts: the former, in the conception and apprehension of the mysteries of God to us revealed; the other, in the inferring and deriving of doctrine and direction thereupon. The former extendeth to the mysteries themselves; but how? by way of illustration, and not by way of argument. The latter consisteth indeed of probation and argument. In the former we see God vouchsafeth to descend to our capacity, in the expressing of His mysteries in sort as may be sensible

unto us; and doth graft His revelations and holy doctrine upon the notions of our reason, and applieth His inspirations to open our understanding, as the form of the key to the ward of the lock. For the latter there is allowed us a use of reason and argument, secondary and respective, although not original and absolute. For after the articles and principles of religion are placed and exempted from examination of reason, it is then permitted unto us to make derivations and inferences from and according to the analogy of them, for our better direction. In nature this holdeth not; for both the principles are examinable by induction, though not by a medium or syllogism; and besides, those principles or first positions have no discordance with that reason which draweth down and deduceth the inferior positions. But yet it holdeth not in religion alone, but in many knowledges, both of greater and smaller nature, namely, wherein there are not only *posita* but *placita*; for in such there can be no use of absolute reason. We see it familiarly in games of wit, as chess, or the like. The draughts and first laws of the game are positive, but how? merely *ad placitum*, and not examinable by reason; but then how to direct our play thereupon with best advantage to win the game is artificial and rational. So in human laws there be many grounds and maxims which are *placita juris*, positive upon authority, and not upon reason, and therefore not to be disputed: but what is most just, not absolutely but relatively, and according to those maxims, that affordeth a long field of disputation. Such therefore is that secondary reason, which hath place in divinity, which is grounded upon the *placets* of God.

(6) Here therefore I note this deficiency, that there hath not been, to my understanding, sufficiently inquired and handled the true limits and use of reason in spiritual things, as a kind of divine dialectic: which for that it is not done, it seemeth to me a thing usual, by pretext of true conceiving that which is revealed, to search and mine into that which is not revealed; and by pretext of enucleating inferences and contradictories, to examine that which is positive. The one sort falling into the error of Nicodemus, demanding to have things made more sensible than it pleaseth God to reveal them, *Quomodo possit homo nasci cum sit senex?* The other sort into the error of the disciples, which were scandalised at a show of contradiction, *Quid est hoc quod dicit nobis? Modicum et non videbitis me; et iterum, modicum, et videbitis me, &c.*

(7) Upon this I have insisted the more, in regard of the great and blessed use thereof; for this point well laboured and defined of would in my judgment be an opiate to stay and bridle not only the vanity of curious speculations, wherewith the schools labour, but the fury of controversies, wherewith the Church laboureth. For it cannot but open men's eyes to see that many controversies do merely pertain to that which is either not revealed or positive; and that many others do grow upon weak and obscure inferences or derivations: which latter sort, if men would revive the blessed style of that great doctor of the Gentiles, would be carried thus, *ego, non dominus*; and again, *secundum consilium meum*, in opinions and counsels, and not in positions and oppositions. But men are now over-ready to usurp the style, *non ego, sed dominus*; and not so only, but to bind it with the thunder and denunciation of curses and anathemas, to the terror of those which have not sufficiently learned out of Solomon that "The causeless curse shall not come."

(8) Divinity hath two principal parts: the matter informed or revealed, and the nature of the information or revelation; and with the latter we will begin, because it hath most coherence with that which we have now last handled. The nature of the information consisteth of three branches: the limits of the information, the sufficiency of the information, and the acquiring or obtaining the information. Unto the limits of the information belong these considerations: how far forth particular persons continue to be inspired; how far forth the Church is inspired; and how far forth reason may be used; the last point whereof I have noted as deficient. Unto the sufficiency of the information belong two considerations: what points of religion are fundamental, and what perfective, being matter of further building and perfection upon one and the same foundation; and again, how the gradations of light according to the dispensation of times are material to the sufficiency of belief.

(9) Here again I may rather give it in advice than note it as deficient, that the points fundamental, and the points of further perfection only, ought to be with piety and wisdom distinguished; a subject tending to much like end as that I noted before; for as that other were likely to abate the number of

controversies, so this is likely to abate the heat of many of them. We see Moses when he saw the Israelite and the Egyptian fight, he did not say, “Why strive you?” but drew his sword and slew the Egyptian; but when he saw the two Israelites fight, he said, “You are brethren, why strive you?” If the point of doctrine be an Egyptian, it must be slain by the sword of the Spirit, and not reconciled; but if it be an Israelite, though in the wrong, then, “Why strive you?” We see of the fundamental points, our Saviour penneth the league thus, “He that is not with us is against us;” but of points not fundamental, thus, “He that is not against us is with us.” So we see the coat of our Saviour was entire without seam, and so is the doctrine of the Scriptures in itself; but the garment of the Church was of divers colours and yet not divided. We see the chaff may and ought to be severed from the corn in the ear, but the tares may not be pulled up from the corn in the field. So as it is a thing of great use well to define what, and of what latitude, those points are which do make men mere aliens and disincorporate from the Church of God.

