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Chinese Writing
文字學概要

by
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裘錫圭

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Acknowledgments

This is a translation of Prof. Qiu Xigui's 裘錫圭 *Wenzixue gaiyao* 文字學概要 (The Essentials of Grammatology), which was first published by the Commercial Press in Beijing in 1988, and again in a revised edition by the Wanjuanlou 萬卷樓 in Taibei, Taiwan in 1994. The translation is in fact based on both editions. It was completed prior to the publication of the Taiwan edition but was subsequently revised in the light of the revisions therein. However, while the Taiwan edition frequently omits Prof. Qiu's discussions of the simplified forms currently used on the mainland as presented in the Beijing edition, these deletions have been retained in our translation. So the present version represents an amalgam of the best of both editions.

The task of translating the work was evenly divided: Jerry Norman translated chapters 1, 2, 3, 7, 8, 9, 10 and Gilbert Mattos chapters 4, 5, 6, 11, 12, 13. Mattos further assumed responsibility for editing and preparing the whole for publication and thus takes responsibility for any errors and oversights.

We wish to extend our deepest thanks to the Society for the Study of Early China, first for having agreed to publish our translation in its monograph series, and secondly for having provided partial funding for its publication. In this same vein, our thanks go to the Department of Asian Languages and Literature of the University of Washington for having generously provided funding which also helped cover publication costs. Norman also wants to acknowledge that a substantial portion of his work was completed while he was a visiting professor at the Tokyo University of Foreign Studies in 1991.

There are also a number of people we wish to thank for their help and encouragement. First we wish to express our utmost gratitude to Prof. Qiu for his continuous help and cooperation when called upon. His incisive comments on portions of our translations proved immensely valuable. A special debt of gratitude is also due David Goodrich of Birdtrack Press, who generously gave of his time and expertise in the production of this book: the original edition was not set in type even in the orignial

language, and a glance at almost any page will show just how much work and skill were required to prepare the camera copy. We also wish to thank Edward Shaughnessy for, among other things, his encouragement and incisive editorial comments and suggestions, which in turn have made it a much more readable product than it otherwise might have been. Finally, we especially want to thank our wives, Stella Chen Norman and Laura Yan Mattos—both native speakers of Chinese—for their "on-call" status as consultants in times of linguistic dilemmas. Their input and ability to disentangle complex sections of the text is appreciated without end.

Foreword

It is tremendous news to all of us interested in Chinese language and writing that an intellectual lacuna has now been filled by the publication of an English translation of Professor Qiu Xigui's 裘錫圭 *Wenzixue gaiyao* 文字學概要. Having been aware of the translation work undertaken by the two respected linguists/graphologists Professors Gilbert Mattos and Jerry Norman since its inception, I am delighted finally to be able to relish the fruit of their work. It requires a thorough understanding of the intricacies involved in the study of Chinese writing to translate into English the sometimes difficult Chinese original, itself a culmination of work which began in 1963 as Professor Qiu's lecture notes at Beijing University. As difficult as adapting these notes to book form must have been, translating the book was certainly just as arduous and painstaking. However, I am confident that the reader will find, as I did, a lucid rendering of the author's ideas on many issues in this field of scholarship.

The book is much more than simply a translation of the original. First, the presentation of the multifarious subject matter in the translation is much easier to comprehend than the original. The expressions and terminology used in the original frequently take on technical meanings in their context and, on occasion, the analyses presented are quite involved. Thus, the translators were required sometimes to coin specialized expression, as the author himself did in Chinese.[1] Their effort has resulted in an admirable level of clarity. Anyone endeavoring to attain a thorough background in this field of scholarship will be well served by this book. Even those who are proficient in reading Chinese and have already made use of the original will find this translation a valuable companion volume to refer to as the occasion might demand.

The second reason this work amounts to more than a mere translation is that it contains a significant amount of previously unseen information in the form of revisions and additions. I have noticed numerous modifica-

1. To better appreciate this important feature of the book, the reader is referred to the extremely useful and quite substantial bilingual glossary at the end of the book.

tions when compared with the original edition published by the Commercial Press in Beijing (1988), and even with the revised edition published in Taiwan by the Wanjuanlou 萬卷樓 Press (1994). It is clear from the acknowledgments that this translation does not omit anything present in either of the two editions unless the author so stipulated. In fact, it incorporates more than the original and the revised edition combined.[2] Professor Mattos explained to me that this was partially due to the author's review of the draft translations of a few chapters and subsequent suggestions. He also explained that Professor Qiu had been very helpful in resolving problems with the text. This sort of exchange between author and translator is not common, and the involvement of the author, even if it did not extend to every page, has certainly increased the overall reliability of the translation. Professor Qiu's proclivity for exactness is widely known, and we are all better served by the translators' decision to incorporate his suggested changes and additions. The end result has been that this "translation" becomes the final word, at least to date, concerning Professor Qiu's work on Chinese writing.

Although the field of Chinese paleography, which deals with inscriptions written on turtle plastrons and bovine scapulas, bronze vessels, stone, bamboo, silk, and pottery, has produced a substantial body of scholarly literature, only a relatively small number of books offer a general treatment of Chinese writing. Such a treatment should address basic issues, such as the definition of terminology and explanation of the nature of sources. Further attention should be paid to tracing the origin and development of Chinese script,[3] as well as the analysis of the principles underlying the structure and use of Chinese characters. The paucity of such works can be attributed to the inherent complexity of the subject. It requires a tremendous amount of knowledge not only in the rather specialized, yet rich, field of Chinese paleography, but also in diverse, yet interrelated, fields such as archeology, philology, linguistics, grammatology, calligraphy,

2. The amount of effort the author has put into revision can be discerned by reading n. 7 in Chapter 3, pp. 37–38.

3. A monograph published by William G. Boltz, titled *The Origin and Early Development of the Chinese Writing System* (American Oriental Series Vol. 78; New Haven, 1994), covers some of the same ground as the present work. However, it is very different in both conception and approach. Boltz's work is fairly theoretical and calls for the reader to consider the relationship between sound and meaning via graphic forms from the vantage point of the development of writing in general. About 400 Chinese characters are discussed either as words or as graphs to illustrate important hypotheses concerning the theme, as given in the title of his book. By contrast, the present work is mostly descriptive, covering the origin, structure, and use of individual characters from the Shang period down to the present day. It discusses about 2,370 Chinese characters and, therefore, can be used even as an extended commentary to dictionary entries, particularly in grammatological aspects.

history, and Chinese language, both classical and modern. Quite simply, scholars erudite enough to produce a good treatise encompassing all these different subjects are scarce. Professor Qiu is a rare exception in this regard. Similarly, few scholars are sufficiently erudite and academically rigorous to produce a reliable translation of such a treatise. Fortunately, Professors Mattos and Norman have certainly proven themselves equal to the daunting challenge undertaken.

The present book provides balanced accounts of numerous issues in the field of Chinese writing. Moreover, it does so with a great deal of circumspection and insight. The reader will routinely find the author's original ideas offered in the context of existing scholarship. And when none is available, Professor Qiu presents his own stimulating assertions which are always worthy of further reflection. For example, Professor Qiu's idea regarding the distinction between the "formal/standard form" (*zhengti* 正體) and "popular form" (*suti* 俗體) is both extremely interesting and useful in explaining how Chinese script evolved.[4] The distinction is skillfully applied to the rise and fall of certain graphic forms in the history of Chinese writing, often reflecting the nature of particular aspects of culture in which writing played an important role. According to this distinction, Shang oracle-bone script, for example, can be considered a rather peculiar form of popular script, while the contemporary bronze script may be viewed as its formal counterpart. Professor Qiu points out that "[f]ormal script refers to the standard script which was used for more serious occasions; what is referred to here as popular script pertains to those forms which were used daily for simplicity and convenience" (p. 63). He goes on to state that "[t]hroughout Chinese history the ruling class looked with disdain upon popular script. Yet in reality, during the process of the evolution of the shapes and styles of graphs, the role played by the popular forms was extremely important. Sometimes a new standard style of script would evolve from what had previously been a popular style (to wit, the clerical script). Even more common are cases where certain popular forms were later assimilated as standard script forms" (p. 66). Here we find an aspect of Chinese history narrated from the viewpoint of grammatology. Concrete examples of this orthographic phenomenon are quoted in abundance in the book. Moreover, we also learn how other orthographic developments occurred, such as "linearization" (i.e., thick

4. Qiu Xigui presented a paper devoted exclusively to the distinction between the formal and popular styles of Chinese script at a symposium called "Chūgoku komonji to In Shū bunka" 中國古文字と殷周文化 (Chinese paleographs and Yin Zhou civilization) held in Tokyo in 1987. For those who wish to pursue the subject further, refer to the revised version of this paper which contains much greater detail than the original. Qiu's revised paper was published in a book that shares the same title as the symposium (Tokyo: Tōhō shoten 東方書店, 1989), pp. 81–120.

strokes eventually being rendered fine, and squared and rounded solid writing being replaced with lines), "streamlining" (i.e., curvilinear lines being rendered even, disconnected lines becoming joined), "quadrilateralization" (i.e., characters becoming squarish), and so on.

This book also offers much that is graphophonological and philological in nature. I should like to mention two points which are related to these fields. I begin with a matter of graphophonological interest.

In Chapter 8 the reader will find a discussion on the evolution of the character *qiu* 裘 'fur garment' from its form in Shang oracle-bone inscriptions  , to its subsequent Zhou bronze-inscription forms  ,  , and finally to the seal form  . As is evident from the graphs themselves, the phonetic symbol *you* 又 was added in the Zhou bronze form. This addition was most likely to distinguish the graph from the graph *yi* 衣 'garment'. In connection with this, Professor Qiu writes, "Probably in order to accommodate a change in pronunciation, '又' *you* was later changed to '求' 'seek'" (p. 222). This is very intriguing because, as noted by Tung T'ung-ho 董同龢, 裘 belongs to the *zhi* 之 rhyme group, even though its phonetic belongs to the *you* 幽 rhyme group.[5] As such, it would seem straightforward to conclude that what was pronounced something like *gwjəgh/*gʷji in the late Shang[6] changed to *gjəgw/*grju 求 sometime before the late Zhou. However, evidence supplied by the *Shijing* rhyme groups indicates that the actual pronunciation for the word "fur garment" remained as *gwjəgh/*gʷji 裘, even though the phonetic 求 would normally suggest a reconstruction like *gjəgw/*grju.[7] At least one more example of this sort can be cited. The bone form of the word *xiu* 羞 'to present food' is written

5. Similarly, the word *jiu* 舊 'old' belongs to the *zhi* 之 group, although its phonetic, *jiu* 臼 'mortar', belongs to the *you* 幽 group. See Tung T'ung-ho, *Shanggu yinyun biaogao* 上古音韻表稿 (Taipei: Institute of History and Philology, Academia Sinica, 1944), p. 128.

6. In all likelihood the reconstructed forms assumed here are not applicable to the late Shang stage, since it is virtually impossible to reconstruct the phonological system of "Proto-Chinese," the language predating Old Chinese. However, a couple of recent works by Wolfgang Behr and Laurent Sagart appear to hold the promise that at least a skeletal reconstruction of Proto-Chinese may be postulated. See Bi E 畢鶚 (Behr), "Jiaguwen suojian ruogan shanggu Hanyu fushengmu wenti lice" 甲骨文所見若干上古漢語複聲母問題蠡測, *Shengyun luncong* 聲韻論叢 (Taipei: Xuesheng shuju) 6, 1998, pp. 471–530. Also, see Laurent Sagart, *The Roots of Old Chinese* (Amsterdam: John Benjamins Publishing Co., 1999).

7. Two Old Chinese reconstructions are given here. The first one cited is Li Fang-kuei's 李方桂, while the latter is William Baxter's. See Li Fang-kuei, "Studies on Archaic Chinese Phonology," *Tsing Hua Journal of Chinese Studies*, Vol. 9 (New Series), Nos. 1 & 2 (1971), pp. 1–61; specifically, p. 29 and p. 31. (An English translation of this article was published by Gilbert L. Mattos in *Monumenta Serica* 31 (1974–75), pp. 219–287.) See also William H. Baxter, *A Handbook of Old Chinese Phonology* (Berlin: Mouton de Gruyter, 1992), p. 469 and p. 509, respectively.

as , consisting of *you* 又 'right hand' and *yang* 羊 'sheep'. (The Zhou bronze forms are also written with the same components, though sometimes with two hands.) Professor Qiu mentions that 又 was "later changed to *chou* 丑 'a cyclical sign' [because it was] close in graphic form (in the seal script, '丑' . . . is written  ." (p. 224). This is not merely graphic, but phonetic as well. This case is very similar to that seen above, where the "bone" phonetic belonging to the *zhi* 之 rhyme group was replaced by the "seal" phonetic belonging to the *you* 幽 rhyme group. The only difference here is that the phonetic 丑 does not straddle two different rhyme groups, since all other graphs with this phonetic belong to the *you* rhyme group. The reason for this can be ascribed to influences exerted by the kind of initial consonants (mostly dentals as opposed to labiovelars, but see n. 8 below) exhibited by the 丑 *xiesheng* series: e.g., 丑 is reconstructed as *hnrjəgwx/*hnrjuʔ and 羞 as *snjəgw/*sljiw, respectively (the former is Li's, followed by Baxter's after the slash). In sum, the two paleographical examples given above (i.e., 裘 and 丑) indicate that in addition to the difficult enterprise of Old Chinese reconstruction, any attempt to postulate the relevant dates of reconstructed forms is almost certain to be fraught with difficulty. This book offers insight into graphophonology which will enable the scholar to treat these problems and related matters with a higher degree of certainty.[8]

Turning our attention to a matter of philological interest, the reader will find in Chapter 12 a brilliant analysis of the word represented by *shǐ* 矢 'arrow', which is commonly glossed as *shì* 誓 'to swear, vow' (pp. 397–

8. See Li Fang-kuei (*op. cit.*: 32) and Baxter (*op. cit.*: 509). However, Pulleyblank reconstructs a labiovelar initial *xʷ- for *chou* 丑 on the basis of the Tai forms (*plao, pau, piau*) cited by Li Fang-kuei in "Some Old Chinese Loan Words in the Tai Languages," *Harvard Journal of Asiatic Studies*, 8 (1945), pp. 333–342. He bolsters this reconstruction by referring to a variant graph for *hao* 好 EMC xawʰ found in the *Shuowen* (12b) written as 𣪊 with 丑 as its phonetic. See Edwin G. Pulleyblank, "The Ganzhi as Phonograms and Their Application to the Calendar," *Early China*, 16 (1991), p. 55. The labiovelar reconstruction for *chou* 丑 receives further independent support from the paleograph of *xiu* 羞 written with the graph for sheep and the phonetic *you* 又 (< *gw-/*w-). If this is correct, the Old Chinese forms for 丑 and 羞 given by Li and Baxter represent a time period later than that represented by Pulleyblank's reconstruction. Also, in regard to the more precise dating of Old Chinese reconstructions, Baxter cites contributions made by Ting Pang-hsin 丁邦新 (*Chinese Phonology of the Wei-Chin Period: Reconstruction of the Finals as Reflected in Poetry*. Taipei: Institute of History and Philology, Academia Sinica, 1975), as well as Luo Changpei 羅常培 and Zhou Zumo 周祖謨 (*Han Wei Jin Nanbei chao yunbu yanbian yanjiu* 漢魏晉南北朝韻部演變研究. Beijing: Kexue Chubanshe, 1958), adopting the view that this change from *-*ji* to -*juw* after the labial initials occurred in several stages where syllables with *gʷ- had already been affected by the Western Han period (206 B.C.–23 A.D.). If we rely on the paleographical evidence being discussed here, it must be concluded that this change occurred much earlier than the Western Han, most probably by the end of the Western Zhou.

399). For example, the Mao 毛 commentary to Ode 45.1 之死矢靡它 reads 矢誓也 '*shǐ* means *shì* (to vow)'; consequently, Karlgren's translation: "Until death he swore to have no other (mind)."[9] Since the readings of 矢 and 誓 are close in their modern pronunciations, many have maintained that 矢 is a loan for 誓. Professor Qiu first points out that 矢 in this particular usage should not be read like *shì* 誓 at all; rather, it should still be read like *shǐ* 矢 as in *gōngshǐ* 弓矢 'bow and arrow'.[10] He then goes on to show that the character was borrowed to denote a word that was semantically close to *chen* 陳 'to display' as in *chenlie* 陳列 'to display'. For example, in regard to Ode 236.7 矢于牧野, the Mao commentary provides 矢陳也 '*shi* means *chen* (to display)'. As such, the above poetic line may be translated, "(The Zhou) displayed (their forces) at Muye." The character 矢 was also borrowed to denote a word which was semantically close to *chen* 陳 'to state' as in *chenshu* 陳述 'to state, set forth'. Ode 252.10 contains the line 矢詩不多 on which Zheng Xuan 鄭玄 comments: 矢陳也. 我陳作此詩不復多也 '*shǐ* means to *chen* 'set forth'. My composition of these poems never amounted to many'. Consequently, the above line from Ode 252.10 may be rendered, "I have composed a few verses."[11] From the perspective of semantic extension, I find it persuasive when Professor Qiu concludes, "*shǐ* 矢 used in the sense of *shì* 誓 'to swear, vow' is most likely an extension of its sense of 'to state'." Thus, the expression *shǐshì* 矢誓 in the edition of the *Shijing* Lu Deming 陸德明 (556–627) had when he wrote his *Jingdian shiwen* 經典釋文 meant "to state one's pledge." In the present Mao edition of the *Shijing* (Ode 58.6), it is expressed as *xìnshì* 信誓 'to trust one's pledge', hence the line *xìnshì dàndàn* 信誓旦旦 could be translated as "having put faith in our vow [to be together until old age] clearly and clearly." "To put faith in" (信) and "to state" (矢 in the sense of 陳), when followed by their common object *shì* 誓 'pledge, vow', are semantically similar: i.e., the former is a bit stronger in terms of meaning than the latter. Therefore, this can be cited as supporting evidence for Professor Qiu's semantic extension theory of *shǐ* 矢 as having been obtained from its meaning "to state." In short, he argues, persuasively in my view, that it is incorrect to interpret 矢 as a loan for 誓 in the sense of "to swear, vow."

I have commented on only a few points of graphological, graphophonological, and philological interest out of a plethora of other examples discussed in this book. Because my main interest lies in pre-modern Chinese,

9. Bernhard Karlgren, *The Book of Odes* (Stockholm: Museum of Far Eastern Antiquities, 1950), p. 29.

10. Qiu Xigui points out (p. 398) that it is entirely accidental that *shi* 矢 and *shi* 誓 are similar in modern pronunciation. Instead, in Old Chinese they were different in terms of both initials and rhyme groups.

11. Karlgren, *op. cit.*, p. 210.

in my foreword I have shown a bias towards matters of historical interest. However, in *Chinese Writing* the reader will also find many issues related to both medieval and modern Chinese. Indeed, as indicated by its English title, this book covers the subject of Chinese writing, which spans a history of more than 3,000 years, both in considerable breadth and impressive depth. It is a treasure trove in this field of study. We are heavily in debt to the author and the translators.

Ken-ichi Takashima
Vancouver
February, 2000

Signs and Abbreviations

{xx}	Denotes a word vis-à-vis a graph.
"xx"	Denotes a graph vis-à-vis a word.
JC	*Yīn Zhōu jīnwén jíchéng* 殷周金文集成
JHKG	*Jiānghàn kǎogú* 漢考古
JM	*Jīnwén zhùlù jiǎnmù* 金文著錄簡目
KG	*Kǎogǔ* 考古
KGXB	*Kǎogǔ xuébaò* 考古學報
MC	Middle Chinese (reconstructions cited according to Li 1971 and as modified by Coblin 1986)
WW	*Wénwù* 文物
WZCK	*Wénwù zīliào cóngkān* 文物資料叢刊

1

The Development of Chinese Writing

1.1 Definition of Writing

In discussing the beginnings of writing, it is first necessary to define what is meant by writing. Linguists and grammatologists, with regard to this question, are divided into two groups, one holding to a more narrow definition and the other maintaining a wider one. Those who maintain the more narrow definition hold that writing is a set of symbols for recording language. Those who espouse the wider interpretation by and large believe that pictures and symbols that transmit information or express a definite meaning may also be called writing. In our opinion, this division of opinion is no more than a difference of terminology, and it is difficult to say that there is any question of absolute right or wrong involved. We belong to the group that maintains the narrower definition, because in traditional Chinese texts, the term *wénzì* 文字 (writing, script) has referred to symbols for recording language, and it is in general more convenient to adopt the narrower point of view when speaking of this subject.

In the case of Chinese, the term *wénzì* can be used to refer to individual characters as well as to the entire system of written symbols for recording a given language. When necessary we will refer to the latter notion as a "writing system."

Everything undergoes a process of development and writing is no exception. Relying on the writing system of another language, sometimes a complete writing system for a language can be devised very quickly. But in the case of a writing system which is created completely or essentially in an independent manner, from the appearance of the first written symbols to the final development of a writing system that is fully capable of recording language, a long period of development is necessary. We will call writing which is still incapable of fully recording a language "primitive writing."

1.2 The Probable Development of Writing

Before writing was created, concrete objects and pictures or symbols were used to record things and express ideas. Moreover, many of the methods that were used have much in common with the principles that were applied in the production of early writing systems of the same type as that developed in China. So from a technical standpoint, the conditions necessary for the creation of writing emerged quite early. Yet the requisite social conditions appeared relatively late. At a time when social production and social relations have not yet developed to the point where they make people feel the necessity of a method for recording language in order to record events or to transmit information, it is unlikely that writing will be created. Ordinarily only on the eve of the formation of a class society, or even after its formation, will such conditions begin to appear. In a primitive society, for example, it is entirely possible for a group called the "deer clan" to use a deer emblem to represent itself. Yet this does not necessarily mean that the character for "deer" has been created at that point. Only when symbols (including emblems) are consciously used to record words used to form sentences is there a true sign that the development of script has begun.

When a society develops to the point where it needs to record language, if all the relevant conditions are present, then writing will make its appearance. As already pointed out above, the independent development of a writing system is a long process. At present we are still unable to describe this process because the independently formed writing systems that everyone is acquainted with, such as ancient Egyptian hieroglyphics, Mesopotamian cuneiform and the Chinese script, all lack source materials that can fully explain this process of development. But on the basis of the knowledge that we already possess concerning these scripts, and by making reference to primitive scripts of a somewhat later period, we can still sketch in a general way the developmental process of script. An example of a primitive script is the script once employed by the Nàxī nationality of Yúnnán Province, the so-called "Nàxī pictographic script" (below simply referred to as Nàxī script).[1]

1. The Nàxī forms cited in this chapter are mostly quoted from Fù (1948); note that *móxiě* is an earlier designation of the Nàxī. In a recent article, Professor Fù (1982:1) writes,

> What were formerly referred to as pictographs, in fact consist of two different types of graphs. One type resembles the symbols in a picture story; in my opinion these should be called picture graphs; the great majority of Dongba scriptures are written in these kinds of graphs. The other type has one graph for one syllable, but the great majority of the graphic forms originate from pictographic elements and should still be called pictographs.

The primitive Nàxī graphs that we refer to correspond to Professor Fù's picture graphs.

1.2.1 Semantographs

According to conventional thinking, the first graphs to appear should have been the most typical examples of pictographs, such as the graph 人 *rén* for "man" which depicts a human form and the character 鹿 *lù* for "deer" which depicts the likeness of a deer, since this is the easiest type of graph to create. However, the actual course of events was probably otherwise. Compared with this sort of graph, the expressive ability of pictures is not necessarily inferior. Táng Lán in his book *Zhōngguó wénzìxué* (The Study of Chinese Writing) has compared a picture of a man shooting a deer taken from primitive cave art with the three ancient Chinese characters 人射鹿 *rén shè lù* "a man shoots a deer."

Anyone can see that if it is merely a matter of expressing the idea of "a man shoots a deer," there is no need to abandon pictures and create writing. Judging from Nàxī script, which will be discussed below, at the level of primitive writing, graphs and pictures were mixed together for an extended period. As regards words like *rén* "man" and *lù* "deer" as well as concrete actions like *shè* "shoot," the borderline between pictures and writing is unclear.

The sort of words for which people first needed to provide graphs were probably words whose meanings were difficult to express by means of pictures—numerals, grammatical elements, words that express quality and other words that express abstract meanings. Moreover, there are some concrete things which cannot easily be expressed by means of pictures. For example, the various species of birds, animals, insects, fish and plants which are very similar in appearance all have different names, but it is frequently impossible to capture their slight differences in pictographic form. The names of these things regularly appear in a language, and it is necessary to have graphs for recording them.

Prior to the production of primitive writing, the use of abstract geometric figures and symbols to express meanings somewhat indirectly had already begun. These methods could be used to devise ways of writing some of the words mentioned above. The meanings of some words can be expressed by abstract figures. For example, in devising characters for the lower numbers, one could continue the primitive stage process of drawing lines or making dots; the ancient Chinese characters "一", "二", "三", "𠄌" (for *yī* "one," *èr* "two," *sān* "three," and *sì* "four," respectively) are examples of this. Other examples are the ancient Chinese characters "□" and "○" to denote {方} *fāng* "square" and {圓} *yuán* "round," respectively,[2] and the use of "×" in Egyptian hieroglyphics to denote the word meaning

2. Examples of ancient Chinese characters in this chapter are taken from *jiǎgǔwén* (shell and bone script) or Shang bronze inscriptional script. See Sec. 4.1 for information concerning this material. For the use of "xx" and {xx}, see Signs and Abbreviations, p. xvii.

"divide."[3] There are still other words that can be expressed by means of symbols. For example, in ancient Chinese script the figure of a mature man 𠆢 was used to express {大} *dà* "large," since an adult is "larger" than a child (others hold that the sense of "large" which is expressed by this figure with outstretched arms also amounts to a kind of indirect method of expressing meaning). In Egyptian hieroglyphics the depiction of a scepter 𓌙 expressed the notion of "rule," since a scepter was the symbol of kingly authority. Characters created by these methods, although they frequently resemble pictures, are in essence quite different from pictures. For example, the use of 大鹿 to write *dà lù* "large deer," and the drawing of a large deer to express this idea represent two basically different methods of depicting the meaning. If one does not know that 𠆢 represents *dà* "large," then he has no way of knowing what 大鹿 means. If the two symbols are treated as pictures, then they can only be understood as a person and a deer together. It probably was not until after graphs like "三" and "大", which were clearly distinguished from pictorial representations, were formed that pictorial representations of concrete things like *rén* "man" and *lù* "deer" were gradually disassociated with pictorial representations under their influence and became true graphic symbols.[4] It should be added that even if a primitive society's numerical symbols in appearance are identical to numbers used later on, they are different by nature. When recording numbers, ancient societies indeed used such devices as drawing lines and dots. But the same four lines or four dots in some circumstances might represent four days, in another circumstance four persons, and in still another circumstance four other things. Therefore these numerical symbols are not symbols for the numbers of a particular language; they are still not writing.

All those characters, including those like "鹿" *lù*, "射" *shè*, "三" *sì* and "大" *dà* discussed above, whose form itself is related to the meaning of the word it represents but has no connection with the sound of the word will be called semantographs. Obviously there are many words in a language for which it is difficult or even impossible to devise semantographs. In the case of the words cited above for which it is difficult to use pictorial representations, in a majority of cases, even if one uses emblems and other indirect methods of expression, it is still impossible to devise suitable characters for them.

3. The examples of Egyptian hieroglyphics given in this chapter are mostly from the article "Hieroglyphics" in the 1973 edition of the *Encyclopedia Britannica* and Istrin (1987). Since the forms are based on secondhand sources, there may be mistakes; I would be grateful for corrections from experts in the field.

4. Táng Lán (1979:90) states: "True writing is not accomplished until graphs depicting concepts come into being," which already points out the main idea presented in our statement above in this regard. The graphs depicting concepts referred to by Táng Lán do not include the most typical examples of pictographs of the "人" and "鹿" sort.

1.2.2 Signs

Before writing was created, in addition to ordinary graphic pictures, people also used arbitrarily fixed symbols that had no inherent relationship to the object represented; these symbols were used as marks of ownership or as expressions of number or other ideas. For example, the Red River Hāní of Yúnnán in their contracts carved on wood use ● to represent "one dollar," | to represent "ten dollars," × to represent "fifty dollars" and ✳ to represent "one hundred dollars."[5] The dot used to represent "one dollar," like the lines "一", "二", "三" and "𠄌" used to represent numbers, can be viewed as abstract representations. The symbols used to represent "ten dollars," "fifty dollars," and "one hundred dollars," at least in the case of the latter two symbols, are the sort of arbitrary fixed symbols mentioned above. It is hard to give a name to such symbols; for the time being, let us use the ready-made term "sign" as their designation. Is it possible to come up with some types of signs as graphs for those words for which it is difficult to devise semantographs?

At the period when a writing system is just being formed, ordinarily a small number of popular "signs" are absorbed as graphic symbols. The antecedents of the ancient Chinese characters "×" (*wǔ* "five"), "⋀" (*liù* "six"), "十" (*qī* "seven"), ")(" (*bā* "eight") were very possibly signs used in the period of primitive society to record numerals (cf. Sec. 3.1). However, it would be difficult to create a large quantity of such signs. The graphic forms of signs have no inherent connection with the words which they represent; they are difficult to recognize and remember and are not easily accepted. In fact, in any independently formed writing system very few graphic signs are created in the process of its development. The limitations of signs are much greater than those of semantographs.

1.2.3 Loangraphs

There is only one way to overcome the limitations created by semantographs and signs: the use of phonetic representation. This entails the use of a graph or the depiction of some object as a phonetic symbol (below referred to simply as a "phonetic") to express a word which is either homophonous or nearly homophonous with this graph or object. In this way those words for which it is difficult to create semantographs can also be recorded by means of graphs. This method of recording language, in the traditional study of Chinese writing, is referred to as *jiǎjiè* "borrowing"; characters formed in this way are traditionally known as *jiǎzìzì* "loangraphs."

5. Wāng (1981:12). When the Hāní use five dots to represent "five dollars," the symbol does not record language. This is a symbol for recording quantity and not an example of writing.

Influenced by the traditional study of Chinese writing, many believe that the principle of *jiǎjiè* is something mysterious. This is a misconception. The punning principle employed in many Chinese two-part allegorical sayings and riddles is the principle that *jiǎjiè* characters are based on. For example, in the case of the two-part allegorical saying 外甥打燈籠——照舅 (舊) "Nephew is carrying a lantern—lighting uncle's way (as usual)," since "舅" *jiù* "uncle" and "舊" *jiù* "old" are homophonous, the former is a loan for the latter, so as to imply things are going as usual (i.e., *zhàojiù* 照舊). From ethnographic sources we can see that many ethnic groups lacking writing, in their use of real objects to convey meaning, have already applied the punning principle. Among the West African Yoruba, for example, cowrie mussels were once used to convey information. In their language the word meaning "six" is homophonous with a word meaning "attracted" and the word for "eight" is homophonous with a word meaning "to agree." If a young man gave a girl a string of six mussels, it expressed "I feel attracted to you, I love you." The girl might reply with a string of eight mussels signifying "Agreed, I feel the same way as you do" (Gelb 1963:5). The Jǐngpō of Yúnnán formerly sent "letters" consisting of tree leaves. They would use different types of tree leaves and other things to express separately a certain fixed meaning. In love letters of the Zàiwǎ branch of the Jǐngpō group, the message conveyed by a *puruan* leaf was "I want to go to your place;" a *doumen* leaf expressed the idea "quickly adorn yourself." In their language the word for "arrive" was homophonous with the name of the *puruan* tree and the word for "adorn" was homophonous with the name of the *doumen* tree (Wāng 1981: 5–6). It would appear that long before the appearance of writing, the punning principle was widely familiar to various peoples.

As indicated above, at the very beginning, in the case of many words for which graphs were required, it was difficult to employ the method of direct semantic depiction. People undoubtedly quickly discovered that they could use the punning principle, which was already familiar to them, to solve the problem that faced them. Therefore, the first appearance of semantographs that were clearly distinct from pictures and the first application of the *jiǎjiè* principle could not have been separated too far apart in time and it is very possible that they were essentially contemporaneous.

In ancient Chinese script, Egyptian hieroglyphics and Mesopotamian cuneiform and in some forms of primitive writing, there are large numbers of *jiǎjiè* graphs as well as numerous frequently used words which are recorded by *jiǎjièzì* "loangraphs." For example, in ancient Chinese script, the grammatical particle 其 *qí* is written with the pictograph  for "winnowing basket." In Egyptian hieroglyphics the word for "large" was written with a pictograph meaning "swallow." In the Nàxī script, the word for "to have" is written with the nearly homophonous word for "turnip."

These examples show that the history of *jiǎjiè* characters is very old. In the process of the development of writing, the use of pictorial representation to create new graphs and the use of the *jiǎjiè* principle developed at the same time, and it was not the case, as some imagine, that the *jiǎjiè* principle was used only after a large number of pictographs was produced.

We have indicated above that the creation of semantographs (which are clearly distinct from pictures) aided in the process of gradually differentiating those original pictographic symbols (which could not clearly be separated from pictures) from pictures proper and making them into true graphic symbols. The *jiǎjiè* process was also able to serve the same function. If pictographic symbols whose nature was still clear were regularly used together with *jiǎjiè* characters, or were themselves borrowed to record words either homophonous or nearly homophonous with the things they represented, they would quickly become true graphic symbols. One may say that the appearance of semantographs which were clearly different from pictures and *jiǎjiè* characters was a sign that the process of the formation of writing had formally begun (Wāng 1981:42).

The adaptability of the *jiǎjiè* method is very strong. In the case of disyllabic or polysyllabic words for which appropriate single *jiǎjiè* characters could not be found, one could borrow two or more characters and combine them to record the word. For example, in the Nàxī script, the pictographs for "artemisia" [pɯ ⊣] and "frog" [pa ⊣] were combined to write [pɯ ⊣ pa ⊣] "spiritual cultivation." In Egyptian hieroglyphics and cuneiform the phenomenon was even more common.

1.2.4 Phonograms

The application of the *jiǎjiè* method greatly increased the ability of graphs to express language. But after the number of *jiǎjiè* graphs increased, a new problem appeared. Characters that were borrowed for their sound not only were still used for the words they originally represented but also were borrowed to write homophonous or nearly homophonous words; moreover, a graph could be borrowed to write several different words with the result that a person reading graphs would find it difficult to decide which word a given character in a given context expressed.

In addition, the primitive form of a semantograph could cause a reader difficulties. Among early graphs, sometimes a single meaningful graphic form could have more than one use. A single graphic form could be used to represent two or more words whose meanings were all related to this graphic form but whose sounds were not at all similar. For example, in the Nàxī script, the graph  , which resembles flowing air, expresses both the word for "wind" and that for "spring" (these two words have totally different pronunciations). In the ancient Chinese script, the graph

 which resembles an adult man, in the beginning represented both 夫 *fū* "adult man" and 大 *dà* "large." The graph  which resembles a moon in the beginning was used both for 月 *yuè* "moon" and 夕 *xī* "evening."[6] In both Egyptian hieroglyphics and cuneiform such examples are also frequently encountered. These sorts of semantographs can naturally affect the precision with which writing is able to express language.

In order to overcome the semantic confusion caused by the use of *jiǎjiè* characters, certain semantographs or semantic symbols were added as indicators of a character's meaning. For example, in the ancient Chinese script, when the pictograph for {翼} *yì* "wing," namely,  (which resembles a bird's or insect's wing) was borrowed to write {翌} *yì* "tomorrow," the character "日" *rì* "sun, day" was at times added to it:  . In the Nàxī script when the pictograph  meaning "bracken" is used as a loangraph for a homophonous word meaning "petty official," an element representing a person sitting erect is often added:  . In Egyptian hieroglyphics there exist some rather complicated examples of this phenomenon. For example, the combination of a phonetic symbol with  can be used to represent the sound of the words for "papyrus," "wax" or "youth." In order to distinguish them, a distinctive semantic symbol meaning "plant"  is appended to the hieroglyph to denote "papyrus"; to denote "wax" a distinctive semantic symbol meaning "a pellet-shaped object"  is appended; and to denote "youth" a distinctive semantic symbol meaning "person"  is appended. Characters of this sort which combine a phonetic and a semantic component or signific are called *xíngshēngzì* "phonograms" in the traditional study of writing in China; the element which indicates the sound of the word is called the *shēngpáng* "phonetic" and the element expressing meaning is called the *xíngpáng* "signific." In general grammatology the signific is called a determinative (*dìngfú*) or classifier (*lèifú*).

People on the one hand add determinatives to *jiǎjiè* characters to distinguish their different uses and on the other hand add phonetics to semantographs and in this way make the relationships between graph and word even clearer. For example, in ancient Chinese script, the character "鳳" *fèng* "phoenix" was originally written  , which resembles a beautifully plumed, high-crested phoenix. Later the phonetic symbol "凡" *fán* ( in

6. Shěn (1938) has studied this characteristic of early semantographs. He points out that this multiple use of single graphic forms was not, in terms of graphic form, what dictionaries call variant forms associated with different writing traditions (*chóngwén*) or variant forms (*huòtǐ*), and "not, in semantic terms, what text critics call extended meaning (*yǐnshēn*) or loangraphs (*jiǎjiè*), and not, in phonetic terms, what historical phonologists call phonological variation (*shēngyùn tōngzhuǎn*); people of later ages viewed them as totally unrelated in terms of form, sound and meaning" (p. 208).

the ancient script) was added and it became . (Note that the ancient pronunciations of *fèng* "phoenix" and *fán* "ordinary" were close.) Still later, the element resembling a phoenix was simplified and written as "鳥" *niǎo*, the common character for "bird," and the phonetic symbol *fán* was moved to the top, resulting in the modern form "鳳". In Nàxī script the word for "cliff" is written  . In the Nàxī language the word for "cliff" is homophonous with the word for "chicken"; hence a chicken's head is added to the pictograph for "cliff" as a phonetic. In traditional grammatology in China, pictographs which have a phonetic symbol added to them are viewed as a special category of pictograph, the so-called "pictographs with phonetics" (象形兼聲 *xiàngxíng jiān shēng*). Actually it is more logical to view them as a special category of phonogram.

The addition of phonetics to semantographs sometimes was clearly for the purpose of distinguishing the different uses of graphic shapes which had two or more pronunciations because of the use of one pictograph for more than one word, or for some other reason. For example, in the Nàxī script, the pictograph for "sun" when it is read [bi ˧] means "sun"; when it is read [ɳi ˥] it means "daytime"; when read [sɔ ˧] or [sɔ ˩] it means "morning." Usually when it means "morning," the semantograph meaning "hilltop" (which depicts a tree on a hilltop snapped in two by the wind) is added and it is written  ; this is because the word for "hilltop" in Nàxī is also pronounced [sɔ ˧]. In Egyptian hieroglyphics the pictograph resembling an ear can represent the words for "ear" and "listen." When it is used to mean "listen," the phonetic symbol for the last consonant of this word is added after the graph. When it means "ear," the entire consonantal skeleton of the word is written in front of the graph (in Egyptian hieroglyphics there are only consonant signs, no vowel signs).

In the ancient Chinese script, graphic forms were often differentiated in order to distinguish cases where a single graph was used to write more than one word. For example, the character mentioned above could also be written  . Both of these graphic forms could be used to denote {大} *dà* "large" and {夫} *fū* "adult man." Later the first was used exclusively to write the word *dà* "large" and the second was used for *fū* "adult man." and  originally were also variant forms of the same graph; later the first form was used exclusively for *yuè* "month" and the second form was used for *xī* "evening." However, the addition of a phonetic to distinguish different usages probably also existed. In the ancient Chinese script there was a small number of phonograms in which the meaning of the graph was identical to that of its signific. For example, the character "鼻" *bí* "nose" is derived from "自" with "畀" *bì* as a phonetic. The character "自" was originally written  , a depiction of a human nose and it originally meant "nose." These sorts of phonograms are perhaps the re-

sult of adding a phonetic to a graph which was originally used to write more than one word. This is tantamount to saying that 𠂤 possibly had two pronunciations: "自" *zì* and "鼻" *bí* (cf. the *Shuōwén*, under the radical 王, where under the character "皇" it says that "自 is read like 鼻") and represented two synonyms. (Others hold that when this character was read *zì* it did not mean "nose"; since the Chinese often refer to themselves by pointing to their nose, the ancients used "自" to denote {鼻} *bí* "nose" as well as to denote {𠂤} as in 自己 *zìjǐ* "oneself.") Only later was the phonetic symbol "畀" added to the character 𠂤 when it represented *bí* "nose" to form a separate character "鼻".

Originally all phonograms were created by adding a determinative or phonetic to an already existing character. Afterwards people created new phonograms by directly combining a determinative with a phonetic. But in the case of Chinese writing, the chief means of creating phonograms was by adding a determinative or phonetic to an already existing character.

1.2.5 The Final Development of Writing Systems

The use of phonograms greatly increased the precision with which graphs were able to express language; their use represented an extremely important step in the development of a writing system. However, the use of phonograms does not seem to have led to the rapid definitive formation of a writing system. The primitive Nàxī script, which already makes use of phonograms, is proof of this.

Below a passage written in primitive Nàxī script is cited from the "Account of Ancient Events," a Nàxī scripture from the Lǐjiàng region (after Fù 1948:29):

The graph means "to take an egg"; is a semantograph for "untie"; in Nàxī the word for "untie" and the word for "white" are homophonous; here the graph is used as a loangraph for "white." ● is a semantograph for "black";  means "wind." ○ represents an "egg."  stands for "lake."  expresses the notion of an egg breaking and emitting light. The graph at the far right is the phonogram for "cliff" already mentioned above. According to the explanation of Nàxī scriptural interpreters, the meaning of this passage is "an egg was thrown in the lake; on the right a white wind blew; on the left a black wind blew. The wind made ripples on the lake. The water of the lake threw up the egg; the egg collided with the cliff and then a resplendent being was born." In this passage composed of primitive graphs, although phonetic loangraphs and phonograms are already utilized, many meanings are still expressed by means of pictures.

The ancient Chinese script, Egyptian hieroglyphics and Mesopotamian cuneiform and other ancient independently evolved scripts must also

have passed through a primitive stage like that of Nàxī writing in which true graphs were used together with pictures.

In the relatively earliest Chinese script that has been discovered, the shell and bone script of the late Shang, one can still observe traces of expressing meaning by means of pictures. A striking example is that certain semantographs often have different forms depending on the linguistic context. For example, in the shell and bone script, a sacrifice called "  " in which the Shang king offered food to his ancestors is often referred to. "" in later texts is usually written "登" (e.g., *Zhōulǐ*, "Xiàguān, Yángrěn": 祭祀, 割羊牲, 登其首 "In making a sacrifice, a sheep is butchered and its head is lifted [as an offering]." According to Zhèng Xuǎn, *dēng* means "to lift up"). The oracular word "" was originally written  , showing two hands lifting a "豆" *dòu*, a vessel for holding edibles. If the item used in the sacrifice was "鬯" *chàng* (a kind of fragrant wine), the graph "" was often written ""; the thing lifted up by two hands is changed to *chàng*. In the oracle script the forms "鬯" and "鬯" coexist. It appears that "" is no more than a variant graph for "" used in a special context. But at an earlier stage of development, the situation with regard to the Chinese script was not so simple. The Nàxī script is enlightening in this regard. In the Nàxī script there are frequent cases where a graph takes on different forms depending on the linguistic context. For example, the word for sounds made by different animals is ordinarily written  , showing sound coming from a cow's mouth. When one wishes to write "a horse neighs," the cow's head is replaced with that of a horse and there is no need to write separately the word for "horse." In the earlier stage of Chinese script development, the graph "" must have been used to write {鬯}. By the late Shang, this primitive way of employing graphs had for the most part been abandoned; by that time "" survived as a special variant of the character "". Some other similar examples can be found in the shell and bone script. Moreover, cases where the arrangement of graphs does not completely conform to the order found in language can occasionally be seen in the shell and bone oracle texts. Both of these features can be viewed as evidence that the Chinese script at one time passed through a primitive period in which true graphs were used together with pictures (see Qiú 1978:168-169).

After phonograms began to appear, primitive writing probably still needed to undergo numerous advances before it was able to become a writing system fully capable of recording language. One may suppose that at the same time as new graphs were being added, the following advances were underway: the representation of meaning by means of pictorial representation was gradually abandoned; simplified graphic forms tended to become stable; and the ordering of graphs gradually changed until it was identical to the order of words in the language.

All independently formed writing systems like the ancient Chinese script, Egyptian hieroglyphics and Mesopotamian cuneiform employed graphs expressing meaning and sound together simultaneously. Phonetic scripts which use only graphs expressing sound were originally formed under the influence of this kind of writing.[7]

7. Concerning the formation of phonetic writing, see Zhōu 1990.

2

The Nature of Chinese Characters

In modern times, scholars who study the development of the world's writing systems at first called Chinese characters, Egyptian hieroglyphics and Mesopotamian cuneiform ideographic writing. Writing systems of this type all contain numerous phonetic elements; simply to call them ideographic writing is clearly inappropriate. In the 1940s some suggested the term "transitional writing" for this type of writing (i.e., writing transitional between ideographic and phonetic writing), but to call these mature writing systems with several thousand years of history transitional writing is also clearly inappropriate. In the 1950s the new term "word-syllabic writing" appeared (Gelb 1952). Toward the latter part of the 1950s some people in China proposed that Chinese characters are not a type of ideographic writing but a type of "semanto-phonetic" writing "making simultaneous use of methods to express both meaning and sound" (see Zhōu 1957 and 1958:2–7). Below, in putting forth our views about the nature of Chinese characters, we will focus on the analysis of the nature of the symbols employed in Chinese script, because the nature of a writing system is determined by the symbols used in it. As to what sort of name one should give to a writing system like that of China, we consider this a secondary problem.

2.1 Two Levels of Symbols

Writing symbolizes language. But writing itself taken as a symbol of language and the symbols used by the writing systems are concepts belonging to two different levels. For example, the Chinese character "花" *huā* is a symbol of the Chinese word {花} "flower"; "++" (the grass component, originally written " 艸", the old graph for *cǎo* "grass") and "化" *huà* are the symbols used in writing the character "花" (a phonogram: "++" is the signific and "化" the phonetic).

In the Chinese writing system, characters like "花" which can be analyzed structurally, are generally referred to as composite characters. The

various constituents of a composite character are called graphic components (*piānpáng*). The composite characters created after the Qin and Han dynasties basically all used already existing components. (Some characters, when used as components, took on different shapes; e.g., the character "艸" *cǎo*, when used on the top of a character, became "++"; "水" *shuǐ* "water" when used on the left side of a character became "氵"; see Sec. 5.3.) However, in the ancient (pre-Qin) script, there were numerous semantographs which can be analyzed structurally but which were composed of pictographic symbols that did not always occur independently; an example of this is a character like 射 (射), referred to in Chapter 1. It is open to question whether such characters can be called composite characters. For the time being, we will refer to them as quasi-composite characters.

There are characters which cannot be analyzed from a structural point of view; these are generally called non-composite characters. With characters of this type, there is also the question of two different levels, one having to do with writing itself as a symbol of language and the other with symbols which are used by the graph itself. For example, the ancient character ⊙ (日) when viewed as a symbol of the Chinese word {日} *rì* "sun" is a graph possessing both a meaning and a sound; looked at as a symbol for the character "日" *rì*, then it is merely a pictographic symbol with a shape resembling the sun. Such a difference also exists in phonetic scripts. For example, English "a", when viewed as symbol for the indefinite article {a}, is a graph that has both a meaning and a sound; viewed as a symbol used by the English writing system, then it is merely a letter expressing a certain sound. For the sake of clarity, the symbols used by a writing system will be called graphic symbols.

Language has a phonetic and semantic aspect. Graphs used as symbols of language must also have both a phonetic and semantic aspect. As regards this point, there is no difference between mature writing systems. It is only on the basis of the characteristics of their graphic symbols that they can be differentiated into different types.

English is an example of a phonetically based writing system. But this clearly does not mean that the English writing system entails only sound but not meaning. It only means that the graphic symbols of English, the twenty-six letters of the alphabet, are phonetic and not semantic. For example, the word "sun" in written English is a symbol of the spoken English word {sun}. It has both a sound, viz., the sound of the English word {sun}: [sʌn], and a meaning, viz., the meaning of the word {sun}—"the celestial body around which the earth and other planets revolve." However, the symbols used to write "sun"—s, u, n,—have only a phonetic link to the word represented. Since there is no semantic link, we call them phonetic letters. In like manner, the reason we refer to the ancient Chinese graph ⊙ (日) as a semantic symbol is that ⊙, taken as a graphic symbol, viz., a pictorial representation of the sun, has only a semantic link to the Chinese word {日} *rì* "sun"; it has no phonetic link. If viewed as a linguistic symbol of the word {日} *rì* "sun," it has both a sound and a meaning (see Chao 1968:105).

In discussing the nature of Chinese writing, if a clear distinction is not made between the nature of writing as a symbol of language, and the nature of the symbols used by the writing system itself, a confusion in logic will result.

2.2 The Nature of Chinese Writing Viewed from the Standpoint of the Semantic and Phonetic Functions of Graphic Symbols

The graphic symbols of any writing system can on the whole be classified into three large types: semantic symbols, phonetic symbols and signs. Graphic symbols which have a semantic relationship with words represented in the script are semantic symbols; those which have a phonetic relationship are phonetic symbols; those without any relationship either on the semantic or phonetic level are signs. Alphabetic writing systems use only phonetic symbols; the Chinese writing system uses all three types of symbols.

2.2.1 Semantic Symbols

Among the graphic symbols of the Chinese script, there are a great many semantic symbols. The graphic symbols used by the types of characters which in the traditional study of the script were called *xiàngxíng* (pictographs), *zhǐshì* (deictic graphs) and *huìyì* (syssemantographs) had only a semantic relationship with the words which they represented; therefore, they were all examples of semantic representation. What we call semantographs are a cover term for these types of characters. The semantographic components of *xíngshēng* (phonogram) characters have only a semantic link to the words represented by the characters as a whole and are therefore also cases of semantic representation.

Semantic symbols can also be classified internally. Some semantic symbols are used as pictographic symbols; they function as semantographs by means of their pictorial form, like the symbols 人 and ⊙, used respectively to write *rén* "person" and *rì* "sun" in the ancient script, and the "bow," "arrow" and "hand" components of the character 射 (射) *shè* "to shoot." Geometric symbols, if not used as signs (see above), but expressing meaning by means of their shape as in the case of 一 (*yī* "one"), 二 (*èr* "two"), 三 (*sān* "three"), 四 (*sì* "four"), □ (*fāng* "square"), ○ (*yuán* "round"), should also be classified in this category. The non-composite graphs of the ancient Chinese script are basically all semantographs composed of individual pictographic symbols.

Some semantic symbols do not function by means of their own shapes. These kinds of semantic symbols are ordinarily semantic components which are already existing characters; they express meaning through the meanings of their original characters. For example, the syssemantograph "歪" *wāi* "crooked, askew" is comprised of the characters "不" *bù*, "not" and "正" *zhèng* "upright," and the meaning of the entire graph is "not upright > askew." In this case, "不" and "正" function as semantic symbols by means of their independent meanings. The role of the signific in phonograms, as a rule, is filled by a character which points to the meaning of the phonograms in question on the basis of its own original meaning; therefore the significs of phonograms should belong to this category. (The characters mentioned in Chapter 1 that consist of a phonetic added to an original *xiàngxíng* character are exceptions.)

When it is necessary to distinguish these two kinds of semantic symbols, the first can be called 形符 *xíngfú* (graphic symbols based on shape or pictographic symbols) and the second type is 義符 *yìfú* (graphic symbols based on meaning or semantographic symbols). After the Chinese script ceased to use the *xiàngxíng* principle to create new graphs, semantic symbols based on shape ceased to be used.

2.2.2 Phonetic Symbols

There are also many phonetic symbols used in the Chinese script. *Jiǎjiè* or loangraphs make use of phonetic symbols. When loangraphs were used to represent a homophonous or nearly homophonous word, it was ordinarily not required that there be a semantic link between the two forms. For example, when the semantograph 𠀋 standing for {箕} *jī* "winnowing basket" was used to represent the modal particle {其} *qí*, the two words {箕} and {其} were not at all related semantically. Another example is the modern use of the phonogram {花} *huā* "flower" to represent the verb {花} *huā* "to spend (money)." While both of them are pronounced *huā*, they are totally unrelated semantically. Therefore, even though 𠀋 was originally a semantograph and "花" was a phonogram, when they are borrowed to write the modal particle {其} and the verb {花}, they function purely as phonetic symbols. Naturally, when 𠀋 and "花" are used as characters, viewed as graphic representations of the modal particle {其} and the verb {花}, they possess both sound and meaning; however, viewed as graphic symbols employed in the loangraph process, they have only a phonetic function. This is the same as the case of ⊙; as a representation of the word {日} *rì* "sun," it has both a sound and a meaning; viewed as a graphic symbol of the character "日", it has only a semantic function.

Sometimes one can also observe cases where a loangraph is not only homophonous or nearly homophonous with a word it is used to represent, it also bears a certain semantic relationship to it. Many of these cases

were probably produced unintentionally. In Chinese, homophonous or nearly homophonous words which are also semantically related are common. When people looked for a homophonous or nearly homophonous character to fulfill the role of a loangraph for a certain word, it is quite possible that they would choose a character that was also semantically related to it. Cases where a character was intentionally borrowed in order to write a semantically related word also exist (see Sec. 9.2). Such instances are not frequent and can be treated as special cases.

The phonetics of phonograms are also phonetic symbols. There are two kinds of phonetics. One kind is borrowed purely for the purpose of expressing sound, e.g., the phonetic "化" *huà* of the character "花" *huā*. Another kind also has a semantic relationship with the word represented by the phonogram. For example, a type of ear ornament made from jade is called {珥} *ěr* (homophonous with the character "耳" *ěr* "ear"); the character "珥" *ěr* consists of "玉" *yù* "jade" plus "耳" *ěr* "ear" (玉, when used as a component on the left side of a character is written "王"). The component "耳" *ěr* is a phonetic bearing a semantic relationship to "珥" *ěr*. Phonetics of this type can be viewed as phonetic symbols which are concurrently semantic symbols.

The phonetic symbols of the Chinese script are very different from those used in an alphabetic script. Even if one puts aside the semantic symbols and signs used at different times, the two types of phonetic symbols can be put on a par. The phonetic symbols of an alphabetic script have only one function—to express sound. The role of phonetic symbols in the Chinese script is filled by ready-made graphs which have both a sound and a meaning. There are many Chinese characters that, in their role as components in composite characters, can serve as both phonetic and semantic symbols. Moreover, they can also serve as phonetic and semantic symbols concurrently. An example of this is the use of the character "耳" *ěr* "ear"; in the characters "餌" *ěr* "cakes" and "鉺" *ěr* "erbium" it is a phonetic symbol; in "聰" *cōng* "acute of hearing" and "聾 *lóng* "deaf" it is a semantic symbol; and in "珥" it serves concurrently as a phonetic and semantic symbol. In general, the number of letters in an alphabetic writing system is quite small. It is quite a different matter with the phonetic symbols of the Chinese script. In principle, every character of the Chinese script can be borrowed for use as a phonetic symbol, and in fact the number of Chinese characters functioning in this way is great. (At various periods, more than 1,000 characters have been used as phonetics.) Characters pronounced in the same way often use different characters as phonetics. If there is a need to stress the difference between the phonetics of alphabetic systems and those of the Chinese script, the phonetic symbols of the Chinese script can be called "loaned phonetic symbols." However, for the sake of convenience, we will still refer to them simply as phonetic symbols.

2.2.3 Signs

In Chapter 1, we have already pointed out that in the initial period of the formation of the Chinese script, it is possible that a small number of signs that had already been in use in earlier periods were absorbed into the Chinese script. The numerals ×, 八, +, and)(probably originate from such signs. Other than this, it is very difficult to find cases where signs were used to create characters.[1] But in the process of the development of the Chinese script, due to changes in graphic shape, phonology and semantics, many semantic and phonetic symbols lost their semantic and phonetic functions and became signs.

Due to changes in the graphic shape of Chinese characters, a majority of non-composite semantographs have lost their original semantic function. For example, after the ancient character ⊙ changed into "日" in the clerical and standard scripts, one could no longer discern the shape of the sun. If one did not take into account the history of the character "日", there would not be any way to detect that the graphic form of this character bore any relationship to the word {日} *rì* "sun." It is obvious that the graphic symbol for "*rì*" has already changed from a semantic symbol to a sign. The character "日" has already been transformed from a semantograph to a sign; a great many more similar examples could be given. Professor Táng Lán (1979) in the chapter "Sign writing and alphabetic writing" in his book *Zhōngguó wénzìxué* [The Study of Chinese Writing] says "Pictorial writing and sign writing were originally closely connected; when pictographs evolved into excessively simplified forms, they were no more than signs" (p. 109). This is quite correct.

Some have viewed the transition of a character like "日" from a pictograph to a semantic symbol as a transition from an element denoting shape to an element denoting meaning; they hold that ⊙ is a symbol expressing shape and that "日" is a symbol expressing meaning. This is not appropriate. The reason that such a view has arisen is probably due to a failure to distinguish the function of graphic symbols from the function of writing. The fact that graphic symbols used for characters like "日" have changed into signs has not at all changed the nature of these characters as symbols for corresponding words in the language. After the forms of characters have become non-pictographic, these characters still preserve their original pronunciations and meanings. This cannot be turned around to prove that their graphic symbols had not become signs. If, because the character "日" still has a meaning, one views its graphic symbol as a symbol expressing meaning and considers it a semantograph, then why can one, basing oneself on the fact that "日" also has a pronunciation, not view its graphic symbol as a symbol expressing sound and consider it to be a phonogram? Clearly this is contrary to logic.

