AN ORIGINAL WRITING OF

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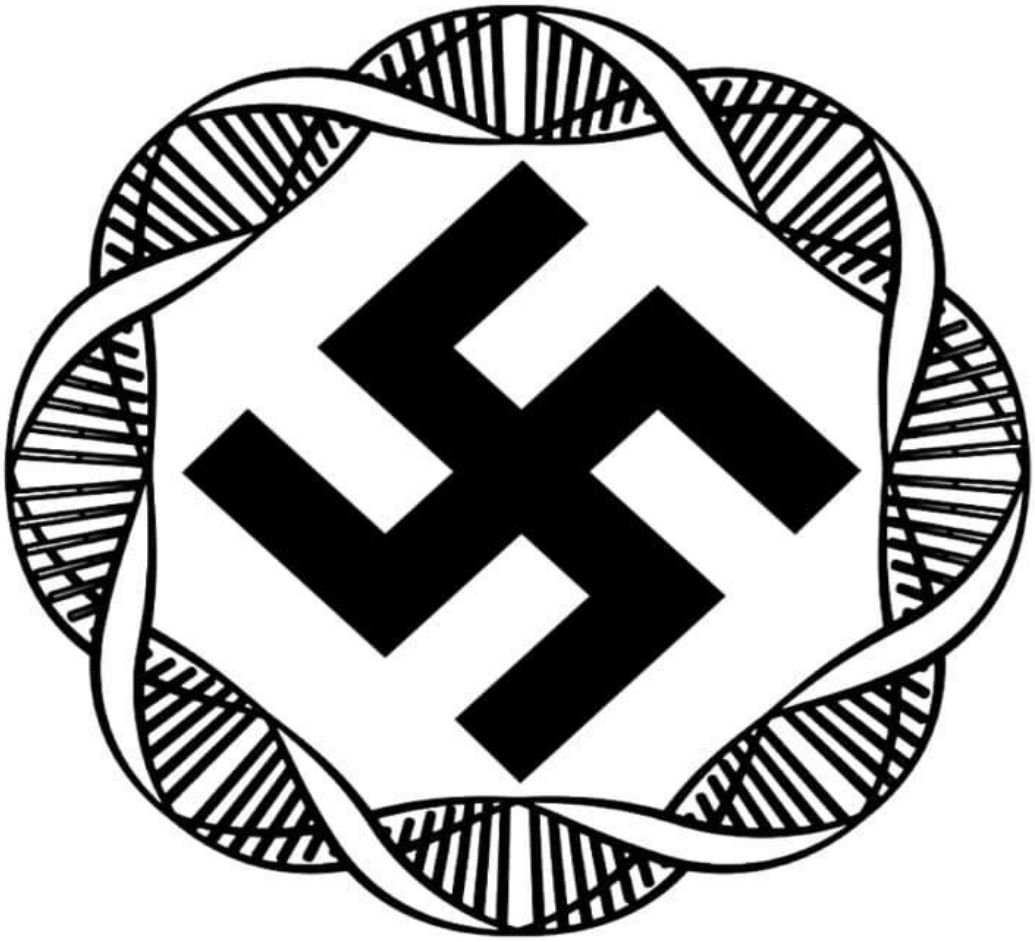


EUGENIC VISION

Book 2

By Qilêansi

The Falsehoods of Egalitarian and its Destruction.

"Equality is a lie. A myth to appease the masses. Simply look around and you will see the lie for what it is! There are those with power, those with the strength and will to lead. And there are those meant to follow – those incapable of anything but servitude and a meager, worthless existence."

The Egalitarian Mindset's main view is that any social variable is the most significant determinant of any phenotypic trait with utmost disregard and even contempt for an infinitesimal ounce of genetic-based explanation. Social variables can be described as income, resources, socioeconomic factors, and the likes. Then phenotypic traits are health, intelligence, personality, physique, any observable characteristic.

Arthur Jensen coined this vile lie as the "Sociologist Fallacy." Arthur Jensen is an Intelligence Researcher that is highly known for his constant search for the truth, and it does not matter if he gets threatened or beaten. He had significantly contributed to the knowledge about intelligence itself and the implications of that.

Nevertheless, this is a fallacy that needs to be destroyed. One could give out one example; lower income causes higher criminality. What is the problem here? Simple, the disregard of a genetic component. There is also the topic of IQ, in which it had profound predictions on most metrics of life outcomes.

Nevertheless, the Egalitarian would argue that lower-income comes from various environmental, cultural, or societal explanations. One explanation is that their childhood environment is poor, and they cannot afford the substantial level of education to get the right job for a considerable income level.

However, this is false as the mere moment that one brings up genetic-based explanations. These problems could be easily explained. It is that genetics can explain the difference in levels of income and criminality.

One of the most controversial books that explain such topics entirely is the Bell Curve by Charles Murray. It is a must-read for everybody; it is beautifully written and can be read by anyone else. One does not need any prior advanced knowledge to understand the contents of the Bell Curve. It can explain that IQ has a superior explanatory power when discussing issues within society.

The Bell Curve laid out that when one moved the average IQ of a particular sample down statistically by just 3 points, from 100 to 97, all social problems

were exacerbated: the number of women chronically dependent on welfare increased by 7%; illegitimacy increased by 8%; men interviewed in jail increased by 12%; the number of permanent high school dropouts increased by nearly 15%.

While one could further discuss IQ, it would be done so in later books. However, one could state this, IQ has a vital genetic component, and it is that IQ affects SES or Socioeconomic factors.

First, let us use the definition of gender as described by WHO or known as the World Health Organization. It is being followed as:

> "*Gender refers to the characteristics of women, men, girls and boys that are socially constructed.This includes norms, behaviours and roles associated with being a woman, man, girl or boy, as well as relationships with each other. As a social construct, gender varies from society to society and can change over time.*"

The word "Social Construct" is but the Egalitarian's favourite of them all what that term implies that a particular phenomenon is based upon societal pressures itself. It means that the reason why men act like men is because of society itself. It means that the reason why women act like women is because of society itself.

This one had ignored most of the knowledge there is about gender. It has been seen in reality that gender, again and again, is not based upon societal pressures. Even if we had not discovered such knowledge, this explanation is utmost flawed and even a downright lie. It does not explain anything at all. Why does society

want to pressure the man and the woman to act in a particular way? Why not in any way?

Then, WHO had decided to make more lies:

> "*Gender interacts with but is different from sex, which refers to the different biological and physiological characteristics of females, males and intersex persons, such as chromosomes, hormones and reproductive organs. Gender and sex are related to but different from gender identity. Gender identity refers to a person's deeply felt, internal and individual experience of gender, which may or may not correspond to the person's physiology or designated sex at birth.*"

Once again, this explanation is flawed and a lie. Gender is a psychological state because a man acted psychologically like a man, and a woman acted psychologically like a woman. How is it that one separates the psychological state from the biological state? It does not. They are the same. A man is a man, and a woman is a woman. This is but an Egalitarian trick.

Firstly, the existence of gender roles is not based upon societal pressures but instead based upon biological/genetic/evolutionary states. The reality of gender roles across humanity, arising from variation in behavioural and physical traits, is a fact, which is most perfectly explained through sexual selection.

A man is a man, and a woman is a woman because it is evolution. Evolution is the prime process visible within reality, to which we have to conform and should do so in goodwill. This thing is called gender, and the derivations from it are just

an evolutionary adaptation towards our environment and if an individual or group deviates from it. There is no doubt that they would get crushed by the reality around them.

One can say the same for the disgust towards LGBTQ. One should not use the word "Homophobia" "Transphobic," for it implies an irrational fear, which it is not. The tendency to be disgusted towards them had a vital genetic component. The aversion towards them is but an evolutionary adaptation to survive in the cruel reality. The acceptance of such groups is but maladaptations in which they would degenerate the strong to be that of the weak and be inevitably destroyed.

To understand the differences between such "genders". One should understand it on mathematical grounds. Plato thought of the Analogy of the divided line, which can be used for Epistemology, the study of knowledge itself, as discussed in the previous book.

As it may be, mathematics is boring. It is considered closer to the truth as described by Plato. As to further explain Platonism from the previous book, which I had already expressed here:

> *The Highest Form to Plato, is the Form of the Good. One can look at the allegory of the Cave in which the Sun in that allegory can be seen as the Form of the Good, as the Good illuminates the other Forms.*
>
> *One could see that Justice is an aspect of Goodness, it is being illuminated by the Good. We see Justice as good as it is being illuminated by the Good, we have this innate notion of the Good.*

Concepts in Platonic Metaphysics are that they are entirely transcendent of reality in every aspect. All of reality merely "participates" in these concepts. For example, a circular object is circular because it is "participating" in the form of "circle-ness". These concepts must exist before and after the existence of anything of the concept. It is like the Form of Circle, the Ideal Circle, the Perfect Circle.

In the analogy of the Dividing Line, Plato sees mathematics as part of the world of Forms. Thus, it would be of utmost benefit to explain differences between "gender." in mathematical terms.

One way to quantify the difference between groups is with effect sizes. Effect sizes can be best described because the smaller it is, the more similar the groups would be, the bigger it is, the more different the groups would be.

Many methods can be used as effect sizes. However, we would only be focusing on the well-known methodologies of effect sizes. These two would be Pearson's r and Cohen's d.

Pearson's r is called a correlation coefficient. It can tell us the strength between two relationships. The correlation can only range between -1.0 and +1.0. A weak correlation would be around 0.1 to 0.3, a medium correlation would be about 0.3 to 0.5, and a strong correlation would be about 0.5 to 1.

As for Cohen's d, it is pretty much the best usage for Effect Size; it is pretty much about the difference between two population means. Cohen's d can range from 0 to about +0.8 or even higher. A weak one should be around 0 to 0.2, a

small one should be about 0.2 to 0.5, a medium one should be about 0.5 to 0.8, and a strong one should be around 0.8 and higher.

First, the most extreme expression of "gender" differences can be manifested into mental disorders. All of them have been known to have natural genetic causes. There is knowledge in regards to "gender" differences within these mental disorders.

SEX DIFFERENCES IN PERSONALITY DISORDERS

Condition: Childhood-onset: Autism spectrum disorder
Sex with greater prevalence: Male
Approximate proportion of cases: 80–90%

Condition: Childhood-onset: Conduct/oppositional defiance disorder
Sex with greater prevalence: Male
Approximate proportion of cases: 75%

Condition: Childhood-onset: Attention deficit hyperactivity disorder
Sex with greater prevalence: Male
Approximate proportion of cases: 66–75%

Condition: Childhood onset: Schizophrenia
Sex with greater prevalence: Male
Approximate proportion of cases: 60%

Condition: Childhood-onset: Dyslexia and/or reading impairment
Sex with greater prevalence: Male
Approximate proportion of cases: 66–75%

Condition: Childhood-onset: Stuttering
Sex with greater prevalence: Male
Approximate proportion of cases: 70%

Condition: Childhood-onset: Tourette syndrome
Sex with greater prevalence: Male
Approximate proportion of cases: 75–80%

Condition: Adult-onset: Major depression
Sex with greater prevalence: Female
Approximate proportion of cases: 66%

Condition: Adult-onset: Bipolar II disorder
Sex with greater prevalence: Female
Approximate proportion of cases: Unspecified

Condition: Adult-onset: Generalized anxiety
Sex with greater prevalence: Female
Approximate proportion of cases: 66%

Condition: Adult-onset: Panic disorder
Sex with greater prevalence: Female
Approximate proportion of cases: 70%

Condition: Adult onset: Obsessive-compulsive disorder
Sex with greater prevalence: Female
Approximate proportion of cases: 60%

Condition: Adult-onset: Post-traumatic stress syndrome
Sex with greater prevalence: Female
Approximate proportion of cases: 66%

Condition: Adult onset: Anorexia nervosa
Sex with greater prevalence: Female
Approximate proportion of cases: 75%

Condition: Adult-onset: Bulimia
Sex with greater prevalence: Female
Approximate proportion of cases: 75–80%

Condition: Adult-onset: Alcoholism or substance abuse
Sex with greater prevalence: Male
Approximate proportion of cases: Unspecified

Something is interesting with Autism or ASD (Autism Spectrum Disorder). Autism can be seen as a spectrum; there's the low-functioning Autism, then there's the high-functioning Autism.

Autism can also be seen as the expression of the extreme male brain, the total opposite of empathy. They are so incredibly low in empathy that even if they do care about the feelings of their loved ones, they wouldn't be able to empathise with it; they wouldn't be capable of understanding it. They are wired up for absolute systematising, the opposite of empathy. There's systematic thinking or systematising, which is all about logic, order, systems, patterns, etc. Then there's empathic thinking or empathy, which is all about the feelings of other people. There's the empathiser, and the opposite end is the systematiser.

