A HISTORY OF THE CHINESE LANGUAGE

HONGYUAN DONG

A History of the Chinese Language

A History of the Chinese Language provides a comprehensive introduction to the historical development of the Chinese language from its proto Sino-Tibetan roots in prehistoric times to Modern Standard Chinese. Taking a highly accessible and balanced approach, it presents a chronological survey of the various stages of Chinese language development, covering crucial aspects such as phonology, syntax and semantics.

Features include:

- Coverage of the key historical stages in Chinese language development – such as Old Chinese, Middle Chinese, Early Modern Chinese, Modern Standard Chinese and regional varieties.
- Treatment of core linguistic aspects of the Chinese language – including phonological changes, grammatical development, lexical evolution, vernacular writing, Chinese characters and Modern Chinese dialects.
- Inclusion of many authentic Chinese legends and texts throughout the book, presented through a rigorous framework of linguistic analysis to help students to build up strong critical and evaluative skills and acquire valuable cultural knowledge.
- Integration of materials from different disciplines – such as archaeology, anthropology, history and sociolinguistics – to highlight the cultural and social background of each period of the language.
- Helpful appendices to aid students with no prior knowledge of linguistics or the Chinese language.
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Written by a highly experienced instructor, *A History of the Chinese Language* is an essential resource for beginner students of Chinese language and linguistics and for anyone interested in the history and culture of China.

Hongyuan Dong is Assistant Professor of Chinese Language and Linguistics at The George Washington University, USA.

"This is an important and valuable book for anyone interested in the Chinese language and its history. It offers a gripping account of what the language was like a thousand years ago and how it reached its present state. The author's clear and reader-friendly style makes it a pleasure to read."

Boping Yuan, *University of Cambridge, UK*

"The book takes us on a very interesting journey through the history of the Chinese language. The subheadings catch our imagination and lead us into a rich world by showing the language through a social and historical perspective. The reader-friendly approach makes the reading enjoyable…a good reference for students and teachers of Chinese as well as for scholars interested in the Chinese language."

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Song Jiang, *The University of Hawai'i at Mānoa, USA*

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This book is dedicated to the memory of my father, Dong Ruiyun

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Contents

Figures

Tables

Preface

Language is one of the fundamental aspects of human society, and language history is a fascinating topic both in itself and in relation to other subjects such as history, literature, archaeology, etc. and therefore studies of the history of language deal with linguistic matters per se and with relevant sociocultural factors. For learners of a modern language, knowledge of the historical development of the sounds, grammar and vocabulary can also be helpful since, among other things, classicisms are quite common in many modern languages. This is especially true with languages like Chinese, where the classical language had been used as the official written language for about two thousand years before modern times. Anyone who is interested in Chinese language and culture and in linguistic history should find this book useful.

Chinese historical linguistics is a difficult subject. There are some very good introductory books available but they are either too advanced for the uninitiated or too sketchy for the motivated and so I want to make this subject more accessible to the general readership. I will not only describe the features of the different stages of the Chinese language, but also guide the readers step by step through many interesting findings.

Readers with no prior knowledge of linguistics or Chinese can make use of the appendices. In Appendix I, I have compiled a list of major chronological divisions in Chinese history. Most of the symbols used in this book are International Phonetic Alphabet (IPA) symbols and there is a short tutorial on phonetics and the IPA in Appendix II. The pronunciation of Modern Standard Chinese is given in *pinyin*, the Romanization system currently used in China, and there is a pronunciation guide to such pinyin symbols in Appendix III. There are also two pinyin-IPA correspondence charts in Appendix IV. A quick reference to these appendices can be made whenever needed.

Pinyin is also used in the transcription of the names of Chinese people and the titles of ancient classics. Some of these have been popularly transcribed in other notations, such as the Wade-Giles system. For example, the name of the ancient philosopher, Laozi, has been variously rendered as Lao-Tsu or Lao Tse, and his book, the *Dao De Jing,* is probably better known as the *Tao Te Ching*. Pinyin transcriptions such as “Laozi” and “Dao De Jing” will be used in this book. In most places, whenever

Chinese characters are provided, traditional Chinese characters will be used, as is more common in books on Classical Chinese. To help the readers better understand the subject matter of this book we have a companion website with useful materials such as recordings, demonstrations of sounds and various exercises. Throughout the book, icons are placed in the margins, where applicable, to refer the reader to relevant materials on the companion website.

The field of Chinese historical linguistics is vast and rich in scholarly debates and disagreements. Therefore, in an attempt to cover all the major topics in the field in such a small book, I have had to simplify many issues and have avoided introducing extensive debates on certain topics. This approach is justified by my belief that, for a book of an introductory nature, it is better for readers to have a good command of the basic methodology and preliminary conclusions than to be exposed to the full range of debates and details. As readers progress to a higher level of research, they will begin to question certain assumptions and simplifications. It will not be too difficult for readers to transition from a simpler picture to further debates and refinements.

Writing a comprehensive history of the Chinese language for the general readership is a daunting task for anyone in the field, but I do feel that there is a need for such a book. Every effort has been made to ensure the accuracy of the content and the citations. Thanks to the invaluable comments from reviewers, the writing has been much improved. The remaining errors and inaccuracies, which I hope will not be many, are certainly mine. If this book proves to be an enjoyable and informative reading experience, that sparks your further interest in linguistic history and the Chinese language and culture, that will be my best reward for having worked day and night in writing this book.

Hongyuan Dong
Washington, DC
September 30, 2013

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CHAPTER 1

A walk through time

General introduction

"The *Dao* that can be spoken of is not the unchanging *Dao*; the name that can be named is not the unchanging name",[1] goes the opening phrase from the *Dao De Jing,*[2] one of the earliest philosophical works in Ancient China, written by Laozi (*fl.* sixth century BCE).[3] Despite the importance of this book in Chinese culture and thought, its real meaning can be difficult to grasp. Wouldn't it be ideal if one could travel some 2,500 years back in time and have a word with Laozi, although he would probably be very reluctant to explain anything in words? But would a modern speaker of Chinese and Laozi be able to understand each other, even in Chinese? Definitely not! Although the *Dao* is constant in Laozi's philosophy, the language one uses to talk about the *Dao* changes constantly. This book tells the story of how the Chinese language has evolved from the earliest time that we can have knowledge of to its current usage and state in the twenty-first century.

1.1 WHY STUDY LINGUISTIC HISTORY?

One of the major problems of understanding ancient texts is language. If we had a better idea of the language used in Laozi's time, it would be much easier for us to understand his thoughts. The same is true of any historical records. Linguistic knowledge can help us grasp the true meaning of these written records and textual interpretations are also the basis for the study of history and ancient thoughts. Language is an important aspect of human society and a history of language can touch upon how language was used in society at different times. In other words, we can approach history from a linguistic perspective. Even if we only look at how a language has changed, without also looking into the related sociocultural background, it is still a fascinating topic for those of us who love languages. Elements from Classical Chinese can be readily spotted in Modern Standard Chinese, which makes it necessary for native speakers, researchers into Chinese culture, and students of the Chinese language to have some knowledge of the ancient language.

1.2 THE LINGUISTIC SCOPE OF THE HISTORY OF THE CHINESE LANGUAGE

In what aspects can a language change? There are a certain number of basic sounds in each language. Historical phonology studies how this system of sounds changes. For example, there are 22 consonants in Modern Standard Chinese, but more than 1,000 years ago, in the language that can be said to be the ancestor of Modern Standard Chinese, there were more than 30 consonants. How were they pronounced? How did they change into the 22 consonants of Modern Standard Chinese? Chapters 3 to 5 focus on such changes and try to reconstruct the sound systems at different times. Besides sound change, studies of syntactic change look into how the rules of grammar and forms of grammatical constructions change. For example, "John is scolded by the principal" is a passive sentence. The Chinese equivalent of this construction is formed with the word bèi. Thus we want to know when this usage first appeared in historical texts and how it developed into its current form and usage. Chapters 6–7 will illustrate the key features of Classical Chinese and how some of the typical syntactic constructions in Modern Standard Chinese came about. Another aspect of language change lies in the meaning of words, which will be dealt with briefly in Chapter 8.

We use the term "Modern Standard Chinese" to refer to the official language of China. Chapter 9 will give an historical account of how this national, standard language was created and its major features will also be discussed. Alongside the national language there are many regional varieties of Chinese which, to some extent, developed from the same ancestral language. Chapter 10 will give a brief description of such varieties of Chinese in terms of their connection to the ancestral language. This branch of study is traditionally called dialectology in Chinese linguistics.

This book deals with how the sounds, words and syntax of Chinese have changed and how the current varieties of Chinese are related to earlier stages of the language. It would probably make our task easier if there were video clips or audio recordings from these ancient times to show how the language was used then, but since we do not have such materials, studies of linguistic history have to rely on written records. The great thing is that written records of Chinese go back at least 3,200 years to the oracle bone script in the Shang Dynasty (sixteenth to eleventh century BCE). But what about the Chinese language before that? Even though we do not have extensive written records from before the Shang Dynasty, the language undoubtedly existed in an earlier spoken form. Using a combination of different methods, we can actually push our hypotheses and knowledge of the language further back to prehistoric times when Chinese was more similar to the ancestral languages of Tibetan and Burmese. We will talk about such genetic relations within the Sino-Tibetan language family in Chapter 2.

Written records are the primary sources of findings in historical linguistics. Actually, the writing system itself should have a history of its own. Chapter 11 will give a sketch of the development of Chinese characters from the oracle bone script to the current simplified forms.

1.3 THE WIDER PICTURE BEYOND THE LINGUISTIC

Although the subject matter of historical linguistics is language itself, it cannot be studied in isolation. When discussing the Chinese language in prehistoric times, we can enlist the help from findings in disciplines such as human population genetics and archaeology. For later stages, where written records are available, the use of these records begins with an inquiry into how and why these written materials were created. Discussions of how language was used in ancient societies can help us better situate our linguistic knowledge, reconstructed through historical linguistics methods. The written records used for the study of the history of the Chinese language include poetry, fiction, Buddhist texts and stories, ancient classics, etc., and these are important cultural products in themselves. To talk about the stages of the history of the language, we will definitely have to touch upon the dynastic history of Ancient China as well. Generally speaking, language changes mostly by itself, naturally, without conscious human effort. But linguistic reforms can also be carried out by governments and people consciously changing various aspects of a language. Such linguistic reforms are usually motivated by certain sociopolitical factors. Therefore, as we go through the different stages of the Chinese language, we will have to develop some understanding of the relevant cultural, historical, social and political backgrounds.

1.4 TERMINOLOGICAL CLARIFICATION

When the word "language" is used in daily conversation, it can refer to spoken or written forms. But in linguistics, "language" primarily refers to the spoken form. In the context of the title of this book, *A History of the Chinese Language*, what does "the Chinese language" refer to? This is actually a very tricky issue.

First and foremost we have to deal with the more controversial term, "Chinese dialects". Roughly speaking, people in the northern and southwestern parts of China speak Mandarin Chinese. Within this vast area, there are different dialects that are mutually intelligible. For example, a person from the city of Harbin in the Heilongjiang Province in Northeast China can converse with a person from Beijing quite freely if they speak their own dialects. Although it would be a little bit more difficult for a native of Beijing to speak with someone from Chengdu in the Sichuan Province in Southwest China, they can still maintain a high level of mutual intelligibility when they use their own dialects. In the southern and southeastern parts of China, it is often the case that speakers from different regions either have great difficulties understanding each other or cannot communicate at all if they use their local dialects, e.g. Cantonese, Shanghainese, Fukienese, Hakka, etc. A native speaker of Shanghainese cannot communicate with someone who speaks Cantonese, unless they both speak Modern Standard Chinese. Sometimes, even within the same linguistic group, such as Fukienese, it is possible that people from different places cannot communicate with each other in their native tongues. Traditionally, both the mutually intelligible Mandarin dialects and those that are not mutually intelligible in

southern and southeastern China are regarded as fāngyán, which literally means "local speech". The common translation of this term in English is "dialect". But this translation causes a certain degree of misunderstanding and terminological chaos.

According to Mair (1991: 4) the English word "dialect" refers to "one of two or more mutually intelligible varieties of a given language distinguished by vocabulary, idiom and pronunciation." For example, someone from London might speak differently from a Sydney native in terms of pronunciation and vocabulary but they can have a conversation with no major problems. This is true of the different dialects within Mandarin Chinese, but not true of the situation between Mandarin and Cantonese, or between Cantonese and Shanghainese. Mair (1991) compares the situation between these major groups of Chinese that are not mutually intelligible to that between English, Dutch, Swedish, and other Germanic languages. Clearly, the translation of fāngyán as "dialect" is misleading. Thus Mair (1991) proposes a new term "topolect", in which "topo" corresponds to "fāng" and "lect" to "yán". This is indeed a better terminology for what fāngyán means in Chinese. Therefore, it is necessary to keep in mind that the geographic variations of fāngyán have both similarities to, and differences from, the kind of linguistic variations covered under the term "dialect". However, the term "dialect", the traditional translation of fāngyán, has been widely used, or misused, according to Mair (1991) and indeed we have a dilemma with various terminologies. For the lack of a better solution, let's use the term "Chinese dialects" as a convenient way to refer to these different local speeches, while dispensing with the common connotations of the word "dialect". Now that the term "Chinese dialects", or simply "dialects", is established in this book, we can give a more detailed description of the major dialect groups.

Table 1.1 The major groups of Chinese dialects

Dialects	*English*	*Principal Geographic Distribution*
Guānhuà 官話	Mandarin; Northern dialects	Northern and southwestern China (chiefly north of the Yangtze River)
Wú yǔ 吳語	Wu dialect	Shanghai, Zhejiang and southern Jiangsu
Xiāng yǔ 湘語	Xiang dialect; Hunanese	Hunan
Gàn yǔ 贛語	Gan dialect	Jiangxi
Kèjiā huà 客家話	Kejia dialect; Hakka	Fujian, Guangdong, Guangxi, Taiwan
Mǐn yǔ 閩語	Min dialect	Fujian, Taiwan, Hainan
Yuè yǔ 粵語	Yue dialect; Cantonese	Guangdong, Guangxi, Hong Kong

Traditionally, Chinese dialects are categorized into these seven major groups: Mandarin, Wu, Xiang, Gan, Min, Kejia and Yue. Table 1.1 gives information on the principal geographic distribution of these dialects together with their names in Chinese and in English.

Usually speakers from different groups cannot communicate with each other, although for historical and cultural reasons, the various Mandarin dialects are actually intelligible to varying degrees to the majority of speakers of the other six groups of dialects, but in one direction only. However, if a speaker from the other six major groups was never exposed to Modern Standard Chinese they would still not be able to understand the Mandarin dialects. Mandarin is the largest group in terms of both geographic area and the number of speakers. Each of the other six groups is usually spoken in one or two of the provinces to the south of the region where the Mandarin dialects are spoken. Cantonese is arguably the most familiar dialect for many people outside of China. One reason for this is that Cantonese-speaking people were among the earliest to migrate overseas to North America and Europe.

The fact that there are so many different regional varieties of Chinese calls for a common spoken language that can be used by all speakers, from all these dialect groups, to communicate with each other. Such a common spoken language can be described as a sort of lingua franca. Historically Mandarin has always been the base of such a lingua franca. In modern times, there is an official, common spoken language called Modern Standard Chinese, or Pǔtōnghuà ("common speech"), which is based on the Mandarin dialect spoken in Beijing. The Mandarin spoken in Taiwan, called Guóyǔ ("national language"), shared the same origin as Pǔtōnghuà although there are noticeable differences in pronunciation, grammar and vocabulary. Thus Guóyǔ should not be confused with Taiwanese, the former being a standard language based on Mandarin and the latter being a Southern Min dialect. Currently Modern Standard Chinese is taught in all schools in China and it is the official language used for publications, radio and TV broadcasts, etc. The promotion of Modern Standard Chinese in the non-Mandarin speaking areas is the main reason why various Mandarin dialects are intelligible to non-Mandarin dialect speakers.

The above-mentioned varieties of the Chinese language are the native tongues of the largest ethnic group in China called the Hàn. There are 55 other ethnic groups in China. Some of these people speak languages that are very different from Chinese, such as Mongolian, Zhuang, Tibetan, Uyghur, etc, while others adopted a variety of Chinese a long time ago. In modern times, people who do not speak a variety of Chinese either learn to speak a Chinese dialect in the process of extensive cultural and economic interactions with local Hàn people, or learn to use Modern Standard Chinese in school.

As we have seen, there are regional varieties of Chinese and an official language which can be used by all speakers to communicate with each other. If we go back in time, we would expect to find a similar situation. In the time of Laozi and Confucius (551–479 BCE), there were dialect differences already, although the differences could not have been as great as they are now. Written records also show that there was a common spoken language at that time. Ever since then we find the same

situation in each period of the language. This common spoken language ultimately developed into Modern Standard Chinese. Thus when we say "the Chinese language" in this book, we refer to the common spoken language in each historical period.

1.5 PERIODIZATION OF THE CHINESE LANGUAGE

Different aspects of the language change at different paces. Usually phonological criteria have been used by many linguists as the basis for the periodization of the Chinese language. If the sound system of the Chinese language remained more or less stable within an extended period of time, then we can regard this timespan as one stage of the language. Table 1.2 shows the major periods of the Chinese language and their relevant timespans, based on Wang (1958) and Xiang (1993).

The prehistoric period preceding Old Chinese can be called Proto-Chinese. Although there are hardly any written records from this prehistoric time, sporadic evidence in Old Chinese helps us deduce some features that might have been present in Proto-Chinese. Comparisons with related languages will also shed light on the properties of Proto-Chinese.

Old Chinese refers to the common spoken language in the first millennium BCE. As has just been mentioned above, in the Spring and Autumn Period and the Warring States Period, there were already different dialects in the various political entities called "states" (guó) in terms of vocabulary and writing systems, and conceivably of pronunciation. Thus, correspondingly, a common spoken form called "the elegant speech" (yǎyán) was used by people from various states to communicate with each other and by educated people to read the classics. This yǎyán is what we call Old Chinese. Language change is gradual – within each period of the language in Table 1.2, cumulative changes make the states of the language noticeably different towards the two ends of the period. Therefore, we can further divide each of the longer periods into sub-stages – Zhengzhang (2003) divides Old Chinese into three sub-stages. The first sub-stage, Early Old Chinese, is the language spoken during the Shang Dynasty and early Zhou Dynasty. The knowledge of the sounds at that time is mostly based on the phonetic cues encoded in Chinese characters found during this early stage, including the oracle bone script and bronze script which was inscribed on bronze ware from the Zhou Dynasty. The middle sub-stage is from the Zhou Dynasty until the Qin Dynasty. This is actually what most people refer to as Old Chinese proper in terms of the sound system, since the written records on which Old Chinese studies are based are mostly from this period. From the Qin Dynasty until the end of the Han Dynasty is the third sub-stage of Old Chinese, Late Old Chinese. In addition to the sounds of Old Chinese, our knowledge of the grammar and vocabulary of Old Chinese is based on written records produced during the second half of the millennium, mostly the prose writings of the Chinese classics and the major works in the Han Dynasty. The grammar of earlier times, for example in the *Book of Documents* (*Shàngshū*, as early as eleventh century BCE), shows considerable differences from this latter half of the period.

Table 1.2 Periodization of the Chinese language

Periodization	*Timespan and relevant historical periods*	
	Twelfth century BCE to third century CE	
Old Chinese *Shànggǔ Hànyǔ* 上古漢語	Late Shang Western Zhou Spring and Autumn period Warring States period Qin Western and Eastern Han	(12th–11th centuries BCE) (11th century–771 BCE) (770–476 BCE) (475–221 BCE) (221–207 BCE) (206 BCE–220 CE)
	Fourth to twelfth centuries CE	
Middle Chinese *Zhōnggǔ Hànyǔ* 中古漢語	Three Kingdoms Western and Eastern Jin Northern and Southern Dynasties Sui Tang Five Dynasties Northern and Southern Song	(220–265) (265–420) (420–589) (581–618) (618–907) (907–960) (960–1279)
	Thirteenth to early twentieth centuries CE	
Early Modern Chinese *Jìndài Hànyǔ* 近代漢語	Yuan Ming Qing	(1271–1368) (1368–1644) (1644–1911)
	Early twentieth century (ca. 1911) to now	
Modern Chinese *Xiàndài Hànyǔ* 現代漢語		

Source: Wang Li 1958, Xiang Xi 1993

The Qin Dynasty is regarded as the empire that unified China after a long period of disunity. Qin Shi Huang (259–210 BCE), the first emperor of the Qin Dynasty, carried out systematic efforts to unify his empire. One such measure was to unify the writing system. His troops also reached far into the southern part of the country, bringing Chinese-speaking people into what is the Cantonese-speaking area today.

The subsequent Han Dynasty was a period of major economic and political prosperity when the ethnic identity of the Chinese people was solidified. In contrast to the non-Chinese peoples outside the Han Dynasty, the Chinese people considered themselves the Hàn people. Hence one of the names of the Chinese language is *hànyǔ*, meaning the language of the Hàn people. It is also during the Western Han Dynasty that Confucianism was established as the official ideology of the empire. The significance of this for the study of the language lies in the fact that

Confucian classics were studied almost religiously by every scholar up to the early twentieth century. Many of these Confucian scholars noted the differences between their own spoken language and the language recorded in the Confucian classics. Such sporadic records can be valuable materials. During the Eastern Han Dynasty, Buddhism was introduced into China. Translations of Buddhist canons during this time also provide valuable data as to how the Chinese language was spoken, which can be revealed from a comparison of the original Sanskrit terms and the terms in Chinese, especially if the term was translated based on the correspondence of sounds between the two languages.

Between the Eastern Han Dynasty and the Sui Dynasty (581–618 CE), there was a long period of political division. Constant wars in the northern part of the country drove many Chinese-speaking people to the south, while non-Chinese speaking people ruled the north. Also during this period of domestic turmoil, the sound systems of Old Chinese gradually transitioned into a more complex system by the beginning of the Sui Dynasty as recorded in a rime dictionary called *Qièyùn* written during the late sixth and early seventh centuries. The sounds of the *Qièyùn* dictionary are mostly regarded as the literary pronunciation of the Northern and Southern Dynasties. Within the grammar and vocabulary system we can trace the origins of many elements in various modern Chinese dialects up to this period as well. By the end of this transitional period what can be considered Middle Chinese was already formed. Middle Chinese is important in that it can be regarded as the common ancestral language for most modern Chinese dialects. Therefore, knowledge of Middle Chinese is the key in understanding how the modern spoken varieties of Chinese came about.

The Imperial Examination system was established in the Sui Dynasty in 605 CE as a way of selecting qualified Confucian scholars to serve as administrative officials in the imperial government. The system was used in subsequent dynasties up until the early twentieth century. This examination system gave rise to official dictionaries, which are similar to the *Qièyùn,* compiled to set the correct pronunciation for Chinese characters used in the composition of essays and poetry which were usually part of the examination. Such rime dictionaries are valuable sources of the sound systems of different times.

The Tang Dynasty is known in Chinese history as a major empire with great cultural and historical significance. In terms of the literature, Tang poetry has always been upheld as the highest achievement of the literary genre. Great poets such as Li Bai (701–762 CE) and Du Fu (712–770 CE) are household names in all Chinese-speaking areas. Almost all Chinese speakers can recite a number of Tang poems from memory. Actually Tang poetry contains important clues to how the literary language was spoken during that time and studies of Middle Chinese are thus intertwined with Tang poetry and poetics.

After the Tang Dynasty, there was a relatively short period of political disunity, but soon the country was unified by the Northern Song Dynasty. By this time, the main phonological features of the earlier part of Middle Chinese, as represented by the *Qièyùn*, had changed quite a bit and Middle Chinese was in the process of

transitioning into Early Modern Chinese. A special type of written material from the Song Dynasty, called the rime tables (yùntú), based on the sound system of the Qièyùn dictionary, is an important source which can help us understand the sounds towards the end of the Tang Dynasty and in the Song Dynasty; it is the link between the earlier part of Middle Chinese and the next major stage of the Chinese language. Pulleyblank (1970, 1971) regarded the language represented by the rime tables as Late Middle Chinese, in comparison to the Early Middle Chinese of the *Qièyùn* time. Due to the transitioning status of the Chinese language during the Song Dynasty, there are still debates about where the Song Dynasty should belong in the periodization of the language. Jiang (2005: 5) points out that, at least in terms of grammar and vocabulary, what we can call Early Modern Chinese had been established by the beginning of the Song Dynasty. In terms of the sounds, Norman (1988) thinks that the language of the Song Dynasty should be considered an earlier form of Old Mandarin, i.e. Early Modern Chinese in Table 1.2.

A rime book called *The Phonology of the Central Plains* (*Zhōngyuán Yīnyùn*), written in 1324 in the Yuan Dynasty, is the major source of what is referred to as the sound system of Early Modern Chinese. Major changes had taken place in both the consonants and vowels of Middle Chinese. Many properties of Modern Standard Chinese can be already found in the system of this rime book. This can be regarded as the first stage of Early Modern Chinese. The second stage includes the Ming and Qing Dynasties, when important moves towards becoming Modern Standard Chinese, especially in the consonants, took place. Generally speaking, by the middle of the Qing Dynasty, the common spoken language was already sufficiently similar to Modern Standard Chinese in all aspects including the sounds, vocabulary and grammar. There are novels written during this time in a style that is close to the actual spoken language.[4] For speakers of Modern Standard Chinese, these literary works are quite accessible and easy to read.

Starting from the late Qing Dynasty, towards the end of the nineteenth century, progressive scholars looked to the West for ways of modernizing China, among which building a national language became a priority. In 1911, the Qing Dynasty was overturned, ending more than 2,000 years of rule of imperial dynasties in Chinese history, bringing China into modern times. In the Republic of China, the standard for a national language continued to be debated. The Beijing dialect was chosen in 1913 as the basis of the new national language, although at that time there was still disagreement on whether elements from other dialects should be included. After long, heated debates over the next decade, it was finally agreed upon among the scholars involved that the new standard of pronunciation should be solely that of Beijing. In 1949, the People's Republic of China was founded on the mainland. The government implemented reforms on multiple levels to promote a national language called Pǔtōnghuà (literally "common speech") and a Romanization system called "pinyin", used primarily as a way to annotate the pronunciation of Chinese characters. The promotion of Pǔtōnghuà in China has been quite successful. Now, after a few decades of promotion, the majority of people from different dialect regions in China can understand and speak Pǔtōnghuà. At the same time, various

Chinese dialects are affected by Pǔtōnghuà to different degrees, because younger generations are taught to speak Pǔtōnghuà in school and modern technology and media have a homogenizing effect, bringing Pǔtōnghuà to every corner of the country. In recent years, there has been a rise in the awareness of regional cultures and identities that are deeply rooted in the use of different local speech. Thus a balance is yet to be established between promoting a uniform national language and preserving the diversity of regional varieties of Chinese, regional cultures and identities.

This chapter gives a very brief sketch of the history of the Chinese language from prehistoric times to its current usages. The remainder of this book will be devoted to a more detailed look at each stage of the development of the Chinese language.

NOTES

1 This quotation is based on the translations of James Legge (see Lao-tse 1891 in the bibliography) and D. C. Lau (see Lau Tzu 1964).
2 All Chinese terms are transcribed in pinyin. Please refer to Appendix III and Appendix IV for more information on the pinyin notation.
3 There is still debate among scholars as to whether the work *Dao De Jing* was really written by one person, and whether there was such a person called Laozi.
4 Literary Chinese, or to put it in a less accurate way, Classical Chinese, was still used at this time for formal writing and the so-called "high-brow" literary genres such as poetry and essays.

CHAPTER 2

Where it all began

Prehistory

One day, in the early 1780s in Calcutta, India, as Sir William Jones was studying the ancient language Sanskrit, he became more and more intrigued by how Sanskrit verbs and grammar had a strong affinity to those in Greek and Latin. "This couldn't possibly have been a coincidence," he thought. The discovery led to his view that these three ancient languages had a common source. He hypothesized a common origin, "which, perhaps, no longer exists", for languages such as Sanskrit, Greek, Latin, Old Persian, Gothic and Celtic. This common origin is what was to be called the Indo-European language, which has now been successfully reconstructed in great detail.

2.1 ESTABLISHING LINGUISTIC GENETIC RELATIONSHIPS

One of the most obvious ways that languages sound similar lies in how words sound alike among them. Table 2.1 shows a few words from Sanskrit, Greek and Latin to show how these languages are similar.

But, of course, words can be similar for different reasons. First, they can be similar by accident. The Classical Chinese word "dàn" means more or less the same thing as "dawn" in English. Such similarities are not systematic, since we can only find a few such words. Second, words can be similar because they mimic natural sounds. Cats "miāo" in Chinese and they "meow" in English. Onomatopoeic words can be similar across many different languages. Third, words can be borrowed from one language into another with corresponding phonological adaptations. It is probably not difficult to guess what the Chinese word "màikèfēng" means, since it is the word "microphone" borrowed from English.

Generally speaking, what sounds are used to represent what words in a language is, for the most part, arbitrary (Saussure 1983). While people say "water" in English, the Chinese use the word "shuǐ". They are totally different because the association between sounds and words is arbitrary. However, when we see that the Germans say "Wasser", we have reason to suspect that "Wasser" and "water" might have come from the same word, also because of the arbitrariness of the association between sounds and words. Such genetic similarities should be quite extensive and systematic in that there are many such words and the sounds in one language correspond to those in another in a regular fashion. Similarities due to coincidence

or sound imitation are not extensive, or regular. Loanwords can be fairly extensive if a large number of words are borrowed between two languages, but if we have evidence for the borrowing, then we can exclude the possibility of similarity between these languages due to a common origin. Therefore, the first step in establishing a genetic relationship between two languages is to compile a list of cognate words, such as those in Table 2.1.

Once we have such a list, it is necessary to look at sound correspondences, rather than word shape similarities. For example, in Table 2.1, in the first word, we find that the sound p- in Sanskrit corresponds to p- in Greek, p- in Latin, and f- in English. Thus a p-p-p-f correspondence between these languages is obtained. Actually we can find the same sound correspondence in the third word meaning "foot" as well. If a longer list of cognate words is available, this same correspondence can be found in many cognate words. Now let's look at the second word: the d- in Sanskrit corresponds to d- in Greek, d- in Latin, and t- in English. Thus a d-d-d-t correspondence is established. The same correspondence can be found in the third word as well. Again if we have a longer list, we can indeed find many more examples of such correspondences. Therefore there are regular sound correspondences between these languages. Thus we have finished the second step towards establishing a genetic relationship, i.e. finding regular correspondences.

The third step will be the reconstruction of the ancestral language called the proto language. In the case of Indo-European, the reconstructed ancestral language is called Proto-Indo-European. The main purpose of the reconstructed system is to explain how the ancestral language developed into different languages. We will pick up the third step in a little bit of more detail in Chapter 4, when we talk about the reconstruction of the sound system of Middle Chinese.

So far we have seen evidence for the genetic relatedness of Sanskrit, Greek and Latin. Actually English is genetically related to these languages, but since the connection between English and the other three languages is more indirect, let's focus on the ancient languages for now. Figure 2.1 shows the genetic relationship between Sanskrit, Greek, and Latin in a structure that looks like a family tree.

The common ancestral language is called Indo-European. Through some changes, or innovations, in the sound system of Proto-Indo-European, each of the three languages became a different language. Each of these new languages can

Table 2.1 Indo-European cognate words

Sanskrit	*Greek*	*Latin*	*English*
pitar-	pater	pater	father
dva-	dyo-	duo-	two
pad-	pod-	ped-	foot
aksah	haksos	axis	axis

Source: based on Xu 1991 and Campbell 1999.

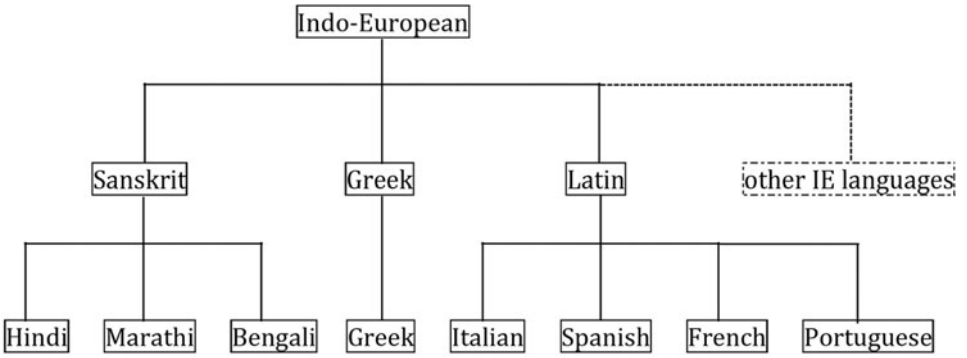


Figure 2.1 A schematic family tree of Sanskrit, Greek and Latin

be further split into more daughter languages; for example, Hindi, Bengali, and Marathi developed from Sanskrit. This representation, and how we understand language change, is called the Family Tree Model. Figure 2.1 is a schematic representation of the Indo-European family of languages; in fact there are over 400 languages and dialects in the whole family, only a small portion of which is sketched here.

2.2 THE SINO-TIBETAN LANGUAGES

After the concept of the "language family" had been established in the early nineteenth century, based upon the Indo-European model, linguists started to look at other languages and tried to classify them into different families. What other languages are genetically related to Chinese? We may look at those languages that are geographically neighbors of the Chinese language.

To the north, northeast and northwest of Chinese, we find languages such as Mongolian, Manchu, Japanese, Korean and Uyghur. These languages belong to the Altaic family, although some people believe that Japanese and Korean are isolates, meaning that they are not related to any other language or to each other. A quick look at Japanese and Korean words may reveal a high degree of similarity between these two languages and Chinese in terms of the vocabulary. To the south of China, we find languages like Vietnamese, which belongs to the Austroasiatic family. There are also a large number of words in Vietnamese that are similar to those in Chinese. Table 2.2 shows examples of numerals from Mandarin (Modern Standard Chinese), Cantonese, Japanese, Korean and Vietnamese.

There are two sets of pronunciations in the columns for Japanese, Korean, and Vietnamese. The first pronunciation for each word looks similar to Mandarin and Cantonese. However, the second pronunciation does not look like Chinese at all. Therefore, it is very likely that the second pronunciation is the native pronunciation in these languages, while the first one was an early loanword pronunciation. Historically speaking, Classical Chinese and Chinese characters were borrowed into

Table 2. 2 Numerals in Chinese, Japanese, Korean and Vietnamese

English	*Mandarin (Pinyin)*	*Cantonese (Jyutping)*	*Japanese*	*Korean*	*Vietnamese*
one	yī	jat[1]	ichi/hito	il/hana	nhất/một
two	èr	ji[6]	ni/futa	i/dul	nhị /hai
three	sān	saam[1]	san/mi	sam/set	tam/ba
four	sì	sei[3]	shi/yon	sa/net	tứ/bốn
five	wǔ	ng[5]	go/itsu	o/daseot	ngũ/năm

Japan, Korea and Vietnam during the Middle Chinese period. The pronunciation of Chinese characters was also imported into these languages with corresponding phonological adaptions. Therefore there is no genetic relationship between Chinese and the neighboring languages of Japanese, Korean and Vietnamese.

In more modern times, around the early part of the twentieth century, especially during the New Culture Movement when Chinese intellectuals looked to modernize China, many words related to Western culture, science and technology were borrowed into Chinese from Japanese. A large number of words from major European languages were translated into Japanese using kanji characters in the second half of the nineteenth century as a result of the Meiji Restoration that started in 1868. For example, words like "kēxué" ("science"), "mínzhǔ" ("democracy"), "shèhuì" ("society"), "jīngjì" ("economy"), "diànhuà" ("telephone"), etc. have all been borrowed from Japanese in modern times.

For the remaining major Altaic languages mentioned above, there are also a smaller number of loanwords between Chinese, Mongolian and Manchu. For example, the word "zhàn" ("a station, a stop") currently used for a bus stop, subway stop or a train station was originally borrowed from Mongolian. A number of colloquialisms in Beijing Mandarin and northeastern Mandarin were borrowed from Manchu during the Qing Dynasty as well, for example, "mǎmǎhūhū" ("in a careless way"). There are also a number of Chinese loanwords in Mongolian and Manchu, due to close cultural contacts over a period of time. Apart from loanwords, there is no list of cognate words that can be found to establish a genetic relationship between the Altaic languages and Chinese, or between the Austroasiatic languages, e.g. Vietnamese and Chinese.

Also relevant here is a language family called Austronesian, which includes the Formosan languages spoken in Taiwan and also the languages spoken across the vast area between Taiwan and Indonesia, such as the Filipino and Indonesian languages. If there are connections between Chinese and Austronesian, such connections have to be quite remote. It is possible for the Austronesian people to have originated in southern China before crossing the Taiwan Strait into the island and then migrating further to other areas between Taiwan and Indonesia, as pointed out by Wang (1998). Sagart (1993) proposed a genetic relationship between Chinese

and Austronesian, but generally linguists have not been able to agree upon a conclusion in this area.

In some parts of southern and southwestern China and in Southeast Asia we find Zhuang, Dong, Thai and other related languages that belong to the Tai-Kadai family. The subgroup of the Tai-Kadai family that includes the Zhuang, Dong and Thai languages is called Kam-Tai, or Zhuang-Dong in China. In southwestern and western China and the Himalayan regions we find languages like Tibetan, Burmese, Qiang and rGyalrong, which are called Tibeto-Burman. There are also the Miao and Yao languages that are spoken in Hunan, Hubei, Guangxi and southwestern China, which belong to the Hmong-Mien family, or Miao-Yao in China. There are a large number of similar words between Chinese and the Kam-Tai, Hmong-Mien and Tibeto-Burman languages. Unlike the similar words between Chinese, Japanese, Korean and Vietnamese, which are known to be loanwords, we do not have readily available records to prove whether the similar words between Chinese and the Kam-Tai, Tibeto-Burman and Hmong-Mien languages are loanwords or true cognate words. Therefore, some linguists call these words "relational words" ("guānxìcí") until strong evidence can be produced to prove either way. If the relational words are loanwords, then there would be no genetic relation between the relevant languages. If the relational words are indeed true cognates, then a genetic relationship could be established.

The concept of a Sino-Tibetan language family became popular during the 1930s, at the University of California, Berkeley, because of the work published by the Sino-Tibetan Philology Project. According to Li (1973), based on a paper written by him in 1937, the Sino-Tibetan family includes Chinese, Kam-Tai, Hmong-Mien, and Tibeto-Burman. Benedict (1972), in a paper which was actually written in 1942, argued that the Hmong-Mien languages and the Kam-Tai languages are not part of the Sino-Tibetan family because the relational words between Hmong-Mien, Kam-Tai and Chinese could possibly be very early borrowings.

A basic vocabulary is needed in order to compare words in different languages. Swadesh (1971) proposed a list of 100 words which were meant to be "universal" and stable; since they refer to fundamental and essential aspects of life and culture, these words can be found in every language and they are less likely to be borrowed or replaced. For example, words like "I, you, one, two, man, woman, fish, dog, ear, eye, see, hear" are among these basic words. The 100-word list was compiled from an earlier 200-word list also proposed by Swadesh. The 100-word list comprises those words that are the more basic ones among the 200 words. Generally speaking, higher-level cultural vocabulary items are easily borrowed through cultural contacts, while words on the 100-word list are less prone to be borrowed and, if they do change over time, the change takes a much longer time than with higher-level cultural words.

Since many of the relational words in the Sino-Tibetan family are from such basic vocabulary items, it has long been quite controversial as to how to prove that either these words were loanwords or they were true cognates. Although we do not know the details of linguistic contacts in the past, we can study the process of such

contacts in modern times and try to see how borrowing between two languages works in order to understand whether or not relational words are indeed the results of borrowing that happened in the past. Chen (1996) studied how the people who speak the Dai language, a Kam-Tai language spoken in Southwestern China, and the Chinese-speaking people interact with each other and learned each other's languages. He spent several years documenting the details of linguistic contacts between these two languages, including loanwords. Based on his observations, Chen (1996) proposed a new theory arguing that loanwords can emerge from basic vocabulary, according to a hierarchy, and that there is no boundary as to how deep such borrowings can go. Chen (1993) divides the 100 basic words into three groups. Group A is the most basic, including words like "fly, dog, yellow, hand, sun, I, rain". Group B includes "white, nose, egg, ear, you, bird, new, know". Group C includes "not, two, drink, gray, name, man, woman, what, small, swim". These groups form a hierarchy among the basic 100 words. Using a vast amount of data about known true cognates and known borrowings from different languages, he discovered that when two languages share many relational words due to contact, these shared words tend to be the less basic ones, those that are higher up the hierarchical structure of basic vocabulary, and shared words in the more basic vocabulary tend to be fewer. On the other hand, if two languages share a lot of relational words due to a common origin, e.g. among the different Chinese dialects, or among the Germanic languages including English, German, Dutch and Swedish, these shared words tend to be the more basic vocabulary items, while the less basic ones tend to be fewer. Therefore Chen (1993) suggests that the tendency holds across different languages, and that it has the property of being a generalizable theory.

Based on this theory, Chen (1993) calculated the ratios of the relational words among Chinese, Kam-Tai, Hmong-Mien and Tibeto-Burman. It turns out that Chinese and Kam-Tai share fewer words on the lower hierarchical level, but more on the higher level. Thus, if his theory is correct, the computational results suggest that Chinese and Kam-Tai are not genetically related. The relational words between them are the result of deep cultural contacts and sharing. Chen (1996) expanded the word list to the 200 basic words. In similar fashion to the previous studies mentioned above, he divided the 200 words into two groups: Group 1 included the first 100 words which are regarded as more basic; Group 2 included the second 100 words. He then applied the same mathematical approach to languages that share relational words, and the conclusions are the same as before. The computational results from Chen (1996) show that Chinese and Tibeto-Burman share more words on the lower hierarchical level, but fewer on the higher level. This clearly suggests that Chinese and the Tibeto-Burman languages are genetically related. At the same time, the Hmong-Mien languages have also been generally excluded from the Sino-Tibetan family by most linguists.

Therefore, of the two main proposed descriptions of the membership of the Sino-Tibetan family mentioned above, Li (1973) and Benedict (1972), more linguists are inclined to agree with Benedict (1972), and include just Chinese and the Tibeto-Burman languages. Table 2.3 shows a few true cognate words in Chinese, Written

Table 2.3 Sino-Tibetan cognate words

Words	*Modern Standard Chinese*	*Old Chinese*	*Written Tibetan*	*Written Burmese*
eye	mù 目	mug	mig	myak
six	liù 六	rug	drug	khrok
insect	fú 蜉	bu	'bu	pûi
poison	dú 毒	duug	dug	tok

Source: based on Norman 1988; Zhengzhang 2003

Tibetan and Written Burmese. The reconstructed pronunciations from Old Chinese are also given since the sound correspondences between Old Chinese and the Tibeto-Burman languages are more easily spotted. The words are also given in Chinese characters and their pronunciation in Modern Standard Chinese.

We have pointed out earlier in this chapter that mere similarity in word shapes is not enough to establish a genetic relationship between two languages. What is more convincing is regular sound correspondence. In Table 2.3, the final consonant in the first word meaning "eye" is -g in Old Chinese, -g in Written Tibetan, and -k in Written Burmese. Thus we have a -g-g-k sound correspondence. This same correspondence can be easily seen in the second word "six" and the fourth word "poison". Also the vowel in the second word "six" is -u in Old Chinese, -u in Written Tibetan, and -o in Written Burmese. Thus we have a u-u-o correspondence. It is also shown to some extent in the fourth word "poison" as well, although the vowel in Old Chinese is a long vowel, -uu, in "poison" according to the reconstructions of Zhengzhang (2003). Figure 2.2 shows a schematic representation of the Sino-Tibetan family tree.

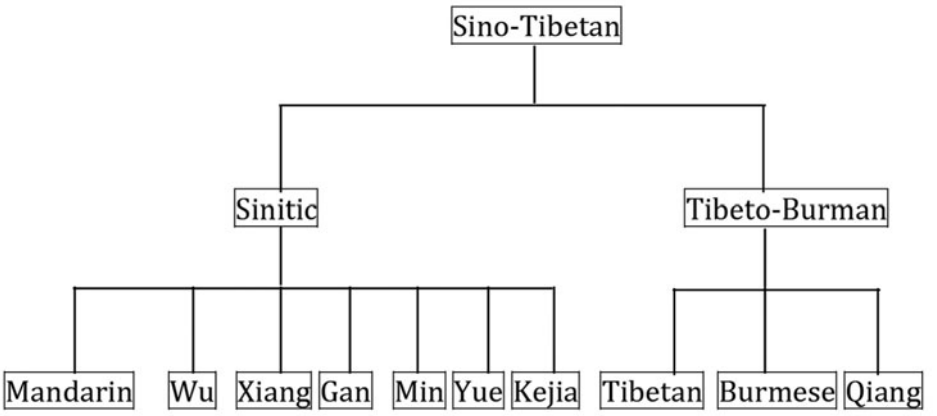


Figure 2.2 A schematic family tree of Sino-Tibetan

In this family tree the primary distinction is between Chinese, or the Sinitic branch, and Tibeto-Burman. The Chinese branch can be further split into the major Chinese dialects mentioned in Chapter 1. The Tibeto-Burman branch includes Tibetan and Burmese amongst other languages.

2.3 HOW OLD IS THE SINO-TIBETAN LANGUAGE FAMILY?

Now that we have established the concept of a Sino-Tibetan language family, how old is this family and when did such a Sino-Tibetan language exist? Earlier we introduced the list of 100 basic words. These basic words are said to change or to be replaced in any language at a rather slow rate when compared with higher-level cultural words. Swadesh was inspired by the method of carbon-14 dating, used to determine the age of fossils of animals or plants. Carbon-14 is a radioactive isotope of carbon which has a half-life of about 5,700 years. If we assume that the 100 basic words in languages also change at a constant rate, and also that no contacts have been made between the two daughter languages after they split, then by studying the percentage of shared cognate words in two languages we can calculate the time when the ancestral language split in two. This is definitely a marvelous idea, but it has proved to be inaccurate. More recently, mathematical methods developed in biology have been applied to the study of linguistic prehistory. The basic idea is based on the distance between languages, a notion that is related to the percentage of shared cognates. Wang (1994), using data on the distance between major Chinese dialects derived from Xu's (1991) shared cognates data, demonstrated how a tree can be drawn to show the relative distance between any pair of languages by the length of the shortest path connecting these two languages. In Figure 2.2, showing the family tree of the Sino-Tibetan languages, the lengths of the branches are equal, but in Wang's (1994) tree, the lengths are different according to the distance numbers. Wang (1998) further shows how the method can be used to study the age of the Sino-Tibetan family.

First, Wang (1998) collected data on distances between the following three groups of languages: major Chinese dialects, major Sino-Tibetan languages, and representative Indo-European languages including Singhalese, Tajik, Portuguese and such Germanic languages as English, Danish and German. Then three trees were drawn in accordance with the distance matrices for each group. They were then compared and it was shown that the time-depth of the Chinese dialects is comparable to that of the Germanic languages. This corresponds well to the fact that the Chinese dialects began to develop about 2,000 years ago, roughly at the same time that the Germanic languages started to split. This is good evidence of the usefulness and accuracy of this method. The Germanic languages form a sub-tree of the whole Indo-European tree. Since the time-depth of the Germanic sub-tree is about 2,000 years, we can now compare the length of the Germanic sub-tree to that of the Indo-European. It shows that the length of the Indo-European tree is about 3.5 times that of the Germanic sub-tree. Now we can tentatively say that the Indo-European

language is about 7,000 years old. Wang (1998) points out that there are actually two major theories for when the Indo-European language started to split: 6000 BP and 8500 BP. Therefore, the 7000 BP here situates right between these two numbers. A comparison between the tree for the Chinese dialects and the Sino-Tibetan tree shows that the latter is about three times as long as the former. Therefore, it seems to suggest that the Sino-Tibetan language is 6,000 years old, a little bit younger than the Indo-European language. If this is correct, we should be able to find archaeological and even genetic evidence to support such a claim.

Wang (1998) cites three maps, constructed by archaeologists, from Chang (1986) showing prehistoric cultures in East Asia at 9000 BP, 7000 BP and 6000/5000 BP. The map at 9000 BP shows several cultures in the upper and middle Yellow River region, and some in the lower Yangtze River region and southern China. These cultures showed no clear evidence of interactions. The map for 7000 BP contains three major cultures that span the whole region of northern China, two cultures in the lower Yangtze River and a vast culture that spans the southernmost coastal area of China. At this stage there were still no major interactions between these cultures. The third map for 6000/5000 BP presents a picture of a network of cultures from north to south that had a significant degree of interaction. Wang (1998) concludes that population movements brought about similarities between these cultures and, alongside such migrations, people brought their own languages. Therefore, a former linguistic community can split up into different linguistic communities, while formerly different linguistic communities can come into close contact with each other and may borrow words from each other. A possible scenario that can be reconstructed from the above-mentioned maps of prehistoric cultures is that the Sino-Tibetan people originally inhabited the Upper and Middle Yellow River region, and then some of them migrated down the river to the east and then to the south, coming into contact with other cultures. This scenario is supported by linguistic evidence.

In the first millennium BCE, i.e. the Old Chinese period, there were various non-Sinitic peoples in the lower Yangtze River region and southern China. According to historical records, these peoples were called the Bǎiyuè, i.e. Hundred Yue. They had very different cultures from the northern Huáxià culture, i.e. what was to become the Chinese culture. As for the language that the Baiyue peoples spoke, they could be related to the Austroasiatic, Kam-Tai and Hmong-mien languages that were mentioned earlier. If the ancestors of these languages were indeed those that were spoken by the Baiyue, we may find very early loanwords in both languages as a result of cultural contacts.

Let's look at some examples of such loanwords now. There are two major words that can be used to refer to rivers in Chinese: jiāng and hé. They are used more or less interchangeably to mean "river" in Modern Standard Chinese, although jiāng is usually a major river. Normally jiāng cannot be described by prefixing the word xiǎo ("small"), but hé can be prefixed with either dà ("big") or xiǎo ("small"). Originally jiāng is a proper name referring to the Yangtze River, and hé is a proper name for the Yellow River. In ancient times, the Chinese people inhabited the Yellow River region in the north while a group of the Yue people lived along the lower Yangtze River.

Therefore these two words were how these different peoples referred to the rivers of their homelands. Later these two words would eventually be generalized to refer to rivers. The word hé might be a native Chinese word that is related to the Written Tibetan word "rgal-ba" for "to pass or ford a river" (Schuessler 2007; Coblin 1986). Norman (1988) relates the word jiāng to Austroasiatic languages such as Vietnamese. The reconstructed pronunciation of jiāng in Old Chinese is *krung; the reconstructed pronunciation in Vietnamese is *krong. The name of the Yangtze might have been given by the earlier inhabitants when the Chinese people arrived there, adopting the name.

Norman (1988) also gives an example of a loanword from the ancestral language of the Hmong-Mien language. According to him, there are two words for "dog" in Chinese: quǎn and gǒu. The first one, quǎn, cannot be used as an independent word in most Chinese dialects now, except in some Min dialects. It is preserved mostly as part of a larger word. There are clear Sino-Tibetan cognates of this word, showing that it might be the original Chinese word for "dog". In most Modern Chinese dialects, the word for "dog" is gǒu. Norman (1998) cites Purnell's (1970) reconstruction of proto-Miao-Yao, i.e. Hmong-Mien, in which the word for "dog" is *klu^{2}. The "u^{2}" part means that it is some type of "u" sound although the exact phonetic value is yet to be decided. According to Zhengzhang's (2003) reconstruction of Old Chinese, the Old Chinese pronunciation of "gǒu" is *kooʔ. The similarity between these two words can also be established with some imagination. Therefore it can be evidence of early contacts between the Chinese people and the Hmong-Mien people in the south.

Chen (1993) presents data for the contacts between the Chinese people and the Kam-Tai people. There has been archaeological evidence for the early cultivation of rice in southern China. The word for rice plant in Classical Chinese is hé, written with a different character from the word for "river" mentioned above. In Zhengzhang's (2003) reconstruction, the pronunciation in Old Chinese of hé is *gool. Chen (1993) listed the following pronunciations: hau^{4} (Wuming Zhuang) and kha^{2} (Thai). Thus it is possible that the word for rice plant was borrowed into Chinese when the Chinese people got into contact with the Yue people in the south and learned how to cultivate rice from them.

Therefore, the evidence from linguistics and archaeology supports a migration scenario whereby the Sino-Tibetan people moved from their homeland in the present-day Shaanxi and Ningxia area to the east and then south, getting into contact with the Yue people who spoke languages which can be considered the ancestors of modern Austroasiatic, Hmong-Mien and Kam-Tai languages. There was also a separate migration from the Sino-Tibetan homeland further west and then south to Tibet and the Himalayan region. We have not produced concrete archaeological evidence for this migration, although linguists have established over 300 cognate words between Chinese and Tibeto-Burman languages, but we might look to human population genetics for evidence of this side of the story.

As Wang (1998) points out, genetics and languages often go separate ways. For example, during the Qing Dynasty, many Manchu people adopted Mandarin Chinese

as their native language. Currently, most of the Manchu people in China can only speak Chinese, while the Manchu language is spoken by the Xibe people in Xinjiang and also by Manchu people in a few villages in Northeastern China. The Manchu language is an Altaic language which does not have any genetic relationship with the Chinese language. However, recent research in human population genetics can use a more reliable genetic marker to trace human migration. Su *et al.* (2000) says "as delineating migrations becomes one of the major themes in human evolution studies, Y chromosome markers began to show their power in tracing human prehistory." Their studies analyzed the genetic structure of 31 Sino-Tibetan populations represented by 607 individuals residing in East, Southeast and South Asia. They concluded that the Sino-Tibetan homeland is the upper and middle Yellow River basin and about 5,000–6,000 years ago the Sino-Tibetan language began to split into the Sinitic branch and the Tibeto-Burman branch. The Tibeto-Burman group migrated westwards and then southward to the Himalayas. The Sinitic group expanded to the east and south.

2.4 LINGUISTIC PROPERTIES OF PROTO-SINO-TIBETAN

Now one more question is in order. What was this Sino-Tibetan language like? The reconstruction of Proto-Sino-Tibetan has not yet been carried out to the same extent as Proto-Indo-European. We cannot give a full picture of the sounds, words, and grammar of Proto-Sino-Tibetan yet and can only look at some typological features of Chinese and Tibetan in the hope of guessing what the characteristics of the original ancestral language were.

The branch of linguistics that classifies languages into different types based on their formal features, rather than genetic relationship, is called typology. One of the most basic criteria for classification is the basic word order type. For example, in the English sentence "John loves Jane", "John" is the subject, "loves" is the verb and "Jane" is the object. This sentence has the Subject-Verb-Object, or SVO, word order and, typically, sentences in English are in the SVO form. Thus we say that English is an SVO language. Modern Chinese is normally considered an SVO language, while Tibetan is SOV. Another feature of Chinese is that there are very few morphological changes to word shapes, while Tibetan has a complex morphological system. In terms of sounds, Modern Standard Chinese has four tones. Modern Standard Tibetan, based on Lhasa, has four tones, while Amdo Tibetan, spoken in the Qinghai Province region, does not have tones. Tibetan allows for more than one consonant at the beginning of a syllable, e.g. zgo ("door") and pki ("carry") as in Daofu Tibetan (Hu 1980). Consonant clusters such as zg- and pk- in these words are not allowed in Modern Standard Chinese. Only one consonant is allowed at the beginning of a syllable.

Note that typology classifies languages according to their similarities in form, without regard to their genetic relationship. In fact, typologically similar languages often belong to many different language families. As we mentioned above, English

and Chinese can both be argued to be SVO languages, but they are not genetically related. Here, however, with respect to the Sino-Tibetan family, it has been established that languages like Tibetan and Burmese are genetically related to Chinese. Therefore, if these languages are typologically very different now, it is possible that the proto-language had some of the typological features of the modern languages, although it is equally possible that many of these modern typological features were later developments after the proto-language split into different languages. Nonetheless, looking at the linguistic features of Tibetan, Burmese and Chinese we can still, to some extent, try to figure out what features the proto-language had.