1. The Heavenly Branch cyclical signs "+" (甲) *jiǎ*, 𠃌 (乙) *yǐ*, and "●" (丁) *dīng* may have originated from signs used in primitive society (see Qiú 1978:164). Lóng Yǔchún (1987:108–109) notes the existence of "purely conventional" or "rigidly conventional" characters in Chinese script whose pronunciations and meanings have no relationship at all with their graphic forms; he cites as examples the characters "五" *wǔ* "five," "六" *liù* "six," "七" *qī* "seven," "八" *bā* "eight," "九" *jiǔ* "nine," and "十" *shí* "ten." What we refer to as graphs created by using signs amounts to roughly the same thing as what he describes as conventional characters.

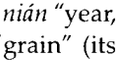
Since characters which have become signs still represent the words which they originally were coined to write, when they are used as components of composite characters, or as loangraphs to express another word, they can still function as semantic or phonetic symbols. The character "日", for example, has already become a sign graph; the "日" in "晴" *qíng* "clear sky," however, is not a sign but is used as a semantic symbol (i.e., it only uses the meaning of the character "日" and not its sound). The "日" in the character "馹" *rì* (a kind of horse carriage used by ancient post stations) and the "日" in the transcription of the name Geneva, "日內瓦" *rìnèiwǎ*, are also not signs but cases of "日" serving only as a phonetic symbol (i.e., it only uses the sound of "日" and not its meaning). In any case, characters like "日", even though the graphic symbols employed have already become signs without semantic or phonetic function, when serving as graphic symbols, they function semantically or phonetically.

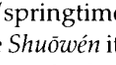
Therefore, although the evolution of the Chinese script has caused the great majority of non-composite graphs, which also comprise the principal material for composite graphs, to become signs, it has not caused the situation whereby composite characters are made of semantic and phonetic symbols, to undergo a fundamental change. The vast majority of Chinese characters are composite characters. The fact that the nature of composite characters has not undergone fundamental change means in turn that the nature of the Chinese script has not undergone a fundamental change either. Thus we must both fully recognize the difference between signs and semantographs and, at the same time, recognize that we cannot exaggerate the influence that the appearance of sign graphs has had on the entire writing system. When Professor Táng Lán (1979) in his *Zhōngguó wénzìxué* wrote, "Up until the present time, the Chinese script cannot be considered a script of signs—it is still a phonetic compound script" (p. 109), he had already essentially expressed this notion.

In addition to non-composite graphs, some other characters have become signs due to changes in graphic form. Many quasi-composite characters have become sign graphs. An instance of this is the character "立" *lì* "stand"; it was originally written 𠂇, and resembled a man standing on the ground. The character "並" *bìng* (now subsumed under "幷" *bìng* as a single graph) was originally written 𠆢 which resembles two men standing side by side on the ground. (The *Shuōwén*'s analysis of "並" *bìng* as derived from

two "立" *lì* graphs does not accord with the graph's meaning.) In the clerical and standard scripts both "立" *lì* and "並" *bìng* became unanalyzable sign graphs. (Concerning the evolution of quasi-composite characters, see Sec. 3.2.)

A few composite semantographs also have become sign graphs. One example of this is the character "表" *biǎo* "outer garment"; it was originally written  (), a composite graph consisting of the two characters, "衣" *yī* "clothing" and "毛" *máo* "fur." The character "表" in origin referred to a garment which was worn outside a fur coat. The fur garments of the ancients were worn with the fur side facing outward, so the character "表" gets its meaning from the juxtaposition of "毛" upon "衣". After this character began to be written "表", it could only be considered a sign graph.

Phonograms occasionally can also become sign graphs. For example, the character  *nián* "year, harvest" was originally a phonogram consisting of "禾" *hé* "grain" (its signific) and "千" *qiān* (its phonetic); later it evolved into the sign graph "年" in which both the signific and phonetic have undergone decomposition.

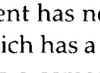
Changes in graphic form have also produced a number of semi-sign graphs, that is, characters composed of a sign plus a semantic or phonetic symbol. Most such characters have come from phonograms. The character "春" *chūn* "springtime" is an example; it was originally written "  ". According to the *Shuōwén* it is "derived from 艸 *cǎo* "grass" and 日 *rì* "sun" because grass grows in the springtime; 屯 is phonetic." Later the components "屯" and "艸" fused into a single element with the shape "  ". This graphic component has neither a semantic nor a phonetic function; it is merely a sign which has a distinguishing function. The component "日", however, still has a semantic function. In this way, "春" has become a semi-sign, semi-semantograph composed of a sign plus a semantic symbol.

There are also many characters which, although their structures have not been dramatically altered due to changes in graphic form, nonetheless, because of phonetic change and alterations in shape, have in actuality already become sign graphs or semi-sign graphs for most people. The most common case is that of phonograms in which the phonetic component, because of phonological evolution, has lost its phonetic function causing the character to become a sign (see Sec. 8.6). For example, the character "恥" *chǐ* "shame" (the original form of "耻") was originally composed of "心" *xīn* "heart" with "耳" *ěr* "ear" as its phonetic. Later the pronunciation of the two characters "耳" and "恥" changed to the point that they ceased to have anything in common; "耳" in fact became a sign which had only a differentiating function and "恥" then became a semi-sign graph. The writing of "恥" as "耻" is first seen in Eastern Han inscriptions; perhaps at that time the pronunciation of "耳" and "恥" were already quite distant, so that some people did not know that "耳" was a phonetic

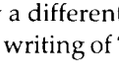
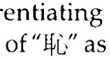
and replaced the component "心" with "止" which was phonetically similar to "恥". (In Han clerical script the graphic forms of "止" and "心" were quite similar.) The character "耻" can be viewed as a half sign, half phonetic character composed of a sign "耳" and a phonetic "止".

Cases whereby the semantic component of a composite character, due to semantic change, has lost its semantic function and become a sign also exist. An example is the character "特" which originally meant "a male bovine," hence the use of the component "牛" "bovine." Since the original meaning has long been obsolete, the component "牛" for most people has in fact become a sign.

Sometimes phonograms can become signs due to both phonetic and semantic change. A case in point is the character "特" cited above in which a component had lost its semantic function. The phonetic function of its phonetic "寺" *sì* has also been lost because of phonological development; hence, for the average person the character "特" has also become a sign graph.

Loangraphs can also become signs. A loangraph is an already existing character that is borrowed as a phonetic symbol to write a word that is either homophonous or nearly homophonous with it. To someone who is totally ignorant of borrowed characters, a loangraph is in truth no more than a sign. The original usages of some characters employed as loangraphs have been forgotten; in this case, if the borrowed character is not a phonogram, then the borrowed character may become a sign graph. For example, the character "我" *wǒ* "I, me" in the earlier stage of the ancient script was written  ; it resembled a kind of saw or a blade-shaped weapon like a saw; the word which it originally represented must have been the name of such a saw or weapon. Since the first person pronoun {我} and that word were either homophonous or nearly homophonous, the ancient Chinese borrowed the character "我" to write it. But at a relatively early period, the word originally represented by "我" was lost and fell from use. Therefore, viewed as the graphic symbol used for the first person pronoun "我" it had already lost its phonetic function and had become a rigidly fixed sign; viewed as a graph, the first person pronoun "我" had already changed from a loangraph to a sign graph. Most people do not know that the character "其", now used to write the grammatical particle {其} *qí*, was originally used to represent the word {箕} *jī* "winnowing basket," so in effect it too has already become a sign graph.[2]

If a borrowed character is a phonogram, once the original meaning is lost, the phonetic component generally still retains its phonetic function.

2. The character "其" is derived from  ; its evolution was probably as follows: →  →  → 其. Some think that "丌" (pronounced *jī*) is an added phonetic. The character "箕" *jī* is derived from "其".

The character "笨", for example, originally meant "the white membrane in bamboo." Later this character was borrowed to write {笨} *bèn* "stupid"; after the original meaning became obsolete, its signific "竹" *zhú* "bamboo" became in effect a sign, whereas the phonetic "本" still retained its phonetic function.

In any case, for a number of reasons, among the Chinese characters now in use, many original semantic and phonetic symbols have become signs. Correspondingly, many semantographs, phonograms and loangraphs have also become sign graphs or semi-sign graphs.

On the basis of the above analysis, the following conclusions can be reached: at an early period when the pictographic element was rather prominent (most likely before the Western Zhou), the Chinese script was basically a writing system that employed semantic and phonetic symbols (strictly speaking "borrowed" phonetic symbols). Later due to changes in graphic form, phonology and semantics, it gradually became a writing system employing semantic symbols (chiefly semantographic symbols), phonetic symbols and signs; the formation of the clerical script (*lìshū*) can be viewed as the sign of the completion of this development. If one were obliged to give separate names to these two stages of the script, the first stage could be called a script of semantic and phonetic symbols, or, as some students of the script have suggested, it could be called a semantophonetic script; the later stage could be called a script of semantic symbols, phonetic symbols and signs. In light of the fact that the signs of the later stages are almost completely derived from semantic and phonetic symbols, and that a majority of characters are still formed from semantic and phonetic symbols, this stage of the script can be called late semantophonetic script.

2.3 The Nature of the Chinese Writing System Viewed from the Standpoint of the Levels of the Structural System of the Language as Manifested by its Graphic Symbols

As indicated previously, some people have called this type of writing system "word syllabic" writing. Others have called it word-writing or morphemic writing.[3] How should these terms be understood?

First of all it should be pointed out that the terms morphemic writing and word-writing are not fundamentally different. A morpheme is the smallest meaningful unit in a language; a morpheme that can function independently is a word. In old Chinese the vast majority of words were

3. The term word-writing (or logographic writing) is taken from Bloomfield (1933:285 ff.). Word-syllabic writing is a term taken from Gelb (1952). The notion of morphemic writing is taken from Chao (1959:144).

monosyllables; Chinese characters at that time, generally speaking, all represented monosyllabic words. However, many monosyllabic words later became morphemes which could not function independently. At the present time, a Chinese character often is a symbol for a morpheme and the symbol for a word. This is the reason that some people have been unwilling to call the Chinese script a word script and have called it a morphemic script. In light of these considerations, the term word-syllabic script can be changed to morphemo-syllabic script.[4]

First, what sort of writing system is implied by the term morphemic script? Phonetic scripts, depending on whether the graphic symbols represent syllables or phonemes, can be divided into syllabic and phonemic scripts. Can a "morphemic script" then be understood as a script in which the graphic symbols represent morphemes? It cannot be understood in this fashion. In general, characters like "日" are taken to be typical morphemic graphs. We can only say that "日" represents the morpheme {日} *rì* "sun, day" but we cannot say that the character "日" directly represents the word {日}. This has already been explained above. Some people, because they see that a character of the Chinese script ordinarily stands for a morpheme, call the Chinese script a morphemic script. It is inappropriate to ignore the nature of the graphic symbol and define a script based purely on the nature of the linguistic element represented by the basic unit written in the script. (What is referred to here as the basic unit used in the script is what is generally called a Chinese character. The strokes of a Chinese character can be considered the basic units of handwriting.) In English almost every graphic unit represents a word. Hasn't everyone rather than calling it a word script, considered it to be a phonemic script? Looked at in this way, isn't the term morphemic script totally unacceptable? Not necessarily. The terms phoneme, syllable, and morpheme refer to lower and higher levels in the structural system of a language. We can explain morphemic writing as a type of writing in which the graphic symbol belongs to the morphemic level, that is to say, the graphic symbol has a relationship to the morphemic level but is unrelated to the phonemic and syllabic levels; or it may be defined as a type of writing which can express the morphemic structure of a language (that is, it is able to tell us from which morphemes words are constructed) and is unable to express a language's phonemic or syllabic structure. Morphemo-syllabic writing can be defined as a kind of writing that makes use of graphic symbols belonging to the morphemic level as well as graphic symbols expressing a syllable.

4. In one of the subheadings in Chao (1968:103), Chinese writing is referred to as "morpheme-syllable writing," but in the text itself Chao says that "Chinese is an almost perfect example of morphemic writing." It would appear that his notion of "morpheme-syllable writing" is not the same as what is meant here.

In light of the explanations above, should the Chinese script be called a morphemic script, or should it be called a morphemo-syllabic script? This problem is discussed below.

Neither the semantographs nor the signs of Chinese express sound; the former is linked only to the meaning of the morpheme it represents (the level below the syllable has no meaning to speak of); the latter can only function to distinguish graphs representing different morphemes. They are both graphic symbols belonging to the morphemic level. Therefore, non-composite, quasi-composite and composite semantographs, as well as sign graphs and semi-sign, semi-semantographs, can all be viewed as morphemic graphs.

However, the phonetic symbols of the Chinese script, although they are all written with ready-made graphs which were originally morphemic symbols, ought to be viewed as symbols expressing syllables; loangraphs which employ phonetic symbols (i.e., loangraphs which record original Chinese morphemes) and phonograms composed of semantic and phonetic symbols normally also represent a single morpheme with a single graph. But we should not consider them all to be morphemic graphs because of this.

In the case of those loangraphs which record transcribed foreign words of two or more syllables, it is perfectly clear that they express the nature of the syllabic structure of morphemes. For example, the four characters "達魯花赤" *dálǔhuāchì* which were borrowed in the Yuan dynasty to write the Mongolian title *darugaci* "governor, keeper of the seal," are clearly all used as syllabograms. Loangraphs used to write native Chinese binomes like "倉庚" *cānggéng* "name of a bird" and "猶豫" *yóuyù* "hesitate" (see Sec. 9.3) also clearly are employed to express syllabic structure.

Those loangraphs which are used to record native Chinese monosyllabic morphemes also similarly serve in expressing syllabic structure. The only difference is that in those cases where a morpheme is a single syllable, the boundary between the level of morpheme and syllable can easily be overlooked. Viewed as graphic symbols, the "花" which is borrowed to write the verb {花} *huā* "spend (money)" and the "花" of "*dálǔhuāchì*" (Mongolian *darugaci*) are basically the same; both of them are symbols standing for the syllable *huā*. The difference between them is that the former is used alone to express the sound of a monosyllabic morpheme and the latter only expresses one syllable in a polysyllabic morpheme. The graph "花" viewed as a graphic symbol used as a loangraph has only the function of expressing a syllable; but viewed as a loangraph for recording the verb {花}, it has both a sound and a meaning (that is, the borrowed meaning of the character "花"). The four characters "達魯花赤" must be joined together before they can express a definite meaning; each of the characters can only be viewed as a meaningless symbol for expressing a syllable. If one does not define "字" (a character) in the usual way as "the basic unit of writing" but as a "symbol for a morpheme or word," then only "達魯花赤" in its entirety is qualified to be called a loangraph.

The letter "a" used to express the indefinite article "a" in English is not basically different from other cases of the letter "a" used to spell other words just because it forms a word all on its own. When the loangraph "花" is used in the Chinese script to write the verb {花} "spend," the fact that a character is used to represent a morpheme naturally does not affect its nature as a graphic symbol being used to express a syllable. Therefore, all loangraphs can be viewed as syllabograms.

The phonetics of phonograms are also syllabographic symbols. For example, the characters "餌", "洱", "珥" and "鉺" are all homophones but they are used to write different morphemes; they all have a common phonetic component "耳". This "耳" clearly should be considered a syllabographic symbol (the "耳" of "珥" also has a semantic function, see above). Since only the semantic of a phonogram is related to the meaning of the morpheme, phonograms can be viewed as graphs which are somewhere between graphs standing for morphemes and those standing for syllables. Semi-signs and semi-phonograms can also be looked at in this way.

It has already been indicated above that the phonetic symbols of Chinese characters and the phonetic symbols of alphabetic writing systems are very different. This kind of phonetic symbol, viewed as a syllabographic symbol, is likewise quite different from the phonetic symbols of a syllabic writing system. Chinese writing uses both syllabographic symbols as well as symbols belonging to the morphemic level. Syllabographic symbols are all borrowed from among ready-made graphs; they are represented by morphemic symbols (rare cases such as "乒" *pīng* and "乓" *pāng* are exceptions, see Sec. 6.3.3). Moreover, there are frequently many characters borrowed to write a single syllable.[5] These are all ways in which they differ from syllabic writing.

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5. This phenomenon for the most part comes about when characters which orignally were not homophonous later became homophones. For example, among the characters pronounced *yi* in the *Xīnhuá zìdiǎn*, around ten or so different phonetics are used: "意", "衣", "奇", "𣪊", "昜", "伊", "韋", "多", etc. Many of these phonetics were not homophones in Old Chinese. Cases where different characters are borrowed in order to differentiate homophones are also frequent (see Yóu 1983:227, note 17). For instance, "黃" and "湟", "蟥" and "蝗" are all homophones. In order to differentiate their graphic forms, the two separate phonetics "黃" and "皇" are used. (This is in some ways similar to the use of different spellings in alphabetic writing to distinguish homophones.) In addition, the borrowing of different characters to express the same syllable is also frequent; this is merely caused by the lack of regularity in selecting phonetics.

From the above analysis it can be seen that Chinese writing should not be simply called morphemic writing but should be called morphemo-syllabic writing. But we should be fully aware of the differences between the syllabographic symbols of Chinese writing and the phonetic symbols of a syllabic system.

The terms morphemo-syllabic script and semanto-phonetic script (or semanto-phonetic-sign script) are names given to the Chinese script looked at from different points of view. These two terms can coexist. Semantic symbols and signs are both graphic symbols at the morphemic level; therefore the term morphemo-syllabic script is appropriate for both the script of early times and later periods.

2.4 The Characteristics of the Formal Aspects of Chinese Characters

Finally, we will discuss the chief formal characteristics of Chinese characters as well as the difference between characters used to record polysyllabic morphemes and ordinary characters.

Above we have already said that the written unit of the Chinese script is the character (*zì*). Every character is ordinarily read as a single syllable. The only exception in modern Chinese is the character "兒" when it is used to represent the suffix "兒", in which case it is non-syllabic. Some people write this "兒" smaller to express this difference. Characters like "𠀋" *qiānwǎ* and "浬" *hǎilǐ* and a few other characters used for units of weight and measure can be read as two syllables, but their nature is like that of compound graphs in the ancient script (cases where two or more characters were written as if they were a single character); they are not standard script characters. (It has already been decreed that these characters resembling compound graphs no longer be used.) In Chinese, monosyllabic morphemes occupy a dominant place. In general one character is created for each monosyllabic morpheme. This is the main reason why the situation in which one character is read as a single syllable came about.

As to the shape of characters, the general requirement that every Chinese character be accommodated within a square appeared very early, and it became a principle that when graphic symbols were combined, the resulting combinations could be written within a square. Therefore, the deployment of graphic symbols lacked strict regularity and this resulted in different arrangements of the symbols: left and right, top and bottom, and inside and outside (see Sec. 8.4). (Characters which do not conform to this principle are frequently encountered in Shang time sources, such as the writing of "般" as  and so forth, but become rarer in Zhou sources and almost nonexistant in Qin and Han materials.) Usually when we speak of "squarish characters" (*fāngkuài zì* 方塊字), this is what is meant.

In Chinese, in addition to monosyllabic morphemes, which form a preponderance, a certain number of disyllabic morphemes also exist; moreover, the number of morphemes consisting of two or more syllables due to the borrowing of foreign words has steadily increased. In the case of such morphemes as these, it is necessary to use two or more characters when recording them.[6]

Put more concretely, when Chinese characters are used to write morphemes of two or more syllables, either the loangraph principle is used or special characters are created.

The use of loangraphs to write disyllabic morphemes is common. The words "倉庚" *cānggéng* and "猶豫" *yóuyù* which already appeared in antiquity (see above) and such modern words as "沙發" *shāfā* "sofa" and "尼龍" *nílóng* "nylon" are good examples. Morphemes of more than three syllables are virtually all written with loangraphs. Examples of this are the ancient words "璧流離" *bìliúlí* (the old transliteration of "琉璃" *liúli* "colored glaze" and "達魯花赤" *dálǔhuāchì* as well as the modern words "蘇維埃" *sūwéiāi* "soviet" and "布爾什維克" *Bùěrshíwéikè* "Bolshevik." In writing morphemes of more than two syllables, the borrowed loangraph must be connected in order to express their meaning; each individual character functions simply as a syllabogram. This has already been discussed above.

The creation of special characters is by and large used only in the case of disyllabic morphemes.[7] The vast majority of such characters use the phonetic compounding principle; examples are the ancient words "蝀蝀" *dìdòng* a name for the "rainbow" and "徜徉" *chángyáng* "wander about at one's ease," as well as the modern words "咖啡" *kāfēi* "coffee" and "噻

6. Whether all early Chinese characters, when used to write disyllabic morphemes, were like this is still uncertain. A part of the disyllabic morphemes of Chinese probably already existed at the time that the script originated. In the case of some disyllabic morphemes referring to actions and concrete objects, it is possible that in the beginning single semantographs representing two syllables were created to represent them. The character "鳳" *fèng* "phoenix" in the oracle bone script, in addition to having a form which added "凡" *fán* to the pictograph for the word {鳳} "phoenix," occasionally was also written with an added "兄" *xiōng*. According to Zhāng Zhènglàng (1939), the form having "兄" *xiōng* as a phonetic should be read as the "凰" *huáng* of *fènghuáng* "phoenix." (In Old Chinese the pronunciations of "兄" and "皇" were close.) Perhaps the pictograph for {鳳} was originally created to write the disyllabic morpheme {鳳凰} "phoenix." It appears possible that in ancient Chinese script there were originally characters read as two syllables, but due to the preponderance of monosyllabic morphemes in Chinese, the great majority of Chinese characters are read as monosyllables. Characters read as disyllables were eliminated at a very early date.

7. Trisyllabic morphemes written with special characters such as the *Shuōwén* form "珣玗琪" *xúnyúqí* "a kind of jade from the area of the Dongyi" and the Qing dynasty transliteration of England, "暎咭唎" *yīngjīlì* are rather rare.

唑" *sāizuò* "thiazole." The use of non-phonetic type characters, such "乒乓" *pīngpāng* "ping-pong," and "旮旯" *gālá* "corner" are quite rare. The original intent behind the creation of "旮旯" is uncertain and its constitutent graphs can only be treated as signs.

The phonograms used to write disyllabic morphemes are frequently created from loangraphs by the addition of a component or the change of an original component. For example, the word "徜徉" cited above was created from a loangraph writing "尚羊" (or "常羊"). Another example is "蜈蚣" *wúgong* "centipede" which was originally written "吳公" (see *Guǎngyǎ*, "Shìchóng"); this is also a case of a loangraph writing; later an insect component was added to the first character: "蜈公" (as seen in the commentary to *Zhuāngzǐ*, "Qíwùlùn," wherein the *Guǎngyǎ* is cited); it was not until later that the insect component was added to both characters. The word "倉庚" referred to above was subsequently written as "倉鶮" and "鶬鶮". (Concerning the practice of transforming loangraphs into special characters, see Sec. 11.1.1.3.4.)

Characters created to write disyllabic morphemes, like loangraphs used to write disyllabic morphemes, have meaning only when the two characters are joined together. Moreover, when a group of loangraphs used to write a morpheme of two or more syllables is separated into its individual characters, each character retains its original graphic meaning. The characters that are created to write disyllabic morphemes, when viewed individually, lack this sort of graphic meaning. This aspect of them differs from most other Chinese characters.

If Chinese characters were not restrained by the one-character one-syllable principle, then words like "徜徉", "蜈蚣" (or "蜈公") and "鶬鶮" (or "倉鶮") could have been written as "[illegible]", "[illegible]" and "[illegible]." In Egyptian hieroglyphics, graphs consisting of groups of phonetic symbols with a determinative written at their side were common. Among the composite graphs of the ancient Chinese script similar examples can occasionally be seen. On seals of the Warring States period, for example, sometimes "邯鄲 (鄲)" Hándān, the name of place located presently in southern Héběi province was written together as "鄲" (see *Gǔ xīwén biān*, p. 361). In composite graphs of this type, the syllabographic nature of the phonetic components of phonograms can be seen even more clearly.

3

The Origin and Development of Chinese Script

3.1 Concerning the Origin of the Chinese Script

One often hears questions like "When did the Chinese script begin?" and "What is the origin of the Chinese script?" As already pointed out in the first chapter, the formation of writing systems like that of Chinese, which were created either completely or basically in an independent manner, went through a long process. Therefore, questions concerning the origin of the Chinese script should be posed in the following manner: "When did the formation process that led to the Chinese system of writing begin and when was it completed?" "How did the Chinese script gradually develop from primitive writing into a writing system that was fully capable of recording language?"

The last of these questions was broached in Chapter 1. Due to the paucity of materials relating to primitive writing, we are at present unable to recover the actual process that led to the formation of the Chinese script, therefore we will not discuss this problem further. For similar reasons, the former question, that is, the question of the beginning and end of the process of Chinese script formation, still cannot be resolved completely. Below only some preliminary observations concerning this question can be made.

The earliest relatively substantial examples of ancient Chinese writing discovered so far are the bone and bronze inscriptions of the late Shang dynasty (ca. 14th to 11th centuries B.C.; see Sec. 4.1). They reveal a mature form of Chinese writing that was already fully capable of recording language. After the rise of modern archaeology, chiefly since the 1950s, some written material earlier than the late Shang and material which is possibly connected with a primitive form of the Chinese script have been discovered. While these materials are very valuable, they are unfortunately few in number and most of them are rather fragmentary so that they are far

from being able to provide an ample basis for solving the problem of the formation of Chinese writing.

The material already discovered which possibly has a bearing on primitive Chinese writing consists for the most part of engravings or drawings on artifacts surviving from the primitive society period. On the basis of their external features, these symbols can be divided into two types. One type consists of symbols resembling concrete objects, while the other consists of geometric symbols. While some are neither geometric symbols nor symbols resembling concrete objects, they can be placed in the latter category. Below the latter type will be referred to as type A and the former as type B.[1] Below the type A symbols will be discussed first.

Based on the discoveries made thus far, the majority of type A symbols were incised or drawn on pottery while a smaller number were incised on turtle shells and animal bones or bone artifacts. Symbols of this type are widely distributed and have been discovered at Yǎngsháo, Mǎjiāyáo, Lóngshān and Liángzhǔ culture sites (what we term "culture site" includes burial grounds, see Qiú 1978:168–169). They were used for a very long period of time. At the upper limit, such symbols are already found on artifacts from the first period Dàdìwān culture sites which date back some seven or eight thousand years ago and predate both the Yǎngsháo culture and the younger Péilǐgǎng culture site at Jiǎhú. The symbols belonging to the first period culture site were discovered at Dàdìwān, Qín'ān County, Gānsù Province and are drawn with pigmented substances on the inner sides of pottery basin-like vessels (*WW* 1983b:22–25). The Jiǎhú symbols were discovered at Jiǎhú, Wǔyáng County, Hénán Province and are incised on turtle plastrons (*WW* 1989:11–12, 14). At the lower limit, such symbols were not only still being used during the late primitive society period but during the advent of the historical period as well. Even after Chinese script had already been created, such graphs continued to be used in some areas for a fairly long period of time. Many symbols of this type are still seen on pottery dating from the Shang to the Spring and Autumn and Warring States periods.[2]

Among the type A symbols, those appearing on pottery discovered at the early Yǎngsháo sites like that at Bànpō are both early and relatively abundant and have received the most attention. Using these symbols, we will discuss their relationship to Chinese characters.

In the various Bànpō-type sites, the largest number of such symbols have been found at Bànpō itself and at the site at Jiāngzhài in Líntóng

1. In regard to recent discoveries relating to the symbols appearing on artifacts dating from the the primitive society period, see Qiú 1993.

2. See Gāo 1987:36. These symbols can still even be found on Western Han pottery; see Wénwù Press 1981a, vol. 1:89–91, 210–211.

County in Shǎnxī. Below are some examples of the symbols found at Bànpō (after Wénwù Press 1963:197, pl. 141, and pls. 167–171):

Many of the symbols found at Jiāngzhài are either identical or similar to those found at Bànpō; in addition there are a few more complicated examples such as the following (after Wáng Zhìjùn 1980:15):

The majority of the symbols from Bànpō are incised on broad black strip designs or on black inverted triangular designs found on the rims (lips) of pottery bowls. There are very few exceptions. According to carbon 14 dating, Bànpō-type sites are dated to six or seven thousand years before the present.

There are different views concerning the nature of the Bànpō-type symbols. Many regard them as writing. Some, moreover, connect them directly with ancient Chinese graphs; for example, they regard × as the character "五" *wǔ* "five," + as "七" *qī* "seven," | as "十" *shí* "ten," ‖ as "二十" *èrshí* "twenty," 丅 as "示" *shì* "show," ↑ as "矛" *máo* "spear," 艹 as "艸" *cǎo* "grass," 𠂤 as "阜" *fù* "mound," etc. (see Yú 1973:32). Others do not regard these sorts of symbols as writing but think that "they are possibly special markings of the owner or the maker of the vessels" (Wénwù Press 1963:198). Still others believe that they were "incised in an ad hoc manner to indicate the right of ownership of some individual or some need when they were manufactured" (Wāng 1981:23).

What these symbols represent definitely cannot be a fully formed system of writing; this much is quite clear. Is there any possibility that they are primitive writing? Most likely there is not. We simply possess no basis for saying that they were already being used to record language. Nor viewed from the standpoint of the symbols of this same type that continued to be used following the creation of Chinese script do they even resemble script (Gāo 1987:35–36).

Still less can we agree with attempts to compare geometric symbols of the Bànpō type with the symbols resembling the forms of concrete objects in the ancient script. These two kinds of symbols clearly are elements belonging to different systems. We cannot conclude that because the former type of symbol sometimes has the same shape as relatively simple examples or certain simplified forms of the former type of symbol that there is a hereditary relationship between them. Symbols of the Bànpō type are probably 3,000 or more years earlier than the bone script of the late Shang. If they were really the ancestors of the later Chinese script,

then their pictorial nature should be considerably more evident than that of the later bone script. The character "皇" in the bone script is mostly written 𦥑, a relatively more pictorial writing of "示", is 𠂤. If the 𠂤 and 丅 found among the Bànpō symbols are indeed "皇" and "示", respectively, why are they less pictorial than the forms found in the later bone script?

However, the great majority of symbols of the Bànpō type which have been discovered so far are incised on the same parts of identical types of vessels and they are very regular. Some symbols not only appear repeatedly on many vessels, they also appear on vessels from different archaeological sites. It would appear that these symbols, or at least a part of them, were possibly used in a consistent way to express certain meanings. In addition to being used as identification marks for individuals or groups, symbols of this type were possibly also used to express other meanings.

Peoples who lack writing often know how to use symbols to record numbers. We may surmise that it is not impossible that the geometric symbols employed by primitive societies in China also had such a use. The ancient Chinese script employed a small number of geometric symbols in addition to symbols of a pictorial nature. 一 (一 *yī* "one"), 二 (二 *èr* "two"), 三 (三 *sān* "three"), 亖 (四 *sì* "four"), × (五 *wǔ* "five"), 入 (六 *liù* "six"), + (七 *qī* "seven"),)((八 *bā* "eight"), | (十 *shí* "ten") are the most obvious examples. (The character for "九" *jiǔ* "nine" is thought by most scholars of the script to be a loangraph.) Symbols either identical to or near to these characters for numerals are commonly seen among the geometric symbols used by various primitive societies in China. Many people believe that symbols of this type are ancestral to the later characters used to write numerals; this is reasonable. But this by no means proves that the symbols used to record numerals in primitive societies represented writing. In Chapter 1, we have explained this. Moreover, since the elements used to create geometric symbols are so simple, it is very easy for people from different areas to come up with identical symbols. These symbols which possess the same form often express quite different meanings.[3] Therefore, even though the ancient script has certain numerals whose external form is identical to certain of the symbols of the Bànpō type, we cannot on these grounds simply conclude that the numerals of the Chinese script originated from the Bànpō-type symbols. It is entirely possible that they came from another primitive culture.

3. For example, in the ancient Chinese script "×" was used to express *wǔ* "five"; in the Nàxī script it was used for "ten"; among the Hānì it was used to mean "fifty dollars"; for the Lisu it meant "to meet" (see Wāng 1981:15). Among the ancient Babylonians it was a mark of ownership (*ibid.*, p. 23). In Egyptian hieroglyphics it was used to mean "divide" (see Chapter 1).

A very small number of the clan emblems found on bronze vessels from the late Shang and early Zhou resemble the geometric symbols from primitive societies; for example:

They may also originate from symbols of this type (Guō 1972:4–5). Symbols employed as identification marks for individuals and groups in primitive society can easily be transformed into clan emblems. There is a question as to whether this group of clan emblems had already become true writing in the Shang and Zhou periods (Wāng 1981:39). They may actually be rather like the cursive monograms called *huāyā* (花押) of later times.

In any case, we do not believe that the geometric symbols employed widely in the primitive societies of China were already a form of writing. With the exception of a few symbols (chiefly those used for recording numerals) that were absorbed by the Chinese script, they are probably not directly related to the formation of the Chinese writing system. Moreover, even those symbols which were absorbed by the Chinese script are not necessarily to be linked with symbols of the Bànpō type. Further study will be required to determine from which primitive society they came. Quite a number of people, basing themselves on the Bànpō-type symbols, have said that the history of Chinese writing goes back more than 6,000 years. Such claims are probably unjustified.

In recent years, some type A symbols have been discovered incised on pieces of bone and on bone artifacts at the period 2 Kèshěngzhuāng culture site located at Huālóuzǐ, Cháng'ān County in the suburbs of Xī'ān (Zhèng and Mù 1988:237–239). Some have labeled them shell and bone script and regard them as the source of the Yīnxū shell and bone script. But this seems highly unlikely.

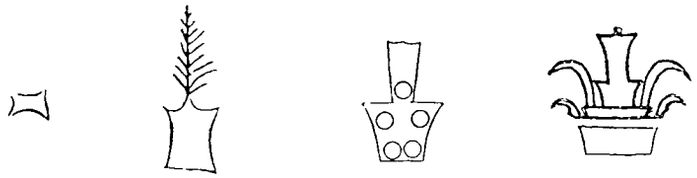
Below we will discuss the type B symbols dating from the primitive society period.

In field archaeology, type B symbols have been discovered for the most part at the Dàwénkǒu culture sites in Shāndōng and usually are found incised on pottery jars with large mouths. The late period Dàwénkǒu culture dates back to around 2800–2500 B.C. According to sources published in recent years (Wáng 1986), sixteen artifacts consisting of pottery jars and potsherds with incised symbols have been discovered to date. Fifteen of them were collected or unearthed at Língyǎnghé and Dàzhūcūn in Jǔ County, and one was collected at Qiánzhài, Zhūchéng County. Most of those excavated came from tombs; and most of these tombs contained rich assortments of burial accessories, suggesting that their occupants had a higher social status than most.

Altogether eighteen symbols appear on the sixteen artifacts mentioned

above, and can be grouped into eight types, examples of each of which are given below (where letters designate sequence and numerals their number of occurrences) (after Lǐ 1987:75):

A (3) B (3) E (3) D (1)



E (3) F (1) G (5) H (2)

B is composed of *A* placed over a mountain-like form. *G* would seem to be the same thing that appears in the middle of the upper portion of *H*. Most of these symbols are incised on the outer surfaces of the vessels near their necks, while a few were were incised near the bottoms of the vessels. Ordinarily only one symbol was incised on each jar; and only two jars collected at Língyǎnghé carry two symbols on each. On one of them we find *G* incised near the neck of the vessel with *E* incised near its bottom. On the other we find *G* and *D* incised on opposite sides near the neck of the vessel. *G* occurs five times and has been miniated in each case. *H* occurs twice. In the complete example illustrated above, the lower basin-shaped portion is drawn with cinnabar (unengraved), whereas the upper half has been miniated. The fragmentary example appearing on a shard has not been miniated. Aside from the fragmentary remains of a miniated example of *B* appearing on a shard collected at Qiánzhài, Zhūchéng County (*WW* 1974:74), none of the other symbols has been miniated, including the unminiated symbols that occur with a miniated *G* on the same vessel. It would appear that miniation had some particular significance.

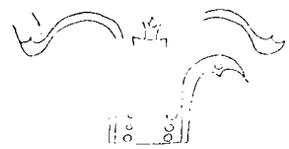
During the excavation of the Dàwénkǒu tombs at Tài'ān and Níngyáng counties in Shāndōng, a flask bearing a miniated symbol on its upper half as illustrated on the right was discovered in a middle period Dàwénkǒu culture tomb (Wénwù press 1974). Whether or not this symbol belongs to the type B symbols appearing on late period pottery jars has yet to be studied.

Examples *A-D* cited above were publicized in an excavation report titled *Dàwénkǒu* published in 1974. During the 1970s many researchers studied these symbols. In 1987, Lǐ Xuéqín (1987) published his study "Lùn xīn chū Dàwénkǒu wénhuà táoqì fúhào" [On the Newly Discovered Pottery Symbols of the Dàwénkǒu Culture], which represented further research based on newer evidence.

For the most part, two views exist regarding the nature of these symbols. Some scholars hold that they represent writing and further treat them as relatively primitive forms of Chinese graphs. For example, Yú Xīngwú (1973:32) interpreted example *A* above as "旦" *dàn* "dawn." Táng Lán (1975: 72–73) interpreted *A* as "炅" *jiǒng* "bright," *B* as the complex form of "炅", *C* as "斤" *jīn* "ax," and *D* as "戌" *xū* "the eleventh of the twelve branches" or "戉" *yuè* "halberd."[4] Lǐ Xuéqín (1985) interpreted B as a *héwén* (contraction) of "炅山" *jiǒng shān*, F as "封" *fēng* "mound," and further suggested that *E* also occurs in bone and bronze inscriptions where it is used as the name of a person or a clan (Lǐ 1987:78). By contrast, some scholars hold that these symbols do not represent writing at all. Wāng Níngshēng (1981:27), for instance, holds that they "fall into the category of pictorial records" and constitute "graphic symbols designed to represent visually persons or clans." In addition, among these two groups of scholars are those who maintain that this or that symbol was related to a sacrifice or to the social status of the owner of the vessel.

On Liángzhǔ culture(?) artifacts or artifacts which are stylistically similar to them, symbols are found that are similar or even identical to the Dàwénkǒu culture type B symbols cited above.

A pottery jar with a wide mouth was excavated from ash-pit no. 2 at the Běiyīnyángyíng site, Nánjīng, which is incised with the following symbol (after Lǐ 1987:79):



This symbol is very similar to *H* cited above and seemingly could be viewed as a variant form of it. According to a report prepared by the unit responsible for the excavation, ash-pit no. 2 at Běiyīnyángyíng is "by and large close to the Zhānglíngshān type . . . and perhaps belongs to the transition stage from the Zhānglíngshān type to the Liángzhǔ type" (*WW* 1978:52).

Symbols of this sort also appear on several ancient jade pieces which ended up in America prior to the 1940s and are now held by the Freer Gallery of Art in Washington, D.C. The first to take notice and study these pieces was the Japanese scholar Hayashi Minao. Later on, Lǐ Xuéqín (1985)

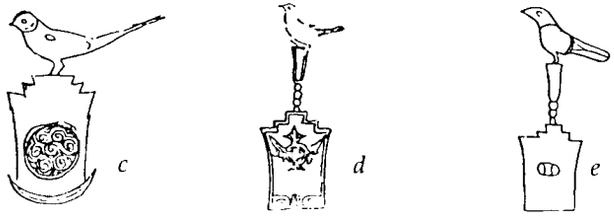
4. Táng Lán (1975:72–73) maintains that "戉" and "戊" represented the same character in antiquity

did research on them and published his findings in "Kǎogǔ fāxiàn yǔ Zhōngguó wénzì qǐyuán" [Archaeological Discoveries and the Origins of Chinese Writing], as well as in Li 1987. Based primarily on Lǐ's article, the symbols appearing on these jade pieces will be introduced below.[5]

These jade pieces consist of a "jade arm-ring"(?) and three *bì*-discs. The symbols below were incised on the two sides of the *bì*-discs (one per side):

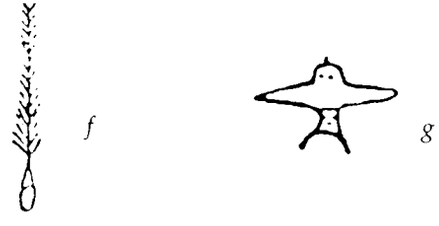
a *b*

Item *a* is identical to *A* cited above. The three *bì*-discs are incised with the following composite symbols (one per disc):



c *d* *e*

All three of these composite symbols feature "a bird standing atop a mountain-shaped form." The mountain-shaped form is the same as that depicted in *B* cited above in its having five peaks "but differs in that it is flat." Lǐ (1985:155) interprets this symbol as "島" *dǎo* "island." The lower half of *c* contains a symbol which is similar to *a* as seen on the "arm-ring," except that the sun-shaped circle is more ornate. The mountain-shaped form in *d* contains a symbol in the upper potion of it which is similar to *b* found on the "arm-ring"; whether the additional items appearing at its base are symbols or decor is difficult to tell as yet. There is also a symbol included in the mountain-shaped form in *e*. This symbol may be a type A symbol. Two other symbols were incised on the edges of the *bì*-disc engraved with *c*:



f *g*

5. The relevant illustrations are all taken from Lǐ 1985:157.

Lǐ (1987:78) has already pointed out that *f* above is but a variant of *F* cited earlier.

Hayashi Minao and Lǐ Xuéqín both maintain that the jade pieces described above are Liángzhǔ culture artifacts. The dates of the Liángzhǔ culture span roughly from 3300 to 2200 B.C. The late period of the Dàwénkǒu culture falls precisely within this time frame. The geographic distributions of these two cultures were relatively close, and they further used similar type implements and no doubt had influenced one another. This led Lǐ Xuéqín to conclude that "that these two cultures had contacts through a common script is entirely feasible." Since he views the Dàwénkǒu type B symbols and the symbols appearing on jade pieces described as writing, he uses the phrase "contacts through a common script" in his discussion. Those scholars who oppose the view that the Dàwénkǒu type B symbols represent writing, also oppose, of course, the view that the symbols appearing on the jade pieces described above represent writing.

Two jade objects engraved with these kinds of symbols have also been discovered among the holdings of museums in China in recent years. The two jade objects are large *cóng* 琮 (a rectangular jade piece with a hole in its center) and share similar shapes. The Capital Museum in Běijing holds a piece on which a symbol has been engraved on each of its two sides. One of them is of the same type as those engraved on the *bì*-disc and also features a composite symbol consisting of "a bird standing atop a mountain-shaped form." The other symbol has been worn away and cannot be identified. Lǐ (1987:78–79) holds that this jade *cóng* belongs to the very latest type of jade *cóng* produced by the Dàwénkǒu culture. The Museum of Chinese History in Běijing holds a piece that reportedly was unearthed in Shāndōng, on the upper portion of which is engraved a symbol that resembles the symbol *a* engraved on the "jade arm-ring," and on one side of the interior wall near the base a slanted triangular form has been engraved. Those reporting on the jade *cóng* believe that it and the "jade arm-ring" are both Dàwénkǒu culture artifacts.[6] Other scholars believe that this jade *cóng* is an artifact of the Lóngshān culture of Shāndōng (see Ān 1988:241, 245 n. 74). Since no similar jade pieces engraved with symbols of this type have come to light at any archaeological excavations thus far, whether these jade pieces should be assigned to which type of culture or to which cultures remains an open question at this point.[7]

6. See Shí 1987:2. This report calls the "jade arm-ring" a "short, tube-shaped mini jade *cóng*."

7. Note appended belatedly by the author to the galleys of the Taiwan edition of the present work: As the source materials relating to the symbols found on jades cited in the present work are incomplete, the reader should refer to Dèng 1993. The engraving

Using symbols *A-D* cited above as a basis, at one time we had concluded that the Dàwénkǒu culture type B symbols served as primitive graphs which represented clan names and further held that in relation to ancient Chinese script "there was a direct link between them" (Qiú 1987:165–166). Viewed at present, however, such an explanation is untenable. Just as Wāng Níngshēng (1981:28) has pointed out in his study "Cóng yuánshǐ jìshì dào wénzì fāmíng" [From Primitive Notations to the Discovery of Writing], "True writing begins when it represents sounds and consists of symbols that are able to record language. The few isolated figures found on pottery still cannot substantiate this point." Moreover, if we were to say that symbols *A-D* are truly similar to Chinese script, then the recently discovered symbols *G* and *H*, including the the symbol of a bird standing atop a mountain-shaped form and symbol *b* seen on jade pieces are clearly less like Chinese script. So construing such forms as primitive writing is groundless, and viewing them as directly ancestral to ancient Chinese script is even more inappropriate.

It would seem that the type B symbols found on the pottery jars may have had two uses. Some were by nature rather like the marks used to designate clan or personal names of later times, while some were used as marks of ownership or profession or status within the clan. When two symbols appear on one jar, they perhaps fall into both of these categories. Wāng Níngshēng (1981:28) says, "As these graphic figures [i.e., the type B symbols] were incised on earthenware, they ought to represent marks denoting the clan of the maker. For example, the stone ax-shaped mark perhaps represented a clan that was skilled in the manufacturing of stone axes . . ." What he describes as marks come close to the latter type of marks we discussed earlier. However, in antiquity, "taking one's official title as a surname," "taking one's title of nobility as a surname," and "taking one's craft as a surname" (see Zhèng Qiáo 1149: "Shìzú lüè 氏族略) was common; and the latter type of marks were usually transformed into marks of the former type, so that the boundary between the two was not absolute. The function of the symbols appearing on jade pieces will require further study.

In Chapter 1, we noted that in a primitive society, for example, it is entirely possible for a group called the "deer clan" to use a deer emblem to represent itself. Yet this does not necessarily mean that the character

on a Liángzhǔ culture jade *bi*-disc recently unearthed at Ānxī in Yúkēng, Zhèjiāng Province, cited therein is basically the same as the lower half of symbol *d* cited above and thus proves that "some [of the symbols of the same type engraved on jades] should be classified as creations of the members of the Liángzhǔ culture." However, the article continues to treat the Freer "jade arm-ring"—which it terms a jade bracelet—as possibly being an artifact of the Dàwénkǒu culture or of the slightly later Lóngshān culture of Shāndōng (pp. 14, 26).

for "deer" has been created at that point. Only when symbols (including emblems) are consciously used to record words used to form sentences is there a true sign that the development of script has begun. So even though the Dàwénkǒu culture type B symbols may already have been used like the marks used to designate clan or personal names of later times, we still cannot construe them as primitive writing.

Another aspect deserving of attention is that by the late period of the Dàwénkǒu culture, production had undergone a fair degree of expansion and there was already a fair distinction in the distribution of wealth; so the possibility that primitive writing began to make its appearance at that time is not altogether unrealistic. Moreover, even though the Dàwénkǒu culture type B symbols still cannot be definitively treated as primitive writing, nevertheless they are symbols which resemble most the ancient pictographic script discovered thus far in China. Viewed from the standpoint that some symbols appear more than once on artifacts unearthed at more than just one place shows that these kinds of symbols were well established. They undoubtedly can be viewed as the forerunners of primitive writing. If they were succeeded by the beginning of the formative process of writing, then the majority of them ought to have been transformed into characters. The areas of distribution of the Dàwénkǒu culture were close to the heartland of ancient China. The style of some of the Dàwénkǒu culture type B symbols was in fact very similar to that of ancient Chinese characters. It would seem that even though they may not necessarily be the precursors of primitive Chinese characters, it is quite possible that they had a certain influence on the emergence of primitive Chinese characters. As was stated previously, the late period Dàwénkǒu culture dates back to around 2800–2500 B.C., so according to our estimates described earlier, the formative process of Chinese writing may have taken place during the middle of the third millennium B.C.

At this point let us turn our attention briefly to the nature of the highly pictographic Shang and Zhou bronze clan emblems which were referred to in our discussion of the type A symbols. Below are some examples of this class of clan emblems:

Wāng Níngshēng (1981:33) maintains that this class of clan emblems is the same as the Dàwénkǒu type B symbols, amounting to "pictorial records" rather than true writing. It is quite possible that a very large number of these kinds of clan emblems had already appeared as early as just prior to the emergence of primitive Chinese script. At that point, of

course, they did represent writing. But Wāng concedes that among the "pictorial records" "most of the graphic figures became the precursors of later script" (p. 40). During the formative process of Chinese script, most of these clan emblems undoubtedly were transformed into characters. Moreover, some of the highly pictographic clan symbols most definitely were not used until after the formation of Chinese script. The clan emblems comprising them should be taken as representing script. So in our opinion, at most, very few of the highly pictographic clan emblems appearing on Shang and Zhou bronzes do not represent writing. There are no good reasons for not treating the great majority of them as script forms. On account of the fact that clan emblems are conservative and decorative, their written forms on a bronze will usually be more pictographic than when written under ordinary circumstances. A difference of this sort is the same as the difference between ancient and modern script forms, and it is not a difference between graphic figures and written forms. In actuality, the written forms of the clan emblems were by no means immutable and frozen. The same clan emblem was at times written in a relatively more pictographic way and at times was written much like ordinary bronze forms. Some of the clan emblems which appear much like drawings and which we are unable to explain with certainty at present occur in the Yīnxū oracle bone inscriptions used as clan names or the names of persons. That they are by nature script forms can hardly be doubted. This was pointed out quite early by Guō Mòruò (1961) in his study "Yīn yí zhōng túxíng wénzì zhī yī jiě" [Elucidation of One of the Pictorial Graphs on a Yin Vessel].

Among the highly pictographic forms occurring in bronze inscriptions which are commonly thought to be clan emblems, some are used as the personal names of individuals, while a small number are even used to denote other meanings. Some scholars term bronze forms of this type identificational inscriptions. This term is somewhat more acceptable than bronze clan emblems or bronze clan names, so we will use it hereafter.

Let us now discuss the approximate period during which Chinese script emerged from the primitive writing stage and evolved into a fully integrated writing system.

Based on our present knowledge, there have never been any peoples in the world who, prior to their entering the stage of a class society, had created a fully integrated writing system. According to the opinions of the vast majority of historians, China most likely entered the stage of a class society during the Xia dynasty, so it is rather unlikely that the formation of Chinese script occurred before then (i.e., ca. 21st to 17th centuries B.C.). Archaeological excavations have not as yet uncovered any writing that can be irrefutably identified as Xia period script.

At the Èrlǐtóu culture site at Yǎnshī County, Hénán, symbols incised on pottery were discovered, e.g., (after *KG* 1965:222):

Most of these symbols are incised on the inner rim of the mouths of large-mouthed jars. Most of the symbols have been discovered in the third and fourth levels of the Èrlǐtóu site and belong to the late phase of the Èrlǐtóu culture. Some believe that the late phase of the Èrlǐtóu culture is contemporaneous with the early Shang; others think it is contemporaneous with the Xia. Those who hold the latter view for the most part treat symbols of the above type as Xia period script. In our opinion symbols of this type by nature are of the same sort as the primitive society period type A symbols; not only do they not constitute mature script forms, they cannot possibly represent primitive script.

A small number of symbols incised on pottery was also discovered at the Èrlǐtóu culture site at Zǐjīn in Shāng County, Shǎnxī, a few of which may possibly be pictographic symbols. Those who reported on the find felt that they may be Xia period graphs (Wáng 1983:1–2). But on account of the paucity of the materials, it is still difficult to ascertain their nature.

Symbols incised on pottery have also been discovered at a late Lóngshān culture site located at Wángchénggāng, Dēngfēng County, Hénán. Some scholars hold this to be a Xia period site and they further treat all the symbols on pottery from it as Xia period script (Lǐ Xiāndēng 1985:34). Since too few of these materials have been published to date, it is difficult to ascertain their true nature.

Since as of now no Chinese script forms have been uncovered that can be irrefutably identified as Xia period script (including primitive Chinese script), the script of the early Shang period (ca. 17th to 14th centuries B.C.) is the earliest Chinese script known to us at present. It is a pity that the source materials discovered to date are so scarce.

Since the 1950s, while numerous pre-Shang sites have been discovered, few materials bearing script have been excavated from them. Some symbols incised on pottery have been discovered at the pre-Shang sites at Nánguānwài and Èrlǐgāng in Zhèngzhōu (Kèxué Press 1959:17, also ill. no. 30, and *KGXB* 1973:83–84). They are the same as the symbols seen on Èrlǐtóu culture pottery, and most of them are incised on the inner rim of the mouths of large-mouthed jars; they also are of the same type as the primitive society period type A symbols and are not writing. Two pieces of bone bearing graphs were also discovered at Èrlǐgāng (Kèxué Press 1959:38, also Fig. 30). One of them is engraved with only one graph, namely, the character "屮" (the character "屮" appears in late period Shang oracle bone

inscriptions) and was unearthed from a pre-Shang layer. The other piece is of uncertain provenance and bears ten or more characters; the graphic forms on it are similar to those found in late Shang oracle bone script, but their pattern of usage is rather unique.

Symbols and graphs engraved on pottery have also been discovered in the Shang-period site at Táixī, Gǎochěng County, Héběi, some of which date from a slightly earlier period than the late Shang (Lǐ Yún 1974). Most of them consist of single graphs incised on pottery; those which truly resemble graphs include "止", "目", "刀" and so forth. Their shapes are more ancient than the late Shang period pottery graphs and oracle bone script discovered at Yīnxū (see Fig. 1).

The graphs and symbols incised on pottery discovered at the Shang sites at Wúchéng, Qīngjiāng County, Jiāngxī, also contain some that predate the late Shang (see Táng 1975:72–73, also *WW* 1975:51–71 and *WZCK* 1978). They appear both as solitary graphs engraved on implements and in groups of four or five and even ten or more; unfortunately the latter have not been deciphered as yet (see Fig. 2). The style of some of the graphs or symbols appearing on the pottery unearthed at Wúchéng would appear not to belong to the Shang culture system.

Of the early period Shang bronze vessels discovered thus far, those bearing inscriptions are exceptionally few in number and are engraved with only one or two graphs (see Fig. 3). Whether some of them should even be treated as writing is debatable.[8]

In sum, all the written material from the early Shang discovered thus far is both scant and fragmentary. Clearly it cannot reflect the level of Chinese script development at that time and is of minor value to our study of the formative process of Chinese writing.

Due to a lack of Xia and early Shang materials bearing script, in discussing the date of the formation of the Chinese script, we can only speculate on the basis of the level of development of the late Shang dynasty. Chinese script of the late Shang was not only able to record language in a complete way, in some aspects it was already quite mature. As was stated previously, the identificational inscriptions of Shang times were rather unique in that their written forms are highly pictorial. The majority of characters found in the bone and bronze script, as compared with them, are already greatly simplified in form (see Sec. 4.1); many characters had pretty well lost their pictorial character. Some characters, due to the requirements of vertical writing, had altered the original orientation of their graphic form; e.g.,  (犬 *quǎn* "dog"),  (豕 *shǐ* "pig") had already changed so that the feet are stranded in midair. In the character (疒, the protoform of 疾 *jí*

8. See Lǐ 1979:73 and Cáo 1988:247–252. Fig. 3B in the present work is regarded by some scholars as a forgery.

"ill") the component representing "person" and the "bed" have been turned upright. At this time, in the political and social life of the upper ruling class, writing was already widely used. The writing techniques of the clerks who served this class had already reached a high level. Looked at in this way, the period at which the Chinese script broke away from the primitive stage and became a complete writing system, should already be rather distant from the late Shang (see Dǒng 1949, 1951, 1954).

But from another perspective, in the late Shang script one can still find some rather primitive survivals like those alluded to in Chapter 1: the graphic forms of certain semantographs are used to represent more than one word, and the graphic forms of certain other graphs change in form according to the linguistic context; moreover, the ordering of graphs does not always correspond to the actual order in the underlying language. These and a few other similar traits had already basically disappeared in the ancient script subsequent to the Western Zhou dynasty; only a few cases of a single graphic form being employed for more than one word survive (the failure to consistently distinguish the graphic forms of "大" *dà* "large" and "夫" *fū* "man" is an example of this). Viewed as such, it would appear that late Shang script was not too distant from the period in which a complete writing system was formed.

In the "Duōshì" section of the *Book of History*, mention is made of an instruction given by the Duke of Zhou in the early Western Zhou dynasty to the survivors of the Shang dynasty in which he said, "The fact is you are aware that [your] ancestors of the Yin had bamboo books and codices and [it is recorded in them] that Yin removed the mandate of Xia." The Duke of Zhou especially emphasizes that the ancestors of the Yin had bamboo books and codices in which the removal of the mandate of Xia by Yin was recorded. Perhaps China began to have complete written records at the junction of the Xia and Shang dynasties and that very possibly the Chinese script became a fully integrated writing system at the same time. Naturally even after a fully integrated writing system came into being, primitive writing would not totally disappear immediately. It is possible that in different regions or for different purposes primitive writing and a fully integrated writing system could have coexisted. One can see this only if he keeps in mind the fact that primitive geometric symbols were still in use even after a complete system of writing was developed.