The male brain is defined psychometrically as those individuals who are systematising when compared to empathising, and the female brain is defined as the opposite cognitive profile. Using these definitions, autism can be considered as an extreme of the standard male profile. That's why females with Autism can be seen between males and females regarding their facial structure.

The idea that Autism is the sign of extreme male brain all came back to Hans Asperger, which Asperger's syndrome is named; he had hypothesised that the autistic cognitive profile is an extreme variant of male intelligence, which is another way of saying that normal males are more interested in things than people.

Let us go into the personality traits between the male and female. In the 1940s, psychometricians, the people who would make tests to assess the mental facets. Raymond Catell leads these psychometricians to explore how personality "facets," the detailed indicators of personality characteristics, clustered into larger constructs—"factors."

Several years later, Catell and his colleagues developed a personality model with 16 factors and a self-report personality test called the Sixteen Personality Factor

Questionnaire, labelled 16PF. Another way to assess personality traits is with the Five-Factor Model (FFM) inventory.

In the FFM inventory, women experienced more free-floating anxiety than men, with effect sizes of around d = +0.40 and +0.56, which is medium. There's the more vulnerable to the stress of about d = +0.44 and +0.54. Women were more appreciative of art and beauty than were men, with the effect size of around d = +0.34 and +0.33. Women were more open to inner feelings and emotions in the low-end estimate of d = +0.28 and a high-end estimate of about d = +0.64. Women are more modest in playing down their achievements of around d = +0.38 and +0.45. They are more reactive, affected by feelings, and easily upset of about d = +0.53.

From the 16PF, women were more apprehensive, self-doubting, and worried with an effect size of around d = +0.60. Then there are the several stereotypical characteristics that would be combined into one factor, which is "sensitive, aesthetic, sentimental," of a massive effect size of around d = +2.29

The characteristics shown in the table below have a particular bearing on the People-Things dimension.

PERSONALITY DIFFERENCES RELATING TO THE PEOPLE THINGS DIMENSION

Warm, outgoing, attentive to others
Costa:

Kajonius:
Del Giudice: d = +0.89
Inventory: 16PF

Sensitive, aesthetic, sentimental
Costa:
Kajonius:
Del Giudice: d = +2.29
Inventory: 16PF

Cooperative, accommodating, deferential
Costa:
Kajonius:
Del Giudice: d = +0.54
Inventory: 16PF

Shows warmth toward others
Costa: d = +0.33
Kajonius: d = +0.07
Del Giudice:
Inventory: FFM

Altruistic concern for others
Costa: d = +0.43
Kajonius: d = +0.51
Del Giudice:
Inventory: FFM

Sympathises with others
Costa: d = +0.31
Kajonius: d = +0.57
Del Giudice:
Inventory: FFM

Enjoys the company of others
Costa: d = +0.21
Kajonius: d = +0.05
Del Giudice:
Inventory: FFM

Straightforwardness, not demanding
Costa: d = +0.43
Kajonius: d = +0.40
Del Giudice:
Inventory: FFM

A person who would be more warm, sympathetic, accommodating, altruistic, and sociable. Females would fit that profile on average compared to Males. If we had combined all of the 15 factors within the 16PF and calculated the effect size of that one, it would be around d = +2.71.

Thus, a person is the opposite of the person described above. A Male would fit that profile on average compared to Females. However, it should be noted that all of this data came from nations that had intensely pursue gender-egalitarian policies.

This would mean that the Socialization theory is false. Many "gender" differences in cognitive facets are wider than smaller in countries with greater gender equality. The Gender Inequality Index (GII) is based on maternal mortality rate, adolescent birth rate, women's share of seats in parliament, percentage of women with at least some secondary education, and women's labour force participation. A high score on the GII indicates high inequality.

The nations with the lowest scores on the GII would be Switzerland, Denmark, the Netherlands, Sweden, and Iceland. The nations with the highest scores on the GII would be Burkina Faso, Congo, Egypt, Pakistan, and Tanzania. As we have discussed before, for the Socialization theory to be accurate, Switzerland, Denmark, the Netherlands, Sweden, and Iceland would have non-existent sex differences.

However, this is shown to be false. The correlations between GII and sex differences in terms of the five-factor model or FFM are negatively correlated to a substantial number with the low-end estimates of around -.42. –.61 for emotional stability, –.57 for extraversion, –.49 for openness to emotion, and –.42 for agreeableness.

Another quantifier of Gender Equality would be the GGGI. The index is scored from 0 to 1, with 1 meaning gender equality. Once again, gender differences would increase as GGGI would increase. The correlations between the two are positive– the low-end estimate of around +0.33. +.33 for emotional stability, +.33 for openness, +.48 for conscientiousness, +.49 for agreeableness, and +.53 for extraversion.

There has been countless research that had affirmed that gender equality would only lead to the widening of innate gender differences. No matter where you look in the most egalitarian societies, there would be a wider gap of inherent gender differences.

We would be now talking about Neurocognitive Functions.

Females, on average, are better in Better Sensory Perception when compared to males. These sensory perceptions are detecting pure tones, more sensitive hearing for high frequencies, better auditory perception of binaural beats, detect faint smells better, etc. This pretty much fits the stereotype that "women are more sensitive than men," For taste, touch, smell, and sound, women are (on average) more sensitive instruments than men are.

There's also sexual disgust. Sexual disgust in this context means involves the risk of disease or incest. Females, on average, when it comes to sexual aversion in terms of effect sizes is pretty large, of around d = +0.60 for low-end estimates to about d = +1.54 for high-end estimates.

They had better Perceptual and Fine Motor Skills when compared to males. Perceptual-motor tasks such as digit-symbol coding are where each symbol corresponds to a number (e.g., "substitute 2 for #"). In fact, by a substantial amount of around d = +0.86. Fine Motor Skills would involve hand-eye coordination. The men are faster in these kinds of skills, but the women are more accurate.

They had better performance on many types of memories but not all types of memories. These memories would be remembering faces and names, recognising facial emotions, the small details of an event, and recognising speech they have heard better, most especially when relating to emotionally laden events in their past.

They had better performance on verbal ability compared to males. When it comes to Verbal reasoning, the low-end estimate of around nearly zero, the high-end assessment of around d = +0.20. When it comes to reading, it is about d = +0.20 to +0.30. Finally, when it comes to writing, it ranges from around d = +0.40 to +0.60.

As for the Males doing better in terms of Neurocognitive function.

Males do have considerable better throwing skills than females. Better Throwing skills in terms of accuracy, hitting accurately even towards a moving object. Effect sizes have sometimes exceeded d = +1.0 and persist when right-handed subjects are throwing with their left hands.

As for Mathematical capabilities, it depends on the math itself on the normal range of mathematics. The Effect sizes are small; they aren't that significant. However, when it comes to the extremes of high-end parts of Mathematics. Males have a pretty big advantage, as can be seen from within the American Mathematics Competitions (AMC).

AMC: Percentile: 95th
Male-female ratio: Raw: 4.2

Male-female ratio: Adjusted: 2.9

AMC: Percentile: 96th
Male-female ratio: Raw: 4.4
Male-female ratio: Adjusted: 3.1

AMC: Percentile: 97th
Male-female ratio: Raw: 4.4
Male-female ratio: Adjusted: 3.1

AMC: Percentile: 98th
Male-female ratio: Raw: 5.3
Male-female ratio: Adjusted: 3.7

AMC: Percentile: 99th
Male-female ratio: Raw: 7.8
Male-female ratio: Adjusted: 5.4

In terms of Visuospatial Skills. These are essential components for extraordinary mathematical and programming skills, which means to be a good Engineer, be a good Architect, be a good Chemist, be a good Aviator, etc. You must have exceptional Visuospatial Skills.

The first category of spatial aptitude is spatial perception. An example is the Piaget water-level task. The test-taker is asked to draw a line to show how the water line would look in the tilted bottle. The correct answer is a horizontal line relative to the earth. The effect sizes favouring males range from d = –0.44 to d

= –0.66. Not to mention in the words of the researcher stated that "It is difficult to understand why this should be such a formidable task for college women."

Another is called "Mental rotation", which refers to the ability to imagine how objects will look when rotated in two-or three-dimensional space. It has been confirmed that males have a substantial advantage over females across different age groups, with effect sizes ranging from –0.52 to –1.49.

There's also Spatiotemporal ability, which is the capability to make judgments about moving objects. For example, the test subject might be asked to press a key when a moving object passes a specified point or asked to estimate the "time of arrival" of a moving object at a specified destination. Effect sizes around d = –0.37 to d = –0.93.

Another form of Visuospatial Skills would test the participants to generate a visual image from either short-term or long-term memory and then use information in that image to perform a task. This kind of testing is for determining both speed and accuracy. When it comes to speed, it favours all of the males by the effect size of around d = –0.63 to d = –0.77. As for accuracy, the "gender" differences are nonexistent.

No doubt that males are superior when it comes to Visuospatial Skills.

Finally, is there a sex difference when it comes to intelligence?

The best measurement of intelligence is the IQ test. The best type of IQ test is called the Wechsler Adult Intelligence Scale (WAIS). In 1955, showed a 1.0-point difference in full-scale IQ favouring males. WAIS-R, released in 1981, showed a 2.2-point difference. WAIS-III, released in 1997, showed a 2.7-point difference. WAIS-IV, released in 2008, showed a 2.3-point difference. Furthermore, the Male IQ range compared to the Female IQ Range is wider. What that means, in Males, you would get more idiots or geniuses compared to females.

In regards to gender, egalitarianism would affect the neurocognitive capabilities; let us see. When the standardised scores for the Gender Development Index (GDI), Gender Inequality Index (GII), and Global Gap Index (GGI) are combined, the most significant effect sizes favouring boys in math were Honduras, Austria, and Ghana. In science, they were Ghana and Honduras, plus Costa Rica.

Nations with the most extensive effect sizes favouring Females are Oman, Bahrain, and Jordan regarding mathematics. In regards to the Sciences, it is Jordan, Albania, and the United Arab Emirates. One thing in common with these nations is that they aren't for gender equality. One explanation as to why effect sizes favour females in terms of mathematical and scientific capability is due to the culture within these nations. It looks as if Arabian culture towards children either depresses male incentives to do well in math and science or increases female incentives to do well in math and science. Hypothetically, if an Arabian male and female and all else being equal. One could state that the Arabian male would outperform the female in both mathematics and sciences.

As for Verbal capability in terms of gender, girls outscored boys in reading in every PISA (Program for International Student Assessment) country, with effect sizes ranging from a low of +0.08 in Peru to a remarkable high +0.83 in Jordan.

The mean effect size across all 67 PISA nations was +0.32. The correlation of the effect size with the equality index was –.11.

Overall, like previously. Nations that are more egalitarian in their treatment of different genders would have more enormous innate differences, and the same goes for the opposite.

Finally, what about gender differences in both educational and vocational choices. Women are more interested in vocations focused on people, and men are more interested in vocations that concentrate on things, objects, abstracts, etc.

This would be revealing the social behaviour of the two genders. It had been decades upon decades away from the early 1900s that there is an incremental decrease of the legal restrictions against women until the 1960s. The supposed gender discrimination within the system had become non-existent. However, for whatever reason, there still exists a substantial disparity in education that young men and women attain, the jobs they take, and how their careers unfold.

There's a survey of 322 men and 157 women in their late 40s about their work preferences and life values. Both men and women have primarily different views in regards to work preferences and life values. It should be noted that this survey was taken from 2012 to 2013 and that the participants are in their 40s. Now, subtract 45 by 2012 or 2013. They would be born around in the late 1960s, the time in which legalised gender discrimination is pretty much fading away to nothingness.

As for the effect sizes, it would be shown in parentheses.

- *"The prospect of receiving criticism from others does not inhibit me from expressing my thoughts." (–0.54)*
- *A merit-based pay system (–0.53)*
- *Having a full-time career (–0.51)*
- *Inventing or creating something that will have an impact (–0.45)*
- *A salary that is well above the average person's (–0.43)*
- *"I believe that society should invest in my ideas because they are more important than those of other people in my discipline." (– 0.42)*
- *Being able to take risks on my job (–0.41)*
- *Working with things (e.g., computers, tools, machines) as part of my job (–0.41)*
- *"The possibility of discomforting others does not deter me from stating the facts." (–0.40)*
- *Having lots of money (–0.36)*

To interpret this. This is about how men valued more or agreed with more than women did. The highest effect sizes mean that it favoured men more, and men would most likely express their thoughts when they are being. criticised

Another effect sizes that favoured women:

- *Having a part-time career for a limited time period (+0.83)*
- *Having a part-time career entirely (+0.78)*
- *Working no more than 40 hours in a week (+0.72)*
- *Having strong friendships (+0.49)*
- *Flexibility in my work schedule (+0.41)*
- *Community service (+0.38)*
- *Having time to socialise (+0.37)*
- *Giving back to the community (+0.35)*

Men being men and women being women. The people who conducted this survey came from Vanderbilt, which is located in the US. And, the US is the core location of events regarding gender during the 1960s. The sample in this particular survey does come from the SMPY cohorts.