Looking at all the different parameters that could be incorporated into the yet-to-be reconstructed Proto-Sino-Tibetan language, we may imagine a language that is quite different from all current Sino-Tibetan languages. However, if we go back 2,000 years to Old Chinese, the Chinese language of that time might have been more similar to the original Sino-Tibetan language. So now let's turn to Chapter 3 to look at the sounds of Old Chinese; the grammar of Old Chinese will be taken up in Chapter 6 when we talk about Classical Chinese.

CHAPTER 3

Thus spake Confucius

The sounds of Old Chinese

"Zǐ yuē shī yún" (子曰詩云) is a common phrase in Chinese, which literally means "Confucius says this and the Classic of Poetry says that". It is used to refer to Confucian classics in general. Confucius has been considered the most important educator and philosopher in Chinese history. Although we can read about his teachings recorded in Classical Chinese, we still wonder what spoken language Confucius used and how poems in the Classic of Poetry sounded like in those ancient times. We know the contents of "zǐ yuē shī yún", but can we know the sounds of "zǐ yuē shī yún"?

3.1 EVIDENCE OF SOUND CHANGE

Of course to ask such a question about the sounds of Confucius' language, we have to know that sounds have changed in the first place. It might seem to be a fairly easy thing to say for speakers whose language has been written down in a phonetic writing system such as the English alphabet. Take the first line of the Old English saga Beowulf for example: "Hwæt wē Gār-Dena in geār-dagum...".[1] We immediately spot the differences in the spelling and couldn't really sound them out exactly as they are written down. Therefore, it is obvious that in Old English these words sounded very different from Modern English, and sometimes even if the letters are the same as in Modern English, their pronunciation in Old English might not have been the same. Moreover, some of the words in Old English might have been replaced by new words in Modern English and we cannot easily understand the old words anymore. But still the phonetic alphabet tells us a great deal about how the language was spoken at that time. In comparison, the Chinese writing system, which uses symbols called "characters", actually disguises sound change. Chinese characters do not represent sounds directly, although in the majority of Chinese characters there are components that could signal roughly what the pronunciation is. By and large, the Chinese writing system is not a phonetic system at all. For example, the character 人 meaning "person" has not changed much in terms of its shape for over 2,000 years. The Modern Standard Chinese pronunciation of this character is rén. But in the graph of the character, there is no component that would correspond to the sounds "r", "e", "n" or the tone. In Old Chinese, the pronunciation of 人 was *njin. Therefore sounds have changed a lot, although the written symbol has not changed much at all. Even though the shape of the written symbol has changed a little, such changes have nothing to do with the sound change.

Actually, the character 人 was originally a representation of the image of a person and is used to represent the word "person" or the idea of a "person". Because of the origin of Chinese characters, people sometimes mistakenly refer to the Chinese writing system as ideographic or logographic, meaning that Chinese characters represent ideas or words but not sounds. Although we will not discuss the history and nature of Chinese writing until Chapter 11, we have to say upfront here that Chinese characters are not silent little pictures that represent actual objects, and the Chinese writing system is not exactly ideographic. DeFrancis (1984) argued quite convincingly against what he terms the "Ideographic Myth" of Chinese characters. We will see in Chapter 11 that although he is right to a large extent, there is actually more to the story than he thought because in some ways the Chinese writing system is indeed ideographic. Therefore it is probably not too controversial to say that the nature of the Chinese writing system is a highly controversial issue and there is no general consensus on it.

Despite such controversies, there is one thing that no one can dispute: that is, that Chinese characters do not represent sounds *directly*. Therefore, for a long time, Chinese scholars didn't realize that sounds had changed from Confucius' times. This is also one of the most difficult things when it comes to reconstructing the sounds of the Chinese language in different periods. If we had a phonetic alphabet of the Chinese language in Old Chinese and Middle Chinese, a direct study of these written symbols would reveal a great deal about the sounds of the Chinese language at these stages. But since Chinese has always been written down in characters, and there is no clue to sound change in the shape change of characters, we have to find a way to either use other materials that could show clues as to how the language was spoken. Or else we have to try and see if there are any phonetic clues at all that were encoded into the structure of the characters that can indicate the actual sounds of the characters when they were created.

Now let's digress a little bit to the reign of the Emperor Wu of Han during the second and first centuries BCE in the Han Dynasty. To further strengthen his rule of the vast empire, he needed an official philosophical system. After extensive debates, he chose Confucianism from among the many different schools of thought that were available. If anyone wanted to be an official in the government, he would have to know and practice the Confucian philosophy. The following two thousand years would see the dominance of Confucianism in Chinese politics and culture in general. Further, in the Sui Dynasty, with the establishment of the Imperial Examination system, all scholars would have to know the Confucian classics very well, by heart, in order to pass the examination and finally secure a place in the imperial government. These ancient works in the classics were written in the Old Chinese period, and therefore they can all be consulted when we want to study various aspects of Old Chinese. To study the sounds of Old Chinese, the most important materials would be rhymed writings, such as the Classic of Poetry (*Shījīng*, tenth to seventh centuries BCE).

The *Shījīng* is a collection of poems in the Western Zhou Dynasty and the Spring and Autumn period. Roughly speaking, it records the spoken language in the first

half of the first millennium BCE. There are 305 poems which belong to one of the three genres: folk songs (fēng 風), court hymns (yǎ 雅) and eulogies (sòng 頌). Although these are normally called or translated as "poetry", they were originally songs that could be sung to music. It is believed that Confucius edited the collection before using it to teach his students. The importance of these poems can be seen in Confucius' famous dictum that without learning these poems, one cannot even speak. Consequently, the *Shījīng* assumed a central role in classical education in later dynasties.

If we read the poems using Modern Standard Chinese pronunciation, we probably encounter many poems that do not sound rhymed. The verse in Table 3.1 is part of one of the folk songs in the *Shījīng*. If we leave the word zhī out of the rhyming scheme, then the words mào and lè should have rhymed. But their Modern Standard Chinese pronunciations are so different that it would take quite a bit of imagination to make them rhyme.

As early as in the Northern and Southern Dynasties period, when people read the *Shījīng*, in many cases the poems sounded out of rhyme with no clue as to what the original rhymes would be. One view of this phenomenon was that the characters that did not rhyme anymore were probably copied wrong in the process of transmission. Therefore, to make these poems rhyme in their own contemporary pronunciation, one could change the characters to another one that would convey a similar meaning with a sound that would make the poem rhyme. An alternative view was that although some poems did not rhyme well, it could be that in the time of *Shījīng* rhyming was not strict, and therefore the characters need not be changed because they were not meant to rhyme in the first place. A third view, called xiéyùn, was that the pronunciation could be temporarily changed for rhyming purposes, e.g. if we change the lè to lào, then they would rhyme again pretty well. The influential Confucian scholar, Zhu Xi (1130–1200), in the Southern Song Dynasty, was a proponent of this theory, and he named it xiéyīn. In his works on the *Shījīng*, he suggested pronunciations for certain characters to make the poems rhyme again. Naturally, sometimes the same character received different temporary pronunciations in different poems. For all of these views on the rhyming practice of the *Shījīng*, they either failed to realize that sounds can change over time, or they failed to correctly understand what sound change means. Not until the Ming Dynasty did Chinese scholars finally realize more clearly how sounds changed and they disputed the validity of the theory of xiéyīn. Chen Di (1541–1617) claimed that "there is a temporal difference between the past and the present; and a geographical difference between the south and the north. It is thus inevitable that characters and sounds change accordingly." He demonstrated that the rhyming practice in the *Shījīng* was sound and that the pronunciation of characters in old times was different from modern times, and that they could not be changed temporarily. Chen Di's theory pioneered the philological study in the Qing Dynasty called xiǎoxué (小學 "small learning"), which reached a high level of achievement before the modern methodology of comparative historical linguistics was applied to reconstructing the Chinese language at different stages.

Table 3.1 A sample poem from the *Shījīng*

Chinese characters	*Modern Standard Chinese*	*English Translation (by James Legge)*
參差荇菜,	cēncī xìng cài	Here long, there short, is the duckweed;
左右芼之。	zuǒ yòu mào zhī	On the left, on the right, we cook and present it.
窈窕淑女,	yǎotiǎo shū nǚ	The modest, retiring, virtuous, young lady:
鍾鼓樂之。	zhōng gǔ lè zhī	With bells and drums let us show our delight in her.

3.2 SYLLABLE STRUCTURE OF CHINESE

Before discussing how we can use the rhyming scheme in the *Shījīng*, some basic phonological knowledge of Chinese is needed. Two notions called shuāngshēng ("double initials") and diéyùn ("double rimes") have been used traditionally to talk about the sound relations between characters. Shuāngshēng is similar to a type of alliteration in English. For example:

Chinese example：忐忑 tǎntè ("nervous"); English example: teeny tiny

If two characters start with the same sound then they are in the shuāngshēng relation. The first two characters in the poem in Table 3.1 above, i.e. cēncī, are another instance of shuāngshēng.

Diéyùn is when two characters rhyme. For example:

Chinese example: 窈窕 yǎo tiǎo ("elegant"); English example: Humpty Dumpty

Therefore, according to these two notions, characters can be compared in terms of both the initial sound and the remaining part that is called the rime. The words "rhyme" and "rime" are used in different ways in this book. "Rime" only refers to the part of a syllable excluding the initial, while "rhyme" is used in the usual sense, either as a verb or a noun.

Another feature of Chinese is its tones. For example, in English when one says "yes?" as in doubt or "yes!" as in confirmation, the word "yes" itself is considered unchanged in its basic meaning; the intonation associated with these two utterances is different, with the former being a rising tone, and the latter being a falling tone. Such pitch differences in intonation do not change the basic word meaning in English. But in Chinese each syllable is associated with a specific pitch pattern called tones, comparable to the intonation mentioned above. The same syllable can mean different things when associated with different tones. By analogy, if "yes" were a Chinese syllable, "yes?" and "yes!" would be two different words with different, unrelated basic meanings. In Modern Standard Chinese, there are four tones. Let's call them 1st, 2nd, 3rd and 4th tones respectively. Table 3.2 shows examples of four words which can be distinguished by their tones only.

Table 3.2 The four tones in Modern Standard Chinese

Tones	*1st tone*	*2nd tone*	*3rd tone*	*4th tone*
Pinyin	mā	má	mǎ	mà
Numerals	55	35	214	51
Character	媽	麻	馬	罵
Meaning	mother	hemp, flax	horse	scold

The same initial and rime combination "ma" can be uttered with four different tonal shapes. The 1st tone is a high flat tone. The 2nd tone is a mid-rising tone. The 3rd tone is a low fall-rise tone. The 4th tone is a high falling tone. The diacritics above the syllable "ma" indicate the four tones. A more accurate way of representing tones is to use numerals on a scale of 1–5, as shown in the second row of Table 3.2. These numerals correspond to the contours in Figure 3.1.

The vertical line on the right represents the level of pitch distinctions that can be made by a speaker of a language, with 1 being the lowest and 5 being the highest. The 1st tone is represented by 55, which means the starting pitch is 5 and should be maintained throughout. The 2nd tone is 35, the 3rd tone is 214 and the 4th tone is 51. This system can be used to describe any tonal shape. Therefore, when it is necessary, we will use such numerals to describe the shape of Chinese tones in the different stages of the history of the language.

Shen Yue (沈約 441–513) of the Northern and Southern Dynasties was the first person who mentioned tones in Chinese. According to him, there were four tones in Middle Chinese. They are called the píng tone (平聲 "the level tone"), shǎng tone (上聲 "the rising tone"), qù tone (去聲 "the departing tone") and rù tone (入聲 "the entering tone"). These four tones are not the same as the four tones in Modern Standard Chinese, although they are historically related. We will describe how the tones changed throughout the history of the language as we go. It is useful to establish here the notion of tones and the basic four-tone system in Middle Chinese, i.e. píng, shǎng, qù and rù, since they are the most important tonal classes that are used as a reference to changes of tones in Chinese.

So far we have introduced the three components of a Chinese syllable: initial, rime, and tone. When we say that sounds can change, it means that the initials, the rimes and the tones can all change. Table 3.3 shows how these components are structured in a syllable.

The initial, or shēngmǔ, is usually a consonant, but sometimes when the syllable does not have an initial consonant, we can say that it has a zero initial. The rime, or yùnmǔ, is the remaining part of the syllable. It can be further divided into a main vowel (yùnfù) and a coda (yùnwěi). The medial[2] (yùntóu) in Modern Standard Chinese is one of the following three sounds i, u, and ü that can appear before the main vowel. The coda can be anything that follows the main vowel, including the sounds represented by the pinyin letters of i, u, n and ng. The tone is superimposed on the syllable[3]. Table 3.4 shows various representative syllable types in Chinese

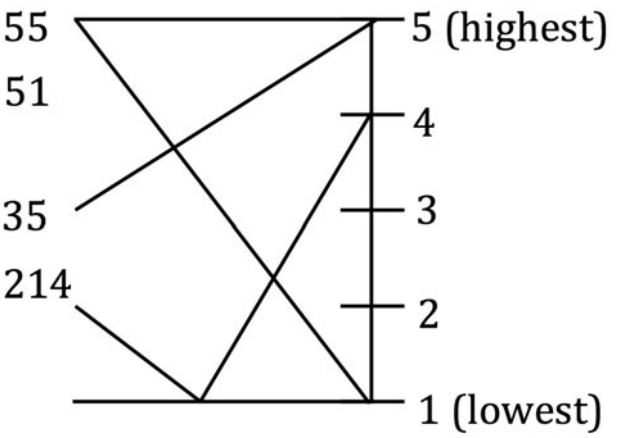


Figure 3.1 Pitch contours of Modern Standard Chinese tones

Table 3.3 The syllable structure of Chinese

Tone			
Initial	Medial	Rime	
		Main vowel	Coda

Table 3.4 Sample analysis of the syllable structure of Modern Standard Chinese

Syllable	*Shēngmǔ* *Initial*	*Yùntóu* *Medial*	*Yùnfù* *Main vowel*	*Yùnwěi* *Coda*
tiao	t	i	a	o
tai	t		a	i
tian	t	i	a	n
yan		y	a	n
an			a	n
a			a	
tang	t		a	ng
ta	t		a	
ya		y	a	

with an analysis of their initials, medials and rimes. The tones are all omitted from these syllables. All of the letters are pinyin letters.

As can be seen from the table, the only thing that cannot be omitted is the main vowel. The initial can be zero, i.e. where the syllable starts with a vowel. The coda can be a vowel or a nasal consonant.

When linguists talk about the sound systems of a European language, they normally refer to the consonants and vowels in the language. In the reconstruction of a proto-language in the Indo-European family, it is the consonants and vowels that are reconstructed. We could do the same thing with Chinese but traditionally and practically it is more convenient and useful to talk about the initials, rimes and tones, rather than consonants and vowels. The concepts of "initial" and "consonant" are actually quite different. In Modern Standard Chinese, there are 22 consonants which include a nasal sound like the "ng" in the English word "sing". It is called a velar nasal sound, represented by the IPA symbol [ŋ]. This consonant cannot appear at the beginning of a Modern Standard Chinese syllable. Thus when we talk about the initials of Modern Standard Chinese, we say there are 22 initials, excluding the velar nasal sound and including the zero initial. The concepts of "rime" and "vowels" are even more different. A rime can comprise a vowel plus a consonant, e.g. "an" and "ong", or two vowels, e.g. "ai" and "ao". But, of course, after the system of consonants and vowels is established, we can also put the consonants and combinations of consonants and vowels into a system of initials and rimes. If the initials and rimes are the primary objects of study, we can also extract the consonants and vowels. These two systems can be mutually convertible. In this book, we will go with the traditional methods that primarily use the initials, rimes and tones.

3.3 METHODOLOGY OF FINDING RIME CLASSES OF OLD CHINESE

Now we are ready to look at how the *Shījīng* can be used to help us understand the rimes of Old Chinese. The assumption is that the rhyming principles of the *Shījīng* are strict and sound. Whenever two characters appear in a rhyme position, they should rhyme in Old Chinese. Or, put in an equivalent way, these characters should have the same rime. Therefore if we study all of the 305 poems and link the characters that appear in a rhyme position, we can group these characters into different classes of rimes. Let's look at the poem from the *Shījīng* in Table 3.5. The Modern Standard Chinese pronunciations of the characters are provided just as a reference point.

In this poem called *Jiānjiā* ("Reeds"), there are three verses. Each verse comprises seven lines of four characters and one line of five characters at the end. If we use the numbers 1–8 to represent these lines in each verse, we find that the last characters in lines 1, 2, 4, 6 and 8 rhyme in each verse respectively. For example, in the first verse the characters 蒼, 霜, 方, 長 and 央 rhyme. Therefore we can put them together in one group. We can keep adding characters to this group as we study more and more poems, as long as there is at least one common character. All of the

Table 3.5 The linking method for rime classes

Verses	*Rime class*	*English translation (by James Legge)*
jiānjiā cāng**cāng**, bái lù wéi **shuāng** 蒹葭蒼蒼, 白露為霜。 suǒ wèi yī rén, zài shuǐ yì **fāng** 所謂伊人, 在水一方。	蒼霜方長央	The reeds and rushes are deeply green, And the white dew is turned into hoarfrost. The man of whom I think, Is somewhere about the water.
sù huí cóng zhī, dào zǔ qiě **cháng,** 遡洄從之, 道阻且長。 sù yóu cóng zhī, wǎn zài shuǐ zhōng**yāng** 遡遊從之, 宛在水中央。		I go up the stream in quest of him, But the way is difficult and long. I go down the stream in quest of him, And lo! he is right in the midst of the water.
jiānjiā qī**qī**, báilù wèi **xī,** 蒹葭淒淒、白露未晞。 suǒ wèi yī rén, zài shuǐ zhī **méi** 所謂伊人、在水之湄。	淒晞湄躋坻	The reeds and rushes are luxuriant, And the white dew is not yet dry. The man of whom I think, Is on the margin of the water.
sù huí cóng zhī, dào zǔ qiě **jī,** 遡洄從之、道阻且躋。 sù yóu cóng zhī, wǎn zài shuǐ zhōng **chí** 遡遊從之、宛在水中坻。		I go up the stream in quest of him, But the way is difficult and steep. I go down the stream in quest of him, And lo! he is on the islet in the midst of the water.
jiānjiā cǎi**cǎi**, báilù wèi **yǐ,** 蒹葭采采、白露未已。 suǒ wèi yī rén, zài shuǐ zhī **sì** 所謂伊人、在水之涘。	采已涘右沚	The reeds and rushes are abundant, And the white dew is not yet ceased. The man of whom I think, Is on the bank of the river.
sù huí cóng zhī, dào zǔ qiě **yòu,** 遡洄從之、道阻且右。 sù yóu cóng zhī, wǎn zài shuǐ zhōng **zhǐ** 遡遊從之、宛在水中沚。		I go up the stream in quest of him, But the way is difficult and turns to the right. I go down the stream in quest of him, And lo! he is on the island in the midst of the water.

characters in this group have the same rime in their pronunciation in Old Chinese. We can do the same for the characters in the second and third verses. Note that the modern pronunciations of the characters in the rhyme positions in the third verse are all different from each other, such as cǎi, yòu and yǐ. The vowel in yǐ can be pronounced similarly to the "ee" in the English word "sheep". But the vowel in sì and the vowel in zhǐ are different. The former is pronounced like a prolonged "z" similar to the "z" in "zoo", while the latter is pronounced like a prolonged "j" similar to the "j" in "jar". Therefore, judging by the modern pronunciations, it is not obvious which characters rhymed in the third verse. Thus, by comparing this verse to the previous two verses, it seems that all of these verses are quite uniform in terms of their rhyming positions. This can be used as a justification for putting the five characters in the third verse into one class. As our studies expand to include more poems, we may have a better idea whether our guesses are correct here. Suppose we find that two of the five characters in the third verse rhyme in another poem and the rhyme

positions there are more certain. That would be more convincing and reassuring. The rhyming principles of the *Shījīng* are not explicitly stated anywhere. Therefore there might be uncertainties in some cases and we have to make our best guesses as to which lines rhyme. Different judgments will lead to different classes of rimes. Sometimes, when the same characters appear in multiple lines, we have to exclude them from the rhymes, e.g. the zhī 之 in the poem in Table 3.1. In that case, the characters next to the zhī, i.e. 芣 and 樂, are in the rime class.

Although the *Shījīng* is very useful, it still has its limitations. For one thing, we can only link the characters that appear in a rhyme position, but there are many other characters that never occur in a rhyme position in the 305 poems. How can we know about their rimes? The Qing philologist Duan Yucai (1735–1815) proposed using the phonetic cues encoded in a type of Chinese characters called xiéshēngzì, or phonetic series. Table 3.6 shows two examples of a series of xiéshēngzì.

The first character in the second row is pronounced as fāng. This same character is also used as a component in the next three characters in the second row. It is the lower component in the second character, the component on the right in the third and the component on the left in the fourth. Now let's look at the pronunciations of all the four characters in Modern Standard Chinese indicated by the pinyin on top. They all have the same rime "ang", although their tones are different. Thus the first character is used as a phonetic component in the other three characters to indicate the pronunciations. There are many more characters that use this same character as a phonetic component. Now let's look at the remaining four characters in the table. The first character in the remaining four is also used as a phonetic component in the other three characters. The rime of the first two characters is "ang" while the rime of the third and fourth characters is "ing". Their Modern Standard Chinese pronunciations are not in the same class any more, although originally they should have rhymed just as in the case of the first group of four characters in the table (by "originally" we mean in Old Chinese pronunciation). Duan Yucai studied the rhyming characters, and also such xiéshēngzì, and decided that, in Old Chinese, characters that share the same phonetic component should be in the same rime class. In many cases, sound changes since Old Chinese made the pronunciation of characters in a phonetic series, i.e. xiéshēngzì, quite different from each other (e.g. the second example in Table 3.6). But no matter how different they sound now, we can deduce that they must have sounded quite similar 2,500–3,000 years ago. Therefore, in Table 3.6, the four characters on the left side of the second row should be put into one class of rime, i.e. 方房紡放; the remaining four characters are in one rime class, i.e. 央泱英映. Now we also see that in Table 3.5, the characters 方 and 央 are also in the same rime class with 蒼霜長. Therefore we can link all of them together to include方房紡放央泱英映蒼霜長 in one rime class. This is how phonetic series, or xiéshēngzì, can be used to expand a rime class. Sometimes, if xiéshēngzì appear in

Table 3.6 Examples of xiéshēngzì

fāng	fáng	fǎng	fàng	yāng	yāng	yīng	yìng
方	房	紡	放	央	泱	英	映

a poem from the *Shījīng*, we can easily identify where the rhyme positions are. Vice versa, if the characters that rhyme in a poem from the *Shījīng* include xiéshēngzì, it can also confirm our assumption that xiéshēngzì should share the same rime. Thus by combining these two methods, we can arrive at a number of classes of Old Chinese rimes. Traditionally these classes are called yùnbù. Duan Yucai established 26 yùnbù in his studies. Later scholars continued to comb through the 305 poems and the xiéshēngzì system to further refine the yùnbù of Old Chinese. Wang (1958) proposed 29 yùnbù, and Li (1971) proposed 22 yùnbù, but actually in 11 of these there are two different rimes, thus making the total number of rimes 33 in his system. Each of these yùnbù is traditionally represented by a character of this yùnbù. For example, the yùnbù which includes all the characters mentioned in the previous example of xiéshēngzì, i.e. 方房紡放央泱英映蒼霜長, is called the 陽 ("yáng") yùnbù, and all the characters in this class have the same rime, "ang". But note that in the traditional method of linking rhyming characters we only have different classes of rimes, not their phonetic values. The pre-modern scholars were mostly interested in classificatory purposes. It is modern scholars like Bernhard Karlgren, Wang Li and Li Fang-Kuei who have tried to give these yùnbù their phonetic values. We will talk about how they do this later in this chapter.

3.4 METHODOLOGY OF FINDING INITIAL CLASSES OF OLD CHINESE

As for the initials, we cannot use the poems in the *Shījīng*, since the requirement of rhyming does not refer to the initial at all. It does not matter what initial a certain character has when it is in a rhyme position. So now let's take a closer look at the characters in Table 3.6. Previously we only focused on their rimes. If we look at their initials, we find that the first four characters all share the same initial "f", while the remaining four characters do not have an initial at all. The "y" is pronounced similarly to "ee" as in English "sheep", which is a medial, not an initial. Note that in such cases it can be said that they have a zero initial. In this way, these characters share the same initial. But when we look at more examples, we find that the initials of xiéshēngzì characters do not always have to be the same. For example, Table 3.7 shows two series of xiéshēngzì and their pronunciations in Modern Standard Chinese.

In the first series, the character 丁 is the shared phonetic component. The initials of the four characters are either "d" or "t" in pinyin. The pinyin letter "d" in Modern Standard Chinese is pronounced more like the "t" in the English word "style" or the "t" in Spanish "tu". It is called an unaspirated stop. The pinyin letter "t" is similar to the "t" in the English word "time" but maybe a little stronger. This "t" is called an aspirated stop. Aspiration refers to the puff of air that follows the release of a consonant, usually a stop. In the IPA (International Phonetic Alphabet) notation, the pinyin "d" or the English "t" in "style" are represented by the symbol [t], while the pinyin "t" and the English "t" in "time" can be written as [t^h]. We use square

Table 3.7 Initials of xiéshēngzì

dīng	dǐng	tīng	tíng	zhōng	zhòng	chōng	chōng
丁	頂	汀	亭	中	仲	沖	忡

brackets for most IPA symbols in this book. The superscripted "h" represents the aspiration, which sounds like an "h". Therefore the initials of the first series are either [t] or [t^h]. Now let's try to say "style" and "this time" while focusing on how we pronounce the two different sounds represented by the letter "t". You might feel that the tip of your tongue is raised against the back of the upper teeth and gum area for both sounds. In other words they are pronounced in the same place. We can make many different sounds at the same place of articulation. For example, if you try to pronounce the letters "d, t, n, l" in the words "doe, tow, low, no", they are articulated with the tip of your tongue at the same place, called the alveolar ridge. Therefore, in terms of the place of articulation, "d, t, n, l" are all alveolar consonants. Now let's look at the second series of xiéshēngzì in Table 3.7; their initials are either "zh" or "ch" in pinyin. "Zh" could be pronounced in a similar way to how you pronounce the "j" in "join", but try to roll the tip of your tongue further up, like when you are pronouncing the letter "r". The "ch" in pinyin is similar to the "ch" in "chase" with the tip of the tongue rolled up like an "r". Sounds like "zh" and "ch" are called retroflex consonants and they are pronounced in the same place of articulation. Therefore we see that even though the characters in a xiéshēngzì series do not share exactly the same initial, their initials are nonetheless closely related by their place of articulation. Bernhard Karlgren discovered this connection and it was later further refined and distilled as a method to classify Old Chinese initials. To put this more clearly, characters in the same xiéshēngzì series should share a single place of articulation in terms of their initials. This method is very powerful in that we can compare many characters and put them into different initial classes. For example, the first series of characters in Table 3.7 would belong to the alveolar initial class, including such sounds as [d, t, t^h]. Let's not classify the initials of the characters in the second series in Table 3.7 for now – it will become clear why when we discuss two further great discoveries about Old Chinese initials.

Qian Daxin (1728-1804) was an erudite scholar in the Qing Dynasty. He made great contributions to the traditional philological studies of Chinese. While reading ancient texts and commentaries, he noticed many discrepancies between the pronunciations of the *Shījīng* era and his own time. For example, he noticed that in early records on the pronunciation of the character 佛 fú, it was said that 佛 fú was pronounced similarly to 弼 bì. In Qian Daxin's time the sounds of the common spoken language were already quite similar to Modern Standard Chinese. Within our modern pronunciation, fú and bì are not similar at all. But if people in the Old Chinese era noted that they were pronounced similarly, then they must have been quite close. Let's focus on the initials only for now. The sound "f" is pronounced with the lower lip against the upper teeth forcing the air out with audible friction, hence the name labiodental fricative. The sound represented by the pinyin "b" is actually similar to the "p" in the English word

"spy", but not the "p" in "pie". We have seen a similar distinction between the unaspirated [t] and the aspirated [t^h], and here it is the same distinction between the unaspirated [p] as in "spy" and the aspirated [p^h] as in "pie". But both are pronounced with the lips touching, hence the name bilabial stops. Actually similar notes about pronunciations are pretty common in texts from the Old Chinese period. If we look at the initials of xiéshēngzì we can find more evidence for the close relationship between these two initials. Table 3.8 shows two examples of xiéshēngzì series.

In Table 3.8, in the first series of xiéshēngzì the character 非 is the common phonetic component. The initials of the first two characters are both "f", or [f] in IPA, while the initials of the other two characters are "b" and "p" in pinyin, or [p] and [p^h] respectively in IPA. The sound [f] is labiodental; the sounds [p] and [p^h] are bilabial stops. In the second series, the character 甫 is the shared phonetic component. Again, the initials of the first two characters are both labiodental and the initials of the remaining two characters are both bilabial stops. According to the relationships of initials in a phonetic series mentioned earlier, the initials of the characters in Table 3.8 should have been in the same place of articulation in Old Chinese, either both labiodental or both bilabial. How can it be determined which one was the original sound and which one developed from the older sound later? If we look at modern Chinese dialects, in some dialects there is no such a sound as "f" (e.g. the southern Min dialect spoken in Xiamen) and many words would be pronounced with a sound similar to the Modern Standard Chinese "p" or "h" instead. Also, in written records of Early Middle Chinese there was still no initial "f" at that time. Therefore it seems reasonable to say that in Old Chinese there was no "f". It developed from bilabial stops much later. When we talk about the comparative reconstruction method later, in Chapter 4, we will have a better idea why, in terms of sound change, developments from "p" to "f" are more common and natural. Qian Daxin formulated his discovery as "gǔ wú qīngchúnyīn" (古無輕脣音), meaning there was no labiodental sound in ancient times. Traditionally, labiodental sounds are called qīngchúnyīn (輕脣音), while bilabial sounds are called zhòngchúnyīn (重脣音).

The second discovery by Qian Daxin is also about Old Chinese initials. In late Old Chinese in the Han Dynasty, we find that notes like "沖 are pronounced similarly to 動". According to modern pronunciation, 沖 is chōng, and 動 is dòng. The major difference between these two characters is their initials, i.e. the retroflex "ch" vs alveolar "d". There are many similar examples from xiéshēngzì as shown in Table 3.9.

Table 3.8 Labiodental and labial sounds in xiéshēngzì

fēi	fēi	bèi	péi	fǔ	fǔ	bǔ	pǔ
非	菲	輩	裴	甫	輔	補	浦

Table 3.9 Dentals and retroflex sounds in xiéshēngzì

zhě	dū	zhù	chǔ	dēng	zhèng	chéng	chéng
者	都	著	褚	登	證	澄	橙

In the first series, the character 者 is the common phonetic component. The initials of these characters include the unaspirated retroflex "zh", or IPA [tʂ], the aspirated "ch" or [tʂ^h], and the alveolar stop "d", or [t] in IPA. It is the same with the second series in the table. Also, according to our understanding of the relations between the initials of characters in a phonetic series, each of the two series of characters in Table 3.9 should share a single place of articulation for their initials. But their initials have clearly different places of articulation in modern pronunciation. Therefore we suspect that in Old Chinese the initials should be either alveolar, e.g. "d" or retroflex, such as "zh", although we cannot say for now which it was in ancient times. Again, in modern dialects we find that some of the characters with the retroflex initials shown in Table 3.9 are pronounced with an alveolar initial (for example, 者 zhě is pronounced as [ta] in the Xiang dialect spoken in Shuangfeng, Hunan).[4] Many dialects, especially those in southern China, retain some archaic features of Old Chinese. Thus we can say for now that the alveolar initials are the original initials in Old Chinese, while the retroflex initials developed from the alveolars later. But to have more convincing evidence for this claim we need to look at both the comparative reconstruction and the historical development. We will talk about these in more detail in Chapter 4. Qian Daxin summarized his second discovery in the phrase "gǔ wú shéshàngyīn" (古無舌上音), meaning there were no retroflex initials in ancient times. The retroflex initials of modern times are related to a traditional category of initials in Middle Chinese called the shéshàngyīn (舌上音). The alveolar sounds such as [t] [t^h] [d] are traditionally called shétóuyīn (舌頭音).

These two discoveries by Qian Daxin are among the most important features of Old Chinese initials. The phonological results of the spin-off of qīngchúnyīn from zhòngchúnyīn, and that of shéshàngyīn from shétóuyīn are far-reaching and can be detected in modern Chinese dialects. We will look at these dialects in Chapter 9.

3.5 POSSIBLE CONSONANT CLUSTERS

So far, Old Chinese already sounds very different from Modern Standard Chinese. Actually, there is another major difference with regard to the initials. Modern Chinese dialects do not generally allow more than one initial consonant. Therefore consonant clusters such as "spl-" in "splash", bl-" in "blue", etc. in English do not exist in Chinese. In the earliest dictionary Ěryǎ (爾雅 The Literary Expositor) composed during the Old Chinese era, it is said that 不律 búlǜ is another way of saying 筆 bǐ. Actually, if we look at the characters 律 lǜ and筆 bǐ, they both have the phonetic component of 聿. Therefore, in accordance with the xiéshēngzì relationships, these two characters should have initials at the same place of articulation. But the initial "l" is an alveolar sound and the "b" is a bilabial stop – they do not share the same place of articulation anymore. We can find many such examples in xiéshēngzì. Table 3.10 shows a few more such cases.

In the first xiéshēngzì series in Table 3.10, the character 稟 is the common phonetic component. The initials of these characters include "b" and "l". In the second series, the common phonetic component is 各, and the initials include "g",

Table 3.10 Consonant clusters and xiéshēngzì

bǐng	lǐn	lǐn	lǐn	gè	kè	luò	luò
稟	凜	廩	檁	各	客	洛	絡

"k" and "l". Their places of articulation are all different, not conforming to how we understand the relationships between initials in xiéshēngzì series. In some modern Chinese dialects we can also find monosyllabic words that have an alternative form with two different syllables. For example, in the dialect spoken in the Shanxi province and the adjoining parts of Hebei and Inner Mongolia, there is a special type of word formed by putting the sound "l" between the initial and the rime. In the dialect spoken in Hohhot, the capital city of Inner Mongolia, words such as 擺 bǎi ("sway") can be pronounced as bulǎi, and 巷 xiàng ("alleyway") can be pronounced as helàng. All of these pieces of evidence point towards the possibilities of consonant clusters such as "bl-", "kl-", "hl-" in Old Chinese. Although the existence of consonant clusters in Old Chinese is not yet universally accepted by all linguists, it is still a tenable hypothesis, especially if we compare the initial consonant clusters in Classical Tibetan and Old Chinese. As mentioned towards the end of Chapter 2, there are many highly complex consonant clusters in Classical Tibetan as well as in some archaic dialects of modern spoken Tibetan. It is entirely reasonable to assume that the original Sino-Tibetan language had such consonant clusters, and they could still possibly be retained to some extent in Old Chinese. Perhaps there were many more such consonant clusters in Proto-Chinese.

3.6 METHODOLOGY OF RECONSTRUCTION OF OLD CHINESE SOUNDS

So far we have discussed how to use the *Shījīng* and phonetic series, i.e. xiéshēngzì, to study the classes of rimes and initials in Old Chinese and we have also discussed some representative features of Old Chinese initials. But the classes of initials and rimes only tell us how many different rimes and types of initials there were back then. How could we know the phonetic values of these classes? To do so, most linguists rely on the phonological system of Middle Chinese as the written records of Middle Chinese are much more extensive. To some extent, most modern Chinese dialects are descendants of Middle Chinese so we can use the pronunciation of modern dialects and the written records together to reconstruct the phonetic values of Middle Chinese rimes and initials. Several such systems have been quite successfully established. Theoretically speaking, we regard Middle Chinese as having descended from Old Chinese, i.e. the rimes and initials developed from Old Chinese under certain phonological conditions. By comparing the phonetic values of Middle Chinese rimes and initials and the classes of Old Chinese rimes and initials, linguists can construct a theoretical hypothesis of the phonetic values of Old Chinese sounds that explains how those sounds eventually became these sounds in Middle Chinese.

In discussions of the history of the Chinese language, the reconstruction of Middle Chinese would normally be introduced first, and then the sound system would be pushed back to Old Chinese. But here, in this book, in order to give a strictly chronological description of the development of the Chinese language from prehistoric times to modern dialects, Old Chinese is introduced here before Middle Chinese. In Chapter 4, after we reconstruct the rimes and initials of Middle Chinese, we will illustrate the connections between Old Chinese and Middle Chinese.

3.7 TONES OR NO TONES IN OLD CHINESE?

Besides rimes and initials there is one more aspect of the sound system of Old Chinese that needs to be studied, i.e. tones. Earlier in this chapter it was mentioned that there are four tones in Middle Chinese, píng, shǎng, qù, and rù. Were there tones in Old Chinese? To answer this question, we need to look at the *Shījīng* again. In traditional Chinese poetics, especially in the genre called regulated verse in the Tang Dynasty, only characters with the same tone should be used to rhyme. For example, characters with a píng tone can rhyme with each other, and the same goes for the other three tones. Characters that have different tones should not be used to rhyme, e.g. if one has a píng tone and the other has a shǎng tone they should not be used to rhyme. In more relaxed compositions of poetry, it is permissible for characters that have different tones to rhyme. According to the rime dictionary called *Guǎngyùn*, which will be introduced in Chapter 4, we know exactly which character has which tone. These tones from Middle Chinese are used as a reference to study the tones of characters in a rhyme position in the *Shījīng*. Most of the *Shījīng* poems have rhyming characters of the same tones, i.e. the same tones in terms of the tones in Middle Chinese. For example, in Table 3.5 the first verse uses the following characters in the rhyme positions: 蒼霜方長央. They all have the píng tone in Middle Chinese, although according to the modern pronunciation 長 has a different tone from the other four characters. The rhyming characters in the second verse are píng tone characters in Middle Chinese as well, although two of them – 湄 and 坻 – have a different tone from the other three in Modern Standard Chinese. However, in the third verse the rhyming characters all have the shǎng tone in Middle Chinese, except for the rhyme character on line 8 – 右 – which has a qù tone. The rhyme character on line 4 – 涘 – originally had a shǎng tone in Middle Chinese, but in Modern Standard Chinese its tone is the same as the tone of 右. Therefore, in the third verse, a character with a qù tone rhymes with characters with a shǎng tone. Indeed a good proportion of poems in the *Shījīng* use rhyme without regard to tones. Chen (1995) cites Shi's (1985) statistics and points out that there are 1,141 verses in the 305 poems in the *Shījīng*. Counting lines with the same rhyme as a unit, he further divides the 1,141 verses into 1,679 rhyming units. 82.2 percent of these rhyming units use characters that have the same tones, while 17.8 percent use characters with different tones. If we focus on the majority of these, the 82.2 percent, and if we assume that characters with the same tones should rhyme in the *Shījīng*, then it is reasonable to say that there are

tonal differences in Old Chinese. Of course, 17.2 percent is not a small number either – it cannot simply be dismissed. Some scholars thought that there were tones in Old Chinese, and these tones might either be used differently or might have different phonological properties. Duan Yucai, the Qing Dynasty philologist, found that the qù tone characters could rhyme with the píng, shǎng or rù tones. He therefore proposed that there was no qù tone in Old Chinese and that the qù tone characters should belong to the other three tones. Wang (1958) further argued that the qù tone in Middle Chinese developed from the rù tone with a long vowel in Old Chinese. Some scholars have argued for a totally different viewpoint based on the same facts – the Ming Dynasty scholar Chen Di, who we mentioned earlier in this chapter, said "the ancients did not have the distinction between the four tones (sì shēng zhī biàn, gǔ rén wèi yǒu 四聲之辨，古人未有)".

Is it really possible that Old Chinese did not have tones? Before answering this question, we need to ask whether tones are an inherent property of a tonal language. If they are inherent, then it means that a tonal language will always have tones although the actual phonological properties of these tones can change over time. If tones are not inherent, then it suggests that a language without any tonal distinction can develop tones under certain circumstances. If we look at the languages of Sino-Tibetan, we do find many without tones. For example, Amdo Tibetan does not have tones, while Lhasa Tibetan has tones. Amdo Tibetan and Lhasa Tibetan share a single ancestral language. Logically speaking, there are two possibilities: either Lhasa Tibetan developed tones, or Amdo Tibetan lost tones. Since we know that in Classical Tibetan there were no tones, it is more convincing to say that Lhasa Tibetan developed tones. This is definitely evidence that supports the second viewpoint on tones, i.e. that a language without tones can develop tones and become a tonal language.

Another piece of evidence comes from the development of tones in Vietnamese and the relationship of Vietnamese to the other Austroasiatic languages. Vietnamese is a tonal language, and its tones can be categorized in a similar way to the píng, shǎng, qù and rù tones in Middle Chinese. There is evidence of cognate words between Vietnamese and the other Austroasiatic languages. But these other languages are not tonal. If tones are inherent, then the existence of tones in Vietnamese is a major obstacle to establishing a genetic relationship between Vietnamese and the other Austroasiatic languages. Haudricourt (1954) claimed that tones in Vietnamese were a later development. He noticed that in the cognate words, Vietnamese words that have a tone comparable to the qù tone often correspond to words ending with an "h" or an "s" in other Austroasiatic languages. For example, the word for "root" is "rễ" in Vietnamese, "rɜh" in Mon and "ries" in Mnong (Norman 1988: 55). It is reasonable to argue that if all these words share the same origin, there should be an extra "h" or "s" at the end of the original Vietnamese word. Although this sound was lost long ago in the Vietnamese word "rễ", it can be deduced from the existence of the tone. Therefore a possible scenario of the initial development of tones, technically called tonogenesis, could be that originally there was an "s" sound at the end of the word, and then the "s" became "h", and this was

further lost altogether at an even later time. With the loss of this sound its effect or influence on the previous vowel is preserved as a specific tone. Haudricourt (1954) also observed that for Vietnamese words that belong to the tonal category comparable to the Chinese shǎng tone, the tone often corresponds to a glottal stop in other related languages. For example, the word for "leaf" is "lá" in Vietnamese, "hlaʔ" in Khmu, and "laʔ" in Riang (Norman 1988: 56). A glottal stop, written in IPA notation as [ʔ], is just a closure of the vocal cords. If you say the word "laʔ", just bring the sound to a sudden stop after you pronounce the vowel "a" by constricting your vocal folds. Again, we see that originally there could be an extra sound in Vietnamese that corresponded to the glottal stop [ʔ] in the other two languages. We can deduce that the tone developed during the process that such a glottal stop sound was lost. Similarly there might have been an earlier sound, e.g. [x] as the "ch" in the German pronunciation of the composer "Bach", or a uvular stop [q] as argued by Zhengzhang (2003), which developed into the glottal stop. The evidence and arguments from Vietnamese tones are much more convincing evidence for tonogenesis, the hypothesis that tones can develop in non-tonal languages as a result of the influence of consonants at the end of the syllable.

Now it is a natural extension to say that originally a character that would eventually develop into the shǎng tone category in Middle Chinese could have had a glottal stop at the end of the syllable in place of the existence of a tone; similarly, a character that would eventually develop into the qù tone category in Middle Chinese could have had an "s" earlier and then later an "h" sound at the end of the syllable in place of the existence of a tone. This is a view similar to Chen Di's claim that there were no tones in Old Chinese. Li (1971) also leaned towards the view that there were no tones in Old Chinese. In his reconstructions of Old Chinese, he attached the letter "x" to characters that belong to the shǎng tone category in Middle Chinese, instead of the later glottal stop as mentioned above, and an "h" to the qù tone characters. The notation with the extra "x" or "h" is probably better regarded as a convenient way of distinguishing the shǎng and qù tones rather than indicating significantly different consonants. Zhengzhang (2003) also argued that there were no tones in Old Chinese and instead the shǎng tone should be replaced by a glottal stop and the qù tone should be replaced by an "s" sound. Interestingly, but not surprisingly, the names of the four tones in Middle Chinese belong to their corresponding tonal category, i.e. 平 itself has a píng tone;上has a shǎng tone;去has a qù tone; and 入has a rù tone. The reconstructed pronunciation of these four characters in Zhengzhang's (2003) reconstructions is 平 beŋ; 上 djaŋʔ; 去 k^has; 入 njub. The characters with a rù tone have one of the following three consonants "b", "d" or "g" as the final sound.

There is strong evidence for the claim that there were no tones in Proto-Sino-Tibetan and Proto-Chinese, but the evidence for the claim that there were no tones in Old Chinese is weaker. More and more linguists are now supporting this view and so we can say here, with some certainty, that tones did not become a phonological property of Chinese until after Old Chinese.

3.8 THE SOUND SYSTEM OF OLD CHINESE

Now it is time to take a look at the reconstructed sounds of initials and vowels in Old Chinese. There are many different systems of reconstruction, devised by various linguists. We choose to follow Li's (1971) Old Chinese initials and rimes for two reasons. First, compared to more recent systems Li's (1971) system is easier, in that it has fewer fine phonetic distinctions or rare sounds. Second, his reconstruction of Old Chinese is a standard reference point for all later systems. It is absolutely necessary for anyone who wants to understand the more recent reconstructions to have knowledge of Li's (1971) Old Chinese. Among the more recent systems, Zhengzhang's (2003) Old Chinese is a much-refined system that incorporates materials, methodology and research that were not previously available. Here Table 3.11 shows the initials as reconstructed by Li (1971).

Most of the IPA symbols in this system are very familiar ones. The sound [p] should be pronounced as in the word "spy", but not in "pie". The sound [p^h] is pronounced as in "pie", but not as in "spy". The sound [b] is similar to the b in "buy". Such a three-way distinction is maintained for the bilabial, alveolar and velar stops, as well as for the alveolar affricates such as [ts, ts^h, dz]. There are also labialized versions of [k, k^h, g, ŋ, ʔ, h] written with a superscript "w", meaning that the lips should be rounded when pronouncing these sounds. Suppose you want to say "cool". Round your lips first before you say it, and when you actually say it, the first letter "c" would be a labialized velar stop, or [k^{wh}] in IPA. The "r" sound, according to Li's (1971) description, is similar to the flapped "d" in American English "ladder", or the "t" in American English "latter". As for the consonant clusters that we mentioned earlier, they are usually formed with a combination of certain sounds in this table. We will not provide the inventory of consonant clusters in Old Chinese here.

Table 3.12 shows the reconstructed 33 rimes for the 22 yùnbù in Li's (1971) system. In his system, the first two columns are matched pairwise into 11 yùnbù, although they actually have different rimes, varying only in the voicing quality of the final consonant (e.g. the voiced-voiceless contrast in "d"/"t"). One major feature of his system which was criticized by many is that there is no open syllable. An open syllable would be one ending with a vowel instead of a consonant.

In Table 3.12 all syllables end with a consonant. Such a strictly closed syllable structure is probably rare and possibly quite difficult to pronounce. In the *Shījīng*, open syllables can rhyme with syllables that end with a -p, -t, or -k. Although there are only a very small number of such cases, in order to account for these rhyming examples in the *Shījīng*, a series of corresponding syllables with the voiced versions of "p", "t" and "k" – i.e. "b", "d" and "g" – is reconstructed.

In Table 3.11 and Table 3.12, the initials and rimes of Old Chinese are given, since in the Chinese tradition, it is more convenient to talk about initials and rimes, rather than consonants and vowels. But of course if we look at the rimes in Table 3.12, we find that there are only four simple vowels: i, u, ə, a. By looking at the consonants in both the initials and rimes, we can provide a description of the consonantal system of the language as well. In Li's (1972) system, there are also two

Table 3.11 Old Chinese initials*

Phonetic features	*Voiceless unaspirated*	*Voiceless aspirated*	*Voiced*	*Nasal*	*Lateral*	*Fricative*	*Flap*
Labial	p	p^h	b	m			
Alveolar	t	t^h	d	n	l		r
	ts	ts^h	dz			s	
Velar	k	k^h	g	ŋ			
	k^w	k^{wh}	g^w	$ŋ^w$			
Laryngeal	ʔ					h	
	$ʔ^w$					h^w	

Source: Li 1971
*It might be more useful if we included the Chinese characters that serve as names to these initials. But since we are only providing these reconstructions for illustrative purposes, rather than for discussing the details, the Chinese characters have been omitted.

Table 3.12 Old Chinese rimes*

Rimes (>open)	*Rimes (>checked)*	*Nasal rimes*
-id	-it	-in
-ig	-ik	-iŋ
-ug	-uk	-uŋ
-əb	-əp	-əm
-əd	-ət	-ən
-əg	-ək	-əŋ
$-əg^w$	$-ək^w$	$-əŋ^w$
-ab	-ap	-am
-ad	-at	-an
-ag	-ak	-aŋ
$-ag^w$	$-ak^w$	
-ar		

Source: Li 1971
* Normally, as a convention, the Chinese characters that serve as the names of these rime classes should also be provided. But our purpose here is, again, just illustrative rather than discussing the details, and therefore the Chinese characters are omitted.

medial sounds that can be put between the initial and the rime: "r" and "j". They can be combined as "rj" too.

As for the tones, there is no agreement as to whether there were tones in Old Chinese, as we mentioned earlier. Zhengzhang (2003) argues that there were no tones in Old Chinese but there were accompanying pitch contours for each syllable type, i.e. a short 3 contour for syllables ending with -p, -t or -k in Li's system above,[5] which would eventually develop into the rù tone; a 31 contour for syllables ending with "h" or "s", which would eventually develop into the qù tone; a 35 contour for syllables ending with "x" or a glottal stop [ʔ], which would eventually develop into the shǎng tone; a 33 contour for other types of syllables, which would eventually develop into the píng tone. These accompanying pitch contours were not tones yet, since they did not serve to distinguish different words. The primary distinction is made by the different types of syllables made up of consonants and vowels, rather than a tonal contour.

Now we have given the reconstructed initials, medials, rimes and accompanying pitch contours in Old Chinese, it is time to appreciate what the language is like. Table 3.5 contains an example from the *Shījīng*. The first four lines are pronounced in Modern Standard Chinese as follows in the pinyin notation:

Jiānjiā cāngcāng,
bái lù wéi shuāng.
Suǒ wèi yī rén,
zài shuǐ yì fāng.

In Old Chinese, according to Li's (1971) reconstruction, the same four lines would be pronounced as:

[kiam krag tsʰaŋ tsʰaŋ /
brak lagh gwjar srjaŋ //
srjagx gwjədh ʔjid njin /
dzəgx hrjidx ʔjit pjaŋ //]

But of course such reconstructed sounds will not be exactly how Old Chinese was spoken 2,500–3,000 years ago. To reconstruct the sounds in Old Chinese, we rely on the reconstructed sounds of Middle Chinese and compare them with the classes of initials and rimes that can be obtained by linking the rhyming characters in *Shījīng* and using xiéshēngzì series. The main goal in reconstructing Old Chinese is to account for the development from Old Chinese to Middle Chinese. Theoretically there are a number of different ways of doing this – it is partially because of this that different linguists have proposed very different reconstructions. But each of the reconstructed systems of Old Chinese sounds tries to describe as closely as possible how real Old Chinese was spoken. If our reconstruction is sufficiently accurate, it will sound most closely like the real Old Chinese.

The *Shījīng* is used as the major source of reconstructing Old Chinese, but was it actually based upon a real spoken language? It is entirely possible that there were different dialects in Old Chinese. Confucius was from the state called Lu, which was located in what is present-day Shandong Province. He opened a school to educate young people using books like the *Shījīng*, the *Book of Documents*, the Classic of Rites, etc. It is said that he had 3,000 students from all over the country. If Confucius' native dialect was different from those of his students, what spoken language did he use in his teaching? According to a passage from the *Analects*, he used the yǎyán (雅言 "elegant speech"). This elegant speech is also interpreted as the "correct speech" because it was based on the spoken language of the capitals of the Zhou Dynasty. The earlier capital of the Zhou Dynasty was in what is present-day Xi'an and the later capital was present-day Luoyang. Therefore, in Confucius' time the "correct speech" would have been based on the dialect of the capital city Luoyang. Some authors compared this common spoken language based on the Luoyang dialect to the use of Greek as the *koine* in the Hellenistic and Roman world. The yǎyán was therefore the lingua franca for the Zhou Dynasty. The first dialect dictionary in Chinese was the *Fāngyán* by Yang Xiong (53–18 BCE) in the Han Dynasty. This is also the origin of the word fāngyán ("dialect, topolect") in Chinese. The major part of the dictionary discusses differences in vocabulary. It seems that, by Yang Xiong's time, the various dialects had been quite different. If the dialects in Confucius' time were already quite different from each other, such differences would certainly increase as time went by. In contrast to the differing dialects, the existence of a common spoken language as a lingua franca has always been attested throughout the history of the Chinese language. The base dialect of such a common language was often called the Zhōngyuán Zhèngyīn ("The correct pronunciation of the Central Plains"), which, for the major part of history, was probably the dialect in what is present-day Henan Province where the city of Luoyang, mentioned earlier, is located.

So far we have introduced the various linguistic and cultural aspects of Old Chinese. The methodology uses five types of information. First, we rely heavily on the *Shījīng* for reconstructing the rimes and tonal classes. It is actually worth emphasizing that the so-called poetry of the *Shījīng* could all be sung – they were mostly different types of songs. Could this be related to the tonal properties of Old Chinese? Tones are properties of pitch contour, which is actually also used by the melodic contour in singing. If there were no tones in Old Chinese, then of course there would not be any problem with accommodating the tonal contours in singing. But if there were tones in Old Chinese, maybe sometimes the tonal contours could not be completely preserved in singing. This might have had some effect on the tones of the rhyming characters in the *Shījīng*. The second type of information we use is the phonetic cues encoded in phonetic series, or xiéshēngzì. Some of the phonological relations in the xiéshēngzì may be older than the *Shījīng*, according to Zhengzhang (2003). Therefore when using the xiéshēngzì, we have to keep in mind that some of them were created before the *Shījīng* era and that sounds may have changed between that time and the *Shījīng* time. The third type of information is obtained by comparing Chinese with other Sino-Tibetan languages, as well as the

Kam-Tai and Hmong-Mien languages, in order to find evidence for the consonant clusters and syllable endings as related to tonogenesis. Such comparative methods have been used more often in more recent research. The fourth type of information is the reconstructed Middle Chinese sound system – the actual phonetic values of Old Chinese depend largely on the system of Middle Chinese. The fifth type of information is modern Chinese dialects, as many old features of the language can be preserved and then observed in modern dialects. For example, Mei (1970) showed that the glottal stop that was associated with the shǎng tone can be seen in some Wu dialects, such as that of Wenzhou, that still have a glottal stop at the end of the syllable with a shǎng tone.

The Old Chinese we have presented so far could be regarded as a sketch of the common spoken language from the late Shang Dynasty until the end of the Han Dynasty in the third century. Subsequent centuries would be the transitional period from Old Chinese to Middle Chinese, as recorded in the rime dictionary *Qièyùn*. We will discuss Middle Chinese in the next chapter.

NOTES

1 The Modern English translation is "Listen! We the Spear-Danes in the days of yore…". At least we can see that the words for "what", "we" and "day" are quite similar to Modern English, while the others are a little bit more different. The word "gār" might have been replaced in Modern English.

2 The status of the medial is a little ambiguous, since it has relations with both the preceding initial and the following main vowel. In Modern Standard Chinese, it can be included as part of the rime, as done in some linguistics textbooks, e.g.《现代汉语(重排本)》published by the Department of Chinese Language and Literature (2006). But historically speaking, "rime" primarily refers to the combination of the main vowel and the coda. Therefore we will use the word "rime" to refer to the combination of the main vowel and coda, unless noted otherwise.

3 But strictly speaking the tone-bearing unit is the rime, instead of the whole syllable. Jacques (2006) cites Howie (1974), saying "another important feature is the tone, that bears on the rime".

4 The dialect pronunciation is taken from《汉语方音字汇》(1962, Department of Chinese Language and Literature, Peking University)

5 In Zhengzhang's (2003) reconstruction, the rù tones have voiced codas such as "b", "d" and "g", rather than the voiceless codas "p", "t" and "k" in Li's (1971) system.