(10) For the obtaining of the information, it resteth upon the true and sound interpretation of the Scriptures, which are the fountains of the water of life. The interpretations of the Scriptures are of two sorts: methodical, and solute or at large. For this divine water, which excelleth so much that of Jacob’s well, is drawn forth much in the same kind as natural water useth to be out of wells and fountains; either it is first forced up into a cistern, and from thence fetched and derived for use; or else it is drawn and received in buckets and vessels immediately where it springeth. The former sort whereof, though it seem to be the more ready, yet in my judgment is more subject to corrupt. This is that method which hath exhibited unto us the scholastical divinity; whereby divinity hath been reduced into an art, as into a cistern, and the streams of doctrine or positions fetched and derived from thence.

(11) In this men have sought three things, a summary brevity, a compacted strength, and a complete perfection; whereof the two first they fail to find, and the last they ought not to seek. For as to brevity, we see in all summary methods, while men purpose to abridge, they give cause to dilate. For the sum or abridgment by contraction becometh obscure; the obscurity requireth exposition, and the exposition is deduced into large commentaries, or into commonplaces and titles, which grow to be more vast than the original

writings, whence the sum was at first extracted. So we see the volumes of the schoolmen are greater much than the first writings of the fathers, whence the master of the sentences made his sum or collection. So in like manner the volumes of the modern doctors of the civil law exceed those of the ancient jurisconsults, of which Tribonian compiled the digest. So as this course of sums and commentaries is that which doth infallibly make the body of sciences more immense in quantity, and more base in substance.

(12) And for strength, it is true that knowledges reduced into exact methods have a show of strength, in that each part seemeth to support and sustain the other; but this is more satisfactory than substantial, like unto buildings which stand by architecture and compaction, which are more subject to ruin than those that are built more strong in their several parts, though less compacted. But it is plain that the more you recede from your grounds, the weaker do you conclude; and as in nature, the more you remove yourself from particulars, the greater peril of error you do incur; so much more in divinity, the more you recede from the Scriptures by inferences and consequences, the more weak and dilute are your positions.

(13) And as for perfection or completeness in divinity, it is not to be sought, which makes this course of artificial divinity the more suspect. For he that will reduce a knowledge into an art will make it round and uniform; but in divinity many things must be left abrupt, and concluded with this: *O altitudo sapientiæ et scientiæ Dei! quam incomprehensibilia sunt judicua ejus, et non investigabiles viæ ejus.* So again the apostle saith, *Ex parte scimus*: and to have the form of a total, where there is but matter for a part, cannot be without supplies by supposition and presumption. And therefore I conclude that the true use of these sums and methods hath place in institutions or introductions preparatory unto knowledge; but in them, or by deducement from them, to handle the main body and substance of a knowledge is in all sciences prejudicial, and in divinity dangerous.

(14) As to the interpretation of the Scriptures solute and at large, there have been divers kinds introduced and devised; some of them rather curious and unsafe than sober and warranted. Notwithstanding, thus much must be confessed, that the Scriptures, being given by inspiration and not by human

reason, do differ from all other books in the Author, which by consequence doth draw on some difference to be used by the expositor. For the Inditer of them did know four things which no man attains to know; which are - the mysteries of the kingdom of glory, the perfection of the laws of nature, the secrets of the heart of man, and the future succession of all ages. For as to the first it is said, "He that presseth into the light shall be oppressed of the glory." And again, "No man shall see My face and live." To the second, "When He prepared the heavens I was present, when by law and compass He enclosed the deep." To the third, "Neither was it needful that any should bear witness to Him of man, for He knew well what was in man." And to the last, "From the beginning are known to the Lord all His works."

(15) From the former two of these have been drawn certain senses and expositions of Scriptures, which had need be contained within the bounds of sobriety - the one anagogical, and the other philosophical. But as to the former, man is not to prevent his time: *Videmus nunc per speculum in ænigmate, tunc autem facie ad faciem*; wherein nevertheless there seemeth to be a liberty granted, as far forth as the polishing of this glass, or some moderate explication of this enigma. But to press too far into it cannot but cause a dissolution and overthrow of the spirit of man. For in the body there are three degrees of that we receive into it - aliment, medicine, and poison; whereof aliment is that which the nature of man can perfectly alter and overcome; medicine is that which is partly converted by nature, and partly converteth nature; and poison is that which worketh wholly upon nature, without that nature can in any part work upon it. So in the mind, whatsoever knowledge reason cannot at all work upon and convert is a mere intoxication, and endangereth a dissolution of the mind and understanding.