Now, let us talk about SMPY or known as the "Study of Mathemathically Precocious Youth."

In 1971, Julian Stanley began SMPY. Firstly, he gathered a considerable amount of 12-year-olds to take the SAT math test. It should be noted that this SAT Math test was designed for high school juniors and seniors that are bound for college. Essentially, this can be seen as a way to see which 12-year-old had the exceptional mathematical ability. That he did, Stanley can identify who's well-versed in mathematics at such a young age. Over the decades, SMPY established four cohorts of mathematically precocious youth. We should only be focusing on the second and third cohorts.

Virtually all of the girl's parents were highly supportive of their daughter's mathematical talents. Parents of children within the SMPY have responded positively to their child's invitation to seek admission to the program and then were willing to go through the time and effort to get their child to the testing site, which often meant a significant journey.

From the data in regards to SMPY Parents. Firstly, the parents of the children are treating them based on their talents rather than their gender. Secondly, fathers did not appear to be more involved with the mathematically talented students than with the verbally talented. Thirdly and finally, the majority of students, especially females, were not strongly sex-typed.

One could have argued that the second cohort, despite their parent's support of their exemplary arithmetic skills. That the females in that said cohort would still be to the traditional pre-feminist norms. After all, the most vital move for intense feminism came during the mid-1960s.

The argument that they could have been socialised to the full-on traditional norms of male and female might be valid. However, this could only be true if the

SMPY females came from specific locations such as middle-class suburban neighbourhoods in the Midwest or South of the USA. However, these SMPY females came from highly educated upper-middle-class families in the Washington, Baltimore, and Philadelphia areas. By the very early 1970s, such said locations would have been more explicitly and emphatically feminist than comparable neighbourhoods today.

Let us consider the timeline here.

> *1963: John Kennedy's Presidential Commission on the Status of Women released its strongly pro-feminist report, and the Equal Pay Act of 1963 mandated equal pay for equal work.*
>
> *1964: Title VII of the Civil Rights Act of 1964 forbade employer discrimination on the basis of sex. Griswold v. Connecticut invalidated legal restrictions on access to birth control.*
>
> *1967: A presidential executive order extended affirmative action in employment and education to include women.*
>
> *1968: Sexual harassment was added to federal anti-discrimination law as a basis for bringing actions against employers.*
>
> *1972: Title IX of the Education Amendments mandated nondiscrimination in any school receiving government aid (effectively all of them) and included broad enforcement powers.*

The girls of the second Cohort were born into the world in which legal gender equality had been achieved. Although, the very peak of such things would be during the late 1970s and the early 1980s. But that doesn't matter, to say the least, as these upper-middle-class girls are grown up in particular locations of systematic education even early as elementary.

They would be growing up with inspirational stories of how women would become successful scientists, political leaders, artists, etc. These legalised gender equality would grow onwards up to high school, in which they are putting males and females in the same gym classes, and even high-school counsellors were incentivising females to join careers that are meant for men. On school campuses, young women were hearing faculty and their fellow students urging them to forgo marriage and childbearing favouring a career. The females from the second cohort, when they are during their college years during 1982–85, all of the well-known and famous universities were eager to add them into their student body, and are even more keen to let them join STEM subjects such as the sciences, technology, engineering, and math.

Regarding the second cohort, both Male and Female are somewhat equal in having bachelor's, master's, and doctoral degrees. However, the traditional gender gap persisted. To begin with, twice as many of these gifted women were getting degrees in the subjects that are people-oriented such as social sciences, business, and the humanities, in contrast to the men. Essentially, men's tilt towards STEM subjects and women's tilt towards the social sciences and humanities (the only exception is philosophy). The reason can be best pointed towards the females' innate higher verbal capabilities compared to the males. Those who have inherent more excellent verbal abilities would go to social sciences and humanities, and

those who have innate more excellent mathematical capabilities would go STEM subjects. This pattern was true for both males and females.

Even both males and females within STEM still gravitated towards different types of STEM. The females would gravitate towards life sciences, which can be considered more people-oriented in comparison to physical sciences and math, which can be regarded as more thing-oriented. In terms of proportions, males outnumbered females by almost two to one on the Things-oriented sciences, and females outnumbered males by nearly two to one on the People-oriented sciences. In fact, in the third cohort, which can be considered to be born into a much gender-egalitarian world compared to the second cohort, they had shown stronger gravitation towards STEM disciplines that deal with living things or people-oriented rather than STEM disciplines that are thing-oriented.

Overall, what this means is that even the most gifted of both genders persists in innate sex differences—no matter where you look at. Of course, this is about the talented. Why don't we look at the general population as a whole?

Well, in the 1960s. Women have seen a massive change in what they could pursue in their life choices; a whole new existence had waited for them. Such changes can be linked to five things.

- *The invention of new forms of contraception, especially the pill, gave women reliable and independent control over their fertility.*

- *The equal opportunities revolution gave women better access to all careers and positions.*

- *White-collar occupations, the ones most attractive to women, expanded.*

- *Jobs for secondary earners expanded, making it easier for women to combine childcare and work outside the home.*

- *Freedom of lifestyle choices in liberal modern societies increased.*

The results of these changes are no doubt very drastic. During the 1960s, only about 41 percent of females in the age range of around 25–54 are in the labour force; it was then during 2018 that approximately 81 percent of females are now in the labour force. As for high-status jobs, from the 1960s to 2018, 1 percent of civil engineers to 17 percent; from 5 percent of attorneys to 35 percent; from 8 percent of physicians to 42 percent. The Fortune 500, which is just the annual list compiled and published by Fortune magazine, ranks 500 of the United States corporations by total revenue for their respective fiscal years. Not a single woman had been a CEO during the early 1970s. It was then during 2018 that 25 women were Fortune 500 CEOs. Regarding the government, there is only 1 woman within the Senate and 19 women in the House of Representatives during the 1960s, up until 2018, 25 women in the Senate and 102 women in the House of Representatives.

We would be looking at RIASEC, the abbreviation for Realistic, Investigative, Artistic, Social, Enterprising, Conventional.

Realistic refers to working with tools, instruments, and mechanical or electrical equipment. Activities include building, repairing machinery, and raising crops/animals.

Investigative refers to investigating and attempting to understand phenomena in the natural sciences through reading, research, and discussion.

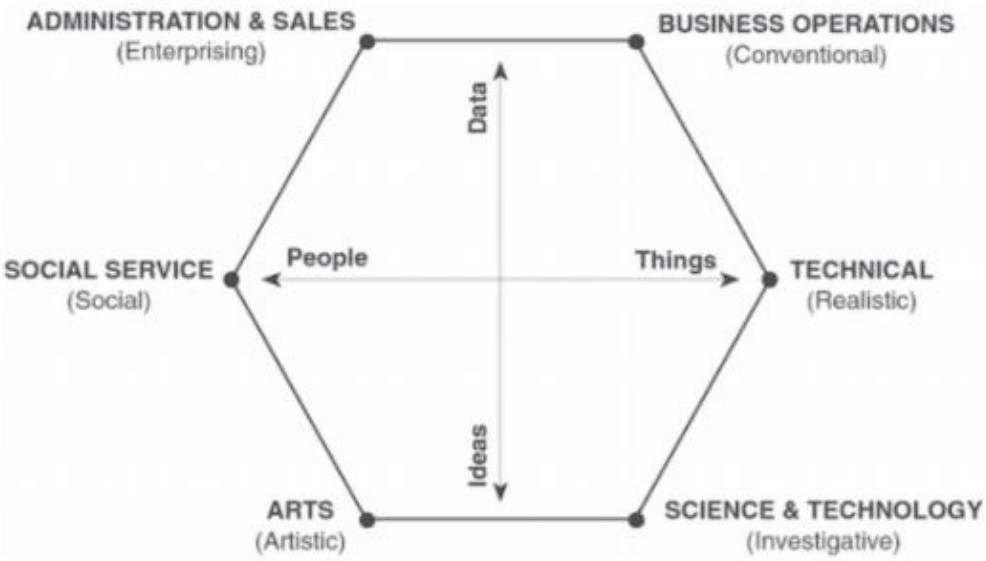
Artistic refers to Expressing oneself through activities such as painting, designing, singing, dancing, and writing; artistic appreciation of such activities (e.g., listening to music, reading literature).

Social refers to Helping, enlightening, or serving others through activities such as teaching, counselling, working in service-oriented organisations, and engaging in social/political studies.

Enterprising refers to Persuading, influencing, directing, or motivating others through activities such as sales, supervision, and aspects of business management.

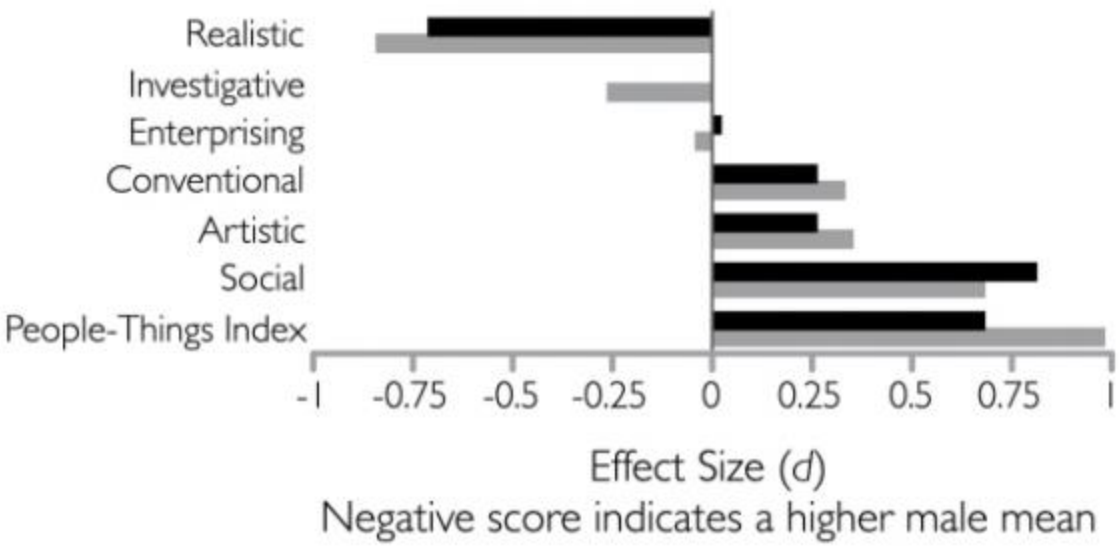
Conventional refers to Developing and/or maintaining accurate and orderly files, records, accounts, etc.; following systematic procedures for performing business activities.

The RIASEC Paradigm can be seen like this one:



Said

psychological paradigm had revealed the sex differences—a database of around 243,670 men and 259,518 women. On average, women's vocational interests inclined toward work with or understanding other people; men's vocational interests inclined toward working with things. The Realistic orientation is an effect size of around d = –0.84, and the Social orientation, an effect size of about d = +0.68. In terms of the Data-Ideas spectrum, there was virtually no sex difference. But on the People-Things spectrum, the effect size is around d = +0.93, meaning that women were on the People end and men were on the Things end of the dimension—a large effect size by any standard.



OCCUPATIONS ACROSS DIFFERENT MEASURES AND SAMPLES

RIASEC dimension: Realistic
Meta-analysis of 503,188 scores on interest inventories: –0.84
Adult scores of SMPY cohorts 1, 2, 3, and 4: –0.92
Ratings of occupations held by Americans ages 25–54: –0.77

RIASEC dimension: Investigative
Meta-analysis of 503,188 scores on interest inventories: –0.26
Adult scores of SMPY cohorts 1, 2, 3, and 4: –0.28
Ratings of occupations held by Americans ages 25–54: –0.08

RIASEC dimension: Conventional
Meta-analysis of 503,188 scores on interest inventories: +0.33
Adult scores of SMPY cohorts 1, 2, 3, and 4: –0.47
Ratings of occupations held by Americans ages 25–54: +0.27

RIASEC dimension: Enterprising
Meta-analysis of 503,188 scores on interest inventories: –0.04
Adult scores of SMPY cohorts 1, 2, 3, and 4: –0.50
Ratings of occupations held by Americans ages 25–54: +0.09

RIASEC dimension: Artistic
Meta-analysis of 503,188 scores on interest inventories: +0.35
Adult scores of SMPY cohorts 1, 2, 3, and 4: +1.06
Ratings of occupations held by Americans ages 25–54: +0.22

RIASEC dimension: Social
Meta-analysis of 503,188 scores on interest inventories: +0.68
Adult scores of SMPY cohorts 1, 2, 3, and 4: +0.88
Ratings of occupations held by Americans ages 25–54: +0.84

In regards to gender equality across nations affecting the capacities of both genders going into careers. When it comes to STEM-based Careers, the more this equality, the more that the males would be in STEM-based Careers.