CHAPTER 4

Poetically they dwelt

The sounds of Middle Chinese

"Oh bright moon with my goblet I thee invite; counting my shadow, three of us here tonight." Li Bai (701–762), the famous Tang poet, surely didn't want to drink alone. Thus he asked the moon and his shadow to join him. How marvelous!

Who were they? You may have wondered after reading the title of this chapter. They were the Chinese people during the Middle Chinese period, especially the Tang Dynasty. Poetry was such an important aspect of life, and also a high form of literary art during the Tang Dynasty, that many of the most celebrated poets in the Chinese culture were from this era. The Tang Dynasty however is more than a thousand years from our time. Would it not be wonderful to read the Tang poetry in their original sounds? To do so, we would need to know the phonology of Middle Chinese.

4.1 THE RIME DICTIONARY *QIÈYÙN*

One of the major written records of the sounds of Middle Chinese is the rime dictionary *Qièyùn* by Lu Fayan dated to 601. The preface to the *Qièyùn* tells us that at the time of the composition of the dictionary there were regional dialects with considerable differences in pronunciation. The purpose of composing this dictionary was to set a standard for literary pronunciation. But what is the base dialect of this system of literary pronunciation? Pan (2000) argues that the base dialect of the common spoken language had always been that of Luoyang and its surrounding areas. Even during the Northern and Southern Dynasties periods the imperial court and government officials in the southern dynasties spoke the Luoyang dialect brought to the lower Yangtze River from the north. Considering the fact that during most of the time from Old Chinese to the Sui Dynasty Luoyang had been the most important city, and the dialect there was considered the standard, it would probably be more reasonable to say that the *Qièyùn* phonology is mostly based on the Luoyang dialect.

Although Lu Fayan did not compile the *Qièyùn* for fame, the dictionary turned out to be so popular during the Tang Dynasty that it was regarded as the standard for literary pronunciation. Tang poetry was mostly composed according to the rimes in the *Qièyùn*. However, the original version of 601 by Lu Fayan has been largely lost. At the time when linguists started to look at the sounds of Middle Chinese, the earliest version of the *Qièyùn* available in full was the much expanded version called

the *Guǎngyùn* completed in 1011 in the Northern Song Dynasty as an official rime dictionary, which could be used in the Imperial Examinations as a standard text. A version called the *Kānmiù Bǔquē Qièyùn* ("Corrected and supplemented *Qièyùn*"), edited by Wang Renxu in 706 in the Tang Dynasty, was lost towards the end of the Qing Dynasty but rediscovered in 1947. A comparison between the *Qièyùn* preserved in the *Kānmiù Bǔquē Qièyùn* and the *Guǎngyùn* shows that their contents are basically the same. Karlgren also studied fragments of the *Qièyùn* before the rediscovery of the *Kānmiù Bǔquē Qièyùn*, and showed that the sound system in the *Qièyùn* was preserved in the *Guǎngyùn*. Therefore although the basis of Middle Chinese reconstruction is the *Qièyùn*, most of the work has been done by studying the *Guǎngyùn*.

4.2 THE FǍNQIÈ SYSTEM

To indicate the pronunciation of characters, fǎnqiè ("reverse cutting") was used throughout the *Guǎngyùn*. Fǎnqiè uses two characters to indicate the pronunciation of a third one. Of the two characters used as pronunciation guides, the initial of the first character and the rime and tone of the second character are put together to form the pronunciation that is being looked up. Here is an example of fǎnqiè. Do not worry about the sounds of the characters yet. There was no pinyin during the Middle Chinese period, and the characters listed below are all that one can see and use when looking up a certain character in a dictionary.

東：都宗切

The structure is usually this: the character to be annotated is followed by the first character, of which the initial is used, and then the second character, of which the rime and tone are used. Finally the word qiè is used to indicate that this method is the fǎnqiè method. We use a colon here to separate the character to be annotated from the fǎnqiè, but punctuation marks were not used in traditional Chinese books; the colon is only a convenient way to show the structure here, it is not part of the original fǎnqiè scheme. Moreover, we cannot provide the pinyin pronunciation for the characters involved, or translate the whole fǎnqiè into pinyin, because fǎnqiè was used widely before any phonetic notation system was invented. If a phonetic notation had been invented, the fǎnqiè system would never have been necessary at all. Therefore, in order to use the fǎnqiè system, one has to sound out the two characters in the fǎnqiè and try to tease apart the initials and rimes of each character in order to combine the two sounds into one. In the example above, the pronunciation of the two characters used in the fǎnqiè is dū and zōng. The initial of the first character is d- (in pinyin) and the rime and tone of the second character is ōng (also in pinyin). Then if we put them together we get dōng, which is the correct pronunciation of the character to be annotated. Here we are using Modern Standard Chinese pronunciation for the two characters used in the fǎnqiè. But in many cases this does not work. For example, the following

fǎnqiè is taken from *Guǎngyùn*. The character to be annotated is actually the same as in the previous example.

東：德紅切

The pronunciation of the two characters used in the fǎnqiè is dé and hóng. If we put them together, we get dóng, which is not the correct pronunciation of the character to be annotated. In fact, this example is not completely wrong, since the pronunciation indicated by this fǎnqiè is only off by the tone, while everything else is correct. In many other cases, the initial and rime of the two characters can be incorrect if we use modern pronunciation.

But what do we say about the fǎnqiè if they are not reliable in terms of our current pronunciation? First, the fǎnqiè should be regarded as an accurate way of representing the sounds of a character. Second, the pronunciation of the two characters used in a fǎnqiè was accurate at the time when the fǎnqiè was created. A lot of changes took place in the sound system of the language as it passed from Middle Chinese to Modern Standard Chinese and so the fǎnqiè system is not always accurate if we use modern pronunciation. Of course, the point of studying historical linguistics is to figure out what changes happened and how. Therefore, if we have knowledge of the changes that happened in the sound system of Middle Chinese, we can still deduce the correct pronunciation of the character to be annotated using modern pronunciation.

Although the fǎnqiè method is a very accurate way of indicating sounds in Chinese, there are a number of disadvantages. First, in order to make it work, one has to know how to pronounce the two characters used in the fǎnqiè. Otherwise we have to look up the pronunciation of one or both of the two characters. Then what if a new character is used in the fǎnqiè for the character that we are looking up? The whole process can go in circles if the fǎnqiè characters are not carefully thought out, using common characters and avoiding a loop in the system. Second, since no fixed character is used in the fǎnqiè, there are many possible ways of indicating the same sound. It is, at the least, very inefficient, although it is useful for us now to learn how these characters were pronounced back then. Actually people can change the fǎnqiè if they found the earlier one was not accurate anymore. For example, the first fǎnqiè we gave above was indeed more accurate, if we use our current pronunciation, than the second one which was older.

4.3 STRUCTURE OF THE *GUǍNGYÙN*

As mentioned in Chapter 3, in Tang poetics – especially in the regulated verse, a highly formalized genre of poetry – for two characters to rhyme they not only need to have the same rimes, but also to have the same tones. For more relaxed genres of poetry, characters can still rhyme even if their tones are different. For example, a character with the pronunciation dōng can rhyme with one with gōng, but not with gòng. Since the *Guǎngyùn* was primarily used for composing poems, the rimes of different tones

had to be separated. Therefore the major division of the *Guǎngyùn*, i.e. juàn (volume), is based on the four tones in Middle Chinese: píng, shǎng, qù and rù.

There are five volumes in the *Guǎngyùn*, and the first two volumes are dedicated to the píng tone characters (because there are more characters in the píng tone category). The third volume contains characters in the shǎng tone category; the fourth volume for the qù tone characters, and the fifth volume is for the rù tone characters. Each volume, or each tone, is divided into a number of yùn (rimes), which are usually listed in the front of each volume with a corresponding number in a table of contents. The first character in each rime, called yùnmù (the eye of the rime), is used as the name of the rime. A rime contains a number of homophonic groups of characters: these are strictly homophonic because rimes of different tones are separated. Each homophonic group is preceded by a dot or circle called niǔ (knob). The first character in each homophonic group is provided with a fǎnqiè, followed by a number indicating how many homophonic characters there are altogether in this group. Figure 4.1 shows a page from the *Guǎngyùn*.

The reading direction of traditional Chinese books is from right to left and from top to bottom. Therefore when we read the page in Figure 4.1, we go from the upper right corner down and then move left to the next column starting from the top again. The five columns on the right of the page are part of the table of contents which is continued from the preceding pages. Then starting from the sixth column from the right is the real content of the dictionary. The numbers 1, 2, 3, etc. are not part of the dictionary. They are added here in the illustration so that we can refer to different sections of the page. Now let's start from the number 1. This is the pronunciation in fǎnqiè for the name of the rime represented by the character below it marked with the number 2. The name is actually the first character (i.e. the yùnmù) in this rime in the contents of the dictionary. Then the part labeled number 3 is an ordinal number indicating where this rime appears in the dictionary. In this case, it is the nineteenth rime in this volume. The lower section in the first column from the right is the twentieth rime, described in the same way as the nineteenth rime. Now let's look at the part labeled number 4, the top of the sixth column from the right. This is the cardinal number "one" written in Chinese characters. It indicates that this is the first rime in the volume. Number 5 is the tiny circle that separates each homophonic group in the rime. Number 6 is the first character in the first homophonic group (i.e. the yùnmù of this whole rime). Here it is the character 東 dōng meaning "east". Below it is the explanation of the meaning of this character, illustrated with citations from various sources. Note that there are two vertical lines of characters in the explanatory notes. To read it, we start first from the line on the right until we reach the bottom of the column, and then we go back to the top where the two lines start and read the line on the left until we reach the bottom of the column. Then we move to the next column and do the same thing in order to read the two vertical lines. Just keep moving in this fashion until you reach the next character in the homophonic group. Now let's look at number 8, where the pronunciation of the first character in the homophonic group is given in fǎnqiè. This is how we know the character is pronounced as dōng. Number 9 is the total number

of homophonic characters in this group. Numbers 10, 11 and 12 are homophonic characters of dōng. Their fǎnqiè is not given since their pronunciation is exactly the same as the first character in this homophonic group, whose pronunciation is already given above.

Figure 4.1 A sample page from the *Guǎngyùn*

4.4 RIME TABLES

Now we have a much more concrete picture of the *Qièyùn* and the *Guǎngyùn*. The second type of major source for the reconstruction of Middle Chinese is a type of phonological chart called a rime table, or děngyùntú, from the Song Dynasty. Rime tables resemble a modern Chinese combination table of initials, rimes and tones.

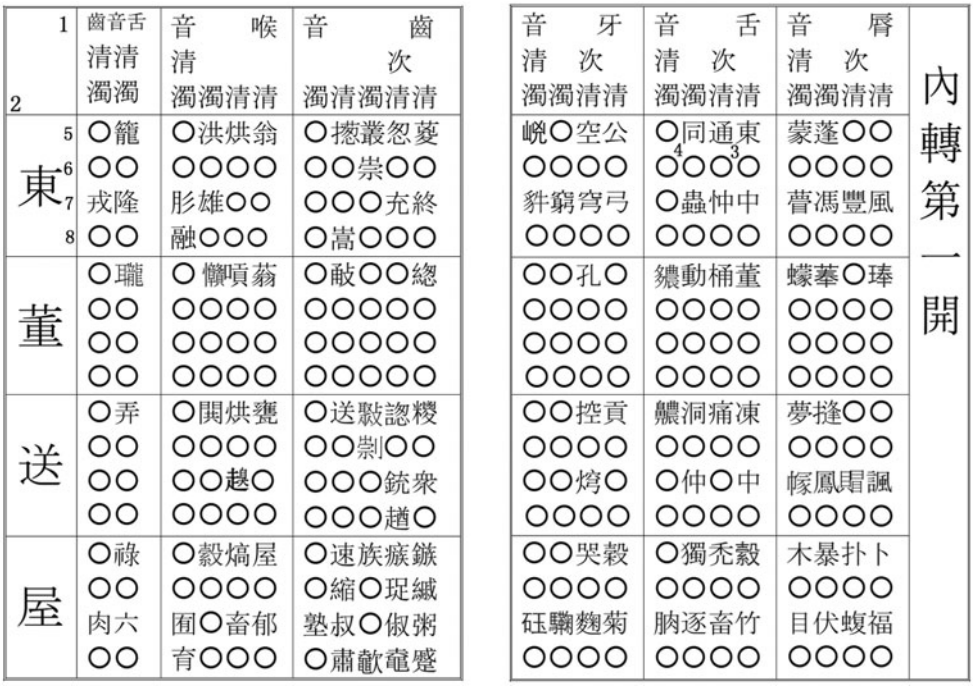
In Table 4.1, the header row contains the various initials in Modern Standard Chinese. The first column on the left is the rime "ong" in the 1st, 2nd, 3rd and 4th tones respectively, from top to bottom. Therefore each cell in the table represents a possible combination. For example, if we combine the initial "d" with the rime "ong" with the 1st tone, we get the syllable "dōng". The circles in the table mean that the combination is not an actual syllable used in Modern Standard Chinese, although theoretically it is possible. For example, we can combine the initial "d" with the rime "ong" and the 2nd tone to get a syllable like "dóng", but if you looked at a Modern Standard Chinese dictionary, you would not be able to find a character with such a sound. Thus in a combination table of initials, rimes and tones, all the initials will be listed in one dimension, here as the header row. There are 22 initials in Modern Standard Chinese, but we only list 8 here and omit the rest, marking them with dots, just to illustrate what a combination table is. The rimes are listed in the other dimension, here vertically as the first column. Each tone of the same rime occupies one row. Therefore we need as many tables as there are rimes to show all the possible and actual combinations. Table 4.1 shows one such table.

A rime table is very much the same as a combination table, however there are two major differences. First, since there was no phonetic annotation system at the time of the composition of rime tables, all sounds have to be represented by characters. Second, there is an extra dimension called děng (grade) in the rime tables. Figure 4.2 is the first page from a book of rime tables called the *Yùnjìng* (*Mirror of Rimes*).

Again here we will use numbers to refer to the different areas of the rime table when we explain its structure. Let's ignore the rightmost column that runs the whole length of the page for now. The top row, labeled with the number 1, with three lines of Chinese characters in each cell, contains the 36 initials in the Song

Table 4.1 Combination table of initials, rimes and tones

	b	p	m	f	d	t	n	l	……
ōng	○	○	○	○	dōng	tōng	○	○	……
óng	○	○	○	○	○	tóng	nóng	lóng	……
ǒng	○	○	○	○	dǒng	tǒng	○	lǒng	……
òng	○	○	○	○	dòng	tòng	nòng	lòng	……



1	齒音舌	音 喉	音 齒	音 牙	音 舌	音 脣	內轉第一開
2	清清	清	次	清 次	清 次	清 次	
	濁濁	濁濁清清	濁清濁清清	濁濁清清	濁濁清清	濁濁清清	
東 5	○籠	○洪烘翁	○摠叢怱蔥	峒○空公	○同通東	蒙蓬○○	
6	○○	○○○○	○○崇○○	○○○○	○○○○	○○○○	
7	戎隆	彤雄○○	○○○充終	豺窮穹弓	○蟲忡中	瞢馮豐風	
8	○○	融○○○	○嵩○○○	○○○○	○○○○	○○○○	
董	○瓏	○懵嗊蓊	○蔀○○總	○○孔○	曩動桶董	蠓蓂○琫	
	○○	○○○○	○○○○○	○○○○	○○○○	○○○○	
	○○	○○○○	○○○○○	○○○○	○○○○	○○○○	
	○○	○○○○	○○○○○	○○○○	○○○○	○○○○	
送	○弄	○閧烘甕	○送敷謥糭	○○控貢	鱷洞痛凍	夢撞○○	
	○○	○○○○	○○剝○○	○○○○	○○○○	○○○○	
	○○	○○趨○	○○○銃衆	○○焪○	○仲○中	幏鳳覿諷	
	○○	○○○○	○○○趙○	○○○○	○○○○	○○○○	
屋	○祿	○穀熇屋	○速族瘯鏃	○○哭穀	○獨禿穀	木暴扑卜	
	○○	○○○○	○縮○琎縪	○○○○	○○○○	○○○○	
	肉六	囿○畜郁	塾叔○俶粥	砫驌麴菊	胸逐畜竹	目伏蝮福	
	○○	育○○○	○肅歜竄蹙	○○○○	○○○○	○○○○	

Figure 4.2 A sample page from the *Yùnjìng*

Dynasty, which are described on the preceding pages in the *Yùnjìng*. You might wonder what these initials are. Actually the characters at the top of the rime table in Figure 4.2 are descriptive terms for the 36 initials, not representative characters standing for a corresponding initial. For example, the first initial (that on the right, in the rightmost cell on the top row) is described as a voiceless labial sound, which is either the bilabial stop "p" or the labiodental "f". These 36 initials are classified first by their places of articulation and then by their voicing quality. This system is a sophisticated phonetic description of the initials in Late Middle Chinese. The first column from the left, indicated by the number 2, contains the four rimes 東 dōng, 董 dǒng, 送 sòng and 屋 wū (that is, the first rimes from the píng, shǎng, qù and rù volumes of the *Guǎngyùn*). The four characters represent a certain rime in the píng, shǎng and qù tones and its corresponding rù tone, very similar to Table 4.1.

The circles in the cells of the table are possible but not actual combinations of the initials and rimes. Each of the characters in the combination cells represents a real syllable in Middle Chinese. These characters are taken from the *Guǎngyùn*. For example, the first homophonic group in the 東 rime includes characters like 東菄鶇 etc. They are all pronounced dōng in Modern Standard Chinese. The first character of this homophonic group, i.e. 東, is taken and put in the corresponding cell in the rime table, indicated here by the number 3. The second homophonic group in the 東 rime in the *Guǎngyùn* includes characters like 同仝童 etc. They are all pronounced tóng in Modern Standard Chinese. The first character of this homophonic group is taken and put in the corresponding cell in the rime table, indicated here by the

number 4. Note that since the homophonic group under 東 is also the first homophonic group in the first rime in the *Guǎngyùn*, 東 is both the name of the rime and also the representative character of the first homophonic group.

Let's look at the cell with 東 and 同 again. There are actually four lines of characters and circles in that cell. Both 東 and 同 are placed on the first line. There are just circles on the second line, three characters on the third line and then just circles again on the fourth line. The situation with all of the other cells varies. In some cells there are characters on each of the four lines. In some other cells there are very few characters. These four lines are called děng (grade). The first line, indicated by the number 5, is the first děng; the second line, indicated by the number 6, is the second děng; the third line, labeled with the number 7, is the third děng; and the fourth line, labeled with the number 8, is the fourth děng. The concept of děng is a totally new one, which does not have any correspondence with the combination table in Table 4.1. If each row represents the same rime, then how can we distinguish between the characters of the different děng in the same row? Let's postpone our answer to this question until later, until after we talk about the methodology of reconstruction.

Rime tables, originally written by Buddhist monks who studied Sanskrit, can be traced back to the late Tang Dynasty in the ninth and tenth centuries, although they became more popular in the early Song Dynasty (eleventh century). The *Yùnjìng*, as shown in Figure 4.2 was probably written in the tenth century, but first published in the Song Dynasty in 1161. It is the oldest rime table that has been passed down to us. These rime tables are very valuable written records of the sounds of Middle Chinese. They represent a great step forward towards a real phonetic analysis of the language. The previous rime dictionaries do not tell us directly what the phonological system is like, i.e. how many initials and how many rimes and tones there are in Middle Chinese, although the system is hidden in the dictionary. Rime tables show the combinations between initials and rimes in four tones, thus revealing the whole system in a few dozen tables.

Although it seems that in order to know the sound system of Middle Chinese we could just try to figure out what the phonetic values of the initials and rimes in the rime tables are, it turns out to be more complicated than that. For one thing, the system of the *Qièyùn* represents the literary pronunciation of the late Northern and Southern Dynasties in the sixth century and the *Yùnjìng* was first composed in the tenth century. There are a few hundred years between these two systems. Did the authors of the rime tables speak the same Middle Chinese language as those of the early rime dictionaries? The capital of the Tang Dynasty was Chang'an, instead of Luoyang. If the *Qièyùn* system corresponds to the common spoken language based on the Luoyang dialect, the *Yùnjìng* system might have been based on the dialect of Chang'an (Pulleyblank 1970). How different was the Luoyang dialect in the sixth century from the Chang'an dialect in the tenth century? These are really difficult questions to answer. A likely scenario is that the language had changed quite a bit. The authors of the rime tables might not have realized that the sounds

had changed, and they would have tried to understand the phonological system in the *Qièyùn* according to their knowledge of their own spoken language.

4.5 THE LINKING METHOD FOR SOUND CLASSES

So far we have two types of written records of Middle Chinese that can be used to reconstruct the sounds. How can we use them then? Similarly to how we used *Shījīng* and the xiéshēngzì series to construct Old Chinese, we need to first get a good understanding of the different classes of initials, rimes and tones that there are in Middle Chinese and then give each class a phonetic value.

Since the rime dictionary the *Guǎngyùn* lists the characters according to what rimes they belong to, it already tells us how many rimes there are in Middle Chinese. Thus we can just take the yùnmù characters and list them systematically. For example:

The rimes of the píng tone are:	東	冬etc.
The rimes of the shǎng tone are:	董	腫etc.
The rimes of the qù tone are:	送	宋etc.
The rimes of the rù tone are:	屋	沃etc.

Looking vertically here, the píng, shǎng and qù rimes only differ in their tones, while the rù tone rime has the same main vowel as the other three rimes but has a different syllable coda. Thus the rime of the píng tone and its corresponding rimes of the shǎng and qù tones are actually one rime. Therefore the píng tone rime can be used to refer to this actual rime. For example, the píng tone rime 東 can be used to represent the three rimes 東董送 if needed. In the *Guǎngyùn*, there are 57 píng tone rimes, 55 shǎng tone rimes, 60 qù tone rimes, and 34 rù tone rimes, altogether 206 rimes. If we ignore the tones, there are 61 rimes listed in the *Guǎngyùn*. But since the rù tone is associated with a different type of syllable from the corresponding píng, shǎng, and qù tones, we can count the rù tone rimes separately. There are 34 rù tone rimes. Thus in this way there are 95 rimes altogether.

Since the fǎnqiè system also includes information about the initials and rimes of all three characters involved, we can look at all of the fǎnqiè used in the *Guǎngyùn* and try to link them into different classes of initials and rimes. Let's recall the structure of a fǎnqiè, which can be represented as A: B C 切. A is the character to be annotated; B is the character used for its initial; C is the character used for its rime and tone. Therefore A and B should have the same initial while A and C should have the same rime and tone. We can put AB in one group in terms of the initials, and AC in one group in terms of the rimes. To link more characters into a larger class, a common character is needed. If we have A: B C 切 and D: E C 切, then A and C should rhyme, and so should D and C. Since C is the common character here, A, D and C should all rhyme with each other, thus belonging to the same rime class. Here is a real example. In the *Guǎngyùn*, we find the following two fǎnqiè:

東：德紅切

同：徒紅切

By linking the characters, we get 東紅, and 同紅. Here 紅 is the common character. Therefore 東 紅 and 同 belong to the same class of rime. In principle, the number of rime classes that can be obtained from the linking method should be the same as the number of rimes listed in the rime dictionary, but this is not actually the case. For example, if we study all the fǎnqiè used in the 東 rime and link them together as much as possible, we can get the following two subgroups:

Subgroup 1: 東紅公

Subgroup 2: 中弓戎融宫終

There is no shared character between these two subgroups to link them further into one big class. Thus it seems that even though the dictionary lists all the rimes, e.g. 東, there are still some subgroups within each rime. Since all of these characters in Subgroup 1 and Subgroup 2 are in the same 東 rime, according to the definition of the rime dictionary, they should have exactly the same main vowel and coda. Then how else can they be different? If we look back at the rime table shown in Figure 4.2, we find that 東from Subgroup 1 is on the first line in the cell, as indicated by the number 3, while 中 from Subgroup 2 is on the third line right below 東. Now let's look at the distribution of characters in the row for the 東 rime. It seems that, with a few exceptions, the characters are either on the first line or the third line. Recall that the four lines are called four different grades (děng). Ignoring the few exceptions for now, we can say that the characters in the 東rime belong to either the 1st děng or the 3rd děng. Let's look at the row for the shǎng tone rime 董 in Figure 4.2. All of the characters are in the 1st děng. In the row for the qù tone rime 送, most of the characters belong to either the 1st děng or the 3rd děng. It is the same with the rù tone rime 屋. Again temporarily ignoring the few exceptions, there is a pretty regular pattern of distribution: the characters from the 東董送屋 rimes belong to either the 1st děng or the 3rd děng. Now we come closer to understanding the notion of děng. In this case here, at least, it corresponds to further distinctions within the same rime. But what is this further distinction? We will have to wait until later to discover this, when we have a more useful methodology, as the linking method can only confirm the existence of these subgroups within a rime.

There are around 1,190 fǎnqiè in the *Guǎngyùn*. It is a vast amount of work to sort through all these fǎnqiè and then try to link them together in different classes. Using the linking method, scholars have identified around 300 subgroups within the 206 rimes of the *Guǎngyùn*. Tang (2002) identified 293 different subgroups, including 83 groups in the píng tone rimes, 76 groups in the shǎng tone rimes, 83 groups in the qù tone rimes, and 51 in the rù tone rimes. If we use the píng tone rimes to represent the corresponding shǎng and qù rimes and count the rù tone

rimes separately, the linking method establishes 51 rù tone rimes and 91 other types of rimes; altogether 142 groups of rimes, compared to the 95 rimes (34 rù tone rimes and 61 others) listed explicitly in the dictionary.

The same linking method can be used to study initials. If we have A: B C 切 and D: B E 切, then A and B have the same initials; D and B have the same initials. B is the common character, and now A, B and D should all have the same initial, thus belonging to the same initial class. Here is a real example:

東: 都宗切

當: 都郎切

Thus we have 東都 sharing the same initial and 當都 sharing the same initial. 都 is the common character so 東都當 should all belong to the same class of initial. By looking at all of the fǎnqiè in the *Guǎngyùn* and using this linking method throughout, a certain number of classes of initials can be obtained. But the linking method alone is probably not totally reliable. When we described the rime table in Figure 4.2, we mentioned the 36 initials recognized in the Song Dynasty. Table 4.2 shows all of these initials, represented by a character for each, sorted according to their places of articulation.

The articulators listed in the first column are what were thought to be involved to produce the relevant sounds. In the classes of sounds of the lips, tongue and teeth, there are two parallel sets of initials. There are further distinctions with respect to the place of articulation. For example, using the lips, we can either utter bilabial sounds such as “p”, or labiodental sounds such as “f”. In each set of sounds,

Table 4.2 The 36 initials of Yùnjìng

Place of articulation	*Representing characters*
Lips	幫滂並明
	非敷奉微
Tongue	端透定泥
	知徹澄娘
Molar	見溪羣疑
Teeth	精清從心邪
	照穿牀審禪
Throat	影曉匣喻
Half tongue or half teeth	來日

there are characters representing the initials. For example, the first character in the first set on top is 幫. This character is used for the phonetic value of its initial only. All of the other characters are used in the same way in Table 4.2.

Let's digress a little bit here. This way of indicating a sound is less straightforward than using a letter in an alphabet, but these representing characters are fixed symbols in the same sense as the letters in an alphabet are fixed. Compared to the fǎnqiè system, where no fixed character is used for a certain initial or a certain rime, here for the first time in the phonological theory of the Chinese language a fixed character is used as a symbol to represent a certain sound. Similarly, since the names of the rimes in the *Guǎngyùn* are also fixed, and they do represent rimes, we can also say that fixed characters are used to represent rimes as well, especially when used in rime tables. Therefore, by late Middle Chinese, there had been a major breakthrough in the phonological theory of the Chinese language in that fixed characters were used to represent initials and rimes. But, of course, the next natural step would be to invent specific symbols for the initials and rimes instead of using part of the pronunciation of a character to indicate either the initial or the rime. But this step did not happen until the late Qing Dynasty in the late nineteenth century when scholars began to invent a phonetic system to annotate the pronunciation of Chinese characters.

These 36 letters from the *Yùnjìng* were meant to be the inventory of initials of Late Middle Chinese in the Song Dynasty while the classes of initials in the *Guǎngyùn* represent Early Middle Chinese. But the 36 initials can still be quite informative and serve as a reference to the initial classes in the *Guǎngyùn*. By linking the fǎnqiè meticulously, some scholars proposed as many as 51 classes of initials and some as few as 33. According to Chen (1995), there are 47 classes of initials. For example, corresponding to the first initial of the molar sounds in Table 4.2, represented by the character 見, there are two related classes of initials, one including 見公過 etc., the other including 居舉九 etc. But as Chen (1995) shows, these two classes, i.e. 見公過 vs 居舉九 are separated because they are used for rimes of different grades (děng). These two classes are different, not because of their initials but because of the rimes of the characters that need to be annotated – so a pair of classes of initials like these can be collapsed into one. It is usual that further adjustments to the 36 initials are needed after using the linking method to obtain the classes of initials in the *Guǎngyùn*.

Table 4.3 shows a summary of the number of classes of initials and rimes arrived at by different methods.

Table 4.3 Classes of initials and rimes in Middle Chinese

Methods	*Initials*	*Rimes*
Listed in the *Guǎngyùn*	None	206 (57 píng, 55 shǎng, 60 qù, 34 rù = 95 types of syllables)
By linking	47	293 (83 píng, 76 shǎng, 83 qù , 51 rù =142 types of syllables)
Listed in the *Yùnjìng*	36	206 but arranged on different děng

Now we have obtained different classes of initials and rimes. As for the classes of tones, they are relatively uncontroversial since they are described and listed uniformly in various written records as píng, shǎng, qù and rù.

4.6 THE COMPARATIVE RECONSTRUCTION METHOD

Bernhard Karlgren (1889–1978) was the first scholar to apply modern methodology in reconstructing the actual phonetic values of classes of sounds in Middle Chinese. The original materials that Karlgren used included the *Guǎngyùn* and rime tables. Karlgren also used Japanese, Korean, and Vietnamese pronunciations of Chinese characters. Classical Chinese was borrowed into these countries during the Middle Chinese period, together with the pronunciation of the characters in Middle Chinese. According to Xu (1991), the Go'on pronunciation of Chinese characters in Japanese was borrowed during the fifth and sixth centuries from the Wu areas in the present-day Jiangsu and Zhejiang provinces, while the Kan'on pronunciation of Chinese characters in Japanese was based on Middle Chinese pronunciation of the seventh century from the capital city Chang'an in the northwest. The Korean pronunciation of Chinese characters is related to the sounds of Middle Chinese around the seventh century. Vietnamese pronunciation of Chinese characters is related to Middle Chinese pronunciation during the eighth and ninth centuries. The pronunciation systems of Japan, Korea and Vietnam can definitely help us in understanding the sounds of Middle Chinese.

But the most important sources for reconstructing Middle Chinese are various modern Chinese dialects. In Chapter 1, we talked about how the Chinese dialects are comparable to a group of languages such as the Germanic languages, including English, German, Dutch, etc. Historical linguists have developed methods to reconstruct the proto-language using the modern languages that have descended from a common origin. This methodology can be applied to reconstructing Middle Chinese as well.

Let's take a detailed look at the comparative method in historical linguistics first and then see how it can be used to reconstruct Middle Chinese using modern dialects. To establish a genetic relationship between two languages, we need to compile a list of cognate words and discover regular sound correspondences. The standard model of language change is the tree model, as shown in Figure 4.3.

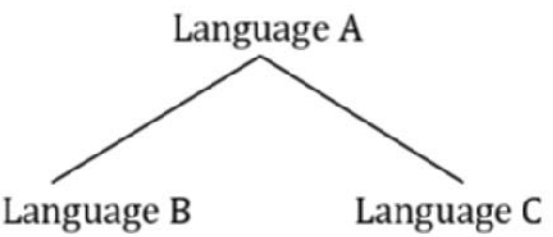


Figure 4.3 The tree model of language change

If we do not have a written record of Language A, we can reconstruct the sounds of Language A using current spoken data from Language B and Language C. Here is a concrete example of comparative reconstruction using cognate words from Romance languages such as French, Spanish and Italian, which descended from Latin (Campbell 1999). Table 4.4 shows a cognate set with four words from these three languages.

The first step is to go through each word sound by sound to establish all the correspondences. For example, looking at the first sound in the word for "path", we find that the sound "ch" in French corresponds to the sounds "c" in Spanish and Italian[1]. This correspondence can be written as ch-c-c in the order of French-Spanish-Italian. Then we go to the second sound and we get the correspondence e-a-a. This whole process would continue through all the words in the cognate sets.

If we now skip to the word "shirt", we find that the first two correspondences are the same as in the word for "path", i.e. ch-c-c and e-a-a. Focusing on the first three sounds in the word "hair", we find three correspondences: ch-c-c, e-a-a and v-b-p. The first two are the same as in the previous two words, and the correspondence v-b-p is new. Skipping again to the word for "horse", we have ch-c-c, e-a-a and v-b-v. The first two sounds are again repetitions, and the third is a new one. The remaining sounds in each word do not correspond to each other as straightforwardly as the first three sounds. So let's just focus on the correspondences that we have obtained as listed below:

Correspondence 1: ch-c-c
Correspondence 2: e-a-a
Correspondence 3: v-b-p
Correspondence 4: v-b-v

Multiple occurrences of the same correspondence, such as ch-c-c, which occurs 4 times in this cognate set, suggest that such a correspondence is regular. Although v-b-p and v-b-v occur only once respectively in our cognate set, this may be due to the limited number of words listed here.

The second step is to reconstruct the original sound. If there are variations in the correspondences, we need to figure out the possibilities of reconstruction. For example, in Correspondence 1 – ch-c-c – there are two sounds, "ch" and "c". One

Table 4.4 A sample reconstruction

Word	*French*	*Spanish*	*Italian*
path	chemin	camino	cammino
shirt	chemise	camisa	camicia
hair	cheveu	cabello	capello
horse	cheval	caballo	cavallo

Source: based on Campbell 1999: 125

possibility is that it was originally "*c" and it changed to "ch" in French. The star "*" in front of a reconstructed sound signals that it is a hypothetical form, rather than being the actual sound in the ancestral language. We can use the notation "A>B" to mean that A developed into B, or "B<A" to mean that B came from A. Therefore we can write *c>ch for French. But is it possible that the original sound was "*ch" and it became "c" in Spanish and Italian? If there is no evidence or argument to favor either hypothesis, "the majority wins" can be used as a reason to use the sound that appears in the majority of current languages as the proto-form. In this case we can hypothesize "*c" as the original sound since it occurs in more languages. But the principle of "the majority wins" should only be used as a reason of last resort as, for one thing, it can be easily overwritten by the naturalness of sound changes. If we consider two possible sound changes, say *c>ch vs *ch>c, are they equally possible in terms of how natural the change is. For example, in many languages there are well-documented changes from [k] to [ʃ]. For example, the word "church" in English corresponds to "kerk" in Dutch. It turns out that the original "*k" sounds became [tʃ], i.e. the "ch" as in "church". Here [tʃ] can be considered a combination of [t] and [ʃ] in one articulating gesture. This sound is a palatal affricate. It is a common phenomenon that can be found in many languages – that a non-palatal sound, often a velar sound such as "k", can change into a palatal sound, such as "ch" in either "church" or "chef". This sound change process is called palatalization. However, it is very rare to find cases in any language where "ch" turned into "k". Therefore, in terms of directionality, palatalization is a more natural sound change process. So now we can reconstruct "*c" as the original sound with more confidence.

For Correspondence 2 – e-a-a – it is hard to say which is the original sound, but "a" is in the majority and maybe we can temporarily reconstruct "*a". If no written records of an older stage of the language are available, we will not be quite sure yet. But since there are extensive records of Latin, the original Latin form can be consulted when reconstruction possibilities are considered. It turns out that in the corresponding Latin word, the second sound in each word is "a", e.g. "caminus" (path) and "camisia (shirt)". We see that the first sound is actually "c" and it corroborates our hypothesis of "*c" as well.

Let's move on to Correspondence 4 – v-b-v. Two possibilities can be considered: "*b" or "*v". In this case, "the majority wins" would predict "*v". But naturalness would give us "*b". A stop consonant such as "b" can become a fricative such as "v" between two vowels. In the word for "horse" in French, the two vowels "e" and "a" surround "v". It is a similar situation in the corresponding Spanish and Italian words, although the change *b>v did not take place. Changes such as a stop becoming a fricative can be called spirantization or fricativization.

For Correspondence 3 – v-b-p – the reconstruction possibilities include "*v", "*b" and "*p". Similar to Correspondence 4, it is more natural for "b "or "p" to become "v", rather than the other direction. But between "*b" and "*p", which one should be the original form? If it is "*p", then *p>b happened. If we observe the position of this sound in each word, we find that it is also between two vowels. Vowels are normally voiced. Thus a voiceless "p" tends to become the voiced "b"

between two voiced sounds. This is called intervocalic voicing. It is a common sound change found in many languages as well. Therefore *p>b would be more natural here. Then *p>b took place in Spanish, and *p>b>v happened in French, if the spirantization *b>v in Correspondence 4 is taken into consideration.

Now let's look at the Latin word for "hair", which is "capillum" with a "p" in the corresponding position. The Latin word for "horse" is "caballus", with a "b" in the corresponding position. Thus such written records confirm our reconstructions of "*p" for Correspondence 3 and "*b" for Correspondence 4.

When studying sound changes, we look at individual sounds. The assumption is that once a single sound has changed to another sound under certain conditions, it will change in all words as long as the conditions are met. Therefore certain sound changes can be said to be regular in that they apply in a law-like fashion. One of the most famous sound change laws is Grimm's Law concerning a sound change that took place in proto-Germanic, separating the Germanic languages from other Indo-European languages. Table 4.5 shows a sample cognate set with three groups of words from English, Latin and Sanskrit. Let's focus on the first consonant of each word, except for the word "slip". Because cognate words for the sound "p" in English and non-Germanic languages are not many, the word "slip" which has the sound "p" at the end and the Latin cognate word which has the sound "b" in the middle are used here.

Table 4.5 Cognate set for Grimm's Law

English (Germanic)	*Latin (Groups I and II) or Sanskrit (Group III)*
Group I	
father	pater
three	trēs
hound	canis
Group II	
slip	lūbricus
two	duo
kin	genus
Group III	
brother	bhr̊tar
do	dhā-
goose	haṁs-á

Source: based on Campbell 1999

If we follow the procedure of the comparative method described above, and focus on the relevant consonants only, we get the correspondences shown in Table 4.6. The sound "h" in Group I in English actually came from an earlier "x", which is the "ch" sound as in the German pronunciation of the composer "Bach". The sound "h" in Group III in Sanskrit came from an earlier "gh", which is an aspirated "g" sound.

What sounds can be reconstructed as the original sounds then? Take group I, for example: f/th/h are fricatives and p/t/k are stops. If *p/*t/*k are reconstructed, then this is an instance of spirantization. It seems reasonable enough. Therefore we have *p>f, *t>th (as in "thin"), and *k>x>h. For Group II, there are at least two possibilities: *p/*t/*k or *b/*d/*g. Since we already reconstructed *p/*t/*k for Group I, the two groups of sounds would not be distinguished if we reconstruct *p/*t/*k for Group II as well. Therefore let's choose *b/*d/*g. These are voiced sounds, and they became their corresponding voiceless stops in Germanic (i.e. *b>p, *d>t, *g>k). This is an instance of devoicing. For group III, by the same logic *bh/*dh/*gh should be reconstructed as the proto-sounds. The processes *bh>b, *dh>d, *gh>g can be considered a type of weakening. Jacob Grimm (1785–1863) first discovered such changes from Proto-Indo-European to Proto Germanic, hence the naming of this sound change law. Figure 4.4 shows these three sound changes in a more systematic way.

Note that although it is named "Grimm's Law", it is not to be mistaken for a physical law, such as gravity, which applies universally whenever the conditions are met. Grimm's Law is a law regarding what happened in Proto-Germanic. It is meant

Table 4.6 Correspondences for Grimm's Law

English (Germanic)	*Non-Germanic*
Group I	
f	p
th (as in "thin")	t
h (< x)	k
Group II	
p	b
t	d
k	g
Group III	
b	bh
d	dh
g	h (< gh)

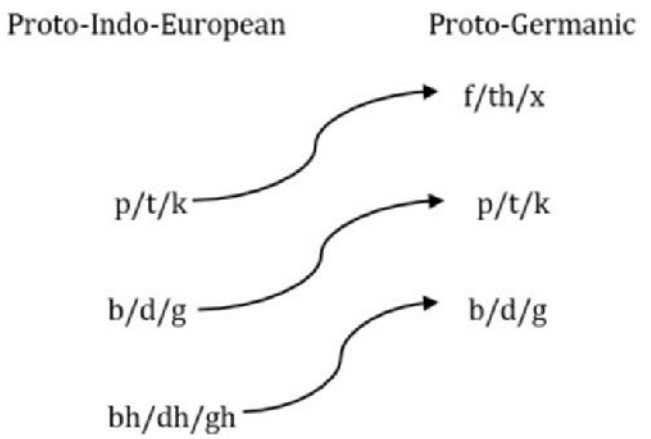


Figure 4.4 Grimm's Law

to be applied to Germanic languages, but it does not mean that the same should happen in all human languages. Keeping this in mind, we can nevertheless make use of established sound change laws like Grimm's Law as a reference when considering "naturalness" or "directionality". Suppose we are faced with two possible reconstruction options, either *p>f or *f>p. Unless there is concrete evidence for *f>p, it is definitely more natural to adopt *p>f. Now recall Qian Daxin's two discoveries regarding Old Chinese initials. One of them is that there was no distinction between "p" and "f" in Old Chinese. At that time we could not decide which one was the original sound. Now in terms of naturalness, *p>f is certainly a better reconstruction. Bringing all these arguments together, the claim that there were no labiodental fricatives in Old Chinese has been firmly established.

Assuming that most modern Chinese dialects are descendants of Middle Chinese, the comparative method can be readily applied to reconstructing Middle Chinese. Moreover, since there are extensive records of the classes of initials and rimes of Middle Chinese, they should be very helpful too. In Karlgren's methodology, the classes of initials and rime are determined first, based upon the traditional method of linking. Then the pronunciations of these characters in modern Chinese dialects are collected and put into a table of cognate words. The reconstruction method is applied, with reference to the classes of sounds. For example, there are four related classes of initials which include the following characters respectively:

1 端：都丁多當得德冬 etc.
2 透：他吐土託湯天通台etc.
3 定：徒杜特度唐同陀堂田地 etc.
4 泥：奴乃那諾內etc.

The character before the colon is used as the name of the initial. These characters are the same as those used in the 36 initials in the *Yùnjìng*. Table 4.7 shows the pronunciations of some of these characters from modern Chinese dialects.

Table 4.7 A sample reconstruction of Middle Chinese initials

	Beijing	*Suzhou*	*Guangzhou*
端 class			
德	tɤ	tɤʔ	tɐk
冬	tuŋ	toŋ	tʊŋ
透 class			
他	t^ha	t^hɒ	t^ha
土	t^hu	t^həu	t^hou
定 class			
地	ti	di	tei
徒	t^hu	dəu	t^hou
泥 class			
奴	nu	nəu	nou
内	nei	nɛ	nɔi

Source: Most of the dialect pronunciations are taken from 《汉语方音字汇》published in 1962 by the Department of Chinese Languages and Literatures, Peking University.

Now let's focus only on the initial consonant in each word. The following correspondences can be established:

1 端 t-t-t *t
2 透 t^h-t^h-t^h *t^h
3 定 t-d-t *d
t^h-d-t^h *d
4 泥 n-n-n *n

For the correspondence in 1, there is no variation across the selected dialects. Therefore we can posit "*t" as the original sound. It is the same with the correspondences in 2 and 4 with "*t^h" and "*n" as the original sounds. There are two different sets of correspondences in 3. For the first one, i.e. t-d-t, reconstruction possibilities include "*t" or "*d". If there is no written record as a reference, "*d" can be chosen here, since *d>t would be an instance of devoicing, just as in Grimm's Law, while *t>d would not be possible since the consonant is at the initial position of the syllable. It is not between two vowels, in which case intervocalic voicing is a possible sound change, as in the case of the Proto-Romance example that we have looked at above. For the second correspondence in 3 – i.e. t^h -d- t^h – theoretically it could be either "*t^h" or "*d" and again, in terms of directionality or naturalness, *d> t^h would be another instance of devoicing and so "*d" is chosen as the original sound. This line of reasoning is further confirmed by the classes of initials that are

used as a reference. Since we know that the four classes of initials represent different sounds, and "*t" and "*tʰ" have been reconstructed for correspondences 1 and 2, it would not be possible for "*t" and "*tʰ" to be reconstructed for the correspondence in 3. Therefore we would be left with the only option, that of "*d". Although there are two correspondence sets in 3, they should have the same reconstruction, since they belong to the same class of initial. Note that, in Karlgren's method, the pronunciation of Chinese characters in Japanese, Korean and Vietnamese is also used alongside modern Chinese dialects.

To some extent Karlgren's method is quite the reverse of what the comparative method normally does. In most cases, the comparative method starts from modern pronunciations and only uses written records as a secondary help. In Karlgren's method of comparative reconstruction, illustrated here, the established classes of sounds are taken as the starting point, and then characters are chosen from each class to see what the current daughter languages can tell us about the phonetic values of the classes of sounds in the ancestral language.

4.7. THE NOTION OF DĚNG (GRADE) REVISITED

It has been shown previously that there are two subgroups in the 東 rime: 東紅公 vs 中弓戎融宮終. Such a distinction is also revealed in the *Yùnjìng* where characters like東紅公 belong to the 1st děng, and 中弓戎融宮終 belong to the 3rd děng. With Karlgren's methodology, it is possible to reconstruct the sounds of these two subgroups of rimes and see where the distinction lies. Table 4.8 shows the pronunciations of 東公 of the 1st děng, and 中弓 of the 3rd děng in three modern Chinese dialects.[2]

Ignoring the initial consonant for now, the following correspondences between these dialects can be obtained.

1	u-ɔ-ʊ	*u
2	ŋ-ŋ -ŋ	*ŋ
3	zero-i-zero	*i

Table 4.8 A sample reconstruction of Middle Chinese rimes and the děng

	Beijing	*Xiamen* (lit.)	*Guangzhou*
東 *1st*	tuŋ	tɔŋ	tʊŋ
公 *1st*	kuŋ	kɔŋ	kʊŋ
中 *3rd*	tʂuŋ	tiɔŋ	tʃʊŋ
弓 *3rd*	kuŋ	kiɔŋ	kʊŋ

For the correspondence in 1, both [u] and [ʊ] are called high vowels. [ʊ] is a lax version of [u]. By "the majority wins" rule, "*u" can be chosen as the original sound for lack of other evidence. For the correspondence in 2, "*ŋ" is reconstructed because there is no variation. In 3, there is an [i] sound in Xiamen, but nothing in Beijing and Guangzhou. Therefore we use "zero" to represent this situation in Beijing and Guangzhou. In many cases, if a certain sound was lost in some daughter languages but not the others, there will be "zeros" in the correspondence set. On the other hand, it would also be possible for certain daughter languages to develop a new sound where there was nothing in the proto-language. But unless we have concrete evidence for this, it would probably make more sense to say that the original sound was lost in Beijing and Guangzhou. Also, if we chose the "zero" as the original "sound", then there would not be any differences between the characters of the 1st děng and those of the 3rd děng. Thus combining all the evidence together, "*i" should be reconstructed. Therefore the 東 rime has two subgroups: the first děng is [uŋ], and the third děng is [iuŋ].

Karlgren proposed that in some cases the distinction between the 1st and 2nd děng and between 3rd and 4th děng lies in the existence of a medial, i.e. [j] for the 3rd děng and [i] for the 4th děng. Here [j] is similar to the first sound in the English word "yes". His claim is only partially accepted by many other scholars, since there is evidence that the 4th deng rimes did not have any "-i-" medials (e.g. Pan 2000). According to Karlgren, another distinction between the four different děng is how open the main vowels are. For example the "a" in "spa" is more open than the "e" in "bed". The 1st děng had a more open vowel while the other three děng had increasingly less open vowels.

4.8 A RECONSTRUCTED SYSTEM OF MIDDLE CHINESE SOUNDS

Karlgren was the first scholar to reconstruct the whole sound system of Middle Chinese in his *Études sur la phonologie chinoise* (*Studies in Chinese Phonology*) published between 1915 and 1926. Later scholars mostly built upon his system and made modifications. One of the major modifications was made by Li (1971). We will present the Karlgren's system here, because it is one of the standard reference points for later systems of reconstruction. For a more recent system, Pan (2000) can be consulted. Table 4.9 lists the 37 initials in Middle Chinese.

It would be more useful if the names in Chinese characters of these initials were also given but this table is just to illustrate what the system is like. Therefore we omit the names of the initials. Chapter 3 introduced the sound system of Old Chinese and the methods used there can tell us how many different classes of initials and rimes there were in Old Chinese. But as for the real phonetic values, they have to be deduced from Middle Chinese reconstructions. This is exactly why Middle Chinese is normally introduced before Old Chinese. Now let's look at the initials in Table 4.9 and figure out how to connect them to the Old Chinese initials in Table 3.11.

Table 4.9 Middle Chinese initials

Bilabial	p	p^h	b			m	
Alveolar	t	t^h	d			n	l
Retroflex stops	ʈ	$ʈ^h$	ɖ			ɳ	
Alveolar affricates and sibilants	ts	ts^h	dz	s	z		
Retroflex affricates and sibilants	tʂ	$tʂ^h$	dʐ	ʂ			
Palatal affricates and sibilants	tɕ	$tɕ^h$	dʑ	ɕ	ʑ	ɲʑ	
Velars	k	k^h	g	x	ɣ	ŋ	
Glottal and other	ʔ				j ji		

First, there are some sounds that could be more or less directly pushed back from Middle Chinese to Old Chinese, e.g. the labials, the alveolars, and the velars. The retroflex stops are the phonetic values of Middle Chinese shéshàngyīn. Recall Qian Daxin's second discovery about the lack of shéshàngyīn in Old Chinese. These retroflex stops in Middle Chinese must be later developments. In terms of sound change, the original alveolar stops, such as "*t" in Old Chinese, split into two series of sounds including the alveolar stops and the retroflex stops in Middle Chinese. If one sound splits into two, there are usually phonological conditions governing which occurrence of the old sound should change to which new sound. In our phonological theory of Old Chinese a condition should be factored in to account for such developments as *t>ʈ. Li (1971) posited a medial "-r-" sound, much like the flapped "dd" in American English "ladder". If "*t" is followed by a medial "-r-" in Old Chinese, it becomes the retroflex ʈ in Middle Chinese. The same goes with $*t^hr>ʈ^h$ and *dr>ɖ. For example, the pronunciation of the character 知(zhī, "to know") in Old Chinese is *trjig. It became ʈie in Middle Chinese. Similarly we have 徹 (chè, "pervade") $*t^hrjat>ʈ^hjɛt$ and 澄(chéng, "clear") *drjəŋ>ɖjəŋ. As for the retroflex affricates in Middle Chinese – e.g. tʂ – they can be explained by positing a sound change such as *tsr> tʂ, e.g. 莊(zhuāng, "luxuriant") *tsrjaŋ>tʂjaŋ. The palatal affricates in Middle Chinese can be explained by using the medial "-j-". For example, 章(zhāng, "chapter") *tjaŋ> tɕjaŋ. Li (1971) also posited sound changes such as *krj>tɕ.

Li (1971) reconstructed a set of labialized velars, such as $-ŋ^w$ for Old Chinese. He uses the lip-rounding feature, i.e. -w to account for the change to the main vowel (for example, 中(zhōng, middle) $trjəŋ^w > ʈjuŋ$). The main vowel [ə] in Old Chinese is not a rounded vowel, and therefore the lip-rounding feature can be added to it so that it became "u", a rounded vowel in Middle Chinese. In Li's (1971) Old Chinese system, there are only four simple vowels. In the Middle Chinese reconstructions that we have introduced here, there are 16 different vowels. In order to account for the development of the four simple vowels into 16, features of consonants surrounding the main vowel in Old Chinese would be used to account for these processes. Now let's take a look at open rimes in Middle Chinese, as shown in Table 4.10.

Table 4.10 Middle Chinese rimes with vocalic codas*

	1st děng	*2nd děng*	*3rd děng*	*4th děng*
Group I	ɑ , uɑ		jɑ, jwɑ	
Group II		a, wa	ja	
Group III	uo		jwo	
			ju	
Group IV	ậi, uậi	ǎi , wǎi	j(i)ɛi, j(i)wɛi	iei, iwei
	ɑi, wɑi	ai, wai	jɐi, jwɐi	
		aï, waï		
Group V			(j)iẹ̯, (j)wiẹ̯	
			(j)i, (j)wi	
			ï	
			(j)ẹ̯i, (j)wẹ̯i	
Group VI	ɑu	au	j(i)ɛu	ieu
Group VII	ạ̯u		jạ̯u, jěu	

* Most of the phonetic symbols used by Karlgren have been converted to standard IPA symbols, but those that cannot be converted are still retained. Here they are with a short description: ǎ [a] shorter; ậ [ɑ] short; å [ɔ]; ě [e] short ; ẹ̯ [e] glide; ạ̯ [ə] glide. Li (1971) suggested we should distinguish two types of "i", with the symbols of "i" and "ï" respectively. But these are just orthographic. Both are still pronounced as [i].

Again it would make more sense to include the names of these rimes in Chinese characters but we omit these names because here our purpose is solely illustrative. The parentheses are used to represent two rimes at the same time: one without the sound in the parentheses and one with that sound. Take (j)i in Table 4.10 as an example. It represents two rimes: i and ji. Traditionally all these rimes are classified into different larger groups according to how similar the main vowels in the rimes are. These groups have a representative character as their names respectively. But here we will omit the Chinese character names of these groups and simply refer to them by numbers. If we look at all of the rimes listed here, some rimes have either "w" or "u" in front of their main vowels. These are called closed rimes. The rimes without such medials would be open rimes. Also many rimes have a medial "-j-",which are usually rimes of the 3rd děng. Comparing these rimes with the Old Chinese rimes in Table 3.12, it is evident that there were no open rimes in Li's (1971) Old Chinese reconstruction. Some of these closed syllables in Old Chinese became open in Middle Chinese by losing the final consonant. For example, 非(fēi, "wrong") *pjəd>pjwei, 敷(fū, "spread")*pʰjag>pʰju, and 透(tòu, "pass") *tʰugh>tʰəu.

Now let's take a look at the nasal rimes and their corresponding rimes with stop codas such as -p/-t/-k, as shown in Table 4.11.

The names of the rimes in Chinese characters are also omitted here for simplicity. There are three types of nasal rimes, i.e. -m, -n, and -ŋ, and they have their matching -p, -t, and -k rimes. The rimes with -m match those with -p, since both -m and -p are bilabial sounds. The rimes with -n match those with -t, because they are both alveolar. The rimes with -ŋ match those with -k, for they are both velar sounds. The -p/-t/-k syllables are also uttered with the rù tone exclusively. Therefore the rù tone is not necessarily solely a tonal property since it is tied to a special type of syllable. The rù tone is also called the checked tone. In Table 3.12 we indicated in the header row of the second column that those rimes later became the syllables with the checked tone. The nasal rimes in Old Chinese also developed into the nasal rimes in Middle Chinese.