Above we have already put forth the view that primitive writing probably did not precede the third millennium B.C. At the end of the third millennium B.C. after the establishment of the Xia dynasty, China formally entered the stage of class society. The ruling classes felt a pressing need for a complete writing system in order to rule more effectively; therefore, the pace at which primitive writing advanced greatly accelerated. The

fact that complete genealogies of the Shang dynastic house have been transmitted is a reflection of the great change undergone by primitive writing. It was precisely on this sort of foundation that a fully integrated system of writing came into being at the junction of the Xia and Shang dynasties in around the seventeenth century B.C. Some scholars maintain that Chinese script came into being at the beginning of the Xia dynasty (see Mèng 1980:106–108). Yet since everyone lacks irrefutable evidence, who is right and who is wrong can only be decided when relevant materials are discovered. Still other scholars hold that "China's pictographic script emerged from a group of diviners during the late Shang dynasty (after Pán Gēng and Wǔ Dīng)" (see Xú and Táng 1985:127, 140). This would put estimates of the time of the formation of Chinese script a bit too late.

Writing was created by working people during the late primitive society period; yet, as Lǔ Xùn has pointed out in his *Ménwài wéntán*, "while writing had its roots among the people, it was undoubtedly later taken over by the privileged." After entering the stage of class society, in the process whereby primitive writing developed into a complete system of writing, a leading role was probably played by various groups in the services of the rulers—diviners, shamans, scribes, etc. Among the Nàxī, writing was formerly controlled by the "*dongba*" (shamans), and was consequently called "*dongba*" writing. The earliest, substantial connected examples of Chinese writing which can be seen at present appear in the bone inscriptions (*jiǎgǔwén*) which are almost exclusively concerned with divination and are most likely the product of diviners (*wū*) and annalists (*shǐ*). The ancient legend of the invention of the script by Cāng Jié probably has no real historical basis. Yet according to tradition, Cāng Jié was the annalist of Huáng Dì (the Yellow Emperor), and to connect the creation of writing with the name of an annalist does make some sense.

3.2 The Main Changes in the Development of Chinese Characters

Even if one calculates from the late Shang, Chinese characters still have a history of around 3,300 years. During this long period of time, Chinese characters have undergone a series of important changes both in their shape and in their structure.

Looked at from the point of view of overall structure, Chinese characters underwent a transformation from more complex to simpler forms. These changes are manifested both in graphic form (*zìtǐ*) and in graphic shape (*zìxíng*). Changes in graphic shape refer to changes in the external appearances of individual graphs; changes in graphic form refer to overall changes in the distinguishing features of graphic shape and calligraphic style, and in most cases refer to rather obvious and rather substantial changes. Of course, changes in these two areas are frequently interconnected and are difficult to separate clearly.

In terms of graphic form, the evolutionary process Chinese characters underwent can be divided into two major stages: the ancient script stage and the stage of the clerical and standard scripts. The former stage began in the Shang dynasty and ended in the Qin dynasty (3rd cent. B.C.); the latter stage began in the Han dynasty and has lasted right down to the present day.

The easiest transformation to perceive in the developmental process of graphic form is the change from pictorial to non-pictorial forms. Throughout the entire ancient period of the script the pictorial nature of Chinese characters diminished continuously. The graphic forms of most characters in this ancient stage had originally resembled pictures. For the sake of convenience, however, the ancients gradually transformed their characters into more linear and less pictorial structures. This process can be referred to as "linearization." An even greater change took place in the transition from the ancient script to the clerical script: in this process most characters totally lost their pictorial character and became symbols comprised of dots and vertical leftward and rightward strokes. This process can be referred to as the "segmentation of graphs into strokes." Below these various processes are shown for the characters "馬" *mǎ* "horse" and "魚" *yú* "fish":

Ancient Script				Clerical	Standard
Identificational	Bone	Zhou Bronze	Small Seal		
				馬	馬
				魚	魚

It is much more convenient to write the clerical script than it is to write the ancient script. The transition from the ancient script to the clerical script must be viewed as the most important simplification that has taken place in both the form and the shape of Chinese characters. Superficially the change from the clerical script to the standard script does not seem great, but the writing of the strokes in the standard script is still even

more convenient than when writing the clerical script; therefore, the change from clerical script to standard script also represents an important simplification.

The simplification of graphic shape often took place in tandem with changes in graphic form. This can be seen from the characters "馬" and "魚" cited above. From the ancient and clerical script forms of the two characters cited below, this can be seen even more clearly.

Even before there were clear changes in graphic form, simplifications of graphic shape were constantly being effected. Examples of this can be seen as early as the Shang dynasty in the bone script:

After the change to the standard script, the shapes of graphs continued to undergo simplification. Since the 1950s, a large-scale systematic program of script simplification has been carried out under government auspices. For example, the two characters cited above, "馬" and "魚" were simplified to "马" and "鱼".

In addition, in the process of Chinese script development, there have also been cases of graphic shapes becoming more complex; such cases can be divided into two types. One type has involved greater complexity in outer shape; another type has involved complexity created by changes in structure of the script. The former type of complexity has sometimes come about in order to differentiate certain graphic shapes more clearly. For example, in the ancient script the character "上" *shàng* "above" and "下" *xià* "below" were written 二 and 亖, respectively. In order to avoid confusing these two characters as well as to prevent confusion with the character "二" *èr* "two," a vertical stroke was added to both characters to produce "上" and "下". The ancient script forms (i.e., seal forms) from which "玉" *yù* "jade" and "王" *wáng* "king" developed were written "玊" and "王", distinguished only by the relative height of the central horizontal stroke, a situation that could easily lead to confusion. The early clerical script inherited these graphic shapes; later, in order to make the two forms more distinct, an extra dot was added to the character to form "玉". The ancient script form from which the clerical script form of "肉" *ròu* "flesh" was derived was written  . In both the clerical and standard scripts, in order to prevent confusion with "月" *yuè* "moon," the word for "flesh" was written in a

more complex fashion: 肉 in the clerical script and "肉" in the standard script. Other more complex forms such as 宍 and 宍 also appeared.

In a majority of cases, the creation of more complex outer shapes seems to have invoked no more than changes in the way characters were customarily written and to have had no particular significance. Examples of this are 辛 becoming 辛 or 辛 (辛 *xīn* "bitter"), 角 becoming 角 (角 *jiǎo* "horn") and 侯 becoming 侯 (侯 *hóu* "archery target"). Such insignificant changes mostly took place during the period of the ancient script. A number of these more complex ways of writing characters were ultimately eliminated and replaced with their original shapes after a lapse of time. In the Spring and Autumn period, for example, "天" *tiān* "sky" and "正" *zhèng* "upright" were written for a time with an extra short horizontal stroke on top: 天 (天) and 正 (正); these variants had disappeared by Qin and Han times

Generally speaking, cases of greater complexity in graphic shape like those cited above involve only a small number of elements in the script viewed as a whole. The degree of added complexity was also not great; in most cases only one or two strokes were added to a graph.

Greater complexity due to structural change most often was due to the addition of another graphic component. An example of this is the pictograph for {鳳} *fèng* "phoenix" to which a phonetic "凡" was added (see Chapter 1). Another example is "㝬" *yuān* "deep pool" to which a signific "水" *shuǐ* "water" was added to form "淵" (originally written 淵). Another example is "戉" *yuè* "ax-like weapon" (originally written 戉), to which a signific "金" *jīn* "metal" was added to form "鉞", etc.[9]

In the Chinese script there are numerous characters with added elements (significs or phonetics), but the majority of such characters have become differentiated from the characters to which the element was added. A number of such examples was given in Chapter 2: "徜徉" from "尚羊", "蜈蚣" from "吳公", "鶺鴒" from "倉庚". The appearance of added elements of this type should be explained as a kind of graphic differentiation or as an increase in the overall number of characters and not as cases of added complexity. Characters like "鳳", "淵" and "鉞" referred to above, whose uses are in no way different from those of the characters from which they were derived are few in number ("㝬" and "戉" in antiquity may also have had loangraph uses which "淵" and "鉞" never had). Therefore, the existence of a large number of characters to which elements have been added can be interpreted as graphic differentiation or as graphic prolifera-

9. The *Shuōwén* under the 金 radical has a character "鉞" which is glossed as "the sound of a chariot's bell." Duàn Yùcái's (1815) commentary suspects that this is an error for "鉞"; even if it is not an error, it is unrelated to the character consisting of 戉 plus an added component and is merely a case of accidental formal identity. Concerning such homographs see Sec. 10.2.

tion and need not be viewed as increasing the complexity of characters. But if we take words as a standard, then differentiation through the addition of elements ought to be viewed as rendering graphic forms more complex. For example, in the case of {蜈蚣}, the change in writing from "吳公" to "蜈蚣" is indeed a case of increasing the complexity of graphic forms. The simplification of Chinese characters at times is also related to the words involved. For example, when the Chinese script was being simplified during the 1950s, the nearly homophonous character "斗" *dǒu* was used for "鬥" as in 鬥爭 *dòuzhēng* "struggle." Viewed from the standpoint of writing, this represents a graphic merger or reduction of the number of graphs in use. But viewed from the standpoint of words, the change of the writing of {鬥} from "鬥" to "斗" is a case of simplification of graphic form.

Even characters such as "鳳", "淵" and "鉞" which have added elements, if viewed from the standpoint of their constituent elements, still exhibit a tendency toward simplification. This is because in the process of the change of graphic shape in Chinese characters, subordinate elements, just like independent characters, have for the most part continuously been changing from more complex to simpler forms. Some subordinate components have undergone even more dramatic simplificatory changes than the majority of graphic shapes. For example, in the clerical script when the element "水" *shuǐ* "water" was written on the left, it was changed into three short horizontal lines, which is a good deal simpler than its form as an independent graph. Some scholars maintain "as regards the individual components of Chinese characters, a tendency toward more complex forms does not exist" (Zhōu 1990:9). This is true. Naturally there are some exceptions like "玉" and "肉" referred to earlier.

To sum up, changes in the form and shape of Chinese characters have for the most part been simplificatory. Although there are cases of certain forms becoming more complex, they pale in significance when compared with the importance of simplification.

The number of Chinese characters has constantly increased. China's first substantial dictionary, the *Shuōwén jiězì* compiled in the Eastern Han (second century A.D.) contains a total of 9,353 characters (10,516 if repeated graphs are counted).[10] The *Yùpiān*, compiled by Gù Yěwáng of the Southern Liang dynasty (sixth century A.D.), contains 16,917 characters.[11] The

10. These are the figures given in the preface of the *Shuōwén* itself. According to calculations based on the present edition of the *Shuōwén*, there are in actuality more than 10,700 characters (see Hu 1936). Among the characters in the modern edition there may be graphs added by later people. The *Shuōwén* used the small seal script, which already at that time was in reality a form of ancient script, as its standard form of writing; many other graphs current at that time were not included.

11. This is according to Fēng Yán's Tang dynasty work *Fēngshì wénjiànjì*. The modern editions of the *Yùpiān* were enlarged by Tang and Song editors; modern editions contain over 22,000 characters.

Guǎngyùn, compiled in the Zhēnzōng period (998–1022) of the Song dynasty, contains 26,194 characters (including cases where the same character appears in different rimes). The *Hóngwǔ zhèngyùn* compiled in the Hóngwǔ period (1368–1398) of the Ming dynasty, contains over 32,200 characters. The *Kāngxī zìdiǎn*, compiled during the Kāngxī period (1662–1722) of the Qing dynasty, contains 47,043 characters.[12] The *Zhōngwén dàcídiǎn* compiled in the 1960s has a total of 49,888 characters, 49,905 if the supplement is included. The *Hànyǔ dàzìdiǎn*, the final volume of which appeared in 1990, contains somewhat over 54,678 characters. However, large-scale dictionaries such as the *Kāngxī zìdiǎn* include many characters which have already fallen out of use, many extremely rare characters (including specialized characters unknown to most people), as well as many graphic variants and corrupted forms. Characters which one normally needs to use account for only a relatively small proportion of the total.

If we were to take the Chinese characters in general use during each period as the object of our investigation, we would discover that their numbers have been fairly stable over time. What we mean by Chinese characters in general use is those graphs that are in actual use once we exclude quite rare characters and relatively specialized ones used only in technical situations, that is, much like what some describe as "Chinese characters in common use."

Due to the paucity of available materials, we are forced to limit our investigation of the historical development of Chinese script to the ancient and modern periods. Let us first look at the ancient Chinese script. The total number of characters found so far in late Shang bone inscriptions is in the millions and in general reflects the use of characters at that time. The 1965 edition of the *Jiǎgǔwén biān* relied on the sources of oracle bone inscription available at that time and identified 4,672 individual graphs. The "Compiler's Preface" to this work states that "some of its characters could be merged with one another; at present, the number of all the individual graphs appearing in oracle bone inscriptions comes to around 4,500 characters" (note: the *Jiǎgǔwén biān* also contains characters that have been grouped incorrectly and should be separated; but the number is not large). Since then, in newly published oracle bone materials we find new graphs that were not included in the *Jiǎgǔwén biān*, but their numbers do not exceed a few hundred at most. If we were to place our estimate of the total number of graphs in general use during the late Shang at around 5,000, we probably would not be too far from the truth. The main literary documents of the Zhou period are contained in the *Shísānjīng* (Thirteen Classics); according to the statistics of the *Shísānjīng jízì* (十三經集字 "A

12. In the *Kāngxī zìdiǎn*, 110 characters are entered more than once. There are 46,933 characters which have different forms. See Wáng Zhúxī 1980:92.

Compendium of the Graphs Comprising the Thirteen Classics"), the Thirteen Classics contain a total of 6,544 individual characters.[13] Since the Thirteen Classics were handcopied and reprinted in new editions over the centuries, the use of characters in them no longer totally reflects their original state; but in terms of the overall number of individual characters used in them, they amply reflect the use of characters during the Zhou period. The Thirteen Classics extend over a rather long time period, encompassing almost the entire Western and Eastern Zhou periods; in addition they contain some things from the Qin and Han dynasties. If it were possible to calculate the statistics of a period limited to one or two hundred years of the Zhou dynasty, the number of characters in general use during that period would probably fall short of the total number used in the Thirteen Classics.

Let us look once more at the use of characters in present-day China. In 1965, the Ministry of Culture and the Committee on Script Reform jointly issued "A List of the Printed Forms of Chinese Characters in Common Use" ("Yìnshuā tōngyòng Hànzì zìxíng biǎo") containing 6,196 characters. In 1981, the Bureau of National Standards issued "A Compendium of Coded Characters Used in Information Exchange—A Basic Set" ("Xìnxī jiāohuàn yòng Hànzì biānmǎ zì fú jí, jīběn jí") containing 6,763 characters. In 1988, the National Working Committee on Language and Writing and the News Publication Commission jointly issued *A List of Modern Chinese Characters in Common Use* (*Xiàndài Hànyǔ tōngyòngzì biǎo*) containing some 7,000 characters. According to one statistical study, the number of individual characters being used in the publication of books, newspapers and periodicals at present is 6,335 (Zhèng 1981). According to another statistical study, if one masters 3,800 Chinese characters, one can then read around 99.9% of the contents of the average book or periodical; if one masters 5,200 Chinese characters, one can then read around 99.99% of the contents of the average book or periodical (Chén 1981:468). In addition, viewed from the standpoint of the word-formation capacity of Chinese, according to statistics compiled by the Language Research Institute of the Chinese People's University, some 4,900 Chinese characters "form nearly all the words in the *Xiàndài Hànyǔ cídiǎn*" (p. 469). In view of the data presented above, it can be stated in general that at present the number of Chinese characters in general use is around five to six thousand.

13. This is according to figures cited by Qián Xuán (1980:47). A debt of gratitude is owed here to Mr. Shī Xièjié 施謝捷 of the Department of Chinese at Nánjīng Teachers College for pointing out that Qián's study is based on Lǐ Hóngzǎo's 李鴻藻 *Shísānjīng jízì* which was published in one volume along with Lǐ's *Shísānjīng bù èr zì* 十三經不二字 in 1886.

It would seem that from the Shang dynasty down to the present, the number of characters in general use has not varied much, and very possibly has remained all along in the vicinity of five or six thousand. For more than three thousand years, new characters have constantly been created but at the same time old characters have been leaving the stage of history. The two processes counterbalance one another so that the overall number of characters has not changed significantly. In general, the later the period the faster the growth of new words. But since compounds have come more and more to predominate, and since foreign words are mostly written with loangraphs, new words which require the creation of new characters have by no means increased proportionally. This is one of the most important reasons why the number of Chinese characters has become relatively stable.

As Chinese characters are composed of phonetic and semantic symbols as well as of signs, they are structurally complex and difficult to remember. If there are too many individual characters, then the people who are to use them will have a hard time mastering them, but if the number of characters is too small, the clarity of the language to be recorded will be affected and difficulties will be encountered. In the process of Chinese character development there have always existed the complementary phenomena of differentiation and merger (see Chapter 12). Differentiation, that is, the creation of new characters, has taken place in order to increase the clarity of recording language, while merger has been due to the need to control the overall number of characters. The number of Chinese characters in general use from ancient times down to the present has not changed drastically; this is clearly not accidental.

Below we will discuss changes that have taken place in the structure of Chinese characters.

Viewed structurally, Chinese characters have undergone three important changes: (1) The overall proportion of phonograms has gradually increased. (2) In the case of semantic symbols (*yìfú* 意符) there was a change from a preponderance of pictographic symbols (*xíngfú* 形符) to semantographic symbols (*yìfú* 義符). (3) The number of signs and semi-signs has increased. Below each of these changes will be discussed separately.

1. The overall proportion of phonograms has gradually risen. In the process of Chinese script development, the proportion of phonograms in the overall number of characters has grown; from a minority of the total number of characters, they have come to comprise an overwhelming majority. (Here the total number of characters refers to the sum total of semantographs, phonograms, signs and semi-signs and does not include loangraphs which borrow characters of other categories.)

After the Chinese script became a fully integrated writing system, most newly added characters were coined from already existing characters by means of the addition or transformation of components. Such characters were preponderantly phonograms (see sections 8.1, 11.1.1.3). Moreover, the principal method for creating new semantographs was through using pictures to convey meaning; the degree of pictorial representation of such graphs steadily declined and this method became less and less apt in the creation of new semantographs. At the same time this process caused the graphic shape of many already existing characters to lose their earlier capacity to convey meaning. Phonograms, on the other hand, were unaffected. This fact not only caused people to create more phonograms and to create fewer semantographs it also caused people progressively to replace semantographs with phonograms. For the purpose of simplification, the phenomenon of replacing phonograms with semantographs also existed but it was much less frequent than the phenomenon of replacing semantographs with phonograms in the Chinese script. For the above reasons, the overall proportion of phonograms in the Chinese script increased.

Scholars have studied the structure of those characters from the late Shang period that can be identified and have found that phonograms are clearly fewer than semantographs (see Lǐ Xiàodìng 1974:374–380). In the Zhou dynasty, especially in the Spring and Autumn period, the number of phonograms increased very rapidly; newly coined semantographs are rarely seen. This can be seen clearly from the relevant material written in the ancient script. It is possible that in the Spring and Autumn period the number of phonograms already exceeded that of semantographs. In the case of the more than 9,300 small seal characters found in the *Shuōwén* there have been several calculations of the proportion of phonograms. According to the "Liùshū yáoliè" 六書爻列 by the Qing scholar Zhū Jùnshēng (1833), phonograms comprise about 82% of all the characters. If one includes those pictographs, deictographs and syssemantographs which contain a "concurrent phonetic element," then the proportion rises to 86%.[14] In the Southern Song dynasty Zhèng Qiáo (1149) analyzed the structure of more than 23,000 graphs. According to his calculations, the number of phonograms had already exceeded 90%.[15] However, among

14. For the "Liùshū yáoliè," see the initial chapter (*juànshǒu*) of Zhū Jùnshēng's *Shuōwén* tōngxùn dìngshēng. In his "Liùshū yáoliè," the author included a small number of loangraphs (*jiǎjièzì*) and *zhuǎnzhù* graphs. At the same time, these same characters were included among the other four categories of graphs according to the original structure of their graphic form. In calculating our percentages, we did not take such graphs into account. Concerning the "six graphic categories (*liùshū*)", see Sec. 6.1.

15. Zhèng Qiáo's study is rather crude and his figures are not entirely dependable. In the syssemantic category there are repeated characters. Moreover, in his *zhuǎnzhù*

commonly used characters, semantographs and signs which are derived from semantographs are rather more numerous and the proportion of phonograms is consequently smaller.

There are still some Chinese characters whose basic structure is unsettled; therefore, the figures cited above cannot be too precise. Nonetheless, the situation reflected by these figures, namely that phonograms have progressively developed from a minority of the total number of graphs, clearly accords with historical facts.

Phonograms have a phonetic element but at the same time they cannot give rise to misunderstandings as some loangraphs do. In a script which employs both semantic and phonetic symbols, especially in a script in which the characters record a language in which monosyllables predominate, phonograms are the most appropriate graphic structure. The rise in the proportion of phonograms is the main characteristic of Chinese script development.

2. *In the case of semantic components, there has been a change from a preponderance of pictographic symbols to a preponderance of semantographic symbols.* In Chapter 2 we have already discussed the difference between pictographic and semantographic symbols; here we will consider a few additional points. Pictographic symbols express meaning by means of their shape; frequently they cannot function independently as graphs. For example, to write the word  (步 *bù* "pace") the ancients drew two feet, one in front of the other.  is a pictographic symbol depicting a person's left foot (for a still more primitive way of writing this element, see the comparative chart of Shang script forms in Sec. 4.1). Used independently it is used for the character "止" (the protoform of "趾" *zhǐ* "foot"). However, which depicts the right foot cannot be used independently as a graph; later became and is the element "少" in "步"; it is seen in the form "" in the characters "登" and "發". In all these cases it is used only as a graphic component. (The *Shuōwén* treats as an independent graph; this is an error.) Another example is the character (立 *lì* "stand") which contains two pictographic symbols: depicts a standing man and "" depicts the ground. Superficially, these elements resemble "大" *dà* "large" and "一" *yī* "one," but in actuality they are unrelated to these two graphs and consequently should be viewed as pictographic symbols that cannot function as independent characters.

The role of semantographic symbols is generally filled by an already

category, there are semantographs and phonograms. Some characters are put into more than one category; some characters are found only in the *zhuǎnzhù* category. This situation renders his statistics for phonograms problematic. Therefore in citing percentages we have used only whole numbers.

existing graph. In the script presently in use there are a few semantographic symbols which occur only as graphic components, such as "彳", "辶" (辵), "疒", "宀", etc.[16] Most of them are frequently used components and the meanings they represent are familiar to most people.

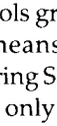
The boundary between pictographic and semantographic symbols is not always completely clear. In the ancient script there are some semantic components that can be viewed both as pictographic symbols and semantographic symbols. An example of this is the graph  (林 *lín* "forest"); regardless of whether we view the two  which make up the character as pictographic symbols—a pictorial representation of a tree—or as a semantographic symbol—a semantic component consisting of "木" *mù* "tree"—in either case the meaning "forest" can be deduced from the graphic form. However, in both the clerical and standard scripts, such components can only be considered semantographic symbols.

In the ancient script in which the pictographic element was relatively prominent, most semantographs made use of pictographic symbols; pictographic symbols were the chief means of semantic representation at that time. The transformation of the Chinese script from a predominantly pictographic to a non-pictographic form destroyed the semantic function of most of the pictographic symbols, but did not greatly influence semantographic symbols which functioned by means of their graphic meaning. Therefore, as the pictographic aspect of the Chinese script decreased, the expression of meaning by means of pictographic symbols gradually gave way to the use of semantographic symbols as a means of creating semantographs. After the Spring and Autumn and Warring States periods, not only did newly created semantographs comprise only a very small part of all newly coined graphs, most of them were composite characters constructed from semantographic symbols. Examples of this are "劣" *liè* "inferior," composed of "少" *shǎo* "little" and "力" *lì* "strength" and "羶" *shān* "rank smelling," an allograph of "膻", comprised of "羊" *yáng* "sheep" and "臭" *chòu* "smelly." Characters created with pictographic symbols like "凹" *āo* "concave" and "凸" *tū* "convex" are quite exceptional

As pictographic symbols were used less and less in creating new characters, the pictographic symbols of already existing characters became

16. "走" is composed of "彳" and "止". In ancient times there was a character "走" but it was quite rare. The *Shuōwén* cites *Gōngyáng zhuàn*, Xuān 6: 走階而走 "Bounding down the steps, he ran off"; modern editions of the *Gōngyáng zhuàn* have "躇" in its place. Moreover, "走" probably existed as a graphic component before it occurred as an independent character. "彳" can also be treated as a semantographic symbol that cannot serve as an independent character. In origin it is an abbreviated form of "行" used as a graphic component; its use in "彳亍" *chìchù* "walk with a mincing gait" occurred later. "" and "" in the earlier stages of the script could both be used independently; see Sec. 7.1.

progressively fewer. In the process whereby the pictographic level of these characters decreased and the graphic form was progressively simplified, people more and more replaced components of certain quasi-composite semantographs, consisting of pictographic symbols which could not be used independently as graphs, with semantic components that could be used independently. For example, "戍" *shù* "to garrison a frontier outpost" was originally written  , depicting a man carrying a dagger-ax. Already in the oracle bone script this character was simplified to in which the "man" carrying the dagger-ax is replaced with the usual character for "man" (人 *rén*). At the same time the dagger-ax on the man's shoulder is written upright, consistent with the usual form of the character for "dagger-ax" (戈 *gē*). The character "雠" *chóu* "mate" was originally written  , showing two birds facing one another. In the Western Zhou bronze script, "雠" *chóu* "mate," an allograph of the above form was written  , where the graph still shows two birds facing one another ("隹" also depicts a bird, see Sec. 7.1). Later the writing of this character was changed to  with the original right-facing "隹" changed to an ordinary "隹". The character "涉" *shè* "wade across a stream" was originally written  showing one foot on the south side of a stream and the other foot on the north side. Later it became  , comprised of "水" *shuǐ* "water" and "步" *bù* "pace." The character "輦" *niǎn* which means a "carriage drawn by two people," originally depicted two men pulling a carriage:



Later it was changed to wherein the "車" *chē* "vehicle" component was simplified in the usual way and the men depicted pulling the cart with outstretched arms were replaced with "夫" *fū* "man." The character "折" *zhé* "sever" was originally written  which depicts an ax cutting a tree in half; later the two halves of the tree were changed to two  and still later the two were changed to  (*shǒu* "hand") to which it was similar in shape; in this way the components became "手" *shǒu* "hand" and "斤" *jīn* "ax." After these semantographs were reshaped, they could for the most part be considered composite graphs consisting of semantographic symbols.

In making maximum use of standard graphic components, to facilitate writing, certain sacrifices were often unavoidably made in the semantic expressiveness of the graphic form. The semantic expressiveness of the later graphic forms of "戍", "雠", "涉" and "折" was obviously not as clear as in their original graphic forms. Sometimes in order to make graphic components correspond to independent characters, the semantic expressiveness of the graphic form was even totally sacrificed. For example, the part of character  (射 *shè* "shoot an arrow") which depicted a bow and arrow was changed to  (身 *shēn* "body") to which it was similar in form, completely losing any connection with the meaning of the character. (The *Shuōwén* defines the character "躲" as 弓弩發於身而中於遠 "to shoot a

bow or crossbow from the body in order to strike at a distance"; the relating of the character's meaning to "身" is farfetched; "𢦏" is an allograph of "射".)

In Chapter 2 we pointed out that the signific of a phonogram is generally a semantographic symbol. The constant increase in the number of phonograms also meant that the importance of semantographic symbols increased and that the importance of pictographic symbols decreased. The creation of some phonograms, moreover, was directly linked to the disappearance of certain pictographic symbols. After phonetic elements were added to semantographs composed of pictographic symbols, they often became ordinary phonograms by changing the original pictographic symbols to semantographic symbols, as in the case of the character "鳳" cited in Chapter 1. Originally it resembled a phoenix, but due to the addition of "凡" as a phonetic element, the pictographic element resembling a phoenix was later replaced by the semantographic symbol "鳥" *niǎo* "bird." Some semantographs were transformed into phonograms through changing what were originally components consisting of pictographic symbols into phonetic symbols. An example of this is the character "昃" *zè* "the declining sun," also written "昊", originally written  or  , expressing the notion of the westward declination of the sun by means of the relative position of the sun and a person; later the obliquely written form of a person was replaced with a graphically similar phonetic symbol "夨" (*zè*) and it became a phonogram (still later the component "夨" was changed to "仄"; "夨" and "仄" also served a semantic function since they both mean "oblique". The two situations described above whereby semantographs are transformed into phonograms, will be discussed in Sec. 8.1; here no further examples will be given.

Due to the fact that in the creation of characters pictographic symbols came to be used less and less and semantographic symbols more and more (generally functioning as the significs in phonograms), and because at the same time many pictographic symbols already in use were progressively replaced by semantographic and phonetic symbols, as early as the Spring and Autumn period the importance of semantographic symbols probably already exceeded that of pictographic symbols. In the process whereby the Chinese script evolved into its clerical and standard script forms, those semantographs which incorporated individual pictographic symbols like "人" and "日", their pictographic elements in most cases were transformed into signs. As for those pictographic symbols that served as semantic components but could not function independently as graphs, if by the time of the formation of the clerical script they still had not been replaced by graphic components that could function independently, in most cases they were later transformed into signs during the process of the formation and development of the clerical script. For example, the

human form combined with a line representing the earth comprising the character "立" were transformed into a sign. Similarly, the lower foot-like element in the character "步" also became a sign. In this way, pictographic symbols, which had been the chief kind of semantic symbol up until that time, basically departed from the stage of history. In the present-day script the number of characters which actually use pictographic symbols in their makeup, such as "一", "二", "三", "凹" and "凸" are very few.

3. Signs and semi-signs increase. Characters comprised of signs are very few in number (see Chapter 2). However, due to the decrease, simplification and corruption of the pictorial quality of various graphic forms, we estimate that at the ancient stage of the script some semantographs and a few phonograms had already become signs or semi-signs. We feel that there is no way to explain the graphic form of many ancient graphs; some of these graphs had probably already become signs to people of that time. The character "射" in the small seal script, which still belonged to the ancient stage of the script, was already derived from "身" and "寸", and may be treated as a form which had already become a sign.

In the process of the formation of the clerical script, a large number of semantographs and some phonograms became signs or semi-signs. This state of affairs was already explained in Chapter 2 and will not be repeated here.

During the clerical and standard script stage, because of simplifications and corruptions in graphic form, sign and semi-sign graphs continued to appear (like certain of the corrupted variants cited in Sec. 10.1.8). In the script reform after 1950, some sign and semi-sign graphs were adopted: "头" (頭 *tóu* "head") is a sign graph; "鸡" ("鷄" *jī* "chicken") and "疟" ("瘧" *nüè* "malaria") are semi-sign graphs

Some characters whose graphic structure was never deformed, for various reasons, have for all practical purposes become sign or semi-sign graphs. This situation was explained in Chapter 2.

Sometimes, as to the question of whether a character ought to be viewed as a sign, people of different educational levels will have different answers: a person of a relatively high educational level would probably consider "都" *dū* "metropolis, capital" a phonogram because he would know that the component "阝" is a variant form of "邑" *yì* "capital city" and that 都城 *dūchéng* "capital" is a sort of "邑" *yi*. The component "者" *zhě* and the character "都" *dū* have nothing in common in their modern pronunciation. But if he recalls the series of similar characters "賭" *dǔ* "gamble," "堵" *dǔ* "block up" and "睹" *dǔ* "see," he can recognize that "者" is the phonetic of "都". But to a person lacking such knowledge, "都" is in actuality a sign. Consider also "之" *zhī*; its original meaning was "to go to." In ancient texts it often has this meaning (e.g., *Mèngzǐ* 12.4 先生將何之 "Sir,

where are you going?"). Therefore, a person with training in Classical Chinese will find it quite natural to consider the grammatical particle "之" a loangraph. Most people probably know only the latter meaning of "之"; to them "之" is in actuality a sign. In the case of semi-signs there is a similar problem. Up until now no one has calculated the number of signs and semi-signs. If one wanted to make such a calculation, then logically these characters whose graphic form has not been deformed but in fact have already become signs or semi-signs should be included. For the reasons given above, it would probably be very difficult to obtain consistent results. We can surmise that even if we adopted a rather conservative point of view, that is to say, the point of view of a person of a high educational level, the proportion of sign and semi-sign graphs in general use in the modern script would be lower than one-fifth. The proportion among high frequency characters would undoubtedly be higher.

The calculation of the proportion of phonograms in the Chinese script mentioned above does not take into account the fact that some phonograms have in actuality already become signs or semi-signs. Therefore, the statistics are in reality a bit too high.

Above we have introduced the most important changes in the historical development of the Chinese script in terms of graphic form and structure. In point of fact these two types of change are intimately connected. The reduction of the pictographic nature of the Chinese script is one of the reasons that prompted people to create fewer semantographs and more phonograms, and the fact that phonograms became the mainstream that set the stage for a further reduction of the pictographic nature of the script. A change in the structure of a writing system objectively often produces a complication or simplification of graphic form. A change in the form and style of a writing system also often produces drastic changes in the system. The appearance of large numbers of sign graphs was chiefly caused by changes in the graphic form of the Chinese script. In terms of graphic structure this is a retrogression, but it is the price that must be paid for simplifying and making a writing system more efficient. Even up until the present, how to treat the contradictions in the simplification and structural transformation of graphic form is still a problem that needs to be addressed seriously. (It was both inevitable and worthwhile to alter drastically the structure of a part of the script in order to convert the pictographic ancient script into its clerical and standard script forms. Whether it was necessary and worthwhile to make drastic alterations in the forms of certain graphs once the standard script had attained its mature form, simply in order to reduce the number of their strokes, is open to considerable doubt.)

4

The Evolution of the Shapes and Styles of Chinese Characters

Part 1: The Ancient Stage of Chinese Script

As mentioned in Chapter 3, the evolution of the shapes and styles of Chinese characters can be divided into two stages: the ancient stage and the clerical and standard script stage. The former stage began in the Shang period and ended in the Qin; the latter began in the Han period and has continued up to the present. This is to put it only in rough terms. During the Qin dynasty, clerical script was used concurrently with the seal script, which is classified as ancient script, and thus in reality, the Qin dynasty straddled both stages. But the clerical script used during the Qin period had not yet attained full maturity, so it may be termed early clerical script. This form of clerical script had already taken shape in the state of Qín by the late Warring States period and continued to be used in the early Han period. It probably would be more in line with the actual development of the shapes and styles of Chinese characters if the period from the late Warring States to the early Han period were treated as a transition stage between the ancient stage and the clerical and standard script stage. However, so as to keep the main points of concern to a minimum and at the same time make allowances for the older approaches to the division of the developmental stages of the script, we will continue to divide the development into the ancient stage and the clerical and standard script stage in our discussion below of the evolution of the shapes and styles of Chinese characters.

If we regard the latter half of the Shang period as the beginning of the ancient stage and the Qin dynasty as its terminus, this stage would then span a period which begins in the fourteenth century B.C. and ends in the late third century B.C., lasting over 1100 years. In Táng Lán's (1901–1979) opinion, based on temporal differences and the peculiarities of graphic shapes and styles, ancient Chinese script can be divided into four classes, namely, 1) Shang script, 2) Western Zhou and Spring and Autumn period

script, 3) Six States script and 4) Qín script.[1] The boundaries separating these four classes are not altogether clear. The script in use at the end of the Shang period and the early Zhou period was quite similar, and just as the script of the late Spring and Autumn and the early Warring States period shared many similarities, so it is often difficult to differentiate one period from the next. The upper limit of the Qín system of writing is the Spring and Autumn period, as it repeats features that are common to Western Zhou and Spring and Autumn period script. Nevertheless, a four-part division of this sort can indeed reflect certain important features of the evolutionary process undergone by the ancient graphic forms, and it greatly facilitates the presentation of ancient written materials for discussion purposes. So our account of the evolution of ancient graphic forms below will follow this classification scheme.

Since it was near the end of the ancient stage that the formation of the clerical script took place, the last section in this chapter deals with the formation of the clerical script.

4.1 Shang Period Script

Twenty-four hundred years ago, Confucius once lamented that there no longer was any evidence available to support his discourses on the rites of the Yin dynasty. Today, however, large quantities of written materials left from the latter half of the Shang period can be seen. Of these materials the most numerous discovered thus far are the shell and bone inscriptions, that is, writings engraved on turtle shells and animal bones which had been used for oracular purposes. The next most numerous are those inscribed on bronzes. After these come writings on pottery, stone, jade, horn, and so forth, though these are fewer in number. Shang bronze inscriptions were nearly all cast along with the implements on which they appear.[2] The oracle bone inscriptions, along with the writings on the other materials mentioned above, in the vast majority of cases, were incised with an engraving tool, while in a small number of cases they were written with a brush dipped in ink or cinnabar.

The oracle bone inscriptions were discovered at Yīnxū (northwest of present-day Ānyáng, Hénán), which was the site of the royal capital during

1. Táng Lán (1979:149–161 and 1981a:315) divided ancient script into four systems: Yīn-Shāng, the two Zhōu (which extends to the late Spring and Autumn period), Six States, and the Qín system. We have modified slightly his terminology in the present study.

2. The same is also true of the bronze inscriptions of the Western Zhou and Spring and Autumn period.

the latter half of the Shang period. Around the fourteenth century B.C., the Shang king Pángēng moved his capital to Yīn. During the 270 odd years following this down to the eleventh century B.C., when King Zhòu of Shang brought his country to ruin, Yīn served continuously as the capital of Shang. The majority of the oracle bone inscriptions record the divinations of the Shang kings, while a small number record divinations performed by members of the nobility who had close ties with the Shang kings.

The Shang rulers were extremely superstitious. They made divinations about all kinds of matters so as to determine whether or not the outcomes would be auspicious, such as whether or not there would be any disturbances during a given ten-day period, whether or not it would rain, whether or not there would be a good harvest, whether or not they would be victorious in battle, and even about child birth, sickness, dreams, and so forth. The materials used for divinations included the plastrons and carapaces of turtles and the shoulder blades of oxen, though occasionally other animal bones were used as well. Small cavities were normally bored on the back sides of the bones prepared for divination and heat was applied to these cavities while making the divination, causing cracks to appear on the bone's surface. These cracks are called 兆 *zhào* or "portents." The diviners would then determine good and evil omens according to the configurations of these cracks. During the latter half of the Shang period, those in charge of divinations often recorded the particulars of a divination on the bone or shell used, noting whether the cracks were omens of good or bad fortune, and even whether or not their prognostications had come true later on. The characters appearing on them are what is referred to as "shell and bone script" (甲骨文 *jiǎgǔwén*) or "oracular inscriptions" (甲骨卜辭 *jiǎgǔ bǔcí*). The Shang people also inscribed matters unrelated to divination on shells and bones. Writings of this sort are also usually referred to as shell and bone inscriptions. Thus, strictly speaking, the scope of the shell and bone inscriptions is somewhat broader than that encompassed by the oracular inscriptions.

After the fall of the Shang dynasty, the inscribed shells and bones lay forgotten beneath the soils of Yīnxū for a long period. Even though they were unearthed from time to time, no one realized that the ancient characters inscribed on them were of major historical value. Not until the twenty-fourth or -fifth year of the Guāngxù Emperor of the Qing dynasty (i.e., 1898 or 1899) was the value of the oracle bone inscriptions recognized. Since their discovery, thanks to the private digs of the local inhabitants of the area and to state-sponsored archaeological excavations, over one hundred thousand inscribed shells and bones have been unearthed. However, only a small number of these oracle shells and bones are complete

(see Figs. 4–5); the vast majority of them consist of small fragments, some bearing only one character.[3]

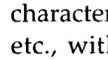
A complete inscribed shell or bone usually carries numerous oracular texts. The more lengthy oracular texts range from as many as sixty to eighty or even ninety characters in length. One non-oracular bone excavated at Yīnxū is covered with graphs recording events on one side and has a chart of the sixty Heavenly Stems and Earthly Branches (干支 *gānzhī*) engraved on the other. Since the inscription recording events mentions the name Xiǎochén Qiáng (小臣牆), the piece is usually referred to as the "Xiǎochén Qiáng bone" (see Fig. 6). While the upper portion of this bone has been lost, we can infer from what remains of the chart that the text recording events was originally over one hundred characters long, and thus in its entirety would be the longest Shang text unearthed thus far. Unfortunately the unearthed piece bears only fifty or so characters. On the other hand, the number of shell and bone texts is not only great but their content is rich, thus making them critical materials for our study of Shang script as well as Shang history and culture.

The practice of casting inscriptions on bronzes initially grew in popularity in the latter half of the Shang period and reached its zenith during the Zhou. During the pre-Qin period bronze was called *jīn* 金, so the graphs appearing on ancient bronzes were later called *jīnwén* 金文 or "bronze script." Since bells and tripods occupy a relatively more important place among the various inscribed bronze objects dating from the Zhou period, bronze script was also termed *zhōngdǐngwén* 鐘鼎文 "bell and tripod script" by some in the past. Pre-Qin bronzes have been discovered over the centuries, and as early as the Song dynasty they were collected and studied. It is estimated that there probably are over ten thousand inscribed bronzes dating from the pre-Qin period which have been recorded, or are extant but have not been recorded as yet. Possibly around a quarter of them date from the Shang period.

Most of the Shang bronze inscriptions are very simple, ranging from only one to five or six characters in length. They mainly record the maker's name (most often the maker's clan name rather than personal name) and the title of the ancestor commemorated, e.g., "Father Yǐ" 父乙, "Ancestor Jǐ" 祖己, and so forth (see Fig. 7). Considerably longer inscriptions appeared during the later stages of the latter half of the Shang period, but the longest of them discovered thus far runs forty odd characters at most (see Fig. 8).

The "Duōshì" chapter of the *Shàngshū* states: 惟殷先人有冊有典 "It

3. Excavated along with these inscribed pieces were numerous other oracular shells and bones which have no inscriptions, since oracular texts were not necessarily always inscribed following a divination.

was that [your] ancestors of the Yin had bamboo books and codices." The character "冊" *cè* appears in the shell and bone inscriptions written  , etc., with the vertical strokes representing long, slender bamboo or wooden slips, and ⊏ or ⊐ representing the strings used to tie the slips together. The contents of the Shang "bamboo books and codices" mentioned in the *Shàngshū* were no doubt far more important than the Shang bone and bronze inscriptions and were much longer than the latter as well. Unfortunately bamboo and wood decay, so none has been preserved.

Presented in brief below are the primary features of the shapes and styles of Shang graphs.

It should be pointed out first that in terms of their structure, bone and bronze graphs exhibit different characteristics. During the Shang period the writing brush was the primary writing implement in use. The character "筆" *bǐ* "writing implement" is derived from "竹" *zhú* "bamboo" and "聿" *yù* "stylus." In oracle bone script the character "聿" was written  , which depicts a hand holding a brush. Even though it is no longer possible for us to see the brush-written books and codices dating from the Shang period, nevertheless a small number of graphs written with a brush dating from the latter half of the Shang period are found on oracle bones as well as on objects made of jade, stone and pottery (see Fig. 9). Graphs appearing on bronzes retain the features of brush-written characters, whereas those written on bone do not. As the Shang rulers frequently made divinations, the number of divinatory notations that had to be inscribed on bones was quite large. Inscribing characters on a medium as hard as bone is a time-consuming and strenuous task. For the sake of efficiency, engravers out of necessity altered the forms of the brush-written characters, changing rounded forms to square forms, solid forms to outlines, and thick strokes to fine strokes, as seen below:

	日	丁	子	父
Bronze				
Oracle Bone				

Sometimes graphic shapes were simplified radically. For instance, the first of the twelve Earthly Branches, "子" *zǐ*, was simplified from  to 𠫓. (In antiquity *zǐ* used in this sense was distinguished from "子" *zǐ* "child.") The character "于" *yú* was simplified from  to 于, and so forth. Bone script can be viewed as a rather peculiar form of the popular script of that era, whereas the bronze script of that period for the most part may be viewed as formal script. Formal script refers to the standard script which was used for more serious occasions; what is referred to here as popular script pertains to those forms which were used daily for simplicity and convenience.

Sometimes the Shang people also recorded matters unrelated to divinations on animal bones. The style of these inscriptions is quite unlike that of the ordinary oracular inscriptions and resembles more that of the bronze inscriptions, such as the inscription on the renowned "Zǎi fēng gǔ" 宰丰骨 (see Shāng 1933:518).

When discussing the evolution of the shapes and styles of Chinese characters, it should be carefully noted that a distinctive feature of oracle bone script is that it is a variety of popular script. For example, the character "日" *rì* "sun" appears very early in the bone inscriptions written ⊡, whereas it appears in relatively late Shang and even in Zhou bronze inscriptions still being written in a comparatively more pictographic manner: ⊙ and ⊖. If on the basis of relative periodization one were to prepare mechanically an evolutionary chart of graphs, one would obtain a sequence for "日" showing ⊙ as having evolved from ⊡, which is not at all in line with the facts.

Differences of graphic shapes in the bone and bronze inscriptions, respectively, also emerged as a result of temporal differences and different usages. As the oracle bone inscriptions of the latter half of the Shang period had a history of over two hundred years, the features of the graphic forms appearing in them can be divided into early and late forms. The early oracle bone graphs are generally much more pictographic than their later counterparts.[4]

As for Shang bronze inscriptions, some served primarily to record names (referred to below as identificational inscriptions),[5] the graphs in which are significantly more pictographic than those seen in the average inscription recording events. The latter are mostly seen on late period bronzes dating from the latter half of the Shang period, and the graphic forms in them resemble those in the late bone inscriptions. Regardless of whether these identificational forms appear on early period bronzes or late period bronzes, they normally are more pictographic than the early period bone forms. Among the identificational inscriptions, while there exist relative degrees of pictography from one form to another, the differences do not entirely appear to be temporal differences. In the chart below are a few examples of the characters discussed above (some of which are character components):

Bronzes cast with identificational inscriptions are usually later than the early period bone inscriptions, and such inscriptions often are found even on bronzes dating from the early Western Zhou. Yet the forms appearing in them are still more pictographic than the graphs in the early period oracle bone inscriptions. This phenomenon must have resulted from the conservatism of the ancients, especially where clan names were concerned. Such an attitude is reflected in certain modern surnames and place names, some of which still preserve relatively ancient readings, e.g., the reading of "冼" *xǐ* (also written "冼") as *xiǎn* when used as a surname, and the reading of "番" *fān* as *pān* in the place name 番禺 Pānyù. This phenomenon seems to be similar to the late Shang practice of using relatively older forms when writing clan names. Other scholars maintain that the identificational inscriptions were intended to serve as decoration, and thus were written in a more highly pictographic fashion. These two opinions, however, are by no means mutually exclusive.

The gradual simplification of graphs during the Shang period can be clearly seen in the comparative chart above. The second examples given therein of the graphs appearing in identificational inscriptions, namely, "犬" *quǎn* "dog," "牛" *niú* "ox," and "止" *zhǐ* "to stop," are relatively less pictographic than the first and by and large may be representative of the common standard script forms which were in use at the same time as the early period bone inscriptions. (In early period bone inscriptions some of the earlier forms of "止" are written similar to the second example of it given in the chart above.) The highly pictographic inscriptional forms

4. Exceptions to this do occur on occasion; for instance, the first of the Twelve Heavenly Branches *zǐ* "子" is usually found written 𠙵 on the early period oracle bones, whereas it appears written 𡥈 in the late period oracle bones. Hence the simplified form of the graph was used during the early period, whereas the standard script form was used during the late period.

5. On Shang and Zhou bronzes (and especially those dating from the first part of the Western Zhou period), we find quite a number bearing inscriptions that are much more highly pictographic than the common textual inscriptions. These inscriptions usually denote the names of clans. Yet sometimes they also denote the personal names of individuals or other meanings. Scholars term such inscriptions "identificational inscriptions."

appearing at the head of each column of the chart possibly preserve features of Chinese script of the early Shang period or of even higher antiquity. As compared with the more highly pictographic forms, the less pictographic forms appearing in identificational inscriptions and the early period bone forms already represent a considerable degree of simplification. The common bronze forms and oracle bone forms of the late period exhibit even further simplification of the less pictographic forms appearing in identificational inscriptions and the early period oracle bone inscriptions. The early period forms of "虎" *hǔ* "tiger" and "犬" *quǎn* "dog" feature the bellies of these animals, whereas in the late period the belly and back were reduced to a single stroke.

Throughout Chinese history the ruling class looked with disdain upon popular script. Yet in reality, during the process of the evolution of the shapes and styles of graphs, the role played by the popular forms was extremely important. Sometimes a new standard style of script would evolve from what had previously been a popular style (to wit, the clerical script; see below). Even more common are cases where certain popular forms were later assimilated as standard script forms, or clearly were responsible for changes in the standard script forms. As attested by the written forms of "虎", "牛", "止", and "戌" in the chart above, the evolution of the standard script forms (as exemplified by the bronze forms) in the script of the latter half of the Shang period was strongly influenced by the popular forms of the oracle bones.

During the latter half of the Shang period there was already a great dichotomy between the primitive drawings and the shapes of graphs in common use. But as written forms, they still retained a rather high degree of pictography. For some characters only the main features of an object represented needed depiction to convey their meanings, on account of which the methods of writing such graphs varied a good deal. This phenomenon is especially noticeable in the graphs appearing in identificational inscriptions and in the early period oracle bone script. In the case of "車" *chē* "chariot, cart," for example, in the *Jiǎgǔwén biān*, we find many different written forms of *chē* from early period bone inscriptions.[6]

In the bronze identificational inscriptions a number of different writings of "車" *chē* are found which differ from those in the bone inscriptions (see *Jīnwén biān*, pp. 929–30). The *Jiǎgǔwén biān* has two examples of the late period writings of *chē* in the bone inscriptions:

6. See *Jiǎgǔwén biān*, pp. 531–32. The examples of *chē* collected therein include some which do not actually denote the character *chē* but denote other words which were related to it. Nevertheless, from these characters the variety of depictions of the chariot in Shang script can be seen just the same.

Aside from their orientational differences, the dissimilarities between them are quite small. It would appear that during the latter half of the Shang period, the late period forms were already much more stabilized than those of the early period.

The orientation of graphic forms during the Shang was rather inconsistent. Most characters could be written facing either left or right. The character 人 *rén* ("人" "person"), for instance, could also be written 人; 子 *zǐ* ("子" "child") could also be written 子. Some characters could also be written upside down or sideways, e.g., 侯 *hóu* ("侯" "marquis") was sometimes written 侯; 五 *wǔ* ("五" "five") was sometimes written 五. The late period bone forms of "車" *chē* above are also cases in point. The irregular orientation of graphic forms had a close connection with the peculiarities associated with relatively high degrees of pictography. While this phenomenon can still be seen in Zhou period script, it was already somewhat rare by then, and essentially had disappeared by Qin and Han times.

Lastly, we shall discuss the patterns of arrangement of graphs during the Shang. The arrangement of Chinese characters in vertical rows from top to bottom had clearly been established even before the latter half of the Shang period. Thus a number of graphs in the oracle bone inscriptions which originally were rather large, such as "犬" *quǎn*, "豕" *shǐ* "swine," "疒" *nè* "sick," and "虎" *hǔ* cited in Sec. 3.1 and in this chapter, were orientationally altered to suit the requirements of the vertical column. While the oracle bone texts on occasion contain lines written horizontally, they are limited to single lines and are related to the need to coordinate the oracle text with the divinatory cracks, so they are exceptions to the rule. The traditional arrangement of columns of characters from right to left was already well established during the latter half of the Shang period and at least by the late stage of this period. During the latter half of the Shang period, the oracle texts written on the left and right halves of turtle plastrons, or those written on the left and right on scapula bones, were usually written in mutually opposing directions. These are also exceptions to the rule. The late period bronze inscriptions of the latter half of the Shang period and the records of events engraved on animal bones are nearly all written from right to left. The practice of arranging Chinese characters in columns from top to bottom and the columns from right to left persisted for over three thousand years before being replaced by their arrangement from left to right and from top to bottom during the mid 1950s.[7]

7. At the beginning of this century there appeared some publications printed horizontally. Nevertheless, the number of materials printed in horizontal columns published prior to the formal adoption of horizontal typesetting in the 1950s was consistently small.

4.2 The Script of the Western Zhou and Spring and Autumn Period

The principal sources for studying the script of the Western Zhou and Spring and Autumn period are bronze inscriptions. The Western Zhou period was the heyday of bronze inscriptions. During the Western Zhou, inscriptions running over a hundred characters in length were commonplace. Inscriptions running two to three hundred characters or more in length were no less unprecedented, such as those on the "Dà Yú *dǐng*" of the early Western Zhou which consists of 291 characters (see Fig. 10); the "Xiǎo Yú *dǐng*" which consists of around 400 characters (a portion of which has been eroded); the "Sǎnshì pán" of the late Western Zhou which consists of 350 characters; and the "Máogōng *dǐng*" which consists of 498 characters (see Fig. 11). During the Spring and Autumn period there were also lengthy inscriptions. The inscription on the large *bó*-bell discovered during the Song dynasty which was cast by Shūgōng 叔弓 (interpreted by some as Shūyí 叔夷), a minister of state who served under Duke Líng of Qí (r. 581–554 B.C.), consists of 493 characters. A set of seven *biānzhōng* (chime bells) cast by this same person, which was unearthed at the same time as the *bó*-bell, collectively bears an inscription having essentially the same content as that on the *bó*-bell and runs 501 characters in length. Nevertheless, the number of lengthy inscriptions dating from the Spring and Autumn period is far fewer than those dating from the Western Zhou. Judging from the content of the inscriptions discovered thus far, the majority of the Western Zhou bronzes was produced by the nobility and officials of the Zhou dynasty, whereas nearly all those of the Spring and Autumn period belonged to the various feudal states.

Aside from bronze inscriptions, other written materials dating from the Western Zhou and Spring and Autumn period have been discovered, the most important of which are oracle bone inscriptions.

Prior to the 1950s, oracle bone inscriptions had been unearthed only at Yīnxū. Since the 1950s, oracle bone inscriptions dating from the Western Zhou have been unearthed at Fāngduìcūn in Hóngdòng County, Shānxī Province, at Báifú in Chāngpíng County, Běijīng Municipality, and at sites on the Zhōu Plain (*Zhōuyuán*) in Qíshān and Fúfēng counties, Shǎnxī, the most important of which are those discovered on the Zhōu Plain. In 1977, a large cache of oracle shell fragments was discovered on the Zhōu Plain in a storage pit amid the remains of an early Western Zhou palace building at Fèngchúcūn in Qíshān County. Nearly three hundred of the pieces bear oracular inscriptions.[8] The graphic forms on them are fairly close to

8. See *WW* 1979c. This figure is based on the latest statistics provided by those in charge of sorting them out.

those in the late Shang oracle bone texts discovered at Yīnxū (see Fig. 12).[9] Judging from their contents, it would appear that these oracle texts record divinations performed by the Zhou kings. A portion of them date from the early Western Zhou, while another portion predate the Zhou conquest of the Shang. Some think that the oracle texts predating the conquest originally were Shang oracle texts, but this is a problem which will require further research. In 1979, inscribed oracle shells and bones were also discovered near Qíjiācūn in Fúfēng County, which is also within the confines of the Zhōu Plain (see *WW* 1981). Their date would appear to be slightly later than the early Western Zhou oracle shells discovered at Fèngchúcūn.

Let us now discuss briefly covenant texts which date from sometime between the late Spring and Autumn and the early Warring States periods.

In 1965, a large number of covenant texts written on jade and stone tablets was discovered among the ruins of Xīntián, the capital of the Eastern Zhou state of Jìn, at Hóumǎ, Shānxī Province. They have been dubbed the "Hóumǎ Covenant Texts" ("Hóumǎ méngshū") by researchers (see Fig. 13) (see Wénwù Press 1976). All the covenant texts were written with a brush. The vast majority of them was written with cinnabar, while a very small number unearthed in a different pit was written in ink. Some researchers think these covenant texts were related to the battle between Zhào Yāng and the Fàn and Zhōngháng clans and therefore date from the late Spring and Autumn period; others think they are related to Zhào Huánzǐ Jiā's usurpation of the throne from Zhào Xiànhóu in 424 B.C. and therefore date from the early Warring States period. During the late 1970s and the early 1980s, a large cache of covenant texts written in ink was discovered at Xīzhāngjìcūn in Wēn County, Hénán. They date from around the same time as the Hóumǎ Covenant Texts (see *Wénwù* 1983). During the 1930s and 1940s, covenant texts of this sort had been discovered in this same vicinity. At that time some dubbed them the "Qìnyáng Jade Tablets" (沁陽玉簡 "Qìnyáng *yùjiǎn*"; the Xīzhāngjì area at the time was part of Qìnyáng County).

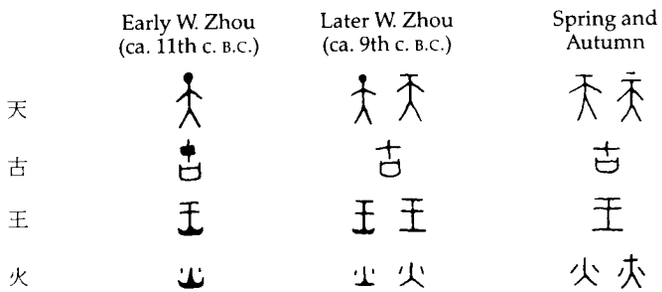
Introduced in brief below are the main features of the evolution of graphic shapes and styles during the Western Zhou and Spring and Autumn period as reflected by bronze inscriptions.