The bottom five countries on the Global Gender Gap Index were Jordan, Lebanon, Turkey, Algeria, and Tunisia. The mean relative-strength effect size for sex differences in science literacy was d = –0.18 within these five countries. The top five countries on the Global Gender Gap Index were Iceland, Finland, Norway, Sweden, and Ireland. The mean relative-strength effect size was d = –0.55.

The same goes for reading, which is of utmost importance in the subject of Humanities. The difference in relative-strength mean effect size for the bottom five countries on the Global Gender Gap Index was d = +0.69; for the top five countries, it was d = +0.83.

If one subscribes to the gender socialisation theory, it would be difficult to explain such results. After all, if gender differences result from societal forces, then explain the increasing gender differences within gender-egalitarian societies? Thus, it is of utmost evident that there exists an innate nature within both men and women that could explain such differences. It can be called the version of the Matthew Effect.

The Matthew Effect is derived from the Bible, Matthew chapter 25 and verse 29 or just Matthew 25:29.

The relevant verse (25:29) is:

> *"For whoever has will be given more, and they will have an abundance. Whoever does not have, even what they have will be taken from them."*

The rich get richer, and the poor get poorer. In the case of education regarding gender, the Matthew effect takes the form of widening test score differences when good students and poor students are both exposed to improved education. The test scores of the poor students may rise, but those of the good students usually grow more.

The Global Gender Gap Index is highly correlated with economic wealth, which is also correlated with the quality of the educational systems. Girls have the biologically grounded tendency to have better verbal skills than math and science

skills; it may be expected that their relative strength will be accentuated as their educational opportunities increase. The same applies in reverse if boys' inborn math and science skills tend to be better than their verbal skills. The better their educational opportunities, the larger the disparity between what they do best and their overall ability.

This is the most significant blow towards the Feminist falsehood. The freer the women, the more different the women, would be. The exact reason gender egalitarianism would lead to more differences can be best summed into a single line: Both sexes become freer to do what comes innately within them. Society doesn't force men to be men and women to be women. It is already within them. It is not acquired through external forces. There's no doubt that the existence of both men and women's innate and pre-existing characteristics—the Platonic Ideal of both Man and Woman.

Nevertheless, the Egalitarian would keep putting more social variables, cultural variables, and environmental variables.

These so-called "Environmental variables" are also based upon a genetic basis. One would say for an example. Two people wanted to be strong and fit. Person A decided to follow the proper schedule to be solid and firm. Person B did not do anything despite his wanting to be strong and healthy. Thus, Person A is much stronger than Person B. Is the difference in strength between Person A and Person B due to a genetic or environmental difference? One could argue that it is environmental; however, the environmental difference is also caused by the genetic difference.

The Egalitarian problem is that they wrongly associate social and/or behavioural factors to indicate that one causes the other. This is false; it is that genetic factors that cause both social and behavioural factors.

As it would have stated before, people who exercise more have fewer/later health problems and live longer, so naturally, conventional wisdom interprets this to mean that exercise leads to health and longer life when in reality, healthy people are driven to exercise and have better health due to their genes.

There are countless bodies of knowledge that have shown the falsehoods of Egalitarian beliefs.

Let us discuss heritability to infer the proportion of a phenotypic trait caused by genetic variance or variation. It is mathematically expressed as h^2 or H^2. It can go around 0 to 1. If it is 0, then that means that there is none. If it is 1, then that means that it is genetic.

One might have noticed the lower-case h, and upper-case H. Lower-case h is just narrow-sense heritability, which is just The proportion of phenotypic variation between individuals within a given population, which is explained by additive genetics. Additive genetics are the genes. Additive genes are simply genes that have the same effect on one's phenotype regardless of what other genes in their genome. Meanwhile, Non-additive Genes are the genes will have a different effect on a phenotype depending on what other genes are in the genome. Upper-case H is just broad-sense heritability, which is just the proportion of the variance explained by additive and non-additive genetic factors together.

The word ‘Phenotype.’ Phenotype does not mean 'what can be seen on the surface,’ but instead, it means anything that can be made visible by suitable means. An example is intelligence; it can be observed, but no one can directly watch intelligence and what we do is through psychometrics. There is also the example of blood groups: we can visibly see someone’s blood group but not through any of the five senses but rather through a suitable means to determine someone’s blood group. What made up the Phenotype is made up of two things: the genotype, the genome of a particular organism, and the second thing is the environment.

Then countless people have not truly understood what heritability truly means. Firstly the one misconception is that people would regard heritability as 'Genes are about 40% for the responsibility of that certain trait'; this is just a misunderstanding of heritability.

Heritability is known as just 'what is the proportion of variance within a phenotypic trait caused by the genetic variance or variation.' This is entirely different from stating that 'Genes are about X% for the responsibility of that trait.’ Those are two other things.

Let us make a baking analogy. Let us say that there is a baked Chocolate Cake. Now, What percentage of the Cake's traits are the ingredients? What percentage of what is the Cake's attributes is the baking of that cake? Those are nonsense questions. No answer to those questions at all, do not even try to answer such questions.

That baked Chocolate Cake is just ingredients expressed within the baking. All Cakes are just ingredients described within the baking. Cakes are just shells for all

of the ingredients. All organisms are just the DNA expressed within the environment. Everything one does/thinks it. There is a direct or indirect expression of their genes to the environment.

Nevertheless... If we got two different Chocolate Cakes. One is a goodly baked Chocolate Cake, and one is a badly baked Chocolate Cake. Some better questions would be to look at two cakes and compare their reasons for turning out differently. Was Cake 1 baked longer at a lower temperature than Cake 2? Or does Cake 1 have the right ingredients when compared to Cake 2?

Now, let us apply it to humans. Two humans with apparent differences, let us say about their intelligence, Human A is way smarter than Human B. Was Human A within the right environment compared to Human B? Does Human A have the right genome compared to Human B? Could it be both? We are talking about variation; it is about the proportion of variation by genetic differences or environmental differences. Now, that is where heritability came in.

A 2015 meta-analysis of 17,804 human traits (both physical and mental), based on 2,748 publications that studied 14,558,903 twin pairs, found, on average, a heritability of 49%. It stated that:

> "*We have conducted a meta-analysis of virtually all twin studies published in the past 50 years, on a wide range of traits and reporting on more than 14 million twin pairs across 39 different countries. Our results provide compelling evidence that all human traits are heritable: not one trait had a weighted heritability estimate of zero.*"

This means that all psychological traits are to an extent heritable. As such, the right question when it comes to concerns of a particular quality should be "how much of the variation of that particular trait is down to genetics," not "is the variation of that particular trait is down to genetics."

It should be noted that .49 or 49% does not necessarily mean that the remaining .51 or 51% is based upon environmental. Now to further expound, environmental influences come in two types: shared and unshared. A shared environment refers to the environment such as parents, peers, schools, neighbourhoods.

Meanwhile, The Unshared environment is anything not covered in the categories listed thus far. The kinds of friends someone has, random events in someone's life, and measurement error are commonly given examples of the unshared environment.

Quoting again from that particular meta-analysis regarding the shared environment:

> "*The meta-analyses of all traits yielded an average rMZ of 0.636 (s.e.m. = 0.002) and an average rDZ of 0.339 (s.e.m. = 0.003). The reported heritability (h2) across all traits was 0.488 (s.e.m. = 0.004), and the reported estimate of shared environmental effects (c2) was 0.174 (s.e.m. = 0.004)*"

As one could see here, the shared environmental effects are around 17.4% or 0.174 and estimating it would be just approximately 18% or 0.18. This means that about 33% or 0.33 is left for the unshared environment. A Substantial amount of that unshared environment is just merely measurement errors.

Measurement errors or observational errors are the difference between a measured quantity and its actual value. One could think of measurement errors as the noise within the statistics, the statistical noise. One example is intelligence itself. It is noted that around more than .80 and lower than .90 of heritability for intelligence if the measurement errors are corrected. It is, in fact of around .91 or 91%.

An unshared environment is not just measurement errors; it can also mean that the environment one created or go into. Although, yes, a large amount of that unshared environment is just merely measurement errors.
Another one would be known as the Lewontin Fallacy. This falsehood can be easily summed as:

> "*There is more genetic variation within than between races, and as such, the validity of race isn't real. Additionally, this means that human populations or race aren't different at all.*"

Let us assume that this Egalitarian falsehood is true, hypothetically. The same could be said for every highly heritable trait like intelligence, personality, physique. Following this logic of what Lewontin argued for, skin colour variation within a population should be more considerable than the skin colour differences between people, except that did not ever happen like ever. The difference in skin colour between Europeans and Pygmies is significant, so there is no overlap. No European is as dark as the lightest Pygmy.

Richard Lewontin argued that 85 percent of human genetic differences are due to individual variation. Only 15 percent due to differences between populations and ethnic groups; ergo, "there are more differences within races than between them."

This fallacy can be quickly dispatched. The sheer number of differences is less important than the *direction* of the differences. If a variety of slight differences all push in the same direction—which they will in the case of subspecies evolved to different ecologies— this could add to significant overall differences between average members of other races.

A.W.F. Edward had presented a systematic critique of Lewontin's argument about genetic variation within and between races. Edward stated that Lewontin had only looked at a minimal number of genetic loci and found out that 85 percent of the human variation was individual differences.

However, Edward argued that if one looks at a lot of genetic loci, one will find these loci correlate differently in different groups due to gene frequency differences, leading to very different results. It is here that this would lead to the concept of race being very different in numerous predictable ways, rendering "race" a valid category based upon reality.

Edward pointed out that if we decided to use Lewontin's logic behind his argument, we would not distinguish between different tree structures. These differences are hidden in the correlational data, just as race differences are.

Edward noted that the only way for Lewontin's argument to even function in the first place, if each of the genetic loci highlighted were randomly distributed

between races, but that would invalidate the existence of evolution. Different races adapt to different ecologies, which would not mean that the human genome is randomly distributed everywhere. Lewontin hardly disproved the reality of race.

This is not just about race. It also concerns ethnic groups. Ethnics groups can be practically seen as extended family to a certain extent. It would begin with one person; then it would expand into the family, extend into the ethnic group, expand into the race, or be genuinely technical subspecies, grown into species.

There have been multiple schools of thought of explaining the creation of ethnicity itself. One would be talking about a specific set of these schools of thought that are termed differently. Still, from a much more correct view, they are all just variants of this Egalitarian thinking because it is only through external forces that shaped these ethnic groups and not innately.

These specific sets of these schools of thought are called the "Constructivist.". The many schools of thought under "Constructivist" thinking are the Instrumentalist, the Modernist, the Social Constructivist, Marxism, and the likes. While, one could talk about each of these schools of thought, specifically. It is much better to speak to them on a set. A problem that permeates all of these "Constructivist" thinking is that they are underpinned by environmental determinism. All that only the environment is the end all be all.

One argument is that why these ethnic groups are like that is because of history, a difference between histories. History, in this sense, is how culture behaves within a set time. If this is the case, they have these different histories because they have these different cultures. As such, it would become a circular argument.

Another one would be, where does this Ethnic pride come from? Where does this Nationalism come from? Where does it all come from? Indeed, it does not pop out from the vacuum; after all, nothing is genuinely invented in the void. One of the people under the Constructivist falsehood, who goes by the name Barth, argued that the elements that compose the ethnic identity are arbitrary. Why do cultures are to a certain extent similar?

Nationalism by a part of the Constructivist school is that the elites imposed it to justify political nature. Why does Nationalism take the form of mass movements against the elites themselves? Wouldn't that be counterproductive?

Another flaw of this Constructivist thinking is that certain people acted against their self-interest in any stretch of the definition. They decided to do the good of their group against another foreign group. The argument made by the Constructivist is that they are brainwashed to do so. But... Once again, other social species would lay down their lives for the sake of their group, and these social species do not have any form of capacity even to do brainwashing at all.

There is a better way to explain that Egalitarian thinking is the Sociobiological school of thought. The most prominent person of this particular school of thought is E.O. Wilson. His approach is of the utmost simplicity, applying evolutionary principles, which had already explained non-sentient creatures' behaviour towards human behaviour. Sociobiology had superior explanatory power compared to all schools of thought used to describe the origins of ethnic identity and nationalism.

It could explain why certain people would die for the group that would damage and even destroy their self-interest. The perfect example is that of a Bee Hive, in

which there are these sterile worker bees will readily lay down their lives by stinging intruders in defence of the hive. A similar case can happen to highly primitive human societies.