So far the phonetic values of the classes of initials and rimes have been presented. But can tones be reconstructed? There are written records of descriptions

Table 4.11 Middle Chinese rimes with non-vocalic codas*

	Nasal rimes (arranged by 1st–4th děng)				*Corresponding checked rimes*
Group I	ɑm	am	j(i)ɛm	iem	ɑp, ap, jɛp, jep
	ậm	ǎm	j(w)ɐm		ǎp, j(w)ɐp, ập
Group II			j(i)əm		jəp
Group III	(u)ɑn	(w)an	j(w)ɛn, j(w)iɛn	i(w)en	(u)ɑt, j(w)ɛt, j(w)iɛt, j(w)et
		(w)ǎn	j(w)ɐn		j(w)ɐt, (w)ǎt
Group IV	(u)ən		j(u)ən		(u)ət, j(u)ət
			j(u)ěn, j(u)iěn		j(u)ět, j(u)iět
			jæn		jæt
Group V	(w)ɑŋ		j(w)aŋ		(w)ɑk, j(w)ak
Group VI		(w)ɐŋ	j(w)ɐŋ	i(w)eŋ	(w)ɐk, j(w)ɐk , j(w)ek
		(w)æŋ	j(w)ɛŋ		(w)æk, j(w)ɛk
Group VII	(w)əŋ		jəŋ		(w)ək, j(w)ək
	uŋ		juŋ		(j)uk
	uoŋ		jwoŋ		uok, jwok
Group VIII		ɔŋ			ɔk

* Here again most of the special phonetic symbols in Karlgren's original notation have been converted to standard IPA symbols. For those that have been retained, please refer to the note under Table 4.10 for a short description of their actual pronunciation.

of Middle Chinese tones by Buddhist scholars and monks. For example, a tone could be described as being high or low. Pan (2000) and Zhengzhang (2003) discuss the meanings of various descriptions of Middle Chinese tones recorded in texts from the Tang and Song Dynasties. Zhengzhang (2003) listed the following tonal values for the early stage of Middle Chinese: the píng tone can be described as flat and even, not high or low, its tonal value is 33; the shǎng tone is a rising tone, which can be rendered as 35; the qù tone is high and falling, which can be represented as 41; the rù tone is generally very short, thus being just 3. In Chapter 3, we have already shown that it is possible that there were no tones in Old Chinese and that, instead, the four tones in Middle Chinese corresponded to different types of syllables in Old Chinese. The rù tone corresponded to syllables with -p/-t/-k codas. The qù tone syllables would have an -h or -s as coda, while the shǎng tone syllable had an -x, -q or -ʔ as coda. The píng tone would include all other types of syllables. With the disappearance of the final -h in Middle Chinese, the qù tone became a separate tonal category. As for the shǎng tone, Zhengzhang (1987) argues that in Middle Chinese the original coda -x or -q has not totally disappeared. It probably was still realized as a glottal stop -ʔ. This can be partially attested in some southern dialects, such as the southern varieties of the Wu dialect in Zhejiang. There is still a glottal stop in syllables with the shǎng tone in some of these dialects.

Now, finally, we can appreciate Tang poetry in its original language using our reconstructed pronunciation. At the beginning of this chapter, we encountered Li Bai who was drinking alone and made the moon and his own shadow his drinking pals. The first four lines in that poem are as follows in its Modern Standard Chinese pronunciation:

huā jiān yì hú jiǔ, /
dú zhuó wú xiāng qīn. //
jǔ bēi yāo míng yuè, /
duì yǐng chéng sān rén. //

In the reconstructed Middle Chinese pronunciation it would be:

[xwa^{33} kɑ̆n^{33} ʔjĕt^{3} ɣuo^{33} tsjə̯u^{ʔ35} /
duk^{3} tɕjak^{3} mju^{33} sjaŋ^{33} ts^{h}jĕn^{33} //
kjwo^{ʔ35} puăi^{33} kieu^{33} mjɛŋ^{33} ŋjwɐt^{3} /
tuăi^{41} ʔjeŋ^{ʔ35} ʑjɛŋ^{33} sɑm^{33} ɳ.ʑjĕn^{33} //]

Whether Li Bai really did chant his poem like this, we can only imagine. Our reconstructed system represents the earlier stage of Middle Chinese in the late Northern and Southern Dynasties during the sixth century. In the Sui and early Tang Dynasties, the system presumably sounded quite similar. But by the Northern Song Dynasty, Middle Chinese had already begun to change into Early Modern Chinese.

NOTES

1 The “ch” combination here in French is pronounced as the “ch” in the English word “chef”. It is one sound, although in writing there are two letters. This sound is represented by [ʃ] in IPA, a palatal fricative. The “c” in Spanish and Italian is pronounced as [k] in IPA.

2 The pronunciations from Xiamen are literary pronunciations instead of colloquial pronunciations. In many southern Chinese dialects, there are two sets of pronunciation for Chinese characters. The colloquial pronunciation normally reflects their native phonology while the literary pronunciation was borrowed from the common spoken language at different stages. In the Xiamen dialect some of the literary pronunciations correspond to the Guǎngyùn system.

CHAPTER 5

Marco Polo's phrasebook

The sounds of Early Modern Chinese

On a hot summer's day in 1275, three European merchants arrived at the summer palace of Kublai Khan. They had travelled from Venice, Italy in 1271, by way of Persia, all the way to northern China, crossing seas, mountains, and deserts, sometimes in extreme weather conditions. Among them was a young man, of about 20 years of age, by the name of Marco Polo (1254–1324). He was to change how Europeans viewed the East for the next few centuries. According to his own accounts, Marco Polo became a favorite of Kublai Khan and was entrusted with important missions all over China in the Yuan Dynasty. He stayed in the Mongol Empire for 17 years before leaving from Quanzhou in Fujian in 1292 to return to Italy three years later.

Whether Marco Polo's travel stories are real or are total fabrications is still hotly debated amongst historians. But let's imagine that he had indeed travelled in China extensively and learned to speak Chinese with the help of some kind of traveller's phrasebook. Now we may wonder what would have been in that little book and what would that language have sounded like? To figure this out, we need to study the phonology of Early Modern Chinese.

5.1 THE RIME BOOK *ZHŌNGYUÁN YĪNYÙN*

The major written record of the sounds of the common spoken language of the Yuan Dynasty is a rime book called the *Zhōngyuán Yīnyùn* (中原音韻, *The Phonology of the Central Plains*), written by Zhou Deqing in 1324. The purpose of this book was to facilitate the composition of the literary genre called qǔ (曲). Zhou Deqing used the works in the qǔ genre, by famous writers such as Guan Hanqing, Ma Zhiyuan, etc., and summarized the rhyming characters in their works to compile the rime book. It is very clear that the phonological system in the *Zhōngyuán Yīnyùn* reflects the sounds of the common spoken language in northern China during the Yuan Dynasty. But what was this common spoken language based on?

As suggested by the title of the rime book, it is based on the phonology of the Central Plains, which often, although not exclusively, refers to the area of present-day Henan province. In Old Chinese and Middle Chinese, the base dialect for the common spoken language and the literary pronunciation system had mostly been that of Luoyang in Henan. Therefore it is quite possible that the base dialect of the *Zhōngyuán Yīnyùn* was that of Henan. However, Geng (2010) points out that a comparison of the sound system in the *Zhōngyuán Yīnyùn* and that of modern

Henan dialect shows some major differences. He believes that the common spoken language was that of Dàdū, the capital of the Yuan Dynasty; Dàdū is the present-day Beijing. Two of the major authors on whom Zhou Deqing based his compilations, Guan Hanqing and Ma Zhiyuan, lived in the Dàdū area. It was possible that they used the Dàdū dialect in their works. Geng (2010) shows that the phonology used in the *Zhōngyuán Yīnyùn* is most closely related to that of the modern Beijing dialect. Figure 5.1 is the first page from the *Zhōngyuán Yīnyùn*. Numbers are added so that we can refer to different parts of the page.

The *Zhōngyuán Yīnyùn* lists 5,876 characters, commonly used in representative works of qǔ, and arranges them into 19 rime groups. In Figure 5.1, the number 1 is where the name of the rime group is listed. This is the first rime group, called 東鍾. These names of rime groups comprise two characters representing rimes from the

Figure 5.1 A sample page from the *Zhōngyuán Yīnyùn*

Guǎngyùn as a result of the simplification of the Middle Chinese phonological system and hence there is a loss of distinction in many cases. Within each rime, the characters are grouped under different tones. There are three major tonal categories: píngshēng (平聲), shǎngshēng (上聲) and qùshēng (去聲). 2 is where the major tonal categories are mentioned; in this case it is the píngshēng category. Under the píngshēng category, there are two subcategories labeled with yīn (陰) shown at 3 in Figure 5.1, and yáng (陽), shown at 4. Therefore in terms of the number of tones, there are four categories in the *Zhōngyuán Yīnyùn*, i.e. píngshēng yīn, píngshēng yáng, shǎngshēng and qùshēng. For characters that belonged to the rù tone in Middle Chinese, these are now dispersed and distributed as a separate group under three of the four new tonal categories: píngshēng yáng, shǎngshēng and qùshēng. Homophonic groups with the same rime are listed within each tonal section (e.g. 東冬 indicated by 5 in Figure 5.1). Different homophonic groups are separated by a circle, such as the one at 6. If we look at the page a little more closely, we find that there are only characters, there are no definitions or fǎnqiè. This is an important aspect of the *Zhōngyuán Yīnyùn,* making it different from both the *Qièyùn* and the *Guǎngyùn*, which are real dictionaries with fǎnqiè and explanations of the meaning of the characters. The *Zhōngyuán Yīnyùn* is rather a reference guide as to which characters could rhyme according to the common spoken language, and assumes that people already know the pronunciation and meanings of most of the characters listed. The first character in each homophonic group is normally a very familiar and relatively easy character so that everyone could pronounce it and use it as a way to figure out the pronunciation of all the other characters in the same homophonic group.

5.2 CLASSES OF INITIALS AND RIMES OF EARLY MODERN CHINESE

How do we use the *Zhōngyuán Yīnyùn* to study the classes of initials and rimes of Early Modern Chinese? Since there are no fǎnqiè, the linking method used for Middle Chinese will not work here. Luo (1932) studied the preface to the *Zhōngyuán Yīnyùn* and the explanatory notes in the second half of the *Zhōngyuán Yīnyùn* and discovered two major principles about the initials in this rime book. First, to obtain the classes of initials, we look up the initials of all the characters in a homophonic group according to the 36 initials in the earlier rime tables, as we discussed briefly in Table 4.2 from Chapter 4. Since these characters are strictly homophonic, they have exactly the same initials and rimes. If the characters in a homophonic group have more than two initials from the 36 initials, then these initials should have merged in the Yuan Dynasty. For example, the six characters in the second homophonic group in Figure 5.1 – i.e. 鍾鐘中忠衷終 – belong to two different initials from the 36 initials in the rime tables. 鍾鐘終 have the initial 照 and 中忠衷 have the initial 知. It can therefore be deduced that these two initials merged in the *Zhōngyuán Yīnyùn*. Starting with the 36 initials, they can be adjusted according to this principle to derive the classes of initials in the *Zhōngyuán Yīnyùn*. The second principle discovered by Luo (1932)

refers to voiced and voiceless initials. For example, there is a homophonic group in the *Zhōngyuán Yīnyùn* that includes 洞動棟凍蝀, of which 洞動 has a voiced initial 定 [d] and 棟凍蝀 has a voiceless initial 端 [t] from the 36 initials. According to the first principle, the two initials from the Song Dynasty should have merged in the Yuan Dynasty. Furthermore, these five characters are all qù tone characters. In the píng tone section, however, we find that characters that originally had a voiced initial would belong to the píngshēng yáng tonal section while those that originally had a voiceless initial would belong to the píngshēng yīn tonal section. The second principle discovered by Luo (1932) says that the distinction between the voiced initials and the voiceless initials was lost in the qù tone, and this can be extended to the píngshēng as well. Although the characters that used to have a voiced or a voiceless initial do not appear in the same píngshēng category, their distinction was lost there too. By studying the characters in the homophonic groups in terms of the 36 initials in the earlier rime tables, Luo (1932) obtained 20 classes of initials for the *Zhōngyuán Yīnyùn*. Ning (1985) later revised the system and proposed 21 classes of initials.

After the initials have been established, the classes of rimes can be obtained in a similar fashion. Chen (1995) gives the following example. The homophonic groups 空悾 and 穹芎 are both from the same rime 東鍾 in Figure 5.1 and they all have the initial 溪 [k^h] in the *Zhōngyuán Yīnyùn*. Since they are different homophonic groups, the only way for them to be different is in their rimes, including the medials. By applying this method we can establish two subgroups of rimes in the 東鍾 rime. Although there are 19 rimes listed in the *Zhōngyuán Yīnyùn*, many of them include more than one subgroup. Ning (1985) obtained 46 classes of rimes.

5.3 RECONSTRUCTION OF EARLY MODERN CHINESE INITIALS AND RIMES

Now we have the classes of initials and rimes, the next step is to find out the phonetic values of these classes. There are various ways to do this. For example, we could use the reconstructions of Middle Chinese as a starting point and figure out the changes that took place. Modern Standard Chinese and various Chinese dialects can also be used as a reference point. But of course it would be very helpful if we could find contemporary descriptions of the phonetic values of the sounds of the common spoken language in the Yuan Dynasty. There was a newly created script in the Yuan Dynasty called the 'Phags-pa script, which is phonetically based. The 'Phags-pa script was designed by a Tibetan lama for Kublai Khan in 1269 – it was intended to be used as a common script within the empire. It was envisioned as a sort of universal script that could be used to write any language, including Chinese, and there were Chinese texts written in this script. Such transcriptions could be used to help us figure out the actual sounds of the classes of initials and rimes.

Now it is time to look at the reconstruction of Early Modern Chinese phonology and compare it with that of Middle Chinese. Table 5.1 shows the 21 initials of Early Modern Chinese reconstructed by Ning (1985). We could have listed the names of the initials in Chinese characters, but we omitted these in the interests of simplicity.

Table 5.1 Early Modern Chinese initials

Bilabial	*Labiodental*	*Alveolar*		*Retroflex*	*Velar*	*Zero*
p	f	t	ʦ	ʈʂ	k	ø
p^h		t^h	$ʦ^h$	$ʈʂ^h$	k^h	
m		n	s	ʂ	x	
	ʋ	l		ɾ	ŋ	

Source: Ning 1985

One of the most obvious differences between this system and that of Middle Chinese is that the voiced obstruents in Middle Chinese, i.e. the voiced stops, affricates and sibilants such as [b, d, g, dz, z] are all lost. As a rule of thumb, voiced stops and affricates like [b, d, g, dz] became aspirated sounds such as [p^h, t^h, k^h , ts^h] in the píng tone, and unaspirated sounds such as [p, t, k, ts] in the non-píng tones. This sound change is a type of devoicing, which we have seen independently demonstrated in Grimm's Law too.

The second major change is that there are two sets of affricates/sibilants in this system, i.e. the retroflex sounds such as [ʈʂ] and the alveolars such as [ts], while in Middle Chinese there were three sets, including palatals such as [tɕ], retroflex affricates/sibilants such as [ʈʂ] and alveolar sounds such as [ts]. The *Qièyùn* system represents Early Middle Chinese, while the rime tables represent Late Middle Chinese. If we look at the 36 initials in the rime tables from the Song Dynasty, we find that there were two sets of affricates/sibilants. Based on Xiang (1993), it can be said that the retroflex and palatal affricates/sibilants in Early Middle Chinese merged into a set of retroflex consonants in Late Middle Chinese, i.e. tɕ>ʈʂ in the Song Dynasty; the three sets of affricates/sibilants were reduced to two sets. Another related change is that there was a series of retroflex stops such as [ʈ] in Middle Chinese, which was missing in Early Modern Chinese. In the 36 initials of the rime tables, these retroflex stops were still existent. It seems, therefore, that in the Yuan Dynasty the retroflex stops eventually merged into the retroflex affricates as well, i.e. ʈ>ʈʂ.

The third important change involves the bilabial stops in Middle Chinese. Recall Qian Daxin's claim about the lack of labiodental fricatives, such as [f], in Old Chinese. The situation was the same in Early Middle Chinese. In the 36 initials of the rime tables there are two sets of lip sounds and besides the original set of bilabials such as [p, p^h, b, m], there is a corresponding set of initials represented by 非敷奉微. According to Xiang (1993) the reconstructions of these new sounds are [f, f^h, v, ɱ]. The sound [f^h] is similar to [f] but with stronger aspiration. The sound [ɱ] is similar to [m] but uttered with the upper teeth touching the lower lip. Thus from Early Middle Chinese to Late Middle Chinese, a set of labiodental sounds split off from the bilabials under certain phonological conditions. In historical linguistics, a split of one sound into two is normally conditioned by certain phonological factors. For example,

palatalization of "k" to "ch" often happens when the vowel after the "k" is a front vowel such as "i" or "e". Intervocalic voicing happens because the relevant consonant is surrounded by vowels. Therefore here the split of "p" to "p" and "f" in Chinese was also conditioned, although we will not go into the details of this phonological condition here. After the new set of labiodental sounds developed, they were further simplified in Early Modern Chinese. The sounds [f, f^h, v] became [f] first, and then [ɱ] filled in the blank left by the former [v] and became a new, less strong [ʊ] sound. This sound is more like the vowel [u], rather than the consonant [v]. Therefore the following sound changes took place in Early Modern Chinese: f^h>f, v>f, ɱ>ʊ. The change of v>f left a blank to be filled by ɱ>ʊ.

Now let's take a look at the 46 rimes reconstructed by Ning (1985) as shown in Table 5.2 below. The names of the rimes would also be very helpful and useful here but we omit them again to simply illustrate the developments.

The most striking feature of Early Modern Chinese rimes is how simplified they are when compared to the highly complex system of Middle Chinese rimes; this is mostly the result of multiple merges in the rime system. For example, the Middle Chinese rimes 東冬鍾 were all different, with the reconstructions of [(j)uŋ], [uoŋ], and [jwoŋ] respectively. But in the *Zhōngyuán Yīnyùn*, the first rime is called 東鍾, and the first homophonic group includes 東冬, as shown in Figure 5.1. This shows that these three rimes merged into [(j)uŋ].

Table 5.2 Early Modern Chinese rimes

Open rimes		
u		
ɔ/iɔ/uɔ	əu/iəu	
a/ia/ua	ɑu/ au/iau	ai/iai/uai
iɛ/iuɛ		ei/ ui
i	iu	
ï		
Nasal rimes		
uŋ/iuŋ		
	uɔn	
aŋ/iaŋ/uaŋ	an/ian/uan	am/iam
	iɛn/iuɛn	iɛm
əŋ/iəŋ/uəŋ/iuəŋ	ən/iən/uən/iuən	əm/iəm

Source: Ning 1985

In terms of syllable types, Middle Chinese had three types of rimes: open rimes, nasal rimes, and rimes with -p/-t/-k codas which are associated with the rù tone. In Table 5.2, there are only open and nasal rimes, while the -p/-t/-k codas were lost and became open rimes. Meanwhile with the loss of this type of syllable, the rù tone was lost as well. That is why the original rù tone characters are distributed to the other three tones in the *Zhōngyuán Yīnyùn*. But there are some disagreements as to whether or not the -p/-t/-k codas completely disappeared in the *Zhōngyuán Yīnyùn*.

Another feature of the rimes in Table 5.2 is that the so-called apical vowels, i.e. [ɿ, ʅ] have become an independent rime class indicated by the symbol [i̩]. In Modern Standard Chinese, the vowel [ɿ] in syllables such as zhi, chi, shi, and ri is called apical by most Chinese linguists, while other linguists describe it as a prolonged consonant similar to the sound of the letter "s" in "pleasure" or the "g" in the French pronunciation of "rouge". In syllables like zi, ci, si, the vowel [ʅ] is another type of apical vowel for many Chinese linguists while others describe it as a prolonged z sound similar to the z in "zoo".

5.4 TONAL DEVELOPMENT

Now let's focus on the tonal development from Middle Chinese to Early Modern Chinese. As is evident in the structure of the *Zhōngyuán Yīnyùn*, the píng tone in Middle Chinese became two different tones. Since they both came from the píng tone, they were put under the same píngshēng category but distinguished by using the dichotomous yīn and yáng. In Chapter 3, we pointed out that a language without tones can develop tones under the influence of stop codas such as -ʔ and -s. It turns out that after tones developed, they can split further according to the initial consonants in the syllable.

Tones are a property of pitch. Let's divide the normal range of pitch used by a speaker into two different registers, i.e. the high register and the low register. This contrast between different registers is usually conditioned by the voicing quality of the initial consonants. For example, suppose we have two English syllables, "bah" vs "pah". When we say "bah" it is naturally a little bit lower than "pah" due to the different effects on the vowel from the preceding consonants. Voiced consonants such as [b] tend to lower the pitch that accompanies the vowel. Of course speakers of English rarely notice the difference because such a distinction of register in English does not serve to distinguish meaning. But let's imagine a scenario where the English sound "b" became "p". Then how would the formerly different words like "bah" and "pah" be distinguished? At this point, the register difference could be elevated to become the primary way of contrast. In this scenario, both words would have the same consonants and vowels, "pah", although the word that came from the former "bah" would be pronounced in a low tone, while the word that came from the former "pah" would be uttered in a high tone. This is called tonal split, and this is what indeed happened in Chinese.

The development of a register distinction and the loss of the contrast between voiced and voiceless consonants are two interrelated processes that brought about

the split of the píng tone into two different categories in Early Modern Chinese. Consider the following example. The pronunciation of the character 兵 in Middle Chinese is [pjeŋ] and that of 平 is [bjeŋ]. Both of them are píng tone characters. The only difference between these two pronunciations is that the first one has a voiceless initial [p] while the second one has a voiced initial [b]. Thus it is possible that between Early Middle Chinese and Early Modern Chinese, there was a point when a register distinction between the pronunciations of these two characters became available. On the other hand, in Early Modern Chinese voiced stops became aspirated voiceless stops and affricates in the píng tone category and unaspirated voiceless in non-píng tones – i.e. b>p^h if in píng, and b>p otherwise – and the register distinction became the primary way of contrast. The modern pronunciations of these two characters are bīng [piŋ^{55}] and píng [p^hiŋ^{35}] respectively, which continues to preserve the result of these two phonological changes that took place in Early Modern Chinese.

Theoretically each tonal category in the *Qièyùn* can be split into two different categories according to their initials, as shown in Table 5.3.

Characters with a voiceless initial became the yīn category, and characters with a voiced initial became the yáng category. Since there are altogether 8 possibilities, they are sometimes referred to by the numbers 1 to 8. Although only the píng tone split in the *Zhōngyuán Yīnyùn,* and consequently led to the two píng tones in Modern Standard Chinese, in many southern dialects each of the píng, shǎng, qù and rù tones split into two categories.

Can we know when such a register distinction started to appear in Middle Chinese? Based on a description of a Chinese dialect made by a Japanese monk called Annen in the ninth century, Mei (1970) argues that the tonal split had already happened by late Tang. Zhengzhang (2003) also gives a numeral tone shape to all of the eight tones as described by various written records in the Tang Dynasty.

As for the phonetic values or tone shapes of the *Zhōngyuán Yīnyùn*, according to Zhou Deqing's descriptions of the tones and how different tones were used in the compositions of the qǔ, Ning (1985) gives the following tonal numerals for the four tones in the *Zhōngyuán Yīnyùn*: píngshēng yīn is a low tone with the shape of 12; píngshēng yáng is a high tone with the shape of 45; shǎngshēng is a low dip and rise tone with the value of 215; qù tone is a high falling tone of 51.

Table 5.3 Tonal splits

Initials	平píng	上shǎng	去qù	入rù
Voiceless	yīnpíng 陰平1	yīnshǎng 陰上3	yīnqù 陰去5	yīnrù 陰入7
Voiced	yángpíng 陽平2	yángshǎng 陽上4	yángqù 陽去6	yángrù 陽入8

5.5 A SAMPLE TEXT

As usual, let's see a concrete example to show how the language was spoken and used during its time. Here we will choose a famous piece in the qǔ genre by Ma Zhiyuan (1250–1321), one of the four major authors that Zhou Deqing studied for the compilation of his rime book. The Modern Standard Chinese pronunciation is:

kū téng lǎo shù hūn yā /
xiǎo qiáo liú shuǐ rén jiā /
gǔ dào xī fēng shòu mǎ //
xī yáng xī xià /
duàn cháng rén zài tiānyá //[1]

In Early Modern Chinese pronunciation it sounds like:

[kʰu^{12} tʰəŋ^{45} lɑu^{215} ʂiu^{51} xuən^{12} ia^{12} /
siau^{215} kʰiau^{45} liəu^{45} ʂui^{215} ʈiən^{45} kia^{12} /
ku^{215} tɑu^{51} si^{12} fuŋ^{12} ʂəu^{51} ma^{215} //
si^{12} iaŋ^{45} si^{12} xia^{51} /
tuɔn^{51} tʂʰaŋ^{45} ʈiən^{45} tsai^{51} tʰiɛn^{12} ia^{45}//]

The term Early Modern Chinese is used here to translate 近代漢語 jìndài hànyǔ. An alternative term would be Old Mandarin in Norman's (1988) periodization. According to him, the sounds of the Song rime tables can be regarded as an earlier form of Old Mandarin. The Ming and Early Qing period can be called Middle Mandarin. By mid-Qing, the Beijing dialect had been firmly established as the common spoken language or the prestigious form of Mandarin. The sounds of Beijing after mid-Qing Dynasty were already very similar to the modern Beijing dialect, which is the basis of Modern Standard Chinese.

So far we have given a detailed picture of the development of the phonological system of the Chinese language before modern times, from Old Chinese to Middle Chinese and then to Early Modern Chinese. But before we talk about the modern standard language and the various dialects in relation to Early Modern Chinese and Middle Chinese, let's temporarily shift our attention away from the sounds of the Chinese language to the grammar and vocabulary used prior to Modern Standard Chinese.

NOTE

1 The meaning of this poem can be translated, without attempting to rhyme as: "There are withered vines on an old tree in which crows are perching at dusk. By the river with a little bridge, there was a home. In westerly winds on the ancient roadway on the back of a scrawny horse was a heart-broken person travelling to the edges of the world with the sun setting to the west."

CHAPTER 6

Philosophy and history

Classical Chinese

Many people study Classical Chinese because they want to read the works of ancient Chinese philosophers such as Confucius, Mencius, Zhuangzi, etc. Besides philosophical works, the other major category of Classical Chinese texts includes history books such as *Zuǒ Zhuàn* (左傳 *Zuo's Commentaries on the Spring and Autumn Annals*) and *Shǐ Jì* (史記 *Records of the Grand Historian*). In this chapter we will look at the grammar of Old Chinese, which is extensively recorded in Classical Chinese texts.

6.1 SOME DEFINITIONS

The term "Old Chinese" (shànggǔ Hànyǔ, 上古漢語) is used in historical linguistics to refer to the yǎyán, the common spoken language used by Confucius, in the first millennium BCE. The sounds of Old Chinese can be reconstructed and Old Chinese is a modern linguistic term. In contrast, "Classical Chinese" (Gǔwén,古文) refers to the language recorded in texts from the end of the Spring and Autumn period (fifth to sixth century BCE) to the Han Dynasty (220 CE). The major part of this period is roughly the second half of the first millennium BCE. Texts written before the fifth century BCE had properties noticeable in their grammar that are different from Classical Chinese. Thus pre-Classical books such as the *Shàngshū* (*Book of Documents*) and the *Shījīng* do not belong to our discussions of Classical Chinese, although we will mention certain grammatical features of the pre-Classical era.

Classical Chinese texts are written records of the spoken language in Old Chinese. After the Han Dynasty, Classical Chinese continued to be used as the literary language, despite the fact that the real spoken language, or the vernacular language, began to diverge slowly from Classical Chinese as a result of natural linguistic change in terms of the sounds, grammar and vocabulary. Literary Chinese (wényán wén 文言文) refers to such uses of Classical Chinese in the post-Classical era, and it was the standard written language of Chinese until the early twentieth century, when the written language began to be based on the modern vernacular. Literary Chinese is not based on the vernacular language of post-Classical times, but is an imitation of an older stage of the language. Sometimes these two terms are used interchangeably; the term Gǔdài Hànyǔ (古代漢語, "Ancient Chinese") is generally used in this undifferentiated sense by many Chinese speakers in referring to both Classical Chinese and Literary Chinese.

In this way there had been a divergence between the written language and the spoken language in China for more than 1,500 years. During most of the imperial period of Chinese history educated people wrote in Literary Chinese, while they used quite different spoken languages; this linguistic situation is a type of diglossia, literally meaning "two languages". In many societies, the written language is based on an earlier stage of the language, which is quite different from the current spoken language or dialects. For example, Written Tibetan, Written Burmese, and Standard Arabic are all such written languages, while the various Tibetan and Burmese dialects and the varieties of spoken Arabic are different, to varying degrees, from the written languages. Normally, the written language is used for formal purposes, such as education and speeches, while the vernacular is used for daily communication needs.

6.2 THE MORPHOLOGY OF CLASSICAL CHINESE

Morphology studies the structure of words and word formation rules. The basic concept used in morphology is the morpheme, the smallest meaningful unit of language. For example, in the English word "happiness", we can readily discern two meaningful components, i.e. "happy" and "-ness", although the meaning of "-ness" is a little elusive. Neither of these two components can be further divided meaningfully. Thus "happy" and "-ness" are both morphemes in English. We can use them in different ways to form many other words as well, e.g. "happily", "happier", "boldness", "sweetness", etc. Some morphemes in English have one syllable, e.g. "-ness", while many others have more than one syllable, e.g. "happy". Classical Chinese morphemes are mostly monosyllabic and a large portion of the words are composed of just one morpheme. Therefore in many cases, one syllable is equal to one morpheme, which, in turn, is equal to one word in Classical Chinese. In comparison, Modern Standard Chinese words are often disyllabic, although morphemes are still predominantly monosyllabic. Consequently, when we translate from Classical Chinese to Modern Chinese, we might need to double the number of syllables. For example[1]:

Example 1

xué ér shí xí zhī → xuéxí érqiě shícháng liànxí tā (The *Analects*)
學 而 時 習 之 → 學習 而且 時常 練習 它
study and often practice it

"Study and often practice what you learn"

In the sentence in Example 1, the part to the left of the arrow is Classical Chinese, while the part to the right of the arrow is the translation in Modern Standard Chinese. It is obvious that each of the first four monosyllabic words has been translated into a disyllabic word. To some extent, Classical Chinese is highly condensed both in words and meaning. Knowing this property of Classical Chinese

can help us avoid misinterpretations. When you see something that looks like a modern word, they are most likely two different words in Classical Chinese. For example:

Example 2

yán	zhě	suǒ	yǐ	zài	yì,	dé	yì	ér	wàng	yá	(The *Zhuangzi*)
言	者	所	以	在	意，	得	意	而	忘	言	
word	subj.	nom.	with	exist	idea,	obtain	idea	and	forget	word	

"Words are employed to convey ideas; but when the ideas are apprehended, men forget the words." (Trans. James Legge)

In the gloss in Example 2, there are grammatical words which are glossed by their functions. For example, "subj." is a subject marker (a grammatical word that indicates the preceding phrase is the subject of the sentence). "Nom." is short for "nominalizer", which we will explain in more detail later in this chapter. For a complete list of such category labels used in this book, please refer to Appendix V. In Modern Standard Chinese, "suǒyǐ" (所以) is the word for "therefore", "zàiyì" (在意) means "to take notice of" and "déyì" (得意) can be paraphrased as "proud of oneself". In Classical Chinese, they each comprise two words, meaning very different things from those in Modern Standard Chinese. However there are a small number of disyllabic morphemes in Classical Chinese which cannot be meaningfully further divided into smaller components. A good portion of these disyllabic morphemes fall into the category of words called "liánmián cí" (聯綿詞). The meaning of disyllabic liánmián cí is expressed by both syllables which are normally in the shuāngshēng or diéyùn relationship. For example, cēncī (參差 "uneven" from the *Shījīng*) is a shuāngshēng word; wàngyáng (望洋 "looking up" from the *Zhuāngzǐ*) is a diéyùn word. Both words have one disyllabic morpheme, instead of two monosyllabic morphemes.

We have established that Classical Chinese morphemes are mostly monosyllabic, although many liánmián cí are disyllabic. Morphemes can be combined in different ways to form words. We will talk about three types of word formation in Classical Chinese: reduplication, compounding and affixing.

Reduplication is the process of doubling the morpheme to make a new word. For example, in English there are words like "bye" and "bye-bye", "night" and "night-night". In Classical Chinese there are words of this kind as well, e.g. 巍(wēi, "high") and 巍巍 (wēiwēi, "lofty"), attested in the *Analects*. Another category of reduplication mimics various sounds, e.g. guānguān (關關) from the *Shījīng*, mimicking the sound of a bird called the osprey.

Compounding is another way of building words where two words are put together, e.g. "blackboard". In Classical Chinese, there are compound words such as jūnzǐ (君子 "virtuous man") and tiānxià (天下 "world"). For compound words, the meaning of the whole word can usually be derived from the component words, albeit indirectly.

Some morphemes are free because they can stand alone as words, e.g. “happy”, while there are bound morphemes that have to be attached to other words, e.g. “-ness”. Affixes are such a type of bound morpheme. If they are attached before another word, they are called prefixes, e.g. the “en” in “entrust”; if they are attached after another word, they are called suffixes, e.g. the “-ly” in “brotherly”. In Classical Chinese there were very few real affixes. In pre-Classical records, the word yǒu (有) is often prefixed to names of states, tribes, dynasties, etc. For example, Huangdi, a legendary emperor of prehistoric China, is also called the “Yǒu Xióng Shì (有熊氏)”. Another prefix which was attested rather late in the Classical era is ā (阿), which can be attached to kinship terms to convey a sense of familiarity. As early as in the Han Dynasty, the word āmǔ (阿母) was attested in Shǐ Jì to refer to a “wet nurse”. The prefix ā (阿) is attached to “mǔ (母)”, the word for “mother”. As for suffixes, rán (然) is usually attached to an adjective to turn it into an adverbial, e.g. pèirán 沛然 “(of rain) abruptly, copiously” from the *Mencius*.

There is also a related morphological process called “derivation by tone”. A change in the tone can turn the relevant word into a related word of a different part of speech. The most common example of this is when a verb is turned into a noun. Many such distinctions are still maintained in Modern Standard Chinese. Table 6.1 gives a few examples with very close relations.

The word liáng 量 is a verb meaning “to measure”, while liàng 量 is the corresponding noun “quantity”. Although these two words are written with exactly the same Chinese characters, the characters have to be pronounced differently according to the meaning in context. For example, in compound words such as cèliáng 測量 (“to measure”) and zhòngliàng 重量 (“weight”). The pronunciations of these words only differ in tone. In terms of their original tonal category in Middle Chinese, liáng came from the píng tone, while liàng came from the qù tone – by changing a non-qù tone to a qù tone, the word changes from a verb to its corresponding noun. The second example is similar. Although the initials of these two words are different in Modern Standard Chinese, they had the same initial in Middle Chinese. Both chuán 傳 (“to transmit”) and zhuàn 傳 (“biography, record”) had the [ɖ] initial and originally their pronunciations were different only by the tone. The verb chuán has a píng tone, while the noun zhuàn has a qù tone. Examples of this distinction in Modern Standard Chinese compounds include chuándì 傳遞 (“to pass”) and zìzhuàn 自傳 (“autobiography”). The next two examples are similar.

Table 6.1 Derivation by tone

Verb	*Noun*
量 liáng “to measure”	量 liàng “quantity”
傳 chuán “to transmit”	傳 zhuàn “biography, record”
處 chǔ “to locate”	處 chù “place”
背 bēi “to carry on back”	背 bèi “back”

Mei (1980) focuses on this type of "derivation by tone" changing a verb to a noun, and compares them with their Sino-Tibetan cognate words in Tibetan. He points out that there is a suffix in Tibetan in the form of -s, which can turn a verb into a noun, e.g. graŋ (verb, "to count") vs graŋs (noun, "number"). Let's recall the discussion about tonogenesis in Old Chinese from Chapter 3. It is possible that in Old Chinese there were no tones. Instead the Middle Chinese qù tone had an -h coda in Old Chinese, while the Middle Chinese shǎng tone had an -x coda in Old Chinese. The -h coda in the qù tone developed from an earlier -s coda, probably in the stage before Old Chinese. Now taking the first pair of words in Table 6.1 for example, Mei (1980) argues that their pronunciations before Old Chinese could have been liaŋ (verb) and liaŋs (noun), respectively. The function of the -s is exactly the same as the -s in Tibetan. In fact the two Tibetan words cited above are cognate words to these two Chinese words. The Tibetan word graŋ ("to count") corresponds to the Chinese word liaŋ ("to measure"), and graŋs ("number") corresponds to liaŋs ("quantity") very nicely both in terms of the meaning and the form. Suppose the Tibetan words are closer to the original Sino-Tibetan words. Then in a time prior to Old Chinese, there could have been a suffix -s that could turn a verb into a noun. This was probably part of the morphological system of the proto-Sino-Tibetan language. Then the final -s became -h in Old Chinese and was subsequently lost in Middle Chinese, creating the tonal contrast between the qù tone and the other tones. Since Chinese characters do not always tell us about the morphological changes explicitly, such as in the case of "derivation by tone", we wonder what other morphological processes there were in Old Chinese.

Now let's make a further distinction among affixes. If an affix turns a word into another word with a different meaning, then it is a derivational affix. The affixes in Classical Chinese that we have discussed so far all belong to this type. On the other hand, if an affix turns the grammatical function of a word into a different one without changing the basic meaning of the word, it is an inflectional affix. For example, in English the lexical meanings of "like" and "likes" are the same, but they co-occur with different words in a sentence, e.g. "like" with first person pronouns and plural nouns in the present tense, and "likes" with non-first person singular pronouns and singular nouns in the present tense. We have not, so far, been able to find any inflectional affixes in Classical Chinese and derivational affixes are scarce in Classical Chinese as well. Affixing as a morphological process is rare, while reduplication and compounding are more commonly found in Classical Chinese, although the number of monosyllabic words built from just one morpheme is still greater than that from disyllabic words. Thus it seems that, on the whole, there was very little morphology in Classical Chinese. Nonetheless, we do have reason to believe that in times earlier than Old Chinese there must have been more morphology, as it is a general feature of the Sino-Tibetan languages.

6.3 WORD CLASSES IN CLASSICAL CHINESE

Syntax is mostly about sentence formation. There are two parts to syntax. First, we have to know how many different classes of words there were in Classical Chinese –

parts of speech such as nouns, verbs, adjectives, etc. Second, we can study the rules used to put words together – where to put the nouns and verbs, etc.

In languages with a highly developed morphology, it is relatively easy to identify classes of words such as nouns, verbs, adjectives, pronouns, conjunctions, etc., based on the kind of morphological processes that they respectively undertake. For example, in English, verbs can inflect for tense and person to have forms such as "like, likes, liked". But in Chinese, it is easier to distinguish words that have concrete meanings from words that only serve grammatical functions; or, to put it in a more or less equivalent way, it is easier to distinguish words that are like nouns from words that are like verbs. But it is more difficult to further distinguish words within each of these classes, partly due to the morphological paucity of the language. Traditionally, Chinese scholars only distinguish the following two classes of words: shízì (實字 "concrete words") and xūzì (虛字 "empty words"). For example, the word "kè" (客) has a concrete meaning "guest", while the second word in Example 1 "ér" (而) serves to connect the two verbs, thus having a specific grammatical function, but not a tangible meaning. In this way we can talk about the meanings of the concrete words and the functions of the empty words. The former were studied by traditional scholars who commentated on classical works, while the studies of the latter would be considered studies of traditional Chinese grammar. The first modern system of Classical Chinese grammar, devised by a Chinese scholar, was that of Ma Jianzhong (1845–1900) in his book *Mǎ Shì Wén Tōng* (馬氏文通 *Ma's Grammar*) published in 1898. In the Ming and Qing Dynasties there had been earlier mentions or studies of the grammar, or the lack of grammar, of Classical Chinese but these had been made by missionaries and Western scholars.[2] Based on Latin grammar, Ma Jianzhong classified Classical Chinese words into nine categories. The concrete words include nouns, adjectives, verbs, pronouns and adverbs. The empty words include prepositions, conjunctions, helping words, and interjections. He also discussed the structure of sentences using concepts such as subject, object, predicate, predicatives, etc. Most subsequent grammar books on the subject would be built on Ma Jianzhong's framework so let's use these classes of words in an intuitive sense, without going into the details of criteria for classifying words, and talk about some of the features of different classes of words in Classical Chinese.

First, intuitively, or notionally, nouns in Classical Chinese are words that refer to objects and people, e.g. niú (牛 "cow") and zǐ (子 "child"). But in many cases, nouns can be temporarily used as a verb, such as in Example 3:

Example 3

Jūn	jū	chén	chén	fù	fù	zǐ	zǐ	(The *Analects*)
君	君,	臣	臣,	父	父,	子	子	
prince	prince	minister	minister	father	father	child	child	

"(There is government, when) the prince is prince, and the minister is minister; when the father is father, and the son is son." (trans. James Legge)

In this quote from the *Analects*, there are four sentences of two words that are exactly the same. For example, "jūnjūn" is a sentence with two instances of the word "jūn" originally meaning "prince, ruler". If the first "jūn" is the subject, then the second "jūn" must be the predicate. In this case it should be temporarily used as a verb. The other three short sentences in Example 3 can be interpreted in a similar way. Now let's look at another example of nouns being used as a verb.

Example 4

jūnzǐ	bú	qì	(The *Analects*)
君子	不	器	

virtuous-man not utensil/instrument/vessel

"The accomplished scholar is not a utensil." (Trans. James Legge)

In this quote, the word "qì" is modified by the negative "bù", which is usually used in front of a verb or an adjective. Therefore we can deduce that here "qì" is used as a verb. Here is one more example from the *Zhàn Guó Cè* (战国策 *Strategies of the Warring States*), a history book dated between the third and first centuries BCE.

Example 5

Mèngcháng-jūn	kè	wǒ	(*Zhàn Guó Cè*)
孟嘗君	客	我	
Lord Mengchang	guest	me	

"Lord Mengchang treats me as his guest."

In this quote, the word "kè" ("guest") is followed by another noun which looks like the object in the sentence. Thus the word "kè" should be interpreted as a verb. Here it can be paraphrased as "treat … as a guest". This use of nouns can be called "putative". Admittedly, that nouns can be used as verbs in the right context is not a feature unique to Chinese, since nouns can very easily be turned into verbs in many languages, e.g. "to man a ship". But it does seem that in Classical Chinese there are many more ad hoc uses of nouns as verbs. The verbal meaning is not conventional or fixed. Therefore readers have to use the context and their knowledge of grammar to deduce what the correct interpretation would be.

Adjectives can be used in the putative sense in Classical Chinese as well. For example:

Example 6

dēng	Tài shān	ér	xiǎo	tiānxià	(The *Mencius*)
登	泰山	而	小	天下	
ascend	Tai Mount	and	small	world	

"(Confucius) ascended the Mount Tai and considered the world small"

In this sentence, the word "xiǎo" is an adjective followed by a noun which looks like the object. Similar to the case in Example 5, the adjective here should be interpreted as a verb, meaning "consider … to be small", following the putative pattern. Adjectives can also be used in the causative sense, for example:

Example 7

kǔ	qí	xīn	zhì	(The *Mencius*)
苦	其	心	志	
bitter	his	mind	will	

"make his mind suffer"

In Example 7, the word "kǔ" ("bitter") should be the verb, while "qí xīn zhì" would be the object. Here the adjective is used as a causative, meaning "make his mind bitter, i.e. suffer." The interpretative pattern of causative uses of adjectives is thus "cause … to be …" The meaning of the adjective should be filled in after "be" in the pattern. In the case of the adjective "kǔ" in Example 7, it should be read as "cause … to be bitter".

Besides these verbal uses, adjectives in Classical Chinese and Modern Standard Chinese have other verbal properties as well. Therefore the term "stative verb" is often substituted. To some extent, the typical kinds of adjectives that appear in English do not exist in Chinese, and instead what feels like an adjective in Chinese is rather a different class of word, in other words a stative verb. But to simplify the topic a little here, we will continue to use the more intuitive term "adjective", as long as we keep in mind that they are actually rather different from how adjectives are used in languages like English.

Similarly, intransitive verbs, i.e. verbs like "come, rise, sleep, run" etc., verbs that cannot take an object, are often used in a causative sense if the verb is followed by an object. For example:

Example 8

Jì	lái	zhī,	zé	ān	zhī	(The *Analects*)
既	来	之，	则	安	之	
perf	come	them,	then	content	them	

"when they have been so attracted, they must be made contented and tranquil." (trans. James Legge)

In the quote in Example 8, the intransitive verb "lái" ("to come") should be paraphrased in the causative pattern as "cause … to come", which is translated as "attract" here. In the second half of the quote, the adjective "ān" ("content") is also used in a causative sense.

Examples 3 to 8 show that nouns and adjectives can be used temporarily as verbs and intransitive verbs can be used as causatives. Such uses are very common in Classical Chinese. This is one of the reasons why some scholars say that Classical Chinese words should just be categorized into "concrete words" and "empty words" without further distinctions within either category. But most scholars nowadays would say that there are indeed different classes of words in Classical Chinese, although there is a greater degree of flexibility among some classes.

Now let's take a brief look at the pronoun system in Classical Chinese. For the first person pronoun, the word wǒ 我 (Old Chinese: *ŋarx) can be found in written records in the oracle bone script from the Shang Dynasty prior to Old Chinese. In the subsequent Zhou Dynasty, another related word wú 吾 (Old Chinese: *ŋag) developed (Xiang 1993). Thus by the time of Classical Chinese, both wǒ and wú could be used but in different ways. Wǒ can be used as either the subject or the object, while wú is often used as the subject and the possessive, i.e. "my" or "our". For example:

Example 9

cǐ	fēi	wú	jūn	yě	(The *Mencius*)
此	非	吾	君	也	
this	isn't	my/our	prince	par.	

"This person is not our prince"

In the gloss, "par." stands for "grammatical particle". According to Norman (1988), yě expresses a sense of factuality. In Example 9, "wú" modifies "jūn", and it can be interpreted as the possessive "my" or "our". In this case, "wǒ" is not usually used. On the other hand, "wǒ" is used for the object, similarly to the English "me" or "us". For example:

Example 10

qí shī fá wǒ (*Zuǒ Zhuàn*)
齊 師 伐 我
State-of-Qi troops attack us

"The troops of Qi attacked us"

In Example 10, the pronoun wǒ is used as the object, and in this case wú is usually not used. Thus it seems the division of labor between wǒ and wú is that the former can be used as the object, while the latter can be used as the possessive. Both can be used as the subject, although as Norman (1988) points out, wǒ in the subject position tends to have a contrastive sense, i.e. "I (or we) but no one else". Generally there is no grammatical distinction between singular and plural nouns or pronouns in Classical Chinese. If a distinction between the singular and the plural needs to be made, words that refer to a group of people, such as bèi 輩 or chái 儕 can be added to wú 吾, e.g. wúbèi 吾輩 ("we") and wúchái 吾儕 ("we").

For second person pronouns, there are two major words: rǔ 汝 and ěr 爾. Different from the division of labor in the first person pronouns, there is no clear distinction here with respect to different positions in the sentence, such as the subject, object, etc. Addressing someone using "爾" or "汝" in Classical Chinese is usually considered impolite, so various honorific, more appropriate, ways of addressing people can be used. For example, zǐ 子 ("master") is originally a polite word that refers to a man, e.g. Kǒngzǐ (Confucius, "Kǒng" is his family name). It can be used to address people in general in a polite fashion.

The third person pronouns have a clear distinction between the possessive qí 其 ("his, her, its, their") and the object pronoun zhī 之 ("him, her, it, them"). We have seen an example of zhī in Example 8 above. Here's an example of qí:

Example 11

tīng qí yán ér guān qí xíng (The *Analects*)
聽 其 言 而 觀 其 行
listen their word and observe their conduct

"I listen to their words and observe their conduct."

As you have seen, not only do Classical Chinese pronouns not have a distinction between singular and plural forms but also there is no distinction between gender either. There is no real third person pronoun for the subject position, and instead bǐ 彼, the word for "that", is used.

This brings us to the demonstrative pronouns in Classical Chinese. Bǐ 彼 is "that"; cǐ 此 is "this". There is another word, shì 是 (Old Chinese: *djigx), for "this". The difference between these two words for "this" is that shì is more general, while cǐ is more specific, referring to something that is actually present (Norman 1988: 90). For interrogative pronouns, the most common ones include shuí 誰 for "who" and hé 何 for "what, why, how, where" depending on the context.

Now let's take a look at prepositions in Classical Chinese, e.g. instrumental yǐ (以 "with"), benefactive wèi (爲 "for"), comitative yǔ (與, "with"), locative yú (於 "at", Old Chinese: ʔag) and yú (于 "at", Old Chinese: *gwjag). Although the Modern Standard Chinese pronunciations of 於and 于 are exactly the same, they were pronounced differently in Old Chinese. According to Xiang (1993), these two prepositions have similar functions. But in earlier times, before Old Chinese in the oracle bone script and the bronze script, there was only the second yú 于. In early Old Chinese, such as in the *Shījīng* and the *Shàngshū*, there are only a few examples of the first yú 於, while mostly it is 于. Starting from Classical Chinese, 於 became more common and eventually replaced 于. In fact, all prepositions in Classical Chinese were originally verbs. The instrumental yǐ can be used as a verb to mean "to grasp, to use, to lead"; the first locative yú 于means "to do, to be" as a verb, while the second yú 於 can mean "to go". The verbal use of the benefactive wèi is either "to help" with the same pronunciation or "to make", in which case it is pronounced as wéi in Modern Standard Chinese. The comitative yǔ is also a verb meaning "to give, to wait". Here's an example with the instrumental yǐ:

Example 12

shì	yǐ	wèi	zhī	wén	yě	(The *Analects*)
是	以	謂	之	文	也	
this	with	call	him	cultured	par.	

"With this, people call him Wén"

In this example, the pronoun "shì" is the object of the preposition "yǐ". A literal translation of "shì yǐ" is "with this", but more naturally it means "because of this".

Actually, the term "preposition" is not exactly the most accurate word to use here, since in both Classical Chinese and Modern Standard Chinese many "prepositions" can function either as a verb or a preposition according to their syntactic position in a sentence. The term "coverb" is often substituted to refer to words that we have just discussed above as "prepositions"; in Chinese there are no real prepositions like there are in English, but instead there are only coverbs, which are more flexible. To simplify the issue a little, we will just use the intuitive term "preposition" in this discussion, so long as we keep in mind that these words are very different from prepositions in English.

So far we have illustrated some major word classes in Classical Chinese. It is not possible to provide a full picture of all the classes of words in this short chapter. Therefore we will move on to sentence formation and special grammatical constructions in Classical Chinese.

6.4 BASIC WORD ORDER IN CLASSICAL CHINESE

The basic word order in Classical Chinese is Subject-Verb-Object. Let's abbreviate this simply as SVO. Example 10 cited above is a perfect example. However there are many cases where the object can be pre-posed – see Example 12 above, where the object of the preposition yǐ is pre-posed. This is often the case with the preposition yǐ. In this sense, yǐ is not exactly a preposition anymore, but rather a postposition. Here the term "coverb" would indeed be less confusing.

The second type of pre-verbal object occurs in negative sentences, where the object, if it is a pronoun, is normally put before the verb, as in Example 13:

Example 13

suì	bù	wǒ	yǔ	(The *Analects*)
歲	不	我	與	
year	not	us	wait	

"The years do not wait for us" (trans. James Legge)

Compared to the object "wǒ" in Example 5 where it is in the post-verbal position in an affirmative sentence, the "wǒ" in Example 13 is pre-verbal in a negative sentence.

Another type of pre-verbal object are the interrogative pronouns such as hé and shuí. For example:

Example 14

xiānshēng	jiāng	hé	zhī	(The *Mencius*)
先生	將	何	之	
master	will	where	go	

"Master, where are you going?" (trans. James Legge)

Example 15

wú	shuí	qī	(The *Analects*)
吾	誰	欺？	
I	who	impose upon	

"Whom should I impose upon?" (trans. James Legge)

Besides these two types of pre-verbal objects, there are special functional words that can be used to extract the object and put it in front of the verb, such as zhī 之 and shì 是. Pre-verbal objects are quite common in pre-Classical works such as the *Shījīng*. Although, generally speaking, Chinese from the earliest records has always been predominantly SVO, the existence of pre-verbal objects in Classical Chinese and earlier times seems to suggest that such a feature might be a proto-Sino-Tibetan feature, since both Tibetan and Burmese are SOV. The fact that the object of yǐ can often be pre-posed, thus making the yǐ a postposition, is even more convincing, since according to Greenberg (1963: 45 Universal 4), "with overwhelmingly greater than chance frequency, languages with normal SOV order are postpositional". Sun (1996) gives a more detailed argument in favor of this view.

Besides the basic word order, prepositional phrases can either precede or follow the verb, but the tendency for each preposition varies (Xiang 1993). Phrases with yǐ or wèi can appear on either side of the verb. In Example 16 the prepositional phrase "yǐ shí" follows the verb and object "shǐ mín", while in Example 17 the prepositional phrase "yì yán yǐ" precedes the verb "bì". But note here that the object of the preposition, i.e. "yì yán", precedes the preposition "yǐ". This "yǐ" is rather a postposition, just like in Example 12, which might be a remnant feature of the earlier SOV word order.

Example 16

shǐ	mín	yǐ	shí	(The *Analects*)
使	民	以	時	
use	people	with	time	

"Employ the people according to the seasons."

Example 17

yì	yán	yǐ	bì	zhī	(The *Analects*)
一	言	以	蔽	之	
one	word	with	cover	it	

"To summarize it with one phrase"

Xiang (1993) also points out that phrases with the comitative yǔ generally only occur in front of the verb, as in Example 18. In contrast phrases with the preposition yú tend to follow the verb as in Example 19.

Example 18

yǔ	péngyǒu	jiāo	ér	bú	xìn	hū	(The *Analects*)
與	朋友	交	而	不	信	乎	
With	friends	interact	and	not	sincere	ques.	

"Have I been sincere or not when I interact with my friends?"

Example 19

fūzǐ	zhì	yú	shì	bāng	yě	(The *Analects*)
夫子	至	於	是	邦	也	
Confucius	arrive	at	this	country	par.	

"when the master arrives at a country"

Furthermore, modifiers generally precede the nouns or verbs that they modify. In Example 20 the monosyllabic adjective "qiáng" can modify the noun "guó" directly, while in Example 21 two adjectives are used to modify the noun "guān" with the help of a structural marker of modifiers, zhī, here indicated by "mod." This marker often intervenes between the modifier and the modified.

Example 20

Jìn	qiáng	guó	yě	(*Hán Shī Wài Zhuàn*)
晉,	強	國	也	
State-of-Jin	powerful	state	par.	

"The State of Jin is a powerful state."

Example 21

dà xiǎo zhī guān (*Qián Fū Lùn*)
大 小 之 官
big small mod. officials

"government officials of higher and lower ranks"

But sometimes the modifier can appear after the noun that it modifies. In Example 22, the adjective "lì" follows the noun phrase "zhuǎ yá" that it modifies with the help of the modifier marker "zhī". Such post-nominal adjectives can be found in pre-Classical texts such as the *Shījīng* as well. Post-nominal modifiers are usually longer phrases formed with the word zhě 者, as shown in Example 23. The zhě is sometimes classified as a special type of pronoun, although its function is to make the verbal phrase that it attaches to into a noun phrase. Thus in this sense let's call it a nominalizer. The nominalized phrase in Example 23 is "kě shǐ bào Qín zhě". It modifies the preceding noun "rén". In Literary Chinese, the modifier marker "zhī" is also used frequently between the noun and the post-nominal modifier phrase.

Example 22

yǐn wú zhuǎ yá zhī lì (The *Xúnzǐ*)
蠉 無 爪 牙 之 利
earthworm not-have claw tooth mod. sharp

"The earthworm does not have sharp claws or teeth."

Example 23

qiú rén kě shǐ bào Qín zhé (*Shǐ Jì*)
求 人 可 使 報 秦 者
look-for person can be-envoy report State-of-Qin nom.

"They looked for a person who could serve as an envoy to report to the Qin."

In general, modifiers of verbs, such as adverbs, manner, directions, etc., also precede the verb. If we think of the prepositional phrases mentioned above as some kind of modifier of the verb and verb-object combination, then some of these modifiers can follow the verb.