In the earliest stages, the Western Zhou bronze inscriptional forms nearly always adhered to the same style as those used in late Shang inscriptions. By the reigns of kings Kāng, Zhāo, and Mù, graphic forms gradually tended towards more regularity and uniformity, though in other respects the changes were still not very great. After kings Gōng and Yì,

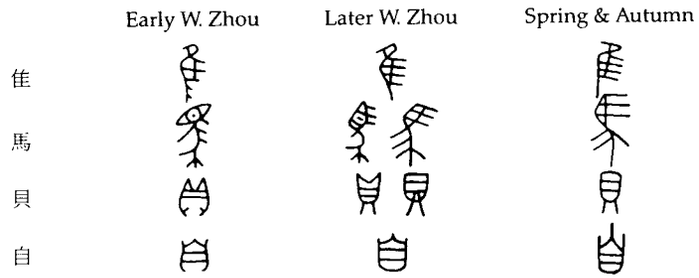
9. As the graphs engraved on the Zhōu Plain oracle bones are quite small, those reproduced in Fig. 12 have been enlarged.

the changes became more pronounced. The principal tendency in the evolution of Western Zhou inscriptional forms was towards linearization and streamlining of graphic elements. During the late Shang and early Western Zhou, the degree of pictography of inscriptional graphic forms was still relatively great. Graphs were often composed of curvilinear lines and had strokes which varied from thick to fine, including squared or rounded elements which had to be filled in. All these features required a good deal of effort to write. So in order to change these aspects of the script, characters had to be linearized and streamlined.

Linearization refers to the phenomenon of changing thick strokes to fine and replacing squared or rounded solid elements with lines; for example (The examples of "火" *huǒ* "fire" cited below are character components.):



Streamlining of graphic forms refers to the phenomenon of changing curvilinear lines to even lines and joining disconnected lines into one; for example (The examples of "貝" *bèi* "cowry" cited below are character components.):



Following these changes, the degree of pictography declined and the writing of characters became relatively more convenient.

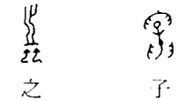
During the Spring and Autumn era, the bronze forms used in each feudal state initially followed for the most part the inscriptional forms in vogue during the late Western Zhou. Later on, the styles of writing in each region gradually took on their own special traits.[10] The special traits of the bronze forms used in each region were primarily manifested in terms of calligraphic style; graphic structures for the most part were still similar. Thus aside from peculiar graphic forms such as the Bird Script, which will be discussed below, the differences between graphic forms were not very great.

In some of the bronze inscriptions of the mid and late Spring and Autumn period there appeared a marked tendency to artfully embellish graphic forms. For instance, the graphic forms appearing in a portion of the bronze inscriptions produced in some of the eastern and southern states are especially long and narrow and usually are composed of intentionally executed flowing, sinuous strokes, e.g.:

Flowing, sinuous strokes intentionally produced differ from those which appear wavy in pictographs. On the contrary, this style of calligraphy reduced the degree of pictography of graphs.

Certain peculiar artistic graphic forms enjoyed popularity primarily from the late Spring and Autumn period to the beginning of the Warring States period. The most important of these was the Bird Seal Script (*niǎozhuàn*), also termed Bird Script (*niǎoshū*), which incorporated bird-like forms in the composition of graphs. For instance,

In addition, there were other graphic forms which incorporated insect-like forms or other decorative forms, such as



10. A region, as used here, could be a single state, such as the state of Qín; it could also encompass several states, such as the states of Qí, Lǔ, etc. which were located within the borders of present-day Shāndōng; the southeastern states of Chǔ, Xú, Wú, and so forth comprised yet another region.

These artistic graphic forms which incorporate bird- and insect-like figures in their composition have been collectively dubbed Bird and Insect Script (*niǎochóngshū*) by some. This style of script was popular for the most part in the states of Chǔ, Sòng, Cài, Wú, and Yuè.

The artistic embellishment of graphic forms as described above does not appear to have had much of an impact on the graphs in daily use.

The graphic forms in the average bronze inscription of the Western Zhou and Spring and Autumn period probably were representative of the formal script of that era. Some inscriptions having characters written rather perfunctorily may reflect certain aspects of the popular forms in use at the time. For instance, during the 1960s, two *guǐ*-tureen covers (referred to as the "Yùn *guǐ gài*") were discovered at Wǔgōng County, Shǎnxī; they probably date from the period of the Western Zhou kings Gōng and Yì. Both were cast at the same time and by the same person, and the content of their inscriptions is identical. Yet the differences between them are striking: one of them is written very neatly, whereas the other is written very perfunctorily (see *WW* 1964a:26–27). The element "宀" in the neatly written inscription is written  , whereas it is written  in the perfunctorily written text, which must have represented the difference between the formal and popular forms of this graphic element at that time. In bronzes dating slightly later than the "Yùn *guǐ gài*" which bear inscriptions composed of very neatly written graphs, the element "宀" is nearly always written , suggesting that the popular form had by then become the conventional form. The graphic forms in the mid Spring and Autumn period "Lúan shū *fǒu*" inscription from the state of Jìn differ rather markedly from the forms seen in other inscriptions from the same period, due perhaps to the assimilation of certain popular forms in the calligraphy of that state (see Fig. 14). The element "宀" is written ∧ in the character "  " (= "寶" *bǎo* "precious") in the "Luán Shū *fǒu*" text. In the late Spring and Autumn or early Warring States period "Hóumǎ Covenant Texts," also from Jìn, the element "宀" is also occasionally written ∧ in the characters "守" *shǒu* "to guard," "室" *zhǔ* "a shrine used to contain ancestral tablets," "宗" *zōng* "ancestor," "定" *dìng* "to settle," and "宮" *gōng* "palace (see Wénwù Press 1976:306, 314, 320). Aside from the "Luán shū *fǒu*" inscription, the element "宀" in other Spring and Autumn bronze texts is also found written ∧, such as in the character "寶" *bǎo* in the "Pānjūn *fǔ*," and in the character "宥" which stands for "賓" *bīn* "guest" in the "Zhūgōng bā *zhōng*." This popular form of the element "宀" was clearly quite in vogue at the time. (This method of writing the element is also seen frequently in Warring States period script.)

Lastly, let us discuss below the problem of the *zhòuwén* 籀文.

The term *zhòuwén* refers to the characters in the *Shǐzhòupiān* 史籀篇. According to traditional accounts, Shǐzhòu was King Xuān of Zhou's (r. 827–782 B.C.) historian and was responsible for compiling the character compendium *Shǐzhòupiān*. The graphic forms used in the compendium were later called *dàzhuàn*, "large seal."[11] Although the *Shǐzhòupiān* has long since been lost, a portion of the graphic forms in it have been preserved in the *Shuōwén*. In the *Shuōwén*, Xǔ Shèn explains his organizational plan as: 今敘篆文, 合以古籀 "Now, [I] will arrange the seal forms and bring together the *gǔ* and *zhòu* [forms]." *Gǔ* and *zhòu* here refer to the *gǔwén* "ancient script forms" and the *zhòuwén*, respectively. (Regarding the ancient script forms, see under "Six States Script," which follows below.) As for the graphs collected in the *Shuōwén*, the small seal forms are taken as the primary graphic forms. If the ancient script and *zhòuwén* forms differ from the small seal form, they are then recorded along with it. For instance:

> 孑(子)...  , 古文子, 从巛, 象髮也.  , 籀文子, 囟有髮. 臂脛在几上也. 孑 (= 子 "child") . . . is the ancient script form of 子 and is derived from 巛 which resembles hair. is the *zhòuwén* form of 子. The element 囟 "the top of the head" has hair. The arms and lower legs are on top of 几 "small table."

If a discrepancy existed only between the small seal and ancient script forms, then only the ancient script form would be given below the former, and conversely for the *zhòuwén* form. The *Shuōwén* also gives ancient script or *zhòuwén* forms as headgraphs and appends the small seal forms below them, but such cases are few. As the version of *Shǐzhòupiān* seen by Xǔ Shèn was already fragmentary,[12] the *zhòuwén* data in the *Shuōwén* are incomplete. Counts based on the current editions of the *Shuōwén* reveal that it contains a total of 220-odd *zhòuwén* forms (see Wáng 1940: *juàn* 5).

According to the traditional explanation, the *zhòuwén* were graphic forms which should have dated from the late Western Zhou. Following the emergence of paleography as a field of study in recent times, this dating of the *zhòuwén* came under suspicion. The late Qing scholars Wú Dàchéng (1835–1902) and Chén Jièqí (also known as Chén Fǔzhāi, 1813–1884) had already opined that among the *zhòuwén* forms in the *Shuōwén*

11. See the "Yìwénzhì" chapter of the *Hànshū*, and also the *Shuōwén*'s "Postface."

12. According to the "Yìwénzhì" chapter of the *Hànshū*, the *Shǐzhòupiān* had originally consisted of fifteen chapters but six of them had been lost by the Jiànwǔ era (A.D. 25–57).

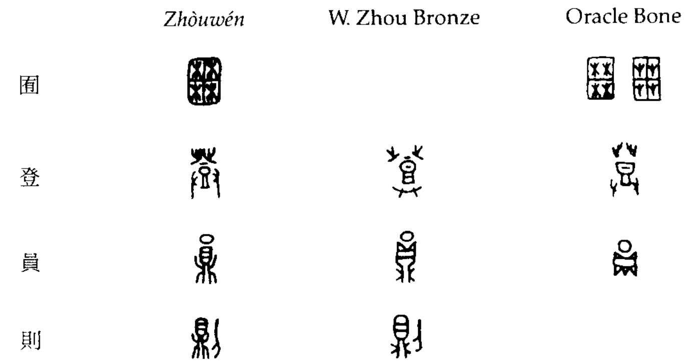
13. In the preface to his *Shuōwén gǔzhòu bǔ* [Addenda to the Ancient and *Zhòuwén* Graphs Recorded in the *Shuōwén*], Wú Dàchéng (1883) opined that the *zhòuwén* forms cited in *Shuōwén* do not coincide with the six types of graphs (*liù shū*) and therefore represent late Zhou script. Chén Jièqí, in his preface to *Shuōwén gǔzhòu bǔ*, also stated: "Thus many of the *zhòuwén* forms are unlike the Stone Drum graphs." (At that time, many regarded the Stone Drum script as being representative of standard large seal script.)

are some that date from later periods.[13] In more recent times, Wáng Guówéi (1877–1927) and Táng Lán unequivocally held that the *zhòuwén* were a strain of graphic forms which dated from the Eastern Zhou. Wáng wrote "*Shǐzhòupiān* shūzhèng" "[Commentary to the *Shǐzhòupiān*"] (Wáng 1940: *juàn* 5) and "Zhànguóshí Qín yòng zhòuwén Liùguó yòng gǔwén shuō" 戰國時秦用籀文六國用古文說 ["On the Theory that Qín Used *Zhòuwén* and the Six States Used Ancient Script During the Warring States Period"] (*juàn* 7), in which he held that the *zhòuwén* "in terms of its technique, by and large consists of well-balanced, rather complicated forms which concentrate more on the symmetrical arrangement of swirls and angles than on their resembling forms or abstract things." Wáng felt that the *zhòuwén* is stylistically quite close to the small seal script and is most similar to the script seen on artifacts dating from the Spring and Autumn and Warring States period from the state of Qín. This led him to conclude that the *zhòuwén* represents a style of script which was in vogue in Qín during the Warring States period and that the *Shǐzhòupiān* must have been "a book used to teach children and compiled by someone from Qín at some point between the Spring and Autumn and Warring States periods." He also doubted that *Shǐzhòu* was a person's name; rather, he suspected that the first line in the *Shǐzhòupiān* may have read 太史籀書 (with 籀書 standing for 讀書 "to read records") "the Grand Historian reads the records," and that the ancients had selected two characters from this line as a title for the book, hence it was styled *Shǐzhòupiān*. In his *Zhōngguó wénzìxué*, Táng Lán (1979:155) writes,

> [The *zhòuwén*] was written as complexly as possible and thus differs from the script in use during the reigns of kings Lì and Xuān of Zhou. On the other hand, it is very close to the graphic forms seen in bronze inscriptions dating from the Spring and Autumn period to the early Warring States period.

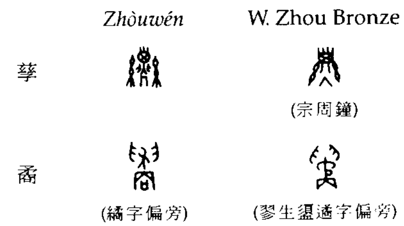
He held that Shǐzhòu was none other than Shǐliú 史留, who is mentioned in the "Gǔjīnrén biǎo" (A Table of Personages Past and Present) in *Hànshū*. He then reasoned, "The 'Gǔjīnrén biǎo' places Shǐliú sometime between the Spring and Autumn and Warring States periods, which is precisely the actual date of the *Shǐzhòupiān*." Our feeling is that Wáng's and Táng's explanations both lack sufficient evidence.

It should be pointed out first that not all the *zhòuwén* forms are characterized by complexity. Some *zhòuwén* graphs are even simpler than their later small seal counterparts, such as small seal "妣" vis-à-vis *zhòuwén* "妣" (represented here in standard-style script), "薇" vis-à-vis "𦱊", "蓬" vis-à-vis "䒠", "磬" vis-à-vis "殸", etc. As for the relatively more complex *zhòuwén* forms, they often conform structurally to their Shang and Western Zhou counterparts. For instance,



Characters which were written in the same way as their *zhòuwén* counterparts, such as "囿", "登", "員" and "則", can indeed be seen in written materials dating from the Spring and Autumn and Warring States periods. Yet since these methods of writing existed as early as the Shang and Western Zhou periods, we, of course, cannot use this as proof that the *zhòuwén* represented Spring and Autumn and Warring States period script.

While among the *zhòuwén* there are some graphs which would appear to have been made more complex at a later date, they in fact had relatively ancient origins; for example:



The character *xián* "次" in the *zhòuwén* script is written 𣹢. It appears written in this same way as a character component in the inscriptions on the Stone Drums of Qín. And insofar as the graphic forms comprising the Stone Drum texts are concerned, they probably date from sometime between the Spring and Autumn and Warring States periods. Consequently, some have used this as proof that the *zhòuwén* were graphic forms used in the state of Qín during the Spring and Autumn and Warring States periods. In 1978, early Spring and Autumn period *zhōng*- and *bó*-bells which were cast under Duke Wǔ of Qín (r. 697–678 B.C.) were discovered near Bǎojī, Shǎnxī. The element "次" in their inscriptions is written 𣹢, which is basically the same as the *zhòuwén* form. Now King Xuān of Zhou died in 782 B.C., or only around a hundred years before the time of Duke Wǔ of Qín. There is a very strong possibility that the *zhòuwén* style of writing

"汝" may already have existed during the time of King Xuān, so it is clear that this character can no longer be used as evidence of the late date of the *zhòuwén* script.

Some *zhòuwén* forms do not appear in any of the relatively early materials written in ancient script discovered to date. Yet since the materials written in ancient script which we have in hand at the moment are quite limited, we cannot conclude that their absence in these materials proves that they did not exist at that time. So we would maintain that the arguments for pushing the date of *zhòuwén* to a later period lack sufficient evidence. Rather than place our trust in recent individuals who conjecture that Shǐzhòu was not a person's name or that Shǐzhòu was Shǐliú, it seems preferable to trust the older explanations of Han date, as propounded by individuals who were less far removed from the ancient period.

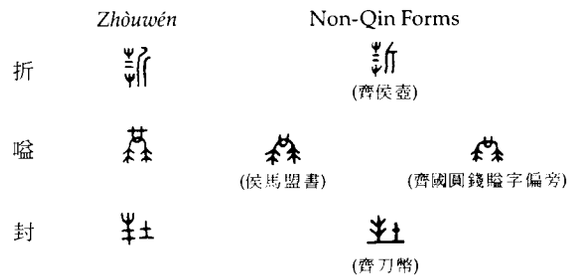
The graphic forms in the *Shǐzhòupiān*, of course, could not have escaped being influenced somewhat by later methods of writing graphs during the process of their transmission from Western Zhou to Eastern Han. Likewise, during the process of transmitting and reprinting the *Shuōwén*, errors have cropped up in reproducing the graphic shapes of the *zhòuwén* forms collected in it. For example, the practice of writing the element "寸" *cùn* for "又" *yòu* in the ancient script does not appear to have become popular until sometime between the Spring and Autumn and Warring States periods, but the *zhòuwén* graphs  ("尌") *shù* and  ("叟") *sǒu* were already derived from "寸".[14] The reason why this happened is that a later copyist must have changed the original method of writing this element to suit his own calligraphic habits. We cannot assign the entire corpus of *zhòuwén* graphs to a later period simply on account of this. Some of the *zhòuwén* graphic forms clearly were greatly distorted at a later date; for instance, "馬" *mǎ* "horse" appears in the *Shuōwén* written  , "車" *chē* appears as  , and so forth. The latter undoubtedly is a distorted form of  , which is the way *chē* frequently appears written in Western Zhou bronze inscriptions (see Wáng 1837: "bǔzhèng," *juàn* 5:2; Sūn 1916: *juàn* 4:22–35). This distorted form further proves that the *zhòuwén* were Western Zhou graphs, since during the latter period the simplified form of "車" was already in common use.

As is generally acknowledged by those who study ancient Chinese script, Qín script underwent much less of a metamorphosis vis-à-vis late Western Zhou script than did the scripts used in the other states during the Spring and Autumn and Warring States period (see sections 3 and 4 below). It is not at all surprising then that in numerous instances Qín graphic forms match the forms in the *Shǐzhòupiān*, as handed down from the late Western Zhou. On account of this, Wáng Guówéi held that the

14. While in the Stone Drum inscriptions and the "Hóumǎ Covenant Texts" there are some relevant examples, there apparently are no data available yet which would allow us to trace this phenomenon back to an earlier period.

Shǐzhòupiān had been compiled by someone from Qín, but his reasons are insufficient (see Róng 1931–3:41). In comparison with Wáng, Táng Lán was more cautious on this score; he never claimed that the *zhòuwén* represented Qín script.

During the Spring and Autumn and Warring States period, certain peculiarly written graphic forms appear in the scripts of states other than Qín which conform well with the *zhòuwén* forms, e.g.:



These graphs were not at all written in this way in Qín. This phenomenon further shows that the *Shǐzhòupiān* was not a compendium of graphs used solely in Qín or that it had been compiled by someone from that state (Zhāng 1970–71:3).

In sum, we believe that the *Shǐzhòupiān* was, as tradition has it, a compendium of graphs which was compiled by King Xuān of Zhou's Grand Historian Zhòu and that the *zhòuwén* forms date from the time of King Xuān, notwithstanding their having been miscopied later on. It would seem then that the arguments of those in recent times who favor placing the date of the *zhòuwén* at later period are untenable.

The so-called *dàzhuàn* "large seal script" originally referred to ancient graphs like the *zhòuwén* whose written style was close to the small seal but which predated the latter. Nowadays, however, the use of the term by students of the script is considerably more confusing. Some use the term as a general reference to all ancient characters which predate the small seal script (the ancients sometimes used it in this same way); some call the script in late Western Zhou bronze inscriptions and that in the Stone Drum inscriptions "large seal";[15] some, following Wáng Guówéi's arguments, call the Qín script of the Spring and Autumn and Warring States period "large seal"; in line with his own views, Táng Lán calls "the script dating from the Spring and Autumn to the early Warring States period" "large seal script." So as to avoid confusion, it is best that we simply not use this term at all.

15. This also represents a relatively older use of the term. Since some of the graphic forms in the Stone Drum inscriptions coincide with the *zhòuwén* forms, many in the past thought that the stones were engraved during the time of King Xuān of Zhou.

4.3 Six States Script

During the transition from the Spring and Autumn period to the Warring States period, Chinese society underwent dramatic changes. This in turn had a profound effect on the evolution of Chinese script. Prior to the late Spring and Autumn period, the nobility occupied a position of dominance in the economic, political and cultural spheres, and writing, of course, was monopolized by them as well. In the process of this transition, the old nobility gradually was replaced by a newly risen exploiting class, and the use of writing began to spread to the common people. Following the onset of the Warring States period, in line with the tremendous changes and rapid developments that were taking place in the economic, political, and cultural sectors, the use of writing became more and more widespread. The structure of graphs in turn underwent unprecedented changes. These changes were manifested for the most part by the rapid development of popular script.

Of all the important states of the Spring and Autumn period, the state of Qín, which had established itself on the old ancestral site of the House of Zhōu, was the most faithful in carrying on the writing tradition of the Zhou dynasty. Following the onset of the Warring States period, because Qín was situated in the western reaches and had been comparatively backward to begin with, it developed more slowly in every respect than the states in the East (that is, the states east of Hángǔguān), so radical changes in Qín script took place at a comparatively later date. It probably was not until the mid Warring States period that popular script began to develop rapidly in Qín. In terms of the relationship between the conventional and popular forms, there was also a distinct difference between Qín script and the scripts of the eastern states. The graphic shapes of the popular forms used in the eastern states normally differed greatly from the traditional conventional forms; moreover, on account of the extremely widespread use of popular forms, the traditional conventional forms were all but routed by the popular forms. By contrast, the popular script of Qín emphasized transforming the lines comprising the conventional forms into squares and angles and into level and straight lines, so that there is usually a clear connection between them. The conventional forms of graphs used in Qín during the Warring States period later evolved into the small seal forms, and the popular forms evolved into clerical script forms. While the popular script of Qín was not without influence on the conventional forms, it never played havoc with the standard-script system. By contrast, when compared with the traditional conventional forms of the late Western Zhou and Spring and Autumn periods, the graphs in common use in the eastern states during the Warring States period had been greatly distorted, almost beyond recognition, whereas in the case of

Qín script, the conventional forms in use there, which followed an older tradition, still held an important position in Qín during this same period. Consequently, Táng Lán distinguished Warring States period Qín script from the scripts of the eastern states, terming the former, which included Qín script of the Spring and Autumn period and the small seal script of the Qin dynasty, as the Qín system of writing, and the latter as Six States script. In actuality, the scope of the so-called "Six States script" is not limited to the scripts used in the states of Qí, Chǔ, Yān, Hán, Wèi and Zhào alone; rather it includes the scripts of all the eastern states. In the present section we shall discuss the scripts of the Six States; the Qín system of writing will be discussed in the section which follows.

Let us first review the source materials of Six States script. As the varieties of inscribed objects remaining from the Warring States period are relatively numerous, those which are richer in content are introduced categorically below.

1. *Bronze inscriptions.* From the late Western Zhou to the early Warring States period, changes in the content of the average bronze inscription were not very great, and inscriptions consist mainly of a narration, giving the reasons for casting the bronze and expressions of hope that the maker's descendants would cherish it and so forth. Discovered in 1978 in the early Warring States tomb of Marquis Yǐ of Zēng, located in Suízhōu, Húběi, was a large set of *biānzhōng* bells. Their inscriptions collectively are comprised of nearly 2,800 characters, and their contents are devoted almost entirely to matters of musical pitch (see *WW* 1979b). This is an unusual case insofar as pre-Qin bronze inscriptions are concerned. Beginning from the mid Warring States period, the traditional form of inscriptions was considerably reduced, and inscriptions consisting of little more than the names of the persons responsible for the articles on which they were engraved appear in great numbers. This type of inscription is normally short and primarily records the artifact's date of manufacture, the government official responsible for its manufacture, the name of its maker, and so forth. Weapon inscriptions occupy a fairly large proportion of such inscriptions (see Fig. 15). The old style lengthy inscriptions, however, still had not yet disappeared by the mid Warring States period. In the 1970s, the late fourth century B.C. tomb of a king of Zhōngshān was discovered in Píngshān County, Héběi. Discovered in the tomb was an iron-legged bronze *dǐng*-cauldron (i.e., the so-called "Zhōngshān wáng Cuò *dà dǐng*") bearing an inscription 469 characters in length and a square *hú*-wine vessel bearing an inscription 450 characters in length (i.e., the "Zhōngshān wáng *fānghú*," see Fig. 16, also *WW* 1979a).

Prior to the Warring States period, the vast majority of bronze inscriptions were cast on bronzes; following the mid Warring States period,

however, they usually were engraved after casting. This is also true of the Zhōngshān bronzes mentioned above, whose lengthy inscriptions were incised with an engraving tool.

2. *Seal inscriptions*. Numerous official and personal seals remain from various states of the Warring States period. Thus, seals are also an important source for studying Warring States period script (see Fig. 17). According to ancient texts, the use of official seals had begun already during the Spring and Autumn period. Yet it would appear that none of the pre-Qin seals discovered thus far can be firmly dated to the Spring and Autumn period. While the vast majority of Warring States period seals are made of bronze, seals made of silver and jade are also common.[16]

3. *Coin inscriptions*. The use of minted coins in China started during the Spring and Autumn period, and by the Warring States period they were circulated in great quantities in many areas. Most of the pre-Qin coins discovered to date are bronze coins dating from the Warring States period. The shapes of the coins from the eastern states are relatively complex but can be divided into four large classes: spade money (shaped like a spade), knife money, round money, and *yībí* money (shaped like a cowry shell). Spade money was circulated primarily in Hán, Wèi, Zhào and Yān; knife money was circulated primarily in Qí, Yān and Zhào; round money appeared relatively late and seemingly was circulated in Hán, Wèi, Zhào, Qí and Yān; *Yībí* money was circulated only in Chǔ. A kind of plate-shaped gold coinage was also popular in Chǔ and was weighed when used. Although these plates have characters stamped on them, they are not actually true minted coinage. Some refer to them as "stamped gold" (*yìnzǐjīn* 印子金) while others call them *Yǐngyuàn* 郢爰 (see Figs. 18 and 19).[17]

Most of the coins from the six states bear place names, which must have been the names of the cities that put them into circulation. Some bear graphs indicating their weight or value. The meanings of the graphs on some coins, such as those appearing on the *yībí* money, are still not understood.

4. *Pottery inscriptions*. Pottery objects of the Warring States period often bear inscriptions. Most of the pottery inscriptions discovered thus far were made with seals which were stamped on the pottery articles prior to their firing (most are potters' seals), while a lesser number were engraved on the pottery before or after firing (see Fig. 20). Thus most pottery inscriptions are actually nothing more than seal inscriptions. Of the pottery inscriptions discovered to date from the eastern states, those from Qí and Yān are the most numerous.

16. Many seals from the states of Qí, Chǔ, Hán, Wèi and Zhào have the character "璽" *xǐ* "seal" written "鉨". This character is not found in old character dictionaries such as the *Kāngxī zìdiǎn*. In the writings of modern epigraphers and archaeologists, however, it is frequently seen. The *Xiàndài Hànyǔ cídiǎn* includes this character.

17. Most of them are stamped with the characters *yǐngchēng* 郢再, the second character of which has been erroneously deciphered as *yuán* "爰" in the past

5. *Bamboo slip and silk manuscript texts*. Prior to the use of paper made from plant fibers in China, for a long period bamboo slips and silk had served as the primary materials for writing. Bamboo slips were in use during the early Shang at the latest, whereas the use of silk as a medium for writing appeared slightly later. Since bamboo slips and silk are easily subject to damage or deterioration, few early writings on bamboo slips and silk have been preserved; the earliest of those discovered thus far date from the Warring States period.

During the early Western Jin dynasty, a Warring States period tomb of the state of Wèi was discovered in Jí Prefecture (present-day Jí County, Hénán) which contained a large cache of bamboo slips. Written on them were such texts as the "Bamboo Annals" and the *Mù Tiānzǐ zhuàn*. Unfortunately, the original forms of the graphs written on these bamboo slips have not been preserved. Since the 1950s, bamboo slips have been discovered in various Chǔ tombs excavated at Chángshā, Chángdé, Línlǐ, and Cílì in Húnán Province, at Xìnyáng in Hénán Province, and at Jiānglíng and Jīngmén in Húběi Province. Between 1986 and 1987, 282 bamboo slips were excavated from Chǔ tomb no. 2 at Bāoshān, Jīngmén, Húběi. The texts written on the slips are comprised of over 12,000 graphs, which is the largest number of graphs discovered thus far written on Warring States period bamboo slips.[18] In 1978, over two hundred bamboo slips were discovered in the early Warring States period tomb of Marquis Yǐ of Zēng mentioned above and amount to the earliest cache of bamboo slips unearthed to date (see Fig. 21). Zēng was a small dependency of Chǔ. The style of writing used in them was essentially the same as Chǔ's, so the bamboo slips in the Marquis' tomb may be viewed as Chǔ bamboo slips. No bamboo slips from the other states of the Warring States period have been discovered since the 1950s.

All the bamboo slip texts discovered thus far were written with brush and ink and most are records of the funerary objects that were buried with the person interred and records of the horses and carriages that

18. See *WW* 1988. Regarding the number of slips and the number of characters on them, see Wénwù Press 1991.

were used in the funeral. Aside from these, records of divinations, "judicial documents" (uncovered in a tomb at Bāoshān, Húběi) and divinatory texts concerning dates have also been discovered.

Only one complete Warring States period silk manuscript has been discovered thus far, and it, too, was from the state of Chǔ. This manuscript, which had been pilfered from a Chǔ tomb in Chángshā, Húnán, around 1942, ended up in the United States during the 1940s. It contains over nine hundred brush-written characters in addition to colored drawings that accompany the text. The text concerns myths related to astronomical phenomena and to the four seasons as well as to relevant taboos, and so forth (see Fig. 22).

Aside from the materials described above, other sources of Six States script include a small number of inscribed objects made of gold, silver, lacquer, wood, jade, stone, as well as stone engravings, but which will not be enumerated here (see Fig. 23).

Let us now turn our discussion to the sources of Six States script that have been preserved in works such as the *Shuōwén* and the "Tri-script Stone Classics," that is, the so-called *gǔwén*, or "ancient script."

As was mentioned in the preceding section, aside from the small seal graphs, the *Shuōwén* also includes a number of ancient script and *zhòuwén* forms. As explained in the *Shuōwén*'s postface, the primary source of the ancient script forms was the Confucian Classics discovered during the Western Han dynasty in the walls of Confucius's former residence, in addition to copies presented by Zhāng Cāng (fl. 3rd-2nd cent. B.C.) and others written in the ancient script (which included the *Shàngshū*, the *Chūnqiū Zuǒshì zhuàn*, etc.). The *Shuōwén*'s postface states:

> In the time of King Xuān, the Grand Historian Zhòu composed the Large Seal in fifteen *piān*. It differed somewhat from the ancient script. When Confucius wrote the Six Classics, and Zuǒ Qiūmíng compiled his commentary to the *Spring and Autumn Annals*, they both used the ancient script, and their meanings could be grasped and discussed.

From this passage we know that Xǔ Shèn used the term "*gǔwén*" to refer to graphic forms which predated the *zhòuwén*. Xǔ felt that even though the texts written in ancient script were later than the *Shǐzhòupiān*, their graphic forms were earlier than the *zhòuwén*, since Confucius and others had intentionally used a relatively more ancient form of script when writing the classics.

Following the emergence of paleography in modern times, the argument that the ancient script predated the *zhòuwén* came under suspicion, mainly because the ancient script forms collected in the *Shuōwén* are usually consistent with the Six States graphic forms, whereas they differ from

their corresponding forms found in the oracle bone inscriptions and in Western Zhou and Spring and Autumn period bronze inscriptions. For instance,

	Shuōwén ancient script	Six States Forms
鞭		
棄 (弃)		
明		
恆 (亙)		

The simplified form of "棄" *qì* "to discard," namely "弃", which we use today, is derived from the ancient script form. The character "明" *míng* "bright" in the oracle bone inscriptions was written in two ways, one derived from "囧" and "月", and the other from "日" and "月". In Western Zhou and Spring and Autumn period bronze inscriptions, *míng* is always derived in part from "囧" and not "日" (see Sec. 5 of this chapter).

Even before the discovery of the oracle bones, Wú Dàchéng (1883) in the preface to his *Shuōwén gǔzhòu bǔ*, opined that in view of the dissimilarities between the ancient script forms cited in the *Shuōwén* and their counterparts in the Zhou bronze inscriptions, what Xǔ Shèn called ancient script forms were actually late Zhou forms. Wú wrote:

> In my humble opinion, I suspect that what Mr. Xǔ [Shèn] construed as ancient script forms in the texts from the walls of Confucius's home had all been written during the Seven States period, near the end of the Zhou dynasty, at a time when the sounds of the language and the shapes of graphs all differed, and thus they no longer [resembled] the ones appearing in Confucius's old bamboo slips on which the Six Classics had been written (p. 2).

In his preface to the *Shuōwén gǔzhòu bǔ*, Chén Jièqí (in Wú 1883:1) also wrote, "I suspect that the old classics found in the walls of Confucius's home had been copied down by someone during the late Zhou dynasty; hence . . . many of the ancient script forms in them do not resemble those seen today on ancient bells and tripods." The classics written in ancient script collected during the Han dynasty quite obviously had been concealed at the time books were being burnt during the Qin dynasty. Wú's and Chén's thesis that these classics amounted to books which had been transmitted from the late Zhou period and had been written in the script in use at the time is quite plausible. Later on, Wáng Guówéi concluded from a large mass of data that the so-called ancient script forms were

graphs that had been used in the eastern states during the Warring States period. His interpretations appear in his "Tóngxiāng Xúshì yìnpǔ xù" 桐鄉徐氏印譜序 (Preface to *A Collection of Seal Inscriptions* by Mr. Xú of Tóngxiāng) (in Wáng 1940: *juàn* 6), "Zhànguó shí Qín yòng zhòuwén Liùguó yòng gǔwén shuō" (On the Theory that Qín Used *Zhòuwén* Script and the Six States Used Ancient Script During the Warring States Period) (in Wáng 1940: *juàn* 7) as well as in a letter written in response to Róng Gēng on the ancient script question.[19] Though we cannot accept Wáng's thesis that the *zhòuwén* were forms used in Qín, his views on the ancient script forms are correct. Over the past several decades numerous written materials from the Six States have been unearthed which provide a good deal of new evidence in support of Wáng's position in this regard.

On account of the differing views on the ancient script texts among the classicists of Han time, two schools emerged. One approached them negatively, viewing them with suspicion and holding that only the New Text versions of the classics—that is, the transmitted versions written in the clerical script which was in vogue during the Han dynasty—were credible. The other school placed credence in the ancient script and held the ancient script versions of the classics in high esteem. Xǔ Shèn belonged to the Old Text school. His views on the ancient script were by no means personal views; rather they were common to this school. Ancient script versions of the classics began to appear as early as the beginning of the Han period, yet it was not until the end of the Western Han that the ancient script text school formally came into being. At that point some two hundred years had elapsed since the time Qín Shǐhuáng unified the script, so few were familiar any longer with Six States script. On seeing that the ancient script graphs differed from the *zhòuwén*, the Old Text classicists construed the former as being older than the latter. Of course, that they arrived at such an erroneous conclusion was not necessarily due entirely to problems of cognition; rather their yearning to elevate the status of the ancient script classics may also have come into play.

During the Zhēngshǐ era (240–249) under the Wèi dynasty (220–265), the government had the *Shàngshū* and the *Spring and Autumn Annals* engraved on stone stelae. All the characters in the texts were written thrice in their respective ancient script, small seal, and clerical script forms. These are the so-called *Zhēngshǐ* Stone Classics, which are also known as the Tri-script Stone Classics (*Sāntǐ shíjīng*) or the Three Character Stone Classics (*Sānzì shíjīng*). The ancient script forms in the Tri-script Stone Classics are quite similar to those in the *Shuōwén* and both must have shared a common source. By the Tang dynasty the Tri-script Stone Classics had already

19. In Wáng 1984:436–38. Some claim that this letter was written in 1925, while others say 1926.

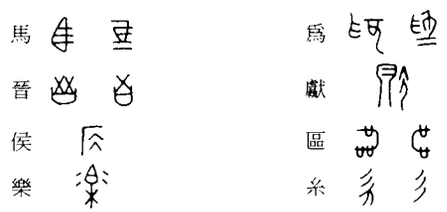
met with destruction, and later even rubbings of their texts were no longer extant.[20] Since the late Qing period, however, fragments of the stelae have been discovered one after another (see Fig. 24).

The ancient script forms preserved in the *Shuōwén* and in the fragments of the Tri-script Stone Classics constitute important source materials for the study of Warring States period script. All the ancient script classics originally were written on bamboo slips. So in actuality the ancient script forms of this sort are of the bamboo-slip and silk-manuscript variety. Yet since they were copied and recopied time after time, copyist errors were unavoidable.

The ancient script forms have also been styled "*kèdǒuwén*," or "tadpole script." This name stems from the tendency of writing the strokes comprising the ancient script forms with thick heads and fine tails, or thick mid-sections and fine tips, thus featuring shapes which do slightly resemble tadpoles. Some in the past have maintained that the writing of graphs in this way was not originally a feature of the ancient script but something concocted by the ancient script copyists of later times. Yet, as calligraphy of this same sort is seen on Chǔ bamboo slips, it is clear that the ancient script copyists of antiquity did not invent them out of thin air; rather it was merely that the unique features of this calligraphic technique were slightly exaggerated and systematized as well.

Discussed below are the key features of the shapes and styles of Six States script.

The currency of popular forms is a most prominent feature of the shapes and styles of Six State graphic forms. Of the popular forms, the most commonly seen are the simplified forms. For example,



The character "弃" *qì* mentioned above was also a simplified form. The popularization of simplified forms was a reflection of the ever-growing use of writing. As seen in the examples above, the character strokes comprising Six States script are usually more level and straight than those predating the Warring States period. This in itself was also a form of simplification.

20. Some during the Song dynasty saw fragmented rubbings from them; for hand-copies thereof, see Hóng 1588.

On the other hand, in the Six States script there was also the phenomenon of embellishing graphs with added dots or components. For example,

Of course, as compared with graphic simplification, this phenomenon was secondary.

Due to the existing phenomenon of radically simplifying graphs on a fairly wide scale, in addition to the lesser but still noteworthy phenomenon of embellishing graphs, the appearance of Six States script differs markedly from that of the late Western Zhou and Spring and Autumn period. Some of the peculiar graphic forms appearing in Six States script, however, had actually appeared as popular forms at an earlier date. It was merely that they had not enjoyed the same popularity then that they did during the Warring States period. The character "安" *ān* "peace," as it was written in Qí, is a case in point. In the Western Zhou "Gébó *guǐ*" inscription, which was written very perfunctorily, the character *ān* appears written  and  , and thus differs from the usual writing of the graph as seen in other Western Zhou bronze texts. This writing of the graph must have been a popular form at the time. In Qí script of the Warring States period, *ān* is found written as  ,  , etc., which clearly had the popular form as their source (see Zhāng 1970–71:116). Again, the element "宀" usually was simplified to ㇒ in Yān script during the Warring States period, yet this method of simplification already appears in Spring and Autumn period script (see the preceding section).

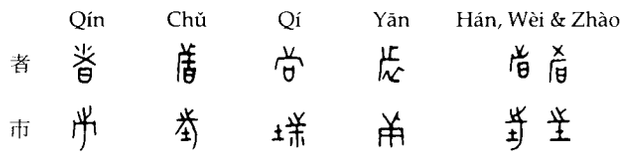
Aside from the currency of popular forms, Six States script exhibits yet another pronounced feature, namely, the use of variant forms in each state.

Already in the script of the Spring and Autumn period there appeared regional variants. For example, as seen in bronze inscriptions, calligraphers in the states of Qí, Lǔ, Xuē, Zhù, and Qǐ, all of which were situated within the borders of present-day Shāndōng Province, liked to write the upper part of the character "老" *lǎo* "old" as  and  . This method of writing the graph was not current in other regions. While acute changes in the script occurred during the mid Warring States period, the changes from state to state were usually dissimilar, as a result of which regional forms increased in great profusion.[21] Not only did Six States script differ markedly from that of Qín, but differences between those of the Six States

21. The examples of the simplification and embellishment of graphs cited above are mostly seen in inscriptions of one or a small group of states.

themselves also differed markedly. (The scripts of Hán, Wèi and Zhào, however, were relatively close, so we shall tentatively treat them as a unit in our discussion below.)

Viewed from the standpoint of the source materials dating from the Warring States period and later, some graphs were written quite differently from one state to another; for example, (Some of the examples of "者" *zhě* cited here are character components.)



Again, in Yān, "中" *zhōng* "center" was written  ;[22] in Qí, "馬" *mǎ* "horse" was written  and "大" *dà* "big" was written  (and thus was confused with "去" *qù* "to leave"), and in Hán, Wèi and Zhào, "隹" *zhuī* was written  and as  in Chǔ, all of which were peculiar to their respective regions.

Sometimes the character components used in one and the same graph were not used uniformly from state to state. For instance, the character "廚" *chú* "kitchen," which is written as such in both the clerical and standard scripts, originated in Qín and is derived from "广" "shelter" and "尌" *shù* as phonetic. In Chǔ, however, it was written "脮", derived from "肉" "meat" and "豆" *dòu* as phonetic; in Hán, Wèi and Zhào it was written "䐈" and "庱", derived from "肉" "meat" or "广" "shelter" and "朱" *zhū* as phonetic. There was also the phenomenon in the different states of one and the same term sometimes being written in its orthographic form and sometimes being represented by a loangraph, as well as the phenomenon of different states using different loangraphs to represent the same term. For example, the character "門" *mén* "gate," was a commonly used semantograph originally written  ; yet calligraphers in some states liked to use loangraphs in its place. In Qí, "聞" was used in place of "門"; and in Yān and Zhōngshān, "閔" was substituted for "門". In Hán, Wèi and Zhào, *mén* was sometimes written "閂", but whether the latter was a variant form or a loangraph is uncertain. In the script of the Hán, Wèi and Zhào region (which included Zhōu), there are also examples where "朱" *zhū* was borrowed to represent the character *chú* "廚" mentioned above

The *Shuōwén*'s postface states that during the Warring States period, the "shapes of characters differed" from state to state. In view of the situ-

22. On an ax found in the tomb of the king of Zhōngshān mentioned above, it appears written  . "中" *zhōng* originally was written ; probably it was first simplified to and then to .

ation described above, Xǔ Shèn's pronouncement is certainly in accord with the facts. This is not to say, of course, that the various states of the Warring States period did not influence one another, nor even that each character was represented by different forms in each state, but only that during this period the phenomenon of regional graphic forms was more severe than in any period that preceded or followed it. After Qín Shǐhuáng unified the country, the variant forms used in the Six States that did not conform with the graphs used in Qín were abolished. Consequently they did not have a notable effect on Chinese script later on. In an effort to negate the effects of Qín Shǐhuáng's unification of the script, some in recent times have denied the severity of the phenomenon of variant graphic forms during the Warring States period. Such arguments, however, do not coincide with the facts.

The relationship between the conventional and popular forms in Six States script is relatively complex. Some popular forms nearly displaced their original conventional counterparts, such as the form of "安" *ān* "peace" used in Qí mentioned above which was derived from "厂". This kind of popular form can be viewed as already having been adopted as a conventional form. Some popular forms coexisted with their corresponding conventional forms. Wáng Guówéi (1984:437) had already pointed out that the "Chénhóu Wǔ *duì*" and the "Chénhóu Yīnqí *duì*" from the state of Qí "were important ancestral temple vessels whose production and inscriptions were all the more important," which is the reason why the graphic forms on them differ from those appearing on pottery objects, weapons, coins and seals.[23] Similar situations occur in Chǔ script. For example, in the "Èjūn Qǐ jié" cast during the reign of King Huái of Chǔ (r. 328–299 B.C., i.e., tallies issued to Èjūn Qǐ's trade groups, that permitted them to pass through border gates and use ferry crossings), the graphic forms comprising their inscriptions are relatively neat and orderly (see Fig. 26). By contrast, the graphic forms appearing on the bamboo slips excavated from Chǔ tombs nos. 1 and 2 at Wàngshān in Jiānglíng, Húběi, which are close in date to the "Èjūn Qǐ jié," are relatively simple and cursory. The written forms in some cases were distinctly different, for example,

In the examples above, the written forms in the tally inscriptions coincide fairly closely with their counterparts in the Western Zhou and Spring and

23. Chénhóu Wǔ was Duke Huán of Qí under the Tián clan (d. ca. 375 B.C.), and Chén Yīnqí was King Wēi of Qí (r. 356–320 B.C.).

Autumn period bronze inscriptions, whereas those appearing in the bamboo texts differ substantially.[24] This precisely reflects the difference between the conventional and popular forms.

The conventional forms used in each state were relatively close to their corresponding forms of the Western Zhou and Spring and Autumn period, so they shared a good deal in common. When we inspect the source materials of Six States script, however, we can hardly find any materials that were clearly uninfluenced by the popular script. For instance, the "Chénhóu Wǔ *duì*" inscription, which Wáng Guówéi described as "an important ancestral temple vessel," has the simplified form of "獻" *xiàn* "to present" cited above. The "Èjūn Qǐ jié" cited above has such simplified forms as 爲 ("爲"), 鑄 ("鑄"), and so forth. So this is why we said earlier that the traditional conventional forms were all but routed by the popular forms in Six States script.

Among the bronzes discovered in the Warring States period Chǔ tomb in Shòuxiàn were important ancestral temple vessels of immense proportions, such as the "Yǎn Hàn *dǐng*" (made by Xióng Hàn, that is, King Yōu of Chǔ, r. 237–228 B.C.), whose inscription was also casually incised in a style of script that is close to that in the Chǔ bamboo texts. The inscription on this large *dǐng*-cauldron also has the simplified forms of "爲" *wéi* and "鑄" *zhù*. (*Zhù* is written as 鑄, which is even simpler than the form seen in the "Èjūn Qǐ jié" inscription.) The element "金" in "銅" *tóng* "bronze" is also written in the same way as the form seen in the Wàngshān bamboo texts cited above (see Fig. 27). Unearthed from this same tomb, the inscription on the "Yǎn Fěi(?) *pán*", on the other hand, was written in the "Mosquito leg script," which was an artistic style of script. Yet even an inscription like the latter, which sedulously strives for perfection, likewise has the simplified form of 爲 *wéi*; moreover, the two "木" *mù* "wood" in the character "楚" *chǔ* were reduced to one (see Fig. 28). Hence it would appear that in some states at least, the popular forms to a very large extent had already replaced the traditional conventional forms by the late Warring States period.

4.4 The Qín System of Writing

The Qín system of writing refers to Qín script of the Spring and Autumn and Warring States periods, along with the seal script.

We will first review the sources of information on the Qín system of writing. (For the sake of convenience, materials on the Qin dynasty clerical

24. The written form of "馬" *mǎ* "horse" in the bamboo texts is similar to the way it is written in inscriptions from Hán, Wèi and Zhào, and perhaps had been influenced by the latter.

script will be presented here along with all the others.) Presented first are sources which appear on material objects transmitted from that era, including some that have already been lost or damaged but which have been recorded in the past.

1. Stone inscriptions. Stone inscriptions are an important source of the Qín system of writing. The most famous ancient stone inscriptions in China, the "Shígǔ wén," or "Stone Drum inscriptions," belong to the Qín system of writing. Early in the Tang dynasty, ten stone monuments were discovered in Tiānxīng County (present-day Fèngxiáng County, Shǎnxī), on each of which were engraved four-character poems, running sixty to seventy or seventy to eighty characters in length. The stones range in height from around 70 to 80 cm or more (see Mattos 1988:22) and are shaped like tall *mántou* (i.e., steamed rolls). Because they vaguely resemble Chinese drums, they usually are referred to as the *Shígǔ*, or "Stone Drums." As a result of numerous studies of their texts, it already has been demonstrated that the Stone Drum inscriptions represent Qín script of the Eastern Zhou era. With respect to their actual date of manufacture, however, many different dates have been proposed, ranging from the early Spring and Autumn period to the mid Warring States period. From the standpoint of their graphic forms, it would appear that the Stone Drums could not predate the late Spring and Autumn period, nor could they postdate the early Warring States period. On the whole, their script can be viewed as Qín script dating from the period straddling the Spring and Autumn and Warring States periods. The Stone Drums are presently held at the Palace Museum in Běijīng, yet more than half of their original inscriptions have been obliterated (see Fig. 29). The earliest extant rubbings of the Stone Drum inscriptions date from the Song dynasty. Yet even at that time there were already sections of the texts which had been obliterated.

As for Qín stone inscriptions dating from the mid Warring States period, there are the "Zǔ Chǔ wén," or "Imprecations against Chǔ" inscriptions. These texts record declarations to the spirits of the imprecations of a king of Qín against a king of Chǔ. At that time, one stone was engraved for each spirit addressed, so their inscriptions are essentially alike. During the Northern Song dynasty three stones were discovered bearing the "Gào Wūxián" 告巫咸, "Gào Dàchénjuéqiū" 告大沉厥湫, and "Gào Yàtuó" 告亞駝 (滹沱) inscriptions. The original stones, as well as rubbings of their inscriptions, have all been lost; at present only reproductions of their inscriptions remain (see Fig. 30). With regard to the date of the "Zǔ Chǔ wén," opinions also differ. Some regard them as the imprecations of King Huìwén of Qín against King Huái of Chǔ, while others regard them as the imprecations of King Zhāo of Qín against King Qǐngxiāng of Chǔ. Those subscribing to the former theory generally outnumber those who subscribe to the latter one. With respect to their specific date of manufacture, the argument that they were produced during the thirteenth year of Huìwén's reign as king (312 B.C.) seems more convincing.

After unifying the country, Qín Shǐhuáng traveled throughout the empire and had stelae erected recording his accomplishments at Yíshān (Shāndōng), Tàishān (Shāndōng), Lángyétái (Shāndōng), Zhīfú (Shāndōng), Jiéshí (Héběi), and Guìjī (Zhèjiāng). His son, Qín Èrshì (r. 209–207 B.C.), also had an imperial edict engraved on each of these stelae, explaining that the inscriptions on them had been engraved by Qín Shǐhuáng. While these stone tablets might have provided excellent source materials for studying the small seal script, unfortunately the original objects have nearly all been destroyed; only fragments of the Lángyé inscriptions remain, which preserve for the most part Qín Èrshì's edict (see Fig. 31). Nevertheless, a complete reproduction of the Yíshān inscription has been transmitted from antiquity (see Fig 32). Reproductions of rubbings of fragments of the Tàishān stone inscription have also been passed down.

Reproductions of rubbings of the Tàishān stone inscriptions appear in a work called *Jiàngtiē*, which most likely was extracted from the Song work *Tàishān Qínzhuàn pǔ*, compiled by Liú Qì (d. 1117) (see Róng 1935b). It preserves 146 graphs (the composite graph 夫=, standing for 大夫, is counted as a single graph). The so-called "Song rubbings of the Tàishān Stone Inscription," which have been passed down to our time and had once belonged to a Ming time collector named Ān Guó, contain nineteen characters more than does the *Jiàngtiē* version. But problems of authenticity loom over Ān Guó's version. Not only is its calligraphy far inferior to that in the Lángyétái stone inscription, but it also contains graphs written in ways that conflict with the Song reproductions. For example,

	Jiàngtiē Version	Ān Guó's Version
平		
靡		

The writing of the two graphs above in Ān Guó's version coincides with their corresponding forms seen in modern editions of the *Shuōwén*, whereas the forms of these graphs appearing in the *Jiàngtiē* version agree with those seen on Han dynasty seals engraved with the seal script. In ancient written materials that predate the Han seals, in most cases the vertical stroke in the character "平" *píng* "level" extends to the horizontal stroke at the top of the graph. While the character "靡" *mǐ* "no, not" does not occur in these materials, the written form of the element "非" *fēi* "no, not" seen in them agrees with the way it appears written in the *Jiàngtiē* version of this element. Moreover, according to Mǎ Héng's study, the character *fēi* in the *Shuōwén* was also originally written  , but was later changed to  , as is seen in modern editions of the *Shuōwén* (see Mǎ 1977:

229). This shows that even though the seal forms in the *Jiàngtiē* version of the Tàishān stone inscriptions have been recopied and are not totally representative of the originals, they are still basically reliable, while those appearing in Ān Guó's version have been tampered with by some later individual in some cases. In his studies "Qín Shǐhuáng kèshì kǎo" (A Study of Qín Shǐhuáng's Stone Inscriptions) and "Qin Tàishān kèshí kǎoshì" (Studies of Some Ancient Stone Inscriptions), Róng Gēng (1935a, 1935b) early on correctly pointed out that Ān Guó's version was a "copy" of the original. (He also pointed out the problems surrounding the character *mǐ*.) The rubbing Ān Guó relied on was probably a handcopy of the Song type, in which the section containing Qín Shǐhuáng's inscriptions may possibly have even been intentionally forged by some later individual. A Ming period rubbing containing twenty-nine characters from Qín Èrshì's proclamation is all that remains of the Tàishān inscriptions. Based on the graphs therein, it seems likely that it too was based on a Song handcopy. The remnant of the stone from which the rubbing was taken was partially destroyed by fire during the middle of the eighteenth century and was rediscovered during the reign of the Jiāqìng emperor (1796–1820) still bearing some ten graphs; what remains of it is now preserved at the Dàimiào Temple in Tàiān, Shāndōng. Some believe that what remains on it are fragments of the original inscription, but this is doubtful. A Yuan dynasty reproduction of the Guìjī stone inscription has also been transmitted but some in the past have doubted its reliability. The characters *píng* and *mǐ* in it are identical to the forms appearing in Ān Guó's version of the Tàishān inscription. In addition, the writing of the characters "陳" *chén* (with "申" as an element on the right), "甲" *jiǎ* (derived in part from "丁" vis-à-vis "十"), "中" *zhōng* (written 中), "得" *dé* (in which the upper part of the element on the right is written "見"), "皆" *jiē* (which is derived in part from 白 and not 曰), "同" (which is derived from 冂 and not 冃), are all in agreement with their written forms in the *Shuōwén* and not with the seal forms found in Qin and Han bronze and stone inscriptions. Again, the component on the left in "刑" *xíng* as in 刑名 *xíngmíng* "name of a penalty or punishment" is written "幵" rather than "井", which is also at odds with Qin and Han script (see Zhāng 1985: 349–352). So there is some justification for the suspicions of earlier individuals regarding the veracity of the Yuan reproduction.

Some stone inscriptions written in the small seal script dating from the Han and post-Han periods also remain, among which the Wei Tri-script Stone Classics are relatively more important.

2. *Bronze inscriptions*. As for Qín bronze inscriptions of the Spring and Autumn period, there are the early Spring and Autumn period *zhōng*- and *bó*-bells made by Duke Wǔ of Qín mentioned in Sec. 2 of the present chapter (see Fig. 33), the "Qíngōng *zhōng*" (which was actually a *bó*-bell) that was discovered during the Song dynasty but was lost later on, and the "Qíngōng *guǐ*" which was discovered during the early Republican period (see Fig. 34). The "Qíngōng *guǐ*" and the "Qíngōng *zhōng*" discovered during the Song dynasty were made by the same ruler of Qín. Some believe the ruler responsible for them was Duke Jǐng of Qín (r. 576–537 B.C.), while others think it was Duke Gòng (r. 608–604 B.C.). Aside from these datings, other suggestions have been put forth as well. The inscriptions on the "Qíngōng *guǐ*" and "Qíngōng *zhōng*" on the whole are representative of Qín script of the mid Spring and Autumn period.

Qin bronze inscriptions of the Warring States period are seen mostly on weapons, weights and measures, tallies, and so forth. Of these, the most famous is the inscription on the "Shāng Yāng *liàng*" (also called the "Shāng Yāng *fāngshēng*") made during the eighteenth year of Duke Xiào of Qín (344 B.C.) (see Fig. 35).

After Qín unified the country, Qín Shǐhuáng's edict of 221 B.C., proclaiming the unification of weights and measures, was either engraved or cast on numerous weights and measuring instruments. During the reign of Qín Èrshì, an additional edict was added along with the former so as to clarify that these were his father's inscriptions. Some weights and measures produced during the reign of Èrshì have both edicts cast on them. Some Qín weights and measures also have inscribed on them their specific weights and place names. Qín weights and measures inscribed with these edicts, as well as the so-called "*zhàobǎn*," "edict plates," made of bronze, which originally were either inlaid or attached to weights and measures, have been discovered continuously over the centuries (see Figs. 36–37). The inscriptions on these weights, measures, and edict plates constitute the majority of Qín bronze inscriptions discovered thus far. Aside from them, Qín dynasty weapons and other inscribed artifacts have also been discovered. Many inscribed bronzes of the Han dynasty were also written in the seal script.

Many of the Qín bronze inscriptions of the Warring States period and of the period following unification were incised with engraving tools. Moreover, they usually were engraved rather perfunctorily and thus constitute important materials for the study of the problems related to the formation of the clerical script.

Qin and Han coin inscriptions were all written in the seal script but consist of few characters. Qin coin inscriptions, for example, are primarily of two types: the *bànliǎng* 半兩, and the *liǎngzī* 兩甾 (錙). No further remarks regarding these coin inscriptions need be added here.

3. *Seals and sealing-clay inscriptions*. Numerous Qín seals dating from the late Warring States period and the period following unification of the country have been discovered over the centuries. While most seals were

inscribed with seal script, many have also been discovered that were written in a popular form of seal script that may be construed as early-period ancient clerical script or as being close to ancient clerical script. Even more seals dating from the Han dynasty have been discovered, the inscriptions on which are usually in seal script (see Fig. 38).

Prior to the use of paper, seals were used primarily to stamp the sealing clay used to seal documents, letters, or other articles. The inscriptions appearing on sealing clay are sometimes called "sealing clay script" (*fēngní wénzì*). Sealing clay script of the Han dynasty has been discovered in vast quantities (see Fig. 39). Though some sealing clay inscriptions from the Warring States period have been discovered, the quantities have been quite small, for which reason we did not mention them when discussing Six States written materials above. Few Qin dynasty sealing clay inscriptions have been discovered as well.

4. *Pottery inscriptions*. Seals bearing the names of potters or government offices were usually imprinted on Qín pottery objects and on bricks and tiles made during the latter part of the Warring States period and the Qin dynasty (see Fig. 40). Some Qin dynasty measuring instruments made of pottery were imprinted with Qín Shǐhuáng's edict by using large seals, each bearing four characters, rather like the movable type of later times (see Fig. 41). Aside from these, characters engraved on Qín pottery are also seen.