In a study of the Bushmen within the Kalahari Desert, it had been found out that more than 50% of adult males have never even reproduced. There is an excess of females, but due to male deaths on hunting trips, and, as such, the headman will have several wives. This means that only the strongest, healthiest, and most intelligent men will significantly impact the gene pool. Countless reviews of hunter-gatherers all agree that most of these peoples follow status-based polygamous mating systems.

As Darwin put it, in describing these kinds of tribes:

> *"The strongest and most vigorous men, those who could best defend and hunt for their families, and, in later times, the chiefs or headmen, would have succeeded in leaving a greater number of offspring than would the weaker, poorer and lower members of the same tribes. The chiefs of nearly every tribe throughout the world succeed in obtaining more than one wife."*

This can be referred to as Group Selection, a concept that the Egalitarian does not like. A much better term that would be used is Multilevel Selection. There are these co-occurring levels of selection. The most bottom is Individual Selection; then there is Kin Selection, the genetically close relatives. The degree of consanguinity first cousins share is .06/.5, corresponding roughly to a great-grandchild. Thus, anything you do for your nearest cryptic relative is equivalent to doing 12.5% of the same thing for yourself or instead for your Darwinian fitness. For example, in an ethnically homogeneous French community, one person is not

very different from another person in kinship. If the community is then merged with nonnative immigrants from Japan, suddenly there is now a more than insignificant selection for kin and ethnic discrimination, even bigotry or racism. In this community, opportunities for discord and clannishness are high, as individuals who discriminate kin would ally against the "*others.*"

One should then predict very different family, clan, and group loyalty and cooperation patterns in such environments. Ethnic tension, bigotry, and racism are to be understood in an evolutionary sense due to mechanisms of inclusive fitness. Moreover, they have important implications for modern ethnically mixed societies.

Then, as one goes up, one would get group selection. In talking of Group Selection, one must define the "group." It could be possible that Group Selection can happen on a species level, albeit rarely. The most agreed definition of the group within the context of Multilevel Selection is that it is something between networks of close kin and subspecies/race. As such, this would include entire Tribes and perhaps entire Nations.

This could explain why these particular people would die for the Nation at the expense of their interests. In terms of individual Selection, it would not happen as one would not be selected for success, but in terms of Kin Selection and to a greater extent for Group Selection. It is an utmost adaptation, a success. Group Selection posits the selection for groups of organisms, favouring these people or group somewhat another people or group, instead of individual Selection, which only focused on the Individuals.

In the book *"The Descent of Man,"* Darwin had to a certain extent intuitively explained Group Selection, as I had quoted in previous paragraphs; however, he

did not explicitly explain, he did not come up with the term Group Selection or let alone Multilevel Selection. The Individuals that are altruistically sacrificed for the group are a group-selected phenomenon. They had allowed the fitness of the group to survive.

So natural selection can happen at the individual level and multiple levels even simultaneously, from the individual to entire groups such as race, called Multi-level Selection. Nevertheless, we would be looking at additional lines of evidence of the existence of race. There are innumerable pieces of confirmation for the existence of race. One such thing is the monoamine oxidase-a gene or known as the MAOA gene. This particular gene also produces an enzyme of the same name as that of the gene itself. This particular enzyme breaks down a class of neurotransmitters known as mono-amines within the brain. These neurotransmitters or mono-amines can affect behaviour such as dopamine and serotonin. There are also different alleles of the MAOA gene that can lead to lower levels of the MAOA enzyme, which would mean that there are more mono-amines within the brain.

Alleles mean the different forms of that particular gene. Okay, every living thing is but both a direct and indirect of genomic expression towards their environment. Let us take eye colour for an example; you have the genes needed for the eye colour, but what differs in your eye colouring are the alleles. Essentially, alleles are like different variants, different versions, etc., of that particular gene. There's the gene for eye colour, and there are alleles for differing eye colours. Blue eyes mean that a particular allele of that gene gets expressed; meanwhile, the alleles towards brown eyes didn't get expressed. That's pretty rare if you consider that Blue eyes came from recessive alleles, and brown eyes came from dominant alleles. Recessive means that it wouldn't get expressed that much, and dominant means that they would get expressed more than recessive ones. These speak of alleles would be of utmost importance in my last book.

There are also molecular differences within the different alleles of the MAOA gene. It is based upon the number of times a certain section for its promoter region is repeated. Essentially, Three repeat alleles lead to lower than average levels of the enzyme MAO-A. The two repeat allele leads to even lower levels of MAO-A.

Variation in MAO-A levels could be related to traits such as aggression and criminal behaviour. This can be seen in the research during the 1990s. They investigated a particular family that carried a rare genetic mutation that leads to extreme deficient levels of the enzyme MAO-A. This family is filled with rapists, arsonists, and other violent criminals. Later, some geneticists raised rates with an artificial version of the MAO-A gene, leading to deficient production of the MAO-A enzyme. It was found out that this artificial version of the MAO-A gene has caused the rats to act far more aggressive than the typical levels of rat aggression.

Practically, low levels of the activity of the MAO-A genes would cause a higher propensity towards negative experiences in contrast to people with the highly active alleles of the MAO-A genes. There's also the link of childhood trauma with the MAO-A gene and that it had been replicated very well within the male subjects. Since then, there has been an inextricable link between the lower activity of MAO-A and higher levels of anti-social behaviour. These same alleles of the MAO-A gene can also be linked to high credit card debt and obesity; there's also the substantial-high risk of being thrown into prison. Essentially, low activity alleles of the MAO-A gene leads to increased impulsivity, likely due to increased dopamine activity, which in turn leads to an elevated risk for criminal activity, aggression, obesity, and credit card debt.

What does this particular gene relate to the main topic of racial existence? Well, there had been established racial differences of MAO-A genotypes. It had been well-documented, well-researched, and other such similar things. The vast majority of the research shows that Blacks are more likely than Whites to carry both versions of the low repeat allele. In summary, Blacks have higher levels of low repeat MAOA alleles than Whites do, which causes them to have higher crime rates. The 13% of the USA population commit more than 50% of the crimes. It is not due to systematic oppression; it is not due to them being both socioeconomic disadvantaged. It is the innate, immutable, and preexisting characteristics of the black race, and with that, it is intergenerational transmitted, from ancestor to descendant. Essentially, one's kin is more naturally inclined to behave and function similarly to oneself than a non-kinsman, specifically (or especially) in the form of parent and child.

Even from the moment that someone is born, there exists of innate behavior. Thus, there truly exists immutable, innate, preexisting, characteristics within everything. As can be stated from here:

> *In the course of the experiment, Kagan noticed something unanticipated. The Chinese children, little more than babies, whether attending day-care or raised at home, were consistently more fearful and inhibited than the Caucasians. The differences were obvious. The Chinese children stayed close to their mothers and were quiet and generally apprehensive, while the Caucasians were talkative, active, and "prone to laughter". These characteristics were confirmed by the mothers as typical of their children's behavior at home as well. In addition, the researchers discovered that the Chinese tots had less variable heart rates than the Caucasians. Kagan could not avoid the clear evidence of an innate difference between the two groups of infants. It is ironic that this scientist's conversion to a biological-genetic*

view came along the lines of racial differences. Kagan was a political liberal who only three years earlier had been one of the most vociferous critics of Arthur Jensen's theories on the heritability of IQ, theories that he and most everyone else denounced as racist. Now he was publishing his observation of fundamental personality differences between racial groups. When we conversed in Harvard office many years later, I asked Kagan if there had been an uproar similar to the one Jensen provoked.

He smiled. "We got no flak on the Chinese paper All the reports of the book were about our day-care findings. Everyone ignored the fact that the Chinese children were different. I think it was because they were Asians, and Asians do well. If they would have been black we probably would have gotten flak."

Asked if it was dismaying for him, an unwavering liberal, to observe inherent racial differences, Kagan snapped, "Nature doesn't care what we want." More reflectively, he added, "I wasn't so much dismayed at my observations of the Chinese kids...I was a little bit saddened to see the power of biology."

Now, someone would point that "humans are 99.9% the same", a claim that is made during the 2000s by Craig Venter. However, seven years later, the same person who had made such a claim then made another analysis and it showed that about 99.5% of humans are the same between two random individuals. However, despite the newer analysis, racial denialists would still use the claim "humans are 99.9% the same" despite it being outdated. It shall be of utmost noted that between humans and chimpanzees, the similarities are around 98.7%, as for humans and gorillas, the similarities are around 98.4%.

What do we mean by "Humans are 99.9% the same"? This is referring to the base DNA. The DNA is the molecule that contains an organism's genetic code, the information necessary to build and maintain the said organism. However, the 99.9% similarity is only referring to the base pairs of the DNA and genes are

often encoded by a very large number of base pairs. Base pairs of the DNA are pretty much two nucleotides joined together and a nucleotide can also be called *'nucleic acid'*. The most important thing to mention is that even a single base pair difference can dramatically alter the functions of a gene.

That's where Single-nucleotide polymorphism or shortened to SNPs came in. SNPs are the genetic variation of a single nucleotide which is the building block of the DNA. SNPs are the most common form of genetic variation among humans, occurring approximately once every 1000 nucleotides. Even if there's one minuscule SNP variation, it could theoretically have a large knock-on effect. As to how many SNPs within humans? 3 million. As for base pairs, it is around 3 billion. Not to mention that genes can also influence and even control other genes, which could have a domino effect to have drastic and significant results. Even if we only look at the base pairs of the Human DNA which is around 3 billion and that we would have the outdated 99.9% similarity of base-pair of DNA. Then a 0.1% difference still means that there are about three million base pair differences and that's an extremely enormous difference.

Essentially, the argument that because humans are around 99.9% and as such everyone is equal in innateness is that of ignorance, misinterpretation, and other such things. The 99.9% similarity of DNA changes nothing at all in regards to the claim of the existence of race and that if someone uses this argument for the non-existence of race, they should be regarded as fools.

There's also the usage of heterozygosity to acknowledge the existence of race. Michael A. Woodley of Menie, 28th baron of Menie, had decided to compare heterozygosity in humans to other species with wide ranges. Well, what does this entail? Firstly, heterozygosity is simply just the probability that, at any given gene location, two organisms of that species will have a different gene variant (allele) at that specific location. A gene is a series of SNPs, so even though the similarity is

99.5% SNP by SNP, at any given gene they can be different more often than not.

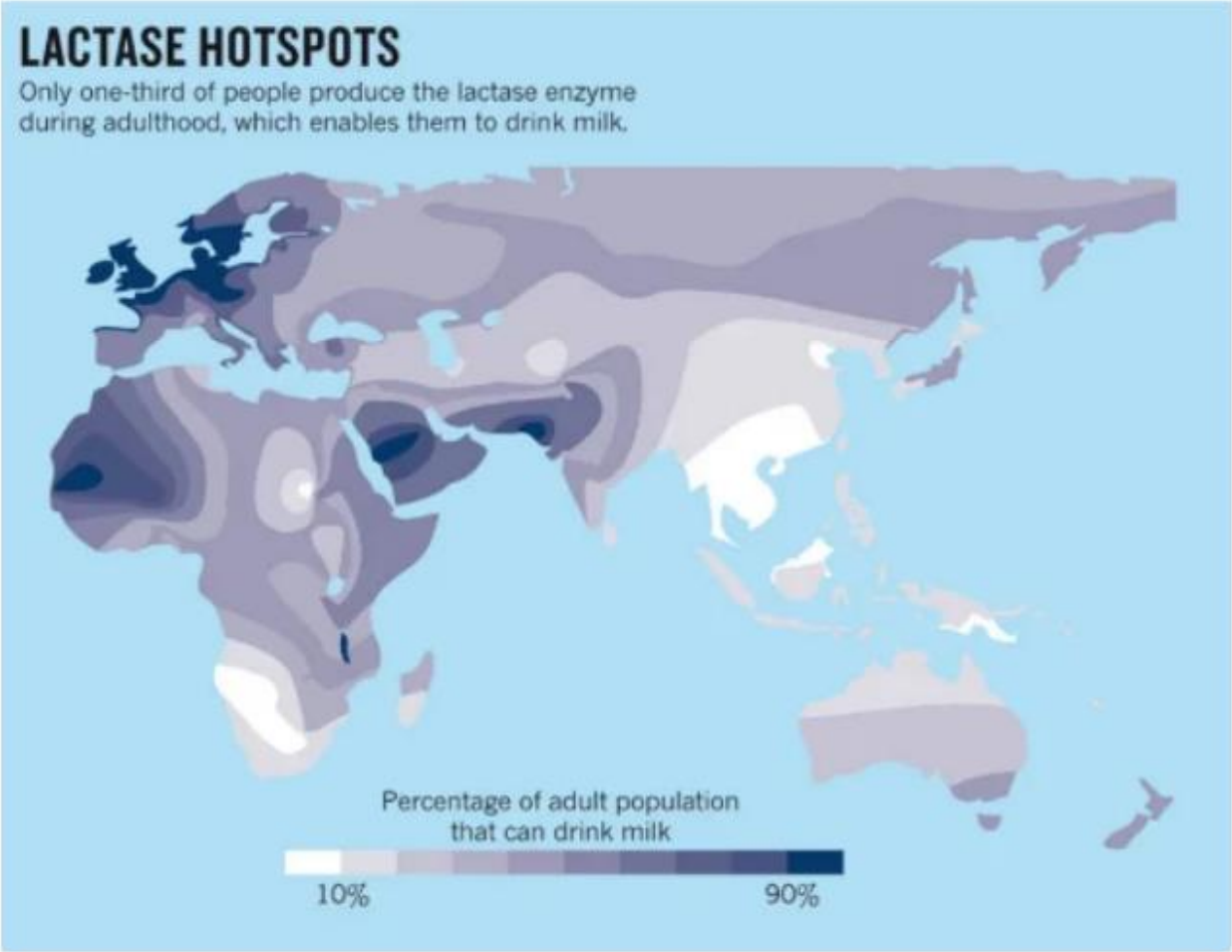
It seems that humans have the more-than-enough required genetic variation for there to be subspecies, which is the technical term for race.