6.5 SPECIAL GRAMMATICAL CONSTRUCTIONS IN CLASSICAL CHINESE

In this section we will talk about three types of nominalizations with the nominalizers zhě 者, suǒ 所 and zhī 之, the equative sentence and passivity. First let's look at nominalization, which is a process of turning a verbal structure into a nominal phrase. Adjectives, or rather "stative verbs", in Classical Chinese share a lot of similar properties with verbs. We mentioned earlier in this chapter that adjectives can be used temporarily as verbs so nominalization can sometimes be applied to adjectives as well. According to Xiang (1993) neither zhě nor suǒ was attested in the oracle bone script or the bronze script in the Shang and Western Zhou Dynasties. They seem to be relatively later developments in the Spring and Autumn period. The word zhě can be attached to a verbal structure or an adjective and refer to the subject of the verb or adjective. For example, from "zhī" (知 "to know") and zhī (之 "it"), we can derive "zhī zhī zhě" (知之者) which can be paraphrased as "those who know it". This use is similar to the agentive suffix -er in English such as in "knower, doer, writer". Thus Norman (1988) calls it an "agentive particle". From "gāo" (高, "tall") we can derive "gāo zhě" (高者), meaning "that which is tall". Now if we look back at Example 23, the verbal structure "kě shǐ bào Qín zhě" can be paraphrased as "those who can serve as an envoy to report to the Qin" in a similar fashion. In contrast, the word suǒ所 is also classified as a special pronoun, whose function is to turn a verbal structure into the noun phrase referring to the object of the verb. For example, from "zhī" (知, "to know"), we can derive "suǒ zhī" (所知), which can be paraphrased as "that which is known" or "what is known". Both zhě and suǒ are still quite commonly used in Modern Standard Chinese. For example, zhě can be used as an agentive suffix comparable to the English -er. Words like "xué zhě"(學者 "study + zhě→scholar"), "dú zhě" (讀者 "read + zhě→reader"), and "zuò zhě" (作者 "write + zhě→writer") are just a few examples. Suǒ is often used in more idiomatic expressions to form nouns from verbs, such as "suǒ jiàn suǒ wén" (所見所聞 "suǒ see suǒ hear→what is seen and what is heard").

The third type of nominalization is zhī which is used between the subject and the predicate of a sentence to turn it into a subordinate sentence. In this case, the verbal structure is complete with its subject and object, compared to the verbal structures in the zhě nominalization, which do not have a subject, and the verbal structures in the suǒ nominalization, which do not have an object.

Example 24

zé wú wàng mín zhī duō yú lín guó yě (The *Mencius*)
則 無 望 民 之 多 於 鄰 國 也
then don't hope people nom. many than neighbor state par.

"Then you should not hope that the people in your state will become more numerous than in your neighboring states."

In Example 24, the part "mín zhī duō yú lín guó yě" after "wàng" is the object of the verb. If we take the zhī out of the object, then we have a full sentence "mín duō yú lín guó" ("the people are more numerous than the neighboring state"). The function of "zhī" here is to turn this whole sentence into a nominal component of the verbal structure with "wàng". To some extent, this can be compared to structures such as "I'm not concerned with your liking or disliking me", in which the original sentence "you like or dislike me" is turned into a nominal phrase with the subject in the possessive case, i.e. "your liking or disliking me". Interestingly, the zhī used here in Classical Chinese is also the most common marker of possessor, such as in Example 25:

Example 25

yǐ zǐ zhī máo xiàn zǐ zhī dùn (Hánfēizǐ)
以 子 之 矛 陷 子 之 楯
with you poss. spear sink you poss. shield

"(What if we try to) break your shield with your spear?"

Here "zǐ" is the polite form of addressing a person, and zhī is similar to a possessive case marker. Thus "zǐ zhī máo" can be translated as "your spear". The use of "zhī" to turn a sentence into a subordinate sentence can be considered an extension of the possessive zhī.

Besides sentences formed with verbs, there is a special type of sentence called the equative, which has more or less the same function as a modern copula structure, although the copula verb is not used in the equative sentence. The equative pattern is "… (zhě 者) … yě 也". The word zhě is the same as the nominalizer zhě mentioned above. Here we will treat it as a subject marker though it can be omitted. The particle yě is one of many sentence final particles used in Classical Chinese to express different types of modal meanings or forces, such as interrogative, factual, surprise, etc. In Example 26, there are two equative sentences and "yě" expresses a factual meaning here. It is where the "copula" sense comes from in this pattern. The subject marker zhě is used in both. In Example 27, the zhě is omitted.

Example 26

Jūn zhě zhōu yě, shùrén zhě shuǐ yě (The *Xúnzǐ*)
君 者， 舟 也； 庶人 者， 水 也
Ruler subj. boat par. commoner subj. water par.

"The ruler is the boat; the people are the water."

Example 27

Dǒng Hú gǔ zhī liáng shǐ yě (*Shǐ Jì*)
董狐， 古 之 良 史 也
Dong Hu ancient poss. good historian par.

"Dong Hu was a great historian in ancient times."

A similar way of expressing the copula sentence is by using the verb wéi 爲 as in Example 28; the negative counterpart of the equative sentence is formed with the negator fēi 非 in the pattern "… fēi … (yě)" as shown in Example 29; the interrogative form of the equative sentence, for example in Example 30, is formed by using the question particle yú (歟 Old Chinese: *rag). Another more general question particle is hū 乎, which we have seen in Example 18 earlier.

Example 28

zǐ wéi shuí (The *Analects*)
子 为 谁？
you (*pol.*) be who

"Who are you, sir?"

Example 29

fēi wú tú yě (The *Analects*)
非 吾 徒 也
neg. my disciple par.

"(He) is not my disciple."

Example 30

fūzǐ shèngzhě yú (*Bái hǔ tōng*)
夫子 聖者 歟
Confucius sage ques.

"Is Confucius a sage?"

As for the passive, there are many different ways of expressing this in Classical Chinese. In some cases, a verb can be used in the passive sense without any help from passive markers and here the passive meaning has to be deduced from the context. In Example 31, the verb "zhū" is used passively. In the context of the discussion, a punishment for a petty crime is contrasted with situations where people who steal the whole country are rewarded with noble titles. Note that the use of zhě with a verbal structure is a typical example of nominalization.

Example 31

qiè gōu zhě zhū (The *Zhuangzi*)
竊 鉤 者 誅
steal hook nom kill

"One who steals a hook will be killed."

The preposition "wèi 爲" can be used as the agentive marker like "by" in English as in Example 32:

Example 32

wèi tiānxià xiào (*Shǐ Jì*)
爲 天下 笑
by world laugh

"He was laughed at by the whole world."

The pattern "… wéi (agent) suǒ (verb)" was one of the major passive patterns in Classical Chinese. The subject is often the patient while the noun after wéi is usually the agent, as in Example 33:

Example 33

wéi rén suǒ yí (The *Xúnzǐ*)
為 人 所 疑
by people nom. doubt

"He is doubted by people"

Two other words, jiàn 見 and bèi 被, can also be used in front of a verb to signal a passive reading, as in Example 34. The word jiàn is a passive marker and, if the agent is needed, it can be introduced by the preposition yú following the verb, as in Example 35. The word bèi is originally a noun, meaning "sleep cover, quilt". In the structure in Example 34 it is followed by a verb. In this case, it can be interpreted metaphorically to mean "to experience, to undergo". Let's call this the BEI-construction in Classical Chinese. The verbs used in this construction would normally have negative connotations, e.g. the verb "slander" in Example 34.

Example 34

xìn ér jiàn yí, zhōng ér bèi bàng (*Shǐ Jì*)
信 而 見 疑, 忠 而 被 謗
sincere and pass. doubt, loyal and cover slander

"He was sincere but was doubted, loyal but was slandered."

Example 35

wú cháng jiàn xiào yú dàfāngzhījiā (The *Zhuangzi*)
吾 長 見 笑 於 大方之家
I long pass.laugh by wise-man

"I would have been laughed at for long by those wise people."

So far we have given a very brief sketch of Classical Chinese grammar with its morphological devices and sentence forming patterns based upon classes of words that are found in many languages. In pre-Classical times, the grammar was quite different, such as revealed in the *Shījīng,* the *Shàngshū* and the oracle bone script. We have seen that there might have been more morphological devices in pre-Classical times and also that, in line with other Sino-Tibetan languages, the basic word order could have been SOV in much earlier times. In the next chapter, we will see how the grammar of Classical Chinese changed during the post-Classical era.

NOTES

1 When example sentences are cited, the first line is the pinyin. The second line is the corresponding characters. A word for word gloss is given on the third line and the meaning of the sentence is provided on the fourth line.

2 In 1822, the French sinologist Jean-Pierre Abel-Rémusat (1788–1832) published an impressive book called *Elements of Chinese Grammar* in which he discussed Chinese characters, spoken Chinese and Literary Chinese grammar. He classified Literary Chinese words in categories such as nouns, adjectives, verbs, etc.

CHAPTER 7

Literature and religion

Vernacular writing

The year 1900 was a tumultuous year of the late Qing Dynasty because of domestic rebellions and foreign military actions. But in a small town called Dunhuang, in northwestern China, it was relatively quiet as it was located in a remote area, long forgotten by time and people. The focus of Chinese civilization and the main ways of transportation had shifted to the east coastline of China, although northwestern China had long been part of the Silk Road, the corridor of trade and cultural exchanges between China, West Asia and Europe. One day, Wang Yuanlu, a Daoist practitioner, was cleaning up a section of the deserted and dilapidated ancient Buddhist site at Dunhuang when, suddenly, his attention was drawn to a wall in which there seemed to be a hidden door. When he finally managed to open it what he saw was a little disappointing to him, since it was just a dusty room full of manuscripts that looked worn and torn – he had probably expected to see something more valuable. He reported his discovery to the authorities but the government showed only lukewarm interest in such a seemingly trivial discovery. However, Wang's discovery caught the attention of Aurel Stein, a Hungarian-British archaeologist, who went to Dunhuang in 1907 and bought many manuscripts from Wang.

In 1908, Paul Pelliot, a French Sinologist, followed his steps to Dunhuang and also bought a large number of manuscripts. Eventually Chinese scholars took notice of the finds and, in 1910, the government ordered the manuscripts to be transported to Beijing. The room discovered by Wang Yuanlu was later named the Library Cave. These manuscripts dated from the fifth to the eleventh centuries are now dispersed around the world, mostly in Beijing, London and Paris. They proved to be extremely valuable materials for the study of Chinese history and culture. Some of these manuscripts are copies of long lost books, such as the *Qièyùn*. When Karlgren studied Middle Chinese, he compared fragments of the *Qièyùn* from the Dunhuang with the *Guǎngyùn*. Now we will see how such manuscripts can be used to study the vernacular writing of the post-Classical era.

7.1 DIGLOSSIA

In Chapter 6 we briefly mentioned that Classical Chinese continued to be used as the written language, in the form of Literary Chinese, after the Han Dynasty, while the spoken language differed more and more from Literary Chinese. This created what is known as "diglossia". Now let's take a look at the linguistic situation in more detail, as shown in Table 7.1.

Table 7.1 Diglossia in Chinese

500 BCE to 200 CE	*200 CE to 900 CE*	*900 CE to 1750 CE*	*1750 CE to early twentieth century*	*Early twentieth century to now*
Classical Chinese	More strict literary writing vs more relaxed literary writing			Literary Chinese not officially used anymore
Spoken Old Chinese	Sporadic vernacular writing	More developed writings in vernacular	Vernacular writing close to MSC	Modern Standard Chinese (MSC)

Table 7.1 shows that in both cases – that is, in both Classical Chinese and Modern Standard Chinese – the written language is based on the actual spoken language, i.e. yǎyán and Modern Standard Chinese respectively. In the middle, there is the "diglossia". The official written language, i.e. Literary Chinese, was modeled to various degrees on Classical Chinese, while the vernacular writing had more elements from the spoken language (although instances of classicism have always been present, even in Modern Standard Chinese). One thing that we want to point out is that even though Literary Chinese was based on Classical Chinese, people after the Tang Dynasty could only imitate Classical Chinese in so far as they had mastered the grammar and vocabulary of Classical Chinese and also only as much as their attitudes towards classicism allowed. Therefore Literary Chinese texts have to be examined with a grain of salt if they are used as records to study the grammar of Classical Chinese. In many cases the authors of Literary Chinese used their own spoken language grammar and vocabulary. Such instances can offer us a glimpse of the spoken language, but if we want to study the grammar of the spoken language of the post-Classical period more systematically we need to use real vernacular writing resources.

7.2 PERIODIZATION OF CHINESE BASED ON GRAMMAR

According to Lü (1984), there are only two different periods of Chinese in terms of grammar, i.e. Old Chinese from the twelfth century BCE to the tenth century CE as opposed to Early Modern and Modern Chinese from the tenth century to the present. Jiang (2005) further separates Modern Chinese from Early Modern Chinese, obtaining three different periods. The beginning of Early Modern Chinese, in terms of its grammar, can be traced back to the late Tang and Five Dynasties period. This language developed in the Song, Yuan and Ming Dynasties into modern Chinese in the mid-eighteenth century in the Qing Dynasty. The grammar of the spoken Beijing dialect in the mid-Qing period had already been sufficiently similar to Modern Standard Chinese. Therefore in this chapter we will look at how Classical Chinese grammar developed in the post-Classical period as revealed in vernacular writing.

7.3 SOURCES OF VERNACULAR WRITING

The written records that we use in this chapter are those that are called "vernacular writing". Before the Tang Dynasty, there were sporadic records of the spoken language, such as in early Buddhist works from the Eastern Han Dynasty onwards, and also folk songs, verses and stories. More systematic vernacular writing would be found during and after the Tang Dynasty. Some of the Dunhuang manuscripts were written in just such a colloquial style, rather than in Literary Chinese. There was a special type of Buddhist text, called biànwén, which had its origins in the Tang Dynasty when Buddhist scriptures and stories were adapted to make them more accessible to the common people and some Chinese stories were written in this style. The texts of biànwén are valuable records of early vernacular writing in the Tang and Five Dynasties period.

Another type of Buddhist literature, not necessarily found only among the Dunhuang manuscripts, is the Chan Buddhism dialogs from the Tang and Song Dynasties. The Chinese Chan masters favored the dialog method when it came to teaching and these dialogs were written down in a colloquial style. In the Song Dynasties lecture notes by Confucian masters such as those by Zhu Xi contain a lot of elements of the spoken language. Besides these religious texts, popular literature also flourished after the Tang Dynasty. Compared to the high-brow art of poetry and formal essays, popular literature of fiction, drama and collections of short stories was written for the common people using their spoken languages. Alongside these materials there are also sporadic records of the spoken language in history books, poems, and language textbooks for non-Chinese speaking people. Popular literature and religious texts comprise the major written records of vernacular writing in the post-Classical era, hence the title of this chapter. But here it is worth noting that Literary Chinese, based on Classical Chinese, was still the dominant form of the written language and was used for all literary forms, including all types of literary genres and religious texts.

7.4 THE USE OF WRITTEN RECORDS

The first question that we have to ask is how we can study grammatical change? A natural assumption is that by comparing written records from different periods, we can discover changes in the grammar pertaining to the different use of words and word order, or different interpretations assigned to the same structure. Thus how much we can say about a certain grammar point depends on the availability of written records and how extensive the research is. Sometimes earlier records can be discovered later, so that our hypothesis about when certain grammar points first appeared can be pushed further back in time. Since there is such a vast body of texts of vernacular writing, and they are dispersed in so many different genres of records, it is hard for any researcher to make a complete and full search of all written records. It might therefore be possible that later scholars will find earlier examples of a certain grammar point when they search the written records more thoroughly.

7.5 MORPHOLOGY OF VERNACULAR WRITING

Just as in Chapter 6 we discussed the morphology of Classical Chinese grammar, in this chapter we will talk about the morphology and syntax of vernacular writing. Let's focus on the morphology of vernacular writing first. Classical Chinese morphemes are mostly monosyllabic and this is still the case with vernacular writing. As for the morphological processes – i.e. affixing, reduplication, and compounding – these all became more common in vernacular writing. For example, the prefix "ā" 阿 we mentioned in Chapter 6 was first attested in the *Shǐjì* dated between the second and first centuries BCE. It can be attached to names to indicate a sense of familiarity and affection. It is widely used in later times. The emperor Liú Shàn of the State of Shǔ in the Three Kingdoms period was often referred to by his infant name "Ā Dǒu" (阿斗). Because of Liú Shàn's lack of leadership ability or ambition, his name Ā Dǒu is now used to refer to a person who does not live up to expectations. The prefix "ā" can also be attached to kinship terms. The following terms are all attested from the end of the Han Dynasty to the Northern and Southern Dynasties: āfù (阿父: ā+father→dad), āshū (阿叔: ā+uncle→uncle), ānǚ (阿女: ā+daughter→daughter). These uses are still quite common in modern times. Interestingly "ā" could also be attached to pronouns, such as shuí (誰: who), nǐ (你: you) to form āshuí and ānǐ. But in Modern Standard Chinese, "ā" cannot be used in this way anymore. Many new prefixes developed in the post-Classical era – for example, the word lǎo 老 originally meant "old", but after the Northern and Southern Dynasties, "lǎo" gradually became a prefix of familiarity used in front of the names of persons or animals. The Tang poet Yuán Zhěn was called "Lǎo Yuán" by another famous poet Bái Jūyì in one of his poems. The modern terms of "Lǎoshǔ" 老鼠 ("mouse") and "lǎohǔ" 老虎 ("tiger"), can be found in records from the Tang and Song Dynasties. As for suffixes, "ér" (兒) originally meant "son", but by the Tang Dynasty mostly became a diminutive suffix of nouns of animals, e.g. yú'ér (魚兒 "fish +ér→small fish"), yàn'ér (雁兒 "wild goose + ér→small wild goose"). In Modern Standard Chinese, the suffix "ér"兒 is often unstressed or incorporated into the preceding syllable. But many such examples from the Tang Dynasty are found in poems and therefore, judging by the poetic rules, these suffixes are still full syllables with full tones. By the Song Dynasty, this use of suffixes became more common after other types of nouns such as objects or things, e.g. dié'ér (碟兒 "plate+ér→saucer"), guàn'ér (罐兒 "jar+ér→a smaller jar"). The suffix "rán" (然), attached to adjectives, was retained, replacing other suffixes of similar functions (Xiang 1993: 193).

Reduplication continued to be a major morphological process. Besides the reduplications of adjectives and sound imitations, kinship terms could also take such forms, e.g. gēge (哥哥 "brother"), as attested in the Tang Dynasty (Pan 1989: 57). In Modern Standard Chinese, most kinship terms can take such reduplicated forms.

Although in Classical Chinese words were predominantly monosyllabic, there were already many compound words. In later times, in the post-Classical period, compounding became a major way of creating new words, especially disyllabic words. This trend towards words with two syllables is generally called disyllabification. One of

the reasons for this is due to the simplification of the phonological system, which made formerly distinct syllables homophones. For example, the Classical word for "arrow" is 箭, *tsjanh in Old Chinese and tsjɛn in Middle Chinese, and the word for "sword" is 劍, *kjamh in Old Chinese and kjɐm in Middle Chinese, but both of them are pronounced as jiàn in Modern Standard Chinese. Similar simplifications created many homophonous words which were not homophones before. According to Pan (1989), however, the proliferation of compounding and especially disyllabic words in the post-Classical era cannot be simply attributed to the simplification of the phonological system of Old Chinese. He lists three counterarguments. First, the phonological reconstructions of Middle Chinese are actually more refined than Old Chinese. Many classes of sounds in Old Chinese diverged into different sounds in Middle Chinese, while in Old Chinese there were already a lot of homophones. If it is partially due to the simplification of sounds that more words became disyllabic after Middle Chinese, we cannot say the same for such a trend before Middle Chinese. Second, another reason for disyllabification might lie in the use of the shuāngshēng and diéyùn method in more general forms, such as to form compound words. Pan gives such Classical Chinese examples as qīnqì (親戚 "relatives") and sīsuǒ (思索 "ponder") in the Shuāngshēng category and pānyuán (攀援 "climb") in the diéyùn category, and these are all compound words. By analogy, many monosyllabic words became disyllabic, e.g. kǒngjù (恐懼 "fear"), jǐnshèn (謹慎 "cautious") and biànhuà (變化 "change"). Pan's third reason is that many phrases, e.g. rìshí (日蝕 "solar eclipse") and yuèshí (月蝕 "lunar eclipse"), became compound words through conventional use. Such a process can be considered a type of lexicalization, in which a former unit of language larger than the word became fixed as a lexical item. What is worth noting here is that affixing and reduplication contributed to the growth of disyllabic words, as well as compounding.

7.6 WORD CLASSES IN VERNACULAR WRITING

In Classical Chinese there are two main words for the first person pronoun, i.e. wǒ 我 and wú 吾. In the post-Classical era, wǒ gradually became the predominant form in the spoken language while wú still lingered on in writing. The division of labor between wǒ and wú in Classical Chinese disappeared both in writing and in the spoken language. Wǒ used to be the object of a verb, but we find examples where wú can be used in such a position after the Han Dynasty. Example 1 is from the third century.

Example 1

jīn	rén	guī	wú
今	人	歸	吾
now	people	affiliate	me

"Now these people are coming to me."

It should be noted that even if wú appears in vernacular writing in the post-Classical period, this is not proof that the word still existed in the spoken language. It might have been preserved as an instance of classicism since writing is in many ways more conservative than spoken language. Norman (1988: 118) cites an earlier study by Gurevich which said that "wú gradually fell from use as a colloquial form in the period between Han and Tang". There is a new word for the first person pronoun, nóng 儂, which is attested as early as the Jìn Dynasty. It was mostly a dialect form used in the Wu and Chu areas, which are roughly the present-day Jiangsu-Zhejiang area and the Hunan-Hubei area respectively. In modern Wu dialects, the second person pronoun form is also 儂, but the connection between the early vernacular form of 儂 as a first person pronoun and the current Wu dialect of 儂 as second person pronoun is probably not quite direct.

The second person pronouns in Classical Chinese, i.e. ěr (爾) and rǔ (汝), were also simplified. Ěr (Middle Chinese: ɲʑje) developed into nǐ 你 (Middle Chinese: nï) in the colloquial form, although rǔ was also widely used in vernacular writing until the Song Dynasty. Phonologically speaking, nǐ should have been derived from ěr. According to Xiang (1993: 233), in vernacular writings such as the biànwén from the Tang Dynasty, nǐ was predominantly used already.

The third person pronouns in Classical Chinese, i.e. qí 其 (Middle Chinese: gi) and zhī 之 had a division of labor, with qí being used as a possessive and zhī as an object. But in post-Classical times, in the third century, a new form qú 渠 (Middle Chinese: gjwo) appeared. Two other third person pronouns developed, including tā 他 and yī 伊 both of which can be used as the subject and the object. Tā in Classical Chinese meant "other", and its pronoun use became widely attested in the Tang Dynasty. Yī is a demonstrative pronoun meaning "that" in Classical Chinese, and its use as a third person pronoun was attested in the Northern and Southern Dynasties, and became widespread afterwards. But the distribution of these three new forms of pronouns in modern Chinese dialects is different. Tā is used mostly in the Mandarin dialects; yī is used in some Wu and Min dialects; qú is used mostly in the Yuè, Kèjiā and some Min dialects.

In Classical Chinese there was no distinction between singular and plural pronouns, such as that between "I" and "we". The word wú 吾 can mean either "I" or "we". If a distinction is needed, then words that express a group of people such as bèi 輩 and chái 儕 can be attached to the relevant pronouns, e.g. wúchái 吾儕 ("we") and ěrbèi 爾輩 ("you" plural). In the post-Classical era, forms such as wǒbèi 我輩 were attested in the Northern and Southern Dynasties period. According to Lü (1984), the word bèi developed into mí 弭 in the Tang Dynasty, e.g. wǒmí 我弭 ("we"), which could be regarded as the early form of the plural suffix -men 們 in Modern Standard Chinese, such as in wǒmen 我們 ("we"), nǐmen 你們 ("you" plural) and tāmen 他們 ("they"). The word mí 弭 further developed into mèn 懣 and some other related forms in the Song Dynasty. In the Yuan Dynasty, it was written as měi 每 in northern vernacular writing, but by the Ming Dynasty, the form and function of -men 們 had become more common.

In Modern Standard Chinese, there is a polite form of second person pronoun nín 您, which is comparable to the French polite form of "vous", Spanish "usted" or German "Sie". The word nín was attested as early as the Song Dynasty as a contracted form of nǐmén, the plural form of nǐ. But in its early uses, nín can be used for both the singular and plural forms of the second person pronoun and it did not necessarily have the polite connotation. In Modern Standard Chinese, nín is used as polite form of second person pronoun for both singular and plural uses. If it is addressing more than two people in a polite form, nín is still considered more correct than nínmen, although nínmen can still be used by some speakers as a result of analogy.

The pronouns for "this" and "that" were cǐ 此 and bǐ 彼 in Classical Chinese, but these words were replaced by new forms in the post-Classical period. The word zhè 這 and its variant forms were attested in the Tang Dynasty. Wang (1958) proposed that zhè came from the Classical Chinese word zhī 之, which, apart from being an object, third person pronoun, could also be used as a demonstrative pronoun meaning "this". Thus to some extent, both in terms of meaning and pronunciations, it is quite possibly a source for the word zhè. The word for "that" nà 那 can be attested as early as in the Tang Dynasty. The character 那 was originally used for the word nǎ, meaning "how" during the late Han and Three Kingdoms period. However, a new character 哪 was later created for this interrogative meaning, while the character 那 was reserved for the demonstrative pronoun "that". The origin of "nà" is not yet clear.

As for the interrogative pronouns such as "who" and "what", the word "shuí" (誰) has not changed much since Classical Chinese. In Modern Standard Chinese it is still the standard form for "who". In Classical Chinese the word hé (何) can be used as "what", "how", "where" and "why". Norman (1988) cites Zhang (1982) saying that the modern word for "what" came from "shíwù" (什物 "miscellaneous utensils") found in its original meaning as early as in the Northern and Southern Dynasties. The word shénme 什麼 as meaning "what" was attested in the Tang Dynasty. The Middle Chinese pronunciation of wù 物 had an m- initial. Thus phonologically speaking, the Modern Standard Chinese "shénme" could be a reduced form of shíwù.

Another major development in post-Classical times is the proliferation of measure words. In Modern Standard Chinese, in order to say things like "three people", a measure word is needed between the number and the noun, i.e. sān gè rén (three + measure-word + person). Measure words could already be found in the oracle bone script in the Shang Dynasty, and the number of measure words has continued to grow since then. In Classical Chinese, however, measure words were not used between numbers and nouns, e.g. sānrén xíng (three people walk). If a measure word is needed, the number and measure word combination follows the noun, e.g. chē sì shèng ("chariot + four + measure word→four chariots"). A similar term "classifier" is also used for "measure word", so let's call the structure of "number + measure word" a "classifier phrase". To some extent, these post-nominal classifier phrases can be regarded as either a post-nominal modifier or some kind of predicate. One of the most common measure words is gè 個, already attested in Classical Chinese as a measure for arrows, for example:

Example 2

fù fú shǐ wǔshí gè (The *Xúnzǐ*)
負 服 矢 五十 個
carry quiver arrow fifty cl.

"(ask them to) carry quivers of fifty arrows."

In Example 2, "gè" is the measure word, indicated by "cl." in the gloss, which is an abbreviation of "classifier". The classifier phrase "wǔshí gè" follows the noun that it modifies. Although the original meaning of "gè" referred to bamboo stalks, and the majority of examples of gè in Classical Chinese use it as the measure word for arrows made of bamboo, the measure word gè could be used for animals and people in Classical Chinese sometimes as well. In the post-Classical period, gè became more generally applied to people, animals and abstract nouns by the Tang Dynasty. With the increase in the number of measure words, the classifier phrase also moved to the front of the modified nouns. By the time of the Northern and Southern Dynasties, we can find such examples as:

Example 3

jiàn rén dú shù shí juàn shū, biàn zì gāo dà (*Yánshì Jiāxùn*)
見 人 讀 數 十卷書, 便 自 高 大
see people read several ten cl. book then self tall big

"I see some people became self-conceited just after reading several volumes of books."

In Example 3, the phrase "shù shí juàn shū" has the structure of "number + measure-word + noun", which contrasts with the phrase "fúshǐ wǔshí gè" in Example 2 which has the structure "noun + number + measure-word". The position of the classifier phrase had changed to prenominal, consistent with other types of modifiers in Chinese in general. This leads our discussion to our next topic, which is word order change in the post-Classical period.

7.7 WORD ORDER IN THE POST-CLASSICAL ERA

In Classical Chinese, pronouns as the object of the verb in a negative sentence are usually put before the verb, rather than after the verb, as is the case for normal objects. But we do find examples where the object pronoun of a verb in a negative sentence is put after the verb in both the Classical Chinese and pre-Classical periods. For example:

Example 4

ěr bù xǔ wǒ (*Shàngshū*)
爾 不 許 我
you not allow me

"If you don't allow me."

Example 5

yǒu shì ér bú gào wǒ (*Zuǒ Zhuàn*)
有 事 而 不 告 我
there-is affair and not tell me

"If there is an affair and you don't tell me."

Example 4 is from the pre-Classical period, where the object pronoun wǒ follows the verb; Example 5 is from Classical Chinese, where wǒ also follows the verb. Thus it seems that in the pre-Classical period, the transition from the pre-verbal position to the post-verbal position of object pronouns in a negative sentence was still ongoing. According to Wang (1958), the post-verbal positions for such pronouns were attested more often from the Han Dynasty onwards, for example:

Example 6

shì guǒ bù zhī wǒ yě (*Shuō Yuàn*)
是 果 不 知 我 也
this indeed not know me par.

"This is indeed an example of not knowing me."

A search within written records from the Han Dynasty reveals many examples of post-verbal pronouns in a negative sentence, especially in direct quotations of dialogs contained in passages written in Classical Chinese. Example 6 is an example from the Western Han Dynasty. The pronoun wǒ here follows the verb. Example 7 is from the Northern and Southern Dynasties period, which shows the same word order:

Example 7

dìng bù rú wǒ (*Shì Shuō Xǐn Yǔ*)
定 不 如 我
definitely not compare me

"You are definitely not as good as I."

As well as pronouns in a negative sentence, interrogative pronouns are also put before the verb as a general rule in Classical Chinese, as mentioned in Chapter 6. To a lesser extent, there are indeed examples where the interrogative pronoun is put after a verb in Classical Chinese, for example:

Example 8

zǐ xià yún hé (The *Analects*)
子 夏 云 何
Zǐ Xià say what

"What does Zi Xia say?"

In Example 8, the interrogative pronoun hé is post-verbal. Starting from the Han Dynasty, more examples of such post-verbal interrogative pronouns are attested, such as in Example 9, possibly from the late Eastern Han Dynasty, although actually the book was compiled during the Northern and Southern Dynasties period.

Example 9

chóu sī dāng gào shuì
愁 思 當 告 誰
sad thought should tell who

"To whom should I talk about my sad thoughts?"

Wang (1958) concluded that the transition of personal pronouns in negative sentences and interrogative pronouns from pre-verbal positions to post-verbal positions was already attested in Classical Chinese and finally completed by the Northern and Southern Dynasties when they both appeared after the verb in the spoken language, although in writing the pre-verbal uses continued to exist, in imitation of Classical Chinese.

Next we will talk about how the word order of locative phrases with yú changed. In Classical Chinese, such locative yú phrases almost always occur after the verb. By the Han Dynasty, pre-verbal locative yú phrases were attested. Wang (1958) gave the following example from the Han Dynasty. The locative phrase "yú dào" is pre-verbal.

Example 10

Bāo	yú	dào	bìng	sǐ	(*Hàn Shū*)
褒	於	道	病	死	
Bao	at	road	get-sick	die	

"Bao got sick and died on the road."

However, there are examples of both pre-verbal and post-verbal positions in the Han Dynasty and afterwards. Wang (1958) pointed out that it was not until the appearance of a pre-verbal locative phrase with a different word zài 在 which replaced yú that the locative phrases became predominantly pre-verbal. In Modern Standard Chinese, the typical position of locative phrases with zài is still pre-verbal.

By the time of the Northern and Southern Dynasties, major adjustments of word order in Chinese had already been completed, with all objects occurring after the verb and all locative phrases before the verb.

7.8 SPECIAL CONSTRUCTIONS IN VERNACULAR WRITING

Let's now focus on some special grammatical constructions and their changes in the post-Classical period using the theory of grammaticalization, or xūhuà 虛化 and yǔfǎhuà 語法化 in Chinese. According to Campbell (1999), grammaticalization refers to the process by which a lexical item becomes a grammatical item, or a less grammatical word becomes a more grammatical word. In general, a lexical item has concrete semantic content, while grammatical items tend to lack such concrete meanings and only have functions of various sorts. Another distinction between a lexical item and a grammatical item is that the latter is usually phonologically unstressed or reduced. Thus in the process of grammaticalization there will often be accompanying semantic bleaching and phonological weakening. Campbell (1999) uses the English future modal "will" as an example. Originally, "will" meant "want", as still can be seen in such idiomatic expressions as "if you will". But now "will" is generally used as a future marker as in "John will go to China this summer". Such uses of "will" can be contracted to forms like "I'll" or "you'll". In terms of the concrete ways by which grammaticalization happens, there are three major processes: reanalysis, extension and borrowing.

Reanalysis looks at the changes in the underlying structure, or the semantic relations, of a string of words without affecting the surface form of the words. Reanalysis means there is the possibility of multiple interpretations. Let's use an example similar to Campbell's (1999) to illustrate how reanalysis happens. For example, the verb "to go" as used in the following structure in Example 11 can be interpreted either as a motion verb or as having a purposive reading.

Example 11

John is going to work in China this summer.

Interpreted as a motion verb, Example 11 means that John will travel to China and work there. But the travelling also implies the purpose. Thus we have the purposive reading that John will travel to China in order to work there. Since the purposive reading is about what one plans to do in the future, it can be reinterpreted as a future marker to mean that John will work in China this summer.

A typical example of reanalysis can be readily found, in the post-Classical Chinese period, with the development of the copula sentence (comparable to English sentences with the verb "to be", such as in "John is a linguist"). In Classical Chinese, the equative sentence in the pattern "… (者), …也" is used to express the meaning of a copula sentence in Modern Chinese. Since the Modern Standard Chinese copula verb is shì是 as in "wǒ shì xuésheng" ("I am a student"), let's trace the use of the word shì in written records from Classical Chinese and post-Classical Chinese to see how it grammaticalized into its current use. Shì is originally a pronoun form of "this". See in Example 12 how the word shì is attached to a noun; it is used as a demonstrative pronoun.

Example 12

shì niǎo yě, hǎi yùn zé jiāng xǐ yú nán míng (The *Zhuangzi*)
是 鳥 也，海 運 則 將 徙 於 南 冥
this bird par. sea move then will move to south ocean

"When the sea is moved, this bird will remove to the Southern Ocean."

Another meaning of shì in Classical Chinese can be glossed as "that which is right", which contrasts with the word fēi 非 which means "that which is wrong", such as shown in Example 13. The word "shì" and "fēi" can be considered as antonyms.

Example 13

lì shì fèi fēi
立 是 廢 非
establish right abolish wrong

"Establish what is correct and terminate what is wrong."

Now let's observe the following sentence and figure out multiple interpretational possibilities.

Example 14

Zhī zhī wéi zhī zhī, bù zhī wéi bù zhī, shì zhī yě (The *Analects*)
知 之 爲 知 之，不 知 爲 不 知， 是 知 也。
know it is know it, not know is not know, this know par.

"When you know a thing, to hold that you know it; and when you do not know a thing, to allow that you do not know it; – this is knowledge." (trans. James Legge)

This quote comprises three smaller sentences. Let's focus on the third sentence "shì zhī yě", which is an instance of the equative sentence in the "… (zhě), … yě" pattern, with the zhě omitted here. The meaning here of "shì" is still the pronoun "this". Thus it means "this is knowing". The meaning of the copula verb "is" is derived from the factual partical yě. The two preceding sentences are what the pronoun "this" refers to. Let's do a more literal translation to show the structure a little bit more: "Knowing is knowing and not-knowing is not-knowing. This is knowing." To some extent, if we consider the whole quote as being a complex sentence, then the first part, i.e. "knowing is knowing and not-knowing is not-knowing" can be regarded as the subject, and the second part, i.e. "is knowing" which corresponds to "zhī yě" in the original Chinese sentence, is the predicate. The function of "yě" is translated here in English as the copula verb "is". Thus the word "this", or "shì" in the original Chinese is situated between the subject and the predicate, serving as a reiteration of the subject, as argued by Norman (1988: 125).

Now we have an alternative structural interpretation based on the common word order of SVO in Chinese. Since the word "shì" is situated between the subject and the noun part, i.e. "zhī" of the predicate "zhī yě", it can be reinterpreted as a verb with "zhī" as the object, taking over the equative meaning conveyed originally by "yě". Remember that shì and fēi are a pair of antonyms and that Norman (1988)

points out that their grammatical uses can be compared to each other. Note that in Classical Chinese the negative form of the equative sentence is formed by using the word fēi as the main verb, such as in Example 15:

Example 15

zǐ fēi wǒ (The *Zhuangzi*)
子 非 我
you neg. me

"You are not I."

By analogy to such uses of "fēi", the reiterative use of the pronoun "shì" in Example 14 can be reanalyzed as the opposite of "fēi", i.e. the copula "to be". Wang (1958) maintains that the copula use of "shì" can be attested as early as in the Han Dynasty, around the first century BCE, or towards the end of the Western Han Dynasty and the beginning of the Eastern Han Dynasty, although Xiang (1993: 326) points out that the copula verb "shì" appeared as early as towards the end of the Warring States Period. In Example 16 from the Han Dynasty, the subject is just a pronoun "he", and it does not need to be reiterated. There is also no particle at the end of the sentence such as the yě used in the equative pattern and so the "shì" can only be interpreted as a copula verb "to be".

Example 16

qí shì wú dì yú (*Shǐjì*)
其 是 吾 弟 與
he is my brother ques.

"Is he my younger brother?"

We can find many more similar examples after the Han Dynasty. The following two examples are both found in vernacular writing in the Northern and Southern Dynasties.

Example 17

wèn jīn shì hé shì (*Táohuāyuán Jì*)
問 今 是 何 世
ask now is what era

"They asked what era it is now."

Example 18

ěr shì hé rén (*Bǎi Yù Jīng*)
爾 是 何 人
you are what person

"Who are you?"

In both Examples 17 and 18, shì is situated between two nominal elements, and there is no particle yě at the end of the sentence. As for the negation of the copula sentence, there are examples from the Northern and Southern Dynasties using fēi 非or fēishì 非是, as shown in Examples 19 and 20.

Example 19

zhǔ fēi Yáo Shùn (*Shì Shuō Xīn Yǔ*)
主 非 尧 舜
master neg. Yao Shun

"The master is not Yao or Shun (legendary ancient rulers)."

Example 20

chén kǒng cǐ yào fēi shì zhēn yào (*Dūnhuáng biànwén jí*)
臣 恐 此 药 非 是 真 药
minister afraid this medicine neg. is real medicine

"I am afraid that this is not the real medicine."

But as early as the Northern and Southern Dynasties, búshì 不是 as the negative form of the copula sentence can be attested (Xiang 1993). Example 21 is from the Northern and Southern Dynasties. Example (22) is from the Tang Dynasty. In both sentences, búshì is used as the negation of shì, which is still the form of the negative copula in Modern Standard Chinese.

Example 21

fù	bú	shì	Fú Jiān	(*Sòng Shū*)
複	不	是	苻堅	
again	neg.	is	Fú Jiān	

"Moreover I am not Fú Jiān."

Example 22

yìng	dé	fúróng	bú	shì	huā	(from poem by Bai Juyi)
映	得	芙蓉	不	是	花	
reflect	comp.	hibiscus	not	be	flower	

"In comparison the hibiscus isn't a flower."

According to Xiang (1993), the copula verb shì in the Han Dynasty tended to be used in conjunction with the sentence final particle yě, although such copula sentences did not appear very often in the Han Dynasty. But starting from the Northern and Southern Dynasties, copula sentences with shì became much more common in writings with more vernacular elements. For example, Xiang (1993) shows that in *Shì Shuō Xīn Yǔ*, the number of copula shì sentences is equal to that of the Classical Chinese equative sentence. In the slightly later book, *Bǎi Yù Jīng*, a Buddhist scripture, the ratio of copula shì sentences reached 90 percent. Further, in later vernacular writings such as the biànwén, the copula verb shì is used more frequently and the sentence final particle yě disappeared as well.

The development of the copula verb shì in Modern Standard Chinese can be viewed as a typical example of reanalysis. Originally shì was used as a reiteration of the preceding subject, which allowed for an alternative interpretation as the copula verb. Then it became a real copula verb in sentences without the particle yě. This process is probably further related to the use of fēi as the negative form of the equative sentence in Classical Chinese. The analogy between fēi and shì might be a further contributing factor in the reanalysis of the word shì (Norman 1988). The negative form of the copula sentence was either fēi, fēishì or búshì, but búshì finally won out, probably due to the use of bù as a general negative word in Chinese (Xiang 1993). In this case, it can be said that the function of bù is extended to replace fēi, which leads to the second type of grammaticalization, i.e. extension.

Extension often follows reanalysis, which derives a new structure based on multiple possibilities of interpretation. The new structure can then be generalized or extended to other similar situations. According to Campbell's (1999) argument, the reanalysis as shown in Example 11 above derives the future structure "be going to",

which was originally only used with people as the subject where there was purposive connection. This future structure can undergo development on its own, further away from the original restriction to apply only to subjects of people. In sentences like "It is going to rain", the subject is extended to dummy subjects such as "it" which goes with verbs of natural phenomena. The structure "be going to" can even be applied to the verb "go", e.g. "I am going to go to France". Now let's use the passive construction formed by the word bèi 被 as an example to show how reanalysis and extension work together. The typical passive construction in Modern Standard Chinese is formed with the passive marker bèi. For example:

Example 23

Yuēhàn bèi lǎoshī pīpíng le.
約翰 被 老師 批評 了
John pass. teacher scold par.

"John was scolded by the teacher."

In such sentences, the passive marker bèi can optionally be followed by the agent. In Classical Chinese, there were various equivalent ways of expressing passivity as mentioned in Chapter 6, e.g. by using the passive marker jiàn 見. The word 被 bèi originally referred to "sleep cover, quilt". It can be used as a verb in Classical Chinese to signify that the event denoted by the verb is experienced by the subject. Moreover bèi in Classical Chinese cannot be followed by the agent as in Modern Standard Chinese. As early as towards the end of the Eastern Han Dynasty, sentences like Example 24 can be found where bèi is followed by the agent.

Example 24

Chén bèi Shàngshū zhào wèn (by Cài Yōng)
臣 被 尚書 召 問
minister pass. Shangshu summon ask

"I was summoned by the Shàngshū (a government official title) to answer some questions."

This example is the key to the development of bèi as a passive marker. At this point, there are two possible interpretations. If we treat "Shàngshū zhào wèn" as the event of "the Shàngshū summoning and questioning someone", then the word bèi can be understood in a similar way to the earlier Classical Chinese examples. Alternatively, the unit "bèi Shàngshū" can be formed first with the "Shàngshū" being interpreted as the agent. Therefore although the surface string of words has not

changed, the underlying structure of the sentence has. If, at this early stage, the agent does have an agentive meaning, the following example from the Tang Dynasty is quite different:

Example 25

bèi huā nǎo (from a poem by Du Fu)
被 花 恼
pass. flowers annoy

"(I was) annoyed by the flowers."

Here the agent is extended to inanimate objects such as "flowers". If we observe the examples with the bèi sentences that we have looked at so far, all of them have a negative connotation, meaning that the event that the subject experienced is not desirable and has a negative effect. This is true, to a large extent, even in Modern Standard Chinese. However, we can find written examples from the Ming and Qing Dynasties where such a restriction was relaxed and bèi could be used with non-negative connotations (Xiang 1993). The extension to cases with appreciative connotations can quite often be found in Modern Standard Chinese, such as that shown in Example 26:

Example 26

Yuēhàn bèi lǎoshī biǎoyáng le.
約翰 被 老師 表揚 了
John pass. teacher praise par.

"John was praised by the teacher."

The verb in Example 26 has an appreciative connotation in contrast to the verb "scold" in Example 23. Although such uses of bèi with appreciative verbs are still quite limited in Modern Standard Chinese, they are nonetheless further extensions of the passive construction. Such extensions might also be related to certain uses of the bèi construction that could be said to have been borrowed from European languages, which leads to the third type of grammaticalization called borrowing.

Grammatical structures are actually quite easily borrowed between languages. Campbell (1999) gives an example from Pipil, an Uto-Aztecan language in El Salvador, in which the pattern of comparison is definitely borrowed from the Spanish "mas … que …" The sentence in Example 27 is a typical comparison construction from Pipil:

Example 27

Ne siwa:t mas gála:na ke taha (Campbell 1999: 288)
The woman more pretty than you

"That woman is prettier than you are."

It is obvious that in Example 27 the Pipil "mas … ke …" is similar to the Spanish "mas … que …" both functionally and phonologically. Similarly, since the early twentieth century, Modern Standard Chinese has borrowed certain uses or structures from European languages, such as English. Such new uses are called Europeanized Chinese (Ōuhuà Jùfǎ 歐化句法). The bèi construction is used more and more often nowadays in cases that correspond to phrases in English.

To sum up the development of the bèi construction in Modern Standard Chinese, the word bèi originally meant "sleep cover" or "quilt" in Classical Chinese. It was used as a verb to mean that the subject experiences a certain event. At first it could not be followed by the agent but as early as in the Eastern Han Dynasty, examples of bèi followed by the agent could be attested. At this stage, the word bèi is reanalyzed as a passive marker. Then it was extended to include inanimate objects as the element that could follow bèi. In terms of the verb, there was originally a tendency to use verbs that have a negative connotation. But in more recent times, verbs with appreciative meanings can also be used in the bèi construction, albeit still limited in their use. Under the influence of European languages, such as English, bèi is used to translate certain passive constructions in other languages, thus further expanding the use of the bèi construction. Such new developments can also be considered a type of syntactic borrowing.

The bèi construction is one of two key grammatical constructions in Modern Standard Chinese, with the other being the BA-construction named after the structural word bǎ 把. The function of bǎ is to extract the object of a verb to the pre-verbal position and put the focus of the sentence on the verbal structure, rather than the pre-verbal object. For example, in Example 28 the sentence is in the normal SVO order, with the object fàn in the post-verbal position. The focus of the sentence can be the whole verbal structure "chī wán fàn le", meaning that "finish eating the food" is the new information of the sentence. In comparison, in Example 29, the object fàn is extracted by using bǎ. Now the focus is on the "chī wán le" part, meaning that the food is relevant in the context of the sentence and that what is conveyed by the sentence as new information is the completion of the consumption of the food.

Example 28

wǒ chī wán fàn le.
我 吃 完 飯 了
I eat finish food par.

"I have finished eating the food."

Example 29

Wǒ bǎ fàn chī wán le.
我 把 飯 吃 完 了
I top. food eat finish par.

"As for the food, I have finished eating it."

In Example 29, the "top." in the gloss is an abbreviation of "topic marker", which is one of the functions of the word bǎ. Originally bǎ把 meant "to grasp, to take" as attested in the Tang Dynasty. For example, Wang (1958) gave the following lines from poems by Du Fu:

Example 30

zuì bǎ qīng hé yè
醉 把 青 荷 葉
drunk grasp green lotus leaf

"Grasping a green leaf of lotus while being drunk."

Example 31

zuì bǎ zhūyú zǐxì kàn
醉 把 茱萸 仔细 看
drunk grasp silverberry carefully look

"Grasping a branch of silverberry and taking a good look at it."

In Example 30, the word bǎ is the only word that could be the verb of the sentence. In Example 31 there are two verbs, i.e. bǎ and kàn. But in this case, the focus of the sentence is on the second verb. Therefore, bǎ could be reanalyzed to be something other than a verb. Since both sentences are from the same poet, the two uses of the word bǎ could both be verbs. But a possible reanalysis of the structure in Example 31 gives rise to a BA-construction. Before the Tang Dynasty there were no equivalent constructions to the BA-construction. It is generally argued that it originated in the Tang Dynasty.

We have looked at three special constructions in the post-Classical era. In the remaining section of this chapter, we will look at two related verbal compounds. The first one is the verb-resultative structure in Modern Standard Chinese. For example, the verbal structure chīwán mentioned in Examples 28 and 29 is such a verb-resultative structure, in which the second component wán is the result of the preceding verb. According to Xiang (1993), such verbal structures can be found as early as the Warring States period, but became more common in the Han Dynasty. Examples such as dǎhuài 打壞 ("hit+broke→ break"), kànjìng 看竟 ("look+finish→finish looking") are from this period. Xiang (1993) further points out that if an object is needed, there are two possible combinations. One type of such verbal construction is called a "coordinate structure"; for example, "jī ér shā zhī" (擊而殺之, "hit and kill him") from the *Zuǒ Zhuàn*. "jī" and "shā" are two verbs connected by "ér" ("and"). If the "ér" is omitted, then the object will follow the verbal structure as in "jīshā zhī". Another type of such verbal construction is originally called a "pivot structure"; for example, "chāi lóng pò" (拆籠破, "tear cage break") from a poem by Bai Juyi, in which the noun "lóng" ("cage") is both the object of the preceding verb "chāi" ("tear") and the subject of the following verb "pò" ("break"). In such structures, if the second verb, "pò", switches positions with the noun, "lóng", then verbal-resultative structure is derived, i.e. chāipò ("tear down").

The second structure is the perfective aspect marker -le 了 in Modern Standard Chinese. The basic function of -le is to indicate that the event denoted by the verb is complete, hence the name "perfective aspect marker". For example in Modern Standard Chinese:

Example 32

wǒ	kàn	le	liǎng	gè	diànyǐng.
我	看	了	兩	個	電影
I	watch	perf.	two	cl.	movie

"I watched two movies."

The word -le is not a past tense marker, since it can be used in a future context as well. In Classical Chinese and early vernacular writing, the meaning of completion was expressed by either adverbs or verbs that had a sense of completion. According

to Xiang (1993), the verb of completion liǎo 了, among a few others, was attested as early as the Han Dynasty, e.g. shí liǎo 食了 ("eat+complete"). But it was during the Tang Dynasty that liǎo became more common in vernacular writings such as the biànwén. At first, liǎo still followed the object, e.g. chī fàn liǎo 吃飯了 ("eat+food+complete"). Then liǎo gradually switched positions with the object, an analogical change comparable to the movement of the resultative next to the verb (Mei 1981). By the Song Dynasty, the word liǎo had moved to a position after the verb, becoming a perfective aspect marker, just as in Modern Standard Chinese. The development of the verb liǎo to become a grammatical perfective aspect marker is a typical example of the process of grammaticalization. As we pointed out earlier, along with the grammaticalization process, there is often an accompanying semantic bleaching and phonological weakening. Semantic bleaching of the verb liǎo is obvious. In terms of phonological weakening, the pronunciation of the word in Modern Standard Chinese has been reduced from liǎo to le. This -le is attached to the verb as an extra unstressed syllable.

We have now sketched out the development of grammar in the post-Classical Chinese period (of course our descriptions here focused only on a few representative structures). In the next chapter, we will talk briefly about the changes in vocabulary.

CHAPTER 8

In other words

Vocabulary change

When we read texts written by ancient people, the words may have had different meanings and the interpretation of ancient texts is full of uncertainties. In other words, ancient people might have talked "in other words". In this chapter we will describe vocabulary change in Chinese.

Some basic words in any language remain more or less unchanged in meaning throughout time, e.g. fēng 風 ("wind"), yǔ 雨 ("rain"), jī 雞 ("chicken"), mǎ 馬 ("horse") in Chinese. But major and subtle semantic changes are more of the norm. Generally speaking, the meaning of a word can be extended, narrowed or shifted. In traditional Chinese linguistics, the concept called yǐnshēn 引申 ("to extend") is used as a general way of meaning change.

8.1 EXTENSION OF WORD MEANING

Let's see a few examples of extension. In Chapter 2, it is mentioned that the words jiāng and hé were originally proper names for the Yangtze River in the south and the Yellow River in the north respectively. But they became general terms for rivers very quickly, with earliest examples such as sān jiāng ("three rivers") and jiǔ hé ("nine rivers") from the pre-Classical era such as Shàngshū. Even in Modern Standard Chinese, both terms are still used primarily as a general word for river. Interestingly, the names of rivers in the south are predominantly called "… jiāng", while the rivers in the north are predominantly called "… hé", although there are some major exceptions, e.g. the Hēilóng Jiāng and many other rivers in Northeastern China. The original meanings of these words can still be seen in set phrases such as jiāngnán (south of the Yangtze River) or Hénán (the name of the Henan Province which is mostly located to the south of the Yellow River).

Location words such as shàng (上, "top"), xià (下, "bottom"), qián (前, "front") and hòu (後, "back") can be extended to temporal senses. For example, shàng and qián can refer to time in the past, such as in shàng xīngqī (上星期, "last week") and qiántiān (前天, "the day before yesterday"), while xià and hòu can refer to time in the future, such as xià xīngqī (下星期, "next week") and hòutiān (後天, "the day after tomorrow").

The word for "the sun" is rì 日 in Classical Chinese. It is naturally extended to the notion of "day", although both words were further replaced in Modern Standard Chinese, i.e. tàiyang 太陽 for "the sun" and tiān 天for "day", while the word rì 日 is

mostly preserved in compound words, e.g. jiàrì (假日, "holiday, vacation"), xīngqīrì (星期日, "Sunday"), etc. Similarly yuè 月 ("the moon") was also extended to the notion of "month", since the traditional Chinese calendar is based upon cycles of the lunar phase.

Another example is the words chì 赤and hóng 紅, both of which are related to the color "red". Originally the word chì, which was considered to be the color of fire, was the general term for the color "red". Different shades of red could all be called chì, with zhū 朱 being the brightest shade and hóng referring to the very light, pinkish red color of silk. Later on, hóng became a general term for all shades of red, and we find compound words such as dàhóng ("big red"), fěnhóng ("pinkish red"), qiǎnhóng ("light red") and shēnhóng ("dark red") in Modern Standard Chinese. The words chì and zhū are still retained as bound morphemes such as in chìzì (赤字, "deficit") and zhūhóng (朱紅, "bright red"). Besides the meaning of "red", chì was also extended to refer to the color of new-borns, thus the term chìzǐ (赤子, "newborn"), which is further extended to the people of a country. The idiom chìzǐ zhī xīn (赤子之心, "a newborn's mind") is attested in the *Mencius*. The word chì also became part of adjectives such as chìchéng (赤誠, "very loyal"). Another route of extension of this word has a connection to exposing all, such as in chìshēn (赤身 "bare + body→nude"), chìjiǎo (赤腳 "bare + foot→barefooted"), chìshǒu (赤手 "bare + hand→barehanded), chìdì (赤地 "bare + land→barren land"), etc.

The word bǐ 筆 is used as a general term for writing tools such as pens, pencils and brushes in Modern Standard Chinese. But originally it referred to ink brushes made from bamboo. Such ink brushes remained the major type of writing tool in China until the twentieth century when it was gradually replaced by modern types of pens and pencils. Eventually the diversification of writing tools extended the meaning of bǐ to a general term. Similarly the English word "pen" originally meant "feather", referring to quill pens, and is now used to refer to a specific type of writing tool (Campbell 1999).

8.2 NARROWING OF WORD MEANING

Word meaning can be narrowed as well. Wang (1958) gives a few such examples. The word chóng 蟲 was originally a general term for animals including animals and fish. But nowadays it refers to only certain insects, worms and bugs. In the vernacular writing of the Early Modern Chinese period, another word for "tiger" is "dàchóng" (大蟲), in which dà means "big". Interestingly there is a parallel development in English with the word "deer", which originally referred to all kinds of animals in Old English, with the spelling "dēor".

The word tāng 湯 originally meant hot water or a hot type of liquid food, e.g. soup in Classical Chinese. But in Modern Standard Chinese, only the second meaning is still retained. Interestingly the "hot water" meaning is still retained in Japanese.

8.3 SHIFTING OF WORD MEANING

In Modern Standard Chinese the word zǒu 走 means "to walk" or "to leave", but in Classical Chinese it meant "to run". The modern meanings should have been derived from the original meaning "to run", but it is neither a case of extension nor narrowing and the meaning has been shifted to a related one. According to Pan (1989), the meaning of "to leave" can be attested as early as the Warring States period, while the new meaning of "to walk" did not appear until the Northern and Southern Dynasties. The original word xíng 行 for "to walk" in Classical Chinese is still retained in many southern dialects, such as Cantonese. In the north, the meaning "to run" is taken over by a new word "pǎo" (跑).