Pottery objects dating from early Western Han usually bear seal inscriptions. The characters appearing on Han dynasty roof tile-ends are mostly written in seal script. Some bricks from this period also have seal script on them.

5. *Lacquer-ware inscriptions*. Qín lacquer ware of the late Warring States period and of the Qin dynasty often have characters branded or incised on them. Lacquer ware of the early Western Han bearing brand marks are also common and are normally written in seal script.

6. *Bamboo slip, wooden tablet and silk manuscript texts*. Qín bamboo slips were discovered for the first time in the 1970s. In late 1975, over 1,100 bamboo slips were discovered in Qín tomb no. 11 at Shuìhǔdì, Yúnmèng County, Húběi (see Wénwù Press 1990). Their contents cover such subjects as Qín law, notations of major events, and works concerning the auspicious and inauspicious nature of things, called *rìshū* 日書. The occupant of the tomb was buried during the thirtieth year of Qín Shǐhuáng or shortly thereafter. The bamboo texts were written at different times, and it is estimated that they do not predate the period from the late Warring States period to the early years of the Qin dynasty. These materials are the most important ones we have for studying Qín clerical script (see Fig. 42). Discovered in tomb no. 42 of this same cemetery were two wooden tablets

bearing letters written home. Based on their contents, they were written near the end of the Warring States period on the eve of Qín's unification of the country. They are also very important for the study of graphic structures (see Fig. 43). In 1979, a wooden tablet containing a legal code was discovered in a late Warring States period Qín tomb in Qīngchuān County, Sìchuān, whose script closely resembles that on the Qín bamboo slips discovered at Shuìhǔdì (see *WW* 1982). In 1986, 460 bamboo slips and four wooden tablets on which maps were drawn were discovered in a late Warring States period Qín tomb at Fàngmǎtān in Tiānshuǐ, Gānsù. The bamboo texts predominantly consist of *rìshū* (see *WW* 1989b). In 1989, a Qin period tomb at Lónggǎng, Yúnmèng County, a batch of bamboo slips bearing Qin legal codes along with a wooden tablet were also discovered (see *JHKG* 1990). The graphic forms on these slips and tablet are similar to those written on the Qín slips from Shuìhǔdì. Bamboo slips are usually quite narrow and normally can accommodate only one line of characters. Wooden tablets are rectangular boards on which several lines of characters could be written.

Near the end of 1973, a large cache of silk manuscripts was discovered in tomb no. 3 at Mǎwángduī, near Chángshā, Húnán, which had been buried along with its occupant during the twelfth year of Emperor Hàn Wéndì (168 B.C.). Their subject matter is quite diverse and includes such important canonical texts as *Lǎozǐ*, *Zhōuyì*, and so forth, as well as medical texts, divinatory texts, and so on. Some of these texts are written in seal script, or in a type of early period clerical script which closely resembles seal script. At least some of these texts were copied during the Qin era.

Aside from the objects described above, there are also other less important material objects bearing Qín script which need not be presented here.

Now let us briefly discuss the small seal forms in the *Shuōwén*. The *Shuōwén* contains over nine thousand small seal forms and is the richest and most systematic source of information we possess on the Qín system of writing. The *Shuōwén*, however, was not completed until the mid Eastern Han. The shapes of some small seal forms as written at that time were already erroneous. In addition, the scholars of the script of that time, including Xǔ Shèn, sometimes could not avoid having misconceptions about the structural composition of the small seal forms. Their misconceptions sometimes led them to distort the shapes of the seal forms. After the *Shuōwén* was completed, it was copied and re-engraved for new editions time after time; and the copyists and engravers, as well as less than brilliant collators, introduced new errors in some instances. Consequently, the graphic shapes of some of the small seal forms in the *Shuōwén* are unreliable and require corrections in the light of the small seal forms seen on Qin and Han time material objects, such as those engraved on bronzes and

stones. For example, the character "戎" *róng* "war" appears in the *Shuōwén* written , and is analyzed there as being derived from "戈" *gē* "spear" and "甲" *jiǎ* "armor." In Western Zhou bronze inscriptions this character appears written , , etc.; in the Yìshān stone inscription it appears written ; and in Han seals written in seal script, as well as those written in clerical and standard script, it is always derived from "十" and not "甲". The seal form of this graph given in the *Shuōwén* is obviously questionable. In ancient script, "甲" *jiǎ* was originally written "十," which is no different from the element "十" in "戎". But the Western Zhou bronze forms of "戎" *róng* cited above prove that the element "十" was not "甲" *jiǎ* but was a simplified form of (, read *guàn*). *Guàn* originally resembled a shield. The spear and shield, respectively, were important offensive and defensive weapons in antiquity. That the elements "甲" "shield" and "戈" "spear" were combined to form the character "戎" *róng* "weapon, military" is quite fitting. Certain scholars of the script probably mistook the element "十" in "戎" for the ancient writing of "甲" (as armor was also important military equipment), so the seal form of *róng* was changed to . This very same error was made in writing "早" *zǎo* as and "卓" *zhuō* as .[25] Aside from these, other examples of seal forms having been miswritten in the *Shuōwén* include ("走") which was miswritten , ("欠") which was miswritten (on the meaning of the graphic shapes of "走" and "欠", see Sec. 7.1.5.3 below), as well as mentioned above, which was miswritten , and so forth. Additional examples need not be introduced here.

The Tang dynasty small seal calligrapher Lǐ Yángbīng (fl. eighth cent. A.D.) took it upon himself to correct the written shapes of seal forms in the *Shuōwén* on the basis of the Qín stone inscriptions. For instance, he changed in the upper part of the character "欠" mentioned above to . His approach, however, was heavily criticized later on. Lǐ's arbitrarily emending an ancient book was wrong. On the other hand, there is absolutely nothing wrong with using the Qín stone inscriptions to emend the incorrect forms given in the *Shuōwén* based on their graphic shapes. The shapes of the small seal characters appearing in Song editions of the *Shuōwén* seemingly stemmed from Lǐ's emendations at first but then were emended back again, yet never completely so. The *Sìbù cóngkān* photolithographic copy of a Song handcopy of the *Shuōwén jiězì xìchuán tōngshì*, for instance, has the character "欠" written and not .

While we have pointed out that the graphic shapes of the seal forms in the *Shuōwén* are incorrect in some instances, our intent was by no means meant to depreciate its value. The *Shuōwén* is one of the most important works we have on the early script. Without the *Shuōwén*, there would be

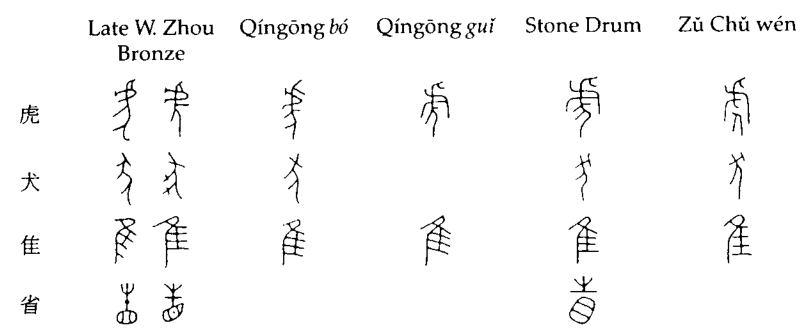
25. We are unable to explain as yet the structural composition of *zǎo* and *zhuō*.

many graphs whose structures would be unclear to us; there would be many graphs whose ancient written forms could not be connected with their clerical and standard script forms; and there would be a number of graphs that would even have been lost altogether. In short, if one wishes to study the structure and history of Chinese graphs, he cannot dispense with the *Shuōwén*. Many scholars of the script in the past, however, placed blind faith in the *Shuōwén*, which is equally wrong. In sum, we should do our utmost to utilize the existing ancient written materials to correct and supplement the *Shuōwén*, so as to render it even more serviceable.

Discussed briefly below are the shapes and styles of graphic forms appearing in the Qín system of writing.

The Qín system of writing, like the other ancient scripts, had its own standard script forms and popular forms. As the popular forms in the Qín system formed a basis for the clerical script, we shall describe them in the following section and discuss only the standard script forms below.

As attested by Qín bronze and stone inscriptions of the Spring and Autumn and Warring States periods, Qín script of the early Spring and Autumn period was very close to that of the late Western Zhou, and was especially close to that seen in inscriptions represented by the "Guójì Zǐbó *pán*" and others, whose graphic forms are relatively more orderly (see Fig. 44). During the entire Spring and Autumn period, the changes in the shapes and styles of Qín script were manifested for the most part by an ever-increasing degree of orderliness and symmetry of graphic shapes. This tendency is seen clearly in the chart below, wherein graphs are arranged chronologically (some are character components):



In order that graphs would appear more orderly and symmetrical, the strokes in Qín writing were sometimes made curvilinear, as in the case of the upper part of the character "虎" *hǔ* "tiger" cited above. For this same reason, and to facilitate their writing as well, strokes were flattened and straightened, as in the case of "犬" *quǎn* "dog" above. As a consequence of these changes, the degree of pictography of graphs declined more and more. The graphic shapes of small seal graphs are even more orderly and

symmetrical than those in the Stone Drum and "Zǔ Chǔ wén" inscriptions, and they are even less pictographic (see below).

As for the graphic forms of the other states of the Spring and Autumn period, some do not exhibit any appreciable tendencies of having been written in a more orderly and symmetrical manner. Though some exhibit such a tendency, the specific techniques selected differ from those practiced in Qín. In Sec. 2 of this chapter, we mentioned the mid and late Spring and Autumn period bronze forms which are long and narrow and artistic in appearance. They are a case in point. Consequently, already by the Spring and Autumn period, Qín script differed markedly from those of the other states in terms of its calligraphic style. By the Warring States period, changes in the scripts of the eastern states were enormously intensified, so that the differences between them and Qín script became more and more pronounced. In the preceding section, the matter of Warring States period "aberrant forms" was discussed and need not be repeated here.

The phenomenon of variant forms influenced economic and cultural exchanges between each region, and it was especially detrimental to the Qin dynasty's domination of territories outside its own. So after Qín Shǐhuáng unified China, he immediately began work on "standardizing script," using Qín script as a model to unify Chinese script. Before this, during the gradual process of unifying the country, the Qin dynasty no doubt had already begun work of this same sort in its newly occupied territories.

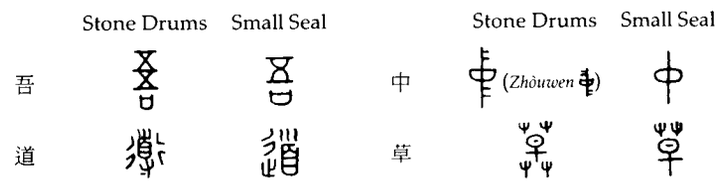
With respect to Qín Shǐhuáng's unification of the script, the *Shuōwén*'s postface puts it this way:

> After that [i.e., after Confucius's time] . . . [the country] was divided into seven states . . . the scripts of which differed from one another. When Qín Shǐhuáng first unified the world, his counsellor-in-chief, Lǐ Sī, presented a memorial requesting that they [i.e., the scripts] be made uniform and that those [characters] which were not in accord with Qín script be done away with. (Note: In actuality, Lǐ Sī had not yet served as counsellor-in-chief.) [Lǐ] Sī wrote the *Cāngjié piān*; Zhào Gāo, Keeper of the Carriages, wrote the *Yuánlì piān*, and the Grand Historian Húmǔ Jìng wrote the *Bóxué piān*. They all took from the large seal script of the Historian Zhòu but in some cases abbreviated and modified it somewhat. This is what is called the small seal.

This section gives one the impression that the small seal script, which Qín Shǐhuáng adopted to unify the country's script, consisted of graphic forms that had been formulated through the simplification of the *zhòuwén* by Lǐ Sī and the others. The "Yìwénzhì" chapter of the *Hànshū* gives a different account. In regard to the contents of the *Cāngjié piān*, the *Yuánlì piān*, and the *Bóxué piān*, the "Yìwénzhì" states: "While the characters [in these works] were largely taken from the *Shǐzhòu piān*, their seal forms often differ somewhat [from those in the *Shǐzhòu piān*] and constitute what is called Qín seal script." Here the author merely points out the objective fact that Qín seal script (i.e., small seal script) differed in shape and style from the *zhòuwén* script. Viewed from the standpoint of the relevant ancient written materials available at present, the *zhòuwén* script was by no means a script used in the state of Qín on the eve of its unification of the country (see Sec. 2 of this chapter). The small seal script had in fact evolved gradually from the script used in the state of Qín during the Spring and Autumn and Warring States periods and was not an "abbreviated and modified" script derived directly from the *zhòuwén* script. The explanation given in the *Shuōwén*'s postface is obviously amiss.

When the small seal forms are compared with the Stone Drums forms, two rather striking changes become apparent. First, the small seal forms lean even further in the direction of orderliness and symmetry and are even less pictographic. For example, (The small seal form of "爲" *wéi* "to make" given here is based on an inscriptional form):

Secondly, some graphic forms underwent obvious simplification. For example, (The character "吾" *wú* cited here from the "Stone Drum" inscriptions is a character component; the small seal form of "中" *zhōng* here is an inscriptional form.):



The two types of changes above can be seen in Qín script of the Warring States period. In the "Shāng Yāng *liàng*" inscription, "爲" *wéi* is written ; and in the inscription on the "Chéngxiāng Zhuó *gē*" 丞相觸 (i.e., Chéngxiāng Shòu Zhuó 丞相壽燭) 戈, produced during the reign of King Zhāo of Qín, the element "角" in "觸" is written . In both cases the written forms of these graphs are quite close to their small seal counterparts but differ from their Stone Drum counterparts. These are examples of changes of the first type. In the "Zǔ Chǔ wén" inscription, the element "吾" in "徒" had already been reduced from to "五"; and the character "中"

zhōng was already being written 中, both of which are identical to their small seal counterparts. The character "道" *dào* "path" had been simplified to 𨒅, which is also close to its small seal counterpart. These are examples of changes of the second type. The "Xīnqī *hǔfú*," passed down from an earlier period, and the "Dù *hǔfú*" discovered in recent years were both cast in Qín prior to unification, yet the script on them does not differ in the least from post-unification script (see Fig. 45). In short, Qín script of the Spring and Autumn and Warring States periods gradually evolved into the small seal script, so there is no distinct dividing line separating pre-unification Qín script from small seal script. Qín script of the Spring and Autumn and Warring States periods along with the small seal script may collectively be termed seal script. The small seal script was not regarded as ancient script in traditional grammatology which took the *Shuōwén* as its core. Viewed from the standpoint of the actual relationship between the small seal script and Qín script of the Spring and Autumn and Warring States period, treating it in this way is clearly improper.

While Qín script was undergoing changes during the Warring States period, the existence of variant forms was unavoidable. As Qín Shǐhuáng sought to use Qín script as a basis for the unification of the scripts used in China, Qín script itself had to be systematically arranged first, from which a kind of standard script could be extracted. It must have been toward this end that Lǐ Sī and the others were prompted to compile the *Cāngjié piān*, and so forth. Their main task was to systematize and unify the existing script and not to create a new script. In his preface to Zhuō Dìngmóu's (1930) *Zhāngcǎo kǎo*, Qián Xuántóng (1886–1939) writes:

> Xǔ Shūzhòng (Shūzhòng was Xǔ Shèn's *zì*) says that Lǐ Sī and the others abbreviated and modified the large seal script to make the small seal script. In actuality, Qín script of the Warring States period was already as such. Thus it is clear that Lǐ Sī and the others merely adopted existing abbreviated and modified forms, unifying and promoting [them as a standard]; it was not that these forms had been created by them.

Qián's observation is quite correct.

Following the appearance of this system of standardized graphic forms as arranged by Lǐ Sī and the others, there may not necessarily have been a special term at that time which was used to distinguish it from the Qín system of writing in use prior to unification. The first use of terms such as "large seal," "Qín seal," and "small seal" must have occurred during the Han dynasty. During the Qin dynasty, probably the only calligraphic term in general use was "*zhuàn*" (篆). In the *Shuōwén*, *zhuàn* is glossed as "*yǐn shū*" (引書 lit. stretch > elongate + script), the meaning of which is obscure. 瑑 *zhuàn*, which has the same reading as 篆 *zhuàn*, means "to make decorative by engraving" (雕刻爲文).[26] In antiquity, the characters "篆" *zhuàn* and "瑑" *zhuàn* could be used interchangeably (see Jiǎng 1987:8). The "Shènshì" chapter of the *Lǚshì chūnqiū* (p. 211) states: 功名著乎槃 (盤) 盂, 銘篆著乎壺鑑 "Let their distinctions be recorded on *yú* and *pán* vessels and the inscriptions be recorded on *hú* and *jiàn* vessels," in which the term 銘篆 *míngzhuàn* is used in the sense of 銘刻 *míngkè* "inscription." I rather suspect that "篆" *zhuàn*, as in 篆文 *zhuànwén* ("seal script"), should be read as 瑑 *zhuàn*. Unlike the clerical script which did not appeal to refined tastes, the *zhuàn* script was highly regarded and was deemed suitable for inscription on bronze and stone and thus earned the name "瑑" *zhuàn*

As a people's writing habits are shaped by long-term practices, it was not easy, of course, for the Qin dynasty to change the writing habits of the peoples in the territories subjugated by it. Yet since the unification of the script was essentially beneficial to the nation, and since Qín law, which was exceedingly harsh, was being vigorously and expeditiously enforced, this task was completed within what amounted to a relatively short period of time. Nevertheless, the influences of Six States script by no means completely vanished at once. This is evidenced by the silk manuscripts unearthed from Han tomb no. 3 at Mǎwángduī, Chángshā. In some of the relatively early manuscripts unearthed from this tomb, the influence of Chǔ script is quite evident. For example, the style of calligraphy appearing in several divinatory texts discovered among the manuscripts, which were copied around the time of unification, can be construed more or less as representing seal script; yet many of the graphs therein are quite clearly Chǔ graphic forms.[27]

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26. See Yán Shīgǔ's commentary to "Dǒng Zhòngshū zhuàn," in *Hànshū*, (Zhōnghuá ed.), *juàn* 56. "文" *wén* here was used in the sense of "紋" *wén* "decoration."

27. Many years prior to unification, Qín had already occupied the Chángshā area, which originally had belonged to Chǔ. In his study of these texts, Lǐ Xuéqín (1981:36–37) points out that among the Mǎwángduī silk manuscripts,

> the script in the "Zhuànshū yīnyáng wǔxíng" 篆書陰陽五行 text [i.e., what we have referred to as a divinatory text above], which was written during the Qin period, contains numerous ancient Chǔ forms. For instance, the written form of "稱" *chēng* therein is written in exactly the same way as it appears in the phrase "郢稱" *yǐngchēng* (previously interpreted as "郢爰" *yǐngyuán*) on Chǔ gold coins. The character "劍" *jiàn* in the phrase "冠, 帶劍" is written 𠇣, which is also ancient script in character. In the sentence: 幷天地左右之, 大吉, the copyist wrote the character "左" *zuǒ* in its ancient form 𠂇, whereas in the sentence 幷天地而左右之, 一擊十 which appears later in the text, he emended it to "左". Similarly, in the sentence 凡戰, 左天右地, 勝, the copyist wrote the character 戰 *zhàn* according to its ancient script form which was derived from "曰", whereas in the sentence 王戰, he wrote it according to the Qín style of writing. The copyist evidently was from Chǔ and had not yet fully mastered the legally unified style of script imposed by the Qin dynasty.

The calligraphic style of the script in Text A of the *Lǎozǐ* discovered at Mǎwángduī is close to that of early period clerical-script, which was close to the seal script. Since the personal names of Emperor Gāozǔ (r. 206–195 B.C.) Liú Bāng, and the Empress Lǚ (r. 194–187 B.C.) Lǚ Zhì, were not treated as taboo characters to be avoided, this text probably was copied sometime between the end of the Qin dynasty and the beginning of the Han period. In this text one still finds in a few rare instances characters which are Chǔ forms. For instance, the character "關" *guān* "a frontier pass" is written  , which differs from the Qín form but coincides with that found in the "Èjūn Qí jié" mentioned above (see Lǐ Yùmín 1981). Yet it is clear that the influence of Chǔ script was gradually disappearing in the former territories of Chǔ. The situation in the former territories of the other eastern states may well have been the same.

The Qin dynasty's utilization of the standardized seal script to unify the nation's script not only eliminated the phenomenon of "written characters differing in form" in each region, but also brought about a major change with respect to the profusion of graphic variants that had existed in the ancient script, which in turn was of major significance to the historical development of Chinese characters. However, this is not to say that Qin dynasty script had no variant forms. For the time being we shall not discuss the differences between the small seal script and the popular forms of seal script or clerical script forms, but just taking the small seal script in itself, variant forms occurred within it as well. The *Shuōwén* has a number of examples of variant small seal forms. It gives "則" *zé* as a small seal form and "劕" as its *zhòuwén* counterpart; yet in the small seal script seen on Qín weights and measures and on edict plates, these two forms of "則" *zé* occur alternately at the same time.

The inconsistent placement of graphic components in the ancient script was quite pronounced. For example,

 was sometimes written (般, Bone)

 was sometimes written  (男, Bone)

 was sometimes written  (旁, Bronze)

 was sometimes written  (杞, Bronze)

 was sometimes written  (聖, Six States)

 was sometimes written  (沽, Six States)

There was already a marked decrease of occurrences of this phenomenon in the small seal script, yet exceptions were by no means rare. The different placement of graphic components of characters written in the clerical script as compared with their placement in their corresponding

small seal forms was termed "*lìxíng*" 隸行 (lit. "*lì* shift") by some of those who have discussed styles of script in the past. They believed that the positions of these elements in the small seal script had been shifted by those responsible for the clerical script. In actuality, the so-called *lìxíng* are usually only a reflection of the inconsistent placement of graphic components which existed in the small seal script itself. For example, in the small seal script, "和" *hé* "harmony" was written in two ways:  and  ; similarly, "徒" *tú* "follower" was written  and  . The *Shuōwén* gives the former written forms in each case, both of which differ from the common clerical script forms of these graphs. Consequently, these cases have been cited as examples of the *lì* shift. In reality, the common clerical script forms of these graphs merely followed a tradition that differed from the one followed in the *Shuōwén* and nothing more. The inconsistent placement of character components still had not been eradicated even in the clerical and standard scripts. More will be said about this when the phonograms are discussed below.

By the Han period, the clerical script had replaced the small seal script as the primary style of calligraphy in common use. The historical development of Chinese script at this point breaks away from the ancient stage and enters the clerical and standard script stage. From the Han dynasty on, small seal script served chiefly as an old style of calligraphy used for engraving seals as well as for inscribing metal and stone objects.

4.5 Formation of the Clerical Script

The "Yìwénzhì" chapter of the *Hànshū* and the *Shuōwén*'s postface both state that the clerical script first appeared during the Qin dynasty and was a simple and convenient calligraphic style of script that had been devised at that time to cope with the hectic tasks associated with the administration of justice, prison management, and the like. Aside from this, the popular tradition that credited Chéng Miǎo with having invented the clerical script for Qín Shǐhuáng has also been widely circulated since Han times.[28] However, there are discrepancies between these accounts and the facts.

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28. The *Shuōwén*'s postface says: 及亡新居攝 . . . 時有六書 . . . 三曰篆書, 即小篆. 秦始皇帝使下杜人程邈之所作也 "At the time [Wáng Mǎng, emperor of] the now defunct house of Xīn was still serving as regent . . . there were six styles of writing . . . The third was seal script, namely, the small seal, which was what Qín Shǐhuángdì had Chéng Miǎo of Xiàdù produce." Chéng Miǎo is credited here with having produced the small seal script. Chéng Miǎo, however, usually has been associated with the production of the clerical script in the past. In his "Shènghuáng piān," Cài Yōng wrote: 程邈刪古立隸文 "Chéng Miǎo got rid of ancient [script] and established the clerical script forms" (*apud* Zhāng Huáiguàn, *Shūduàn*, in Zhāng c. 860: *juàn* 7). During the Southern and Northern

Judging from Qín written materials discovered by archaeologists, the formation of the clerical script occurred during the Warring States period. As was stated above, in comparison with the scripts of the other states of the Warring States period, Qín script appears to have been relatively more conservative. Yet, for the sake of convenience, the people of Qín in their daily use of script continuously deformed and transformed the graphic shapes of the conventional script. Out of these changes the popular forms of Qín script emerged, which in turn served as a basis for the formation of the clerical script.

Instances of the coexistence of conventional and popular forms can be seen in the bronze inscriptions dating from the reign of Duke Xiào of Qín (r. 361–338 B.C.). The inscription on the "Shāng Yāng liàng," produced during the eighteenth year of Duke Xiào (344 B.C.), is comprised of very formally executed conventional forms, whereas the inscription on the "Shāng Yāng *máoduī*" (i.e., inscribed on the metal cap at the end of the spear shaft), produced during the sixteenth year of Duke Xiào (346 B.C.), is comprised of very perfunctorily written popular forms (see Fig. 46). After Duke Xiào, the use of writing became more and more commonplace and popular forms in turn became more and more popular. Popular forms appear in bronze inscriptions (mostly on weapons), in inscriptions on lacquer ware, as well as on seals and pottery.[29] The ways in which these popular forms were written are in many cases already identical or similar to the ways their corresponding clerical script forms were written. For example, the element "羊" *yáng* "sheep" in the the upper half of the character 義 *yì* "righteous" as it appears written in the "Xiāngbāng Yì *gē*" (相邦義 [i.e., Zhāng Yì 張義] 戈), produced during the thirteenth year of Huìwénjūn (325 B.C.), was already being written 羊 (vis-à-vis 羊 in formal seal script). Similarly, the element "水" *shuǐ* "water" was already being written as three short horizontal strokes, i.e., 氵 (vis-à-vis 氵 in formal seal script), in the character "游" *yóu*, as seen in the "Xiāngbāng Jiū Yóu *gē*" 相邦樛游戈, produced during the fourth year of Huìwénjūn (334 B.C.) or during the fourth year of Huìwénwáng (321 B.C.), and in the character 漆 *qī* as seen in the "Shàngjùn *gē*" 上郡戈, produced during the third year of King Zhuāngxiāng (247 B.C.) or during the third year of Qín Shǐhuáng

dynasties period (420–589), Yáng Xīn of the Song, Wáng Sēngqián of the Qi, and Jiāng Shì of the Northern Wei dynasties all said that Chéng Miǎo had produced the clerical script on behalf of Qín Shǐhuáng as well. Duàn Yùcái and others suspected that the last sentence in the passage quoted from *Shuōwén* above originally may have appeared below the line which followed it in the text, i.e., 四曰佐書, 即秦隸書 "The fourth is administrative style, that is, Qín clerical script," and that it had been misplaced in later editions of *Shuōwén*.

29. With respect to the sources of the inscriptions appearing on Qín weapons and so forth mentioned in the present work, the reader should consult Qiú 1974.

(244 B.C.). The element *zhě* "者" in the character "遠" was already being written 者 (vis-à-vis 者 in the formal seal script) in the inscription on the "Shàngjùn *gē*" 上郡戈, produced during the fortieth year of King Zhāo of Qín (267 B.C.).[30] The element "女" *nǚ* "woman" in the character "奴" *nú* "slave" was already being written 奴 (vis-à-vis 奴 in formal seal script) as seen in the "Gāonú *tóngquán*" 高奴銅權, produced prior to unification.

In the popular script of the state of Qín, the practice of transforming the rounded and curved strokes of formal seal script into square and angular strokes was quite popular. It was solely due to this practice that some characters came to exhibit pronounced overtones of the clerical script. The characters 廿 (廿) and 帀 (帀) as seen in the "Xiāngbāng Rǎn *gē*" (相邦冉 [i.e., Wèi Rǎn 魏冉] 戈), produced during the twenty-first year of King Zhāo of Qín (286 B.C.), are cases in point.

Insofar as the study of calligraphic styles is concerned, the Qín bamboo slip texts discovered during the 1970s are even more valuable than the other materials cited above. Not only are the characters written on them more numerous, but they were written directly on the slips with a brush, which in turn allows us to see the actual appearance of the characters that were in daily use at that time. Careful examination of the characters written on the large cache of bamboo slips unearthed from Qín tomb no. 11 at Shuìhǔdì reveals that the clerical script had already basically taken shape by the time the texts on them were written.

The writing on the Qín bamboo slips from Shuìhǔdì is not formal seal script. Judging from the calligraphy on them, the rounded and curved strokes of the formal seal script had already been broken down or changed into square, angular, level and straight strokes. For example, the character "又" *yòu* (including its occurrences as a graphic element) was written 又 in formal seal script, whereas it is written 又 in the bamboo slip texts. Judging from the graphic shapes of the characters written on these slips, the ways of writing many graphs clearly differed from the ways their corresponding formal seal forms were being written, yet these same graphs do not differ at all, or only slightly, from their corresponding early period clerical script forms of the Western Han. For example (The small seal forms enclosed in parentheses are provided for reference):

毋	毋	(毋)	羊	羊	(羊)	明	明	(明)
州	州	(州)	人	人	(人)	皆	皆	(皆)
立	立	(立)	亦	亦	(亦)	即	即	(即)
老	老	(老)	者	者	(者)	書	書	(書)

30. The element "者" *zhě* in the character "奢" *shē* "extravagant" as seen in the Qín pottery inscription illustrated in Fig. 40, i.e., 者, is even closer yet to the clerical script form of this graph.

The formation of these graphic forms was related to the calligraphic practice of using square, angular, level and straight strokes. The last example given above, "書" *shū*, originally was derived from "聿" *yù* "stylus" and "者" *zhě* as phonetic. In the bamboo slips, however, this graph was simplified by fusing together the upper part of "者" and the lower part of "聿". The character *shū* was written in more or less the same way as this in the early period clerical script of the Western Han. If the diagonal stroke in the element *zhě* in *shū* were deleted, the graph would not differ at all from the way it was written in the clerical and standard scripts of a later period. A phenomenon well worthy of note in these bamboo slip texts is that in nearly all the characters that have the element "水" *shuǐ* "water" on the left, it is written 三, whereas characters having this element written in its formal seal form, i.e., 氺, are exceedingly rare. (The element "水" in the character "江" *jiāng* in 江陵 *Jiānglíng* in the Shuìhǔdì "Yǔ shū" 語書 text is written 氵.)

Based on the situation described above, the graphic forms represented in the Qín bamboo texts may be regarded as new graphic forms which had evolved from popular forms. Following the excavation of these texts, the script on them has often been regarded as representing Qín clerical script, which seems quite plausible.

Discovered in Qín tomb no. 70 at Fènghuángshān, Jiānglíng, Húběi, in 1975, were two jade seals engraved with the same inscription:[31]

A

B

The graphic forms in these seals are obviously dissimilar. The script on seal A is formal seal script, whereas the style of the script on seal B coincides with that in the bamboo slip texts. The occupant of this tomb may have intentionally had two seals engraved with the two styles of script that were in vogue at the time. These seals show that the style of script in the Qín bamboo slips was a new style that had already parted ways with the seal script. As mentioned above, the two wooden tablets bearing letters written home that were discovered in Qín tomb no. 11 at Shuìhǔdì were written rather perfunctorily. As compared with the script on the bamboo slips discovered in tomb no. 11., the style of the script on these tablets is even closer yet to the clerical script of later times and unquestionably can be regarded as Qín clerical script.

31. After Wú 1978:50. Some believe that tomb no. 70 at Fènghuángshān dates from the time of King Zhāo of Qín, while others believe that it dates from the time of Qín Shǐhuáng.

The texts on the bamboo slips from tomb no. 11 at Shuìhǔdì were written between the end of the Warring States period and the early years of the Qin dynasty. The texts on the wooden tablets were written on the eve of unification. So it is evident that the formation of the clerical script had already essentially taken place by the end of the Warring States period. It quite obviously had evolved from the popular script of the state of Qín during the Warring States period, and it was not something that had been created at the behest of Qín Shǐhuáng. In his preface to Zhuō Dìngmóu's (1930) *Zhāngcǎo kǎo*, Qián Xuántóng points out that Kāng Yǒuwéi (1857–1927) and Liáng Qǐchāo (1873–1936) had both recognized that clerical script had evolved naturally and that it was not the creation of one individual or another. Qián expresses his agreement with this point of view and goes on to say that clerical script "must have had its beginnings during the time of the Warring States and was used in popular circles." In his *Zhōngguó wénzìxué*, Táng Lán (1979:165) points out that the *Hànshū* and other texts state that during the Qin dynasty,

> clerical script was devised to cope with the sundry tasks involved in the administration of justice, prison management, and the like, but this is tantamount to reversing cause and effect. In actuality, it was a style of script that was already in common use among the people, and so when it came to tackling such multifarious tasks, they had no choice but to use it.

All these views are quite accurate. Nevertheless, while the clerical script was undergoing a gradual formational process, the government scribes who regularly made use of writing in their work most certainly played an important role in this process, and Chéng Miǎo may well have played an even more important role. It is also possible that when the government offices in Qín adopted clerical script, it already had been systematized by Chéng Miǎo, which in turn generated the tradition that he created clerical script for Qín Shǐhuáng.

During the Warring States period, Six States popular forms also had a tendency to evolve along the same calligraphic lines as the clerical script. The script on the Chǔ bamboo slips and silk manuscripts, as described by the late Guō Mòruò (1972:8), "is simple in form, flat and level in shape, and is close to the clerical script of later periods." This phenomenon is seen in Qí pottery inscriptions, too, wherein the element 亣 in 夻 was written 大;[32] the element 朩 in "棠" *táng* was written 木; and 卒 (*zú* "卒")

32. The writing of 亣 as 大 already appears in bronze inscriptions as early as the Spring and Autumn period. Aside from pottery inscriptions, this writing of the graph is sometimes also seen in Qí script as well as in Hán, Wèi and Zhào script. In Qin dynasty clerical script, however, it was normally written 亽.

was written either 𡈼 or 𡈼. These modes of character simplification are quite similar to the ways the seal script was transformed into the clerical script. Even if Qín had not succeeded in unifying all of China, Six States script would sooner or later have also evolved into a kind of script that resembled clerical script.

The clerical script represented in the Qín bamboo texts was still undergoing change and had not yet reached the apex of its development. This aspect of the script was manifested in two ways. First, many graphs were still being written like their formal seal script forms. For example,

木： 自： 行： 塞：

As compared with the later clerical script form 又, the character 𠂇 mentioned above was still closer to its seal form as well.

Secondly, even though some characters at that time were already being written like, or similar to, their mature clerical script forms, during this same period they were also still being written in ways that were closer to their seal forms. For example,

比
之
言
辵

In actuality, the various ways of writing the character components "言" and "辵" merely reflect the changes they underwent in the course of evolving from seal to clerical script forms.

These two phenomena are still seen in early Western Han clerical script, but the extent of the differences from the mature clerical script at that time was no longer quite so dramatic as in the examples above. The clerical script of the Qin and early Western Han may be collectively termed early period clerical script so as to distinguish it from the mature clerical script of a later period.

While Qín popular forms were evolving into clerical script forms, they were sometimes written in ways that are similar, or identical, to their *cǎo* (草 lit. "grass") or cursive forms of later times. Modified versions of some of the graphs written in this way were later adopted as standard clerical script forms. The character "之" *zhī* cited above from the Qín bamboo slips, where it is written 𠂤, is a case in point. This method of writing "之" *zhī* had evolved from writing the character 𠂤 with rapid, perfunctory strokes. Later on, through a process of "regularization," similar to the process involved in the simplification of Chinese script in recent times that has rested on transforming cursive forms into standard-script type forms, the graph evolved into the mature, standard clerical script form of *zhī*

commonly seen, namely, 之. In the examples cited above from the Qín bamboo slips we find the element "止" *zhǐ* in "辵" being written 乚. Later on, the element "止" was written in essentially the same way in the cursive script. The element "辵" is frequently seen written 辶 in mature, standard clerical script, which was also a byproduct of the "regularization" of the cursive script features of this element.

The script on the wooden tablets discovered in tomb no. 4 was written in an especially perfunctory way. The element "工" in "攻" *gōng* was written 𠂇; the element "止" in the characters "𠂤" (從) *cóng*, "徒" *tú*, and "定" *dìng* was written 𠂇; the element "辵" in "遺" *yí* was simplified to 𠂆 or 𠂉. Perfunctory writing of this sort, which may be regarded as popular clerical script, later formed the basis of the cursive script.

With regard to the origins of the clerical graphic forms, certain questions remain which need clarification.

It stands to reason that since the clerical script evolved from Qín popular script of the Warring States period, its graphic forms should be relegated to the Qín system of writing. However, while some of the clerical graphic forms do not coincide with the small seal forms given in the *Shuōwén*, they do coincide with the graphic forms dating from the Spring and Autumn period or with certain forms seen in Six States script. Moreover, examples of this kind can not be treated as being too few to warrant consideration. Consequently, some scholars of the script think that the clerical script "was in part composed of forms adopted from Six States script." This is actually a misconception. As was pointed out in our discussion of the Qín system of writing, some of the small seal forms appearing in the *Shuōwén* differ from those that were in actual use during the Qin and Han periods. The primary evidence cited by those who hold that the clerical script was partially derived from Six States script consists of problematical graphs of this sort, such as the writing of "戎" *róng* as 𢦏 in the *Shuōwén*, which was discussed in the preceding section. In actuality, the clerical script form of "戎" is identical to the form appearing in Qín Shǐhuáng's Yíshān stone inscription, so it undoubtedly had originated from the Qín system and not from Six States script. Similarly, even though the clerical script form 𠂇 (欠) differs from the small seal form 𣪊, as given in the *Shuōwén*, its origin clearly can be traced back to the seal form 𣪊, as seen in Qin and Han bronze and stone inscriptions. In sum, just because some clerical script forms do not coincide with certain problematical seal forms given in the *Shuōwén*, we cannot conclude that these forms must have originated from Six States script.

Certain complex phenomena associated with the evolutionary process of graphic forms can also easily lead one to form misconceptions about the origin of the clerical graphic forms. For instance, in the oracle bone script the character "朝" *zhāo* is derived in part from "月" *yuè*, whereas the

small seal form of *zhāo* is derived from "舟" *zhōu* and not *yuè*.[33] (In early Western Zhou bronze inscriptions there are also some examples of the element "朝" in the character "廟" *miào* being derived from "月".) On the surface, the clerical and standard script forms of *zhāo* would not appear to have originated from the Qín system of writing but were a carry over from some other ancient writing tradition. However, the character *zhāo* in all its occurrences in the Qín bamboo slip texts is derived from *zhōu*. In Eastern Han stelae inscriptions there are also many examples of the character *zhāo* being derived from *zhōu*. This shows that the element *yuè* in the clerical and standard forms of *zhāo*, like that in the characters "朕" *zhèn* and "服" *fú*, was an abbreviated version of *zhōu*. Thus there is no question that the clerical and standard script forms of *zhāo* originated from the Qín system of writing. Linking it with the relatively earlier ancient form of *zhāo*, which is derived from *yuè*, is inappropriate.

Similar to the case of *zhāo* is that of "明" *míng*. In the Qín system, the character *míng* was derived in part from "冏" and from "日" *rì* in the Six States script (see Sec. 3 of the present chapter). The character *míng* used nowadays coincides with the Six States form. In the clerical script, however, *míng* is usually derived from "目" *mù* and not "日". In the perfunctorily written small seal inscriptions appearing on Qin dynasty weights and measures, the element 冏 (冏) in *míng* was sometimes abbreviated as 冏; 目 was a further simplification of the latter (which was confused with "目" *mù* "eye"). It probably was for the sake of reducing the writing of this element by one stroke or for the sake of bringing it into conformity with the syssemantic principle that the ancient script form of *míng* was universally adopted later on.

Even though we may disagree in principle with the theory that a segment of the clerical script forms had their origins in Six States script, on the other hand, we would not deny the possibility that the seal forms or popular seal forms, including the clerical script itself, may well have been influenced in certain ways by Six States script. Even if we were to exclude the tendency of those residing in the eastern states following unification to use the old graphic forms of their former states when writing seal and clerical script, we can still find certain indications of such influences. For example, in the inscriptions of both Qín and the eastern states, there appears a tendency to simplify the element "鼎" *dǐng* in 鼒 ("則" *zé*) to "貝" *bèi*. In the East, as early as the end of the Spring and Autumn period or the early Warring States period, the character *zé*, written with *bèi* as an element, already appears in the "Hóumǎ Covenant Texts" of Jìn (in these

33. In the *Shuōwén* the character "朝" *zhāo* is derived from "𦥑" as signific and "舟" *zhōu* as phonetic. While *zhāo* appears in Han time seals derived in part from *zhōu*, it has "𦥑" on the left and not "𦥑". *Zhōu* and *zhāo* were phonetically very close in Old Chinese.

texts the character *zé* in many cases is still derived from *dǐng* as well). It is possible that the abbreviation of *dǐng* into *bèi* in the Qín system was due to the influence of eastern states writing. Again, in the case of "於" *yú*, it was often simplified to 𠂤 in the Qín bamboo slip texts; and in some of the perfunctorily inscribed texts on weights and measures, it appears written as 𠂤 (similar forms of the graph are still seen in Han time stele inscriptions). In Chǔ script of the Warring States period, the character "於" was also written 𠂤 in some instances (e.g., see the Chángshā Yǎngtiānhú Chǔ bamboo slips). Whether or not the written form of *yú* in the Qín system had been influenced by Chǔ script is an open question worthy of consideration.

During the Qin dynasty, the small seal was the principal style of script in use, whereas clerical script was only a burgeoning secondary style of script whose social status was quite low. The term "*lì*" itself, which at that time meant "state-owned slave, prisoner-in-servitude," is indicative of its status. Some claim that clerical script was so dubbed on account of its having been "used in the affairs concerning prisoners-in-servitude and state-owned slaves" (施之於徒隸),[34] while others claim that it was so dubbed on account of the Qín officials' having "had the prisoners-in-servitude and state-owned slaves assist in writing (documents)" (令隸人佐書).[35] In short, clerical script was looked upon with disdain by the upper strata of the ruling class. That the Qín rulers permitted officials to use clerical script in dealing with routine matters was done under duress and out of necessity and not because they liked or valued this kind of script. On more formal occasions, clerical script was not used.

Nevertheless, as clerical script was far more convenient to write than the small seal script, it was not possible to check its development over the long run. The encroachment of clerical script on the small seal script's domain is already quite evident in the inscriptions appearing on Qín weights and measures. As these inscriptions are imperial edicts concerning the unification of measurements and expressing the ruler's intent that these edicts forever be applied, one would expect formal seal script to have been used in such inscriptions. Yet of the inscribed weights and measures which remain from that period, examples of the inscriptions on them having been engraved very perfunctorily are by no means lacking. The written forms of characters appearing on them, such as "毋" *wú*, "明" *míng*, "皆" *jiē*, "者" *zhě* and so forth, are completely identical to the clerical script forms in the Qín bamboo slip texts mentioned above. Considered overall, the script in perfunctorily written inscriptions of this sort

34. See the "Yìwénzhì" chapter of the *Hànshū* (Zhōnghuá ed., p. 1721).

35. See Wèi Héng 衛恆 (Jìn dynasty), *Sìtǐ shūshì* 四體書勢, mentioned in his biography in *Jìnshū* (Zhōnghuá ed., p. 1064).

still cannot be regarded as true clerical script, since not one has been discovered thus far in which the element "水" *shuǐ* in the character "法" *fǎ* "law" is written in the clerical style, i.e., 𠂤. Nevertheless, these edict inscriptions, which contain numerous clerical-style elements, were indeed foreboding of the fate of the small seal script which was on the verge of being superseded by the clerical script.

During the Qin dynasty, the clerical script in fact had already shook the small seal script from its dominant position. By the Western Han dynasty, which was not so distant from the time the Qin dynasty utilized small seal script to unify the country's writing system, clerical script was formally substituted for the small seal script and became the principal style of script in use. So, in a manner of speaking, it could be said that the Qin dynasty had in fact used clerical script to unify the nation's writing.

5

The Evolution of the Shapes and Styles of Chinese Characters

Part 2: The Clerical and Standard Script Stage of Chinese Writing

The clerical and standard script stage of Chinese writing began during the Han dynasty and has lasted up to the present. Graphic forms written in mature clerical script closely resemble those written in standard script; so even though the clerical script was replaced by the standard script at a very early date, it has not customarily been treated as a form of ancient script.

During the Western and Eastern Han period, clerical script was the primary style of script in general use, with the cursive script serving as an auxiliary style. Probably sometime during the mid Eastern Han period, a simpler and more convenient form of popular script evolved from the clerical script in daily use which we shall tentatively term the neo-clerical style. By the late Eastern Han, semi-cursive script had come into existence and was based on the neo-clerical and cursive scripts. It was probably sometime between the Han and Wei periods that standard script came into existence, which was based on the semi-cursive script. After the appearance of standard script, by no means were the clerical and neo-clerical scripts suddenly overshadowed. It was not until after the Wei-Jin period, which lasted some two hundred years, that standard script finally supplanted them as the dominant form of script in use.

5.1 Source Materials for the Study of the Clerical and Standard Script Stage

For the sake of convenience, we shall first discuss the various source materials related to the clerical and standard script stage of development.

On account of the fact that during this stage most of the relatively radical changes in graphic shapes and styles occurred during the Western and Eastern Han and the Wei-Jin period, the source materials introduced here date primarily from that period, while some dating from the Southern and Northern Dynasties will only be mentioned in passing. Discussion of Sui and Tang as well as later materials will be omitted. The source materials will be discussed below categorically, essentially according to the nature of the media on which graphs were written or engraved.

1. Stone and Grave-Tablet Inscriptions. Prior to the discovery of the wooden tablets dating from the Western and Eastern Han and the Wei-Jin period during the late Qing dynasty, stone inscriptions were the most important source materials available for the study of the graphic shapes and styles of this period.

Stele inscriptions constitute the most important stone inscriptions dating from this period. The practice of inscribing stone tablets probably did not emerge until the Eastern Han period and flourished during the mid and late Eastern Han. So the majority of the Han dynasty stone inscriptional graphs collected by earlier individuals date from the mid and late Eastern Han. Only scattered remains of Western Han stone inscriptions have been discovered; and the number of early Eastern Han stone inscriptions discovered is also not great.

Of the Western Han stone inscriptions whose dates are certain, the graphs engraved on the "Zhào èrshíèr nián qúnchén shàngchóu kèshí" (dated the twenty-second year of Suí, king of Zhào, or 158 B.C.) and the "Lǔ liùnián běibìshí" (dated the sixth year of King Gōng of Lǔ, or 149 B.C.) are written in small seal script. The earliest datable stone inscriptions written in clerical script dating from the Western Han are the "Bāzhōu mín Yáng Liàng mǎi shān jì," dated the second year of the Dìjié era (68 B.C.) and one dated the second year of the Wǔfèng era (56 B.C.), both of which date from the reign of Emperor Xuān (r. 73–48 B.C.).

The stele inscriptions of the Eastern Han are normally written in clerical script. The calligraphy of the stele inscriptions dating from the late Eastern Han period is usually quite attractive, such as that in the "Shímén sòng" (a precipice inscription also called the "Yáng Mèngwén sòng"), the "Yī Yīng *bēi*" (also called the "Kǒngmiào zhì shǒu miào bǎishí zúshǐ *bēi*"), the "Lǐqì *bēi*" (also called the "Hán Chì zào Kǒngmiào lǐqì *bēi*"), the "Kǒng Zhòu *bēi*," the "Huáshān *bēi*" (also called the "Xīyuè Huáshān miào *bēi*," the "Shǐ Chén qián hòu *bēi*," the "Xī xiá sòng" (a precipice inscription), the "Hán Rén míng," the "Cáo Quán *bēi*," the "Zhāng Qiān *bēi*," and the "Xīpíng stone classics," all of which have been lauded by calligraphers of later times (see Fig. 48).

Wei and Western Jin stele inscriptions are also usually written in neatly and carefully executed clerical script. Eastern Jin stelae, on the other hand, are mostly written in neo-clerical script.

Since the Southern and Northern Dynasties, standard script became the dominant style of script used on stelae.

Grave tablets (*mùzhì* 墓誌) are by nature similar to the grave stelae. However, stelae were erected above ground, whereas grave tablets were buried in tombs. As both stone and brick were used in the production of grave tablets, the term "stone inscriptions" does not adequately cover all the graphs written on grave tablets.

In the graves of criminals and the like dating from Qin and Han times, brick tiles inscribed with the identities, places of origin, and names of the deceased have been discovered. These can be viewed as being proto-grave tablets. The practice of relatives placing grave tablets in graves did not become popular until the Jin period (and perhaps arose at that time as a result of the government's prohibition on the private erection of grave stelae). Grave tablets were in vogue during the Southern and Northern Dynasties and their use had become a fairly well-established custom. The epitaphs were generally engraved on square slabs made of stone or brick and record information on the family background of the interred and a brief biography, after which follows a rimed passage called a *míng* 銘, which is why the epitaphs are also called *mùzhìmíng* 墓誌銘.

Eastern Jin and Southern and Northern Dynasties stelae and grave tablets constitute important source materials for the study of the neo-clerical and standard scripts.

2. Bamboo and Wooden Slip and Wooden Tablet Texts. During the Western and Eastern Han period, while bamboo and wooden slips still served as the main materials for writing, the use of wooden tablets also was fairly widespread. After Cài Lún improved the method of producing paper during the mid Eastern Han period, paper increasingly served as a medium for writing. But it was not until the Southern and Northern Dynasties period that paper rather thoroughly displaced bamboo and wooden slips and wooden tablets as a medium for writing. During the Jin dynasty, even though paper was already in wide use, bamboo and wooden slips and wooden tablets were still being used to record government documents and records.

Since the end of the Qing dynasty (i.e., the beginning of the twentieth century), numerous Han time bamboo and wooden slips and some dating from the Wei-Jin period had been discovered now and then in Western and Eastern Han and Wei-Jin period frontier fortress sites located in the Northwest. Since the 1950s, numerous bamboo books have been dis-

covered in Han tombs situated in Húnán, Húběi, Ānhuī, Shāndōng, Gānsù, Qīnghǎi, and Jiāngsū provinces.

The Han bamboo and wooden slips unearthed from the frontier fortress sites have customarily been divided into three types, based on their places of discovery:

A. The Dūnhuáng bamboo and wooden slips were discovered at Dūnhuáng, Ānxī, Jiǔquán, and Dǐngxīn (Máomù) in Gānsù Province. During the Han period, these places belonged to Dūnhuáng and Jiǔquán prefectures; nevertheless, the Han bamboo and wooden slips unearthed from these places have usually been called the Dūnhuáng bamboo and wooden slips (see Figs. 49–50).

B. The Jūyán bamboo and wooden slips were discovered at various sites along the banks of the Éjìnà River in Gānsù and Inner Mongolia. During the Western Han period, the frontier fortresses located at these places were under the jurisdiction of the Jiānshuǐ and Jūyán commanderies in Zhāngyē Prefecture; nevertheless, the bamboo and wooden slips unearthed at these places have usually been called the Jūyán bamboo and wooden slips (see Figs. 51–52).

C. The Lop Nur Han bamboo and wooden slips were discovered on the northern shores of Lop Nur Lake in Xīnjiāng. Their number is small. Since the site of their discovery is near the so-called Lóulán site, some have also called them the Lóulán Han bamboo and wooden slips.

The bamboo and wooden slips described above have often been discovered at the sites of Han time government agencies and beacons connected with the frontier fortresses and most are documents and records as well as private letters left behind by officers and soldiers who were stationed at those sites. Their dates range from the latter part of Emperor Wǔ's reign (r. 140–85 B.C.) to the late Eastern Han (yet the number of those dating from the late Eastern Han are few).

Most of the bamboo and wooden slips discovered in tombs are books and funerary-furnishing inventory lists (*qiǎncè* 遣冊). None of the Han time bamboo and wooden slips discovered at frontier fortresses dates from the early Western Han period. The bamboo and wooden slips found in tombs such as those discovered in tomb no. 1 at Yínquèshān, Línyí, Shāndōng, tomb nos. 1 and 3 at Mǎwángduī, Chángshā, Húnán, tomb no. 1 at Shuānggǔduī, Fùyáng, Ānhuī, tomb 247 at Zhāngjiāshān, Jiānglíng, Húběi, and the group of Hàn tombs at Fènghuángshān, Jiānglíng, all date from the early Western Han (i.e., up to and including the early years of Emperor Wǔ reign) (see Figs. 53–54).

The Han period slips from the frontier fortresses are mostly made of wood, whereas relatively more made of bamboo are found among those

discovered in tombs. Aside from them, some wooden tablets have also been discovered at the frontier fortress and tomb sites.

Wei and Jin period bamboo and wooden slips have primarily been unearthed at the "Lóulán site" to the north of the western side of Lop Nur Lake as well as in the sites located in the northern sector of Mínfēng, Xīnjiāng. As for the dates recorded on the slips, they range from the Wei dynasty of the Cáo family (220–265) to the early Eastern Jin period (317–420), yet most of them date from the Western Jin (265–316) (see Figs. 55–56). A small number of bamboo and wooden slips have also been discovered in several Wei-Jin period tombs.

The styles of script selected for bronze and stone inscriptions are usually rather conservative. Since everyday script was normally used on bamboo and wooden slips and on wooden tablets, the value of the script appearing on them for the study of the evolution of Chinese script exceeds that of the script appearing on stelae. The gradual maturation of the clerical script and the gradual formation of the cursive script can be seen in the Western Han slips. Early neo-clerical script is found on slips dating from the mid and late Eastern Han. With respect to the study of neo-clerical script and the semi-cursive and cursive scripts, the Han-Wei bamboo and wooden slips provide valuable insights.

3. *Writings on Silk and Paper.* As mentioned in 4.4 above, a large quantity of silk manuscripts was discovered in an early Western Han tomb (no. 3) at Mǎwángduī, Chángshā in 1973. Aside from a small number which are written in seal script, most of the silk manuscripts are written in early period clerical script. A portion of them are written in a style which is closer to seal script, suggesting that they were copied as early as the end of the Qin dynasty or the beginning of the Han, whereas the rest probably were copied during the time of Emperor Wén (r. 179–157 B.C.) (see Figs. 57–58).

Before the 1950s, a small quantity of silk manuscripts consisting of letters and various lists written in clerical script were discovered at Han period frontier fortress sites located at Dūnhuáng and Jūyán (including Jiānshuǐ).

Aside from bamboo and wooden slips, writings on pieces of paper were found at the Wei-Jin period "Lóulán site" that date from roughly the same period as the Wei-Jin bamboo and wooden slips. They consist of letters, documents, and records, a number of which are fragmentary. Insofar as the study of the styles of script is concerned, the value of these writings on paper is greater than those on the wooden slips (see Figs. 59–65).

In some of the places where the Dūnhuáng bamboo and wooden slips have been unearthed, a very small number of writings on paper have also been discovered and may date from the late Eastern Han (see Fig. 66). According to the most recent reports, a small number of writings on paper have been discovered at the site of the Xuánquánzhì (a courier

station), where excavations began in 1990, in strata dating to the reigns of the Western Han emperors Xuān (r. 73–49 B.C.) and Yuán (r. 48–31 B.C.).[1]

Numerous scrolls and writings on paper dating from the Jin period and the Southern and Northern Dynasties were discovered in the Mògāo Cave at Dūnhuáng and at Turfan, Xīnjiāng, among which are Buddhist and Daoist canonical texts, handcopied versions of old texts, documents, contracts, and so forth. All of them are important source materials for the study of the neo-clerical and standard scripts (see Figs. 67–69).

The writings of famous calligraphers transmitted since the Wei-Jin period may also be classified as writings on silk and paper. Unfortunately, those which remain usually consist of hand-copies or engravings of later handcopies.

4. *Other source materials.* Aside from the materials described above, there are also numerous source materials dating from the Western and Eastern Han and the Wei-Jin period, such as writings on artifacts made of bronze, lacquer ware, pottery, porcelain and on bricks and roof tiles as well as those seen in land purchase certificates, tomb security texts, funerary-objects inventory tablets, and on tomb walls and so forth. The more important of these will be introduced below.

Some of the inscriptions appearing on Western Han bronze articles are written in clerical script and are of considerable reference value to the study of the evolution of Western Han clerical script (see Figs. 70–71).

During the mid and especially the late Eastern Han period, the practice of placing pottery jars in tombs with tomb security texts written on them became popular. These texts are important source materials for the study of neo-clerical script (see Fig. 72).

During the 1970s, the Cáo clan's (i.e., Cáo Cāo's clan) cemetery of the late Eastern Han period was excavated at Bó County, Ānhuī (presently Bózhōushì). A portion of the tomb bricks in two of the tombs bear graphs which had been hastily incised on them; these graphs are of great value to the study of the various styles of writing of that period (see Figs. 73–74) (see *WZCK* 1978:142–175). During the 1980s, another of the Cáo clan's tombs containing inscribed bricks of this same sort was discovered at Bózhōushì (see *KG* 1988).

5.2 The Development of Han Time Clerical Script

We shall describe the development of Han time clerical script from the standpoint of graphic shapes and calligraphic style. We shall first discuss changes in graphic shapes.

1. See *Zhōngguó wénwù bào*, January 5, 1992.

Primarily on the basis of the unique features of graphic shape, in Sec. 4.5 it was pointed out that the clerical script of the Qin and early Western Han period was early period clerical script which had not matured as yet. Emperor Wǔ's era of the Western Han may be viewed as the period during which the clerical script attained maturity.