Species	Heterozygosity	Recognized Subspecies	Source
Humans	.776	?	Wise
Humans	.73	?	Jorde
Humans	.698	?	Bowcock
Chimpanzees	.765	4	Reinartz
Chimpanzees	.63	4	Wise
African Buffalo	.729	5	Van Hooft
Leopards	.58	13	Uphyrkina
Jaguar	.739	9	Eizirik
Pumas	.52	6	Culver
Canadian Lynx	.66	3	Schwartz
NA Brown Bears	.5275	19	Paetkau
Scan. Brown Bears	.687	19	Waits
Coyotes	.629	19	Garcia-Moreno
Gray Wolves	.574	37	Garcia-Moreno
African Wild Dogs	.643	5	Girman
NA Wolverines	.55	2-3	Kyle and Strobeck
Scan. Wolverines	.325	2-3	Walker
Elk	.395	7-8	Polziehn
Bighorn Sheep	.6235	3	Forbes
Bonobos	.535	1	Reinartz
Polar Bears	.68	1	Paetkau
Dingoes	.445	1	Wilton
Domestic Dogs	.5085	1	Garcia-Moreno

Furthermore, there are also several recognized subspecies or race which have diverged from each other in time spans similar to or more recent than humans have had to evolve subspecies:

Subspecies'	Time of divergence
Cyanoptera – Discors (birds)	65,000
Discors – Septentrionalium (birds)	70,000
Cyanoptera – Septentrionalium (birds)	95,000
North American Moose – European Moose	165,000
Proposed time for human subspecies to have evolved	100,000
8 subspecies of tigers	72,000
2 subspecies of lizards	12,000
Eastern and Western Wood Duck	34,000

Not to mention, how humans are so spread out throughout the world even tens of thousands of years ago. It shouldn't seem intuitively implausible that humans would evolve subspecies faster than most other animals. Humans have evolved to have different skin colors and not to mention lactose tolerance:



There's also the fst value. The fst value is about the proportion of total variation that exists between two populations compared to the overall variation in both populations.

Fst distances between the subspecies of various species are similar to the distances between populations of humans:

Species	Fst Distances	Recognized Subspecies	Source
Gray Wolves	0.168	37	Roy 1994
Pumas	0.167	6	Culver 2000
Humans (K=14)	0.155	?	Barbujani 1997
Asian Dogs	0.154	11	Kim 2001
Humans (K=44)	0.121	?	Jorde 2000
North American Coyotes	0.107	19	Roy 1994
North American Wolverines	0.067	2-3	Kyle and Strobeck 2001
Jaguars	0.065	9	Eizirik 2001
African Buffalo	0.059	5	Van Hooft 2000
Canadian Lynx	0.033	3	Schwartz 2002
Humpback Whales	0.12	3	Jackson 2014
Plains Zebra	0.11	5	Lorenzen 2008
European Wildcats	0.11	3	Pierpaoli 2003
Kob Antelope	0.11	2-3	Lorenzen 2007
SW European Cow	0.068	18	Jordana 2003
Red Winged Black Bird	0.01	5	Williams 2004

Fst values will vary depending on how many groups you divide a species into. The Fst value for each species is just an average for all subspecies-relations. "K=14" refers to the number of subdivisions in the species.

The fewer the divisions that are recognized, the higher the average Fst value between the divisions will be. That's why any species will have a higher Fst value when the number of populations is lower. An Fst value of around 0.2 is pretty much reaching the inability to interbreed.

An Fst value can also be argued as a kind of "inverse kinship coefficient", or "anti-kinship". This can be done by multiplying the Fst value by two and you would get the "anti-kinship".

For an example would be parents and children. The Kinship coefficient between a parent and a child is around 0.5, between full-on siblings is around 0.5, between grandparent and grandchild is around 0.25. If you want a Kinship coefficient of around 1, it would be Monozygotic or Identical twins.

Now, the fst distance between a European and an African is around 0.166, which can be translated into a Kinship coefficient of around -0.332.

- Identical Twins = 1
- Parent-Child = 0.5
- Siblings = 0.5
- Aunt, Uncle, Niece, Nephew = 0.25
- Grandparent = 0.25
- First Cousin = 0.125
- European-African = -0.332

The explanation of why Fst values can function as the "inverse kinship coefficient divided by 2" is simply that Fst values is just the coefficient of kinship between

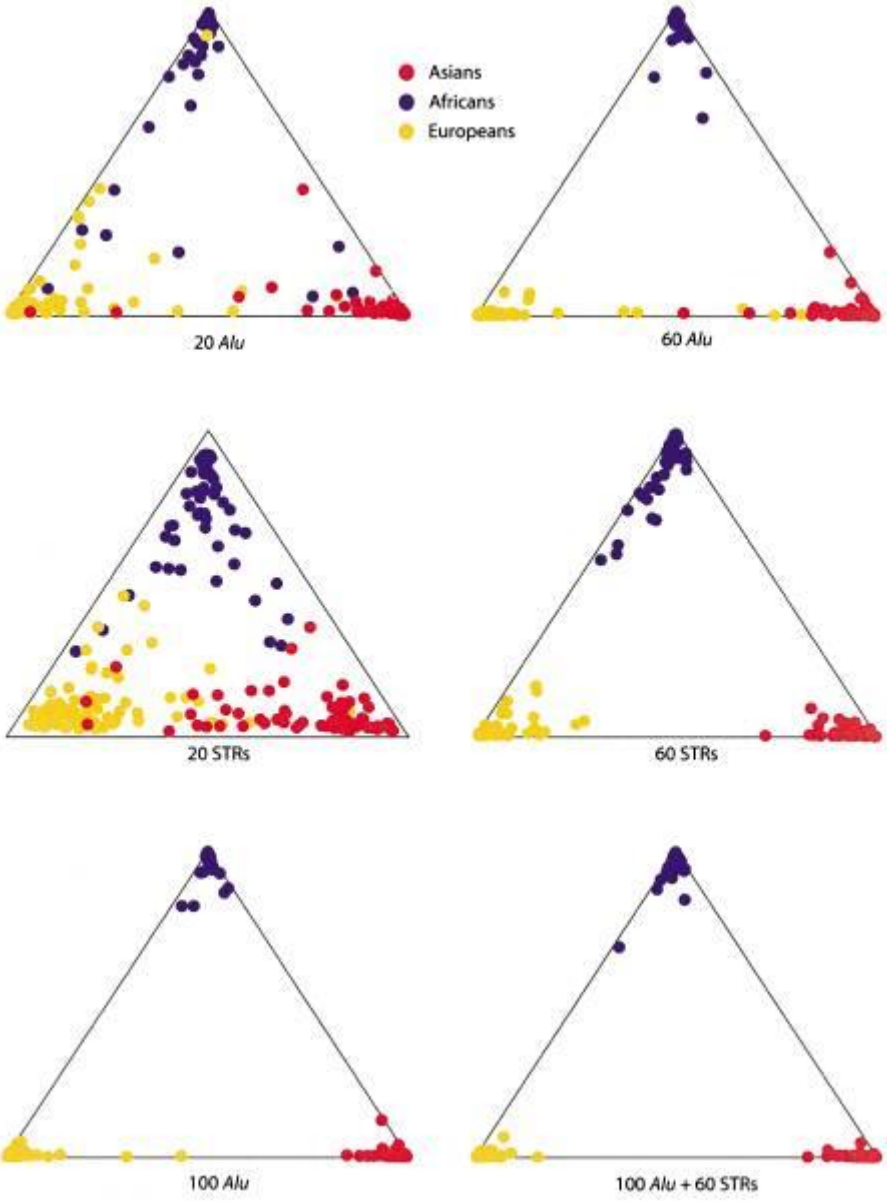
members of the same deme (deme in the context of biology just means group of individuals within the same taxonomic group) due to the population structure and that genetic differences between demes imply genetic similarity within demes. Essentially, An individual's coefficient of kinship with someone from his own deme is just Fst while his kinship with someone from the other deme is −Fst.
Aside from the usage of coefficient of kinship and Fst values. There's also Cluster analysis or clustering which is the task of grouping a set of objects in such a way that objects in the same group are more similar to each other than to those in other groups.

The way it works with the identification of racial groups is when researchers get a bunch of genetic data, and then tell the computer to sort it into clusters. For example, it may take 300 pieces of DNA, and then tell the computer to sort individuals based on those 300 pieces of DNA into three clusters. Of course, you could just use the computer into whatever amount of clusters that you wanted. But for our purposes, let us assume that it would be sorted into three distinct clusters. These three clusters would act as the signatures for three distinct racial groups. What one can do is to take some genetic markers, give it to the computer, and tell the computer to sort it into three categories, and see how well those three categories correspond to the socially recognized races.

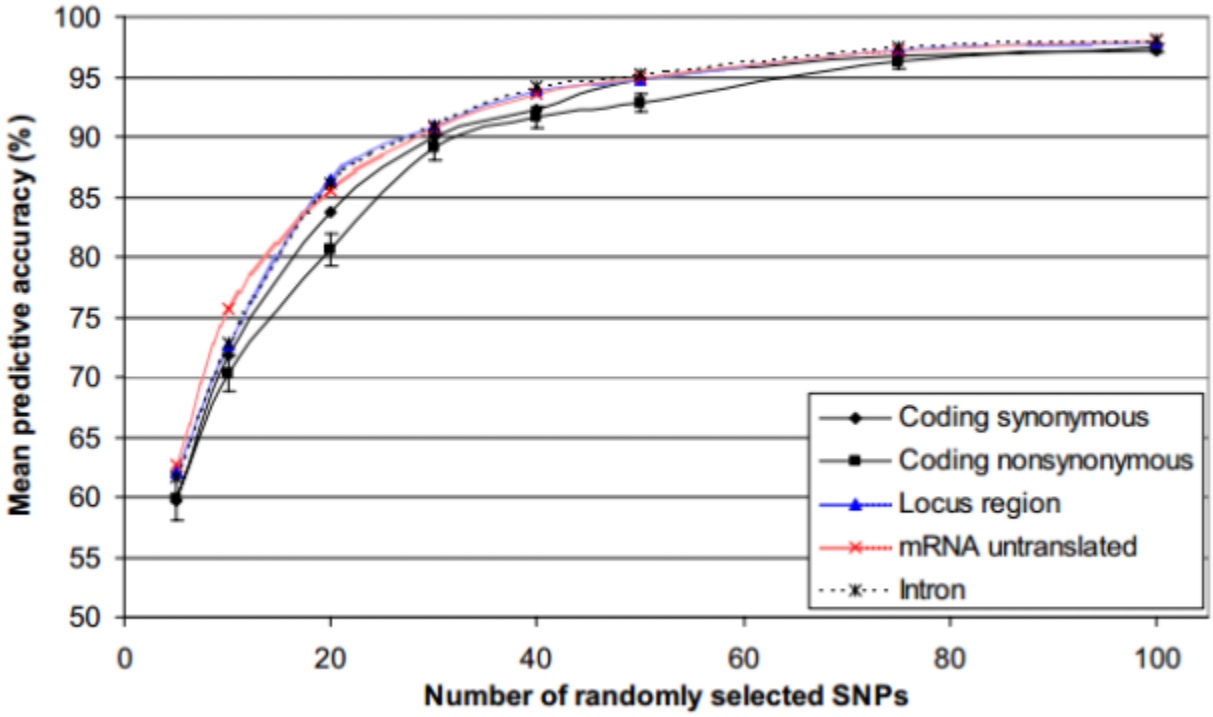
This can be see with the Correspondence between genetic cluster and geography by number of loci used:

Location	20 Loci	60 Loci	100 Loci	160 Loci	Number
Africa	91%	99%	100%	100%	
Asia	82%	96%	99%	99%	
Europe	79%	95%	99%	100%	

These are the results when K=3, or the number of populations the computer is told to classify the data into is 3. The computer doesn't know beforehand the race of the individuals, it just gets data, then is told to cluster them into X number of groups. The next picture provides a visual description of how well the races correspond to geography based on the number of loci.