The word for "lower leg" in Classical Chinese is jiǎo (腳), and the word for "upper leg, thigh" is gǔ (股). But the meaning of jiǎo later shifted to refer to "foot", replacing the original Classical Chinese word zú (足). With such changes, a new word tuǐ 腿 was created as early as in the Northern and Southern Dynasties to refer to the lower leg, the original meaning of the word jiǎo (Xiang 1993). The new word tuǐ later was extended to refer to the whole leg. In Modern Standard Chinese the compound words dàtuǐ 大腿 and xiǎotuǐ 小腿 can refer to the upper leg and the lower leg respectively. The original words gǔ and zú are used in Modern Standard Chinese mostly as morphemes in compound words or idioms such as gǔgǔ (股骨, "thigh bone"), zúqiú (足球, "soccer"), etc.

8.4 SUBSTITUTION OF LEXICAL ITEMS

Besides word meaning changes through extension, narrowing and shifting, new words can be created and eventually replace older terms. After the substitution, older terms can nonetheless be preserved in compound words, idioms, or simply as obsolete terms used in special contexts. Let's see a few interesting examples.

In Classical Chinese, according to Wang (1958), the word for "face" is miàn 面. In late Northern and Southern Dynasties, a new word liǎn 臉 appeared to refer primarily to the cheeks until it replaced the earlier word miàn to refer to "face" in the Tang Dynasty. In Modern Standard Chinese, liǎn is still the primary word for "face", while "miàn" is preserved in compound words such as miànzi (face) which is used in a metaphorical way. Citing Mao (1994), Sun (2006) pointed out the difference between the connotations of liǎn and miànzi in the Chinese culture. Liǎn emphasized the respect that one receives in the community in terms of one's conformity to social and moral norms. Miànzi emphasized the public recognition of one's social prestige, influence, or reputation. The term "yǒu miànzi" (have + miànzi) is usually used to mean that one is well-respected and somehow treated preferentially due to one's social prestige or rank. In this case, the word "lian" cannot be substituted for "miànzi". Conversely, the common phrase "diū liǎn" ("lose face") is often used when one has done something that is not approved by social and moral norms. Similarly in this phrase, the word "miànzi" will not be used. Apparently, the cultural importance of the metaphor of "face" is so important in the Chinese culture that it was borrowed

into the English-speaking communities in China, and eventually into the general English vocabulary (for example, in phrases such as “lose face” and “save face”).

Similarly many words for facial features have also changed. For example, the word for “eye” was mù 目 in Classical Chinese, and yǎnjing 眼睛 in Modern Standard Chinese. The word for “mouth” was kǒu 口but has changed to zuǐ 嘴. But of course the terms for “eyebrows” (méi 眉), “nose” (bí 鼻) and “ears” (ěr 耳) have not changed much. They were monosyllabic words in Classical Chinese, but in Modern Standard Chinese the original words became morphemes in the corresponding compound words, i.e. méimao (眉毛), bízi (鼻子), ěrduo (耳朵).

The word for “chopsticks” is “kuàizi” (筷子) in Modern Standard Chinese, although the original word is zhù (箸). Norman (1988) cites a written record in the Ming Dynasty that said the word zhù 箸 sounded the same as another word which means “to stop, to stay”, and therefore for people who made a living on boats it was not a welcome association in meaning. However the word for “fast” is kuài 快 and a new word and a new character were created to replace the word 箸. This new word kuài 筷 was eventually distributed to most dialectal areas in modern China.

8.5 MIXED CHANGES IN WORD MEANING

We have discussed changes such as extension, narrowing, shifting and substitution. But in many cases it is not just one type of change in action, but rather a combination of these four different types. For example, in the changes to the words for “foot” and “leg”, it is actually change in both shifting and substitution. Here is an example of narrowing and shifting: the development of color terms related to the color “blue” is also quite interesting. The Classical Chinese word qīng 青 is a general term for “blue”, but the actual reference ranges from bordering the color “black” to the color “green”. There are terms like “qīngyī” (青衣 ”black+clothes→clothes in black”), “qīngtiān” (青天, “blue sky”) and “tàqīng” (踏青 “tread+green→a short excursion out of town in spring”). In Modern Standard Chinese, qīng primarily refers to a type of blue similar to indigo. The modern general term for blue is lán藍, which originally refers to a type of grass used as a dye which can produce colors from green to blue. The modern term for green is lǜ 綠, which originally refers to the color of a certain fabric, considered to be a mixture of blue and yellow. Another term bì碧, originally referring to green jade stones, was also used as a color term for green in Classical Chinese, but not anymore as the modern term for green. The term hēi黑 has not changed much from its original meaning as the color “black”. There is another related color zǐ (紫, “purple”), which has not changed much in its basic meaning. The color zǐ was used as the color of clothing for emperors and government officials of high rank in the past and it was extended to refer to things related to the emperor, such as the name of the Forbidden City (Zǐ Jìn Chéng 紫禁城) which literally means “Purple Forbidden City”. The color purple was also the preferred color in the Daoist religion and by its association with royalty and Daoism, the color zǐ was further extended to mean “auspicious”, such as zǐqì (紫氣, “auspicious signs”).

The meaning changes here involve the extension of lán and lǜ to take over the meaning of blue and green, the narrowing of qīng from a general term for blue to a subtype of blue, the substitution of lǜ for bì as green, and also the extension of zǐ to mean "royal" and "auspicious".

The other basic color terms, such as bái (白, "white") and huáng (黃, "yellow") have not changed much. Previously we also talked about the extension and substitution of the color hóng for chì. The development of color terms as used in ordinary language is a fascinating topic on its own.

8.6 LEXICAL CHANGES DUE TO EUPHEMISM AND TABOO

There are other types of changes in the vocabulary, such as changes due to taboo and euphemisms. For government officials to retire from their imperial positions in the past, the word guītián 歸田, literally meaning "return to the fields", was commonly used. A type of taboo called bìhuì 避諱 (literally meaning "avoid") was a unique way of creating new words in the past in order to avoid using certain words out of respect to certain classes of people, such as the emperors, superiors, seniors, and the deceased. For example, if the emperor's name contained a certain character, to use the character would be considered disrespectful, comparable to calling the emperor by his name. Thus the same character used in certain words in the language needed to be replaced by another that had a similar pronunciation or a similar meaning. Since the emperor was the highest ruler, to whom everyone had to pay the highest respect, changes made to words out of respect for the emperor would definitely affect the use of the word in the language for all speakers. The word zhìjī (雉雞, "pheasant") was changed to yějī (野雞) during the Han Dynasty, because Empress Lü's given name was zhì 雉. Although the original word would definitely be reinstated after the fall of the relevant ruler or dynasty, the newly coined word would have already gained currency in the language. Nowadays, the formal term for "pheasant" is still zhìjī 雉雞, although in colloquial usage the word yějī 野雞 is more often used. Pan (1989) gives another more interesting example. The lunar goddess Cháng'é 嫦娥 in Chinese mythology was originally called Héng'é 姮娥, but because the Emperor Wen of the Han Dynasty had a similar character, huán 桓, in his name, the character héng 姮 in 姮娥 was changed to cháng 嫦. In modern times, Cháng'é is still the standard name for the lunar goddess and the original name, Héng'é, is not used. In other cases, characters used in standard versions of books such as the Confucian Classics would have to be replaced to avoid using the character in the emperor's name at that time. Such changes would lead to different versions of the same sentence in the book in later stages. For scholars in later times it would be necessary to know why the original character was changed, in order to understand the real meaning of the relevant sentence.

8.7 BORROWING: LOANWORDS AND CALQUES

All of the above-mentioned changes in the vocabulary would give rise to new words in many cases. But the major source of new words is borrowing. In Chapter 2, we saw that words such as jiāng (江, "river"), gǒu (狗, "dog"), and hé (禾, "rice plant") were borrowed into Chinese from Austroasiatic, Miao-Yao and Kam-Tai languages in ancient times. If in pre-Classical times the major borrowing was between Chinese and the bǎiyuè 百越 languages in the south, in the Han Dynasty the main source of borrowing had shifted to the north and to the west. Pan (1989) shows that the word for "camel" luòtuo 駱駝 in its current form appeared in the Tang Dynasty, but it was borrowed into Chinese in different forms as early as the Classical period from languages of non-Han people to the north. According to Luo (2003) the word for "grape" pútao (葡萄, Old Chinese *bagdəg^{w} in Li's system, or *badu in Wang Li's reconstruction) was borrowed from the Proto-Iranian word *budāwa or *buðawa. The Persian word for "wine" is still "bade", which might be related to the ancient root morpheme for "grape". According to historical records, the Emperor Wu of Han sent Zhang Qian as an envoy to countries to the west of the Han Empire in the second century BCE. He brought grapes and alfalfa back to China from a country called Dà Yuān 大宛 in Central Asia. The word for alfalfa is mùxū (苜蓿, Old Chinese *muatsjək^{w}) which is related to the proto-Iranian word *buksuk, *buxsux or *buxsuk. But of course sometimes words can be borrowed back and forth between two languages. A famous example is the word bóshì 博士 which was originally used for certain government positions and also referred to an erudite person. The use of bóshì in such senses can be traced back to Classical Chinese. Much later it was borrowed into Mongolian to mean "teacher". During the Yuan Dynasty, this word was borrowed back into Chinese in a different form, bǎshi 把式, to mean a person with certain manual skills. The same Mongolian word was also borrowed back as bǎxi 把戲 to mean "small tricks". In Modern Standard Chinese, bóshi is used primarily as a degree title equivalent to the doctorate, while bǎshì is still used to describe a skilled person of a certain profession and bǎxi is also used to mean "small tricks". In Chapter 2, we have also mentioned Mongolian loanwords in Chinese such as the word for "station" (zhàn 站).

Since Buddhism was introduced into China during the Eastern Han Dynasty, many Sanskrit terms were successively borrowed into Chinese either directly or indirectly through other ancient languages such as Tocharian. When borrowing a word from another language the original word can be used with some phonological adaptations. Let's call such borrowed words "loanwords". The earliest loanword of the word "Buddha" was fútú 浮屠 from the Eastern Han Dynasty. We mentioned in previous chapters that loanwords from Sanskrit to Chinese can be very useful when studying the sounds of Chinese when these terms were borrowed. Here we see that the modern pronunciation of the word fútú has the sound f-, which corresponds to the original sound b- in Sanskrit. This reminds us of Qian Daxin's claim that there was no labiodental sound in Old Chinese. Thus it is further confirmed by this correspondence between f- and b-. Also if we look at the second consonant in the word "Buddha" which corresponds to the pinyin "t" in modern pronunciation, it is reasonable to

assume that this "t" was originally a voiced consonant such as "d" or "dh" in Late Old Chinese. In the Northern and Southern Dynasties, the word for Buddha was also written as fótuó 佛陀, or simply fó 佛. The correspondence between the rime of the second syllable, i.e. -uo and the Sanskrit vowel -a can tell us that in Middle Chinese, the pronunciation of 陀 must have been more like the "a" in "Buddha".

According to Pan (1989), the very common colloquial word chànà 剎那, meaning "an instant, a very short time", came from the Sanskrit "ksana". Even the name of the jasmine flower, mòlì 茉莉, was borrowed from the Sanskrit "mallika". Such examples are abundant in the Chinese language. But this type of borrowing based on sounds is not the best way of borrowing, since each Chinese character has a meaning and native speakers want to understand how the meaning of the whole word is related to those of the characters used. Thus another type of borrowing called loan translation or calque is quite often used in Chinese. A calque is a new word coined by using a word-for-word translation; the meaning is borrowed, but the shape of the words is not. For example, in many languages, the word for railway is based on the same meaning, such as the French "chemin de fer" ("road of iron") and the Chinese tiělù 鐵路 ("iron+road"). Many such calque words were created to translate concepts from Sanskrit to Chinese, such as shìjiè (世界, "world"), xiànzài (現在, "now"), píngděng (平等, "equality"), xìnyǎng (信仰, "belief"), etc. Sometimes a mixed borrowing is also used. Pan (1989) gives the example of the word for "apple" píngguǒ 蘋果, which was based on the Sanskrit word "bimbara". The first syllable in the Chinese word, i.e. píng, corresponds to the "bim" in the Sanskrit word, and then the Chinese word for fruit, i.e. guǒ 果, is added to make it clearer.

8.8 CLUES TO MEANING CHANGE IN CHINESE CHARACTERS

Since Chinese characters, in many cases, encode information of the meaning of the word that they represent, a study of the composition of the characters can reveal a great deal about the original meaning of the word. Take xí 習, as used in words like xuéxí (學習, "to study") and liànxí (練習, "to practice"). There is a component of "wings" as the top part of the character, i.e. the 羽 component. It seems quite unrelated to the meaning of "study" or "practice". But originally the word xí 習 did mean "(of young birds) to flap the wings in order to learn how to fly". In the *Book of Rites*, we find the following sentence yīng nǎi xué xí (鷹乃學習, "hawk then learn fly") meaning "the young hawks then learn to flap their wings". The modern word for "study" is also xuéxí 學習, but it is probably a compound verb using xué (學, "to study") and xí (習, "to practice, to review"). The word xuéxí 學習 in the sense of "to study" is attested as early as in the Han Dynasty.

In this chapter, we have explored the ways the meanings of words have changed, the sources of new words and the importance of the information encoded in Chinese characters when we study meaning change. This means we have now finished the major part of our discussion of the historical development of the sounds, grammar, and vocabulary of the Chinese language up to pre-modern times.

CHAPTER 9

One for all

Modern Standard Chinese

So far in the previous chapters we have traversed thousands of years in the history of the Chinese language and culture. It certainly feels like a long journey. Finally we are on the doorstep of modernity. In this chapter we will discuss how Modern Standard Chinese was created, what linguistic features it has and how it is related to the earlier stages of the language.

9.1 THE CREATION OF THE NATIONAL LANGUAGE

Towards the end of the nineteenth century, China experienced a series of internal and external crises which spurred scholars and imperial officials to ponder on the question why China had lagged behind the Western world so much in the preceding three centuries, even though ancient China was a leading civilization in the East for a long time. Some scholars thought that one reason for China's backwardness was the low level of literacy in the whole country, and that illiteracy was a major hindrance to the development of modern society. An immediate concern, therefore, was to lower the illiteracy rate by, on the one hand, carrying out linguistic reforms to build a national spoken language and a corresponding written language and, on the other hand, to change the writing system to facilitate learning and education.

As has been pointed out earlier, in Chapters 6 and 7, for nearly two thousand years, Literary Chinese, which is based upon Classical Chinese, was used as the official written language from the end of the Eastern Han Dynasty. This situation is comparable to the use of Latin in Medieval Europe. Imagine what it would be like for a modern-day English speaker to write in Latin. For all Chinese speakers in the early twentieth century, no matter which variety of Chinese they spoke, Literary Chinese represented an entirely different stage of the language, one that required extensive training to master. It was probably not difficult to make a connection between the use of Literary Chinese and the low literacy rate of the country at that time, although Literary Chinese was probably not the only cause of illiteracy. Another disadvantage of using Literary Chinese was that it is modeled on an obsolete language, the grammar of which could not be completely grasped and imitated by modern speakers. Because writings in Literary Chinese tend to present problems when it comes to lucidity and clarity, Literary Chinese was considered to be the major obstacle in achieving literacy, education and modernization.

In the early twentieth century, major political changes took place in the country with the overturn of two thousand years of imperial dynasties and the establishment of a new political system based on the republic model. Building on previous efforts to reform the written language, many scholars in the new republic advocated the use of the vernacular writing as the basis for a new written language that corresponded, more or less, to the spoken language. One of the key figures in the so-called "New Culture Movement" was Hu Shih (1891–1962). Like most educated people of his times, Hu Shih received a typical classical education during his younger years. In 1910, at 19 years of age, he was sent to the United States to study agriculture at Cornell University on a special scholarship. He subsequently changed his major to philosophy and literature, and went on to do a doctoral degree in philosophy with John Dewey (1859–1952) at Columbia University in 1915. At the beginning of 1917, he published an essay in the magazine *New Youth*, the literary bastion of the New Culture Movement, to call for reforms in the literary language by liberating the written language from the restricting and impractical rules of unnecessary archaisms prevalent in Literary Chinese writings. Upon returning to China later that same year, he not only advocated the use of vernacular writing but also composed literary pieces to set examples for others.

Vernacular writings such as those during the Ming and Qing Dynasties were written in the de facto common spoken language based on the dialect of the capital area (e.g. the Beijing Dialect in the Qing Dynasty). As mentioned earlier, throughout the history of Chinese there has always been a de facto common spoken language comparable to a lingua franca or *koine*. But as Chen (1999) points out, this common language was a rather vague, attitudinal and unofficial type of language, used in polite society or for cross-dialect communication. For most of its history, there was no conscious government effort to establish schools to teach a standard system for the pronunciation of this spoken language. The earliest official attempt to teach a spoken language was initiated by Yongzheng, Emperor of the Qing Dynasty, in 1728. He established schools in the Fujian and Guangdong areas to teach them Beijing Mandarin. Previously, before this policy was implemented, when officials from these areas reported to him in the imperial court he always had great difficulty understanding them because of their heavy accent. Therefore in order to facilitate his rule of the empire, down to even the remotest corners, he wanted people to learn to speak Beijing Mandarin. If someone was not able to pass the Mandarin language examination, he would not be allowed to participate in the imperial examination for a position in the imperial government. Although such efforts were met with great enthusiasm initially, the local schools soon fell out of fashion. It was not until the late Qing era, in 1909, that Beijing Mandarin was specified as the National Language (Guóyǔ) by the government of the Qing Dynasty, which was then already on the verge of collapse.

After the founding of the new Republic of China in 1912, the base dialect of a new national language became a thorny issue. Since the imperial power of the Qing Dynasty was abolished, Beijing Mandarin became just one of the possible candidates for the national language, alongside such prestigious dialects as Shanghai, Nanjing

and Wuhan. In 1913, the new government called for a national conference with representatives from various provinces, led by a committee of linguistic experts, to decide on the standards for a new national language. After extensive debating and voting, Beijing was chosen as the base dialect, but compromises were also made to include certain features that existed in other dialects but not Beijing. The conference decided on the standard pronunciation for around 6,500 commonly used Chinese characters. These standard pronunciations of Chinese characters were called the Old National Pronunciation (Lǎo Guóyīn). As a result of the compromises, the new standard pronunciations created an artificial language which would be very hard for anyone to use. The Middle Chinese rù tone, or the entering tone, which was originally associated with syllables ending with the consonants -p, -t or -k disappeared in Early Modern Chinese with the loss of the final consonant in Beijing Mandarin and most other Mandarin dialects, although it was still retained completely in Cantonese and to some extent in various other southern dialects. Amongst other things, the new standards included a tonal category for words which used to belong to such syllables, but for people whose dialects did not have such syllables it was impossible for them to make real distinctions. Even if one had extensive knowledge of the older features of the Chinese language, or contemporary Chinese dialects, how would one combine features from different stages or varieties of the language?

This system of pronunciation of the national language was published by the government in the form of a dictionary with annotations for the pronunciations of each character in 1919. The following year, the government promulgated this system of pronunciation across the country, especially in elementary schools, by abolishing the teaching of Literary Chinese and beginning to teach vernacular Chinese. However, the artificial nature of the Old National Pronunciation prompted many scholars to favor a system of pronunciation based on the real pronunciations of Beijing Mandarin, while others still argued for a hybrid system like the Old National Pronunciation in which the differences between Mandarin dialects and southern dialects were taken into consideration. The debate on the standard pronunciation of the national language continued for most of the 1920s. In 1926 a consensus to adopt Beijing Mandarin pronunciation exclusively as the standard was reached among the members of the committee in charge of the unification of the national language under the Ministry of Education of the Republic of China. This new system of pronunciation was called the New National Pronunciation (Xīn Guóyīn). When the Ministry of Education published a new edition of the dictionary of commonly used characters in 1932, the New National Pronunciation was finally officially adopted as the phonological basis of the National Language.

According to Chen (1999), the adoption of vernacular Beijing Mandarin pronunciation as the official phonology of the national language was especially significant in that for the first time in the history of the Chinese language real vernacular pronunciation gained prestige over literary pronunciation. In the past, when rime dictionaries were composed based upon a certain, de facto, common spoken language, the purpose of the composition of these dictionaries was primarily to set a standard for reading and pronouncing characters. Such a literary system

would incorporate certain older features that were considered to be more "correct" than the actual vernacular pronunciations. Therefore the new pronunciation system was not just a product of linguistic reform, but it should also be regarded as an indication of the determination of the people and government to modernize China.

So far, after decades of debates, linguistic research, and government efforts, the new national language had its standard pronunciation based on Beijing Mandarin and vernacular writing had been adopted as the written language. But this is only half of the story. Even though the standard pronunciation had been chosen, the problem continued to be how to indicate such pronunciations so that they could be taught and learned more efficiently and effectively. And even though vernacular writing was the written language, there continued to be the problem of what written symbols should be used to write down such vernacular words.

From the earliest written records, characters have always been used as the only official writing system in China. The most peculiar feature of Chinese characters, in comparison to the English alphabet and other similar writing systems, is that the characters do not directly represent, or are not directly associated with, any particular or fixed sound. Although the majority of Chinese characters contain cues to their pronunciation, the whole system is still not a phonetic writing system. Throughout the history of the Chinese language, scholars and annotators have invented different ways to indicate the pronunciation of a character, e.g. the fǎnqiè system. Alongside the movement to establish a standard for the new national language, various scholars created new ways to indicate the sounds of Chinese that would be more accurate than the fǎnqiè. In the Old National Pronunciation of 1913, a phonetic annotation system called Zhùyīn Zìmǔ (Letters for Phonetic Annotations), which was based on previous twentieth-century versions, was used as the official phonetic script to annotate the sounds of the characters. The new phonetic symbols were based on older Chinese characters that have very few strokes. Each of these symbols corresponds to one sound, or one fixed combination of sounds, and each sound or combination is represented by one symbol. Table 9.1 shows a few examples of Zhùyīn Zìmǔ together with the Romanized phonetic symbols in pinyin used now for Modern Standard Chinese.

Since the Old National Pronunciation included both Beijing and non-Beijing sounds, these phonetic letters were used to represent both types of sounds. The non-Beijing sound symbols were subsequently removed from the system when it was used to represent the New National Pronunciation. This updated system was renamed Zhùyīn Fúhào (Symbols for Annotating Sounds) in 1930 and was used alongside a Romanized script called Guóyǔ Luómǎzì (Romanized Symbols for the National Language) in the dictionary published by the Ministry of Education in 1932. That brings us to the second issue mentioned above about the writing system itself.

Table 9.1 Examples of Zhùyīn Zìmǔ

Zhùyīn Zìmǔ	ㄅ	ㄆ	ㄇ	ㄈ	ㄚ	ㄠ	ㄨ	ㄡ
Pīnyīn	b	p	m	f	a	ao	o	ou

Admittedly, it takes a long time for anyone to acquire proficiency in reading and writing Chinese characters. During the early twentieth century, many scholars blamed Chinese characters for the problems in literacy, education and, ultimately, with the modernization of China. One of the most influential scholars was Qian Xuantong (1887–1939), a renowned philologist and linguist who was well versed in the classics of traditional Chinese culture. In an article published in the magazine *National Language Monthly (Guóyǔ Yuèkān)* in 1923, he called for a "revolution of the Chinese writing system" to replace Chinese characters with a phonetic script like that used in Western countries, because, according to him, Chinese characters represented an old era and were not fit for the modern world. Qian was among those who, in 1926, designed the Romanized script Guóyǔ Luómǎzì, or gwoyeu romatzyh, the spelling of its name in the new script itself. Although it was used in addition to the Zhùyīn Fúhào in the dictionary of 1932 to annotate the pronunciation of characters, it was designed to be a fully functional writing system which would ultimately replace Chinese characters. However, Guóyǔ Luómǎzì was not widely used at all, partly because it was too complicated to be practical or easy to master.

Lādīnghuà Xīn Wénzì, or Latinxua sin wenz, the only Romanized script that has ever been implemented in practical literacy movements on a large scale, was designed by Chinese communist scholars together with Soviet linguists in the Soviet Union. The design was started in 1928, in Moscow, and was established in 1931 to be used to teach the 100,000 Chinese workers in the Soviet Far East to read. Later, in the early 1940s, it was introduced to the Communist controlled areas in China.

Replacing Chinese characters completely with a Romanized script has always received strong criticism and opposition from the general public who expressed concerns centering on both its practicality, cultural identity and continuity. It was a more realistic goal to simplify Chinese characters first and then see how this would lead towards romanizing the language eventually. In the early 1920s, Qian Xuantong proposed a set of principles to simplifying Chinese characters and he also showed how simpler forms had always been used by the people as an unofficial alternative to the more complex traditional characters.

After the founding of the People's Republic of China in 1949, the government took a series of measures to promote a national language, a system of simplified Chinese characters and the use of a new Romanized script called pinyin. In 1956, the national language called Pǔtōnghuà (Common Speech) was officially established. According to the definition of Pǔtōnghuà, the pronunciation is based on that of Beijing, the grammar is based on exemplary vernacular literary works such as those written by Lao She (1899–1966), and the vocabulary is based on words generally within the Mandarin dialect group. The national language Guóyǔ in the Republic of China era was brought to Taiwan in 1949 and continues to be used and regulated there. Essentially these two varieties of Modern Standard Chinese are based upon the same criteria, with some differences in the details in pronunciation, grammar and vocabulary. Since they took different paths of development after 1949, the differences between these two systems are gradually increasing. In 1956, a set of simplified Chinese characters was promulgated by the government of the People's

Republic of China and it was distributed immediately to the whole country in an effort to eradicate the illiteracy which was extremely common in rural areas.

Although Qian Xuantong's proposal to simplify Chinese characters was ultimately unsuccessful due to vehement oppositions from conservative forces, and traditional Chinese characters are still used in Taiwan today, the PRC government was very determined to implement, in stages, the simplified characters. The set of 1956 was only the first step, which was followed by a second set of further simplifications in 1977. However, due to oversimplifications in the second set it was revoked in 1986, although a number of these further simplified characters had already been in popular circulation. Today, most educated speakers of Chinese need to be able to read both simplified and traditional Chinese characters and to write at least one type. Although there have always been calls from scholars to revert back to the traditional Chinese characters, the use of simplified Chinese characters will probably continue in the same way as it does now.

The Internet age ushered in new interesting developments in the writing system. For a number of years after the invention of the personal computer, because displaying and typing Chinese characters proved to be extremely difficult, it was considered impossible for the Chinese writing system to enter the digital age. However, now most young people actually read and type Chinese characters more often than writing them and writing Chinese characters has become increasingly challenging for those who do not write very often. On the other hand, typing Chinese characters requires the selection of the correct character from a long list of homophones. In many cases, a person either fails to select the correct character or just does not bother to do so and, especially in the fast-paced cyber world, substitutions of homophones are very common. For the younger generations who are usually familiar with English or another Western language, they tend to mix Chinese characters and foreign words or even make new inventions using resources from both languages. No wonder such innovative and sometimes sloppy uses of the written language are called "Martian writings" because it is very hard for people who do not follow the latest trends in Internet memes to understand them.

Along with the simplification of characters, a new Romanized phonetic system called pinyin (spell sounds) was established in 1958 by the Chinese government as the primary method of annotating the pronunciation of characters. The Communist scholars who created the Lādīnghuà Xīn Wénzì in the 1920s were very enthusiastic about replacing Chinese characters with a phonetically based script. After the founding of the People's Republic of China, major government figures and scholars were also considering transitioning to a phonetically based writing system using pinyin, while the simplification of Chinese characters was only a stage in this transition. However, the consensus now is to stay with simplified characters as the writing system. Meanwhile in Taiwan, the Zhùyīn Fúhào system is still used as the primary method of annotating the pronunciation of Chinese characters.

Now that we have given a detailed historical account of how Modern Standard Chinese was created in its spoken and written forms, together with reforms of the writing system, in the remaining part of this chapter we will illustrate the sounds,

grammar and vocabulary of Modern Standard Chinese and how they are connected to earlier stages of the Chinese language.

9.2 PHONOLOGY OF MODERN STANDARD CHINESE

First let's compare the initials of Modern Standard Chinese as shown in Table 9.2 with those of Early Modern Chinese, shown in Table 5.1 from Chapter 5.

If we count the zero-initial, then there are 22 initials in Early Modern Chinese. The initial [ʋ] in Early Modern Chinese disappeared at around the beginning of the Qing Dynasty. The words with a [ʋ] initial are pronounced as a zero-initial syllable in Modern Standard Chinese. For example, the word wēi 微 ("tiny") was pronounced as [ʋui] in Early Modern Chinese, but as [uei] now. The initial [ŋ] also disappeared by becoming a zero-initial during the fifteenth century. For example, the word wǒ 我 ("I") was pronounced as [ŋɔ], but as [uo] now. But note that although the sound [ŋ] disappeared as an initial, the sound [ŋ] itself still exists in Modern Standard Chinese as a syllable coda, e.g. in the word for soup tāng [$t^haŋ^{55}$].

A major change in the initials is the appearance of the set of palatal sounds in Modern Standard Chinese, i.e. [tɕ, $tɕ^h$, ɕ]. These sounds developed from the alveolar [ts, ts^h, s] and the velar [k, k^h, x] when they are followed by a high-front vowel such as [i] or [y]. Note that the IPA symbol [y] is the sound ü (umlaut) as in the German word über. This is an instance of the commonly seen process of palatalization. As early as in the sixteenth century, the velar initials had already begun to change to their corresponding palatals. For example:

[ki]>[tɕi], [k^hi]>[$tɕ^h$i], [xi]>[ɕi]
[ky]>[tɕy], [k^hy]>[$tɕ^h$y], [xy]>[ɕy]

Traditionally, syllables with [tɕ, $tɕ^h$, ɕ] are called tuányīn 團音 ("round sounds") because of their auditory perception of smoothness. At this point, the alveolars had not changed to palatals yet. Thus there would be a contrast between sounds like:

[tsi] vs [tɕi], [ts^hi] vs [$tɕ^h$i], [si] vs [ɕi]
[tsy] vs [tɕy], [ts^hy] vs [$tɕ^h$y], [sy] vs [ɕy]

Table 9.2 Modern Standard Chinese initials

Bilabial	*Labiodental*	*Alveolar*		*Retroflex*	*Palatal*	*Velar*	*Zero*
p	f	t	ʦ	ʈʂ	tɕ	k	ø
p^h		t^h	$ʦ^h$	$ʈʂ^h$	$tɕ^h$	k^h	
m		n	s	ʂ	ɕ	x	
		l		ɽ			

In comparison to the round sounds, the syllables with the alveolar initials [ts, tsʰ, s] mentioned above are called jiānyīn 尖音 ("sharp sounds") due to their auditory perception of sharpness. This contrast between the round sounds and the sharp sounds is still maintained in Peking Opera, although the contrast disappeared in Beijing Mandarin during the Qing Dynasty, resulting in homophones such as the following: jiàn for both the word for "sword" 劍 and the word for "arrow" 箭. However, in Early Modern Chinese, the word for "sword" was [kiɛm] while the word for "arrow" was [tsiɛm]. Then, in the Ming Dynasty, [kiɛm] first became [tɕiɛn] contrasting with [tsiɛn] as an instance of the contrast between "round sounds" and "sharp sounds". In the Qing Dynasty, [tsiɛn] became [tɕiɛn] as well. Note here in the Ming Dynasty the rimes with -m also changed to -n. For modern-day speakers of Modern Standard Chinese, it is very hard to say which word was originally a round sound word, and which was a sharp sound, and they have to be learned one by one.

Now let's look at the rimes of Modern Standard Chinese, as shown in Table 9.3, in comparison with the rimes of Early Modern Chinese, shown in Table 5.2 from Chapter 5.

The system of rimes is further simplified in Modern Standard Chinese. For example [uɔn] and [uan] merged, and [iu] became [y].

The apical vowels are now also separate categories, i.e. ï having diverged into ɿ and ʅ. Some characters with the pronunciation of [ɽï] such as 兒而爾耳二 in Early Modern Chinese developed into the retroflex vowel [ɚ] in the Ming Dynasty. Because

Table 9.3 Modern Standard Chinese rimes

	without medial	*[i] series*	*[u] series*	*[y] series*
Simple	ɿ	i	u	y
	ʅ			
	a			
	o			
	ɤ			
	ɚ			
Compound	ai	ia	ua	yɛ
	ei	iɛ	uo	
	au	iau	uai	
	ou	iou	uei	
Nasal	an	ian	uan	yan
	ən	in	uən	yn
	aŋ	iaŋ	uaŋ	
	əŋ	iŋ	uəŋ	
			uŋ	yŋ

Source: see *Modern Chinese*, edited by the Department of Chinese Language and Literature, Peking University, 2006, p. 58 for more detail

the word ér ([ə]兒) is also a suffix, the [ə] syllable gradually merged with the preceding syllable in a variety of ways to create what are called rhoticized syllables. Such rhoticized syllables appeared as early as the seventeenth century. In Modern Standard Chinese, one of the functions of the suffix ér is as a diminutive suffix. For example, lánzi 籃子 is a basket, while lán+ér is a small basket. The pronunciation of lán+ér is made by deleting the nasal coda -n in the first syllable and adding the retroflex ɾ as the coda, i.e. láɾ, although it is still written as 籃兒. Syllables like láɾ are called rhoticized syllables and are a major feature of Modern Standard Chinese, while many southern dialects do not have such rhoticized syllables.

The major change in the rime system concerns the rime types in terms of their medials. In Modern Standard Chinese, rimes without a medial are called kāikǒuhū (開口呼, "open-mouth sound"), rimes with an [i] medial are called qíchǐhū (齊齒呼, "even-teethed sound"), rimes with an [u] medial are called hékǒuhū (合口呼, "close-mouth sound") and rimes with an [y] sound are called cuōkǒuhū (撮口呼, "round-mouth sound"). Roughly speaking, the [i] series came mostly from the rimes of the 3rd děng and some rimes of the 2nd děng in Middle Chinese. The [u] series came from rimes with such sounds as [u] or [w], and the [y] series came from the rimes with [u] or [w] of the 3rd děng in Middle Chinese, which developed into rimes with the [iu] component in Early Modern Chinese as shown in Table 5.2, e.g. [iuəŋ]>[yŋ].

Another major change is that the rimes with the nasal coda -m disappeared. Most of these -m syllables merged with the rimes with the nasal coda -n during the Ming Dynasty. Thus formerly different syllables such as [t^ham] (談, "talk") and [t^han] (壇, "altar") are not distinguishable in Modern Standard Chinese anymore. Both words are pronounced as tán.

In terms of tonal development, the basic system is the same as in Early Modern Chinese. Recall Table 3.2 from Chapter 3. There are four tonal categories: yīnpíng 55, yángpíng 35, shǎngshēng 214, and qùshēng 51. The Middle Chinese píng tone split into yīnpíng and yángpíng according to the voicing quality of the initial. If a píng tone character had a voiceless initial in Middle Chinese, it is generally in the yīnpíng tonal category in Modern Standard Chinese. If a píng tone character had a voiced initial in Middle Chinese, it is generally in the yángpíng tonal category. Part of the original shǎng tone characters became qù tone in Modern Standard Chinese if their initials were in the voiced obstruents class, such as voiced stops, affricates and fricatives. The qù tone did not change much from Middle Chinese to Early Modern Chinese and, from there, on to Modern Standard Chinese. The rù tone characters are also distributed into the four tonal categories in Modern Standard Chinese according to their voicing qualities of the initials. For example, if a character in the rù tone category had a voiced obstruent initial in Middle Chinese, their modern tonal category is generally the yángpíng, while characters with other types of voiced consonants, such as nasal consonants, became qù tone characters. The characters in the rù tone category with voiceless initials are distributed into the other four tonal categories without clear rules.

One new development is called tone sandhi, i.e. where the tone changes in connected speech. Two third tones, i.e. 214–214 in Modern Standard Chinese, are

realized as 35–214, where the first syllable is changed to the second tone. For example, the most common phrase for "hello" is nǐ hǎo 你好, which is pronounced as ní hǎo. This is the most common type of tone sandhi in Modern Standard Chinese. Whether or not there were tone sandhi in Middle Chinese and Early Modern Chinese we do not have reliable written records to say either way. Tone sandhi are quite common in other modern Chinese dialects – Modern Standard Chinese has only one real tone sandhi rule, as stated above, but many southern dialects have a highly complex system of tone sandhi.

Another new development is called qīngshēng (輕聲), i.e. unstressed syllables with their original tones neutralized. For example, the Modern Standard Chinese pronunciations for the words tàiyáng 太陽 and yuèliàng 月亮 are tàiyang, and yuèliang, in which the first syllable has the main stress with the full tonal shape, and the second syllable is unstressed with the loss of its tonal shape as shown by the lack of its original tone mark. Such unstressed neutral tones are also lacking in many southern dialects as well.

9.3 MORPHOLOGY OF MODERN STANDARD CHINESE

Now let's take a brief look at the grammar of Modern Standard Chinese. In terms of its morphology, the majority of the morphemes are still monosyllabic, with a small number of disyllabic morphemes, such as húdié (蝴蝶, "butterfly"), pútao (葡萄, "grape"), zhīzhū(蜘蛛, "spider"). Both of these two types of morphemes have been common throughout the history of the language. With the translation of ideas and concepts from Western cultures, there are many multisyllabic morphemes in Modern Standard Chinese, e.g. màikèfēng ("microphone"), bù'ěrshíwéikè ("Bolshevik"), etc.

In terms of morphological processes, affixing, reduplication and compounding are all quite common, with compounding still being the major path to creating new words in Chinese. For example, the prefix lǎo 老 is still a common way of indicating familiarity, such as in Lǎo Zhāng (Old Zhang), in which the prefix lǎo is attached to a family name, usually that of an older person. Similarly the prefix xiǎo 小 can be attached to surnames of younger people to show familiarity as well, such as in Xiǎo Zhāng (Little Zhang). The prefix dì 第 can be attached to cardinal numbers to form ordinal numbers, such as dìyī ("first"), dìwǔ ("fifth"), etc. In terms of suffixes, the diminutive -ér 兒 was attested as early as in the Tang Dynasty, as mentioned in Chapter 7. In Modern Standard Chinese, the -ér suffix is both a phonological phenomenon with its function of rhoticizing the preceding syllables and a morphological phenomenon with its diminutive meaning. More examples of this -ér suffix include: píng'ér (瓶兒, "small bottle"), qǔ'ér(曲兒, "a tune"), etc. But in many cases, the -ér morpheme is purely stylistic. For example, the word for "movie" is "diànyǐng", but it is often pronounced as "diànyǐng'ér" without the diminutive meaning at all. Another type of -ér morpheme serves to distinguish between different words. For example, gài 蓋 is the verb "to cover", while gài'ér is the noun

"a lid, a cover". Also xìn 信 means "letter, correspondence", while xìn'ér 信兒 is a short message. The word "huǒxīng" 火星 is the planet "Mars", while "huōxīng'ér" 火星兒 is a "spark from the fire". There are a number of new suffixes as well. For example, huà 化 is similar to the English "-ize" or "ization", as in "modernize". The word for "modern" in Chinese is "xiàndài", from which xiàndàihuà can be derived. The suffix xué 學 is similar to the English "-ology", as in "geology" and "phonology". Many words of such fields of studies have this xué suffix, e.g. dìzhìxué ("geology"), yīnxìxué ("phonology") and shùxué ("mathematics").

The -men morpheme we mentioned in Chapter 7 for plural pronouns, e.g. wǒ ("I") vs wǒmen ("we"), can be attached to nouns of people, such as háizi ("child") →háizi-men ("children"), xuéshēng ("student")→xuéshēngmen ("students"). Thus it seems that -men is an inflectional morpheme in Modern Standard Chinese. However, the -men morpheme is not compatible with number words. If we want to say "three children", we have to say "sān-ge háizi" ("three-cl. child"). Adding -men as "sān-ge háizi-men" is not grammatical at all. Thus some scholars argue that -men is not an inflectional morpheme at all, but rather a morpheme denoting a group, which seems to be quite reasonable judging from the origin of -men being the word for a group of people, i.e. bèi in Classical Chinese.

Reduplication is also quite common in Modern Standard Chinese. Nouns, adjectives, verbs and measure words can all be reduplicated. For example, kinship terms are normally in a reduplicated form, such as bàba ("dad"), māma ("mom"), shūshu ("father's younger brother, uncle"), dìdi ("younger brother"). Note that in these terms the second syllable is always unstressed, with a neutral tone. Adjectives can be reduplicated to be more descriptive and vivid. For example, from "hóng" (紅, "red") we can form "hónghóngde". Adjectives with two syllables, say AB, can be reduplicated either as AABB, e.g. jiǎndān ("easy")→jiǎnjiǎndāndān, or as ABAB, e.g. bīngliáng ("icy cold")→bīngliángbīngliáng. Verbs can be reduplicated to derive a tentative meaning or a delimitative meaning such as "do something a little bit". For example, from the verb "to look at" kàn 看, we can form kànkan, meaning "take a look", and it can often be used in a suggestion, as in "nǐ kànkan" ("you + look look"), to mean "please take a look". Some disyllabic verbs can be reduplicated as ABAB, e.g. tǎolùn ("to discuss")→tǎolùntǎolùn. Measure words can be reduplicated to mean "every", e.g. tiáo (the measure word for xīnwén "news")→tiáotiáo xīnwén ("every piece of news")

As a result of the general trend of disyllabification in Chinese, more words are being created by compounding. In terms of the internal structures of compound nouns and verbs, according to Packard (2000: 127) about 90 percent of compound nouns in Chinese have a nominal formant on the right, and about 85 percent of compound verbs have a verbal formant on the left. For example, the word for "volcano" is "huǒshān" ("fire + mountain"). The main nominal element, i.e. the shān, is on the right. The word for "to put on a demonstration" is "shìwēi" ("show + power"). The main verbal element, i.e. shì, is on the left. However, the boundary between a compound word and a phrase is not always easy to draw. For example, various elements can come between the verbal elements and the nominal elements

in compound verbs. From shìwēi, we can get shì-le yícì wēi ("show-perf. one-cl. power→ "carried out demonstration once").

9.4 WORD CLASSES OF MODERN STANDARD CHINESE

The major word classes are still the same as before, including nouns, verbs, adjectives (or stative verbs to be more precise), measure words, conjunctions, interjections, pronouns, prepositions (or coverbs), helping words, sentence final particles, and so on. There is still a certain degree of flexibility among the major word classes, especially among nouns, verbs, and adjectives. Although they cannot be used in the putative or causative senses as frequently as in Classical Chinese, they do have a lot of common properties. For example, nouns can take the sentence final particle -le which often occurs in a sentence with a verb and an adjective, as shown in Examples 1, 2 and 3 below.

Example 1

wǒ	huì	huábīng	le
我	會	滑冰	了
I	can	skate	par.

"I can skate now (e.g. in contrast to the past when I didn't know how)."

Example 2

Jīntian	tiānqì	rè	le
今天	天氣	熱	了
today	weather	hot	par.

"It is becoming hot today (e.g. compared to yesterday)."

Example 3

xīngqītiān	le
星期天	了
Sunday	par.

"It is Sunday now."

This word -le, which appears at the end of a sentence, is different from the perfective aspect marker -le, first mentioned in Chapter 7. The basic function of this sentence final particle is still heatedly debated among linguists. According to Li and Thompson (1981), the basic communicative function of -le is to signal a "currently relevant state". One of such currently relevant states is a change of state. In Example 1, the -le indicates that there has been a change in the state of being able to skate. In Example 2, there is this contrast between today's being hot and another time. In Example 3 it is the change of time that is expressed. Since sentence final particles are normally attached to a sentence, we can see that Chinese nouns can be the predicates of a sentence, as in Example 3. This shows one of the common properties of nouns with verbs and adjective. Adjectives can also be predicates without a linking verb in Chinese, as shown in Example 2. Adding the linking verb shì is not normally grammatical.

In terms of the pronoun system, the first person, second person and third person pronouns are wǒ, nǐ and tā respectively. The distinction between singular and plural pronouns is made by the -men morpheme, such as "tā" ("he, she, it") vs. "tāmen". One more recent development is that a gender distinction is now made in the written forms of "tā". Although the spoken form is one and the same "tā", it is written as "他" if it refers to a male person, as "她" if it refers to a female, as 它 as a gender neutral pronoun like "it". Similarly for the plural forms, the distinction is also maintained in writing as 他們 ("they" masculine), 她們 ("they" feminine) and 它們 ("they" animals and things).

Similar to Classical Chinese, prepositions can be used as verbs in many cases. For example:

Example 4

qǐng	gěi	wǒ	dǎ	diànhuà
請	給	我	打	電話
please	to	me	make	phone

"Please make a phone call to me."

Example 5

qǐng	gěi	wǒ	yì	běn	shū
請	給	我	一	本	書
please	give	me	one	cl.	book

"Please give me a book."

In Example 4, the main verb is “dǎ”, while the word “gěi” is used as a preposition. In Example 5, the only verb is “gěi”. Most prepositions can be used as verbs, such as gēn 跟 (“together with” and “to follow”), yòng 用 (instrumental “with” and “to use”) and zài 在 (“at” and “to be present, to be located”).

9.5 WORD ORDER OF MODERN STANDARD CHINESE

The basic word order of Modern Standard Chinese is SVO, although there is quite a degree of flexibility. For example, the object can be put at the front as a topic of the conversation such as in Example 6:

Example 6

měi	ge	rén	wǒ	dōu	xǐhuan
每	個	人	我	都	喜歡
every	cl.	person	I	all	like

“I like everyone.”

The phrase “měi ge rén” is the object of the verb “xǐhuan”, but here it is fronted to be the topic of the sentence and also because the adverb “dōu” requires that phrases formed with “mei” be on its left. Another way of fronting the object is by using the BA-construction as in Example 7:

Example 7

qǐng	bǎ	shū	gěi	wǒ
請	把	書	給	我
please	top.	book	give	me

“Please give me the book.”

In Example 7, the direct object of the verb is “shū”, and it is fronted by using bǎ as a topic marker. Such sentences are usually uttered in a context where the noun denoted by the object of the verb is already known, because it is the topic of the conversation.

Prepositional phrases generally precede the verb but for locative phrases, they have some special properties. Pre-verbal locative prepositional phrases indicate the location where an event is taking place while, in general, post-verbal prepositional phrases indicate the location of the result of the action denoted by the verb. Examples 8 and 9 show such a contrast.

Example 8

bié	zài	zhuōzi	shang	tiào
别	在	桌子	上	跳
don't	at	desk	upside	jump

"Don't jump on top of the desk."

Example 9

tā	tiào	zài	zhuōzi	shàng
他	跳	在	桌子	上
he	jump	at	desk	upside

"He jumped onto the desk."

In Example 8 the locative preposition "zài zhuōzi shang" is where the "jumping" takes place; in Example 9 the result of the "jumping" is that "he lands on the desk".

9.6 ASPECT MARKERS

Modern Standard Chinese does not have a grammatical device for tense but there are systematic ways of indicating the aspect of verbs. The concept "tense" concerns the temporal relations between an event or a state and the speech time. The concept "aspect" concerns the perspective from which the internal makeup of an event or a state is viewed. Theoretically speaking, a language may encode either tense or aspect, or both or neither, in its grammar. Additionally, if the language encodes both in its grammar it may use totally different morphemes, or morphemes that fuse the functions of these two different dimensions. For example:

Example 10

I was reading Chinese Linguistics at 2pm yesterday.

In the above sentence the event of reading happened before the speech time, as indicated by the use of the past tense form "was" of the verb "to be". The event is viewed as ongoing, as indicated by the use of the present participle form "reading". Both tense and aspect are encoded in the verbs used. However, in Chinese, only the aspect is specified, for example:

Example 11

wǒ zài kànshū
我 在 看書
I prog. read

"I was/am/will be reading."

The morpheme zài is a progressive aspect marker, which corresponds to the English -ing form. However in Example 11 there is no specification of time and it can be used as a past ongoing event, a current ongoing event or a future one. To make these readings clearer, time words can be added, for example:

Example 12

wǒ xiànzài zài kànshū
我 現在 在 看書
I now prog. read

"I am reading now."

We have seen the perfective aspect maker -le. Here is one more example where it is used in a future context.

Example 13

Wǒ míngtiān xià le kè jiù huí jiā
我 明天 下 了 課 就 回 家
I tomorrow off perf. class then return home

"I will go home right after class is over tomorrow."

There are two other aspect markers: the durative -zhe 着 and the experiential -guo 過. For example:

Example 14

bié	kàn	zhe	diànshì	chī	fàn
別	看	着	電視	吃	飯
don't	watch	dur.	TV	eat	food

"Don't eat food while watching TV."

Example 15

wǒ	qù	guo	Zhōngguó
我	去	過	中國
I	go	exp.	China

"I have been to China."

The durative aspect marker -zhe is often used as a background state for some other event, as shown in Example 14, while the experiential aspect marker -guo is often used to talk about a past experience which has current relevancy. As we mentioned in Chapter 7, the perfective aspect marker -le originally was a verb of completion. It has undergone grammaticalization and switched positions with the object of the verb. Now the perfective marker -le is attached to the verb directly. Similarly, all the other three aspect markers, i.e. -zai, -zhe and -guo, were originally verbs as well and have been grammaticalized into aspect markers that are attached to the verb.

9.7 SPECIAL CONSTRUCTIONS

In terms of the passive construction, there were some new developments since it was established in the Tang Dynasty. A new type of bèi construction, where the verb is followed by an object, can also be attested in the Tang Dynasty (Xiang 1993). This type of bèi construction is quite common in Modern Standard Chinese as well. For example:

Example 16

Yuēhàn	bèi	xiǎotōu'ér	tōu	le	qiánbāo
約翰	被	小偷兒	偷	了	錢包
John	pass.	thief	steal	perf.	wallet

"John's wallet was stolen by a thief."

In Example 16, the object "qiánbāo" has a semantic relation with the subject "Yuēhàn", i.e. the subject being the possessor of the object, hence the translation "John's wallet" in English. Although it is possible to use "John's wallet" as the subject, as in Example 17, the meanings of Examples 16 and 17 are not quite the same. What Example 16 says is that what happened to John is the event of "wallet-being-stolen", while Example 17 is saying that what happened to the wallet is the event of "being-stolen". Although they amount to more or less the same thing happening in the real world, the contexts of the uses may be slightly different.

Example 17

Yuēhàn	de	qiánbāo	bèi	xiǎotōu'ér	tōu	le.
約翰	的	錢包	被	小偷兒	偷	了
John	poss.	wallet	pass.	thief	steal	perf.

"John's wallet was stolen by a thief."

Beside bèi, many new passive markers appeared. Two of the most often used in the spoken language now are jiào叫, attested as early as the late Yuan Dynasty, and gěi給, attested quite late during the Qing Dynasty (Xiang 1993). These morphemes are used in a similar fashion to the bèi construction, for example:

Example 18

Yuēhàn	de	qiánbāo	jiào/gěi	xiǎotōu'ér	tōu	le.
約翰	的	錢包	叫/給	小偷兒	偷	了
John	poss.	wallet	pass.	thief	steal	perf.

"John's wallet was stolen by a thief."

There have been further developments in the BA-construction as well. For example, a type of BA-construction without a verb can be attested as early as in the Yuan drama (Xiang 1993). This type of BA-construction is still possible in the spoken language of Modern Standard Chinese. For example:

Example 19

wǒ	bǎ	nǐ	ge méi	liángxin	de
我	把	你	個沒	良心	的
I	top.	you	cl. not-have	morals	nom.

"You are such a person without morals!"

Such BA-constructions are often used to express strong feelings where the verb can be considered to be omitted.

In a typical use of the BA-construction, the focus of the sentence is what is done to the object of the BA. In Example 20 the meaning of the sentence focuses on what has been done to the book, i.e. it having been returned or, in a more general sense, how the object has been affected in a certain way.

Example 20

wǒ	bǎ	shū	huán	le.
我	把	書	還	了
I	top.	book	return	perf.

"As for the book, I have returned it."

A new type of BA-construction, where such a focus on "what is done to the object" is not quite available, can be attested as early as the late Yuan Dynasty (Xiang 1993). In Modern Standard Chinese, they are still quite commonly used, e.g.:

Example 21

kàn	bǎ	nǐ	gāoxìng	de	zuǐ	dōu	hé	bǔ	lǒng	le.
看	把	你	高興	得	嘴	都	合	不	攏	了
look	BA	you	happy	comp.	mouth	even	close	not	touch	par.

"Look you are so happy that your mouth cannot close (since you are just smiling all the time)!"

In Example 21, the object "wǒ" is more an experiencer of the predicate "gāoxìng". Thus there is no real sense of "what is done to the object" here, since there is no real object anyway. It is rather the loose notion of "being affected" here that sanctions the use of the BA-construction.

With the modernization of China, ever since the late Qing Dynasty, scholars have been looking to Western languages for models on how to change the Chinese language. In our globalized society today, with English being the de facto lingua franca, the influences from English can be seen in the grammar of Modern Standard Chinese – for example, passive constructions are sometimes used to translate English phrases. Sentence structures have tended to become more and more complex, being modeled on long sentences with lots of logical connectors and grammatical particles. Many Europeanized sentences can readily be found, especially in formal writings. On the other hand, Modern Standard Chinese, being a regulated standardized language, is always being influenced by the speaker's native dialect and certain prestigious forms of dialects. Sometimes, a popular way of saying something might not be grammatical according to the standards of Modern Standard Chinese. For example, the standard way of saying "haven't done something" uses the structure "méiyǒu + verb" such as in "méiyǒu hēshuǐ" ("have not drunk water", "did not drink water"). The corresponding affirmative structure uses the perfective marker -le as in "hē le shuǐ" ("have drunk water", "drank water"). But in the Modern Standard Chinese spoken in certain southern dialectal regions, the affirmative form is simply using the structure "yǒu + verb", such as "yǒu hēshuǐ" ("have drunk water", "drank water"), since the word "méiyǒu" is the negation of the word "yǒu". This might have been influenced by certain southern dialects where the affirmative is indeed formed by using the verb "to have". Although such uses of the verb "yǒu" in Modern Standard Chinese are not approved by the standard, it is nonetheless used by many speakers and there is always a certain tension between the regulations and speakers' actual uses of the language. Even for speakers of Beijing Mandarin, some typical Beijing Mandarin features are not adopted in Modern Standard Chinese. The reverse influence of Modern Standard Chinese on dialects is probably stronger in many ways and dialects that have always had more contact with Mandarin have many elements that were imported from Mandarin dialects.

With this we conclude our discussion of the grammar of Modern Standard Chinese with respect to its connections with earlier stages of the language. In the remaining section of this chapter, we will give a brief account of the vocabulary change in Modern Standard Chinese.

9.8 VOCABULARY CHANGE

There is no doubt that vocabulary is a reflection of a speaker's lifestyle in general, e.g. cultural concepts, science and technology, etc. and compared to earlier stages of the language, Modern Standard Chinese contains a large vocabulary covering modern science and technology. In the Ming Dynasty, Jesuit missionaries started to carry out their proselytizing efforts in China and many of these missionaries, such as the celebrated Matteo Ricci, helped translate books on Western science and technology into Chinese, thus creating the first batch of recently added new words (Pan 1989). For example, many early words created in the Ming Dynasty like zìxíngchē (自行車,"bicycle"), bǐlì (比例, "ratio"), dìpíngxiàn (地平線, "horizon"), huǒchē (火車, "train") and gōngsī (公司, "company") are still used in Modern Standard Chinese.

In the Qing Dynasty, many Manchu words were borrowed into Chinese, e.g. “mǎmǎhūhū” (馬馬虎虎, “in a careless way”), as mentioned in Chapter 2. Here are a few more examples: lāta (邋遢, “unkempt”, “messy”), luōsuo (羅嗦, “wordy”, “nagging”) and hēhù (呵護, “take care of”). Towards the end of the Qing Dynasty, many scholars translated concepts from Western languages into Chinese, thus giving rise to the second batch of new words from Western languages, such as zhǔzhāng (主張, “proposal”), jiàoyu (教育, “education”), jīchǔ (基礎, “foundation”), yínháng (銀行, “bank”), rìbào (日報, “daily newspaper”) and jīqi (機器, “machine”).