The graphic shapes of the characters written in clerical script that appear on bamboo and wooden slips and in silk manuscripts dating from the early Western Han (i.e., up to and including the early years of Emperor Wǔ's reign) in many cases are still quite close to the seal script forms. By contrast, the number of these graphic forms is by far fewer in the bamboo and wooden slips discovered at Jūyán and Dūnhuáng dating from the latter part of Emperor Wǔ's reign and thereafter. For instance, the character "斗" *dǒu* (a unit of measure) usually appears on the bamboo and wooden slips and in the silk manuscripts dating from the early Western Han written  and  , whereas it is written  ,  ,  ,  , and so forth on the Jūyán bamboo and wooden slips. The character "自" *zì* "self" usually appears on the bamboo and wooden slips and in the silk manuscripts dating from the early Western Han written  ,  , and so forth, whereas it usually appears written  ,  , and so forth on the Jūyán bamboo and wooden slips. The character "它" *tā* usually appears on the bamboo and wooden slips and in the silk manuscripts dating from the early Western Han written  ,  , and so forth, whereas it usually appears written  ,  , and so forth on the Jūyán bamboo and wooden slips; moreover, the component "它" *tā* from which the characters 地 *dì* "land," "池" *chí* "pool," and so forth are derived was simplified to  , so later on it became indistinguishable from the component "也".[2] During the early Western Han, the characters "大" *dà* "large" and "木" *mù* "wood" were being written  and  as well as  and  . In the Jūyán bamboo and wooden slips it would appear that the former writings had already completely vanished.

Following Emperor Wǔ's reign to the late Eastern Han period, the graphic shapes of the clerical script forms also underwent numerous changes. The character "其" *qí*, for instance, changed from , , etc. to ; the character "五" *wǔ* "five" changed from  ,  , etc. to  , and so forth. In general, the changes yielded graphs which became more and more like their later standard script forms.

Viewed from the standpoint of complexity and simplicity, the graphic shapes of the clerical script forms in most cases evolved from the complex to the simple.

2. The characters "地" *dì* "land," "池" *chí* "pool," "施" *shī* "to do, to make," and so forth originally were derived from "它" *tā*; only later did "池" *chí* and "沱" *tuó* become two separate characters. That the characters "地" *dì*, "施" *shī*, and so forth are explained in the *Shuōwén* as being derived from 也 *yě* as phonetic is an example of its corruption of seal forms.

During the clerical script's process of evolution, following the appearance of new graphic forms, the older forms usually did not, *ipso facto*, descend from the stage of history. This phenomenon not only occurred during the development of early clerical script (see Sec. 4.5), but it can also be observed often in the mature stage. In late Eastern Han stele inscriptions, for instance, while the character "其" *qí* was already being written 其, it was also being written 亓 and 𠀠; while the character "五" *wǔ* "five" was already being written 五, it was also being written 𠄎 and 𠌫; the component "心" *xīn* "heart" in the characters "恭" *gōng* "respect," "慕" *mù* "admire," etc. was also variously written 忄, 屮, 忄, 忄, 心, and so forth. Again, in the case of the component "口" *kǒu* "mouth," already in the clerical script of the Qin period it occurs written as 口 in a few cases; yet on the mid and late Western Han bamboo and wooden slips it is still commonly found written 𠙵 (the component "口" in the characters "如" *rú* "like, as if," "知" *zhī* "to know," etc. is often written as such) and can even be seen on late Eastern Han period stelae.

On a small number of late Eastern Han stelae, conscious attempts at archaizing by transforming clerical script forms into stylized small seal forms can still be seen, such as the character "農" *nóng* "agriculture" being written 𢆶 (in the "Sīnóng Liú fūrén *bēi*"), "壹" *yī* "one" being written 壺 (in the "Zhù Mù *bēi*"), and so forth. The apocryphal preface to the *Book of History* attributed to Kǒng Ānguó makes reference to "*lì gǔ dìng*" 隸古定, which refers to transcribing ancient script forms into clerical-style forms while preserving the shapes of the former.[3] The transcription of ancient script forms into standard-script style forms by the same token was later termed "*lìdìng*" 隸定.

Below we shall discuss the changes in the calligraphic styles of Han time clerical script.

In terms of their composition, the characters written in the clerical style appearing on late Eastern Han stelae are usually squat and squarish as well as carefully and neatly executed and are clearly the product of a set of conventions which governed the brush in their production. Rightward down-strokes nearly all have thick feet and usually have raised ends. In the production of certain rather long horizontal strokes, when the stroke is nearing completion, the brush is raised slightly upward, resulting in a thick tail with an upturned point. With regard to the production of the L-shaped strokes appearing in clerical-style characters, when nearing the completion of the stroke, the brush in most cases is moved outward and then upward at a rather wide angle, e.g., 乚. When leftward down-strokes (i.e., *piě* 撇) are nearing completion and the brush is being lifted, in most

3. While some argue that "*lìgǔ*" 隸古 and "*dìng*" 定 should not be read together, the usual reading of the text will be followed here.

cases it is also raised slightly upward. Horizontal strokes with raised ends usually begin with a downward point, giving the stroke as a whole a slight wavy appearance, e.g.,  . At times, longer, right-falling strokes also exhibit these same calligraphic features, e.g.,  . The terms *tiāofǎ* 挑法 "raised-end technique," *bōshì* 波勢 "wavy," and *bōzhé* 波磔 "wavy downward strokes sliding to the right" (the calligraphic term "磔" *zhé* refers to downward strokes which slide to the right) are used by calligraphers to describe the unique features of the clerical script and refer to these very techniques.

The unique features of the clerical-style script discussed above had undergone a formative process. The clerical script which has these features has customarily been called "Han clerical script" (漢隸), whereas the pre-Han clerical script has been termed "Qin clerical script" (秦隸). Qin clerical script has also been termed "ancient clerical script" (古隸). Since the term "Qin clerical script" also covers the clerical script of Han time that was in use prior to the formation of Han clerical script, it seems more reasonable to term it "ancient clerical script." Yet it should be noted that the term "ancient clerical script" has different meanings. It can also be used as a term relative to the alternate name for standard script, namely, "modern clerical script" (今隸). Used in this way, the term "ancient clerical script" would be synonymous with what is usually described as clerical script.

Han clerical script is also called *bāfēn* 八分 script. This term probably had already appeared sometime between the Han and the Wei dynasties. At that time the clerical script in common use was what was referred to above as neo-clerical script (新隸體). Its appearance had already diverged sharply from standard clerical script, so it became necessary to give standard clerical script yet another name (see Qǐ 1979:34). Up to the Tang dynasty, the style of script in common use at that time (namely, standard script) was usually referred to as clerical script, whereas Han clerical script was called *bāfēn* script.

With regard to the reasons for this script's having been dubbed "*bāfēn*," the explanations of the ancients differ. Some held that it was derived from the phrase 字方八分 "characters eight-tenths square," which served as a criterion for the relative sizes of characters; some held that it was derived from the fact that graphs written in this style of calligraphy are relatively squat, with oblique strokes jutting out on both sides, and thus "resemble the way the character 八 *bā* diverges"; still others, purportedly on the authority of Cài Wénjī (fl. ca. 162–239), have maintained that this style of script "disposed of eight parts of Chéng [Miǎo's] clerical script and took two parts, and disposed of two parts of Lǐ [Sī's] seal script and took eight," hence the name *bāfēn* (see Táng 1979:169–170). Reference to "Chéng [Miǎo's] clerical script" in the latter explanation does not actually pertain to genuine Qin clerical script at all. The ancients lacked a historical sense

of the development of calligraphic styles and thus quite easily confused the clerical script that they termed a neo-clerical style or standard script with the clerical script "invented" by Chéng Miǎo.[4] Nevertheless, even they had to recognize that the *bāfēn* style in reality was even closer to small seal script than was "Chéng [Miǎo's] clerical script," which is the reason for their saying that its creator had taken two parts from "Chéng [Miǎo's] clerical script" and eight parts from "Lǐ [Sī's] seal script." In any event, it is now difficult to ascertain which of the above explanations is most in line with or closest to the original meaning of the term *bāfēn* intended by its originator. It is also quite possible that all these explanations are incorrect. Han clerical script is also called *fēnshū* 分書 and *fēnlì* 分隸, both of which are derived from the term *bāfēn*.

So exactly when did the *bāfēn* script come into existence? This question will be discussed below.

Prior to the discovery of the Han time bamboo and wooden slips, the graphs preserved in stone inscriptions were just about the only source materials available for the study of clerical script. In the clerical script found on the Han time stelae which had been discovered, the distinguishing features of the *bāfēn* style were not fully manifested until the mid Eastern Han period; so earlier scholars posited somewhat later dates for the formation of the *bāfēn* script. As later researchers have had a large quantity of Han time bamboo and wooden slips bearing clerical script on which to base their studies, their views have differed from those held earlier.

The rudiments of *bāfēn*-style calligraphy appeared quite early. Once the formal seal style of calligraphy had been abandoned, when characters were written rapidly and the brush was lifted quickly at the end of a stroke, a sharp tail slanting upwards would quite naturally appear at the ends of horizontal and downward diagonal strokes. If this style of calligraphy were then "regularized," the raised-end strokes of the *bāfēn* script would result. Professor Wèi Jiàngōng (1936) holds that the raised-end strokes of the *bāfēn* script resulted from the regularization of cursive style calligraphy. This is a most perceptive viewpoint.

Even as early as in Qin time clerical script, we find a small number of cases of characters having oblique and horizontal strokes with thick feet. In early Western Han clerical script, instances where this calligraphic technique was used increased appreciably. For instance, in those silk manuscripts unearthed from tomb no. 3 at Mǎwángduī that date from the reign of Emperor Wén (r. 179–157 B.C.), we find numerous characters whose written style is rather close to that of the *bāfēn* script (see Fig. 58). The calligraphic style of some of the characters appearing in the wooden tablets dating from the reign of Emperor Wén unearthed from tomb no. 9 at Fènghuángshān, Jiānglíng also resembles fairly closely the *bāfēn* script (see Fig. 75, noting the character "上" *shàng* in the second column). In the clerical script of the early Western Han, however, as we frequently encounter tall, narrow characters and methods of writing which are closer to the seal script, it is clear that the *bāfēn* style of calligraphy by no means occupied a dominant position at that time. Thus the clerical script of the early Western Han was essentially the same as that of the Qin period and also falls within the scope of ancient clerical script.

The gradual formation of the *bāfēn* script can be seen on the bamboo and wooden slips discovered at Dūnhuáng and Jūyán dating from the latter part of Emperor Wǔ's reign to the reign of Emperor Xuān. Among the Dūnhuáng bamboo and wooden slips there is one which dates from the third year of the Tiānhàn era of Emperor Wǔ (98 B.C.) (Fig. 49A) and another called the "Shǐ Shāchē Xù Xiāng rú" 使莎車續相如 slip (Fig. 49B) which, as was shown by Wáng Guówéi, predates the third year of the Tàishǐ era of Emperor Wǔ (94 B.C.). The script on both slips can be classified as ancient clerical script. Yet the style of the script on the slip dated the third year of the Tàishǐ era shown in Fig. 49C differs only slightly from the *bāfēn* script. Among the Jūyán bamboo and wooden slips are quite a number of fragments of provisions account books dating from the Zhēnghé era of Emperor Wǔ to the Shǐyuán era of Emperor Zhāo, the script on which represents the transition from ancient clerical script to *bāfēn* (see Figs. 51A–B). There is also an exit and entry tally dated the seventh year of the Shǐyuán era of Emperor Zhāo (80 B.C.), the style of the calligraphy on which is already of the *bāfēn* type, even though it is not written very neatly (see Fig. 51C). Aside from these, there are also some slips from Jūyán dating from the reign of Emperor Zhāo which bear a style of script that is very similar to the *bāfēn* script; these will not be enumerated here. Fairly standard *bāfēn* script appears on the slips dating from Emperor Xuān's reign, such as that seen on one from Jūyán dated the second year of the Běnshǐ era (72 B.C.) called "Shuǐmén suì zhǎng Yīn Yě *jiǎn*" (see Fig. 51D) and one from Dūnhuáng dated the fifth year of the Wǔfèng era (57 B.C.) (see Fig. 49D). It is quite evident that the final formation of the *bāfēn* script had already occurred sometime between the reigns of emperors Zhāo and Xuān at the very latest. Following the formation of the *bāfēn* script, the clerical script, whose character strokes were relatively simple and convenient to write and which in terms of calligraphic style was little influenced by the *bāfēn*, was still quite common. Clerical script

4. For example, the Liang dynasty scholar Yǔ Jiānwú in his essay "Shūpǐn lùn" (collected in Zhāng c. 860: *juàn* 2) writes: "Investigation [reveals] the clerical style arose in the state of Qín, and its inventor was the prisoner-in-servitude [*lì*] Chéng Miǎo of Xiàpī . . . hence it was called *lì* script. It is the same as the formal script of the present time." What he called "formal script" (正書) is what we now call standard script (楷書).

of this sort is found in the more perfunctorily written texts appearing on the bamboo and wooden slips dating from Emperor Xuān's reign on (see Fig. 76). In more recent years, scholars have termed clerical script of this sort "popular clerical script" (通俗隸書) (see Lài and Wáng 1990:192–212). In the early period, its written style was close to ancient clerical script but gradually developed into the neo-clerical script mentioned earlier (see Sec. 5.5).

The changes in calligraphic style of the clerical script, as reflected in Western Han bronze inscriptions, are essentially the same as those seen on the bamboo and wooden slips. The clerical script found on early Western Han bronzes is of the same type as that seen on the bamboo and wooden slips of that same period. In the bronze inscriptions dating from the reign of Emperor Wǔ to the reign of Emperor Xuān, a similar evolution of the clerical script and the script on the bamboo and wooden slips of that same period can be observed. In the clerical script appearing in inscriptions, however, some of the unique features of brush-written *bāfēn* calligraphy are not fully displayed. For example, in the inscription on the "Yángquán shǐzhěshè *xūnlú*," which dates from the time of Emperor Xuān, while the composition of the characters in it is similar to that of the *bāfēn*, it contains no strokes having distinctive raised ends (see Fig. 71).

The calligraphic style of graphs appearing in Western Han stone inscriptions is somewhat more conservative. The script in the "Bāzhōu mín Yáng Liàng mǎi shān jì" inscription dated the second year of the Dìjié era (68 B.C.) of Emperor Xuān represents the transition from ancient clerical script to *bāfēn*, while that appearing in a stone inscription dated the second year of the Wǔfèng era (56 B.C.) is still very close to ancient clerical script (see Fig. 47).

In the foregoing we have distinguished early period and mature clerical scripts on the basis of graphic shape; it was further pointed out that the maturation of the clerical script occurred during the reign of Emperor Wǔ. From the standpoint of calligraphy, even during the latter part of Emperor Wǔ's reign we find cases where the ancient clerical script was already on the verge of becoming *bāfēn* script. Thus the scope of early and ancient clerical scripts and that of mature clerical and *bāfēn* scripts basically coincide. Perhaps we may view the mid and late period of Emperor Wǔ's reign as a period straddling the transitional development of clerical script from one phase to another. The script of the earlier period could be termed early period clerical script as well as ancient clerical script. The script of the later period could be termed mature clerical script as well as *bāfēn* script. (In certain instances, the clerical script dating from Emperor Zhāo's reign still retains certain rather pronounced features of the ancient clerical script; thus his reign period could also be included in the transition period.)

Clerical script is also called *zuǒshū* 佐書 "assistant's script." The *Shuōwén*'s postface reports that during Wáng Mǎng's time there were "six scripts,"[5] and says that "the fourth is called *zuǒshū*, i.e., Qín clerical script" (四曰佐書, 即秦隸書). The people of Han time also frequently called the calligraphic style of the clerical script used in government documents *shǐshū* 史書 "scribal script." Wáng Zūn's biography in the *Hànshū* (Zhōnghuá ed., p. 3226–7), for example, states:

> [Wáng] Zūn studied on the sly and was skilled in scribal script. At age thirteen, he sought to serve as a sub-official functionary in a prison (吏 = 史?). Several years later, he served in the governor's office. . . . He was appointed assistant secretary and served for a time as a 'shǒushǔ' [name of a low-grade official] in supervising prisons.

Due to the fact that the *Shǐzhòupiān* was also called the *Shǐpiān* 史篇, it was usually assumed wrongly that *shǐshū* 史書 was the same as *zhòuwén* 籀文. This error was pointed out by Duàn Yùcái (1815) in his commentary to the postface to the *Shuōwén*. He noted that in the *Hànshū*, "the phrase *shàn shǐshū* 善史書 is used in some instances and *néng shǐshū* 能史書 in others, both of which refer to one's being versed in clerical script as was appropriate at that time, much like one's being skilled in standard script today." Duàn's assessment is quite correct. The *shūzuǒ* 書佐 "assistant secretaries" and *shǐ* 史 "scribes" were the government officials in charge of preparing documents in government offices. According to the "Xiàolì" chapter of the *Lùnhéng*, 治書定簿, 佐史之力也 "Managing documents and maintaining records are the strengths of the assistant secretaries and scribes." According to the "Bǎiguān zhì" section of the *Hòu Hànshū*, 書佐幹主文書 "Assistant secretaries manage official documents." Professor Qǐ Gōng (1979:32–33) holds that it was for these reasons that the *zuǒshū* and *shǐshū* were so named. His suggestion is quite plausible. So it is quite possible that the *bāfēn* style of script first came into being from the hands of the assistant secretaries and scribes in government offices and only later spread throughout the society. As nearly all the primary sources we use to study the formative process of the *bāfēn* script originated from government offices, such as the Jūyán and Dūnhuáng bamboo and wooden slips as well as the lengthier bronze inscriptions, the script on them must have come from the hands of assistant secretaries and scribes. Nevertheless, the script commonly seen in stone inscriptions may not necessarily have come from their hands. This may well be one of the reasons why

5. The term *liùshū* 六書 here refers to six styles of calligraphy and is unrelated to its other usage in relation to the six principles of writing, e.g., pictographic, phonetic compounding, etc.

conventional *bāfēn* script began to appear in stone inscriptions at a somewhat later date.

Judging from the titles *zuǒshū* and *shǐshū*, the suggestion that *lìshū* earned its name from the fact that Qin officials "had prisoners-in-servitude (隸人 *lìrén*) assist in writing [documents]," seems correct (see Sec. 5.5 above). In the text "Questions and answers concerning the law" (法律問答) unearthed from the Qín tomb at Shuìhǔdì, there is the following passage:

> 何謂"耐卜隸""耐史隸"? 卜,史當耐者,皆耐以爲卜,史隸. 後更其律如它 What do the [terms] "nàibǔlì" and "nàishǐlì" refer to? Diviners and scribes who must undergo the punishment of having their whiskers and temple hair shaven off are all shaven and are used as diviners and scribal prisoners-in-servitude. Later on, the statutes [pertaining to them] were changed to ones like those [applied to] others. (Wénwù Press 1990: 139)

Does not what is referred to here as "scribal prisoners-in-servitude" amount to nothing more than "having prisoners-in-servitude assist in writing [documents]?" Before "the statutes [pertaining to them] were changed to ones like those [applied to] others," "having prisoners-in-servitude assist in writing [documents]" was no doubt a common phenomenon in Qín government offices. Thus it was for this reason the simple and convenient style of script used in government and prison documents came to be called clerical script.

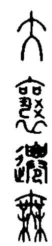
5.3 The Transformation of the Graphic Shapes of the Seal Script Forms into Clerical Script Forms

Insofar as the evolution of the forms and styles of Chinese characters is concerned, the transformation of the seal script forms into clerical script forms was the most important change of all. This transformation caused the appearance of Chinese characters to undergo immense changes and had a profound effect on their structure as well (see Sec. 3.2 above). So it is imperative that the changes in graphic shape undergone by the small seal script as the clerical script evolved be described here in some detail. As was already mentioned, the forms of characters written in the clerical style underwent unceasing change. In order to explain more fully the differences between the graphic shapes of the seal forms belonging to the ancient stage vis-à-vis those of the clerical and standard script stage, when we encounter a character having a variant clerical-script form, we normally will compare the seal script forms with late period clerical script forms that are structurally closer to their counterparts written in standard script. So among the examples cited here of the small seal script's transformation into clerical script, some may be viewed as cases where somewhat earlier clerical script forms had been transformed into late period clerical script forms.

The transformation of the graphic shapes of the seal forms into clerical script forms is manifested primarily in the following respects:

1. *Decomposition of seal-style script, converting curved lines into straight lines.* While the degree of pictography of Chinese characters from Shang times down to the time of the small seal script continuously dissipated, the pictographic principles underlying the composition of the script were never truly abandoned. The clerical script no longer heeded pictographic principles and either broke down or changed the sinuous lines of the ancient script into level and straight strokes in order to facilitate writing. For example, in the clerical script the seal form of *rì* ⊖ "sun" was changed to 日, in which the outer ring was broken down into four strokes: 丨, 一, 丨, and 一, or three strokes: 丨, 𠃍, and 一. The seal form of the character "女" *nǚ* 女 "woman" became 女, in which the curved central stroke resembling a kneeling figure was changed into a straight stroke. (When the character "女" was changed into a clerical script form, it was rotated nearly 90 degrees, after which the central stroke became a horizontal stroke.) This was the most important method used to transform seal script into clerical script.

2. *Contractions.* What originally had been two separate strokes in the seal script were usually combined into one in the clerical script, whereas in some instances two or more character components or elements contained in a character component were combined, resulting in a relatively simpler graphic form comprised of fewer strokes. For example,



— 大 The two arms were merged as "一" and the torso and left leg were merged as "丿".

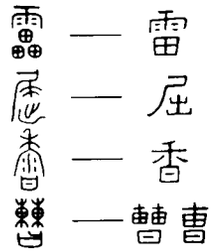
— 襄 was simplified to "井".

— 遷 was simplified to "西" and to "大".

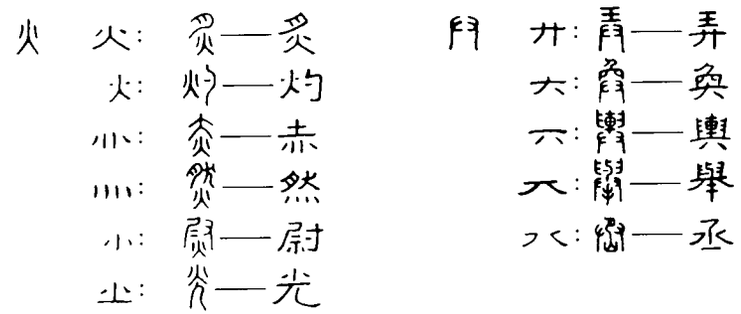
— 無 Contracted overall.

The characters "寒" *hán* and "塞" *sài* mentioned in Sec. 3.2 are also examples of contractions. At the same time, contraction normally played a role in the process of changing curved lines into straight lines.

3. *Omissions.* In some instances, segments of seal forms were omitted outright in their corresponding clerical script forms. For example,



4. Distortion of character components. The writing of graphs used as character components in the seal script normally does not differ appreciably from their writing as independent graphs. In the case of the clerical script, however, distinct differences between the writing of independent graphic forms vis-à-vis their written forms when used as character components can often be observed. For example, when the character "人" *rén* "person" was used as a character component on the left side of characters, it was written "亻" (in actuality, this writing of the graph is even closer yet to its seal form than is the character "人"); when the character "犬" *quǎn* "dog" was used as a character component on the left side of characters, it was written "犭"; when the character "邑" *yì* "city" was used as a signific on the right side of characters, it was written "阝" (yet when it was used as a phonetic component in characters such as "浥" *yì* "wet, moist," "挹" *yì* "to scoop up," etc., it was then written in its usual way "邑"); when the character "阜" *fù* "mound" was used on the left side of characters as a signific, it was also written "阝", and so forth. It was mentioned earlier that the character "水" *shuǐ* "water" became "氵" when used as a character component; "艸" *cǎo* "grass" became "艹", and so forth. Yet the writings of character components usually varied according to their position within a character; for example, when "水" *shuǐ* occurred in the upper or lower parts of characters, it was written "水" and not "氵", as in "沓" *tà* "talkative" and "漿" *jiàng* "thick fluid." Sometimes even though components occurred in the same position, their written forms differed. Consequently, one and the same character component at times diverged into a variety of dissimilar written forms; for example,



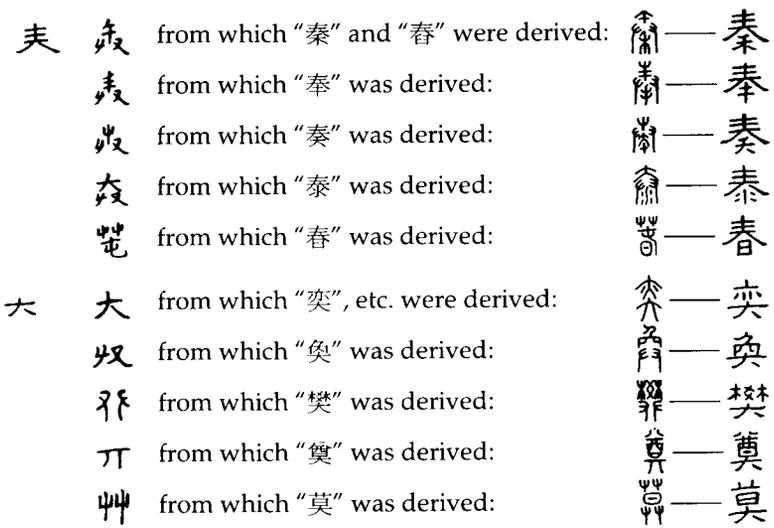
In the clerical script we find that the methods of writing character components in many cases had not yet been firmly established; thus one and the same character component appearing in one and the same character often could be written in a variety of different ways, such as the component "心" *xīn* appearing in the characters "恭" *gōng* "respect" and "慕" *mù* "to long for" cited in the preceding section of the present work. The methods of writing character components in early period standard script also had not been fully established as yet. For the sake of simplicity and clarity, we have chosen to cite only examples where distortions were later perpetuated in the mature standard script forms of these graphs. We find, for instance, that in late period clerical script, the component "火" *huǒ* "fire," from which the characters "赤" *chì* "red" and "尉" *wèi* "a company grade military officer" are in part derived, are also written 灬, but examples of which are not cited here.

5. Convergence of character components. For the sake of simplicity and expedience, some character components in the clerical script which were either uncommon or consisted of numerous strokes were converted into forms which resembled them but which were comprised of fewer strokes and were more common as well. For example, the character component 𦎫 (𦎫), read *chún* in the characters "敦" *dūn*, "淳" *chún*, "醇" *chún* and "鶉" *chún* and the character component 𠭯 (i.e., the ancient graph for "郭" as in 城郭 *chéngguō* "the inner and outer walls of a city") in the character "郭" *guō* were all changed to "享".[6] The character component 𠯿 (昏, read *kuò*) in the characters "活" *huó*, "括" *kuò*, and "适" *kuò* (as in the name Nángōng Kuò 南宮适, mentioned in the *Lúnyǔ*) was changed into "舌" in each case.

In addition, the contraction, omission and distortion of character components also led to the confusion of character components. For instance, due to the distortion of character components, the component "肉" *ròu* "meat" placed on the left side of graphs, a portion of the occurrences of "肉" *ròu* in the lower part of graphs, the component "舟" from which graphs such as "朕" *zhèn* "I, my," "服" *fú* "to submit," etc. were originally derived, and the component "丹" from which "青" *qīng* "green" was originally derived were all confused with the component" "月" *yuè* "moon." Again, due to contraction, the element 𡥈 from which "寒" *hán* "cold" was originally derived and the element 𡥈 from which "塞" *sài* "to stop up, a stopper" was originally derived both became "𠂤". The characters "屈" *qū*

6. In the *Shuōwén* the character "孰" *shú* is also derived from 𦎫; yet from the standpoint of the ancient form of the graph, this graph originally was derived from the ancient form of "享", i.e., 𠭯, and not 𦎫.

"to bend," "尿" *niào* "urine," etc. were originally derived from "尾" *wěi* "tail," but due to the omission of an element in the component, they later joined the group of characters which are derived from "尸" *shī*. Let us cite another two cases where character components were confused mainly due to contractions:



The five facets of the transformation from seal script to clerical script described above represent the primary ones.

The formation of the clerical script brought about the transformation of the graphic symbols used in Chinese writing which demanded the "sinuous depiction of form" into relatively simpler symbols composed of level and straight strokes, and thereby greatly increased writing speed. This transformation represented a significant advance. Yet on seeing that the clerical script had wrought havoc on the composition of the Chinese characters in some cases, the shift from seal to clerical script was viewed by the literati and officialdom of the feudal society as a mishap; yet, in our view, such an attitude is clearly untenable.

5.4 The Cursive Script of Han Time

Of the styles of script in use during the Han dynasty, aside from clerical script, there was also the *cǎo* 草 "grass" or cursive script. In antiquity the character *cǎo* "grass" was also used in the sense of "coarse, rough; simple and crude." It would appear that *cǎo* in the term *cǎoshū* "grass script" was used in this same sense. The term *cǎoshū* has broad and narrow

meanings. As used in its broad sense, it is non-temporal and can refer to any characters which have been hastily written. As used in its narrower sense, it refers to a specific style of script which did not come into existence until the Han dynasty (see Qǐ 1979:38). Beginning around the Eastern Jin period, Han time cursive script was called *zhāngcǎo* 章草, so as to differentiate it from the new style of cursive script in use during this period. By contrast, this new style of cursive script was called *jīncǎo* 今草 "modern *cǎo* script."

As was mentioned in Sec. 4.5 above, when the popular forms were in the process of evolving into clerical script forms in the state of Qín during the Zhou dynasty, a number of cursory ways of writing characters appeared which produced characters that were identical or similar to the cursive forms of later times, such as writing the component 止 as **ㄓ**, and the like. After the formation of the clerical script, these cursory ways of writing characters continued to be used as popular clerical script forms. In addition to them, there also appeared a number of new cursory ways of writing characters. The formation of the cursive script was in fact based on these old and new cursory styles of writing.

In the texts written in ancient clerical script on the bamboo and wooden slips and wooden tablets, we find examples where the entire texts appearing on them are written rather cursorily, as is seen on the wooden tablets from tomb no. 4 at Shuìhǔdì mentioned in Sec. 4.5, and also in some of the ancient manuscripts unearthed from the Han tomb at Yínquèshān, Línyí, Shāndōng (see Fig. 77). One finds on these slips and tablets character components written in ways which are identical to their corresponding forms written in the cursive script of later times. However, even though the vast majority of these graphs are cursorily written, there is still not much structural difference between them and their counterparts written in normal ancient clerical-script. Thus the style of writing found on these slips and tablets can only be regarded as amounting to clerical script rather than *cǎoshū* or cursive script in the narrow sense of the term.

In antiquity there was a style of script called "*zhá*" (**逴**). The *Yùpiān* (under radical "辵") states: **逴**, 士洽切, 行書貌 "**逴**, read *shì* + *qià* [nowadays read *zhá*], is cursively written in appearance." The *Guǎngyùn*, under rime 洽 *qià*, states: **逴**, 行書 "**逴** is cursive script." The *Jíyùn*, under rime 洽 *qià*, states:

> **逴**, 行書也. 秦使徒隸助官書艸**逴**, 以爲行事, 謂艸行之間, 取其疾速, 不留意楷法也, 从筆, 从辵 *Zhá* is cursive script. The Qin dynasty had state-owned slaves and prisoners-in-servitude assist the government officials in writing cursively written records to serve as [legal] precedents. It refers to a style of writing which incorporated the speed of the cursive and semi-cursive scripts but which ignored the

techniques of standard handwriting. It is derived from 筆 *bǐ* "writing implement" and 辵 *chuò* "to run and stop."

Thus according to the *Jíyùn*, this style of script had already appeared during the Qin dynasty. The perfunctorily written clerical script which we described above may possibly have been termed *zháshū*.

Viewed from the standpoint of the datable Jūyán bamboo and wooden slips, those dating from the latter part of Emperor Wǔ's reign and those dating from Emperor Zhāo's reign only have texts written in cursory clerical script on them; among the slips dating from the reign of Emperor Xuān, such as slip no. 271.17 which dates from the second year of the Shénjuē era (60 B.C.) (see Fig. 52A) and no. 562.3A which dates from the first year of the Yǒngguāng era (43 B.C.) (see Fig. 52B) of Emperor Yuán we find, especially in the latter, a style of writing that already has a very strong cursive flavor; and in slip no. 284.8A which dates from the first year of the Yángshuò era (24 B.C.) of Emperor Chéng and no. 170.5A which dates from the second year of the Yuányán era (11 B.C.) of Emperor Chéng (see Figs. 52C–D), we find a style of writing which is already fairly pure cursive script. We can infer from this that the formation of cursive script took place sometime between the reigns of emperors Yuán and Chéng at the very latest and quite possibly may already have been formed at some point during the reigns of emperors Xuān and Yuán.

The Tang scholar Zhāng Huáiguàn in his work *Shūduàn* (in Zhāng c. 860: *juàn* 7) cites the remarks of Wáng Yīn, who lived under the Song dynasty (420–478) during the Southern Dynasties period: "During the reign of Emperor Yuán of Han, Shǐ Yóu wrote the *Jíjiùzhāng* in which [he] decomposed the clerical script and wrote it in a crude fashion. Han time habits were uncomplicated and slothful, so it [the cursive script] gradually became popular." Here the appearance of *zhāngcǎo* script is linked with the *Jíjiùzhāng*. This is inconceivable. *Jíjiùzhāng* was a popular name for the *Jíjiùpiān* compiled by Shǐ Yóu. The *Jíjiùpiān* was divided into thirty-one *zhāng* or chapters (with sixty-three characters in each chapter), so some called it the *Jíjiùzhāng*. It would seem that this name had not appeared as yet during the Han dynasty. While calligraphers of the Wei-Jin period liked to use the *zhāngcǎo* script to copy the *Jíjiùpiān*, yet in the Han time manuscript copies of the *Jíjiùpiān* written on bamboo and wooden slips discovered at Dūnhuáng and Jūyán, they are all written in clerical script. Therefore it is quite unlikely that the *zhāngcǎo* was a style of script created by Shǐ Yóu when writing his *Jíjiùpiān*. That someone would create a style of script for the sake of compiling a book is most improbable (see Táng 1979:172). Nevertheless, the time of Shǐ Yóu does coincide more or less with the period during which the formation of the cursive script evidently took place. The late Han scholars Cài Yōng and Zhào Yī both

state that the cursive script was created during the Qin dynasty, yet there does not seem to be any reliable evidence to support such a claim.[7] In the past many individuals have held that cursive script arose during the Eastern Han, yet they too have erred in the other direction of placing it too late.

The formation of cursive script took place somewhat later than that of the *bāfēn* script. However, a very large number of the cursorily written popular clerical script forms which served as a basis for the formation of cursive script already existed during the ancient clerical script stage. So it can also be said that the *bāfēn* and *zhāngcǎo* scripts developed separately from formal and popular ancient clerical script forms. The situation here is very similar to the way the formal script of the state of Qin during the Warring Stages period evolved into the small seal script, while the popular script evolved into the clerical script (see Qiú 1974:54).

Examples where cursive script forms emerged from ancient clerical script and not mature clerical script forms are commonplace. This is true not only of the way in which character components were written; the way in which the characters themselves were written usually reveals their evolution from ancient clerical script forms. For instance, 夫, the cursive form of "夫" *fū* "adult male, husband," must have evolved from the cursive ancient clerical script form 夫; 天, the cursive form of "天" *tiān* "heaven," must have evolved from the cursive ancient clerical script form 天; 可, the cursive form of "可" *kě* "can, able," must have evolved from the cursive ancient clerical script form 可; 𪜈, the cursive form of "鹿" *lù* "deer," must have evolved from the ancient clerical script form 𪜈 (see Qiú 1974: 54). The formation of the ancient clerical script was based on popular seal script forms; the graphic shapes of the two are usually quite close to one another. Earlier scholars, such as the Qing time scholar Sūn Xīngyǎn (1798) and others, had theories regarding the emergence of the cursive script forms from the small seal script. The fact that they had already realized the truth in this situation should be acknowledged.

Cursive script was a simple and convenient style of script which served as an auxiliary script to the clerical script and was used primarily in drafting documents and in correspondence. Government personnel such as assistant secretaries and scribes most likely played a major role in the cursive script's formative process. Since they frequently had to draft documents, a style such as the cursive script would certainly have served them well. During Han times the number of those who made use of the cursive elements embodied in popular clerical script was considerably smaller

7. Cài's remark was cited by Emperor Wǔ of Liáng in his *Cǎoshūzhuàng* 草書壯; see the section titled "Cǎoshū" in *Shūduàn* (in Zhāng c. 860: *juàn* 7.15). For Zhào's remarks, see his *Fēi cǎoshū*, in Zhāng c. 860: *juàn* 1.

than the number who made use of the clerical elements embodied in popular seal script of the state of Qín during the Warring States period. So the formation of cursive script was not as natural as that of the clerical script, nor was its mass appeal as widespread as that of the clerical script. In the Western Han bamboo and wooden slips dating from the period following the formation of cursive script, even though slips with texts written in clerical script intermingled with cursive script are frequently seen, slips with texts written purely in cursive script are seldom found.

The cursive script on the bamboo and wooden slips discovered at Dūnhuáng and Jūyán dating from the time of Wáng Mǎng and the Eastern Han period is more mature than that on Western Han slips (see Fig. 50A–B). The proportion of the texts on Eastern Han bamboo and wooden slips which were written in cursive script also increased significantly. This situation coincides with the view reflected in early writings that cursive script was relatively popular during the Eastern Han period.

After the Han dynasty, there was certainly no shortage of calligraphers over the ages who delighted in writing the *zhāngcǎo* script. It is said that during the Wei-Jin period, numerous famed calligraphers copied the *Jíjiùpiān* in *zhāngcǎo* script. Yet only a later copy of one written by Huáng Xiàng of the Wú Kingdom has survived down to the present. Yè Mèngdé, who lived during the Northern Song dynasty, had Huáng Xiàng's copy of the *Jíjiùpiān* engraved in stone at Yīngchāng (present-day Xǔchāng, Hénán). During the Zhēngtǒng era (1436–1449) under the Ming dynasty, another individual had stone engravings of the text made anew at Sōngjiāng but based his copy on a fragmentary rubbing of Yè's copy and further supplemented it with a copy made by the early Ming calligrapher Sòng Kè. This copy is what is commonly referred to as the Sōngjiāng redaction of the *Jíjiùzhāng* and amounts to the richest and most systematic set of source materials on the *zhāngcǎo* script we have at present (see Fig. 78).[8] Aside from this, pieces written in *zhāngcǎo* script by several calligraphers of antiquity are still preserved in calligraphic style guides transmitted down to our time.

As Huáng Xiàng's redaction of the *Jíjiùzhāng* has been copied time and again, occurrences of textual errors in later copies, of course, have been unavoidable. Yet one need only compare them with the Han time materials written in cursive script discovered by archaeologists and it becomes evident which of the extant redactions by and large reflects the features of Han time cursive script. Numerous characters and character components

8. Citations appearing below from the *Jíjiùzhāng* are based on the photolithographic copy of the Sōngjiāng redaction collected in the *Jíshí ān cóngshū* (*sānjí*) 吉石盦叢書 (三集). In a few cases, the written forms of the graphs presented here are based on the photolithographic copy published by the Wénwù chūbǎnshè under the title *Míng Sòng Kè shū Jíjiùzhāng* 明宋克書急就章.

appearing in Huáng Xiàng's redaction of the *Jíjiùzhāng* are written in ways which are identical or exceedingly similar to their counterparts appearing on the Han bamboo and wooden slips. For example, "君" *jūn* "lord" is written 君; "卿" *qīng* "high official" is written 卿; "得" *dé* "to obtain" is written 得; "與" *yǔ* "to give" is written 與; "樂" *lè* "joy" is written 樂; "器" *qì* "implement, utensil" is written 器; "等" *děng* "grade, class" is written 等; "尉" *wèi* "a company grade military officer" is written 尉; "長" *cháng* "long" is written 長; "書" *shū* "book" is written 書. When written on the left side of a character, the component "言" *yán* "words" is written 言; when written on the left side of a character, the component "糸" *mì* "silk" is written 糸; when written in the lower part of a character, the component "止" *zhǐ* is written 止; when written in the lower part of a character, the component "皿" *mǐn* "a shallow container" is written 皿; when written on the right side of a character, the component "月" *yuè* "moon" is written 月; when written above, the component "門" *mén* "gate" is written 門; when written below, the component "心" *xīn* "heart" is written 心, and so forth. Some of the characters appearing in Huáng Xiàng's redaction of the *Jíjiùzhāng* have character strokes which are similar to the raised-end strokes seen in the *bāfēn* script; this feature also coincides with the cursive script appearing on the Han bamboo and wooden slips.

The shapes of some of the graphs written in cursive script during Han time underwent changes. The script in Huáng Xiàng's redaction of the *Jíjiùzhāng*, of course, is close to relatively late Han time cursive script. For example, the cursive form of the character "受" *shòu* "to receive" appears on Western Han bamboo and wooden slips written 受,[9] whereas it appears on Eastern Han slips written 受 and 受. In Huáng's redaction, *shòu* appears written 受, which is close to the form appearing on Eastern Han slips. A tomb brick unearthed from tomb no. 1 of Yuánbǎokēng among the late Eastern Han graves of the Cáo clan at Bóxiàn, is inscribed with the characters 會稽曹君 "Guìjī Cáojūn" written in cursive script. Aside from the character "稽" *jī*, the shapes of the characters are all basically the same as those found in Huáng Xiàng's redaction of the *Jíjiùzhāng* (see Fig. 74C; in the *Jíjiùzhāng* the character *jī* appears written 稽).

On the basis of Huáng Xiàng's redaction of the *Jíjiùzhāng*, we shall summarily discuss the means by which the *clerical script* was transformed into cursive script. (Yet with regard to the cursive forms which had already appeared during the process of the seal script's evolution into ancient clerical script, we could also phrase this as the means by which the *seal script* was transformed into the cursive script.)

9. This character was a simplification of the popular ancient clerical script form 受. In the clerical script the element "爫" was sometimes changed to 曰, such as in the character "爭" *zhēng* "to wrangle" which was normally written 爭.

The primary means by which the clerical script was transformed into cursive script are as follows:

1. *Omission of a part of a character.* For example, the character "時" *shí* "time" was written 时 in the cursive script, with the upper half of the component "寺" omitted. (The simplified form of "時" *shí* in use today, i.e., "时", may be viewed as being based on the cursive form.) The character "尉" *wèi* "a company grade military officer" was written , with the lower portion of the left half of the character omitted. The character "盧" *lú* "a surname" was written , with the central portion of the character omitted. (In the cursive script the component "虍" was written and the component "皿", .) The character "尚" *shàng* "still" was written , with the vertical stroke on the left omitted.

2. *Merging character strokes while retaining the outline of a character, or using dots and short strokes to represent portions of a character.* For example, the character "長" *cháng* "long" was written 长; "爲" *wéi* "to make" was written 为.[10] The character "彊" *qiáng* "strong" was written ; the character "君" *jūn* "lord, master" was written ; the character "論" *lùn* "discourse" was written . (The simplified form of the character "論" *lùn* in use today, namely "论", is based on the cursive form.)

3. *Changing the methods of writing character strokes.* Since cursive script was written very rapidly, it was only natural that the strokes of the clerical script forms should undergo modifications. For example, the tail-ends of the relatively long deflected downward strokes of the clerical script are usually rather thick, whereas they are normally pointed in the cursive script. As a rule, only curved strokes were used in the clerical script and no hooks were used. The production of curved strokes in the clerical script is usually very slow; yet in the cursive script they are produced quite rapidly, thereby causing some strokes with short, curved ends to be reduced to hooked strokes, such as the stroke ㇕ in the components 宀 : 宀, 冖 : 冖, etc. in the clerical script which became ㇇ in the cursive script. This same calligraphic technique influenced the *xíngshū* or semi-cursive script and finally developed into the stiff hooks so prevalent in the standard script. In the production of horizontal strokes, cursive script made less use of the raised-end technique than did the *bāfēn*. The production of dots, downward strokes, etc. in the cursive script also differed somewhat from the way they were produced in the clerical script. Aside from this, cursive script made generous use of continuous strokes, such as the second

10. The simplified forms of the characters "長" *cháng* (i.e., 长) and "爲" *wéi* (i.e., 为) are both based on their cursive counterparts. In the Han bamboo and wooden slips, the character "長" *cháng* also was simplified to , , etc.

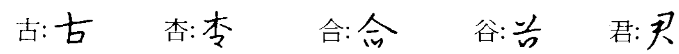
stroke in the character "時" *shí* "time" cited above which was written ; and the first stroke in "尉" *wèi*, which was written . In some cases, a character could be written with a single stroke, such as for "卿" *qīng* "a state minister," for "門" *mén* "gate," etc. Yet as compared with modern cursive script, *zhāngcǎo* script made less use of continuous strokes. In *zhāngcǎo* script each character stands detached from one another, which is also quite unlike the situation in modern cursive script where one character is often linked to another.

With respect to the cursive script's character components, several points require explanation.

In the cursive script, the methods of writing certain character components had undergone a relatively complex formative process, as is seen in the following examples:

As is also revealed by the examples above, cursive forms usually evolved from cursive ancient clerical script forms which were based on popular seal forms rather than from mature clerical script forms.

Some of the character components in cursive script diverged into several forms; the case of the component "口" *kǒu* "mouth" is an outstanding example. According to Huáng Xiàng's redaction of the *Jíjiùzhāng*, the component *kǒu* was written in at least five different ways: , , , , and , as in



 was derived from which was a simplified form of .

In other respects, some character components which originally had been clearly distinguished were intermixed in the cursive script, or already had evolved in such a way that they could be easily confused with one another. For example, viewed from the standpoint of Huáng Xiàng's redaction of the *Jíjiùzhāng*, the character components in the graphs below manifest such a development:

糸	as in 約: , 紬:
歹 (originally written)	as in 列:
月 (originally written 冎)	as in 別:
車 (as a signific only)	as in 斬:
子	as in 孫:
月 (as a signific used for 肉, 舟)	as in 膾: , 勝:

The left half of ("能" *néng* "able") was also very similar to the components cited above.

On account of the fact that graphic forms written in the cursive script were overly simplified and could easily be confused for one another, it was not possible for the cursive script to replace the clerical script in the same way as the latter had replaced the seal script, becoming the dominant style of script in use.

With regard to the reasons why the *zhāngcǎo* script was so named, there are several accounts. Aside from the account already mentioned above which linked the *zhāngcǎo* script with the *Jíjiùzhāng*, there was also another which had it that this script got its name from Emperor Zhāng 章 of the Eastern Han dynasty (r. A.D. 76–88) who had promoted it, as well as another which attributes the name to its use in memorials to the throne, called 章奏 *zhāngzòu*. Such explanations are doubtful. The character *zhāng* means "orderliness, regulation." Most now believe that on account of the fact that it was more orderly than modern cursive script, it was therefore styled *zhāngcǎo* or "orderly cursive script." The latter explanation is probably correct.

5.5 Neo-Clerical Script and Early Period Semi-Cursive Script

While the formation of the *bāfēn* script set more clear-cut norms for clerical-style calligraphy, the writing of calligraphy of this sort was fairly troublesome. So most people usually did not fully adhere to the stylistic requirements of this style of calligraphy in their day-to-day writings. Probably sometime during the mid Eastern Han period there evolved from the clerical script in daily use a more convenient and simple popular style of calligraphy that was clearly different from the *bāfēn* script. Even though during the latter half of the Eastern Han period the literati and officialdom vied with one another in having texts carefully and neatly written texts in the *bāfēn* script engraved in stone, most people had already begun using this popular form of clerical script in their daily affairs.

The popular clerical script of this sort as described above normally did not incorporate the *bāfēn*'s raised-end produced at the end of a stroke, and at the same time various features of the cursive script were brought into play, such as the more frequent use of pointed, left-falling strokes, revealing in turn the transition from *bāfēn* to standard script. This style of calligraphy is seen on the wooden slips and the tomb security jars dating from the mid and late Eastern Han period. Among them, a slip dated the second year of the Yǒnghé era (A.D. 137) discovered at Dūnhuáng (see Fig. 50D) and a jar of uncertain provenance which is dated the first year of the Xīpíng era (172) (see Fig. 79) have often been cited as examples by those who have discussed script in the past. As for the style of script on the former, Luó Zhènyù (1914) appraised it as "[consisting of] seven parts standard script and three parts clerical script." This same style of script is found in some of the inscriptions written on tomb walls and engraved on tomb bricks dating from the late Eastern Han period, such as the inscription written on the walls of the "Hù Wūhuán xiàowèi" tomb (護烏桓校尉) discovered at Lín'gěěr in Inner Mongolia (see Fig. 80), and on some of the inscribed bricks discovered in the tombs of the Cáo clan at Bóxiàn (see Fig. 73B) as well as the vermilion script appearing on the Eastern Han tomb bricks discovered recently at Běitǎcūn in Cāng County, Héběi (see *Shūfǎ* 1 [1987], 35). So as to differentiate it from formal clerical script, we shall tentatively call this style of calligraphy "neo-clerical script." Neo-clerical script was still in vogue during the Wei-Jin period. We shall discuss it again in the next section.

During the late Eastern Han period there appeared yet another new style of script, namely, *xíngshū* 行書 or "semi-cursive script." According to tradition, semi-cursive script was created by Liú Déshēng sometime during the reigns of emperors Huán (r. 147–167) and Líng (r. 168–188). According to one description of his semi-cursive calligraphy, "even though it was innovative [for its time], it is fine-looking and elegant as well as graceful and soft, and was peerless at that time" (Zhāng Huáiguàn, *Shūduàn*, in Zhāng c. 860: *juàn* 8.16). It is also said that between the Han and Wei dynasties, the renowned calligraphers Zhōng Yóu 鍾繇 [151–230] and Hú Zhāo 胡昭 [162–250] had studied this style of script under Liú.[11]

The semi-cursive script with which we are most familiar now was a style of script which fell between the standard and modern cursive scripts. During the time of Liú Déshēng and the others, modern cursive script did not exist as yet; so the semi-cursive script which they wrote was not, of course, entirely like the semi-cursive we know today. Unfortunately, nothing remains now of Liú's and Hú's calligraphy. Among the more reliable style guides featuring Zhōng Yóu's calligraphy which remain, the calligraphy seen in the "Mùtián bǐngshè *tiě*" 墓田丙舍帖 may well be semi-cursive script (see Fig. 81—a carved reproduction of a copy made by Wáng Xīzhī 王羲之 [321–379]). Some, however, hold that this sample of Zhōng's calligraphy is written in standard script.[12] Still others doubt whether it actually reflects the true features of Zhōng's calligraphy. Therefore, ascertaining the truth with respect to early period semi-cursive script is not an easy task.

Of the Wei-Jin period materials bearing script which remain at present, are there any which contain representative samples of early semi-cursive script? Below we shall discuss some of our thoughts on the subject.

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11. See Wèi Héng 衛恆 (Jin dynasty), *Sìtǐ shūshì* 四體書勢, mentioned in his biography in *Jìnshū* (Zhōnghuá ed., p. 1061). Also, Zhāng Huáiguàn in Zhāng c. 860: *juàn* 8.

12. Chǔ Suìliáng 褚遂良, "Jìn Yǒujūn Wáng Xīzhī shū mù" 晉右軍王羲之書目 (in Zhāng c. 860: *juàn* 3), lists this style guide under the heading *zhèngshū* "regular script."

On the slips and pieces of paper unearthed at the Lóulán site we find samples of everyday script of the Wei-Jin period. Among them are texts written rather neatly in neo-clerical script (see Figs. 55A–B, 59A–C) as well as texts written in a style of cursive script that belongs to the stage between the transition from *zhāngcǎo* to modern cursive script (see Figs. 56C–D, 65A–C). In addition to them, there are also quite a number of samples of characters written in other styles of script which fall between the two. In terms of the graphic shapes of the latter, aside from being composed of a small number of components used in cursive script, they are not a great deal different from neo-clerical script forms; yet it is clear that the calligraphic style in which they were written had been rather heavily influenced by cursive script, generating in turn a style which is considerably more lively than formal neo-clerical script. They are by no means uniform. In the case of the characters written on the slips and pieces of paper, it would appear that they are no more than rather cursorily written neo-clerical script forms. But on various other slips and pieces of paper, the characters are clearly written in a style which is quite unique. The ways in which strokes are formed and the structures of the characters themselves are clearly much closer to standard script than was neo-clerical script. Regardless of whether this new style is discussed in relation to neo-clerical script or *zhāngcǎo* script, it certainly would have been worthy of being termed "graceful and soft." Rather classic examples of this style of script are seen on a slip dated the fourth year of the Jīngyuán era under the Wei dynasty (A.D. 263) (see Fig. 55C) and in two letters signed by a certain Jì Chěng 濟逞 (see Fig. 62A–B) and another signed by a Chāo Jì 超濟 (see Fig. 63) which probably do not postdate the early Eastern Jin period. In our opinion, this style of script was indeed early period semi-cursive script.

Of the samples of Wáng Xīzhī's semi-cursive script which remain today, nearly all are written in the style which falls between the standard and cursive scripts; only that appearing in the "Yímǔ *tiē*" 姨母帖 (also called the 十一月十三日帖 "11th month, 13th day *tiē*") is written in a somewhat archaic and indelicate style (see Fig. 82). Moreover, it so happens that the script in the "Yímǔ *tiē*" is quite similar to that seen in Jì Chěng's letter mentioned above. This is further evidence that the script described above was indeed early period semi-cursive script.

Tracing backward from the Wei-Jin period, several examples of script which stylistically resemble the early period semi-cursive script described above are found engraved on tomb bricks from the Cáo clan's cemetery at Bóxiàn (see Fig. 74A–B). Their dates roughly coincide with Liú Déshēng's. So it is evident that the formation of semi-cursive script had popular origins and by no means should be solely attributed to Liú.

Already during the late Eastern Han period, we find neo-clerical script that has strong overtones of cursive script, an example of which is seen

on the pottery jar cited above, dated the first year of the Xīpíng era. Early period semi-cursive script must have been based on this style of script and was formed by beautifying the writing techniques of strokes and graphic compositions.

Early period semi-cursive script represented a new style of script which was quite unique. This style of script was not an admixture of some characters written in neo-clerical style and some in cursive style, nor was it a cursive form of neo-clerical script. In some cases, early period semi-cursive script was written rather neatly, like that in Chāo Jì's letter mentioned above. Yet since it had its own unique traits insofar as the writing of character strokes and the composition of characters are concerned, it is still quite easily distinguished from neo-clerical script. In 1976, five brick grave tablets were discovered in the tomb of Mèng fūjūn at Mǎānshānshì, Ānhuī, dated the first year of the Tàiyuán era (376) under the Eastern Jin dynasty. While the contents of the texts are all identical, they are written in two different styles of script, one of which is neo-clerical script (see Fig 83A). The other style is more elegant (see 83B), and some hold that it is *zhēnshū* (i.e., what we term standard script). In actuality, it is neatly executed early-period semi-cursive script.

The script in Zhōng Yóu's "Mùtián bǐngshè *tiē*" mentioned above clearly resembles standard script even more so than do the samples of early period semi-cursive script cited above. Nevertheless, its overall style is still consistent with theirs. Yáng Xīn (in Zhāng c. 860: *juàn* 1), who flourished under the Song dynasty during the Southern Dynasties period, wrote: "Zhōng [Yóu] wrote in three styles of script: one is called *míngshí* 銘石 'stone inscriptional script,' and it is the finest of all; the second is called *zhāngchéng* 章程 'regulation script,' and is used in copying texts and teaching script; the third is called *xíngxiá* 行狎 script and is used for private correspondence." *Xíngxiáshū* is in fact semi-cursive script.[13] The content of the "Mùtián bǐngshè *tiē*" is indeed private correspondence. While it is possible that the extant editions of the "Mùtián bǐngshè *tiē*" contain inaccuracies here and there due to the infidelities of copyists in adhering to the original, nonetheless it probably still reflects for the most part what Zhōng's semi-cursive script looked like. The fact that Zhōng's semi-cursive script is rather close to standard script may well have been his own creation.

In his discussion of Zhōng Yóu and Hú Zhāo's semi-cursive script in his "Lìshū shì" (see note 11 above), Wèi Héng says that "while they both

13. Wáng Sēngqián (Qi dynasty) during the Southern Dynasties period, in his essay "*Lùn shū*" (in Zhāng c. 860: *juàn* 1) also cites Yáng Xīn's remarks above but somewhat differently. For "三曰行狎書, 相聞者也" Wáng has "三曰行狎書, 行書是也" "The third is called *xíngxiá* script which is semi-cursive script." As for the term *xíngxiáshū* 行狎書, it was later more commonly written as *xíngyāshū* 行押書.

had learned it from Liú Déshēng, Zhōng's [style] differs somewhat"; perhaps he was referring to this unique aspect of Zhōng's style.

Even though early period semi-cursive script is by no means a cursive form of neo-clerical script, it is, in the final analysis, a style which developed out of a somewhat cursively written form of neo-clerical script and thus unavoidably retained some of the characteristics of the latter. Moreover, after the appearance of early period semi-cursive script, it was quite inevitable that it should exert an influence on neo-clerical script and that the neo-clerical script written by some should move in the direction of semi-cursive script. Consequently, it is most difficult to draw a fine line which would separate early period semi-cursive script from cursorily written neo-clerical script. Judged from the way we write characters today, some of the characters may actually be regarded as cursorily written standard script forms or as semi-cursive forms; both are possible. It would seem that some of the characters written during the Wei-Jin period could either be regarded as cursorily written neo-clerical script forms or as early period semi-cursive forms. A case in point is the letter drafted by Lǐ Bò, administrator of the Western Regions of Qián Liáng (one of the sixteen states which existed during the Jin dynasty), unearthed at Lóulán (see Fig. 61). Perhaps a more appropriate way of viewing this style of writing would be to place it between the neo-clerical and early period semi-cursive scripts.