Now, let us say that you wanted to deny the existence of race. Which triangle that you wanted to pick? The one with the fewest loci, of course. This is often done in courses on race where the teacher gives the class a genetic test to see what race they are, and their test uses a small number of SNPs (around 20). The fewer SNPs you use, the less it will cluster, and thus the less genetic cluster will correspond to visibly recognized races. And so a dishonest or uninformed teacher will do this. As can be seen here:



This also deals with another criticism of race: that the categories are subjective. This criticism would be addressed. It might be true that categories themselves are subjective in the sense that colours are subjective. After all, where red ends and orange begins is a subjective thing, so are we going to use the subjectivity of boundaries to say that colors don't exist?

Let us go about the five laws of Behavioral genetics, which as follows:

1. *All human behavioural traits are heritable.*

2. *The effect of being raised in the same family is smaller than the effect of the genes.*

3. A substantial portion of the variation in complex human behavioural traits is not accounted for by the effects of genes or families.

4. A typical human behavioural trait is associated with very many genetic variants, each of which accounts for a tiny percentage of the behavioural variability.

5. All phenotypic relationships are, to some degree, genetically mediated or confounded.

The First Law of Behavioral Genetics is that all human behavioural traits are actual. All human characteristics, to a certain extent, have a genetic component. Genetic components influence one's political beliefs, economic beliefs, and worldview to a specific time. Essentially, the first law is about heritability.

The Second Law of Behavioral Genetics is once again correct; it talks about a shared environment. It has been countless times that the shared environment is minuscule when compared to the heritability estimates.

The Third Law of Behavioral Genetics is once again confirmed, which talks about the unshared environment. In general, there will be variance leftover once genes and shared environmental effects are accounted for. For example, Identical twins would have differences in sex preference or that have different fingerprints. Twins differ substantially for cancer incidence – despite having very similar lifestyle habits, indicating that these factors do not do as much as many think. The Egalitarian would try to fill this proportion with the usual environmental suspects (e.g., schools, peers, differential parental treatment). Thus, indicating that they do not learn anything at all.

Next to the Fourth Law of Behavioral Genetics is that a typical human behavioural trait is associated with very many genetic variants, each of which accounts for a tiny percentage of the behavioural variability. This means, in layman's terms, multiple genes contribute to a particular trait or that it is polygenic. Intelligence is one example; it is being donated by over a thousand genes alone. This is why one should be wary of genetic engineering. Human biochemistry is complex until we are advanced enough to identify every gene within the human genome accurately and what it does accordingly. This is primarily of concern for breeding or genetic engineering. This puts the kibosh on simplistic notions of a "gene for X" because, in reality, there are a plethora of genetic variants at play that would contribute to a particular trait.

Finally, the Fifth Law of Behavioral Genetics. The Fifth Law is that all phenotypic relationships are to some degree genetically mediated or confounded. This is the most underappreciated compared to the other Four Laws of Behavioral Genetics.

> "*People who exercise more have fewer/later health problems and live longer, so naturally conventional wisdom interprets this to mean that exercise leads to health and longer life when in reality healthy people are driven to exercise and have better health due to their genes.*"

One could put up countless examples. Poverty and Criminality. It is common knowledge that poverty is causing criminality, right? Wrong genetic factors could be a decisive factor for the two phenomena. Assume this, everyone is in a state of equal poverty, and then there is this one guy who had all the stuff to remove them from their poverty. So, some people in poverty decided to steal that stuff to be not in poverty, in which thus, they committed a crime. Some people do not

commit the crime. Why is that? Why is there one financially profitable guy? Why is everyone poor? Why did some people decide to become a criminal? Why do some people not become criminals despite being in a state of poverty?

There is a straightforward answer; it is that of heredity. One person is financially sound because they had the right genes to reach their phenotypic maximum. All the other people are poor because they do not have the right genes to compare their phenotypic maximum.

Some of the poor people would commit criminality because they had reached their phenotypic maximum in which they can no longer tolerate the conditions of poverty. That phenotypic maximum is utmost determined by their genotype. The same goes for the poor people who would not commit a crime. They had not reached their phenotypic maximum, determined by their genotype not to tolerate poverty conditions. The genotype determines the phenotypic ultimate, and the environment determines if they would get this phenotypic maximum. All phenomena related to human interaction are, to some degree, genetically mediated.

In the countless decades, many environmental factors have been interpreted and stated to be causal factors without using any adequate genetically-based information that can be used.

In the last decade or so, many extensive genetically informative studies began to be published showing that the statistical relationships between environmental variables and outcome variables were not causal, but resulting from a genetic confound, i.e. environment variables, are often heritable. I would put up a list.

Each header is the alleged environmental cause; each bullet is the supposed outcome.

Neighbourhood deprivation

- Adolescent violent criminality and substance misuse

What does this mean?

It means that the adverse effect of neighbourhood deprivation on adolescent violent criminality and substance misuse in Sweden was not consistent with a causal inference.

Childhood family income

- Adolescent violent criminality and substance misuse

What does this mean?

It means that there were no associations between childhood family income and subsequent violent criminality and substance misuse once you had adjusted for unobserved familial risk factors, which is the quality of the parent-child relationship, family dissolution and parental criminality.

Exercise

- Well-being

What does this mean?

Exercisers are accurate, on average, to be more satisfied compared to non-exercisers in their lives. This doesn't mean that any environmental effect causes it and is strongly affected by genetic confounding (confounding implies that it causes both). This means that exercise participation and life satisfaction are highly heritable, and shared environmental factors do not influence individual differences in these two traits. Thus, the association of exercisers to be more satisfied is mediated by genetic factors.

- Symptoms of anxiety and depression

What does this mean?

The same goes for well-being. There's no doubt that there's a strong association of exercisers to be less anxious and depressive symptoms at the very least. However, to claim that the two are causal factors is the rationale of the association is incorrect. Again, like with well-being, the association of exercise with reduced anxious and depressive symptoms can be best explained by genetic confounding. There's a common genetic vulnerability to lack of regular exercise and risk for anxiety and depression within the population.

Music Practice

- Music ability which includes rhythm, melody, and pitch discrimination

What does this mean?

It is a common saying that practice makes perfect. The prevailing idea is that deliberate long-term practice would inevitably result in increased music ability. However, the truth of the matter, just like with exercise and its associations, goes for music. It had been found out that the deliberate of music practice is substantially heritable, the lowest estimate to be around 40% and the highest estimate to be approximately 70%. Thus, associations between musical training and musical ability can be explained by genetic confounding.

Maternal smoking during pregnancy

- Cognitive (low academic achievement and general cognitive ability) and externalising outcomes (criminal conviction, violent criminal conviction and drug misuse), but effects found for pregnancy outcomes (birth weight, preterm birth and being born small for gestational age)

What does this mean?

Maternal smoking during pregnancy or SDP has been associated with several psychiatric outcomes in the offspring. There has been much research into the question of whether the associations are truly causal. The adverse consequences of SDP would be categorised in three areas: pregnancy outcomes (birth weight, preterm birth and being born small for gestational age), Cognitive (low academic

achievement and general cognitive ability) and externalising outcomes (criminal conviction, violent criminal conviction and drug misuse).

The pregnancy outcomes are consistent with the causal interpretations; it is only with cognitive and externalising effects that they aren't compatible with the causal interpretations. Only when genetics are factored can they explain most of the associations between SDP and the cognitive and externalising outcomes.

This means that the associations between SDP in their mothers and their offspring's cognition and externalising behaviours are primarily due to genetic effects that would influence their behaviour.

Being a teenage mother

- Young adult criminal convictions: shared environmental and genetic confound, 67% and 31%, respectively

What does this mean?

Just like with the previous ones, Teenage childbirth is associated with poor psychosocial outcomes for teenage mothers. One such adverse psychosocial product is that adolescent mothers would have higher rates of antisocial behaviour. However, one should question if there's any causal link between the two.

The answer is like before; genetic factors confound the association between teenage childbirth and early adulthood criminality. Confounded means that one phenomenon affecting both phenomenons previously thought to be a causal link

with each other, but it turned out that one phenomenon caused it. This one phenomenon is the genes.

What does this mean?

Once again, there's an association with early age sexual intercourse and substantial psychosocial outcomes that are adverse. Whether a causal link between the two isn't still clear up until now.

Low socioeconomic status

- Sick leave (mental and somatic disorders)

What does this mean?

Low socioeconomic status means that they have low income, poor education, or any trait of being poor. It has been seen that there's a strong association between both low SES and Sick leave, which is caused by mental and somatic disorders.

Poor education and inadequate income were indeed associated with sick leave due to both mental and somatic disorders. However, the strong association is partly due to genetic confoundings.

Education

- Allostatic load (composite index of health risk)

What does this mean?

It has been found that the more you are educated, the more that you would be associated with better health. However, if there's any causal link between the two is unanswered up until this point. One way to measure fitness is through the Allostatic load, which is the cumulative burden of chronic stress and life events. Essentially, a composite index of health risk.

Now, for the answer to the question. Better schooling or education doesn't itself protect against allostatic load. Just like with previous answers, it is confounded by genetic factors.

Smoking Cannabis

- Lower intelligence

What does this mean?

Marijuana or Cannabis is one of the most common recreational drugs. There's no doubt that one could conclude that the usage of Marijuana is linked with the decline of cognitive function. However, causal links aren't still answered.

The answer is once again is due to genetic confoundings. There could be genetic liabilities that would discourage intellectual attainment and promote marijuana use.

After all, there is the Nature of the Nurture. Most people call the measures of "Environmental" or "Nurture" such as parenting are significantly influenced by genetic influences.

If environmental measures are tested in an environment in which it is genetically sensitive, one could find evidence for genetic influence for these environmental or nurture measures. A significant genetic impact was seen for objective measures of the environment such as parenting and self-report measures of parenting, social support, and life events.

The reason appears to be that such measures do not assess the environment independent of the person. Humans select, modify and create environments correlated with their genetic behavioural propensities such as personality and psychopathology. For example, in studies of twin children, parenting has been found to reflect genetic differences in children's characteristics such as personality and psychopathology.

Now the Egalitarian would go up the topic of "Epigenetics." If one of their talking points failed, they would go to one of their favourite topics, which is "Epigenetics." They would state that "But!!! You are ignoring Epigenetics!!!" or something similar to that particular statement.

They had believed that Epigenetics has proved that alterations in the environment can change our genes, and therefore traditional beliefs about genetic characteristics are outdated and irrelevant. They would tell you that you are out of date.

This view of Epigenetics and its relation to any Nature/Nurture Debate is pervasive. Mainstream media had been doing it for a long time. The famous American weekly news magazine 'Time magazine' explained "Why Your DNA isn't Your Destiny" back in 2010, with the subtitle "The new field of epigenetics is showing how your environment and your choices can influence your genetic code—and that of your kids.". Another one would be from an American general audience science magazine aptly named 'Discover,' there is a 2013 Magazine from 'Discover' which would tell you about " the genome has long been known as the blueprint of life, but the epigenome is life's Etch A Sketch: Shake it hard enough, and you can wipe clean the family curse."

The New York Review of Books weighed in with "Epigenetics: The Evolution Revolution" in its issue of June 7, 2018. Authors Israel Rosenfield and Edward Ziff reported, "Epigenetics has also made clear that the stress caused by war, prejudice, poverty, and other forms of childhood adversity may have consequences both for the persons affected and for their future— unborn—children, not only for social and economic reasons but also for biological ones."

Epigenetics's problem is that it is being misunderstood and that it is being misused, and the biggest perpetrator of this type of crime is the Mainstream Media.

To understand Epigenetics, one should go back to the basics. The basics are that your double helix of DNA resides in the nucleus of a cell. The cell would contain the proteins that enable it to perform its particular function, whether it be a cell in the biceps or the brain. For the Cell that would do that thing, a minimal number of relevant genes within the DNA producing those proteins for that cell type must

be identified and their information transcribed. The transcription must then be transferred to the ribosome, the place in the cell where proteins are synthesised.

Then there are the steps in the process of getting the information to the ribosome. This is a part of the process known as genetic regulation of gene expression regulation, which turns genes off or on and turns them up or down. Some of the things within genetic regulation can include a class of chemical modifications to DNA or to components of the "packaging" of DNA (chromatin) that has led to what is now called epigenetics.