Some words were borrowed into Chinese from Japanese, since many new words were first created in Japan when new concepts were translated into Japanese using kanji characters, a result of the Meiji Restoration that started in 1868. Some of these words are Classical Chinese words or phrases that were given a new meaning, e.g. zhǔyì (主義, “doctrine”), lǐxìng (理性, “reason”), lèguān (樂觀, “optimistic”) and bǎoxiǎn (保險, “insurance”). These words borrowed from Japanese are generally not considered real loanwords. Another type of new word in Japanese was those created by using kanji characters to create new combinations, with more or less the same meanings as the corresponding characters used in Chinese. For example: chōuxiàng (抽象, “abstract”), biāoběn (標本, “specimen”), zhèngdǎng (政黨, “political party”) and zhéxué (哲學, “philosophy”). Some scholars argue that these words cannot be considered real loanwords, since the meanings of the characters used and their relationships with the meaning of the new words are the same as in Chinese, probably due to the fact that the characters and their meanings were first borrowed into Japanese from Chinese. Therefore, the second type of new words should be best considered as words that have been “borrowed back”. There are, however, some truly Japanese words written in kanji, e.g. jījí (積極, “active”), chǎnghé (場合, “occasion”), shǒuxù (手續, “procedures”) and such words used in Chinese are real loanwords from Japanese.

With the introduction of Marxism and communism into China in the 1910s, many new words related to communism were created, e.g. zīběn zhǔyì (資本主義, “capitalism”), shēngchǎnlì (生產力, “productive force”), zhímíndì (殖民地, “colony”), dìguózhǔyì (帝國主義, “imperialism”), jīhuì zhǔyì (機會主義, “opportunism”), sīwéi (思維, “thought”) and wéiwù zhǔyì (唯物主義, “materialism”).

In more recent years, many new concepts were created to once again reflect developments in modern science and technology, forming the third batch of such new words, such as hùliánwǎng (互聯網, “internet”), shǒujī (手機, “cellphone”), dǎyìnjī (打印機, “printer”) and shǔbiāo (鼠標, “mouse used with a computer”).

As pointed out in Chapter 8, loanwords based only on sounds are generally not popular in Chinese. Therefore calques, or loan translations, and a mixture of sound and meaning translations are always preferred. For example, “telephone” was once “délǜfēng”, but was replaced by “diànhuà” (“electricity+speech”). The word “democracy” was once “démòkèlāxī”, but was replaced by “mínzhǔ” (“people+master”). Examples of mixed sound-meaning loanwords include píjiǔ (“pi for beer”+wine) and bǐsàbǐng (“bǐsà for pizza” + pancake). But of course there are

indeed quite a number of loanwords based on sounds only, e.g. màikèfēng ("microphone") and "gāo'ěrfū" ("golf").

Besides new words created to translate Western concepts and loanwords from Western languages, there are many elements from Classical Chinese and Literary Chinese in Modern Standard Chinese as well. Many of these elements are in the form of set expressions, e.g. the four-character idioms. These idioms are highly condensed. Many of them are based on stories from ancient texts. There are also words from Literary Chinese that are still used in formal writings. For example, the Literary Chinese zhī 之, as a marker of modifier, can often replace the Modern Standard Chinese de 的 in order to achieve a more formal flavor. Instead of saying "hànyǔ de yǎnbiàn" (漢語的演變, "Chinese language + de +development→Chinese Language's development"), we can equally say "hànyǔ zhī yǎnbiàn" (漢語之演變) to sound more academic or formal.

In order to understand compound words in Modern Standard Chinese, it is sometimes necessary to know the original meanings of each morpheme. Moreover, it is also difficult to draw a distinctive line between what is Modern Standard Chinese and what is Literary Chinese.

With this we conclude this chapter on Modern Standard Chinese. In contrast to a standard national language, there are various modern dialects, some of which are similar to Modern Standard Chinese while some of them are very different. In the next chapter we will take a detailed look at modern Chinese dialects.

CHAPTER 10

Celebration of diversity

Modern Chinese dialects

It was early evening, and most people had gone home after a day's work. The streets were quiet and behind an open window someone was singing:

> The moon comes forth in her brightness /
> How lovely is that beautiful lady! //
> O to have my deep longings for her relieved! /
> How anxious is my toiled heart! //
> (trans. James Legge)

He went on to sing two more refrains and then paused to look at the moon after finishing singing. Ding … he heard a sound of a bell with a wooden clapper. "Excuse me, I was walking home after my assignment today of collecting songs, and overheard your song and couldn't help but think it is really good. Can I write it down and present it to the emperor?" "Well, let me dwell on that for a moment, … ok, sure!" This is probably how the folk song *The Moon Comes Forth* from the *Shījīng* was first found during the Zhou Dynasty, more than 2,500 years ago, and then passed down to us.

10.1 DIALECTS THROUGHOUT THE HISTORY OF THE CHINESE LANGUAGE

In the Zhou Dynasty, there was a special type of government official who was responsible for collecting folk songs from all over the country. According to a passage from the *Shǐjì*, in early spring, these government officials would shake their bells while walking around the country to let the people know that they were passing by. People would come to them and present their own songs. These government officials would then present these folk songs to the court musician so that they could be refined musically and eventually played to the emperor. In the *Shījīng*, there are songs from such places as Qín and Bīn in the western part of the country and Bèi, Yōng, Wèi, Zhèng, Chén and Qí from the eastern part of the country. There were as many as 3,000 songs at one time, but these were narrowed down to 305 as a result of selection and editing by Confucius.

When we talked about the *Shījīng* in Chapter 3, we concluded that the language used in the *Shījīng* was the yǎyán, or the common spoken language

based on the capital city, Luoyang. Since the folk songs were collected from different places, would it not be reasonable to say that there might be elements from different dialects in these songs? Indeed, there are some dialect words in the song we have just cited above from the Chén area, which was located to the east of the capital. Although the songs from the *Shījīng* had been edited by the court musicians, and also by Confucius before he decided to use it as one of the textbooks in his school, thus making the phonological system quite uniformly based on the yǎyán, dialect words and pronunciations nonetheless exist in the *Shījīng*. Some of the rhyming characters that cannot be explained by assuming a uniform basis of the yǎyán in the *Shījīng* could possibly have been due to pronunciations from different dialect regions.

Confucius spoke the dialect of the State of Lu, in present-day Shangdong; and Zhuangzi spoke the dialect of the State of Song, in present-day Henan; while Laozi might have spoken the dialect of the State of Chu, in the south. The Chu dialect can also be seen in the famous collections of songs from the Chu state called the *Chu Ci* of the Warring States period. But, in general, the sounds and words used in the *Chu Ci* were still the yǎyán, and thus the base language was similar to that of the *Shījīng*, although there were some words that could be argued to be Chu dialect words in the *Chu Ci*.

According to historical records, the Chu dialect was very different from the northern dialect called the Xià dialect. Mencius compared the various languages and dialects spoken in the south to birds talking, because they were very difficult to understand. He further argued that if a person from the State of Chu wanted to learn the dialect of the State of Qi, in the eastern part of the north, he would have to be brought to the big cities in the State of Qi so that he could have an immersion education; it would be impossible for the same person to learn the dialect of the State of Qi if he stayed in his native Chu where everyone else around him spoke a different language. This is a very interesting story, even from a modern perspective.

In the Old Chinese period, in the south near the eastern coastal areas, there was the State of Wu and the State of Yue and the people in the State of Wu may have spoken a language that was quite similar to the Chu dialect. We have mentioned that at that time there were various non-Chinese peoples in the south called the Hundred Yue peoples who spoke languages that were ancestors of the current Kam-Tai and Austroasiatic languages. There were also peoples referred to as the Yí people on the east coast during the Zhou Dynasty and their languages were probably different from the Xia, Chu and Wu dialects.

In the Old Chinese period, therefore, there were already a lot of differences between the languages and dialects of the country. In the north, there was the Xia dialect, in the south there was the Chu dialect and on the eastern coastal areas there was the Wu dialect. All of these dialects are related to modern Chinese dialects in some way. The yǎyán was based on the Xia dialect spoken in the capital city of Luoyang. To the east of the Xia dialect, there were the Yí languages, some of which were probably not related to Chinese. Further to the south of Chu and Wu, there were the Yue languages which were not related to Chinese either.

In the Qín Dynasty, the territory of the empire was extended to the very southern part of present-day Guangdong and Guangxi provinces. Chinese speaking people were first brought to these areas during this time and immigration has been one of the major factors in the formation of modern Chinese dialects.

In the Han Dynasty, Yáng Xióng (揚雄 53 BCE–18 CE) compiled a dictionary called *Fāngyán* (方言, "regional speech") in which he listed words from different regions of the country. This dictionary is a valuable source for studying the sounds of the Late Old Chinese period, the dialects of the Han Dynasty and also modern Chinese dialects. In the Jìn Dynasty, a scholar Guō Pú (郭璞 276–324) made commentaries on the book *Fāngyán* according to the actual dialects of his times. Thus by comparing his notes with the original writings, we can glimpse into the situation of dialects in the Jìn Dynasty.

In the Eastern Jìn Dynasty, the northern part of China was ruled by non-Chinese speaking peoples from the north and, to avoid the constant wars in the north, many Chinese-speaking people migrated to the southern part of the country, bringing their own dialects to those areas as well.

In the Northern and Southern Dynasties, the dialects differed considerably in pronunciation. The preface of the *Qièyùn* describes such dialectal differences as: in the Wú and Chǔ areas of the middle and lower Yangtze River region, the way they spoke was light and shallow; in the Yān and Zhào areas of the north people sounded heavy and turbid; people in the Qín and Lǒng areas of the northwestern part of the country pronounced the qù tones like the rù tones; in the Liáng and Yì areas of the southwest, their píng tones sounded like the rù tones.

In the Tang Dynasty the dialects in different regions continued to develop while the common spoken language, which was based on the Luoyang dialect in the early years and on the Chang'an dialect afterwards, could be used as a cross-dialectal *koine*, which is what we call Middle Chinese. Towards the end of the Tang Dynasty, in the late ninth century, the country was again war-torn, especially in the north, which prompted the second major wave of immigration from the north to the south, bringing the northern dialects into various southern areas.

The reconstructed phonological system of Middle Chinese can serve as a starting point for studies of modern Chinese dialects. Many words and grammatical features of modern Chinese dialects can be traced to the formation periods of vernacular writing from the end of the Classical era to the start of the Song Dynasty. It is reasonable to say that most modern Chinese dialects can be regarded as a descendant of Middle Chinese, although some features of certain dialects, such as the Min dialects, are actually older than Middle Chinese. Some scholars, e.g. Norman (1988), propose separating the Min Dialect from the other major Chinese dialects, and relating the Min dialect directly to Old Chinese.

In the Song and Yuan Dynasties, the contrast between the dialects in the north and those in the south were already quite considerable. The composition of popular drama and operas called qǔ曲 was divided into the southern qǔ and the northern qǔ since their base dialects were quite different. In the late fourteenth century, at the beginning of the Ming Dynasty, the emperor sent troops to the southwestern part of

China to claim the territory, bringing the northern dialect into the present-day Yunnan, Guizhou, and Sichuan provinces. In the Qing Dynasty, the Manchu adopted Mandarin and spread it to the northeastern part of China. Also, as we mentioned in Chapter 9, during the reign of Yongzheng Emperor in the Qing Dynasty in the eighteenth century, the Min and Yue dialects were already unintelligible to Mandarin speakers. There have been immigrations since the Qing Dynasty that have brought different Chinese dialects to the northeast, Inner Mongolia, Xinjiang and various overseas countries. Towards the end of the Qing Dynasty, people started to create a national language which was later to be called the guóyǔ and then the pǔtōnghuà after the founding of the People's Republic of China. Nowadays, pǔtōnghuà can be understood by most people, although in some areas older people who did not go to school might not be able to speak pǔtōnghuà, or even understand it. In addition to pǔtōnghuà, there are seven major groups of modern Chinese dialects, as we have shown in Table 1.1 in Chapter 1.

We have sketched the historical development of Chinese dialects and there are various factors that contributed to the formation of these different dialects. Immigration is the major reason why dialects spread into different areas. Most of the southern dialects were formed when Chinese-speaking people, at different times, moved from the north to the south bringing their northern dialects. Another major factor is geography. The reason why the mutually intelligible Mandarin dialects span the vast area in the north, while the smaller area in the south is divided into six major groups of mutually unintelligible dialects, is partially due to the different geographical features. The terrain in the north in generally quite flat, contributing to a higher degree of communication between the different areas. The south, by contrast, is quite hilly, which creates a higher degree of isolation among the different groups of people (Norman 1988; Sun 2006). In the Fujian province there are many hills and mountains and consequently the Min dialect shows the least internal homogeneity. Another contributing factor is that the political and military activities in the north were more frequent and consequently the interactions between people from different areas in the north were more common. People from the north also moved to the south to avoid political and military actions but interactions between these immigrants in the south were generally less frequent. The rule of the emperor was often established in the north and then further extended to the south. The political military factors and the geographical features both worked together to create a more uniform Mandarin dialect group in the north and a fragmented situation of dialects in the south.

The Chinese term "dialects" came from the title of the book *Fāngyán* that we mentioned earlier in this chapter. Within the imperial paradigm of the major part of Chinese history, the concept of fāngyán was mostly a cultural and political term. Because the emperor ruled the whole country, the view arose that the different types of speeches were just regional and subordinate to the dialect of the capital, which was often the lingua franca. Whether the regional speeches were intelligible to the emperor was never a primary concern as long as they remained "regional", just part of the empire. Mair (1991) points out that even non-Chinese languages

could be considered fāngyán, and indeed in the late Qing Dynasty the notion of fāngyán was even extended to languages not spoken within the empire, such as Western languages. Nowadays people normally refer to the varieties of Chinese as "Chinese Fāngyán", which is a historically and culturally correct notion. Although some of these fāngyán are not mutually intelligible, calling them different Chinese languages would be a dismissal of the important connotations of the term fāngyán in terms of its history and culture. In conclusion, when studying these different varieties of Chinese from a purely linguistic perspective, they can be called different "Chinese languages". Taking into consideration their relevant historical and cultural backgrounds, using the term "fāngyán" will not prevent the correct scientific study of these varieties of Chinese and, in addition, it will be consistent with its use throughout the history. The only problem, as pointed out in Chapter 1, is with the translation of fāngyán into "dialect". Using the term "dialect" is fine as long as we keep in mind that most of the Chinese dialects are not mutually intelligible; they are more comparable to a group of languages such as the Germanic languages, which include German, English, Swedish, etc.

10.2 GROUPINGS OF MODERN CHINESE DIALECTS

Let's recall the seven major modern Chinese dialects: Mandarin, Wu, Xiang, Gan, Kejia, Min and Yue. The primary subgrouping is between Mandarin, or the northern dialect, and the southern dialects which include the other six groups. Norman (1988) further divides the six groups into central and southern dialects: the central group includes Wu, Xiang and Gan, which are considered to have been influenced by Mandarin as they had closer contact with it; the southern group includes Kejia, Min, and Yue, which have had less influence from Mandarin and, in general, have more archaic features due to their isolation and time depth. But, in our discussion here, we will treat all non-Mandarin dialects as southern, without distinguishing between central and southern groups.

The major criteria for classification are phonological characteristics, in association with their historical connection to Middle Chinese or even earlier stages of the Chinese language, such as the voicing quality of initials, the vowels in the rimes, and the tonal categories. By using a combination of a number of these phonological characteristics we can derive a number of dialect groups. Some linguists try to single out one phonological characteristic that can serve as the sole criterion for such classificatory purposes, e.g. the split of the Middle Chinese rù tone, while other linguists look also at grammar and vocabulary from a historical perspective to see whether certain archaic features or early vernacular items have been preserved in each dialect.

Since the detailed description of all the major Chinese dialects with respect to their phonology, grammar and vocabulary would exceed the scope and volume of this introductory book, and possibly the interests of most readers too, we will pick certain prominent phonological characteristics of each dialect group in our description and just briefly discuss the grammar and vocabulary of each dialect.

10.3 MULTIPLE STRATA IN MODERN CHINESE DIALECTS

The pronunciation, grammar and vocabulary of modern Chinese dialects can reveal different strata. For example, in most dialects there are different strata as revealed by the distinction between literary pronunciation and colloquial pronunciation. The common spoken language and the system of literary pronunciation have always been based on the prestigious dialect of the time, e.g. the Luoyang dialect in Old Chinese, the Chang'an dialect in Middle Chinese and the Beijing Dialect in Early Modern Chinese and Modern Chinese. Throughout the history of the language, educated people have learned to use the literary pronunciation during their formal education. But in general, distinctly literary pronunciations in the Mandarin area are very few, partly because the literary pronunciations of different times were all based on Mandarin dialects. In comparison, all southern dialects have more developed and distinct literary pronunciations, especially in the Min dialects, which are the dialects that are the most different from Mandarin.

The spread of the Chinese language to different areas in the past generally meant it replaced the original language or dialects, and the Chinese-speaking people also intermingled with the original inhabitants of the new territory. In such cases, a particular variety of Chinese would be superimposed upon the original language. In this new variety of Chinese there would remain a substratum of the original local language. For example, before the Han Dynasty the southern part of Chinese was mostly inhabited by the Yue people. When the Chinese people migrated to the south, the Chinese language replaced the Yue languages, while absorbing certain features of the sounds, grammar and vocabulary that formed the substratum. In Wu, Min and Yue 粵 dialects there is evidence for a substratum of the ancient Yue 越 language. Note here that the pronunciation and the characters of the word for Cantonese and the word for the ancient Yue people were originally the same. But here we use two different characters: the character 越 will be reserved for the ancient Yue people and language, while the character 粵 will be reserved for the current Yue dialect. Besides the main system of sounds, grammar and vocabulary as the backbone of a certain dialect, there is often a super stratum of literary pronunciation and a substratum of the original language. Now we will take a brief look at each of the seven major groups of dialects.

10.4 THE MANDARIN DIALECTS

Let's first take a look at the Mandarin dialects that are spoken in the area north of the Yangtze River, including the northern, northeastern, northwestern, and southwestern regions of China. Besides the Han people, minority peoples such as the Hui and the Manchu have traditionally adopted Mandarin as their native language. According to Yuan *et al.* (2001), the area where Mandarin is spoken is about three quarters of all the areas of Chinese dialects and the number of speakers of Mandarin is about 70 percent of speakers of all the seven groups of dialects. It is

the largest group of dialects both in terms of its geographical distribution and the number of speakers.

In their general features the Mandarin dialects are quite similar to the Beijing dialect, on which Modern Standard Chinese, as we described in detail in Chapter 9, is based. Some of the commonly shared phonological characteristics of Mandarin dialects include:

1 The voiced obstruents in Middle Chinese became voiceless aspirated in the píng tone and voiceless unaspirated in the other tones.
2 The stop codas -p, -t, -k have generally been dropped, or merged, to a glottal stop in some areas such as Shanxi and the lower Yangtze River region.
3 Rimes with the coda -m merged with rimes with -n.
4 There are four tones, i.e. yīnpíng, yángpíng, shǎngshēng and qùshēng in most places. The phonological condition of the split of the píng tone in Middle Chinese is the same as in Beijing, i.e. the voicing quality of the initial. In some dialects there are only three tones. There are also dialects with five, six and even seven tones, especially in those dialects that still have the rù tone.

The grammar and vocabulary of Mandarin dialects also show a high degree of internal uniformity. Morphological devices such as the diminutive morpheme -er兒is a common suffix, and phonologically it is attached to the preceding syllable, although the exact phonetic values of the -er can vary in different dialects. The pronoun systems across the different dialects are mostly based on the 你 nǐ, 我 wǒ, 他 tā distinction found in Modern Standard Chinese. The plural forms are mostly formed with the -men 們 morpheme. For lexical items in different places there is quite a range of variation, but in general the vocabulary of Mandarin Chinese shows more innovation than the southern dialects, in which many archaic words are still used in colloquial speech. Norman (1988) uses the word for "to go" to illustrate this point. In Chapter 8 we have given a detailed description of the distinctions between zǒu走 and xíng行 in Classical Chinese, with the former meaning "to run" while the latter means "to walk". But in Mandarin dialects xíng has generally become obsolete and zǒu is the word for "to walk" and a relatively new word pǎo 跑 is used to mean "to run".

Despite the commonly shared features of Mandarin dialects, there are still some interesting subgroups. One of these is called the Jìn dialect, which is spoken in Shanxi and adjacent areas in Hebei, Henan, Shaanxi and Inner Mongolia, in cities such as Taiyuan, Zhangjiakou and Hohhot. One of the most distinctive features of the Jìn dialect is the existence of the rù tone. Yuan *et al.* (2001) reports that there are four tones in the Taiyuan dialect spoken by the younger generation, i.e. píng 11, shǎng 53 , qù 55 and rù 21. The -p, -t, -k codas have merged into a glottal stop [ʔ]. For example, the word "eight" bā 八 (Middle Chinese: pat) is pronounced as [paʔ^{21}] in Taiyuan. In the Jìn dialect there are also the so-called infix -l-. For example, from 蹦 [pəŋ^{55}] ("to jump") we can derive [pəʔ ^{21}ləŋ^{55}] and from巷[xõ^{55}] ("alleyway") we can derive [xəʔ^{21} lõ^{55}]. We actually used this as a piece of evidence for the existence of consonant clusters in Old Chinese in Chapter 3. Some scholars argue that, based on

features like these mentioned here, the Jìn dialect should be a separate group from the Mandarin dialects.

However the existence of the rù tone in Mandarin is not confined only to the Jìn dialect. In the Jianghuai Mandarin spoken in parts of the Jiangsu, Anhui, Hubei and Jiangxi provinces in the lower Yangtze River region, in places like Yangzhou and Nanjing, there are also separate tones derived from the rù tone. The Nanjing dialect has five tones: yīnpíng 32, yángpíng 14, shǎng 22, qù 44 and rù 5. The -p, -t, -k endings have also merged into a glottal stop such as in the word for "eight" [paʔ^{5}] in Nanjing. Geographically speaking, the Jinaghuai area is quite far into the southern dialectal regions such as the Wu and Gan areas. The Mandarin dialects in these regions were brought to the south from the north when the capitals were moved to places in these areas. As early as in the Three Kingdoms period, Jiànyè (present-day Nanjing) was already the capital city of the Wu Kingdom (229–280). During the Eastern Jìn Dynasty (317–420), the capital of the former Western Jìn was moved to Jiànkāng (the former Jiànyè) and the Luoyang dialect was brought to these southern areas at the same time. It served as the capital of the subsequent four dynasties in the south during the Northern and Southern Dynasties. Thus Nanjing has also been called the Ancient Capital of the Six Dynasties. In the Southern Song Dynasty (1127–1279), the capital city of the Northern Song (960–1127) was moved to the lower Yangtze River from Bianjing (present-day Kaifeng in Henan province) to Lin'an (present-day Hangzhou in the Zhejiang province adjacent to Jiangsu where Nanjing is located). Again the Mandarin dialect from Henan was brought to these southern areas. In the early Ming Dynasty, the capital was set primarily in Nanjing (called Yìngtiānfǔ at that time) from 1368–1421, before it was moved to Beijing (then called Shùntiānfǔ). The Nanjing dialect was the most influential dialect in the Ming Dynasty, probably serving, as argued by some scholars, as the common spoken language of that time. Historically speaking, across several dynasties, Nanjing and the adjacent lower Yangtze River areas were populated by northerners when the northern capitals were moved to the south. The dialects spoken in this area naturally have more in common with the Mandarin dialects as a result.

Besides these Mandarin dialects within China, there is also a Mandarin dialect called Dungan, spoken by the Dungan people, mostly in Kyrgyzstan and Kazakhstan. They are descendants of the Hui people who migrated to these regions in the late nineteenth century. Between 1862 and 1877, towards the end of the Qing Dynasty when the imperial rule was considerable weakened by internal and external factors, the Hui Muslims in Northwestern China, including those from Shaanxi, Gansu, Ningxia and Xinjiang, launched a series of military actions against the government. These revolts were eventually suppressed by the Qing Dynasty and, as a consequence, many ethnic Hui people in Northwestern China fled across Xinjiang into Central Asia. The Hui people had generally adopted Chinese as their native language and they brought their Northwestern Mandarin to Central Asia. The Dungan language is intelligible to speakers of other Mandarin dialects and although there have been loanwords from Russian and Arabic into the Dungan language, the major part of the vocabulary is still Chinese. A speaker from Beijing is able to carry on a conversation with a Dungan speaker without major communication problems.

10.5 THE WU DIALECT

The Wu dialect is currently spoken in the part of Jiangsu south of the Yangtze River and to the east of Jianghuai Mandarin as well as in the Zhejiang province. The early history of the Wu area can be traced back to the Spring and Autumn period, about 2,500 years ago. There were two major states in this area: the State of Wu and the State of Yue. According to historical records, the rulers of these states were all descendants of the Xia people from the north but their cultures were quite different. They cut their hair and they tattooed their bodies. The State of Wu was annexed by the State of Yue, and then the State of Chu took over this area during the Spring and Autumn periods. The Wu and Chu languages were similar, probably belonging to the Chinese language, while the Yue language was not intelligible to the Chinese speaking people. As early as the Han Dynasty, there were records showing that people in this area used different vocabulary items, such as nóng 儂 instead of wǒ 我 for the first person pronoun. Impressions of the Wu dialect described it as being light in contrast to the heavier pronunciation of the northern dialects. This might have been due to the different vowels and the manner of articulation of their initials. The Wu area was the cultural center of Chinese dynasties that were established in the south, such as the Six Dynasties, Southern Song and early Ming, and was influenced by the Mandarin dialects. In the vernacular writing traditions of the imperial periods, during the late Qing period, there were many novels written with spoken Wu dialogs in them. The dialects in the northern part of the Wu area are generally mutually intelligible, with Suzhou as the traditional representative dialect and Shanghai as the relatively new prestigious Wu dialect. The southern Wu dialects, such as the Wenzhou dialect, have not been affected as much by Mandarin and they contain more archaic features of the Wu dialect. We mentioned that in the Wenzhou dialect, the shǎng tone characters are still uttered with a glottal stop, which could be a lingering feature from the original stop coda associated with the shǎng tone in the Old Chinese period.

The shared features of the phonology of the Wu dialect, both northern and southern Wu, include:

1 There are voiced obstruents, which are important evidence for the existence of such sounds in Middle Chinese.
2 The Middle Chinese -m, -n and -ŋ codas have generally merged into -ŋ.
3 The -p, -t, -k endings associated with the rù tone have merged into a glottal stop.
4 The four tones in Middle Chinese have generally split into two categories each. Thus many Wu dialects have 7–8 tones.
5 Tone sandhi, i.e. tonal changes in connected speech is highly complex. For example, there are seven tones in Suzhou and these seven tones can enter tonal changes in two or three character combinations.
6 The distinction between literary and colloquial pronunciation is quite common.

In terms of grammar and vocabulary, influences from Mandarin can be seen in many Wu dialects, especially in the north. For example, in early vernacular writings from

the late Han to Tang Dynasties there were three third person pronouns qú 渠, yī 伊, and tā 他. All three forms can be found in different Wu dialects but tā should be considered a Mandarin influence. The first person pronoun is generally a cognate to wǒ我. The second person pronoun is a cognate to nǐ 你or nóng 儂. In terms of the plural forms of pronouns, various forms are used, but in general -men 們 is not the original Wu dialect morpheme and can only be found in dialects such as in Hangzhou, which was more heavily influenced by Mandarin. A number of words from the Wu dialect have also been adopted into Modern Standard Chinese, such as gāngà (尷尬, "embarrassed"). Some compound words in the Wu dialect have different morpheme orders from Modern Standard Chinese, e.g. liàngyuè 亮月for yuèliang (月亮, "the moon"), huānxǐ 歡喜 for xǐhuān (喜歡, "happy"), and dàodì 道地 for dìdao (地道, "authentic").

The Hangzhou dialect in Zhejiang is a Wu dialect in terms of its phonology, but in the Hangzhou dialect the third person pronoun is tā, the plural morpheme is -men and the diminutive -ér is quite often used. All these seem to suggest that Hangzhou is closely related to Mandarin in terms of its vocabulary and grammar. This is probably so because Hangzhou was the capital of the Southern Song Dynasty (1127–1279) for more than a century.

10.6 THE XIANG DIALECT

The Xiang dialect is spoken mostly in the Hunan province. The designation "Xiang" comes from the major river in Hunan, the Xiang River and "Xiang" is usually taken to be the alternative name for Hunan. Probably the most famous Xiang speaker is Chairman Mao who was born in 1893 in a small village called Shaoshanchong, not far from the present capital city of Changsha. The Xiang area belonged to the State of Chu in the Spring and Autumn period, and therefore the Xiang dialect could be related to the ancient Chu dialect. Traditionally, the Xiang dialect preserves the voiced obstruents of Middle Chinese, like the Wu dialect, but in more recent years, especially in major cities such as Changsha, the capital city of Hunan province, the influence of Mandarin (such as southwestern Mandarin) has caused the voiced obstruents to become voiceless (Yuan *et al*. 2001). Therefore the Xiang dialect can be further divided into the Old Xiang represented by Shuangfeng and the New Xiang represented by Changsha. The phonological features of Changsha include:

1 The voiced obstruents in Middle Chinese became voiceless unaspirated.
2 The -p, -t, -k codas disappeared, but the rù tone has been preserved as a separate tonal contour.
3 There are 6 tones. The píng and qù tones have split into two categories respectively, while the shǎng and rù tones did not.

In contrast, the more conservative Old Xiang, as represented by Shuangfeng, has the following phonological features:

1 The voiced obstruents are mostly preserved.
2 There is no labiodental sound such as f. Most words with an f- initial in Modern Standard Chinese would have a velar fricative, e.g. [x]. The words for "fly" fēi 飛 is pronounced as [xui^{55}].
3 Some words with the retroflex initials such as [tʂ] in Mandarin have an alveolar sound such as [t]. For example, the word for "pig" zhū 豬 is [ty^{55}].
4 The -p, -t, -k codas have disappeared, as did the rù tone.
5 There are 5 tones; the píng and qù tones split into two respectively, while the shǎng did not split, and the rù tone became either yángpíng or yīnqù.
6 The distinction between literary and colloquial pronunciation is common, with the literary pronunciation more similar to Mandarin.

From these phonological features, it seems that Old Xiang preserves some archaic features, such as the voiced obstruents of Middle Chinese. Item 2 in the list reminds us of Qian Daxin's claim that there were no labiodentals in Old Chinese and we know that, at least in Early Middle Chinese, the labiodentals had still not split off the labial initials such as [p] and [b]. Although there is no "f" in Shuangfeng, the original labials have diverged into labials and velars such as [x]. Item 3 is related to Qian Daxin's other claim that there were no retroflex sounds in Old Chinese. Although there are indeed retroflex initials in Shuangfeng, some of the words which originally had an alveolar initial are still preserved. The fact that literary pronunciations are more common in Shuangfeng also shows its distance from Mandarin. The lack of these characteristics in the New Xiang shows the influence of Mandarin.

In terms of grammar and vocabulary, Changsha has more similarity to Mandarin in its pronoun system. All of the personal pronoun forms, including the plural forms with -men, are cognates to Mandarin. Interestingly Shuangfeng's personal pronouns are also quite similar to Mandarin, except for the first person singular which is the quite old form áng 卬, which is attested occasionally in the *Shījīng* and the *Shàngshū* according to Xiang (1993). In some Old Xiang dialect, the third person pronoun can be related to the qú 渠 or qí 其 of the Classical Chinese era. The plural morpheme in some Old Xiang is different from -men, but the actual morphemes in Old Xiang vary.

The Chu area in ancient times was also inhabited by the ancient Yue people, and now by the Miao and Yao people. It is possible that the northern Xia people migrated to this area at an early time and that elements from the ancient Yue people were absorbed as a substratum into the Xiang dialect. For example, the words for "male" and "female" are attached to the front of nouns of animals in Chinese in general, such as gōngjī (公雞, "male+chicken→rooster") and mǔjī (母雞, "female+chicken→hen"). But in both Old Xiang and New Xiang the word for "male" follows the noun of the animals, e.g. jīgōng (雞公, "chicken+male"). Similarly in modern languages that could be considered related to the ancient Yue languages, such as Vietnamese, Thai, Miao and Yao, the adjectives that modify a noun all follows the noun. In contrast, adjectives that modify a noun are mostly pre-nominal in Classical Chinese and since.

10.7 THE GAN DIALECT

South of the Xiang, we find the Gan dialect spoken in the central and northern part of Jiangxi Province. The name "Gan" is also derived from the major river of the province, the Gan River. This area belonged to the same cultural sphere in ancient times as the Xiang did. Ancient languages or dialects like the Ancient Wu, Ancient Chu and Ancient Yue have all left their marks in the substratum of the Gan dialect. Immigrations from the north in the Eastern Jìn Dynasty also brought many northerners to this area. According to Yuan *et al.* (2001), the Gan dialect has become less distinctive as a group due to contacts with the Jianghuai, Xiang and Kejia dialects around it. However, let's use the Nanchang dialect as a representative to illustrate some characteristics of Gan dialect. In terms of phonology, the Nanchang dialect has the following features:

1 The voiced obstruents in Middle Chinese have become voiceless aspirated.
2 The stop coda -p merged into -t while the -k coda is still preserved.
3 There are 7 tones. The píng, qù and rù tones split into two categories respectively, while the shǎng tone did not split.
4 The equivalent to the Mandarin labiodental "f" varies between "f" and a bilabial fricative [ɸ]. Suppose you want to whistle and keep your lips in the same position; do not whistle but instead just exhale and you get a bilabial fricative. Words like fēi (飛, "to fly") can be pronounced as [ɸui^{42}] according to Yuan *et al.* (2001).

In terms of grammar and vocabulary, there is influence from Mandarin. The third person pronoun in Nanchang is cognate to qú 渠, and the plural morpheme is [tən],while the Mandarin -men is also an alternative form. The words for animals also put "male" after the noun, for example, jīgōng (雞公, "chicken+male"), the same as in Xiang. To some extent, the northern Wu, new Xiang and Gan dialects all have a higher degree of influence from Mandarin compared to the other southern dialects, including the dialects of Kejia, Min, and Yue (Norman 1988).

10.8 THE KEJIA DIALECT

The Kejia dialect, or the Hakka dialect, is spoken in southern Jiangxi, eastern Guangdong, western Fujian and some places in Taiwan. The name Kejia literally means "guest people", in contrast to the original local residents. Originally the ancestors of the Kejia people were Han Chinese from the north. Between the Eastern Jìn (317–420) and Tang Dynasties, they began to migrate south, reaching as far as the central part of Jiangxi, to avoid wars in the north. Towards the end of the Tang Dynasty, the north became war-torn again, and they migrated again from where they had reached earlier, further south to southern Jiangxi and parts of Fujian. By the time of the Song Dynasty, the southern areas were already inhabited by Han people who spoke dialects such as Min and Yue so the people

from this new wave of immigration from the north were considered "guest people" and they were identified differently by the government. The name "Kejia" can thus be traced to the Song Dynasty. During the Yuan Dynasty, the Kejia people migrated further again, to Guangdong, in order to avoid the Mongolian troops that pushed into southern China from the north. In the mid-Qing Dynasty, in the eighteenth century, the Kejia people further dispersed to a larger area, including Sichuan and Taiwan, because the population increased and because of issues and fights between the Kejia and the original local inhabitants. The Kejia people have a high degree of self-identity, and the Kejia dialect has a high degree of internal mutual intelligibility. It is generally agreed that the ancestors of the Kejia people originated in the Central Plains, the traditional center of the Han culture in the north, during the Middle Chinese period. An often-quoted saying of the Kejia people is "you can sell the land of your ancestors but you cannot forget the language of your ancestors" – this demonstrates the Kejia people's attitude towards their own dialect. Generally, the representative variety of Kejia is the Meixian dialect, spoken in the present-day Meizhou City in Guangdong so let's use the Meixian dialect to illustrate the characteristics of Kejia.

In terms of phonology, Kejia has the following characteristics:

1 The voiced obstruents became voiceless unaspirated.
2 Many, but not all, words with the labial initials such as [b] and [p] in Middle Chinese have become [f]. For example fū (敷, "cover") is [fu^{44}] while fǔ (斧, "axe") is [pu^{31}].
3 All of the -p, -t, -k codas are preserved and the rù tone is preserved as well.
4 All of the -m, -n, -ŋ codas are also preserved.
5 There are 6 tones. The píng and rù tones split while the shǎng and qù did not.
6 There are no rimes of the [y] series as in Modern Standard Chinese.
7 The three sets of Modern Standard Chinese initials of j/q/x, z/c/s and zh/ch/sh are pronounced as [ts, ts^{h}, s].

Looking at these characteristics, it is obvious that the Kejia dialect is comparable to Middle Chinese in terms of the existence of -p, -t, -k, -m, -n, -ŋ codas. Also recall that the [y] series of rimes in Modern Standard Chinese only developed after Early Modern Chinese, hence it is a relatively new feature. In all of the other dialects that we have looked at, including Mandarin, Wu, Xiang and Gan, there are four series of rimes including the [y] series, while in Kejia, there are only three series, with the [y] series not having developed yet. The Kejia dialect shares similarities with the surrounding dialects. For example, in terms of the devoicing of Middle Chinese as shown in item 1 above, Kejia is similar to the Gan dialect. Some scholars have suggested that Kejia and Gan should be put in one supergroup. In terms of the features 2, 3 and 4 above, Kejia is similar to the Yue dialect. In terms of the feature 6, Kejia is similar to southern Min, such as the Xiamen dialect. Regarding feature 7, Kejia is similar to Yue in that there is only one set of affricates/fricatives. Kejia also has some distinctions between literary pronunciation and colloquial pronunciation.

Regarding feature 2, the original bilabial initial is still preserved more in the colloquial pronunciation while in the literary pronunciation many of these words would have the labiodental initials, as in Mandarin. For example, the character fù 複 for "complex" is pronounces as [fuk^{21}] in the literary pronunciation and [puk^{21}] in the colloquial pronunciation.

The grammar and vocabulary of Kejia are generally quite different from Mandarin. Reduplication of adjectives is quite common to express a more vivid descriptive meaning. The prefix ā 阿 is more commonly used than in Mandarin, e.g. in front of kinship terms. The third person singular pronoun is [ki^{11}], derived from the late Classical period qú 渠. The plural morpheme is not the same as in Mandarin. For example, in Meixian it is [teu^{44}] or [teu^{44} n̥in^{11}] such as in [ki^{11} teu^{44} n̥in^{11}] ("they"). In terms of the order between adjectives and the nouns that they modify, there are more post-nominal forms alongside the usual animal nouns found in Gan and Xiang. For example, in addition to jīgōng 雞公 ("chicken male"), there are such forms as càigān (菜乾, "vegetable + dry→dried bok choy"). In this aspect Kejia is more similar to the Yue dialect. Some compound words switch the order of the two morphemes in the corresponding Mandarin words. For example, huānxǐ 歡喜 for xǐhuan 喜歡 ("like") and nàorè 鬧熱 for rènao 熱鬧 ("bustling with activity"). This reminds us of similar phenomena in the Wu dialect.

10.9 THE YUE DIALECT

Kejia has been close neighbors with the Yue dialect, which is spoken mostly in the Guangdong and Guangxi provinces and in Hong Kong. Because the Yue dialect is also spoken outside Guangdong (for example, in Canton) strictly speaking the Yue dialect cannot be called "Cantonese", although most people do use the term "Cantonese" as a general term for the Yue dialect (Yuan *et al*. 2001). Historically speaking, the Guangdong and Guangxi areas were inhabited by the ancient Yue people, hence the name of this area and also the name of the dialect. As early as in the Qin Dynasty, Qin Shi Huang sent troops to conquer this area and then he further sent people to this area as a punishment, since back then it was a remote area where life was difficult. Since then, northern Han people have migrated to this area across successive dynasties, cohabiting with the non-Han people. During the Tang Dynasty especially, this area became more developed with further immigrations of northern Han people.

Although before the Song Dynasty, the Yue areas were considered a remote corner where people were sent as a punishment, beginning with the Song Dynasty this area gradually became more and more of a cultural and economic center for Han people in the south. This became especially the case when, in the Ming and Qing Dynasties, trade between China and the outside world began to be conducted by sea. The first waves of Jesuit missionaries arrived in the coastal area of Guangdong in the Ming Dynasty and they are probably the earliest known learners of the Yue dialect. These missionaries compiled dictionaries and textbooks of Yue.

Compared with other southern dialects, the Yue dialect enjoys a robust literary tradition and there has been literature written in the Yue dialect. In addition to the

common Chinese characters, special characters were created to write down special words in the Yue dialect.

Over the past 30 years the Yue dialect area, especially Guangdong, has become one of the richest provinces of China. Both Hong Kong and Guangzhou are influential cities in terms of popular culture and economy. With the spread of the cultural and economic influences of Hong Kong and Guangdong, the Yue dialect, especially Cantonese, has become a major dialect in the whole of the country. Words and phrases from Cantonese have been quite popular and commonly seen in the north, and Cantonese songs have been imitated by northerners. There has even been a Cantonese-style Mandarin that was used by many non-Cantonese speakers to construct a chic or hip identity, especially among pop singers.

Guangzhou is the most representative variety of the Yue dialect. Internal uniformity among the different varieties of the Yue dialect is also quite high compared with the Wu and Min dialects. The phonological characteristics of Yue include:

1 The voiced obstruents have become voiceless. But whether it is aspirated or unaspirated is different in different varieties. For example, in Guangzhou, the voiced obstruents became aspirated in the píng tones and unaspirated otherwise.
2 All of the -p, -t, -k, -m, -n, -ŋ codas are preserved.
3 There is a distinction between long and short vowels. For example "sam^{1}"means "heart", while "saam^{1}" means "three".
4 In most places the píng, shǎng, and qù tones have split into two respectively. The rù tone split into yīnrù and yángrù first, and then the yīnrù further split into shàng yīnrù if the vowel is short and xià yīnrù if the vowel is long. In some places, the yángrù tone is also further split into two according to the length of the vowel.
5 The smallest number of tones is 6 and the greatest is 10. The Guangzhou dialect has nine tones but the three rù tones are associated with -p, -t, and -k codas, thus it is not solely a tonal property. Some linguists treat Guangzhou as having six tones. The same is true for dialects which have the -p, -t, -k codas and the rù tone such as the Kejia dialect.
6 The three sets of affricates and fricatives are also merged into one set.
7 Tone sandhi is quite common.
8 Many words with labial initials in Middle Chinese have become [f], similar to the situation in Kejia. The labiodental initial f is more common in literary pronunciations.

Thus on multiple levels, Yue and Kejia are very similar. Both have preserved the major phonological features of Middle Chinese, which was reconstructed mostly on the basis of Guǎngyùn. Some people jokingly say that Guǎngyùn is the sound of Cantonese, since the Chinese name for Cantonese is Guǎngdōng huà 廣東話, which shares the same character, 廣 (guǎng).

Now let's take a look at the grammar and vocabulary of Yue. In this aspect, Yue shares many similarities with Kejia as well. For example, the prefix ā 阿 is more commonly used than in Mandarin, e.g. in front of kinship terms; the third person singular pronoun is cognate to qú 渠, and the plural morpheme is not -men. In general, the plural morpheme in Yue is [tei^{22}]. The use of post-nominal adjectives is very common in Yue, e.g. jīgōng (雞公, "chicken male") and càigān (菜乾, "vegetable dry"). Regarding vocabulary, Yue dialect has more monosyllabic words than Mandarin. Archaic lexical items are often preserved, such as the use of xíng行for "to walk". Other examples include the use of yǐn飲 instead of hē 喝 for "to drink" and the use of wú 無 instead of méiyǒu 沒有 for "not have". Some words have different orders of morphemes from Mandarin, e.g. huānxǐ 歡喜 for xǐhuan 喜歡 ("like") and qízhěng 齊整 for zhěngqí 整齊 ("tidy"). There are many loanwords from Western languages like English in the Yue dialect, e.g. [pɔ^{55}] for "ball" and [p^{h}aŋ^{55}] for "pan" and [si^{22} tik^{5}] for "stick" (Yuan *et al*. 2001). But Western languages may have also borrowed a few words from the Yue dialect as well. Among many theories for the origin of the word "ketchup" in English, it is possible that it was borrowed from the Yue dialect – the word [k^{h}ɛ^{35} tʃap^{5}] (茄汁 "tomato+sauce →ketchup") seems to be a pretty good candidate.

There are some aspects of its grammar that are unique to Yue. For example, the common way of saying "I go first" in Yue is [ŋɔ^{13} ha:ŋ^{21} sin^{55}] (我行先, "I go first"), while in Mandarin it is "wǒ xiān zǒu" (我先走, "I first go"). The two dots in the IPA for the word 行, i.e. ha:ŋ represents a long vowel "aa". In Yue, a few adverbs like "first" follow the predicate, rather than precede it. Another often-quoted example is in respect of ditransitives such as "give someone something". To say "he gave me three books", the Yue dialect uses "[k^{h}œy^{13} pei^{35} sa:m^{55} pun^{35} sy^{55} ŋɔ^{13}]" (佢畀三本書我, "he give three cl. book me"), in which the person "ŋɔ^{13}" follows the object "sa:m^{55} pun^{35} sy^{55}", while in Mandarin it would be switched as in "tā gěi wǒ sān běn shū" (他給我三本書, "he give me three cl. book").

Since the Yue areas were originally inhabited by the ancient Yue people, some characteristics of today's Yue dialect can be said to reflect the substratum of the ancient Yue language. For example, the existence of post-nominal adjectives and the contrast between the long and short vowels.

The difference between the Yue dialect and Mandarin is huge, and they are mutually unintelligible. With the current promotion of Modern Standard Chinese in China, more and more people in the Yue dialect region can now both understand and speak the national language. But, as we recall, there was practically no real teaching of the common spoken language in the past – practically speaking, many people using the Yue dialect could not speak Mandarin. Liáng Qǐchāo 梁啓超 (1873–1929), one of the leading characters in the Reformist movement in the late Qing Dynasty, once went to Beijing to present his ideas on reformation to the emperor. But he did not speak the Beijing dialect and, as hard as he tried, he could not get his ideas across to the emperor. The emperor did not take him seriously and dismissed him as the emperor could not understand what Liáng Qǐchāo was trying to say – because he could not speak the Beijing dialect he appeared less intelligent in the emperor's opinion than he actually was. If Liáng had been able to speak perfect Beijing dialect

the result of his meeting with the emperor might have been quite different – the mutual unintelligibility of dialects in China cost him a precious opportunity to bring about greater modernizing reforms in China in the late Qing period.

10.10 THE MIN DIALECT

As difficult as the Yue dialect is, it is nonetheless not the most difficult dialect in China. In fact it is quite possible for a Mandarin speaker to pick up Cantonese within a few years of studying and living in the region. Chao Yuen Ren 趙元任 (1892–1982), a well-known linguist, could speak 33 Chinese dialects. There was a story about him staying in a new town and going out to pick up the local language – after a few days he talked to the local people in their own language and they could not tell that he was not a native. He could also speak French and German fluently without an accent, but even for him the Min dialect was still the most difficult one to grasp.

The Min dialect is spoken in Fujian, Taiwan, Hainan, Zhejiang and parts of Guangdong. The area around Fujian was originally inhabited by the ancient Yue in the Spring and Autumn period. The Han people from the north started to migrate to this area during the Qin Dynasty, when Qin Shi Huang sent troops to conquer this region at the same time as he captured the Cantonese region. Waves of northern Han people arrived in this area during the Jìn Dynasty in the fourth century, during the late Tang and Song Dynasties, and then during the Southern Song and late Ming Dynasty periods. It was during the seventeenth century, late Ming period, when the Manchu troops captured the entire mainland, that the Han people retreated to Taiwan bringing the Min dialect with them.

The name of "Min" is derived from the Min River. The Min area is very hilly and in ancient times people in the different areas lacked communication with both the north and internally. Consequently, they formed really archaic and very different dialects and the Min dialect probably has the lowest internal mutual intelligibility among the seven major groups of Chinese dialects. Because of this, some scholars propose to divide the main dialects further, into separate groups. Yuan *et al.* (2001) divides the Min dialect into five subgroups. Two of the major groups include the Eastern Min with Fuzhou as the representative variety and Southern Min with Xiamen as the representative dialect. Taiwanese is the Southern Min dialect spoken in Taiwan. Many characteristics of the Min dialect are older than Middle Chinese and some linguists argue that the Min dialect might have descended directly from Old Chinese, without going through Middle Chinese. Since the internal differences among the varieties of the Min dialects are quite large, we will use just one, the Southern Min, for illustrative purposes. The phonological features of Southern Min include:

1 The voiced obstruents have become voiceless unaspirated in most places.
2 A new set of voiced stops such as [b, d, g] developed from their corresponding nasals [m, n, ŋ].
3 Rimes with -m, -n, -ŋ codas are preserved in Xiamen but to different degrees in other places.

4 Nasalization of nasal rimes is common.
5 The -p, -t, -k codas are preserved to different degrees in different places. Some have -p, -k, but no -t, while some have -t, -k but no -p, while some merged all three to a glottal stop.
6 There are seven to nine tones, with seven being more common. For example, in Xiamen, the píng, qù, and rù tones have split respectively while the shǎng tone did not split.
7 There is a highly complex system of tone sandhi.
8 There is a highly developed system of literary pronunciation.
9 There are no labiodental initials such as "f". The corresponding initial in Southern Min is often [h], such as fù (附: attach) which is pronounced as [hu^{33}], although in the colloquial pronunciation the original bilabial initials are more common.
10 Many words with a retroflex initial in Mandarin would have a stop initial. For example, in Xiamen, the word zhū (豬, "pig") is [ti^{55}], zhī (知, "to know") is also [ti^{55}] and zhāng (張, "to stretch") is [tĩũ^{55}]. The tilde "~" above the vowels signifies nasalization.
11 There is no [y] series of rimes.

The most striking features of Southern Min are 9 and 10, corresponding to the two claims of Qian Daxin that we introduced in Chapter 3. Feature 10 exceeds the time-depth of Middle Chinese, since by the time of Middle Chinese the change from alvoelars to retroflex initials under the influence of the medial -r- had already happened. But, of course, not everything is archaic in Southern Min. For example the voiced obstruents in Middle Chinese have become voiceless, and the -p, -t, -k endings are not preserved as completely as in the Yue dialect.

In terms of grammar and vocabulary, the first person pronoun is cognate to wǒ我, while the second person pronoun is cognate to rǔ 汝, which is one of the Classical Chinese terms. The third person singular pronoun forms are related to yī伊in Southern Min, but in other Min dialects cognates to qú 渠 can also be found. The plural morpheme in Southern Min is generally made by adding [-n], which is not related to the Mandarin -men at all. Reduplication of adjectives can be up to three syllables, not limited to two. For example [sui^{51}] 水 means "pretty". [sui^{55} sui^{51}] 水水 means "very pretty" and [sui^{55} sui^{55} sui^{51}] means "extremely pretty" (Yuan *et al.* 2001). This use of reduplication is quite unique to the Min dialect. In Southern Min, the verb "to have" can be used to express a verbal aspect similar to the -le in Mandarin. For example, [i^{55} u^{55} kʰũã^{11}] (伊有看, "he have see→he saw") (Yuan *et al.* 2001). This use of the verb "to have" is sometimes used by speakers of the Min dialect when they speak Modern Standard Chinese, although the verb "to have" in Modern Standard Chinese cannot be used this way. In terms of vocabulary, there are many archaisms in the Min dialect. For example, the word for "to walk" is xíng 行, in some places in northeastern Fujian the word for "dog" is quǎn 犬 instead of the word gǒu (Norman 1988), the word for "wok" is dǐng 鼎 instead of guō 鍋, and the word for "chopsticks" is zhù 箸 instead of kuàizi 筷子, to list just a few.

In the same way as in the Yue dialect, there is a possible substratum of the ancient Yue dialect. For example, the designation of "male" and "female" in terms for animals also follow the noun, e.g. jīmǔ (雞母, "chicken female") and niúgōng (牛公, "ox male").

Probably the most famous Min dialect word that everybody knows is the word "tea". Actually the word "tea" comes from the Xiamen dialect, once a major point of contact with Western traders. The word for "tea" in Xiamen is still [te^{24}] in the colloquial pronunciation and [ta^{24}] in the literary pronunciation. This is the origin of the word "tea" in English, and many other European languages, e.g. French thé and Italian tè. The origin of the word "chai" in English, in many languages in India and also in Japan and Korea, is the Mandarin pronunciation of the same word, i.e. chá.

Here again we see that the retroflex initial "ch" in Mandarin corresponds to the alveolar "t" in Min, which represents the older pronunciation. Also, the vowel in the literary pronunciation of this word in Xiamen, i.e. "a", is more similar to the vowel in Mandarin. In general, the literary pronunciation in Min would be newer and more similar to Mandarin.

10.11 INFLUENCES OF THE NATIONAL LANGUAGE ON DIALECTS

Nowadays, with the promotion of Modern Standard Chinese in all aspects of life, in every corner of the country, in combination with the modern technologies of communication and travel, the national language is being emphasized everywhere, even in the areas where the Min dialect is spoken. The influence of Modern Standard Chinese has created a distinction between the dialects of the older generations and the younger generations in many places, such as in Taiyuan, Shanghai and Xiamen and more and more young people are becoming less fluent in their parents' native dialects. To some extent, the diversity of dialects is being replaced by convergence towards Modern Standard Chinese. The promotion of the national language based on Mandarin has always been met with some degree of resistance in some prestigious southern dialectal areas, such as Shanghai and Guangdong. Indeed the pride of dialectal speakers in their own regional cultural identity, as revealed through their dialects, is to be respected during the process of promoting the national language. But the need for a unified common language for everyone in the country is also to be emphasized as well. Therefore the tension between promoting the national language and protecting the diversity of regional dialects and cultures is a highly sensitive issue, especially in the non-Mandarin regions in the south. Chinese dialects are extremely valuable cultural assets of the Chinese culture. The diversity of regional cultures as reflected in genres of regional popular dramas and operas, folk songs, literature, and movies in dialects should be celebrated in the process of promoting Modern Standard Chinese.

CHAPTER 11

The legend of Cangjie

Chinese characters

China has a long tradition of keeping historical records. The earliest historian was probably the legendary Cangjie during the reign of Huangdi, more than 4,000 years ago. According to various legends, Cangjie was a gifted person with great intelligence and physical features. He was described as having four eyes with two pupils in each eye. He observed astronomical signs in the sky and footmarks left by birds and other animals on the ground, and got the idea of writing with distinctive shapes. This was how he created the Chinese characters and that was probably how he wrote down the historical records for Huangdi as his official historian.

Of course the story of Cangjie is, strictly speaking, just a legend. It is possible that there was indeed such a person as Cangjie who was instrumental in collecting and utilizing the various written symbols invented by people a long time before him but the invention of writing should be considered a joint effort of generations of people instead of being attributed to just one person.

11.1 THE STORY OF THE "DRAGON BONES"

When it comes to Chinese characters, legends abound. There is a type of medicinal ingredient in traditional Chinese medicine called "dragon bones", which are the fossils of animal bones. They are believed to have calming and sedating effects. In the late 1890s, farmers in Xiaotun Village of Anyang, Henan often dug at the site of the ancient capital city of the Shang Dynasty of about 3,000 years ago. They found lots of animal bones with markings on them. These were sold as medicinal dragon bones. In 1899, a scholar called Wáng Yìróng saw some of these dragon bones in a drugstore and was intrigued by the markings on them. He immediately recognized the connection between these markings and the ancient Chinese characters from the Zhou dynasty that he had been studying. These "dragon bones" turned out to be ox bones and turtle shells. The Shang Dynasty rulers believed in pyromancy and, when there was an important event, the rulers would often order the people in charge of divination to carve the characters of the possible outcomes of the event on a piece of animal bone and heat it over fire. The direction of the cracks on the bone would tell the outcome of the event. After the Shang Dynasty, divination by pyromancy fell out of favor and such oracle bones were soon forgotten by history. People had probably known about the existence of such animal bones from the ancient site of the Shang capital for a long time before the recognition of the

markings as writing in 1899. Such writings are called the oracle bone script which dates back to around 1200 BCE. It was a highly developed system of writing and it is reasonable to assume that the oracle bone script was the result of a long period of accumulation and invention of symbols.