As was mentioned in Sec. 4 above, prior to the formation of the cursive script, there was a style of calligraphy called 蹅 *zhá*. According to the explanations given in certain dictionaries and rime books, it was intrinsically close to the semi-cursive script of later times. Characters which are derived in part from "辵" *chuò* "to run and stop" usually have something to do with movement of various sorts. The character 蹅 *zhá* is a syssemantograph derived from "筆" *bǐ* "a writing implement" and *chuò* "to run and stop" and thus probably denoted writing rapidly. *Xíngshū* "running script" may also have been so dubbed on account of the rapidity with which it is written.

5.6 The Formation and Development of Standard Script and the Evolution of the Cursive and Semi-Cursive Scripts

The earliest known master of the standard-script style calligraphy was Zhōng Yóu; and the oldest known samples of standard-script style calligraphy in existence are by him and are found in various editions of handcopies of the "Xuān shì *biǎo*" 宣示表 in addition to his other style guides (among which the "Jiàn Jì Zhí *biǎo*" 薦季直表 appears suspect) (see Fig. 84).

The script in the "Xuān shì biǎo" and the other style guides attributed to Zhōng Yóu had clearly emerged from the womb of early period semi-cursive script. If one were to write the tidily written variety of early period semi-cursive script in a more dignified fashion and were to use consistently the pause technique (*dùn* 頓, used to reinforce the beginning or ending of a stroke) when ending horizontal strokes, a practice which already appears in early period semi-cursive script, and further were to make use of right-falling strokes with thick feet, the result would be a style of calligraphy like that in the "Xuān shì biǎo." Zhōng Yóu's semi-cursive calligraphy is much closer to standard script than most examples of early period semi-cursive script. As he had occasion to write some very serious pieces such as memorials to the emperor, he wrote the characters in them in a more dignified way than was the practice in the ordinary semi-cursive style, and in so doing the earliest form of standard script came into being.

If what has been said above is basically in line with the facts, then we can simply view early period standard script as having been an offshoot of early period cursive script. Sūn Kuàng, who flourished during the Ming dynasty, in his "*Shū huà bá* bá," wrote: "As I have said before, during the Han-Wei period, clerical script was formal script and Zhōng and Wáng's lesser standard script was a semi-cursive form of clerical script." This is a most incisive opinion.

The Wáng referred to by Sūn above was the renowned Eastern Jin calligrapher, Wáng Xīzhī (321–379). His standard script calligraphy and that of his son, Wáng Xiànzhī (344–388), which was based on Zhōng Yóu's standard script, underwent further maturation, becoming ever more pleasing to the eye (see Fig. 86).

It should be pointed out that even though standard script had already come into existence between the Han and Wei dynasties, nevertheless the number of those who used it during entire Wei-Jin period was fairly small, most having been men of letters. Most people of that period still used neo-clerical script or a style of script which fell between neo-clerical script and early period semi-cursive script. Aside from pieces written in semi-cursive and cursive script, the calligraphy appearing on Wei-Jin period slips and pieces of paper available at present is nearly all of these types. Handcopies of ancient books, the Buddhist sutras, and so forth dating from the Wei-Jin period are also mostly written in neo-clerical script; moreover, in some instances overtones of the *bāfēn* script were intentionally incorporated (see the relevant figures cited in Sec. 5.1 above). The "Jīngjí zhì" chapter of the *Suíshū* says,

> [On] the central plain, battle followed battle and warfare was the order of the day. Only [in the territory under the control of] Fú and

> Yáo did culture and education flourish. [Fú here refers to the Fú clan's Former Qin dynasty (352–410), and Yáo refers to the Yáo clan's Later Qin dynasty (384–417), both of which were contemporaneous with the Eastern Jin dynasty.] [Emperor] Wǔ of Song entered the frontier pass and collected their books and charts. The government repositories held only four thousand scrolls, [consisting of] green paper on red spindles with script that was archaic and indelicate.

The meaning of "archaic and indelicate" script here probably refers to the use of neo-clerical script rather than standard script in the handcopies of early texts produced during the Former and Later Qin dynasties.

The style of calligraphy selected for stele inscriptions was even more conservative than that used in copying old texts. The *bāfēn* script was still commonly used on Wei and Western Jin period stelae. The styles of *bāfēn* script engraved on Eastern Han stelae are many and varied and differ from one calligrapher to the next, whereas the *bāfēn* calligraphy appearing on Wei and Western Jin stelae in most cases is dull and artificial as well as stereotyped. This no doubt reflects the fact the *bāfēn* script, on account of its having been edged out by the neo-clerical script, had already become an outmoded style of script that was only used in stone and metal inscriptions (see Qǐ 1981:344). Neo-clerical script already began to appear in a few Wei and Western Jin stele inscriptions, such as in the "Dàng kòu jiāngjūn Lǐ Bāo tōng gé dào" inscription, dated the fourth year of the Jīngyuán era (263) under the Wei dynasty (see Fig. 87) and the "Jiǔzhēn tàishǒu Gǔ láng *bēi*," dated the first year of Fènghuáng era of the Wu dynasty (i.e., the eighth year of the Tàishǐ era under the Jin dynasty or 272) (see Fig. 88). In the "Gú láng *bēi*" inscription, however, we find instances of deliberate archaism, such as writing "之" *zhī* as 𠂤 and the like.

The style of script used on most of the Eastern Jin stelae discovered to date is neo-clerical script. Among them, the inscription appearing on the "Guǎng wǔ jiāngjūn *bēi*" dated the fourth year of the Jiànyuán era under the Former Qin dynasty (i.e., the third year of the Tàihé era under the Eastern Jin dynasty or 386), is written somewhat more casually and probably is somewhat closer to the neo-clerical style in daily use during that period. Yet in this inscription we find instances of deliberate archaism, such as writing "之" *zhī* as 𠂤, the grass signific as ⺾, and so forth (see Fig. 89). In the "Yáng Yáng shéndào què" inscription, dated the third year of the Lōngān era (399) (see Fig. 90) and in the "Cuàn Bǎozǐ *bēi*," dated the first year of the Yìxī era (405) (see Fig. 91) we find that while the calligraphers responsible for them had intended on imitating the *bāfēn* style, they had not mastered it. Consequently their calligraphy is quite artificial-looking.

While most of the Eastern Jin grave tablet inscriptions are written in neo-clerical script, a small number are written in *bāfēn* script (such as in the "Xiè Kūn *mùzhì*" inscription [see *WW* 1965:36]) or semi-cursive script

(such as the semi-cursive script seen in the "Mèng fǔjūn *mùzhì*" inscriptions mentioned above). Some of the grave tablet inscriptions in neo-clerical script are written rather clumsily, such as the "Mèng fǔjūn *mùzhì*" inscription written in neo-clerical script; some are stylistically already rather close to semi-cursive and standard script, such as the "Yán Qiān fù Liú shì *mùzhì*" inscription, dated the first year of the Yǒnghé era (345) (see Fig. 92); still others appear to have been written by calligraphers who had attempted to imitate the *bāfēn* while writing in neo-clerical script just as those responsible for the "Yáng Yáng shéndào què" and other such inscriptions had, such as the "Wáng Xìngzhī *mùzhì*" inscription, dated the seventh year of the Xiánkāng era (341) (Fig. 93) and the "Liú Kè *mùzhì*" inscription, dated first year of the Shēngpíng era (357) (see Fig. 94).

Due to the fact that *bāfēn* and neo-clerical style scripts were used in Wei-Jin period stele and grave tablet inscriptions and that the style of script used by the average person was also of the neo-clerical variety, some of those who have discussed calligraphy in the past have argued that it is virtually impossible that standard script, or a variety of semi-cursive script that was close to standard script, could have existed at that time. They have concluded in turn that the standard and semi-cursive calligraphy attributed to Zhōng Yóu and Wáng Xīzhī that has been transmitted to our time is basically unreliable. This is not a satisfactory explanation. That some have stated that the authentic calligraphy of Wáng Xīzhī stylistically must have resembled that seen in such inscriptions as the "Cuàn Bǎozǐ *bēi*" mentioned above is even more hilarious. What they have failed to recognize is that the ancients often used different styles of script for different purposes. Moreover, there was usually a substantial gap between the script written by men of letters, especially that written by innovative calligraphers, and the script written by the average person. That Zhōng and Wáng's standard script and the neo-clerical script coexisted is not the least bit strange. In the writings on paper unearthed at the Lóulán site which date from the Wei-Jin period and which do not postdate the early Eastern Jin period, we not only find early period semi-cursive script but also standard script written in a style which is similar to Zhōng and Wáng's (see Fig. 64). Thus it is quite evident that the arguments of those who doubt that the standard script could possibly have existed during the Wei-Jin period and question the reliability of the extant style guides attributed to Zhōng and Wáng are totally untenable.

Following the emergence of the Southern and Northern Dynasties, standard script finally became the foremost style of script in use.

As was mentioned above, during the Eastern Jin period neo-clerical script in some cases was already rather close to the semi-cursive and standard scripts. By the Southern and Northern Dynasties period, there appeared a form of standard script which had evolved from neo-clerical

script under the influence of Zhōng and Wáng's standard script. Already on early Southern and Northern Dynasties period stelae and grave tablet inscriptions we find that it was this style of script that occupied a dominant position and not neo-clerical script. In terms of its character composition and the technique of writing character strokes, this form of standard script retained some of the more prominent vestiges of the neo-clerical script. Moreover, like the neo-clerical script used on stelae and grave tablets during the Eastern Jin period, the script used on stelae and grave tablets during this time also frequently incorporates archaisms, with character strokes having slight overtones of the *bāfēn* script, for which reason it is somewhat more archaic and indelicate in appearance than Zhōng and Wáng's standard script. This style of standard script was used in stelae and tablets dating from the Song dynasty of the House of Liu during the Southern Dynasties period, such as in the "Cuàn Lóngyán *bēi*" inscription, dated the second year of the Dàmíng era (458) (see Fig. 95) and the "Liú Huáimín *mùzhì*" inscription, dated the eighth year of the Dàmíng era (464) (see Fig. 96). This style of standard script occupied a dominant position in Northern Dynasties period stelae and tablets for a rather lengthy period. Due to the fact that the number of Northern Wei stelae and tablets which feature this form of standard script is quite large (see Figs. 97–98), the script was later dubbed *Wèi bēi tǐ* "Wei stele style" by some.

By the time of the Qi (550–577) and Liang (502–557) dynasties of the Southern Dynasties period, a style of script appeared on stelae and tablets which was very close to Zhōng and Wáng's standard script (see Figs. 99–100). By the latter half of the Northern Dynasties period, there also appeared a tendency for the script used in stele and tablet inscriptions to move in the direction of Zhōng and Wáng's style. In some inscriptions such as the "Gāo Guīyàn zàoxiàng jì" inscription, dated the first year of the Wǔdìng era (543) under the Eastern Wei dynasty, the style of the script used is already almost totally in the Zhōng–Wáng vein (see Fig. 101). From the Tang dynasty onward, the "*Wèi bēi tǐ*" essentially departed from the stage of history and did not make a comeback till the Qing dynasty, thanks to the importance attached to it by the calligraphers of that period.

Characters written in imitation of the *bāfēn* script can be seen on Southern and Northern Dynasties stelae and tablets (see Fig. 102). Yet such characters are intrinsically different from the "*Wèi bēi tǐ*" and have nothing more than slight overtones of the *bāfēn* script seen on Wei dynasty stelae and tablets. Some view the characters of this sort as representing a style of script which emerged during the evolutionary process from Han clerical script to standard script, while others confuse this style with the "*Wèi bēi tǐ*." Both views are incorrect.

Zhōng and Wáng's standard script had emerged from the womb of semi-cursive script. So from the standpoint of character composition and

the techniques of writing character strokes, in some respects it lacked the solemnity and dignity required of formal script used in stele inscriptions. For this very reason, Zhōng and Wáng's standard script was modified in various ways during the Southern and Northern Dynasties period. Not until the time of Ōuyáng Xún (557–641), during the early Tang period, were these modifications satisfactorily completed (see Fig. 103). Consequently, some have held that it was not until the beginning of the Tang dynasty that standard script reached full maturity. For instance, Sūn Kuàng (nd.), who held that "Zhōng and Wáng's lesser *kǎi* script was a semi-cursive form of clerical script," in his "*Shū huà bá* bá" wrote,

> As to the standard script (楷書 *kǎishū*), it most assuredly began with Ōuyáng. Every dot and every stroke are all completely regulated; not one brush stroke is compromised or expediently executed. The intent is exactly the same as that of the clerical script and the techniques are wholly complementary with those of the semi-cursive and cursive scripts.

The character *kǎi* "楷" in the term *kǎishū* means "model, pattern," so the original meaning of "*kǎishū*" referred to characters that could serve as models or as a standard and was not at all a special term applied to any one style of script in particular. During the Wei-Jin period some referred to carefully and neatly executed *bāfēn* calligraphy as *bāfēn kǎifǎ* 八分楷法 "*bāfēn* model [script]" or simply as *kǎifǎ* "model [script]." Zhōng and Wáng's standard script, which had emerged from the womb of semi-cursive script, clearly did not possess the necessary qualifications during their time to be termed "model script." A number of those who have discussed styles of script in the past have held that the *zhāngchéng* script described by Yáng Xīn as one of Zhōng Yóu's three styles of calligraphy corresponds to what we call standard script. I am unsure about the validity of this view. It is possible that the Zhōng Yóu standard script under discussion was initially included in the *xíngxiá* style of calligraphy and only later became independent. As for the *zhāngchéng* script, perhaps it was a more formalized type of neo-clerical script. From the Southern and Northern Dynasties to the Tang period, standard script was variously called *zhèngshū* 正書 "formal script," *zhēnshū* 眞書 "regular script," and *lìshū* 隸書 "clerical script." The terms *zhèngshū* and *zhēnshū* were contrasted with the terms *xíngshū* "semi-cursive script" and *cǎoshū* "cursive script," and the term *lìshū* was contrasted with the term *bāfēn* (see Sec. 5.2). Like the term *kǎifǎ*, the term *kǎishū* also had been used to refer to the *bāfēn* script. In his note on the *bāfēn* script, the Tang scholar Zhāng Huáiguàn (in Zhāng c. 860: *juàn* 7) in his *Shūduàn* says that the *bāfēn* "originally was called *kǎishū*. *Kǎi* means 'model, pattern, standard.'" During the Tang period, however, the term *kǎishū* probably already was used in reference to the standard script

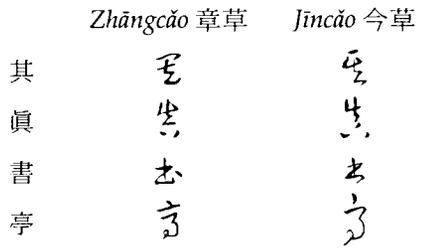
in question. Since the Song dynasty the term *kǎishū* has been used as a special term for the script in question.

Due to the influence of the semi-cursive and standard script styles of calligraphy, during the Wei-Jin period the *zhāngcǎo* script gradually evolved into modern cursive script. As Professor Qǐ Gōng (1981:27) has pointed out, the script in the "Píngfù *tiē*" by Lù Jī of the Western Jin (see Fig. 104) represents cursive script which had undergone a transition from *zhāngcǎo* to modern cursive script. The cursive script found on the slips and writings on paper unearthed at Lóulán in most cases also shares these same features (see Figs. 56C–D, 65). With respect to the formalization of modern cursive script, Wáng Xīzhī probably played a major role in this process. In his essay "Lùn shū," Wáng Sēngqián (in Zhāng c. 860: *juàn* 7) of the Northern Qi period wrote:

> [My] deceased great-grandfather Commandant Qià in a letter to the Right Army [he is referring here to Wáng Xīzhī who had attained the rank of Commandant of the Right Army and Administrator (*nèishǐ*) of Guìjī] said: 'All have changed the ancient shapes; for if this were not so, [we] would at present still follow Zhōng [Yóu] and Zhāng' [he is referring here to Zhāng Zhī, an Eastern Han master of *cǎoshū* calligraphy].

In the *Shūduàn*, Ōuyáng Xún's essay "Remarks on Commandant-escort Yáng's writing of the *Thousand-Character Classic* in *zhāngcǎo* script" is cited in which Ōuyáng also states that Wáng Xīzhī and his younger cousin Wáng Qià (323–358) had transformed *zhāngcǎo* script into modern cursive script (*jīncǎo* 今草) (in Zhāng c. 860: *juàn* 7.15). So there must be some basis for these accounts. Aside from the "Bào Nú *tiē*," nearly all the extant samples of Wáng Xīzhī's cursive calligraphy are written in modern cursive script (see Fig. 105).

While modern cursive script in most cases adhered in shape to the *zhāngcǎo* script, the production techniques of character strokes in the latter which were close to the clerical script were dropped in the former. Sometimes strokes were merged slightly, thereby making modern cursive script even more convenient to write than *zhāngcǎo*; for example:



Aside from this, some characters written in modern cursive script had been simplified to the point that they no longer resembled their *zhāngcǎo* counterparts at all, such as "亦" *yì* "also" which was written 𠂉, "上" *shàng* "above" which was written ⺊, "下" *xià* "below" which was written 丆, and so forth. The methods of writing some characters in modern cursive script were based on the *zhāngcǎo* script and on cursively written standard script forms, such as "卿" *qīng* "a state minister" could be written 𠂤 as well as 𠂢; "介" *jiè* "scales, armor" could be written 𠆢 as well as 𠆣, etc. The linking of strokes is more prevalent in modern cursive script than in *zhāngcǎo*, and characters are often linked to one another. In sum, since modern cursive is even more cursive than the *zhāngcǎo* script it is also much more difficult to read than the latter. Consequently, modern cursive script was used only to a very limited extent and mostly by scholars. Since Tang times yet another form of cursive script emerged called *kuángcǎo* 狂草 "deranged cursive script," most of which could not be read by others, and therefore became a kind of art form whose sole intention was amusement.

At the hands of Wáng Xīzhī and others, semi-cursive script, along with the development of the standard script and the formation of modern cursive script, evolved into a style of script which fell between the standard script and modern cursive script, and whose appearance differed substantially from early period semi-cursive script (see Figs. 106–107).

There were no strict rules for writing semi-cursive script. When it was written with a bit more care, bringing it closer to standard script, it was called *zhēnxíng* 眞行 "regular semi-cursive" or *xíngkǎi* 行楷 "semi-cursive standard" script. When it was written in a self-indulgent way, with a heavy cursive flavor, it was called *xíngcǎo* 行草 "semi-cursive cursive" script. Semi-cursive script could be written much more quickly than standard script; and since it could be read much more easily than cursive script, semi-cursive script proved to be of considerable practical value. Nowadays we regard standard script as formal script; yet most educated persons ordinarily write in a style which is closer to semi-cursive script.

The dividing line which separates the clerical and standard script stages is not easily defined. Examined comprehensively from all angles, it would seem that the Southern and Northern Dynasties period can be viewed as the beginning of the standard script stage and that the Wei-Jin period can be viewed as the period during which the transition from the clerical stage to the standard script stage took place.

After Chinese script entered the standard script stage, while graphic forms continued to be simplified, the styles of script did not undergo any major changes.

6

The Classification of Chinese Characters

6.1 The Six-Principles Theory of Chinese Script

When discussing the structure of Chinese characters in the past, scholars of the script have usually clung to the *liùshū* 六書 "six-principles" theory, which divides Chinese characters into six categories, i.e., pictographs, indicators, etc.

The earliest occurrence of the term *liùshū* appears in the "Dìguān" chapter of the *Zhōulǐ* (p. 731), in reference to the duties of the *Bǎoshì* "Protector," who, among other duties, was responsible for instructing the children of the nobles in the *liùyì* 六藝 "six arts," which are described as follows:

> As to the six arts, the first is called the five rituals; the second, the six [kinds of] music; the third, the five [techniques of] archery; the fourth, the five [techniques of] charioteering; the fifth, the six scripts [*liùshū*]; the sixth, the nine calculations.

The *Zhōulǐ* does not, however, explain the actual meaning of the term *liùshū*.

Han time scholars interpreted the term as referring to six basic principles underlying the structure of Chinese characters. According to the "Yìwénzhì" chapter of the *Hànshū* (Zhōnghuá ed., p. 1720),

> When the ancients reached the age of eight, they undertook primary studies. Thus the Zhōu official, the Protector, was charged with fostering the scions of state, teaching them the *liùshū*. [The term *liùshū*] refers to the *xiàngxíng*, *xiàngshì*, *xiàngyì*, *xiàngshēng*, *zhuǎnzhù*, *jiǎjiè*. They are the bases for creating characters.

In his commentary to the *Zhōulǐ* passage cited above, however, Zhèng Zhòng (d. A.D. 83) writes: "The *liùshū* are the *xiàngxíng* 象形, *huìyì* 會意, *zhuǎnzhù* 轉注, *chùshì* 處事, *jiǎjiè* 假借, *xiéshēng* 諧聲" (p. 731).

In the *Shuōwén*'s postface, Xǔ Shèn defines each of the *liùshū* and further gives examples of each:

> 周禮八歲入小學, 保氏教國子, 先以六書. 一曰指事. 指事者, 視而可識, 察而見意.[1] 上下是也. 二曰象形. 象形者, 畫成其物, 隨體詰詘,[2] 日月是也. 三曰形聲. 形聲者, 以事爲名, 取譬相成,[3] 江河是也. 四曰會意. 會意者, 比類合誼 (=義), 以見指撝,[4] 武信是也. 五曰轉注. 轉注者, 建類一首, 同意相受, 考老是也.[5] 六曰假借. 假借者, 本無其字, 依聲托事, 令長是也. [According to] the *Zhōulǐ*, at the age of eight [one] undertakes primary studies. The Protector instructed the scions of state by first teaching them the *liùshū* ("the six principles of writing"). The first is called *zhǐshì* ("indicate things"). As for the *zhǐshì* graphs, when seen they can be recognized; when inspected their meaning becomes apparent. The graphs 上 "above" and 下 "below" are such. The second is called *xiàngxíng* ("resemble form"). As for the *xiàngxíng* graphs, one makes a drawing of an object and follows the sinuousity of its physical form. The graphs 日 "sun" and 月 "moon" are such. The third is called *xíngshēng* ("form and sound"). As for the *xíngshēng* graphs, based on a thing, one creates a written word and takes a [phonetically] analogous one and combines them. The graphs 江 "river" and 河 "river" are such. The fourth is called *huìyì* ("conjoining meanings"). As for the *huìyì* graphs, [one] matches [semantic] types and combines their meanings in order to reveal the meaning which is indicated. The graphs 武 "martial" and 信 "trust" are such. The fifth is called *zhuǎnzhù* ("evolving and deriving"). As for the *zhuǎnzhù*, one establishes [graphs of] similar categories under one head, by the shared meanings they are mutually (connected =) related. The graphs 考 "deceased father" and 老 "aged" are such. The sixth is called *jiǎjiè* ("loan-borrowing"). As for the *jiǎjiè* graphs, originally having no proper graph, by just relying on the sound, it [the sound] is entrusted to the thing [referred to]. The graphs 令 "to lead" and 長 "leader" are such.

1. While modern editions of the *Shuōwén* have "察而可見" here, Duàn Yùcái (1815) emended the text to read "察而見意" on the basis of Yán Shīgǔ's (581–645) comments on the "Yìwénzhì" chapter of the *Hànshū*.

2. 詘 *qū* here is interchangeable with "屈" *qū* "to bend, to flex." The phrase "詰詘" *jiéqū* means "bent and twisting, sinuous."

3. The first sentence is usually construed as referring to the signific and the second to the phonetic element.

4. *Huī* "撝" "to wave, to brandish" here is interchangeable with "麾" *huī* "to command, to lead." The phrase "指麾" *zhǐhuī* here means 意之所指 "the meaning which is indicated."

5. The *Shuōwén* assigns "老" *lǎo* to the *huìyì* class and glosses it as "考" *kǎo*. *Kǎo* is placed under the "老" *lǎo* radical where it is analyzed as 从老省, 丂聲 "derived from an abbreviation of 老 *lǎo* and 丂 as phonetic" and is glossed as "老" *lǎo*.

The classicists of Han time were divided among the Old (*gǔwén*) and New (*jīnwén*) Text schools (see Sec. 4.3 above). Now the *Zhōulǐ* referred to above by Xǔ Shèn was a classic revered by the Old Text school. The "Yìwénzhì" chapter of the *Hànshū* cited above was compiled on the basis of the *Qīlüè*, a work by Liú Xīn (d. A.D. 23), who was a leading master of the Old Text school during the late Western Han. Both Zhèng Zhòng and Xǔ Shèn also were members of the Old Text school. Zhèng Zhòng was the son of Zhèng Xīng, and Zhèng Xīng was Liú Xīn's student. Xǔ Shèn was Jiǎ Kuí's (30–101) student, and Jiǎ Kuí's father Jiǎ Huī had also studied under Liú Xīn. So the three explanations of the *liùshū* cited above must all have had a common origin. Yet we find discrepancies in their use of nomenclature and sequential arrangement of the *liùshū*. These are summarized below:

Yìwénzhì 藝文志	Zhèng Zhòng 鄭眾	Xǔ Shèn 許慎
1. xiàngxíng 象形	1. xiàngxíng 象形	2. xiàngxíng 象形
2. xiàngshì 象事	4. chùshì 處事	1. zhíshì 指事
3. xiàngyì 象意	2. huìyì 會意	4. huìyì 會意
4. xiàngshēng 象聲	6. xiéshēng 諧聲	3. xíngshēng 形聲
5. zhuǎnzhù 轉注	3. zhuǎnzhù 轉注	5. zhuǎnzhù 轉注
6. jiǎjiè 假借	5. jiǎjiè 假借	6. jiǎjiè 假借

Xǔ Shèn's nomenclature has been adopted by most people in the past.

The *Zhōulǐ* refers to the *jiǔshù* 九數 "nine calculations" in conjunction with the *liùshū*, both of which were subjects studied by children. As the "nine calculations" were nothing more than multiplication tables, it seems likely that the content of the *liùshū* was just as elementary and only covered commonly used characters (see Zhāng 1948:1–22). Interpretations of the *liùshū* as "the bases for creating characters" were probably attributable to the Old Text classicists who "used antiquity as a pretext for reforming the system."

The six-principles theory is the earliest systematic theory of the structure of Chinese characters. The establishment of the six-principles theory by Han time scholars contributed immensely to the development of grammatology in China. To this day the terms *xiàngxíng*, *huìyì*, *xíngshēng*, and *jiǎjiè* are still generally used as technical terms. Nevertheless, from the standpoint of the history of the development of grammatology in China, the Han dynasty must, in the final analysis, be relegated to its earliest stage, since it is inconceivable that the researches of Han time scholars on the structure of Chinese characters would be flawless. Moreover, since their concepts were circumscribed by the figure six, it was obviously very difficult for them to be totally realistic when classifying

Chinese characters on the basis of structure. Consequently, the problems inherent in the six-principles theory are fairly numerous. Presented below are some of the major problems in brief. We shall first discuss the problems related to the *xiàngxíng*, *zhǐshì*, and *huìyì* classifications, and then follow with a discussion of the problems related to the *zhuǎnzhù* class, and finally take up those related to the *jiǎjiè* class.

According to the six-principles theory, characters which include one or more semantic symbols in their structure—that is, what we term semantographs—were divided into three classes, namely, *xiàngxíng*, *zhǐshì* and *huìyì*; yet, in reality, the boundary separating these three classes is not altogether clear.

The *Shuōwén*'s postface says that the characters "日" *rì* "sun" and "月" *yuè* "moon" are *xiàngxíng* graphs and that "上" *shàng* "above" and "下" *xià* "below" are *zhǐshì* graphs. The characters "日" and "月" were originally written ⊙ and 𝔻, respectively, while "上" and "下" were written 二 and 丅, respectively. The graphic signs comprising the former two depict concrete things, and the words they represent are the names of the things they depict. The latter two are comprised of abstract pictographic symbols, and the words they represent are not the names of "things" but the names of "concepts." The difference between these two classes would seem to be quite distinct. Yet in many cases it is actually quite difficult to determine into which class a character should be placed. Take, for instance, characters of the 亦 ("大" *dà* "big") type; they, like "日" and "月," are composed of graphic symbols that represent concrete things, but the words they represent are not the names of the things they represent; rather they are the names of "concepts" that are related to the things depicted, not unlike "上" *shàng* and "下" *xià*. So some of those who have discussed the six principles in the past have classified characters of this sort as *zhǐshì* graphs, while others have classified them as *xiàngxíng* graphs. The *Shuōwén* explains the graph "大" *dà* "large, great" as follows: 大, 天大, 地大, 人亦大, 故大象人形 "*dà*: Heaven is great; the earth is great; man is also great; therefore [the character] for 'great' resembles a person in shape." From this it would appear that Xǔ Shèn himself regarded the character *dà* as a *xiàngxíng* graph. In certain cases Xǔ Shèn construed graphs which were composed of abstract symbols as being *xiàngxíng* graphs. For example, the graph 𤔔 ("叕" *zhuó*) is explained in the *Shuōwén* as follows: 綴聯也, 象形 "*zhuó* means 'joined together' and is a pictograph."[6] The meaning of the character *zhuó* as given in the *Shuōwén* is conveyed by interconnecting six curved lines; is there any great difference between doing this and alternating the relative positions of long and short lines to generate the meanings conveyed by "上" *shàng* and "下" *xià*? If the character *zhuó* can be construed as a *xiàngxíng* graph, then why are *shàng* and *xià* not construed in the same way? In the "Liùshū lüè" section of his *Tōngzhì*, Zhèng Qiáo (1104–1162) (1149) assigns *shàng* and *xià* to the *xiàngxíng* category and places them in a sub-class called *xiàngwèi* 象位 "resemble position." It cannot be said that his method here is unreasonable. But in doing so, the boundary separating the *xiàngxíng* from the *zhǐshì* vanishes altogether.

6. The character "叕" appears written 𤔔 on the Qín bamboo slips, which differs from the form given in the *Shuōwén*. While Xǔ Shèn's explanation may not necessarily be correct, this is of no import to the present discussion.

The *Shuōwén*'s postface gives the characters "武" *wǔ* "martial, prowess" and "信" *xìn* "trust" as examples of *huìyì* graphs. The character *wǔ* is derived from "止" *zhǐ* "to stop" and "戈" *gē* "dagger-ax," which some interpret as 止戈爲武, suggesting that halting weapons or putting a stop to war constitute true prowess. The character 信 *xìn* "trust," which is composed of *rén* "person" and *yán* "speech," has been construed as 人言爲信, suggesting that there should be truth in what a person says. In the archaic script, however, we seldom find characters which depend on a combination of graphic components to convey a meaning, that is, characters of the "歪" *wāi* type, which combines "不" *bù* "not" and "正" *zhèng* "straight" to convey the idea of "askew." Questions surround both of the characters cited in the *Shuōwén*'s postface. Most scholars nowadays regard the character *xìn* as a *xíngshēng* graph, derived from 言 *yán*, and 人 *rén* as phonetic (Táng Lán, however, holds that *yán* is phonetic). *Wǔ* appears quite early and is found in the oracle bone inscriptions. The expression 止戈爲武 "halting weapons constitutes true prowess" comes from the *Zuǒzhuàn* (Xuān 12) and has a fairly long history; yet it is quite evident that the creator of the graph did not have such an analysis in mind at the time of its creation.

In the ancient script, semantographs which are composed of two or more semantic symbols in most cases utilize pictographic symbols in their construction, and thus usually are reminiscent of drawings, such as the examples "立" *lì*, "步" *bù*, and so forth cited in Sec. 3.2 above. While most of those who have discussed the six principles in the past have regarded such characters as *huìyì* graphs, they are by nature distinctly different from *huìyì* graphs of the "歪" *wāi* type. In his "Liùshū lüè," Zhèng Qiáo (1149) assigns "立" *lì* and "步" *bù* to the *xiàngxíng* class and says that the character *lì* "resembles a person standing on the ground" and that *bù* "resembles two feet, one in front of the other"; his explanations here of their graphic shapes are more perceptive than those given in the *Shuōwén*. In more recent times, an even more clear-cut position on the matter was taken by Lín Yǐguāng (1920) in his work *Wényuán*, in which he advocates that only characters like *wǔ* and *xìn* which "take on the interconnected meanings [of their component parts]" can be considered *huìyì* characters.

According to Lín, characters such as  (射 *shè* "to shoot"),  (涉 *shè* "to ford"),  (舂 *chōng* "to pound," which resembles two hands lifting a pestle and pounding something in a mortar),  (爭 *zhēng* "to contend," which resembles two hands vying for some object), etc. are characters which consist of "drawings of things, whose combination of parts is based on form rather than meaning" and therefore all should be regarded as *xiàngxíng* graphs. Such an explanation is plausible. Yet since these characters "whose combination of parts is based on form" combine two or more semantic symbols to represent a new meaning (i.e., a meaning which differs from the intrinsic meanings of the components comprising the character), in this respect they are unlike *xiàngxíng* graphs such as "日" *rì* and "月" *yuè*, but they are like the *huìyì* graphs "whose combination of parts is based on meaning." So treating them as *huìyì* graphs is also a reasonable alternative. Long after Chinese characters had totally changed to non-pictographic forms, people at times created compound semantographs and still used the technique of "combining parts on the basis of form," which is to say that a semantographic symbol was forced to serve as a pictographic symbol. For instance, the character "㚔" *tǔn* which depicts a "man" over "water" and expresses the idea of "floating," was a very late creation. Now, should this character be regarded as a *xiàngxíng* graph or should it be regarded as a *huìyì* graph? In short, the dividing line separating the *huìyì* from the *xiàngxíng* graphs is also obscure.

Some semantographs by their very nature are quite different from the examples of the *xiàngxíng*, *zhǐshì*, and *huìyì* graphs cited as examples in the *Shuōwén*'s postface, such as graphs of the "匝" *pǒ* type, that is, the so-called *biàntǐ* 變體 "altered-forms." According to the usual explanation, *pǒ* means "impossible" and is represented by the character "可" *kě* "able, possible" written in reverse. Many people assign graphs of this type to a *zhǐshì* class whose definition is even more obscure for the lack of any better alternative. Still others assign them to the *huìyì* class, which is obviously in contradiction with the definition of the *huìyì* given in the *Shuōwén*.

That some of those who have used the six-principles theory to analyze the structure of semantographs have had to concoct terms such as "*xiàngxíng* and concurrently *zhǐshì*" (象形兼指事), "*huìyì* and concurrently *zhǐshì*" (會意兼指事), and so forth, is enough to reveal the illogicality of using the six-principles theory to differentiate classes of semantographs.

Of the six principles, the *zhuǎnzhù* class of characters is even more problematical. Of all the names assigned to the six principles of writing, the surface meaning of the term *zhuǎnzhù* is the murkiest. The description of the *zhuǎnzhù* given in the *Shuōwén*'s postface is also insufficiently clear. Consequently, disparate explanations of the *zhuǎnzhù* over the centuries have been more numerous than for the other classes. Presented in brief below are several of the more representative opinions in this regard.

1. *The* zhuǎnzhù *as a method of creating new graphs by re-orienting existing ones.* This theory was advocated by Dài Tóng (fl. 13th cent.) in his *Liùshū gù* [The Six Scripts], by Zhōu Bóqí (1298–1369) in his *Liùshū zhèng'é* [Emendations to the Six Scripts], and others. They held that the *zhuǎnzhù* was a method of creating new characters by re-orienting existing ones such as "reversing 正 () *zhèng* to make 乏 () *fá*" and so forth.[7]

2. *The* zhuǎnzhù *as phonograms which can be mutually explained via their significs.* This theory was advocated by Xú Kǎi (920–974) in his *Shuōwén jiězì xìzhuàn tōngshì* [The *Shuōwén jiězì* with Annotations].[8] He held that while the *zhuǎnzhù* are "categorically phonograms," ordinary phonograms cannot be mutually explained in terms of their significs. He wrote,

> Jiāng 江 "river" and 河" *hé* "river" can both be labeled as 水 *shuǐ* "water," but *shuǐ* cannot be labeled *jiāng* or *hé*; the *zhuǎnzhù* class of characters, on the other hand, can be mutually explained in terms of their significs; the characters 壽 *shòu*, 耋 *dié*, 耄 *mào*, 耆 *qí* can all be labeled as 老 *lǎo* "old" and *lǎo* can also be labeled as *qí*, both being interchangeable (p. 17).

3. *The* zhuǎnzhù *as the relationship between a division head (i.e., classifier) and the characters grouped under the division head.* This theory was advocated by Jiāng Shēng (1729–1799) in his *Liùshū shuō* [The Six Scripts Explained], and others. Jiāng wrote,

> Altogether there are 540 divisions in the *Shuōwén jiězì*; its partition into divisions amounts to "establishing categories" (建類); the heads of the 540 divisions, from "一" *yī* at the beginning [of the *Shuōwén*] till "亥" *hài* at the end is what is called "one head" (一首). And below each, the phrase "all [characters] assigned to X are derived from Y" (凡某之屬皆从某) means "by the shared meaning they are mutually (connected =) related" (同意相受).

4. *The* zhuǎnzhù *as polysemic graphs to which semantic symbols were added, spawning in turn phonetically based differentiated forms.* This theory was advocated by Zhèng Zhēn (1806–1864) and his son Zhèng Zhītóng dur-

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7. Péi Wùqí (Tang dynasty) in the preface to the *Qièyùn* says, "The character 考 *kǎo* turns to the left, and the character 老 *lǎo* turns to the right." Here he uses the differences in the directions of the lowest strokes in the graphs to establish a *zhuǎnzhù* relationship between them. Most now recognize Péi as having been the originator of the theory that the *zhuǎnzhù* were re-oriented graphs. Yet as his explanation of *kǎo* and *lǎo* is absurd, very few after him adopted his approach.

8. See Xú c. 986:17, under the character "上" *shàng*. His explanation of the *zhuǎnzhù* class of characters is rather complicated; only the main thrust of his arguments is presented here.

ing the Qing dynasty. In his *Liùshū qiǎnshuō* [Elementary Introduction to the Six Scripts], Zhèng Zhītóng (1940) remarks:

> In the *zhuǎnzhù*, phonetic elements are primary. One character had separate usages, and in each case a signific was added to elucidate it [i.e., such usages]. The *zhuǎnzhù* and *xíngshēng* are opposite each other and yet, in fact, they also complement each other.

According to Zhèng, the character "齊" *qí* spawned the characters "齋" *zhāi* "to fast," "齜" *zī* "sacrificial dishes," "劑" *jì* "to prepare (medicines and drugs)," and so forth, all of which are *zhuǎnzhù* graphs. (The words represented by these characters originally were represented by the character "齊" *qí*.)

5. *The* Zhuǎnzhù *as existing characters to which were added semantic or phonetic symbols, creating in turn complex or differentiated forms.* This theory was advocated by Ráo Jiǒng during the Qing dynasty in his *Wénzì cúnzhēn* [Writing in Truth]. Ráo wrote,

> The *zhuǎnzhù* involves making characters from other characters already in use. One reason [for this] was that the structure of the seal forms of these graphs was obscure and their meanings were not very clear, so semantic or phonetic elements were added to the original seal forms to make them clear.[9] This is what Mr. Wáng in his *Shìlì* calls *lěizēngzì* 纍增字 "cumulative graphs."[10] Another reason [for this] was that while the meanings of graphs were extended, these usages were not distinguished by [separate] graphs, so semantic or phonetic elements were added to the original seal forms to distinguish them [i.e., in the same way as significs were added to the character "齊" *qí* cited above to form 齋, 齜, 劑, etc.]. Another reason was that the dialects underwent changes and there was no way to judge sounds, so phonetic elements were added to the original seal forms to differentiate them. These are what Mr. Wáng in his *Shìlì* calls *fēnbiéwén* 分別文 "differentiated graphs.'

Ráo Jiǒng held that the character "考" *kǎo* was created on account of the fact that "the pronunciation of "老" *lǎo* was changed to "丂" *kǎo* in some dialect," as a result of which "the element "丂" was added to the character *lǎo* to distinguish it."

9. What he is describing here are characters of the type discussed in Sec. 3.2, such as the character "淵" "abyss," to which was added the signific "水" *shuǐ* "water" to form "淵" *yuān*."

10. He is referring here to Wáng Yún's (1837) *Shuōwén shìlì*.

6. *The* zhuǎnzhù *as a process involving the alteration of character readings to indicate other meanings.* This theory was advocated by Zhāng Yǒu (1054–?) in his *Fùgǔbiān* [Reviving Antiquity] and by Yáng Shèn (1488–1559) in his *Zhuǎnzhù gǔyīn lüè* [The Ancient Readings of the *Zhuǎnzhù* Characters], and by others as well. They held that the *zhuǎnzhù* involved assigning characters new readings to indicate other meanings. For instance, the character "其" was the protoform of "箕" *jī* "basket" but later was given a reading of *qí* when used as a grammatical particle. The character "少" *shǎo* was originally read in the ascending tone but later was given a reading in the departing tone when used in the sense of "young."

7. *The* zhuǎnzhù *as a process involving the extension of word meanings.* This theory was advocated by Jiāng Yǒng (1681–1762) in a letter written to Dài Zhèn (see below),[11] by Zhū Jùnshēng (1788–1858) in his *Shuōwén tōngxùn dìngshēng* [The *Shuōwén* Annotated and Phonologically Arranged], and others. They held that the *zhuǎnzhù* was a process whereby the original meanings of words evolved through extensions, resulting in other meanings. For example, the character "令" *lìng*, as in 命令 *mìnglìng* "to command," was extended to its use in official titles. The character "長" *cháng* "long," as in 長短 *chángduǎn* "length," was extended to mean "elder," as in 少長 *shàozhǎng* "young and old," in addition to its use in official titles.

8. *The* zhuǎnzhù *as glossing words.* This theory was advocated by Dài Zhèn (1724–1777) in a letter ("Dá Jiāng Shènxiū xiānshēng lùn xiǎoxué shū"), by Duàn Yùcái (1735–1815) in his *Shuōwén jiězì zhù* [The *Shuōwén jiězì* with Commentary], and others. They held that the *zhuǎnzhù* involve characters' mutually defining each other or some characters' sharing a common meaning (such as is found in the *Ěryǎ* ["Shìgǔ" no. 1]: "初 *chū*, 哉 *zāi*, 首 *shǒu*, 基 *jī*, 肇 *zhào*, 祖 *zǔ*, 元 *yuán*, 胎 *tāi*, 俶 *chù*, 落 *luò*, 權輿 *quányú*"—all of which are glossed as 始也 "beginning").

9. *The* zhuǎnzhù *as a process of creating characters which reflects linguistic growth.* This theory was advocated by Zhāng Bǐnglín (1869–1936) (1972: 92–99) in his *Zhuǎnzhù jiǎjiè* [The *Zhuǎnzhù* and *Jiǎjiè* Characters], and others. Zhāng wrote,

> Having continuously multiplied, characters gradually became more numerous. Before characters were created, spoken language surely

11. Jiāng Yǒng's remarks are cited in Dài Zhèn's "Dá Jiāng Shènxiū xiānshēng lùn xiǎoxué shū" 答江愼修先生論小學書 [A Letter Written in Response to Mr. Jiāng Shènxiū's (Jiāng Shēng) Discussion of Philology], collected in Dài 1861: *juàn* 566.10–12.

> preceded them. When using characters as a substitute for spoken language, each adopted the sounds of the words they represented. While dialect [readings] had their differences, the meanings of graphs remained uniform. As for the readings of characters, in some instances [while the finals of syllables underwent changes] initials did not undergo change; whereas in other instances, [while initials underwent changes] finals did not undergo change. Thereupon another character was created to represent [the new reading]. This is what is called the *zhuǎnzhù*.

Zhāng held that graphs such as "屏" *píng* "a screen" and "蕃" *fán* "a fence," "亡" *wáng* "to lose" and "無" *wú* "without," etc. were phonetically and semantically related to one another. Even though their graphic shapes were unrelated, they could be regarded as examples of *zhuǎnzhù* graphs just the same.

It is quite evident that most of the theories presented above are at odds with the original meaning of the term *zhuǎnzhù* as it was conceived by Han time scholars. The interpretations of the *zhuǎnzhù* as described in the first, sixth, seventh, eighth and ninth theories above have absolutely nothing in common with the *zhuǎnzhù* as described in the *Shuōwén*. As for the seventh, eighth and ninth theories, they in fact deal more with linguistic problems. Now such questions, of course, are well worthy of study. Yet if they are placed within the scope of the six principles of script which served as "the bases for creating characters," only confusion will result. The third theory assigns nearly all characters to the *zhuǎnzhù* class. No matter from which angle one views a theory of this sort, it does not make any sense at all. The second theory may well be more in line with the original meaning of the term as given in the *Shuōwén*. But according to this theory, the *zhuǎnzhù* were nothing more than rather exceptional phonograms, so it would seem unnecessary to establish a separate class for them. Moreover, strictly speaking, the character "老" *lǎo* is not completely synonymous with the characters "考" *kǎo*, "壽" *shòu*, "耄" *dié*, "耄" *mào*, and "耆" *qí*. The persons responsible for the fourth and fifth theories probably viewed the average phonogram as having been formed directly from semantic and phonetic symbols, and therefore labeled as *zhuǎnzhù* graphs those phonograms which were derived from existing characters but to which phonetic elements had been added. In actuality, in most cases, phonograms were formed by the addition of elucidating elements, so separating phonograms of this sort from the average phonogram is unreasonable. If one were to label as *zhuǎnzhù* only those phonograms which were derived from existing characters to which phonetic elements were added, and were to continue to label those phonograms which were derived from existing characters to which semantic symbols

were added, then the distinction between phonograms and the *zhuǎnzhù* would be more rational. But this most likely would not tally with the *Shuōwén*'s original concept.

In our opinion, it is basically unnecessary today to pay any attention to the meaning of the term *zhuǎnzhù* when engaging in the study of the Chinese script. Even without taking the *zhuǎnzhù* into account, we can still describe quite clearly the structure of Chinese characters. With respect to the more valuable aspects of the old *zhuǎnzhù* theories, some can be treated in relation to the appropriate areas of grammatology, while others can be treated in relation to linguistics. In short, there is no need for us to be drawn into the endless arguments over the meaning of the term *zhuǎnzhù*.

The definition of the term *jiǎjiè* given in the *Shuōwén*'s postface, namely, "originally having no proper graph, by just relying on the sound, it [the sound] is entrusted to the thing [referred to]," would seem to be in full agreement with what we described as loangraphs (that is, using a character to represent a homophonous or nearly homophonous word). Actually, this is not the case at all. The examples of the *jiǎjiè* cited in the *Shuōwén*'s postface, "令" *lìng* and "長" *zhàng*, only illustrate the phenomenon of semantic extensions and not the phenomenon of phonetic loans. Qing scholars who held that the *zhuǎnzhù* were in fact extensions reassigned the characters *lìng* and *zhàng* as examples of the *zhuǎnzhù*.

In the eyes of Han time scholars, the *jiǎjiè* probably amounted to the use of graphs which were used to express some meaning other than their own (i.e., the designated meaning of the graph at the time of its creation). Whether this phenomenon was actually brought about by semantic extension or phonetic borrowing was something that they did not care to distinguish. There is also the possibility that they basically did not recognize that among the *jiǎjiè*—which "originally had no proper graphs"—there existed the phenomenon of phonetic borrowings which had nothing to do with semantic extensions. In view of the way the *Shuōwén* takes great delight in giving forced explanations of the phenomenon of phonetic loans in terms of the phenomenon of semantic extensions (see Sec. 9.5.1.1), the latter hypothesis is probably correct. However, viewed objectively, there does exist the phenomenon of phonetic borrowings for originally graphless words which had nothing to do with semantic extensions. Regardless of whether this be viewed from the standpoint of ordinary script or from the realities of the Chinese script, this point must be conceded (see Chapter 1). Semantic extensions are a linguistic phenomenon, whereas phonetic borrowings are a method of using script to record spoken language; the two are intrinsically dissimilar. When viewed from the standpoint of concrete examples, it is sometimes quite difficult to differentiate between the graphs having

multiple usages that are attributable to semantic extensions and those that are attributable to phonetic borrowings. But in principle they must be distinguished from one another. Therefore, denying the existence of the phenomenon of phonetic borrowings is wrong; lumping together graphs having multiple usages that are attributable to semantic extensions with those that are attributable to phonetic borrowings and labeling them all *jiǎjiè* graphs is also unacceptable.

Among the scholars of the script of antiquity, there already were those who pointed out the unsuitability of confusing semantic extensions with phonetic borrowings. For instance, in his *Liùshū gù*, Dài Tóng asserts explicitly that the *jiǎjiè* should not include extensions. In his explanation of the *jiǎjiè* he says, "As to what is called *jiǎjiè*, the meaning [of a graph] is not what was adopted. [A graph] is borrowed solely for its sound [value], after which it is called a *jiǎjiè*." Consequently, he held that "令" *lìng* and "長" *zhàng* could not be used as examples of the *jiǎjiè*; rather a true *jiǎjiè* is like the case of "豆" *dòu* which originally denoted a kind of food vessel (as in 俎豆 *zǔdòu*, two kinds of utensils used in ancient rituals) and was borrowed to stand for *dòu* as in 豆麥 *dòumài* "beans and wheat." Scholars of the script who have explained the *zhuǎnzhù* as extensions for the most part have also differentiated the *jiǎjiè* from extensions.

Prior to the post-Qing era, however, the vast majority of scholars of the script included the extensions within the *jiǎjiè*. Even those who had a rather clear idea of the intrinsic dissimilarity between the two phenomena of semantic extensions and phonetic borrowings continued to think along these lines in most cases. For instance, Dài Zhèn (1861: *juàn* 566.12) held that "one character will have several usages" which include "extensions in the light of its meaning" and "side consignments" (旁寄) in the light of its sound. The term "side consignments" here is bound to refer to phonetic borrowings. Nevertheless he still advocated labeling extensions and "side consignments" as *jiǎjiè* and was opposed to differentiating the two.

Even now, a sizable number of persons still lumps extensions and the *jiǎjiè* together; and some explicitly advocate that among the *jiǎjiè*—which "originally had no proper graphs"—there did not exist the phenomenon of phonetic borrowings which had nothing to do with semantic extensions. It is quite evident that the Han time theories of the *jiǎjiè* have had a substantial impact even up to the present.

As was stated above, the Han time scholars' theory of the six principles of Chinese script was a major achievement. Yet after it was accorded an authoritative status, it gradually turned into the shackles that hindered the development of grammatological studies in China. During the feudal era, when the classics were venerated and antiquity was fawned upon, all those who studied script looked upon the six principles as inviolable

guiding principles. Even though their interpretations of the six principles usually differed from one another, not one person dared leap from the confines of the six principles and do research on his own. It would seem as if Chinese characters had somehow been predestined to be divided into six categories. Numerous books and essays were written debating such issues as to exactly how the term *zhuǎnzhù* should be defined, exactly which characters should be assigned to the *xiàngxíng* category, which to the *zhǐshì*, which to the *huìyì*, and so forth and so on. But the truth of the matter is that they were unable to reach any meaningful conclusions relevant to these questions. It could be said that a tremendous amount of energy was expended in vain. On the other hand, there were many problems in the area of grammatology that should have been addressed but were largely ignored. Even up to the present, such research practices have continued to exert an influence on us. This is something that we should guard against. In his *Zhōngguó wénzìxué*, Táng Lán (1979:75) writes,

> . . . what do the six principles tell us? First, there were never any clear-cut definitions; each person could come up with his own interpretations. Second, when the six principles were used to classify characters, it usually was impossible to determine which character should be placed in which category. In the light of these two points alone, we should neither place all our faith in the six principles nor fail to seek other explanations.

Perhaps what Táng says here goes a bit far, but it is not at all unreasonable.

6.2 The Three-Principles Theory of Chinese Script

Táng Lán (1979, 1981a) not only criticized the six-principles theory of Chinese script, he further put forth a new theory of the structure of Chinese characters—the three-principles theory (三書說). He first discussed his three-principles theory in his *Gǔwénzìxué dǎolùn* [Introduction to the Study of Ancient Chinese Script] published in 1935, and again in his *Zhōngguó wénzìxué* published in 1949. The excerpts below from the latter work describe the main points of his theory. He writes:

> In my work *Gǔwénzìxué dǎolùn*, a new system was set up, namely, the three-scripts theory:
>
> 1. *Xiàngxíng wénzì* 象形文字 "graphs depicting figures"
> 2. *Xiàngyì wénzì* 象意文字 "graphs depicting concepts"
> 3. *Xíngshēng wénzì* 形聲文字 "graphs depicting sounds"

> A graph depicting a figure is a drawing of an object or of some commonly used mark [Note: The meaning of the term "mark" here differs from our interpretation of the term.], which is readily understood at first sight. If a tiger is drawn, it then becomes the character for "tiger"; a drawing of an elephant becomes the character for "elephant"; one stroke and two strokes become the characters for "one" and "two"; "square" and "round" are represented by □ and ○. For a character to qualify as a graph depicting a figure, it must be:
>
> 1. an independent graph,
>
> 2. a noun, and
>
> 3. [a graph] which has no meanings other than the original noun. . . . The ancient character for 大 "large" resembles the front view of a person, but in speech the word "*dà*" has nothing to do with a human form. . . . As this character contains a meaning apart from a human form, it is therefore a graph depicting a concept.
>
> A graph depicting a concept constitutes the main portion of a pictograph. . . . But graphs depicting concepts are not immediately understood at first sight and require some thought.
>
> Graphs depicting figures, concepts and sounds constitute what we call the three principles of Chinese writing, which are broad enough to encompass all Chinese graphs. If a graph does not belong to the category of graphs depicting figures, then it must belong to the category of graphs depicting concepts; if it does not belong to the latter category, then it must belong to the category of graphs depicting sounds. Form, meaning and sound are three facets of writing. So if we use the three principles to categorize characters, we need not tolerate again areas of confusion (pp. 75–78).

Táng Lán's criticism of the six-principles theory may have played a major role in promoting the development of grammatology in China, yet his three-principles theory is not of much value.

Below are some of the problems surrounding Táng's three-principles theory.

1. The three-principles theory forces a comparison between the three principles and the form, meaning and sound of characters. The *xíng* 形 "form," *yì* 意 "meaning," and *shēng* 聲 "sound" of graphs as discussed by Táng coincide with the more commonly used terms *xíng* 形 "form," *yīn* 音 "sound," and *yì* 義 "meaning." Associating semantographs and phonograms with the meanings and sounds of characters, respectively,

is by and large a reasonable approach, since the graphic shape of a semantograph indicates its meaning, and the phonetic element of a phonogram indicates its sound. But associating the shapes of graphs with pictographs is rather difficult to comprehend. When we speak of the "sound of a character" and the "meaning of a character," in reality we are referring to the sound and meaning of the word which a character represents. Hence it can be said that graphic forms are the written forms of words. Now if pictographs are indeed the written forms of words, how is it that semantographs and phonograms are not? Why is graphic shape associated with pictographs alone? When viewed from the standpoint of the way in which graphic forms become associated with the words they represent, then there is no great difference between pictographs and semantographs. Because the form which a pictograph takes on resembles the form of the thing referred to by a word, the thing referred to by the word becomes the substance of the word's meaning. The graphic forms of pictographs and those of semantographs are alike in that they both represent the meanings of graphs. By no means do words possess "forms" that exist independently apart from their meaning and stand for what a pictograph resembles.

2. The three-principles theory does not reserve a place for semantograph types which do not fit into the category of picture writing. Táng's pictographs and semantographs are both forms of picture writing (roughly corresponding to what we described as semantographs comprised of pictographic symbols). So there is no place reserved in his theory for semantographs which are not of the picture-writing type. Táng probably felt that since graphs of this sort arose later on and were few in number, they could be disregarded. Yet flaws inevitably crop up at the outset if one fails to take into account such characters when constructing what is supposed to be a basic theory of the structure of Chinese characters. Táng termed such characters "altered semantographs" (p. 93). But doing so, of course, does not solve the problem in a conscientious way.

In actuality, in terms of early period Shang and Zhou script alone, we already find semantographs which we have difficulty describing as picture writing. Take, for example, the characters "明" *míng* "bright," "鳴" *míng* "the cry of birds," etc. (In the oracle bone script, there are examples of "明" *míng* derived from "日" *rì* "sun" and "月" *yuè* "moon" and of 鳴 *míng* composed of an abstract drawing of a chicken + "口" *kǒu* "mouth.") Even though there is a considerable gap between them and later syssemantic (*huìyì*) graphs of the "歪" *wāi* type, to say that they represent picture writing is clearly farfetched. Again, in the case of the character  (宦 *huàn* "servant"), the graphic form expresses the idea of one's acting as a servant in another's home; the element  below "宀" can

only be interpreted as "臣" *chén* "servant" and should not be construed as an eye set upright. The character 𠂇 (去 *qù* "to leave") is derived from 大 *dà* "large" and 口 *kǒu* "mouth" and was the protoform of "呿" *qù*, which means to open one's mouth (e.g., *Zhuāngzǐ*, "Qiūshuǐ," 公孫龍口呿而不合 "Gōngsūn Lóng's mouth fell open and wouldn't stay closed." [after Watson 1970:187]) with 大 *dà* conveying the meaning of "to expand, to widen" and not serving as a pictographic symbol representing the front view of a person. In short, using the term "picture writing" as a cover term for all the semantographs in Chinese script which convey meaning is inadequate.