This idea came way during the 1650s with William Harvey to describe how the developmental process allows the homogeneous fertilised egg to become a complex organism. William Harvey uses something similar, which is 'Epigenesis.'

It is only officially that the first appearance of the word "Epigenetics" occurred during 1942 with Conrad Waddington. He described the "whole complex of developmental processes," portraying an "epigenetic landscape" of branching pathways that a cell might take.

Decades later, up to 1958, which is just a few years after discovering the structure of DNA, a microbiologist who goes by the name "David Nanney" had decided to recast Waddington's definition. Nanney described two types of cellular control systems. One consisted of "genetics systems" that are involved in transcription. The other consisted of "epigenetic systems" that were auxiliary mechanisms for determining whether expression occurred, and if so, its intensity.

It is also one of his articles that would become a significant aspect of epigenetics known as "persistent homeostasis" ; it refers to the idea that cellular memory survives cell division.

So what caused "persistent homeostasis"? Well, decades of research can collapse the causation of "persistent homeostasis" into a few sentences. The answer turned out to be epigenetic marks of two kinds: those caused by DNA methylation and those caused by histone modifications. I will concentrate on DNA methylation, which has been more commonly studied, and ignore histone genetic marks in this short description:

> *The DNA does not change, per se. No actual researcher on epigenetics had ever claimed that environmental events genuinely modify it. All the scientific claims involving epigenetics, correct and incorrect, are about gene expression changes, not DNA changes. In other words, the genotype of a person had not still changed at all.*

Now, let us go to the topic of DNA methylation; a genetic mark can be thought of as a speck of a chemical in the methyl group deposited onto a gene. The most common of this DNA methylation in which it does is to turn off the gene, essentially suppressing its expression by making it so that it is less accessible to the transcription machinery. There are other effects in some circumstances, such as it can turn on the genes or modulate the intensity of genetic expression.

The very first task of methylation of the genome begins at conception. A fertilised egg contains not only DNA inherited from the parents but also the parents' methylation patterns. About a week after conception, almost all of those patterns are erased, and virtually all of the genome is methylated de novo. This new

genome-wide methylation pattern paves the way for cell specialisation by repressing DNA sequences that are not supposed to be expressed in a given cell. During pregnancy, methylation and demethylation continue at specific stages of the embryo's development in a programmed sequence until the tissue is fully developed. At this point, it has generated a template that is exceptionally stable lifelong.

It is a highly stable process but not absolutely stable. There can still be abnormal methylation processes that would occur during this particular lifespan. This peculiar process of methylation can be used to predict various diseases, including some cancers.

Furthermore, this is where all that hype began. The very evidence that environmental events can induce changes in methylation. However, it should be noted that despite this overhype of Epigenetics, One must remember this: Environmental circumstances routinely change gene expression, but it does not change the genotype.

Let us say that you had broken your ankle; there would be a genetic expression within the bones within the ankle that would change so that your broken ankle would heal up. If you decided to run a mile, various gene expression changes would have taken place in your respiratory system, your muscular structure, etc. That the environment interacts with genes to change the phenotype temporarily is not news. It happens all the time. The Epigenetic process happens all the time. It can be thought of as reaching your phenotypic maximum, which is determined by your genotype.

What makes Epigenetic distinct lies in the cellular memory of methylation that survives cell duplication. Suppose that an adverse environmental event early in childhood not only caused temporary changes in gene expression (as in a broken ankle) but changed the methylation patterns, thereby causing permanent genetic changes that damage the phenotype.

Now, let us propose a genuinely positive and substantial environmental effect that could demethylate and thereby reactivate the genes that the damaging event had turned off. Suppose—and this was the most exciting possibility of all—that cellular memory not only survived during the lifetime of the person who had experienced these environmentally induced genetic changes but could be passed onto offspring.

This is where all that hype of Epigenetics came from, and that is why the Egalitarian are so into the idea of Epigenetics. They had believed that Epigenetics could be the path to greater heights of equality of all beings, equality in capabilities and outcomes for all people.

The potential findings of Epigenetics about genetic expression sank in during the 2000s; the use of the term epigenetics had been expanded to include all forms of transmission of the phenotype by mechanisms that did not involve changes in the DNA sequence. In other words, to expand beyond Nanney's emphasis on cellular memory and instead treat the larger realm of transmission of the phenotype through RNA and transcription factors as part of epigenetics.

It is then stated by the director of the Center for Epigenomics at the Albert Einstein College of Medicine, John Greally, who noted that this modern definition of epigenetics had become way too broad for its original purposes. It had become conflated to the point that changes in transcription regulatory effects with cellular

memory. This has created pervasive problems of interpretation—among other reasons because a change in DNA methylation can be an effect instead of a cause.

Now, let us take into the claims of the hard-on advocates for Epigenetics. Their first significant claim is the one that is tailored to the masses with both optimism and media excitement. It dealt with the effects of maternal love in infancy. An article which goes by the name "Epigenetic Programming by Maternal Behavior" was published in 2004. It had reported that rat pups who received high levels of arched-back nursing plus pup licking and grooming had differences in DNA methylation of a specific glucocorticoid receptor in the hippocampus than pups who received low levels of such nurturing. That particular receptor has been the focus of attention because it regulates genes known to affect early development, mainly stress response.

Then, the Egalitarian and similar-minded people decided to make implications of what this article had to offer. If such things can happen in rat pups, why also not in humans? Human children are deprived of the necessary and substantial maternal love. Human children are permanently less able to cope with stress and more vulnerable to psychological disorders for genetic reasons. Then the article concluded that: "Thus we show that an epigenomic state of a gene can be established through behavioural programming, and it is potentially reversible.". According to the authors of the article, they had concluded that the effects on methylation were reversed with cross-fostering.

It is then the Egalitarian had loved this type of thing that they fastened up the implications of such a thing. Something can be done to undo the genetic damage experienced by children who were deprived in infancy.

Since 2004, there have been floods of articles about the article that the Weaver Study had suggested. The ones that have received the most media attention focus on "natural experiments" in the Dutch famine of 1944–45, the Chinese famine of 1959–61.

Let us first take a look at the Dutch Famine of 1944-45. In the Dutch famine case, a team of Dutch scholars compared methylation 60 years later of people who had been in utero during the worst of the famine with siblings who were born before or after the famine. Their conclusion:

> *In summary, using a systematic genome-wide approach, we show that DNAm [DNA methylation] at specific CpGs [cytosine-phosphateguanine dinucleotides] mediates a considerable proportion of the associations between prenatal famine exposure and later-life adiposity and serum TG levels. Our data are consistent with the hypothesis that the associations between exposure to an adverse environment during early development and health outcomes in adulthood are mediated by epigenetic factors. The specific causal mechanism awaits elucidation.*

In layman's terms, it means that children within the utero are affected in their DNA methylation in ways similar to those of laboratory studies. However, the data did not permit the authors to determine whether the mother's stress or the stress on the fetus (or both) caused those effects on methylation, nor could they tell whether the changes were due to DNA sequence changes variants or other factors.

Then there are two systematic reviews of the epigenetics literature that have been published. The first, published in 2016, was written by psychiatrist Gustavo

Turecki and neurobiologist Michael Meaney. Their review of the literature identified 430 articles, of which 40 met the authors' criteria for inclusion. The other systematic review, published in 2018, was prepared by a team supervised by developmental psychologist Wendy Kliewer. The authors limited their review to infants' studies, using 20 out of 510 unique articles that their literature search had identified.

Neither of these two systematic reviews had ever found support for epigenetic effects resembling epigenetics' portrayal in the media. Neither discussed transgenerational epigenetic change.

In the history of science, a paradigm-breaking discovery—the heliocentric solar system, quantum mechanics—is made by a young scientist, resisted by the older generation of scientists, and finally wins acceptance as the geezers die off ("Science advances one funeral at a time").

Epigenetics is an oddball. Epigenetics is not typically like within the history of science. Epigeneticists who are still young themselves and doing cutting edge work see their discipline as the victim of a hijacking. In their view, too many epigenetics enthusiasts reach conclusions and publish them without understanding the science that already exists. For John Greally, the Yehuda study of Holocaust survivors "is pretty typical of all epigenetics studies today for being uninterpretable." Geneticist Graham Coop had a Twitter response to the New York Review of Books article that began, "Utter nonsense." Furthermore, they have allies in the older generation—the week that the New York Review of Books article came out, evolutionary biologist Jerry Coyne's blog began with "Another lousy article on epigenetics."

For further deep dive into the debate of epigenetics, I could pinpoint two people that would have an overview of these subjects of epigenetics. They are neuroscientist Kevin Mitchell and Jill Escher.

Mitchell's case against the popularised view of epigenetics within mainstream media began with two long scholarly appraisals of the data posted on his blog, Wiring the Brain, in January 2013. Then in May 2018, he returned to the subject in the wake of the Yehuda study of Holocaust victims; he was rather blunt with what he had stated:

> "*You could be charitable and say the evidence is weak, circumstantial, observational, and correlative, and that it warrants circumspection and careful interpretation (and further research, of course!). I would go further and say that nothing in any of those papers rises to the level of what should properly be called a finding. There is no there there.*"

Months later that, Jill Escher responded on her blog, Germline Exposures, with a list of 49 references documenting her allegation that Mitchell cherry-picked studies to make his case and ignored abundant evidence of epigenetic inheritance in mammals. Just like with Mitchell in the type of response:

> *Sloppy overstatement and dogmatism from the Ivory Tower, such as Mitchell's blog post, can breed complacency precisely at a time when we should be deeply alarmed about the intergenerational effects of past and current exposures. It should be clear to all of us by now that molecular insults to the germline can influence disease, behavior, or physiology of offspring, perhaps in ways that are staggeringly important for public health. While healthy skepticism is always welcome, research does not progress by*

allowing outspoken academicians to distort the state of the science unchallenged.

Four days later, Mitchell responded to Escher with another detailed methodological critique of the epigenetics literature.

Suppose there is an outsider's opinion about this whole debate about epigenetics. I would state this; Epigenetics is complex; it is one subject that any amateur would find hard to get into.

They were investigating whether events in early childhood change methylation patterns and whether such patterns are reversible. Mitchell's scepticism towards Epigenetics is excellent and convincing, and that the aspect of the research is being conducted using methods that lend themselves to rigorous examination. The more ambitious claims of the enthusiasts are currently unwarranted.

The second issue would be transgenerational epigenetic. There is a solid scientific case for it in the experiments regarding C. elegans (a worm about one millimetre long) and D. melanogaster (the fruit fly), which is not good enough because they are not even mammals, to begin with. Although, there is some evidence of intergenerational transmission that has also come from laboratory versions of the house mouse, a mammal, which would be closer.

The case of transgenerational epigenetics is not fully resolved, but the proponents face an uphill battle. The most straightforward reason is that it is an uphill battle. It was explained by the Cambridge study leader, Anne Ferguson-Smith. "There are two rounds of epigenetic programming that prevent any epigenetic marks from

being transmitted from one generation to the next," she told The Scientist. "People do not seem to appreciate this."

The study of methylation patterns and their manipulability is at an extremely early stage. Even if one takes all of the conclusions in the literature reviews at face value, their applications are far down the road.

Epigenetics, if properly understood, is best suited within the medical sciences. As far as I can tell, if it is genuinely adequately understood, there would not be anyone who would be unironically and seriously defending the very notion that we are on the verge of learning how to turn genes on and off and thereby alter behavioural traits in disadvantaged children (or anyone else).

The truth is that epigenetics effects are still genetic effects. Epigenetic in its entirety is a genetic effect. How so? Because the causes of these epigenetic effects are that the genes within your genome have produced the mechanics to cause such epigenetic effects.

The causal effect of epigenetics on our phenotype is minimal. There would be no percentage of epigenetics because everything that epigenetics does is genetic to the DNA strands in your father or mother. Genes have created the mechanisms that would annotate DNA with methylation. Then there were other proteins that were copying this information to the child. So even if this particular feature of the human phenotype is entirely based on epigenetics, it's genetics. It's the genes that created this system of informational communication between parents to offspring to transfer this particular information. And so it's a sender receiver system. The parents are the sender. The child is the receiver.

The widespread popular belief that environmental pressures routinely and permanently alter gene expression in humans is that those alterations are reversible. These effects that are passed down through generations are wrong and misunderstood. It is being misused by anyone eager for the claims that the Egalitarian made. Heredity limits an individuals' upper limit to IQ, and the environment determines how much of that innate potential will be reached. No amount of nurturing can make one exceed innate potential.

There is no doubt that there is countless knowledge that disproves the Egalitarian talking points and their derivatives again and again. To believe in the superiority of nurture/environmental/cultural/etc. Over nature is by principle Egalitarian, an infectious and destructive ideal made by the spiteful, envious, and solipsistic "Enlightenment".