11.2 THE ORIGIN OF CHINESE CHARACTERS

There have been discoveries of even earlier symbols on potsherds and animal bones in many ancient archaeological sites, dating between 4500 and 8000 years BP. Some of these symbols resemble those in the oracle bone script. In 1988, archaeologists found a Paleolithic site, in Damaidi in Ningxia in northwestern China near Shaanxi, with many petroglyphs dating back 7000 to 8000 years. Among the petroglyphs were about 2,000 symbols that looked like hieroglyphs which could be related to the oracle bone script. If these were indeed earlier forms of Chinese characters, then the age of Chinese writing could be pushed back at least 3000 years from the time of the oracle bone script.

On the other hand, before the invention of writing there were other ways of communication, including tying knots and carving lines. Historical records during the Zhou Dynasty did mention that in ancient times people used knots tied on ropes to communicate simple messages or simple carved marks on objects to document agreements, especially the numbers involved.

11.3 THE DEVELOPMENT OF CHINESE CHARACTERS

The oracle bone script is characterized by sharp and square lines and by shapes that bear a certain degree of resemblance to objects, with some simplification. At about the same time, during the Shang Dynasty and through the early Zhou Dynasty and the Spring and Autumn periods, characters were inscribed on bronze ware and are called bronze script. These look similar to the oracle bone script to some extent. The oracle bone script and the bronze script were only preserved because of the endurance of the materials used. The bamboo strips on which the Shang people could have written with a brush in ink have not survived to present times. Even with the bamboo strips found in later times, such as those from the Warring States period, the ink has sometimes completely disappeared although the bamboo strips are still there.

After Qin Shi Huang united China, he took a series of standardizing measures to unify many aspects of the empire, including weights and writing. The small seal script, based on the large seal script used before the founding of the Qin Dynasty, was adopted as the official script of the Qin Empire, and variant forms used in different states were abolished. The small seal script has smooth curved lines and the shapes are more regularized and conventionalized. At about the same time as the appearance of the small seal script, the clerical script was gradually developed

to facilitate faster writing, especially for the government employees who needed to keep a vast body of records. The clerical script became more and more popular for general purposes in the Han Dynasty, while the small seal script was used for more formal types of writing. The clerical script has smooth lines and is much simpler than the small seal script.

During the Han Dynasty, the cursive script gradually became a separate style from earlier forms of sloppy, faster writing. The cursive script was used mostly for personal uses such as jotting something down or writing a personal letter. The cursive script has more simplified and connected strokes than the clerical script. Later development of the cursive script made more connected strokes across characters, in a much more simplified and abstract fashion. Towards the end of the Eastern Han Dynasty, the semi-cursive script, also known as the running script, began to appear, based on the writing style and shapes of both the clerical script and the cursive script. What we now know as the running script is somewhere between the cursive script and the regular script. This appeared as early as between the end of the Eastern Han and the Three Kingdoms period before it finally became a distinctive type of script in the Northern and Southern Dynasties (Qiu 2001: 96). The regular script has straight lines and square shapes compared to other types of script. In the Tang Dynasty, the regular script flourished, and since then it has been used as the dominant script in formal writings, printed books, etc.

Nowadays the regular script is still the official type of script and it is also the most legible type as well. Most people use the running script for common writing tasks, such as note taking, personal communication, and writing drafts. The seal script is still widely used on seals and in calligraphy, as a form of art. The clerical script is mostly used by calligraphers, while cursive writing is practiced more often as an art form as well.

Table 11.1 shows a few example characters in scripts of each type. By comparing the shape changes vertically, readers can get some general idea of the development of Chinese characters.

11.4 SIX TYPES OF CHINESE CHARACTERS

Now let's turn to the topic of the liùshū 六書 system that classifies Chinese characters into six different types. The earliest dictionary of Chinese characters is the *Erya* (爾雅) dating from before the third century BCE. This dictionary focuses on the meaning of characters rather than on how the meaning is related to the composition of the characters. A little bit later than the *Erya*, a dictionary called *Shuō Wén Jiě Zì* (說文解字), composed by Xǔ Shèn (許慎) in 100 CE in the Han Dynasty, is the first character dictionary that systematically explained the composition and origins of about 9353 characters. According to this dictionary, Chinese characters can be classified into wén 文 and zì 字 in terms of their overall composition. If a character is a single graphic element, which cannot be further analyzed into smaller contributing components, e.g. 山 (shān, "mountain"), then it is a wén; if a character is composed of multiple elements, which all contribute to the meaning and pronunciation of the

Table 11.1 Historical development of Chinese characters

Word	quǎn "dog"	mù "eye"	zǐ "child"	shuǐ "water"
Oracle bone				
Bronze				
Small seal				
Clerical	犬	目	子	水
Regular	犬	目	子	水
Running	犬	目	子	水
Cursive	犬	目	子	水

whole character in different ways, then it is a zì, e.g. 好 (hǎo, "good"). Hence the title of the dictionary literally means "to talk about the wén and analyze the zì". It is a rather fitting title in every sense of the four characters used. The word for "writing" in Chinese is therefore "wénzì" (文字).

In the *Shuō Wén Jiě Zì*, Chinese characters are further classified into six different types: pictograms, indications, ideogrammic compounds, rebus, phono-semantic compounds and derivative cognates.

The category of pictograms, or xiàngxíng 象形 in Chinese, is self-explanatory. For example, characters like 日 (rì, "sun"), 月 (yuè, "moon"), 山 (shān, "mountain"), 人 (rén, "person"), 木 (mù, "tree") and 田 (tián, "field"). Originally these characters looked more like the objects that they represent in the oracle bone script. But in the regular script, the original shapes could not be readily recognized in order to make an association between the characters and the meaning. For example, by looking at the character "木", no one would be able to say that it is meant to be a tree without first learning about it. Therefore, although the name of this category is pictograms, they are nonetheless not pictures, but abstract presentations of a pictorial original. This category accounts for only a small portion of all Chinese characters.

Characters of the type called indication, or zhǐshì 指事, are typically based on pictograms with extra strokes added to indicate the focus of the meaning. For example, from the character 木, we can derive two characters by adding one line to the top as in 末 (mò, "tip") and by adding a line to the bottom as in 本 (běn, "roots"). The connection of these two characters with the original 木 (mù,"tree") is quite clear. This class of characters also accounts for a very small portion of all Chinese characters.

Ideogrammic compounds, or huìyì 會意, are characters that could be interpreted if the components are put together in a meaningful way. For example, by putting two instances of the character 木together, we get 林 (lín, "woods"), and by adding one more, we get 森 (sēn, "forest"). Another commonly used example is 休 (xiū, "rest"), which is composed of 人 (rén, "person") on the left with some change to the shape and 木 on the right. A person leaning against a tree gives us the idea of taking a rest. These types of characters are more common in Chinese than the previous two types.

Rebus, or the borrowing of homophones, or jiǎjiè 假借, are the most important type of Chinese characters, according to DeFrancis (1984). This is the use of a graph for its phonetic value, without regard to its meaning. For example, if I draw pictures of a soda can, a ewe, a sea and a well as a rebus, it could mean the sentence "can you see well?" The picture of the soda can is used to stand for the sound "can", but not the meaning of "can". For example, the character 又 (yòu, "again") is originally a pictogram of the right hand but it was a homophone of the word for "again". Therefore the graph 又 can be used to stand for the sound "yòu" which also means "again". In many cases, after the original graph was borrowed a new graph would be invented for the original meaning. In this case, 右 (yòu, "right, as opposed to left") was invented to stand for the original meaning of "the right hand". Interestingly, we see that both characters and both words are still homophones. But in other cases, if we know that two characters are related by the concept of a rebus, we can deduce that their pronunciations must have been more or less the same, even if they are not homophones anymore. This is the case with 來 (lái, "come") which is originally a pictogram of the wheat plant but was borrowed to stand for the sound value only and was used to write the homophonous word "to come". A new character 麥 (mài, "wheat") was created for the original meaning but now they are not homophones anymore (DeFrancis 1984). One has the initial "l", and the other has the initial "m". If they were homophones, one possibility is that in Old Chinese, or earlier than that, both the word "to come" and the word "wheat" were pronounced with a consonant cluster such as ml-. Then if "m" was later dropped, it would become the word "to come", and if "l" was later dropped, it would be the word "wheat". Such evidence can be used to support the claim that there were consonant clusters in Old Chinese in earlier times. Although this class of Chinese characters accounts for only about one percent of all Chinese characters, they are the most productive type of writing, as shown by the phono-semantic compounds, or xíngshēng 形聲, which account for the absolute majority of Chinese characters.

Actually we have already seen the so-called phono-semantic compound characters, xíngshēng 形聲, in Chapter 3 when we talked about the phonetic series called xiéshēngzì. The phono-semantic compounds are composed of a part which indicates the meaning of the whole character, and a part which indicates the pronunciation . For example, the character 清 is composed of two parts 氵 and 青. The part 氵 means water and it indicates that the whole character 清 has something to do with water. The part 青 is used here only for its sound, which is qīng, and which indicates that the pronunciation of the whole character should be similar to qīng. In

this case, the compound character 清 means "(of water) clear", and the pronunciation is qīng. Here is another example: the character 室 is composed of the semantic part 宀, which is a roof and the phonetic part 至, which is pronounced as zhì. The whole character 室 means "room" and is pronounced as "shì". When we used the xiéshēngzì to derive the classes of initials and rimes in Old Chinese, we used two principles. First, characters in a phonetic series should be in the same rime class. Second, their initials should have the same place of articulation. The example with 室 here is still analyzable in these two ways even according to modern pronunciation. The rimes of 室 shì and 至 zhì are the same, and the place of articulation is retroflex in both. Of course, the relations are maintained here but their Old Chinese pronunciations are still quite different from what they are now. In some cases, the sound relations have not been preserved due to sound change, such as in the character 英 (yīng, "flower"), which is composed of 艹 meaning "grass" as the semantic part, and 央 yāng as the phonetic part. The rimes of yīng and yāng have become so very different now. The phonetic component in these compound characters is based on the concept of rebus as seen in the class we have just discussed. But the immediate problem with this type of character is that the sound component cannot accurately indicate the pronunciation of the compound character, and also that the sound component is not fixed.

There is one more class of Chinese characters, which is that of the derivative cognates. There are very few of these. The most often cited example is 老 lǎo and 考 kǎo. These two characters were originally the same graph, with the same meaning of "old" and the same pronunciation. Later the character developed in different directions. The meaning, shape, and pronunciation all changed until they are hardly recognizable as having descended from the same word. 老 lǎo still means "old", while 考 kǎo can mean "to examine" in addition to meaning "old", especially in Classical Chinese and archaisms. Since they were originally the same word, and they have different initials now, i.e. "l" and "k", their original pronunciation could have had the consonant cluster "kl-". This is also some evidence for the existence of consonant clusters in Old Chinese and earlier stages of the language.

11.5 NUMBER OF CHINESE CHARACTERS

In the *Shuō Wén Jiě Zì*, there were 9,353 characters and 1,163 variant forms. But new characters were constantly being invented, mostly using the phono-semantic principle. For example in the dictionary called *Jí Yùn* 集韻 from the Northern Song Dynasty, there are 53,525 characters, but many of them are variant forms, unofficial popular forms or rare characters. It seems to be an astounding number of characters, which no human being can master in its entirety or keep in his active vocabulary. This is indeed the case. But fortunately, in order to read and write in Chinese, only a much smaller number of Chinese characters are needed. For a Modern Standard Chinese speaker, it is enough to know between 2,000 and 3,000 characters for most common functions. For specialized purposes such as the study of ancient texts, or history, one generally needs to know many more characters.

11.6 CHINESE CHARACTERS IN VERNACULAR WRITING AND DIALECTS

With the development of vernacular writing in the post-Classical era, new words needed to be written down with characters. Sometimes, a character can be borrowed for the new meaning. For example, the Classical Chinese word for "to eat" is "shí 食" which is still used in many southern dialects, such as the Yue and Min dialects. The Modern Standard Chinese word for "to eat" is "chī 吃". According to the *Shuō Wén Jiě Zì*, "吃" means "to stutter". This meaning is still preserved in Modern Standard Chinese words such as "kǒuchī" (口吃, "to stutter"). Apparently this character was borrowed in order to write the new word for "to eat". In many cases, a new character would be created to write down a new word. For example, in Chapter 8 we mentioned the creation of the new word for "chopsticks" and a corresponding new character 筷. Besides vernacular language, various dialects can also be written down with Chinese characters. Since Chinese characters do not represent sounds directly, the same character can be pronounced in different ways in different dialects. For example, the character 家 means "home, family", and it is pronounced as jiā in Modern Standard Chinese but as gaa[1] in Cantonese. For cognate words across the different dialects, they could all be written down with the same etymologically correct character but, in many cases, a word in a certain dialect will not have a clear cognate recorded in dictionaries from ancient times. In such cases another character can be borrowed to represent the sound, e.g. the Suzhou Wu word for "he, she" [li[44]] is written with 俚 (Norman 1988: 77), which is used to write the word lǐ ("vulgar") in Modern Standard Chinese. It is common in major dialects with a literary tradition, such as the Wu and Yue dialects, for new dialect characters to be created in order to write down special words in these dialects. For example, the Cantonese word for "not have" mou[5] is written with "冇", as contrasted to the word for "have" jau[5] which is written as "有". Taking out the two lines inside the character 有 gives us the character for "not have". Besides such newly created characters, most of the characters used in Cantonese are borrowed characters based on their similar sounds.

11.7 THE SIMPLIFICATION OF CHINESE CHARACTERS

If the more than 50,000 characters in the *Jí Yùn* are not enough of a headache for everyone, these newly created characters for writing down the northern vernacular words and dialectal words further complicated the situation by adding to the number of characters. Besides the problem with the number of characters, the complexity of the character system is also quite difficult for many people – for example, characters like 鬱, 龜 etc. just have too many strokes. The simplification of Chinese characters, both in terms of the number and of the complexity, has always been a trend in the history of the development of characters. From the oracle bone script and bronze script to clerical script, simplification was already an issue.

According to the preface of the *Shuō Wén Jiě Zì*, the reason for simplification in the clerical script was that government affairs and transactions increased, and there was an urgent need for faster writing. Although this view of the appearance of the clerical script is not supported by historical facts as Qiu (2001) shows, the trend towards simplification is nonetheless a major theme. In the running script and the cursive script, the details of characters were often omitted. In addition, for popular usages, some non-official forms were also created from time to time but, in general, the regular script has not changed or simplified much since its emergence in the Northern and Southern Dynasties.

In Chapter 9, we described the formation of Modern Standard Chinese. One of the major tasks was to make the language easier to learn in order to facilitate education.

As early as in 1923, Qian Xuantong proposed the simplification of Chinese characters leading, finally, to a phonetic writing system. In 1935, a set of over 300 simplified characters was recognized by the government. After the founding of the People's Republic of China on the Mainland, the government took further measures to simplify Chinese characters, adopting the principles originally proposed by Qian Xuantong while adding further ways of simplification. In 1956, the Scheme of Simplifying Chinese Characters was promulgated in which there were 515 simplified characters and 54 simplified radicals. We will discuss some of the ways of simplification.

One way to reduce the number of characters is by collapsing homophones. For example, in Classical Chinese the characters 後 and 后 are homophones, the former meaning "after", the latter meaning "queen, empress". They are still homophones pronounced as hòu now, and thus only the simpler form 后is used for both meanings. Actually, even in Classical texts such homophones are sometimes used interchangeably as well.

There are also variant forms such as 群 and 羣, 峰 and 峯, in which the positions of the components are different. The first one in each pair has been chosen as the standard form in the simplified character system and the number of characters in actual use can be reduced in this way.

The original character for the word qì might have been 气, instead of 氣 with the "rice" component. In such cases, the earlier simpler form, i.e. 气, is chosen to replace the standard traditional Chinese character 氣. In the dictionary *Shuō Wén Jiě Zì*, there are quite some old, simpler forms that were replaced by later, more complex characters. The word for "rites", lǐ 禮 had a simpler older form 礼, which was adopted as the form in the simplified Chinese character system. By restoring the older simpler form, we can reduce the number of strokes of a certain character.

Another slightly different example is 云. Originally, this character is the one for "clouds" but later, by using the phono-semantic principle, a "rain" radical was added to form 雲, and the former character 云was reserved for a homophonous word meaning "to say", which is the "yún" in the phrase "zǐ yuē shī yún" (子曰詩云) in the title of Chapter 3. But in Modern Standard Chinese, the word "yún" as a verb "to say" has become obsolete and is only preserved in idioms like "zǐ yuē shī yún", or

similar such classicisms. Therefore the character 云 is restored to write the word "yún" for clouds. They are still homophones, but the verb "yún" meaning "to say" is not used in the same context, and using the same character is an efficient way of simplification.

In many cases, the popular unofficial form of a character is simpler. For example, the character 声 for the word shēng "sound" was originally such an unofficial form, while the traditional official character is 聲. In such cases, the unofficial, simpler form can be made official, replacing the more complex form.

Since many characters are simplified in the semi-cursive script, the shape in the semi-cursive script can be regularized to derive a simpler character. For example, the character 書 (shū, "book") is written in a simple form in the semi-cursive script with more curved lines and linked strokes. It is then regularized as 书, with distinct strokes and straight lines. The radical 言 ("speech") as in the character 語 (yǔ, "language") is often simplified as 讠 in semi-cursive writing, and by adopting this form for the radical 言 , we can batch-convert characters that contain such a radical. For example, 請→请, 諒→谅, 記→记. This method is very productive.

Since many Chinese characters are constructed following the phono-semantic principle and the phonetic components are not fixed, a simpler phonetic component can be substituted. For example, in the character 讓 ràng, the right part 襄 xiāng is the phonetic part, but it is quite complex, and in the simplified character system, the character 上 shàng was substituted and the radical 言 on the left was also simplified in the way mentioned above, so that 讓 is simplified to 让. The character 燈 dēng has 登 dēng as its phonetic component, and it is replaced by 丁 dīng to derive the simplified form 灯.

In some cases, a common component in many characters is replaced by a place-holder symbol. For example, the character 又 can be used to replace complex components. The left part of the character 歡 is replaced by 又 to derive 欢. The left component in 鄧 is replaced to get 邓, and the right part of the character 漢 is replaced to derive 汉. In the traditional forms of these characters, the replaced components serve as different phonetic cues, but the place-holder symbol 又 does not give any phonetic or semantic cues to the whole character at all.

A smaller number of completely new forms were created. For example 卫 was created for 衛 (wèi, "defend") and 灶 was created for 竈 (zào, "stove").

The original plan for simplifying Chinese characters was intended to use this as a quick way to eradicate illiteracy in China, and as a bridge to finally replace Chinese characters with a Romanized script such as pinyin. The simplification was meant to be carried out in stages. The first batch of simplified characters in 1956 was followed by a second batch in 1977, with further simplifications. But such radical simplifications created all kinds of issues, such as over simplification or strokes that made certain characters look too similar, collapsing homophonous characters too much creating problems with the meaning of written words, and aesthetical issues with the shape of the oversimplified characters, to name but a few. Probably the real problem is the chaos created by such simplifications. Multiple forms of different degrees of simplification could be seen, and the conventionalized nature of writing suddenly

became quite fluid which hindered the effectiveness of communication and caused confusion. Moreover, many scholars were already against the first simplification of Chinese characters in 1956, and this further simplification in 1977 was regarded as going too far, and it received complaints from many scholars. In 1986, the second batch of simplified Chinese characters was abolished, and the plan to use a Romanized script to replace Chinese characters was also indefinitely deferred, although pinyin is still used as a way to annotate the pronunciation of Chinese characters and also as a standard way to Romanize Chinese characters for use in other languages. The second batch of simplified Chinese characters was revoked, but they had all been in wide circulation and use for almost ten years and the influence of the second batch of simplified characters can still be seen in unofficial usages nowadays.

Although Chinese characters have been simplified on the Mainland, traditional Chinese characters have continued to be used in Taiwan, Hong Kong and many overseas Chinese communities. In recent years, Singapore has adopted simplified Chinese characters. In general, for most Chinese speakers, it is necessary to be able to read both types of characters and to write in one. Although many scholars opposed the simplification of Chinese characters from the beginning, out of concern for tradition and continuity in history, the real issue with the simplification of Chinese characters is probably the creation of more complexity by creating two systems, i.e. traditional and simplified Chinese characters. The original purpose of the simplification actually complicates the situation. Anyone who uses or learns Chinese will have to know both types of characters at some point and therefore the whole task becomes more demanding.

11.8 CONTROVERSIES ABOUT THE NATURE OF CHINESE WRITING

What is the relation between writing and language? Historically speaking, language was first only spoken. Writing is a later development. Most writing systems record the sounds of a language. Thus for linguists, language is primary while writing is secondary and derivative. A word in a language has two sides: the sound and the meaning, or the signifier and the signified. These could be considered as mental images of the sound and of the object denoted. The connection between the signifier and the signified in a system of linguistic signs, i.e. a language, is largely arbitrary. There is no objective reason why the sound “water” has to be associated with the meaning of “water”. There are a smaller number of words in any language which have a non-arbitrary association between the signifier and the signified, such as onomatopoeic words, but these words are strictly a smaller part of the language. By using syntactic rules, sentences can be constructed out of words. When a speaker utters a word or a sentence, it is the externalization of the internal linguistic system. Such utterances can be written down using written symbols which correspond to the sounds of the words or sentences. To some extent, speech is the externalization of language, and writing is the materialization of speech. Whenever we say

"language", it refers to the spoken language or, primarily, speech. But in people's ordinary talk, "language" is used ambiguously to refer to either "speech" or "writing" and sometimes "speech" and "writing" are not distinguished. Figure 11.1 shows the relationship between language and writing.

But this view does not exactly apply to Chinese, because Chinese writing is not a direct record of sounds. Then what is the nature of Chinese writing? Let's say what it is not, by debunking one common myth that says "Chinese characters are ideographic because Chinese characters represent ideas using symbols that were derived from drawing pictures of things". This is termed the Ideographic Myth by DeFrancis (1984). Note that this view does not say that Chinese characters are just pictures of things but rather that Chinese characters were derived from such pictures, and now these symbols represent ideas, thoughts and concepts, etc. by using conventionalized symbols which are not entirely phonetic.

The Ideographic Myth is at least as old as the early missionary accounts of Chinese in the sixteenth century, although many of these missionaries did not have extensive knowledge of the Chinese writing system. Even Chinese people sometimes agree with the claim that Chinese characters are ideographs. DeFrancis (1984) argued quite convincingly that Chinese characters are not ideographic. One of the reasons for this is that no fully functional writing system can be ideographic, because ideographic symbols are limited in number and too cumbersome to be used to express anything beyond the immediate and concrete ideas. All current writing systems in the world started as drawings or pictures. The crucial step towards real writing is the use of a symbol for its phonetic value only, i.e. the rebus principle that we discussed earlier. The difference between Chinese characters and other types of writing systems in the world today is that the rebus principle is not used to create fixed symbols to represent fixed sounds. We see that in the phono-semantic compound Chinese characters, the phonetic component can indeed vary and it does not indicate the exact pronunciation of the whole character. Moreover, according to the fundamental assumptions of modern linguistics, all writing is necessarily phonographic, and ideographic writing is impossible. Therefore DeFrancis (1984) concludes that Chinese writing is basically a phonetic system, although it is not as efficient as a truly phonetic system such as the alphabetic writing systems.

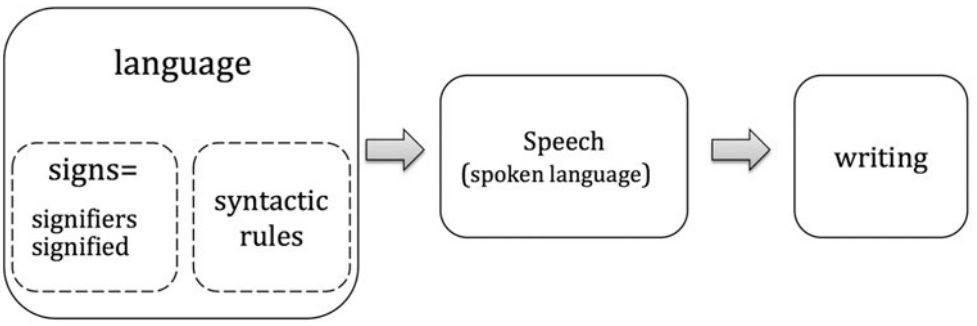


Figure 11.1 The relationship between speech and writing

To debunk the Ideographic Myth is necessary. For one thing, the Ideographic Myth of Chinese writing instills the wrong idea about Chinese language. People try to look for meaning where there is none, and we have all heard of stories behind the pictures of Chinese characters: many of these stories are just popular myths that do not have any substance.

But is Chinese writing really just phonetic? In the liùshū system, there are definitely characters that do not fit into any phonetic design, e.g. the pictograms, the indications, the ideogrammic compounds, although together they account for only a small number of all the Chinese characters. But for the majority of Chinese characters of the phono-semantic type, at least half of the information contained within the character is about the meaning category of the whole character. Such semantic information is indeed very important for the reading of Chinese characters and therefore Chinese characters could be argued to be as ideographic or logographic as they are phonetic.

The debate about the nature of Chinese writing has always been quite heated, with proponents on each side. We hope that our discussions here will inspire our readers to explore this topic in more depth on their own. Together with the previous ten chapters, this chapter concludes our very brief introduction to the history of the Chinese language.

APPENDIX I

Chronological divisions of Chinese history

夏	Xia	Twenty-first to sixteenth centuries BCE
商	Shang	Sixteenth to eleventh centuries BCE
西周	Western Zhou	Eleventh century to 771 BCE
春秋	Spring and Autumn period	770– 476 BCE
戰國	Warring States period	475–221 BCE
秦	Qin	221–207 BCE
西漢、東漢	Western and Eastern Han	206 BCE–220 CE
三國	Three Kingdoms	220–265
西晉、東晉	Western and Eastern Jin	265–420
南北朝	Northern and Southern Dynasties	420–589
隋	Sui	581–618
唐	Tang	618–907
五代	Five Dynasties period	907–960
北宋、南宋	Northern and Southern Song	960–1279
遼	Liao	916–1125
金	Jin	1115–1234
元	Yuan	1271–1368
明	Ming	1368–1644
清	Qing	1644–1911

APPENDIX II

Articulatory phonetics and IPA

Phonetics studies the properties of linguistic sounds. Specifically, articulatory phonetics describes how sounds are uttered in the vocal tract using different configurations of the articulators that participate in the making of linguistic sounds. Correspondingly, each sound can be represented by a symbol from the International Phonetic Alphabet (IPA for short). Using IPA symbols, we can describe and compare sounds in any human language. Some symbols look familiar, e.g. [b][d][g]; some are not common. Here we will give a brief introduction to articulatory phonetics and IPA; we will provide the minimum that is required for a better understanding of chapters in this book.

Sounds in human languages can be primarily classified into consonants and vowels. If there is complete or partial obstruction of the air when uttering a sound, it is considered a consonant. If the vocal tract is open to different degrees, with no obstruction of the air, or if there is very little constriction of the vocal tract, the sounds can be regarded as vowels. The most typical consonants include stop or plosive sounds, such as the "b" in "bay". Typical vowels include sounds like the "a" in "spa". Let's discuss the articulatory phonetics of consonants first.

There are four major dimensions by which to distinguish consonants: place of articulation, manner of articulation, voicing, and aspiration. The first two dimensions are the most basic ones.

The place of articulation refers to where the obstruction of air occurs when you utter a consonant. For example, when you say the "b" in "bay", you use your lips to block the airflow first and then release it. The major places of articulation include:

Table AII.1 Places of articulation

Places of articulation	*Description*	*Examples*
Bilabial	Uttered with lower and upper lips	b "bay" p "pay" m "may"
Labiodental	Uttered with lower lip against upper teeth	f "fade" v "vade"
Dental	Tongue against teeth	th "thigh" th "thy"

Places of articulation	*Description*	*Examples*
Alveolar	Tongue against the gum area right above the upper teeth	t “too” d “do” n “no” l “low” r “right” “dd” “ladder” s “sip” z “zip”
Post-alveolar or palatal	Tongue a little further back than alveolar sounds	sh “show” “g” “rouge”
Retroflex	The tip of tongue rolled up against the palatal area	Chinese “sh” as in “shéi” (who)
Velar	The back of tongue raised against the back of palate	k “Kate” g “gate” ng “sing”
Uvular	The back tongue against the uvula	Hebrew q “qol” for “voice” The French r as in “rouge”
Glottal	Uttered at the vocal folds	h “hide” For some English speakers: “tt” in “button”

The manner of articulation refers to the kind of obstruction of air that it is when you utter a consonant. For example, when you pronounce the b in “bay”, there is a total obstruction in the vocal tract. But when you pronounce the f in “fade”, there is a narrowing of the vocal tract but air can still pass through. The manners of articulation include:

Table AII.2 Manners of articulation

Manner of articulation	*Description*	*Examples*
Stop or plosive	Total obstruction of air	p “pie” t “tie” g “guy”
Nasal	Total obstruction of air in the mouth but air comes out of the nose	m “may” n “nay” ng “sing”
Trill	Relevant articulators such as the tip of tongue, etc. flap quickly	The Spanish r “carro”

Manner of articulation	*Description*	*Examples*
Tap or flap	A quick tap on the back of the upper gum area or immediately above it	"dd" in "ladder" "t" in "later"
Fricative	Narrowing of air passage causing friction	f "fin" th "thin" sh "shin"
Affricate	A combination of a stop and a fricative	ch "chat" [t+sh] ts "cats" [t+s]
Approximant	Narrowing of air passage but not causing frication	r "right" j "yes"
Lateral	The center of the air passage is blocked, but air can flow around the sides of the tongue	l "like"

Now we are ready to combine these two dimensions into one table. The horizontal dimension, listed on top of the table below, shows the place of articulation. The vertical dimension, listed in the first column, is the manner of articulation. The combinations are shown in the cells. All the symbols are IPA symbols. Readers can try to figure out how to say these sounds based on the two dimensions.

Table AII.3 IPA symbols

	Bilabial	Labio-dental	Dental	Alveolar	Palato-alveolar / palatal	Alveolo-palatal / palatal	Retroflex	Velar	Uvular	glottal
Plosive	p b			t d		ʨ ʥ	ʈ ɖ	k g	q ɢ	ʔ
Nasal	m	ɱ		n		ɲ	ɳ	ŋ	ɴ	
Trill	B			r					ʀ	
Tap or flap				ɾ			ɽ			
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ɕ ʑ	ʂ ʐ	x ɣ	χ ʁ	h ɦ
Affricate				ʦ ʣ	ʧ ʤ	ʨ ʥ	ʈʂ ɖʐ			
Approximant	w	ʋ		ɹ		j ɥ	ɻ			
lateral				l						

In each of the cells, the IPA symbols are aligned either on the left or on the right and that is the third dimension: voicing. The vocal cords are two thin strips of membrane

in the throat. If they vibrate as a sound is produced, the sound is a voiced sound, e.g. [b, d, g, z, v, m, n, l, w, j]. If the vocal cords do not vibrate as a sound is produced, it is said to be voiceless, e.g. [p, t, k, s, f]. Let's now illustrate the sound inventory of American English using the IPA symbols from the table above.

Table AII.4 American English consonants

	Bilabial and Labio-dental	Dental	Alveolar	Palato-alveolar	Palatal	Velar	Glottal
Plosive	p b pay bay		t d too do			k g king guy	ʔ button
Nasal	m may		n no			ŋ sing	
Tap or flap			ɾ ladder				
Fricative	f v fade vade	θ ð thigh thy	s z sue zoo	ʃ ʒ shy rouge			h how
Affricate				tʃ dʒ chin gin			
Approximant			ɹ right		j yes	w water	
Lateral			l low				

The fourth dimension is aspiration. If a puff of air follows the release of an obstruction, then the consonant is aspirated. Otherwise, it is unaspirated.

This can be represented by a superscripted h. In fact we can find such pairs of sounds in English:

[p^h] vs [p]	as in	pit vs spit
[t^h] vs [t]	as in	take vs stake
[k^h] v. [k]	as in	Kate vs skate

But since the distinction between aspirated sounds and unaspirated sounds in English is not contrastive, meaning that there is no pair of words that are distinguished only by the differences in aspiration, we can just use one symbol, say "p" to represent these two different sounds. So whether it is aspirated or unaspirated in English is predictable. For example, if the letter p occurs at the beginning of a monosyllabic word, such as "pit", it is aspirated. If the letter p occurs after s, such as in "spit", it is unaspirated. We can say that there is a phoneme /p/ in English which has two allophones [p^h] and [p]. By contrast, Modern Standard Chinese uses such distinctions as a primary way of distinguishing between a pair of words such as "pā" and "bā" (note that the Modern Standard Chinese pinyin b is actually a voiceless [p]). Thus the p in "pā" is [p^h] and the b in "bā" is [p]. The only distinction between these two words

is the aspiration. They are not predictable. Therefore we say that /pʰ/ and /p/ are two different phonemes. Note here that we generally put IPA symbols in square brackets, e.g. [p], but when we want to indicate that a certain sound is actually a phoneme, we use a pair of slashes, e.g. /p/.

Thus all consonants can be described in the four dimensions, for example:

[s] is a voiceless alveolar fricative
[b] is a voiced bilabial stop
[tʃ] is a voiceless palato-alveolar affricate
[pʰ] is an aspirated voiceless bilabial stop

Now let's see how vowels can be described by referring to the relevant articulators. By definition, if there is no obstruction of air stream or very little constriction of the vocal tract, the sound produced is a vowel. Vowels can be described by three different dimensions: the height of the tongue, the frontness or backness of the tongue and lip-rounding. If we imagine that the four vowels [i, u, a, ɑ], as described below, outline the whole space of vowels, then all of the possible vowels will be within the space represented in Figure AII.1.

[i] tongue at highest and frontmost
[u] tongue at highest and backmost
[a] tongue at lowest and frontmost
[ɑ] tongue at lowest and backmost

The front vowels are usually unrounded, meaning that when you utter the vowels, the lips are not rounded. Suppose you are trying to pronounce [i] as in the English word "feet", but round your lips first without moving your tongue position at all. You

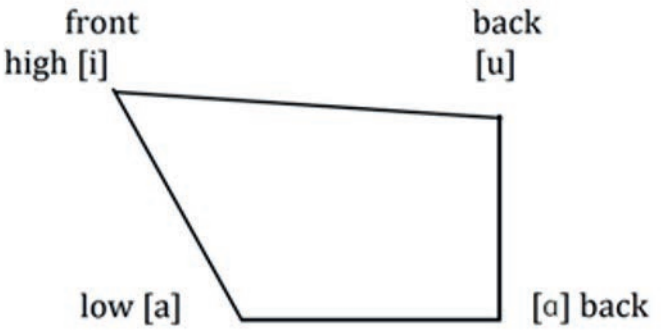


Figure AII.1 The space of vowels

will get the rounded version of [i], i.e. [y], which is the ü (umlaut) in the German word "über", or the French u in the word "tu". The back vowels are normally rounded, such as [u], but if you unround your lips when you say [u], you get the unrounded version. Now if we divide the vertical space into four equidistant levels, i.e. high, mid-high, mid-low and low, and the horizontal space into front, central and back, then we get a full specification of all possible vowels. Some of the more common ones are listed here in Figure AII.2.

In this figure, there are two sounds at each point in the front and at the back. The first one of each pair is the unrounded version, while the second one of each pair is the rounded version. Table AII.5 shows the vowels in American English with examples.

Now we can use all of the three dimensions to describe vowels, for example:

[i] high front unrounded
[o] mid-high back rounded
[a] low front unrounded

For a detailed IPA transcription of all the pinyin letters in Modern Standard Chinese, please refer to Appendix IV.

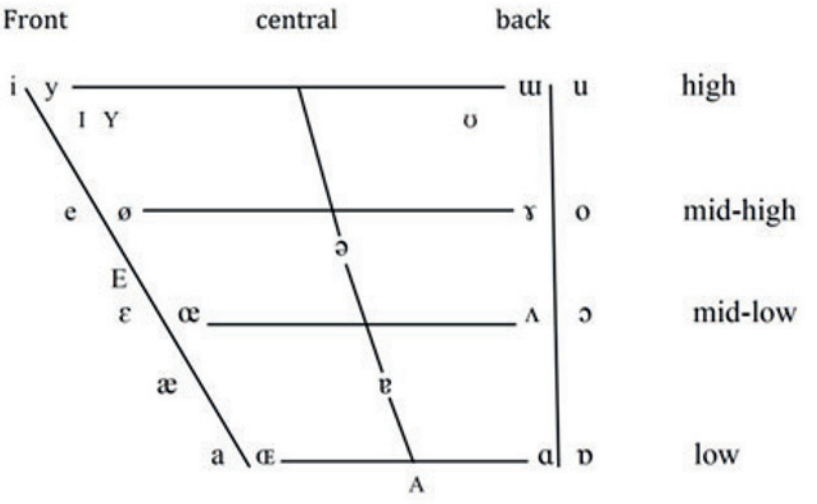


Figure AII.2 Vowels in IPA symbols

Table AII.5 American English vowels

Front vowels	[i]	feet
	[ɪ]	fit
	[e]	bait
	[ɛ]	bed
	[æ]	back
Central vowels	[ə]	of
	[ʌ]	but
Back vowels	[u]	tool
	[ʊ]	good
	[o]	go
	[ɔ]	paw
	[a]	hot
	[u]	tool

APPENDIX III

Chinese Pinyin pronunciation guide

The following guide describes the pronunciation of pinyin letters and combinations in Modern Standard Chinese, comparing them to similar sounds from English. Although such comparisons cannot be totally accurate in their exact phonetic values, they can still be useful for readers who wish to know how to pronounce the pinyin used in this book.

The comparable sounds in English are underlined. Notes are added to correct the common tendencies to pronounce these words in other ways. Where the tables have a column called "Extension to other pinyin" these are combinations that use the listed pinyin letters as a component.

INITIAL CONSONANTS

The following are similar to English:

b as in "boy", p as in "pie", m as in "my", f as in "five"
d as in "day", t as in "tea", n as in "no", l as in "love"
g always as in "guy", k as in "kite"
h stronger than "who", actually more like the German pronunciation of "Bach"
s always as in "say", sh as in "shy", ch always as in "chat"

The following are usually very difficult to pronounce:

Pinyin	*Sounds like*	*Note*
j	jeep	Never as rouge
q	cheese	Never as k
x	sheet	Not ks
z	cards	Not the same as zoo
c	cats	Never as k
zh	jar	Never as zoo or rouge
r	rouge	Less strong than rouge, but acceptable if pronounced as the British r.

SIMPLE VOWELS

Pinyin	*English*	*Note*	*Extension to other pinyin*
a	ah, father	Never as back or bay	ia/ya, ua/wa
o	boy	Just the "o" in boy. Never as know by itself	uo/wo
e	ugh, uhh, duh	Never as in bay, bed, etc.	ie/ye but as in "yes" üe/ue/yue but the e is as in "yes". The ü/u/yu in these combinations are all pronounced as ü (umlaut)
i	Lee	Never as the short it	ui/wei but as in "wait"
u	tool	Never as put	iu/you but as "ee-oh"
ü or u after j/q/x/y	No English equivalent. Same as German über (umlaut) and French tu	Never as "you"	
i after z/c/s	Prolong the z/c/s as if there is no vowel. The i sounds like a prolonged z.	Never as "ee"	
i after zh/ch/sh/r	Prolong the zh/ch/sh/r as if there is no vowel. The i sounds like a prolonged "zh" sound such as the g in "rouge"	Never as "ee"	

COMPOUND VOWELS

Pinyin	*English*	*Extension to other pinyin*
ai	I	uai/wai
ei	hay	wei
ao	owl	iao/yao
ou	oh	you, sounds like “ee-oh”

VOWEL PLUS R OR NASAL

Pinyin	*English*	*Note*	*Extension to other pinyin*
er	are	Also as “err”	
an	ahh-n	Never as in ant	uan/wan ian/yan üan, spelt as “uan” after j/q/x/y
ang	ahh-ng	Never as in sang	uang/wang iang/yang
en	uhh-n, deepen	Never as enter	un / wen as u-en ün/ yun as ü-en
eng	uhh-ng	Never as ginseng	weng as u-eng
in	been	More tense, never as in	
ing	ee-ng	More tense, never as bing	
ong	o-ng [o as in boy]	The o is never as in (AmE) hot	iong/yong

TONES

1st tone	high flat, sing the note G and prolong it
2nd tone	rising, as if asking a question as in “yes?”
3rd tone	low dip and rise, go as low as you can in pitch, keep the shape relatively flat. Do not emphasize the contour, especially the rising part
4th tone	high falling, as if confirming something, e.g. “yes!”

APPENDIX IV

Correspondence chart of Mandarin pinyin and IPA symbols

22 INITIALS

Pinyin	*IPA*
b	[p]
p	[pʰ]
m	[m]
f	[f]
d	[t]
t	[tʰ]
n	[n]
l	[l]
g	[k]
k	[kʰ]
h	[x]

Pinyin	*IPA*
j	[tɕ]
q	[tɕʰ]
x	[ɕ]
z	[ts]
c	[tsʰ]
s	[s]
zh	[tʂ]
ch	[tʂʰ]
sh	[ʂ]
r	[ɻ]
ø	zero initial

37 RIMES[1]

No medials	*[i] series*	*[u] series*	*[y] series*
-i [ɿ][2] or [ʅ][3]	i [i]	u [u]	ü [y]
a [a] o [o] e [ɤ] er [ɚ]	ia [ia] ie [iɛ]	ua [ua] uo [uo]	üe [yɛ]
ai [ai] ei [ei]		uai [uai] ui [uei]	
ao [au] ou [ou]	iao [iau] iu [iou]		
an [an] en [ən] ang [aŋ] eng [əŋ]	ian [ian] in [in] iang [iaŋ] ing [iŋ]	uan [uan] un [uən] uang [uaŋ] ueng [uəŋ][4] ong [uŋ]	üan [yan] ün [yn] iong [yŋ]

1 Based on the Department of Chinese Language and Literature, Peking University, 2006, p. 58.
2 This is the special vowel in syllables like zi, ci and si.
3 This is the special vowel in syllables like zhi, chi, shi and ri. Both of these vowels are called apical vowels in Chinese linguistics.
4 Note that this rime is always a syllable by itself. Thus it is always written as “weng” as a morpheme.

APPENDIX V

Category labels used in syntax

cl.	classifier or measure word
comp.	complement marker
dur.	durative aspect marker
exp.	experiential aspect marker
mod.	marker of modifier
neg.	negator
nom.	nominalizer
par.	grammatical particle
pass.	passive marker
perf.	perfective aspect marker
pol.	polite form
poss.	possessive case marker
prog.	progressive aspect marker
ques.	question particle
subj.	subject marker
top.	topic marker

References

Aitchison, Jean. 2010. *Understand Linguistics*, in the *Teach Yourself* series. McGraw Hill.

Bao, Zhiming. 1990. "Language and world view in ancient China." *Philosophy East and West* 40(2), pp. 195–219.

Benedict, Paul. 1972. *Sino-Tibetan – A Conspectus.*

Blum, Susan. 2005. "Nationalism without linguism." In W. Martin Bloomer, ed. *The Contest of Language, Before and Beyond Nationalism*. University of Notre Dame Press.

Campbell, Lyle. 1999. *Historical Linguistics: An Introduction*. The MIT Press.

Cavalli-Sforza, L. L. and Piazza, M. P. 1994. *The History and Geography of Human Genes*. Princeton University Press.

Chang, K. C. 1986. *The Archaeology of Ancient China*. 4th edition. Yale University Press.

Chen, Baoya (陈保亚). 1993. 羌夏—澳越语言文化联盟论.《云南民族学院学报（哲学社会科学版）》3, pp. 75–80.

Chen, Baoya (陈保亚). 1996.《论语言接触与语言联盟》, 北京: 语文出版社.

Chen, Ping. 1999. *Modern Chinese: History and Sociolinguistics*. Cambridge University Press.

Chen, Renqiu (陈壬秋). 1995.《汉语音韵学概要》. 四川大学出版社.

Coblin, W. South. 1986. *A Sinologist's Handlist of Sino-Tibetan Lexical Comparisons.* Monumenta serica monograph series, 18. Steyler Verlag.

Coblin, W. South. 2000. "A brief history of Mandarin". *Journal of the American Oriental Society* 120 (4), pp. 537–552.

Coney, Jeffrey. 1998. "The effect of complexity upon hemispheric specialization for reading Chinese characters". *Neuropsychologia* 36(2), pp. 149–153.

DeFrancis, John. 1984. *The Chinese Language: Fact and Fantasy*. The University of Hawaii Press.

Department of Chinese Language and Literature, Peking University (北京大学中国语言文学系语言学教研室编) eds. 1962.《汉语方音字汇》, 北京: 文字改革出版社.

Department of Chinese Language and Literature, Peking University (北京大学中文系现代汉语教研室编) eds. 2006.《现代汉语（重排本）》, 北京: 商务印书馆.

Fromkin, Victoria, Rodman, Robert and Hyams, Nina. 2013. *An Introduction to Language.* 10th edition. Cengage Learning.

Geng, Zhensheng (耿振声). 2010.《中原音韵》的基础方言与移民及方言接触， 北京市哲学社会科学"十一五"规划项目 "北京话音系的形成和历史演变研究" 阶段成果报告，项目编号：06BaWY015.

Gong, Hwang-cherng (龔煌城). 2002.《漢藏語研究論文集》. 臺北:中央研究院.

Greenberg, Joseph. 1963. “Some universals of grammar with special reference to the order of meaningful elements”. In Joseph Greenberg, ed. *Universals of Language: Report of a Conference Held at Dobbs Ferry, New York, April 13–15, 1961*. MIT Press.

Hansen, Chad. 1993. “Chinese ideographs and Western ideas”. *The Journal of Asian Studies* 52(2), pp. 373–399.

Haudricourt, André. 1954. “De l’origine des tons en viêtnamien”. *Journal Asiatique* 242, pp. 68–82.

Hegel, G. W. F. 2010. *The Science of Logic*. Trans. and ed. by George Di Giovanni. Cambridge University Press.

Hirayama, Hisao (平山久雄). 1991. 汉语声调起源窥探. 《语言研究》第一期.

Howie, J. M. 1974. “On the domain of tone in Mandarin”. *Phonetica* 30, pp. 129–148.

Hu, Tan (胡坦). 1980. 藏语（拉萨话）的声调研究. 《民族语文》1, pp. 22–36.

Jacques, Guillaume. 2006. *Introduction to Chinese Historical Phonology*. Université Paris V René Descartes.

Jiang, Shaoyu (蒋绍愚). 2005. 《近代汉语概要》, “北京市高等教育精品教材立项项目语言学教材系列”， 北京大学出版社.

Jin, Chi (金池). 2005. 《论语新译》, 人民日报出版社.

Jones, Sir William. 1786. “The third anniversary discourse, delivered 2d February, 1786: on the Hindus”. In *The Works of Sir William Jones*, Vol III, printed for John Stockdale, Piccadilly and John Walker, Paternoster-Row, 1807, London.

Karlgren, Bernhard. 1915–1926. “Etudes sur la phonologie chinoise”. *Archives d’études orientales*, vol. 15 (in 4 parts). Leiden: E. J. Brill; Uppsala: K. W. Appelberg.

Karlgren, Bernhard. 1957. *Grammata Serica Recensa*. Stockholm: Museum of Far Eastern Antiquities.

Ladefoged, Peter and Johnson, Keith. 2010. *A Course in Phonetics* (with CD-ROM). 6th edition. Cengage Learning.

Lao-tse. 1891. “The Tâo Teh King”. In *The Sacred Books of China: the texts of Tâoism*. Trans. James Legge. Clarendon Press.

Lao Tzu. 1964. *Tao Te Ching*. Trans. D. C. Lau. Addison Wesley.

Li, Charles and Thompson, Sandra. 1981. *Mandarin Chinese: A Functional Reference Grammar.* University of California Press.

Li, Fang-Kuei (李方桂). 1971. 《上古音研究》. 北京: 商务印书馆.

Li, Fang-Kuei. 1973. “Language and dialects in China”. *Journal of Chinese Linguistics*, 1(1).

Liu, JeeLoo. 2006. *An Introduction to Chinese Philosophy: from Ancient Philosophy to Chinese Buddhism*. Wiley Blackwell.

Liu, Jin. 2006. “The rhetoric of local languages as the marginal: Chinese underground and independent films by Jia Zhangke and others”. *Modern Chinese Literature and Culture*, 18(2), pp. 163–205.

Liu, Jin. 2011. “Deviant writing and youth identity: representation of dialects with Chinese characters on the Internet”. *Chinese Language and Discourse*, 2(1), pp. 58–79.

Liu, Xiaonan (刘晓南). 2003. 论朱熹诗骚叶音的语音根据及其价值. 《古汉语研究》4, pp. 25–35.

Luo, Changpei (羅常陪). 1932. 中原音韻聲類考. 《國立中央研究院歷史語言研究所集刊》第二本第四分 pp. 423–440.

Luo, Changpei (罗常培). 2003.《语言与文化》. 北京出版社.
Lü, Shuxiang (吕叔湘). 1984.《近代汉语指代词》, 上海: 学林出版社.
Mai, Yun (麦耘) and Zhu, Xiaonong (朱晓农). 2012. "南京方言不是明代官话的基础". 《语言科学》11(4), pp. 337–358.
Mair, Victor. 1991. "What is a Chinese "dialect/topolect"? Reflections on some key Sino-English linguistic terms". *Sino-Platonic Papers,* 29.
Mao, L. R. 1994. "Beyond politeness theory: 'face' revisited and renewed". *Journal of Pragmatics,* 21, pp. 451–486.
Mei, Tsu-Lin. 1970. "Tones and prosody in Middle Chinese and the origin of the rising tone". *Harvard Journal of Asiatic Studies*, 30, pp. 86–110.
Mei, Tsu-Lin (梅祖麟). 1980.《四声别义中的时间层次》.《中国语文》第六期.
Mei, Tsu-Lin (梅祖麟). 1981.《现代汉语完成貌局势和词尾"了"的来源》,《语言研究》1, pp. 65–77
Mei, Tsu-Lin (梅祖麟). 2000.《梅祖麟语言学论文集》, 北京: 商务印书馆.
Ning, Jifu (宁继福). 1985.《中原音韵表稿》, 吉林文史出版社.
Norman, Jerry. 1988. *Chinese*. In *Cambridge Language Survey* series. Cambridge University Press.
Norman, Jerry and Mei, Tsu-Lin. 1976. "The Austroasiatics in ancient South China: some lexical evidence". *Monumenta Serica*, 32, pp. 274–301.
Packard, Jerome. 2000. *The Morphology of Chinese*. Cambridge University Press.
Pan, Wuyun (潘悟云). 2000.《汉语历史音韵学》, 上海教育出版社.
Pan, Yunzhong (潘允中). 1989.《汉语词汇史概要》, 上海古籍出版社.
Pulleyblank, Edwin G. 1970. "Late Middle Chinese, Part I". *Asia Major,* 15, pp. 197–239.
Pulleyblank, Edwin G. 1971. "Late Middle Chinese, Part II". *Asia Major*, 16, pp. 121–166.
Pulleyblank, Edwin G. 1996. *Outline of Classical Chinese Grammar*. University of British Columbia Press.
Purnell, Herbert C. 1970. *Toward a Reconstruction of Proto-Miao-Yao*. PhD dissertation, Cornell University.
Qian, Zhongshu (錢鍾書). 1979.《管錐編》第一冊. 中華書局.
Qian, Zongwu (钱宗武). 2001. "论今文《尚书》的句法特点".《中国语文》6, pp. 531–576.
Qiu, Xigui (裘錫圭). 2001.《文字學概要》,北京: 商務印書館.
Ramsey, S. Robert. 1987. *The Languages of China*. Princeton University Press.
Sagart, L. 1993. "Chinese and Austronesian: evidence for a genetic relationship". *Journal of Chinese Linguistics,* 21, pp. 1–64.
Saussure, Ferdinand de. 1983. *Course in General Linguistics*. Eds. Charles Bally and Albert Sechehaye; trans. Roy Harris. Open Court.
Schuessler, Axel. 2007. *ABC Etymological Dictionary of Old Chinese*. Honolulu: University of Hawaii Press.
Schwarts, Benjamin I. 1985. *The World of Thought in Ancient China*. Belknap Press of Harvard University Press.
Shi, Cunzhi(史存直). 1985.《汉语音韵学纲要》, 安徽教育出版社.
Su, Bing, Xiao, J. H., Underhill, P., Deka, R., Zhang, W. L., Akey, J., Huang, W., *et al.* 1999. "Y chromosome evidence for a northward migration of modern humans in East Asia during the last ice age". *American Journal of Human Genetics,* 65, pp. 1718–1724.

Su, Bing, Xiao, C., Deka, R., Seielstad, M. T., Kangwanpong, D., Xiao, J., Lu, D., Underhill, P., Cavalli-Sforza, L., Chakraborty, R. and Jin, L. 2000. "Y chromosome haplotypes reveal prehistorical migrations to the Himalayas". *Human Genetics,* 107, pp. 582–590.

Sun, Chaofen. 1996. *Word Order Change and Grammaticalization in the History of Chinese.* Stanford University Press.

Sun, Chaofen. 2006. *Chinese: A Linguistic Introduction*. Cambridge University Press.

Swadesh, Morris. 1971. *The Origin and Diversification of Language*. Ed. by Joel Sherzer. Aldine.

Tang, Zuofan (唐作藩). 2002.《音韻學教程(第三版)》, 北京: 北京大學出版社.

Ting, Pang-Hsin (丁邦新). 1981 "漢語聲調源於韻尾說之檢討",《中央研究院國際漢學會議論文集：語言文字組》, 台北: 中央研究院 pp. 267–283.

Ting, Pang-Hsin (丁邦新) and Sun, Hongkai (孙宏开), eds. 2001.《汉藏语同源词研究（二）汉藏、苗瑶同源词专题研究》. 南宁: 广西民族出版社.

Tzeng, Ovid, Hung, D. L., Cotton, B. and Wang, S. Y. 1979. "Visual lateralization effect in reading Chinese characters". *Nature,* 282, pp. 499–501.

Wang, Li (王力). 1958.《汉语史稿（修订本）》，科学出版社.

Wang, Li. (王力). 1982. 朱熹反切考.《龙虫并雕斋文集》. 北京: 中华书局.

Wang, Li. (王力). 1985.《汉语语音史》. 中国社会科学出版社.

Wang, William S-Y. 1994. "Glottochronology, lexicostatistics and other numerical methods". In *Encyclopedia of Language and Linguistics.* Longman.

Wang, William S-Y. 1998. "Three windows on the past". In V. H. Mair, ed. *The Bronze Age and Early Iron Age Peoples of Eastern Central Asia*, pp. 508–534. University of Pennsylvania Museum Publications.

Xiang, Xi (向熹). 1993.《简明汉语史》，高等教育出版社.

Xu, Tongqiang (徐通锵). 1991.《历史语言学》，北京商务印书馆.

Yu, Min (俞敏). 1980. "汉藏两族人和话同源探索".《北京师范大学学报(社会科学版)》1, pp. 45–53.

Yuan, Jiahua (袁家骅) *et al*. 1960.《汉语方言概要》. 北京: 文字改革出版社.

Yuan, Jiahua (袁家骅) *et al*. 2001.《汉语方言概要(第二版)》. 北京: 语文出版社.

Zhang, Longxi. 1985. "The 'Tao' and the 'logos': notes on Derrida's critique of logocentrism". *Critical Inquiry* 11:3. University of Chicago Press.

Zhengzhang, Shangfang (郑张尚芳). 1987. 上古韵母系统和四等、介音、声调的发源问题.《温州师范学院学报》第4期.

Zhengzhang, Shangfang (郑张尚芳). 2003.《上古音系》, 上海教育出版社.

Index