(16) But for the latter, it hath been extremely set on foot of late time by the school of Paracelsus, and some others, that have pretended to find the truth of all natural philosophy in the Scriptures; scandalising and traducing all other philosophy as heathenish and profane. But there is no such enmity between God's Word and His works; neither do they give honour to the Scriptures, as they suppose, but much embase them. For to seek heaven and earth in the Word of God, whereof it is said, "Heaven and earth shall pass, but My word shall not pass," is to seek temporary things amongst eternal: and as to seek

divinity in philosophy is to seek the living amongst the dead, so to seek philosophy in divinity is to seek the dead amongst the living: neither are the pots or lavers, whose place was in the outward part of the temple, to be sought in the holiest place of all where the ark of the testimony was seated. And again, the scope or purpose of the Spirit of God is not to express matters of nature in the Scriptures, otherwise than in passage, and for application to man's capacity and to matters moral or divine. And it is a true rule, *Auctoris aliud agentis parva auctoritas*. For it were a strange conclusion, if a man should use a similitude for ornament or illustration sake, borrowed from nature or history according to vulgar conceit, as of a basilisk, a unicorn, a centaur, a Briareus, a hydra, or the like, that therefore he must needs be thought to affirm the matter thereof positively to be true. To conclude therefore these two interpretations, the one by reduction or enigmatical, the other philosophical or physical, which have been received and pursued in imitation of the rabbins and cabalists, are to be confined with a *a noli akryn sapere, sed time*.

(17) But the two latter points, known to God and unknown to man, touching the secrets of the heart and the successions of time, doth make a just and sound difference between the manner of the exposition of the Scriptures and all other books. For it is an excellent observation which hath been made upon the answers of our Saviour Christ to many of the questions which were propounded to Him, how that they are impertinent to the state of the question demanded: the reason whereof is, because not being like man, which knows man's thoughts by his words, but knowing man's thoughts immediately, He never answered their words, but their thoughts. Much in the like manner it is with the Scriptures, which being written to the thoughts of men, and to the succession of all ages, with a foresight of all heresies, contradictions, differing estates of the Church, yea, and particularly of the elect, are not to be interpreted only according to the latitude of the proper sense of the place, and respectively towards that present occasion whereupon the words were uttered, or in precise congruity or contexture with the words before or after, or in contemplation of the principal scope of the place; but have in themselves, not only totally or collectively, but distributively in clauses and words, infinite springs and streams of doctrine to water the Church in every part. And therefore as the literal sense is, as it were, the main stream or river,

so the moral sense chiefly, and sometimes the allegorical or typical, are they whereof the Church hath most use; not that I wish men to be bold in allegories, or indulgent or light in allusions: but that I do much condemn that interpretation of the Scripture which is only after the manner as men use to interpret a profane book.

(18) In this part touching the exposition of the Scriptures, I can report no deficiency; but by way of remembrance this I will add. In perusing books of divinity I find many books of controversies, and many of commonplaces and treatises, a mass of positive divinity, as it is made an art: a number of sermons and lectures, and many prolix commentaries upon the Scriptures, with harmonies and concordances. But that form of writing in divinity which in my judgment is of all others most rich and precious is positive divinity, collected upon particular texts of Scriptures in brief observations; not dilated into commonplaces, not chasing after controversies, not reduced into method of art; a thing abounding in sermons, which will vanish, but defective in books which will remain, and a thing wherein this age excelleth. For I am persuaded, and I may speak it with an *absit invidia verbo*, and nowise in derogation of antiquity, but as in a good emulation between the vine and the olive, that if the choice and best of those observations upon texts of Scriptures which have been made dispersedly in sermons within this your Majesty's Island of Brittany by the space of these forty years and more (leaving out the largeness of exhortations and applications thereupon) had been set down in a continuance, it had been the best work in divinity which had been written since the Apostles' times.

(19) The matter informed by divinity is of two kinds: matter of belief and truth of opinion, and matter of service and adoration; which is also judged and directed by the former - the one being as the internal soul of religion, and the other as the external body thereof. And, therefore, the heathen religion was not only a worship of idols, but the whole religion was an idol in itself; for it had no soul; that is, no certainty of belief or confession: as a man may well think, considering the chief doctors of their church were the poets; and the reason was because the heathen gods were no jealous gods, but were glad to be admitted into part, as they had reason. Neither did they respect the pureness of heart, so they might have external honour and rites.

(20) But out of these two do result and issue four main branches of divinity: faith, manners, liturgy, and government. Faith containeth the doctrine of the nature of God, of the attributes of God, and of the works of God. The nature of God consisteth of three persons in unity of Godhead. The attributes of God are either common to the Deity, or respective to the persons. The works of God summary are two, that of the creation and that of the redemption; and both these works, as in total they appertain to the unity of the Godhead, so in their parts they refer to the three persons: that of the creation, in the mass of the matter, to the Father; in the disposition of the form, to the Son; and in the continuance and conservation of the being, to the Holy Spirit. So that of the redemption, in the election and counsel, to the Father; in the whole act and consummation, to the Son; and in the application, to the Holy Spirit; for by the Holy Ghost was Christ conceived in flesh, and by the Holy Ghost are the elect regenerate in spirit. This work likewise we consider either effectually, in the elect; or privately, in the reprobate; or according to appearance, in the visible Church.

(21) For manners, the doctrine thereof is contained in the law, which discloseth sin. The law itself is divided, according to the edition thereof, into the law of nature, the law moral, and the law positive; and according to the style, into negative and affirmative, prohibitions and commandments. Sin, in the matter and subject thereof, is divided according to the commandments; in the form thereof it referreth to the three persons in Deity: sins of infirmity against the Father, whose more special attribute is power; sins of ignorance against the Son, whose attribute is wisdom; and sins of malice against the Holy Ghost, whose attribute is grace or love. In the motions of it, it either moveth to the right hand or to the left; either to blind devotion or to profane and libertine transgression; either in imposing restraint where God granteth liberty, or in taking liberty where God imposeth restraint. In the degrees and progress of it, it divideth itself into thought, word, or act. And in this part I commend much the deducing of the law of God to cases of conscience; for that I take indeed to be a breaking, and not exhibiting whole of the bread of life. But that which quickeneth both these doctrines of faith and manners is the elevation and consent of the heart; whereunto appertain books of exhortation, holy meditation, Christian resolution, and the like.

(22) For the liturgy or service, it consisteth of the reciprocal acts between God and man; which, on the part of God, are the preaching of the word, and the sacraments, which are seals to the covenant, or as the visible word; and on the part of man, invocation of the name of God; and under the law, sacrifices; which were as visible prayers or confessions: but now the adoration being *in spiritu et veritate*, there remaineth only *vituli labiorum*; although the use of holy vows of thankfulness and retribution may be accounted also as sealed petitions.

(23) And for the government of the Church, it consisteth of the patrimony of the Church, the franchises of the Church, and the offices and jurisdictions of the Church, and the laws of the Church directing the whole; all which have two considerations, the one in themselves, the other how they stand compatible and agreeable to the civil estate.

(24) This matter of divinity is handled either in form of instruction of truth, or in form of confutation of falsehood. The declinations from religion, besides the privative, which is atheism and the branches thereof, are three - heresies, idolatry, and witchcraft: heresies, when we serve the true God with a false worship; idolatry, when we worship false gods, supposing them to be true; and witchcraft, when we adore false gods, knowing them to be wicked and false. For so your Majesty doth excellently well observe, that witchcraft is the height of idolatry. And yet we see though these be true degrees, Samuel teacheth us that they are all of a nature, when there is once a receding from the Word of God; for so he saith, *Quasi peccatum ariolandi est repugnare, et quasi scelus idololatriæ nolle acquiescere*.

(25) These things I have passed over so briefly because I can report no deficiency concerning them: for I can find no space or ground that lieth vacant and unsown in the matter of divinity, so diligent have men been either in sowing of good seed, or in sowing of tares.

Thus have I made as it were a small globe of the intellectual world, as truly and faithfully as I could discover; with a note and description of those parts

which seem to me not constantly occupate, or not well converted by the labour of man. In which, if I have in any point receded from that which is commonly received, it hath been with a purpose of proceeding in *melius*, and not *in aliud*; a mind of amendment and proficiency, and not of change and difference. For I could not be true and constant to the argument I handle if I were not willing to go beyond others; but yet not more willing than to have others go beyond me again: which may the better appear by this, that I have propounded my opinions naked and unarmed, not seeking to preoccupate the liberty of men's judgments by confutations. For in anything which is well set down, I am in good hope that if the first reading move an objection, the second reading will make an answer. And in those things wherein I have erred, I am sure I have not prejudiced the right by litigious arguments; which certainly have this contrary effect and operation, that they add authority to error, and destroy the authority of that which is well invented. For question is an honour and preferment to falsehood, as on the other side it is a repulse to truth. But the errors I claim and challenge to myself as mine own. The good, if any be, is due *tanquam adeps sacrificii*, to be incensed to the honour, first of the Divine Majesty, and next of your Majesty, to whom on earth I am most bounden.

Footnotes:

[\[1\]](#) Stoops in the rice and takes the speeding gold. Ovid. *Metam*, x. 667.

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