3. The differentiation of pictographs and semantographs is insignificant. Táng felt that the class divisions of his three-principles theory were extremely clear-cut and that it was absolutely devoid of areas of confusion. In actuality, however, the boundary line separating pictographs from semantographs is not so clear as he thought. In the first part of his *Gǔwénzìxué dǎolùn*, Táng treats the character "雨" *yǔ* "rain" as a pictograph. In the errata to the first part, he emends this, saying that *yǔ* should be treated as a semantograph. The characters "上" *shàng* "above" and "下" *xià* "below" are treated as semantographs in this same work, but were later treated along with "□" (方 *fāng* "square") and "○" (圓 *yuán* "round") as pictographs in his *Zhōngguó wénzìxué*. He maintained that a pictograph must be a noun; yet the words that *fāng* and *yuán* represent may not be nouns. It is clear that even he was unable to make up his mind when differentiating pictographs from semantographs.

4. The three-principles theory excludes loangraphs as one of the basic types of Chinese character. Because Táng held that loangraphs had nothing to do with character creation, they were not included in his three-principles theory. To say that borrowing is not a method of character creation is permissible. Yet, on the other hand, if one fails to recognize loangraphs as one of the basic types of Chinese characters, this is unacceptable. When a semantograph or phonogram is borrowed to represent a homophonous or nearly homophonous word, they serve as phonetic symbols. Therefore, even though a loangraph (such as "花" *huā* as in 花錢 *huāqián* "to spend money") and the borrowed character (*huā* as in 花草 *huācǎo* "flowers and plants") may be identical in terms of their external forms, they are intrinsically different in terms of their graphic structure. (*Huā*, as in *huācǎo*, is a phonogram composed of a semantic symbol and a phonetic symbol, whereas *huā*, as in *huāqián*, is a loangraph which makes use of only one phonetic symbol.) It has been said that borrowing is tantamount to the creation of characters by not creating characters, which seems to be a reasonable assertion. Not only do loangraphs possess their own special structural characteristics, their numbers are great and their functions are quite important. When constructing a theory of the structure of Chinese characters, it is imperative that loangraphs be viewed as one of the basic types; otherwise it will not be possible to reflect accurately the basic nature of Chinese script.

Chén Mèngjiā (1956) in a chapter on script in his *Yīnxū bǔcí zōngshù* [Introduction to the Yīnxū Oracular Texts] published in 1956, already pointed out the problems with Táng Lán's three-principles theory discussed in sections 3 and 4 above. He further introduced a new three-principles theory of his own. He held that loangraphs must be included as one of the basic types of Chinese characters and that the pictographs and semantographs should be merged and both treated as pictographs. So his three-principles theory consisted of *xiàngxíng* 象形 "pictographs," *jiǎjiè* 假借 "loangraphs," and *xíngshēng* 形聲 "phonograms."

While we believe that Chén's three-principles theory is basically sound, we feel his term "pictograph" should be emended to "semantograph" (referring to characters created from semantic symbols). Only by doing so can a place for all semantographs be secured in the three-principles theory. Chén also took issue with Táng Lán's argument that in antiquity only semantographs existed whereas *huìyì* graphs did not (p. 75); yet it escapes me why he himself continued to use the term "pictographs" as a cover term applied to the entire stock of semantographs.

At this point it seems advisable to bring up the question of whether or not graphs attributed to *tōngjiǎ* 通假 "phonological borrowing" should be included among the *jiǎjiè*. The term *tōngjiǎ*, also called *tōngjiè* 通借, has broad and narrow connotations. The term is used here in its narrow sense, referring to cases where a homophonous or nearly homophonous character is used to represent a word that originally had a character, such as in the simplified script where "斗" *dǒu*, as in 斗升 *dǒushēng* (units of measure), was borrowed to replace "鬥" *dòu* in 鬥爭 *dòuzhēng* "struggle." According to the *Shuōwén*'s definition of the term *jiǎjiè*: "originally having no proper graph, by just relying on the sound, it [the sound] is entrusted to the thing [referred to]," the *tōngjiǎ*, which originally had their own graphs, should not be included with the loangraphs. Yet as we do not agree with the *Shuōwén*'s view of the loangraphs, it is, of course, unnecessary to be constrained by its definition. A major consideration in regard to the *tōngjiǎ* and the *jiǎjiè* standing for originally graphless words is the fact that borrowed graphs were all used as phonetic symbols. Viewed from the standpoint of graphic structure, by nature the *tōngjiǎ* graphs and the loangraphs used for originally graphless words are totally identical. Therefore, with respect to the three-principles theory, we do not believe that loangraphs should be restricted to the scope of those

which are used to represent words having no characters of their own but should include the *tōngjiă* as well. The technical term *tōngjiă* used in the field of Chinese grammatology appeared rather late; and its use has gradually increased in recent times. The loans discussed by most scholars of the script in the past comprehended loans involving words which already had graphic forms of their own, i.e., the so-called *tōngjiă* graphs of later times.

The three-principles theory divides Chinese characters into three classes, namely, semantographs, loangraphs, and phonograms. Semantographs utilize semantic symbols and therefore can also be termed semantic-sign graphs. Loangraphs utilize phonetic symbols and therefore can also be termed phonetic indicator or phonetic-sign graphs. Phonograms simultaneously utilize semantic and phonetic symbols and therefore can also be termed semi-semantic and semi-phonetic graphs or semantic-sign, phonetic-sign graphs. Classified in this way, the sequence of ideas is clear and well-organized as well as logical and far superior to the six-principles theory.

When researching each of the three principles, subclasses can, of course, be set up. If it becomes necessary, several kinds of classifications can be made on the basis of different criteria.

6.3 Characters which Fall Outside the Scope of the Three Principles

The three principles are not able to serve as cover terms for the entire stock of Chinese characters. As was discussed above, during the Chinese script's process of development, many characters changed into sign graphs or semi-sign graphs due to changes in graphic shape and so forth. The three principles and six principles are alike in that they only deal with the original structures of these characters and not their present status. Moreover, there is also a small number of other characters in the Chinese script which fall outside the scope of the three principles (and, for that matter, outside the scope of the six principles as well). Let us discuss these categorically below.

1. *Signs.* In addition to those characters whose shapes evolved into signs due to changes in graphic shape and so forth, Chinese script also has a small number of signs, such as "五" *wŭ* "five," "六" *liù* "six," "七" *qī* "seven," "八" *bā* "eight," etc. which were discussed in Chapter 1.

2. *Semi-signs.* In addition to those characters whose shapes were changed into semi-signs due to changes in graphic shape and so forth, Chinese script also has a small number of semi-signs. For example, in modern times the character "叢" *cóng* "crowd together" was simplified into "丛", which can be treated as a graph consisting partially of a sign and partially of a phonetic. The element "从" *cóng* in this graph is a phonetic, while "一" *yī* "one" is a sign. During the Song and Yuan dynasties, the character "乂" *yì* was borrowed for "義" *yì* "righteousness." Later on, a dot was added to "乂", creating the character "义", which was used exclusively thereafter as a simplified form of "義" *yì*. This character can also be treated as a graph consisting partially of a sign and partially of a phonetic. But for those who do not know the reading of the character "乂", the character "义" *yì* can only be regarded as a sign.

3. *Graphs altered in shape to indicate sound.* The shapes of existing graphs have been altered at times to create new ones so as to indicate that the sound of the latter is close to the sound of the former. We term graphs created in this way "graphs altered in shape to indicate sound," as occurred in the case of "兵" *bīng* which was altered and became "乒乓" *pīngpāng* "ping pong." Some differentiated forms only differ from their matrigraphs by the subtle alteration of a stroke, e.g., the character "刁", a differentiated form of "刀" (see Sec. 11.1.1.2), would also appear to be a member of this class.

4. *Phonetic fusions.* The readings of graphs of this sort are the result of fusing the readings of the two components which comprise a graph, in much the same way as readings of characters are derived from the *fănqiè* spelling method. In order to translate Buddhist chants and charms into Chinese, during the medieval era, the Buddhists created graphs of this sort. Such graphs were intended to indicate syllables which Chinese lacked, such as "⿰名養" *măng*, derived from 名 *míng* + 養 *yăng*; "⿰亭夜" *diè*, derived from 亭 *tíng* + 夜 *yè*, and so forth (see Liáng 1959: 150). Among the characters in use in modern times, some represent fusions of syssemantic and phonetic elements. For example, the character "甭" *béng* represents a fusion of "不" *bù* "no" and "用" *yòng* "need" and expresses the idea of "needn't"; the Wú dialect characters 覅, read *fiæ* ˩˥ and 朆, read *fən* ˧, represent fusions of "勿" *wù* "don't" + "要" *yào* "want" and "勿" *wù* "don't" + "曾" *céng* (sign of the past) and express the ideas of "don't" and "never," respectively, and so forth. Among the characters used in the field of chemistry, graphs such as "羟" *qiăng* standing for 氫氧基 *qīngyăngjī* "hydroxyl," and "羰" *tāng* standing for 碳氧基 *tànyăngjī* "carbonyl" are similar in nature to the "甭" *béng* type, but the element "气", from which "氫" *qīng* and 氧 *yăng* are derived, and the element "石", from which "碳" *tàn* is derived, have been omitted in each case. *Qiăng* "羟" took its tone from *yăng* "氧", whereas *tāng* "羰" and "羊" *yáng* differ in tone; the rules of character creation were not applied uniformly here.

Some scholars of the script in the past have held that even before the *fǎnqiè* system was used to indicate pronunciations, characters already appeared in Chinese having the qualities of phonetic fusions, such as "矧" *shěn* "still more," derived from "矢" *shǐ* and "引" *yǐn*; "羑" *yǒu* "to guide to goodness," derived from "羊" *yáng* and "久" *jiǔ*; and "眇" *miáo* "blind in one eye," derived from "目" *mù* and "少" *shǎo*. In actuality, characters of this sort are nothing more than common phonograms and only coincidentally have the same initials as their significs.

5. *Characters with two phonetics*. Graphs of this sort are made up of two components, both of which serve as phonetics. For example, the *Shuōwén* identifies the ancient form of "牾" *wú* "to oppose," i.e., "牾", as a phonogram derived from "午" *wǔ* and "吾" *wú* as phonetic. In actuality, however, it can be treated as a character consisting of two phonetics. In antiquity, the character "午" *wǔ* had already been borrowed for the word {牾} *wú* as in 牾逆 *wúnì* "obstinate"; thus the character "牾" was the result of the addition of the phonetic symbol "吾" to the loangraph "午" (see Sec. 11.1.1.3.3). By their very nature, the characters "  "[12] and "  "[13] seen in the ancient script are possibly of the same type as *wú* "牾". What Lín Yìguāng (1920) terms *èrchóng xíngshēng* 二重形聲 "dual-phonetic" characters in his *Wényuán* [The Origins of Writing] (*juàn* 22) are precisely what we term characters with two phonetics.[14]

The component elements comprising the character "耻" *chǐ* mentioned in Chapter 2 as well as those comprising the character "幹" *gàn*, which originally was the popular form of "  " *gàn*, are also both phonetic symbols (the character "  " is derived from "木" *mù* and "  " *gān* as phonetic). Yet as most people were not aware that "耳" and "" were phonetic symbols, these two characters were in fact viewed as consisting partially of signs and partially of phonetics.

A few Chinese characters possibly had quite unique origins, such as the character "歹" *dǎi*, as in 好歹 *hǎodǎi* "good and bad," which first appeared sometime between the Song and Yuan dynasties.[15] According to some studies, the character "歹", which we now read *dǎi*, evolved from the Tibetan letter  , read [ta]. The earlier method of writing this character appears in ancient texts as ,[16] which is very close to the Tibetan letter just cited. Later on its shape was changed to  , and finally became indistinguishable from the element on the left in characters such as 死 *sǐ*, 殘 *cán*, and so forth.[17] Between the Song and Yuan dynasties, the Tibetans already enjoyed a close relationship with the Mongols. When recording Mongolian personal and place names, the Mongols probably often used the Tibetan letter  to indicate sounds of the [ta] type.[18] The word {歹} *dǎi* "bad, evil," originally was borrowed into Chinese from Mongolian. As its original reading was quite close to [ta], the character in question was borrowed to record it as well (see Xú 1944:58; also Lǐ 1957: "Shuo *dǎi*").

Viewed in a wider context, apart from those characters which had evolved into sign graphs and semi-sign graphs due to changes in graphic shape and so forth, the number of characters which cannot be covered by the three principles is rather small. If our only goal is to explain the original structure of the average Chinese graph, then the three principles are essentially suitable for this purpose. In the three chapters which follow, we shall examine separately the semantographs and phonograms as well as the problems related to the loangraphs.

12. The ancient readings of "台" *yí* and "司" *sī* were quite close.

13. The *Shuōwén*'s gloss on this graph is as follows: , 長踞也. 从己, 其聲 "*Jì* means 'to squat for a long time' and is derived from *jǐ* and *qí* as phonetic." Yet this explanation may not necessarily be correct.

14. Among the characters collected by Lín, however, some probably are not true cases of characters with two phonetics.

15. The character "歹" *dǎi* and the character "歹" (derived from), read *è*, from which characters such as "死" *sǐ* "to die," "殘" *cán* "deficient," etc. are derived, are homographs. On homographs, see Sec. 10.2.

16. See the Yuán edition of *Táocūn chuògēng lù*, *juàn* 1, collected in *Sìbù cóngkān sānbiān*.

17. The *Kāngxī zìdiǎn* still gives as the standard form and "歹" as a corrupted form.

18. The character "歹" was used time and again in works such as the *Náncūn chuògēng lù*, *Yuáncháo mìshǐ*, etc. where Mongolian personal and clan names are recorded.

7

SEMANTOGRAPHS

7.1 Classification of Semantographs

There are numerous ways that semantographs are structured, creating a rather complicated situation. Classifying semantographs is a vexed matter. We have criticized the *liùshū* (six principles) classification in which semantographs are divided into the three categories of *xiàngxíng* (pictographs), *zhǐshì* and *huìyì* graphs as lacking in logic, but this does not mean that we will be able to classify semantographs into more logical categories. Below we will provisionally divide semantographs into abstract graphs (*chōuxiàngzì*), pictorial graphs (*xiàngwùzì*), deictic graphs (*zhǐshìzì*), quasi-pictorial graphs (*xiàngshìzì*), syssemantographs (*huìyìzì*) and altered graphs (*biàntǐzì*); examples will be given for each category. The classification of the example characters will be based on their older forms. Of the forms cited, those taken from bronze identificational inscriptions (which are generally close to pictures) will be designated "iconograph"; those taken from the oracle bone script will be designated "bone"; those taken from Shang and Zhou bronze inscriptions will be designated "bronze"; those taken from Qin and Han seal script (including the seal script of the *Shuōwén jiězì*) will be designated "seal"; and those taken from the ancient clerical script will be designated "clerical."

For some characters only a graphic component is cited; such forms will be identified as "component." If the component is taken from the oracle bone script, it will be designated "bone component" and similarly for the other varieties of script (note, however, that the citation of such components does not necessarily mean that the form does not occur independently). In citing graphic forms we have only sought to elucidate the idea behind the creation of the graph and to supply the most important links in graphic evolution; no attempt has been made to give a complete listing of forms.

7.1.1 Abstract Graphs

This class of graph is created from abstract symbols; they are few in number. The graphs 一, 二, 三, 亖 (四), 上 (上), 下 (下), 口 (方), ○ (圓) cited

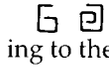
in previous chapters are all of this type. If the *Shuōwén*'s explanation is reliable, the character 𢍏 (𢍏 *zhuó* "connect") can also be put in this category.

The numeral {四} *sì* "four," before the end of the Western Zhou was always written "三"; in the Spring and Autumn and Warring States periods, "三" and "四" were both used. After the Qin dynasty the form "四" was in general use; only in the Wáng Mǎng period was "三" restored for a short time. It would seem that the *Shuōwén*'s explanation of "四" as "it resembles a four-way division in form," is unreliable. The use of "四" to express number is probably a case of borrowing, but we no longer know the original meaning of the graph. The replacement of "三" by "四" was clearly in order to avoid confusion with "二" and "三".

In the ancient script it was easy to confuse "□" *fāng* "square" with the outline forms of "●" *dīng* "cyclical sign," namely, ▫, and "○" *yuán* "round"; therefore, "□" was very early replaced by the loangraph "方"; the character "方" was earlier written 才; its original meaning is unclear. (The *Shuōwén*'s explanation of "方" as "two boats joined together" is not reliable; there have been more recent attempts to explain the original meaning of "方", but as yet there is no widely accepted explanation.) Both "四" and "方" in actuality became signs at an early date.

"○" and "圓" *yuán* are the earlier and later forms of the same graph. The character "圓" is derived from "□" with "員" as phonetic. In the seal script "□" was written ⬭; in the *Shuōwén* it is explained as "resembling a circumference." According to tradition, "口" and "圍" *wéi* are homophonous. In Old Chinese "圍" and "圓" were phonologically similar, differing only in that "圓" has a nasal ending while "圍" lacks such an ending. "□" clearly has developed from "○". In the silk and bamboo documents of the Qin-Han period, {圓} *yuán* "round" is mostly written "員"; there are similar examples in *Mèngzǐ* and *Huáinánzǐ*. The graph "員" was originally simplified from "鼎" *yuán*; originally it must have been from "鼎" *dǐng* "tripod" with "○" (圓) as a phonetic. Because "○" could easily be confused with the characters "□" (方) and the simplified form of "丁", ancient scribes probably borrowed "員" as a substitute for "○" at an early date. (Some think that "員" is a complex form of "○"; most *dǐng* tripods have a round mouth, so the character *dǐng* was added beneath "○" in order to avoid confusion with other characters.) In addition to substituting for "○", "員" also has other uses; for example, it is used to write the word {員} *yuán* "quota." For this reason the component "□" was added to "員", giving the form "圓" which is used exclusively for {圓} *yuán* "round."

Below further examples of abstract graphs are given.

 (bone, bone component)  (seal) 回 *huí* "whirl, turn." According to the *Shuōwén*, the ancient script form of "回" is  , a form similar to the bone graph. The graphic form expresses its meaning by the outline of a whirl.

 (seal) 糾 *jiū* "entangled." *Shuōwén*: "糾 means to be entangled." The meaning is expressed by two curved lines joined in a hook-like manner. *Jiū* "糾" is an enlargement of "丩" (*Shuōwén*: "糾, a rope of three strands.") Later "丩" was abandoned and its functions were taken over by "糾".

 (bone)  (seal) 小 *xiǎo* "small." The meaning "small" is expressed by three or four small dots. The characters "小" *xiǎo* "small" and "少" *shǎo* "few" are developments of the same graph; "少" has developed from the form consisting of four dots.

Abstract graphs for the most part appeared very early. After the Qin-Han period only a very few such graphs like "凹" *āo* "concave," "凸" *tū* "convex" and "丫" *yā* "forked" seem to have appeared.

7.1.2 Pictorial Graphs

The graphic forms of characters in this category resemble some physical object. The words they represent are the names of the things depicted. The pictographs of the six principles classification (as explicated by most scholars) correspond to our pictorial graphs. The characters "日", "月", "鹿", "虎", "馬", "魚", "犬", "人", "自", "止", "肉", "角", "車" and "冊", discussed in previous chapters, are all pictorial graphs.

Below, we will present further examples.

 (bone)  (bronze)  (seal) 山 *shān* "mountain." The graph resembles rising and falling mountain peaks.

 (bone)  (seal) 丘 *qiū* "mound, hillock." The graph resembles a mound lower and smaller than a mountain.

 (bronze) 厂 *hǎn* "cliff." A more complex form of this graph with an added phonetic is "𠂤". The *Shuōwén* says "厂" "a cliff of mountain stones where men may live; a pictograph."

 (bone) 水 *shuǐ* "water." The graph resembles flowing water. In the standard script, when "水" occurs as a component on the left, it is written "氵"; when it occurs underneath, it is written "氺", as in "泰" *tài*, "黍" *shǔ*.

 (bone)  (bronze) 川 *chuān* "river." The graph originally resembled two banks with water flowing in between; later the dots in the center which resemble water were joined into a line.

 (bone)  (seal) 泉 (clerical) 泉 *quán* "spring, source." The graph resembles a spring with water flowing from it. The seal form cited is taken from the script found on coins of the Wáng Mǎng period (A.D. 9–25). In the seal form given in the *Shuōwén* the center part of the graph is written "丅".

  (bone)  火 (bronze component) 火 *huǒ* "fire." The ancients in general viewed fire as a physical thing, so "火" can be taken as a pictorial graph. In the standard script, when "火" occurs underneath as a component, it is written as four dots (concerning the various variants of "火" as a graphic component, see Sec. 5.3).

 (bone) 木 *mù* "tree." The graph resembles a tree; the top part resembles the tree's branches, the lower part resembles its roots. The original meaning of "木" was "tree."

 (bone component)  (seal) 艸 *cǎo* "grass." The graph is the orthograph of "草" *cǎo* "grass." (A graph which is used for the expression of a word's original or extended meaning, when viewed in relation to this word's loangraph, is its orthograph; "草" is a loangraph for {草} *cǎo* "grass"; see Sec. 9.1.3.) Since the roots of grass are generally small, the graphic form of "艸" lacks a depiction of the roots and is in this way distinguished from the graph "木". In ancient times "艸" could also be written "屮", with no distinction of the simple and duplicated forms. In the standard script "艸" is written as "艹"; now it has been altered to "艹".

 (bone)  (seal) 禾 *hé* "foxtail millet." The top part of the graph resembles the ear and leaves, the lower part the roots.

 (bone)  (bronze)  (seal) 黍 *shǔ* "broom-corn millet." The ears of broom-corn millet are diffused; this is the chief way in which it differs from "禾" "foxtail millet." The person who created this graph clearly used this characteristic. In the oracle bone script "黍" is written both with and without a water component; the reason for adding this component is unclear. In Zhou bronze script, "黍" as a component was simplified to "禾". This is an example of the transformation of a pictographic symbol into a semantographic symbol.

 (bone)  (bronze) 來 *lái* "wheat." (The modern simplified form is "来".) The graph originally resembled a wheat plant. The ears of wheat are vertical, so the upper part of the character "來" does not droop. The slanting or horizontal stroke added at the top is probably a superfluous element with no profound significance. In *Shījīng* Ode 275.2: 貽我來牟 (麰) "You have given us wheat and barley," "來" is used in its original meaning.

 (bone)  (seal)  (clerical) 桑 *sāng* "mulberry." The upper part resembles the bushy leaves and branches of the mulberry. The first seal form is from a Han seal; the second seal form is taken from the *Shuōwén*.

 (bone)  (Stone Drum)  (seal) 栗 *lì* "chestnut." The upper part of the graph originally resembled chestnuts growing on a tree; later the shape of the chestnut part of the graph was changed to "卤". ("卤" or "卣" was also a character read *tiáo* or *yǒu*; the *Shuōwén* defines *tiáo* as a descriptive adverb meaning "hanging down, drooping" in reference to fruit or seed.) The *Shuōwén* has an ancient script form (a *Zhòuwén* form according to Xú Kǎi's [ca. 986] edition) written  in which the upper "卤" has been corrupted to the form of "西" *xī* "west".

 (bone)  (seal) 象 *xiàng* "elephant." The graph gives prominence to the long trunk of the elephant.

 (bone)  (seal) 豕 *shǐ* "swine." In the bone script the difference between "豕" and "犬" *quǎn* "dog" is that the tail of "豕" is shorter and the tail of "犬" is longer; moreover, the belly of "豕" is fatter while that of "犬" is thinner (for the bone form of "犬" see Sec. 4.1). As clan designations on bronzes, both "象" and "豕" have very pictorial representations (see *Jīnwén biān*, pp. 673 and 1077, no. 196).

 (iconograph)  (bone)  (bronze)  (seal) 龍 *lóng* "dragon." (The modern simplified form is "龙".) The graph originally resembled some strange beast having a large mouth and a long belly.

 (bone) (bronze) (seal) 鳥 *niǎo* "bird." (The modern simplified form is "鸟".)

  (bronze)  (seal) 隹 *zhuī* "(short-tailed) bird." This graph as well as the preceding one resembled birds. In their use as graphic components "隹" and "鳥" are often interchangeable; e.g., "雛" *chú* "young (bird)" can also be written "鶵"; "鷄" *jī* "chicken" is also written "雞". According to the *Shuōwén*, "隹" is "the general designation of short-tailed birds" while "鳥" is "the general name for long-tailed birds." This may be no more than a conjecture based on graphic shape.

 (bone) (seal) 龜 *guī* "tortoise." (The modern simplified form is "龟".) The graph originally resembled the side view of a tortoise.

  (bone)  (seal) 虫 *huǐ* "poisonous snake." The graph resembles a type of small poisonous snake. Note that this character should be read *huǐ*; in ancient texts the character "虺" *huǐ* is generally used to write this word, but in the Qin-Han period at the latest people were already using "虫" to write "蟲" *chóng* "insect" (on Qin bamboo slips and Han stele inscriptions). That we presently use "虫" as a simplified form of "蟲" in fact has ancient antecedents.

  (bronze)  (seal) 它 *tuō* "a kind of poisonous snake." This is the protoform of "蛇" *shé* "snake." The shape of *tuō* is thicker than that of 虫 *huǐ*. For a discussion of the change in form of *tuō* in the clerical script, see Sec. 5.2.

 (iconograph)  (bone)  (seal) 蠆 *chài* "a kind of scorpion." (The modern simplified form is 虿.) The graph originally resembled a scorpion. In Old Chinese the pronunciations of "蠆" and "萬" were close and were differentiated from a single graph. There are examples in the oracle bone script of borrowing  to express {萬} *wàn* "ten thousand." In the Zhou bronze script "萬" is written or  which in origin were expanded forms of . Later "萬" was used exclusively to write {萬} *wàn* "ten thousand," and  was used exclusively for the graph's original meaning, giving rise to two different characters. Although the *Shuōwén* explains "萬" as "蟲" *chóng*, the author was unaware that "萬" and were differentiated from a single original graph.

 (iconograph)  (bone)  (bronze) 貝 *bèi* "shell." (The modern

simplified graph is "贝".) The graph originally resembled a cowrie shell. The ancients used shells for ornaments and as currency; hence many words having to do with wealth have "貝" as a component.

 (bone)  (bronze) 子 *zǐ* "child." The graph resembles a baby. The creators of the graph exploited the fact that babies' heads are disproportionately large, that they swing their arms about, but their legs are underdeveloped.

 (bone)  (bronze)  (clerical) 女 *nǚ* "female, girl." The status of women was very low in ancient times, so that the character "女" resembles a person kneeling with joined hands. The pronunciations of "女" *nǚ* and "奴" *nú* "slave" are close; some scholars believe that "女" originally depicted a female slave.

 (bone)  (bronze)  (seal) 首 *shǒu* "head." The graph resembles a person's head. The *Shuōwén* considers the form without any hair to be a small seal form and the form with hair to be an ancient script form. However, in bronze and stone inscriptions of the Qin-Han period, the seal forms of "首" all have hair, so the *Shuōwén*'s explanation does not correspond with the facts. If when depicting the form of a head, a human body is attached, the result is (頁); "頁" *yè* was in origin an allograph of "首". The pronunciation *yè* for this graph was probably a late development. Characters containing "頁" as a component mostly are related to the notion of "head."

 (iconograph)  (bone)  (bronze)  (seal) 耳 *ěr* "ear." The graph resembles an ear.

  (bronze, bronze component)  (seal) 目 *mù* "eye." The graph resembles a person's eye.

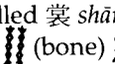
 (bone) 口 *kǒu* "mouth." The graph resembles a person's mouth.

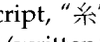
 (bronze)  (seal)  (clerical) 心 *xīn* "heart." In the standard script, when "心" occurs as a component on the left, it is usually written "忄"; as a component at the bottom of a character it is sometimes written "⺗" as in "忝", "恭" and "慕".

 (bronze) 手 *shǒu* "hand." The graph resembles a hand with five fingers depicted at the top. In the ancient script, in composite and quasi-composite semantographs, the component representing "hand" is usually written with a form depicting the hand from the side  (又) and the above form with five fingers is not used. In the standard script, "手" as a left-side component is written "扌" ("拜" and "掰" are exceptions) and at the bottom of a graph it has the form "丰", e.g., "舉", "奉".

 (iconograph)  (bone)  (bronze)  (seal) 疋 *shū* "foot." The character "止" (趾) resembles a foot (regarding the written forms of "疋" in the ancient script, see Sec. 4.1). The character "足", on the other hand, depicts both the leg and the foot. In *Guǎnzǐ*, "Dìzǐ zhí," the line 問疋何止 "ask where he will put his legs" (said by a disciple to his master when he is about to rest) uses "疋" in its original meaning. The form of the character "足" *zú* "foot" in the seal script) is close to that of "疋"; it is possible that they evolved from a single graph.

 (bronze)  (seal) 衣 *yī* "garment." The graph resembles an upper garment. In *Shījīng* Ode 27.2 the Máo gloss to the line 綠衣黃裳 "a green coat and a yellow skirt" says that "the top is called 衣, and the bottom is called 裳 *shāng*."

 (bone)  (bronze) 絲 *sī* "silk, floss." (The modern simplified form is 丝.) The graph resembles two skeins of silk. In the earliest stages of the ancient script, "糸" and "絲" were a single undifferentiated character. Later "糸" (written "  " as a component on the left in the simplified script) was considered a separate character read *mì*.

 (iconograph)  (bone)  (bronze)  (seal) 鼎 *dǐng* "three-legged pot." The graph resembles a round caldron with three legs. A *dǐng* was an ancient type of vessel for cooking and holding food.

 (bone)  (bronze)  (seal) 鬲 *lì* "hollow-legged tripod." A *lì* was an ancient type of vessel for heating water and cooking gruel. The chief difference between a *lì* and a *dǐng* is in their legs: the legs of a *lì* are hollow and the walls of the legs and the vessel itself are joined; the walls of the legs are also the bottom of vessel.

 (bone)  (bronze)  (seal) 壺 *hú* "pot." (The modern simplified form is 壶.) The original graph resembles a pot with a lid and body having two handles on the side. (The ancient *hú* lacked a spout.)

 (bone)  (bronze component)  (seal) 皿 *mǐn* "vessel." The graph resembles a large wide-mouthed vessel with a circular bottom. The characters "盆" *pén* "basin," "盂" *yú* "a broad-mouthed receptacle for holding liquid," "盤" *pán* "a wide shallow bowl," etc. were all like *mǐn* in this respect, which explains why they all have *mǐn* as a component.

 (bone component)  (bronze) 豆 *dòu* "a stemmed vessel." The graph resembles a circular-bottomed vessel for holding food. The *Shuōwén* says "an ancient food vessel for meat."

  (bone)  (seal) 酉 *yǒu* "wine vessel." The graph resembles a round-bottomed jug for holding wine. The pronunciations of "酉" and "酒" *jiǔ* "wine" were similar in Old Chinese and in ancient texts "酉" is often used for "酒". A majority of characters having "酉" as a component are related to wine in some sense.

 (bone) 爿 *chuáng* "bed." This is the protoform of "牀" (床) *chuáng* "bed"; it shows a bed viewed from the side (the standard script form "爿" is identical to the graph "  " read *pán* "split bamboo or chopped wood"; see the section below on allomorphic graphs.) The characters "壯" *zhuàng*, "狀" *zhuàng*, "妝" *zhuāng*, and "牆" *qiáng* all have "爿" as phonetic.

 (bone)  (bronze component) 宀 *mián* "a kind of structure." The graph resembles a structure; in dictionaries, it is read *mián*, but this probably represents a late tradition.

 (bone component)  (bronze components) 广 *yǎn* "a kind of structure." The graph resembles a structure simpler than that represented by "宀". In dictionaries it is read *yǎn*. (The modern simplified form of "廣" is "广", making it a homograph of the ancient form.) Many graphs referring to structures have "宀" and "广" as semantic components. If the structure in question was a simple one or if it was not principally for human habitation, its graph often has "广" as its component: "廬" *lú* "thatched hut," "廊" *láng* "corridor," "廡" *wǔ* "corridor," "府" *fǔ* "government office," "廁" *cè* "latrine." In simplified characters "广" is sometimes altered to "厂": "厨"*chú* "kitchen," "厩" *jiù* "stable," "厕" *cè* "latrine." The complex form of "厂" is "廠" which also has "广" as its component. (The simplified character "厂" and the protoform of "厈" are homographs.)

 (bone)  (seal), 戶 *hù* "door." The graph resembles one leaf of a door.

  (bronze)  (seal) 門 *mén* "gate." (The modern simplified form is 门.) The graph resembles a door with two leaves.

  (bone)  (bronze) 行 *xíng* "walk." The graph resembles a crossroad. The original meaning of "行" was "road"; "walk" is an extended meaning. The seal form given in the *Shuōwén* is  ; this is a corrupted form. The *Shuōwén* definition "a person's going on foot" is also erroneous. When used as a semantic component it is often simplified to  ; later "行" was decomposed into two different graphs, "彳" *chì* and "亍" *chù*. Characters having to do with walking often have "彳" or "止" as components; later these two forms were fused into a single component "辶", the so-called "走之" *zǒuzhī* "walking *zhī* component." ("辶" was originally written "辵"; concerning the transformation undergone by the component "辵", see Sec. 4.5.)

 (bone)  (bronze)  (seal)  (clerical) 舟 *zhōu* "boat." The graph resembles a simple wooden boat.

 (iconograph)  (bone)  (seal) 戈 *gē* "dagger-ax." The dagger-ax was the most commonly used weapon of the Shang-Zhou period. The graphic forms resemble a dagger-ax head attached to a handle.

 (iconograph)  (bone)  (seal) 刀 *dāo* "knife." In the standard script the graph "刀" is generally written "刂" when it occurs as a component on the right; the character "切" is an exception. Used as a phonetic "刀" is still retained as "刀" in a few late characters like "魡" *dāo* "the mallet" and "叨" *dāo* "talkative"; in the characters "钊" *zhāo* "to encourage" and "到" *dào* "arrive" it has become "刂".

 (bone)  (bronze component) 斤 *jīn* "adze." The graph resembles an adze-like tool which was used by carpenters in antiquity. The element  is a side view of the adze head;  represents a curved handle.

 (bone)  (bronze)  (seal) 弓 *gōng* "bow." The first graph resembles a drawn bow; the remaining forms resemble a slack bow.

 (bone) (bronze)  (seal) 矢 *shǐ* "arrow." The graph resembles an arrow.

 (iconograph component) (bone)  (seal component) 疒 *yǎn* "banner." The graph resembles a type of ancient banner. Most characters having to do with flags and banners have "疒" as a component. In bronze inscriptions "疒" is sometimes written "旂" "a type of banner." It is possible that "疒" is the protoform of "旂". The dictionary reading of *yǎn* for "疒" is probably a late development.

  (bone)  (seal) 网 *wǎng* "net." The complex form of "网" is "網" which consists of a component "糸" and a phonetic "罔". "罔" was originally written  which is from "网" with "亡" as a phonetic. According to the *Shuōwén* both "罔" *wǎng* and "網" are allographs of "网". There are examples of "罔" being used for {网} *wǎng* "net" in Qin-Han epigraphic sources as well as in ancient texts. Since "罔" is also used to represent a negative and other words, a silk component "糸" was added, creating the character "網" which is exclusively used for {網} *wǎng* "net." At present the original graph "网" has been reintroduced as the standard simplified form of "網", which amounts to a case of "restoring antiquity" as it were. In the standard script when "网" is used as a phonetic, it is written "冈", as in "岡" *gāng* "ridge (of a hill or mountain)"; when it is used as a semantic component, it is generally written "罒", as in "罟" *gǔ* "net" and "罩" *zhào* "bamboo basket for catching fish." The only case of "冈" being used as a semantic component is in the homophonous graph "罔". "冈" comes from a simplified form of "网", .

There are some variants of pictorial graphs. A few of them depict only a part of the thing they represent; e.g., the graph "牛" explained in Sec. 4.1 shows only the head of a cow. The graph "羊" "sheep" is similar:

 (iconograph)   (bone) (bronze)  (seal) 羊 *yáng* "sheep."

The graphic forms of some pictorial graphs are rather complex. The things these graphs depict are difficult to represent in an isolated fashion, or if they are represented in an isolated fashion, they are easily confused with other graphs. Therefore, when pictorial graphs were devised for such words, it was necessary to include some related thing, such as the environment, some attached principal part or some contained object, or to add a semantic component to make the meaning of the graph explicit. Pictorial graphs of this kind can be called complex pictorial graphs. Examples:

 (bone) (seal) (clerical) 州 *zhōu* "islet in a river." This is the protoform of "洲" *zhōu* "islet." The original meaning was "a place in a river where one can rest" according to the *Shuōwén*. The graph depicts a piece of land in a river.

 (bronze) (seal) 果 *guǒ* "fruit." If only "fruit" were depicted, it would not be sufficiently clear, so the tree that produced the fruit is also depicted.

 (bronze)  (bronze)  (seal) 枼 *yè* "leaf." The *Shuōwén* considers "枼" and "葉" to be separate characters; in fact "枼" is the protoform of "葉". Leaves are difficult to depict independently, so "枼", like "果", also depicts the tree. Since leaves grow out once a year, "枼" also had the extended meaning of "generation." (The Máo commentary to *Shījīng* Ode 304.7 昔在中葉 "formerly in the middle generation" says that "葉" means "世" *shì* "generation.") In Old Chinese the pronunciations of "世" *shì* and "葉" were close; {世} *shì* "generation" must have been a word derived from {葉} *yè* "leaf." Viewed from the standpoint of graphic form, the early Zhou bronze form of "世" was  , and clearly was simply the top part of "枼". After "世" came into common use, "枼" came to be viewed as a compound graph consisting of "木" with "世" as its phonetic. The *Shuōwén*, based on the notion that a generation is thirty years, erroneously derived "世" from "卅" *sā* "thirty": 从卅而曳長之 "from *sā* extended"; this explanation is unreliable.

  (bone)  (seal) 朿 *cì* "thorn." The graph resembles a thorn or bark on a tree or weapon. The *Shuōwén* describes "朿" as "thorns on a tree"; "刺" *cì* is defined as "the murder of a grandee by a prince; *cì* is to harm directly, from 刀 and 朿, 朿 is also phonetic." Later both *cì* "thorn" and *cì* "assassinate" were written "刺". The seal script form of "朿" cited above is from the *Shuōwén*; the top part of the graph has already been corrupted. (The "朿" component of "速" in the Taìshān inscription of Qin time is written the same way.) The "朿" component of the graph "刺" on Han seals is written ; the lower part has already been corrupted but the top part retains the original shape. The popular variant of "刺", "剌", developed from this sort of seal form. "朿" and "朿" are different characters and should be kept separate. (The character "速" cited above is a variant of "迹" and is not the same as "速" *sù* "fast.")

 (bronze)  (seal) 瓜 *guā* "melon, gourd." In order to depict a melon, the vine was also included.

 (iconograph)  (bone)  (seal) 元 *yuán* "head." The original meaning of "元" was a man's head (e.g., *Zuǒzhuàn*, Xī 33: 狄人歸其元, 面如生 "The Dí returned his head; the face was lifelike"). The graph in depicting a head includes the body.

 (bone)  (bronze)  (seal) 身 *shēn* "body." The original meaning of "身" was probably "belly" (e.g., *Yìjīng*, Hex 52: 艮其身 "keeping his belly at rest," about which Yú Fān's commentary says: "身 means 'belly,' or according to some 'a pregnant body'"). In order to depict "belly," the graph also includes the body.

 (bone)  (bronze)  (seal) 眉 *méi* "eyebrow." In order to depict an eyebrow, the graph includes the eye as well.

 (bronze)  (seal) 須 *xū* (the protoform of 鬚) "beard." (The modern simplified form is 须.) The beard grows on the face, so the form of a beard is depicted on a "頁" component which represents the face. (Later, the component "髟" *biāo* "shaggy hair" was added to the character "須" to form the character "鬚". At present this complex form has been subsumed under "须".)

 *(bone)*  *(bronze)*  *(seal component)* 食 *shí "food." The graph depicts* food held in a 簋 *guǐ* vessel. In antiquity this kind of vessel was commonly used for holding food. The component  resembles the body of the vessel while the component  represents a lid. The element "艮" in "簋" developed irregularly from  .

 (bone)  (seal)  (clerical) 牢 *láo* "livestock pen." The character "牢" refers to a pen for cows and sheep. The element  resembles a pen. In order to make the meaning clear, a "牛" *niú* "cow" was added. In the clerical script the common graphic component "宀" replaced the pictorial component depicting a pen. (In the *Shuōwén* "牢" is wrongly analyzed as derived in part from "冬" *dòng* "winter.") This is an example of a pictographic symbol being replaced by a semantic symbol.

  (bone)  (Stone Drums)  (bronze) 囿 *yòu* "hunting park." This graph referred to a large hunting park in antiquity. Large quantities of grass and trees were preserved in such parks as shelter for the animals and birds. If only a large enclosed area were depicted, it would not be sufficient to bring out the characteristics of the park; this is the reason that trees ("木") or grass ("屮") were added. This character was later changed to a phonogram of "口" with "有" *yǒu* as its phonetic.

 (bronze)  (seal) 胃 *wèi* "stomach." The element  resembles a stomach. Because the shape is insufficiently clear, a "肉" *ròu* "flesh" component was added. Possibly is the protoform of "胃" and the "肉" component was added later.

Almost all pictorial graphs appeared very early. Among late semantographs perhaps "閂" *shuān* "door bolt" can be considered a complex pictorial graph in which "一" depicts a door bolt. Some people think that "傘" *sǎn* "umbrella" is a pictograph (what we call a pictorial graph).

7.1.3 Deictic Graphs

In this category of graphs, a deictic symbol is added to a pictorial graph or pictographic symbol to convey meaning. There are very few such graphs. Examples:

 (seal) 本 *běn* "roots of a tree." The original meaning of "本" was "the roots of a tree." In graphic form, it consists of a deictic symbol added to the lower part of a tree.

  (bronze)  (seal) 末 *mò* "tip, end." A deictic symbol is added to the top part of a tree to express the meaning of "木" "tip, end."

 (seal) 刃 *rèn* "blade." A deictic symbol is added to "刀" *dāo* "knife" to express the meaning of "blade" (刀口).

 (bone)  (seal) 亦 *yì* "armpit." This is the protoform of "腋" *yè* "armpit." (The character "腋" is rather late; in antiquity "掖" was used to express {腋}. "亦", "掖" and "腋" were all pronounced similarly in Old Chinese. "掖" and "腋" both have "夜" *yè* "night" as a phonetic; "夜" originally comes from "夕" *xī* "night" with "亦" as a phonetic; see Sec. 8.3.) In graphic form,  consists of adding deictic symbols under the armpits of the form of a man standing upright. Táng Lán believed that "亦" was the protoform of "液" *yè* "liquid, fluid"; in the bronze script the graph occurs, which is a more primitive way of writing "亦"; this graph depicts sweat falling from the armpits of a man. If this theory is correct, "亦" should be viewed as a complex pictorial graph which contains a principal part (the four dots representing sweat) and an added component depicting a man.

Deictic symbols can be viewed as a special kind of semantic symbol and deictographs can be viewed as quasi-composite graphs.

In actuality, deictographs are close to a kind of complex pictorial graph which is related to the principal form from which it is derived. However, it is very difficult to distinguish the thing which such graphs wish to express from the principal forms from which they derive, so it is necessary to add a deictic element to the relevant part of the principal form to express the meaning. In the ancient script there are some characters which are transitional between graphs which depict their principal form and graphs of a deictic nature. Examples:

 (bronze component) (seal)  (clerical) 面 *miàn* "face." The character "面" originally depicted the front surface of a person's face; therefore, the graphic form consists of a curved line in front of "首" *shǒu* "head." The curved line can be viewed as a deictic element or as a longitudinal section representing a person's face.

 (iconograph)  (bone)  (seal) 厷 (clerical component) 太 *gōng* "upper arm." This is the protoform of "肱" *gōng* "upper arm." The element depicts the entire upper limb. The added element "o" can be viewed as having a deictic function, or an element depicting a cross section of an arm.

 (bronze)  (seal) 叉 *zhǎo* "finger or toe nail." According to the *Shuōwén*, "叉 is the nail of the fingers or toes; it comes from 又 and resembles the form of nails." The two strokes added to the ends of the fingers in the character "叉" can be viewed either as having a deictic function or as resembling the form of fingernails. Later the character "爪" was borrowed for "叉" as in the expression "爪牙" *zhǎoyá* "talons and fangs—lackeys, underlings," which is actually "叉牙". Nowadays, the character "蚤" *zǎo* "flea," which has "叉" as a phonetic, is written "蚤". This is a case of merging what were originally distinct elements.

7.1.4 Quasi-pictorial Graphs

Graphs belonging to this category resemble pictorial graphs. The difference between the two categories is that the words represented by pictorial graphs depict things, while the words represented by quasi-pictorial graphs depict attributes, states or actions. The number of graphs in this category is not large and they mostly appeared very early. Examples:

 (bone) 又 *yòu*

 (bone) 𠂇 (standard script component).

"𠂇" and "又" are the orthographs of "左" *zuǒ* "left" and "右" *yòu* "right." Separately, they resemble a left hand and a right hand and in this way express the directional notions "left" and "right."

  (bone)  (seal) 失. "失" is homophonous with "仄" *zè* "oblique" and the two characters are similar in meaning. The *Shuōwén* defines "失" as "to incline the head." The graph depicts a person inclining his head.

 (bone)  (seal) 𠂤. This is the protoform of "逆" *nì* "counter, contrary." (The original meaning of "逆" is "to greet, welcome"; later it was borrowed to write {逆} *nì* "contrary, counter.") The meaning "contrary, counter" is expressed by a graphic form resembling a man upside down.

In the early stages of the script some graphic forms simultaneously served as pictorial and quasi-pictorial graphs. In Chapter 1 we have already shown that "月" *yuè* "moon" and "夕" *xī* "night" could both be written 𠙵 and 𠙵. When 𠙵 or 𠙵 represented "月" it should be classified as a pictorial graph; used for "夕" it should be classified as a quasi-pictorial graph. The graph  , which resembles an adult man, can be used both for "大" *dà* "large" and for "夫" *fū* "man." When used for "夫" it should be classified as a pictorial character; used as "大" it should be classified as a quasi-pictorial graph.

There are pictorial semantographs which combine several pictographic symbols to depict some quality or action, like (射) and (立) referred to above; logically such graphs could be considered quasi-pictorial, but *for the sake of convenience of classification, we place them in the category of syssemantographs. The reason that we have considered the above cited graphs "𠂇" and "又" to be quasi-pictorial graphs is to distinguish them from graphs like "射" and "立".*

7.1.5 Syssemantographs

With the exception of abstract and deictic graphs, we view all graphs which combine two or more semantic symbols in order to express a meaning independent of these semantic symbols as syssemantographs.  and  mean the same thing;  and  also mean the same thing; therefore graphs like "果", "胃", although they are comprised of two semantic symbols, are still pictorial graphs and not syssemantographs.

The semantic symbols which make up syssemantographs can be both graphic symbols based on shape or graphic symbols based on meaning. Normally to place characters comprised of graphic symbols based on shape together with those comprised of graphic symbols based on meaning is not appropriate. But in Sec. 3.2 we pointed out that there are some characters composed of two or more semantic symbols; whether the semantic symbols used should be considered graphic symbols based on shape or graphic symbols based on meaning is ambiguous, so we have no alternative to using the present classificatory scheme.

The number of syssemantographs is great and they are of several complicated types. Below we will divide them into six classes and give explanatory examples. These six classes do not have a completely consistent criterion. The means of classification is no more than an expedient.

7.1.5.1 Type A. Pictorial Syssemantographs

These kinds of characters on the whole correspond to those syssemantographs that Lín Yǐguāng (1920) thinks should be included among pictographs (see Sec. 6.1).

 (bone)  (seal) 宿 *sù* "stay overnight." The graph shows a person sleeping on a bamboo mat.  is the protoform of "簟" *diàn* "bamboo mat"; in the small seal script it was erroneously altered to  (in dictionaries read *tiàn*, which is close to the reading *diàn* for "簟"). The *Shuōwén*'s analysis of it as "resembling a tongue in shape" is incorrect.

 (bone)  (bronze component)  (seal) 疒 *nè* "illness." The graph shows a sick person lying on a bed. The bone graph sometimes adds small dots to the sides of the person's form, perhaps indicating sweat. In dictionaries "疒" is read *nè*. In actuality, "疒" is probably the protoform of "疾" *jí* "illness."

 (bronze) (seal) 臽 *xiàn* "pitfall." The graph shows a person falling into a pitfall. In the bronze graph cited an element has been added to the form of the man; it may be a corrupted form of "止". (In the ancient script, the man component is often changed to a "女" "woman"; this may be just such a case.) "臽" and "陷" are close in meaning. Perhaps "臽" is the protoform of "陷".

 (bone) 从 *cóng* "follow." The graph shows one person following another.

 (bone) 北 *běi* "north." This is the protoform of "背" *bèi* "back"; it depicts two men back to back. North is the back and dark side; the word {北} *běi* "north" is derived from this fact. Later "北" came to be used to express the direction "north" and a flesh component "肉" was added to "北" to form the character "背" which was then used to express the original meaning of the graph.

 (bone)  (bronze)  (seal) 無 *wú* "is not, have not." (The modern simplified form is "无".) Originally "無" and "舞" *wǔ* "dance" were a single character. The graphic form depicts a person dancing holding oxtails or some similar objects. (In the "Gǔyuè" section of the *Lǚshì chūnqiū* there is the following passage: 昔葛天氏之樂, 三人操牛尾, 投足以歌八闋 "Formerly in the music of Gětiānshì three people would take oxtails and flinging their feet would sing eight strophes of a hymn.") The component "舛" at the bottom of the graph "舞" originally depicted two feet. Because the character "無" was regularly borrowed to write the negative {無}, "舞", which expressed the original meaning of the former, was subsequently differentiated to denote this meaning.

 (bone) 夾 *jiā* "on two sides." (The modern simplified form is "夹".) The graph depicts two persons supporting another person on both sides. The ancients, when drawing pictures, often drew persons of high status larger than those of low status; this is why the person in the center is larger than the two persons at his sides.

 (bone)  (bronze) 即 *jí* "go to eat." The graph depicts a person eating. In ancient times people knelt on the floor on mats; the element  depicts a kneeling person.

 (bone)  (bronze) 卿 *qīng* "minister." This is the protoform of "饗" *xiàng* "to entertain." The graph depicts two persons having a meal facing one another. The use of "卿" for the word {卿} *qīng* "minister" is either an extension of the original meaning or a borrowed usage. In ancient texts "卿" was used for {向} *xiàng* "facing, toward" (see the second part of this chapter).

 (bronze)  (seal) 埶 *yì* "plant, cultivate." This is the protoform of "藝" "to plant, cultivate." The graph shows a person planting something in the earth. The element "丮" *jí* depicts a person extending two hands; in the standard script "丮" has been confused with "丸". In later times, a "力" was added to the "埶" to express the word {勢} *shì* "power." In the case of the "埶" that was used for {藝} *yì*, a "艸" component was first added and it was then expanded to "藝". The graphic component "埶" in the modern simplified script has become "执" (as in 势) *shì* "power," 热 *rè* "hot," 亵 *xiè* "be disrespectful") and has become confused with the simplified form of "執" *zhí* "hold, grasp" which is "执".

 (bone)  (seal) 鬥 *dòu* "struggle." (The modern simplified form is "斗".) The graph depicts two people fighting.

 (pictograph)  (seal) 取 *qǔ* "grasp, take." The graph depicts a hand grasping an ear. In ancient times when game was taken in hunting or an enemy was killed in battle, the left ear was generally taken as a proof of prowess.

 (iconograph)  (bone)  (seal) 得 *dé* "obtain." The graph initially meant "to obtain wealth"; the addition of the element "彳" showed that it was obtained on the road; in the *Shuōwén* the form without a "彳"

is considered an ancient script form. In the seal script "又" became "寸". In the ancient script characters having "又" ("hand") frequently had the "又" changed to "寸" in later times. In the seal form of the *Shuōwén*, the element "貝" has been corrupted to "見". The seal form cited above is from a Han seal.

(bone) (bronze) (seal) 隻 *zhī* "one of a pair." The graph depicts a hand seizing a bird. In the Shang and Zhou scripts, "隻" was used to write the word {獲} *huò* "capture." In later times "隻" was used to write the word {隻} *zhī* "one of a pair" (now written "只" in the simplified script), and a new character "獲" with the component "犬" and "蒦" *wò* as a phonetic was coined to write {獲}. (In the seal script it was written ; the modern simplified form is "获".) "隻" is both the protoform of "獲" and the orthograph of "只" (隻) "one of a pair." This is very similar to the situation whereby certain early semantographs had more than one use, but the use of "隻" for the word meaning "one of a pair" is something that took place only after "隻" had been used for {獲} for a long period. Consequently one can explain this phenomenon as a special case of borrowing a graph that had already existed. In general, borrowing refers to cases where only the sound of the borrowed graph was used to write another word. The borrowing in this case is only a borrowing of the graphic form and is unrelated to the original sound and meaning of the borrowed graph. We can refer to this as "borrowing of graphic shape."

(bone) (seal) 及 *jí* "reach." The graph depicts pursuing and catching a person.

(bronze) 秉 *bǐng* "handful, sheaf." The graph depicts a hand holding grain (here the graph for grain represents a sheaf of grain). With regard to "秉" in *Shījīng* Ode 212: 彼有遺秉, 此有滯穗 "There there are sheaves forgotten, here there are ears neglected," the Máo commentary says it means "a handful."

(seal) 兼 *jiān* "to do concurrently." The graph depicts a hand holding two sheaves simultaneously.

(bone) (seal) 采 *cǎi* "to pick, gather." The graph depicts a hand picking leaves from a tree. The element "爪" on the top represents a hand grabbing or holding something. Later, a hand component "扌" was added to "采", but in the modern simplified script "採" and "采" are no longer distinguished

(bone) (seal) 孚 *fú* "captive." This graph is the protoform of "俘" "captive." (The use of "孚" to write the word *fú* "trust" is a case of borrowing.) In primitive times, those victorious in battle slaughtered all the adult males of the opposing side and took captive only the women and children. This is the reason that the form of "孚" shows a hand seizing a child.

(seal) 舀 *yǎo* "ladle out." The graph depicts a hand taking something out of a mortar. The characters "稻" *dào* "rice plant," "蹈" *dǎo* "trample" "滔" *tāo* "flood" all have "舀" as a phonetic. The phonetic of the characters "陷" *xiàn* "pitfall," "餡" *xiàn* "filling (of pastries)," "閻" *yán* "gate of a lane" and "諂" *chǎn* "flatter," on the other hand, is "臽" *xiàn*. The two forms should be carefully distinguished.

(bone) (bronze) (seal) 受 *shòu*. The two words {受} *shòu* (rising tone) "receive" and {授} (departing tone) *shòu* "give" were originally both written with the character "受". The form of the graph depicts the giving and receiving of a boat. The hand above is that of the giver, that below the hand of the recipient. A great many things can be exchanged. Why did the creator of this graph choose a boat? It was probably because the pronunciation of "舟" *zhōu* "boat" was near that of "受" *shòu*, and hence could simultaneously play the role of phonetic. The *Shuōwén* definition of "受" is "'give to one another,' composed of 叀 with 舟 as a phonetic." This is probably a traditional explanation. Viewed from the standpoint of graphic form, ancient characters like "受" which have "舟" as a component, can in actuality be viewed as syssemantic and phonograms simultaneously. The first seal form cited above is from a Han seal, the second from the *Shuōwén*.

(iconograph) (seal) 共 *gòng* "together." In ancient texts "共" is mostly used to write the word {供} *gòng* "offer." The graph depicts two hands offering a vessel; perhaps this is the protoform of "供". It appears that the *Shuōwén* definition of the original sense of "共" as "同" *tóng* "together" is incorrect. when used as an independent character is probably the protoform of "拱" *gǒng* "to encompass with the arms."

(bone) (bronze) 戒 *jiè* "guard against." The graph depicts two hands holding a dagger-ax in order to guard against something.

(bronze) 弄 *nòng* "play." The graph depicts two hands holding a piece of jade and playing with it.

(bronze) 盥 *guàn* "wash." The graph depicts a washing of hands with water; the lower component "皿" *mǐn* "vessel" is a receptacle for water.

(bone) (bronze) 興 *xīng* "arise." (The modern simplified character is "兴".) The ancient explanation of "興" was "起" *qǐ* "arise." The graph shows several hands holding up something together. Later, the pictographic element "𦥑" (possibly a depiction of a carrying rack) was changed to the semantographic symbol "同" *tóng* "together." The *Shuōwén*'s definition is (舁 *yú*) is "'to lift together.' 興 is 'to arise'; it is composed of 舁 and 同; it is to share strength."

(bronze) (seal) 闢 *pì* "open." (The modern simplified form is "辟".) The graph "闢" was in origin a semantograph which depicted two hands opening a door. (The ancient script form in the *Shuōwén* is like this.) It

was not until later that the character consisting of the "門" component with "辟" as its phonetic was substituted. (It is possible that "辟" was first used as a loangraph to replace 關, and then at a later time a "門" component was added forming "闢".)

(iconograph) (bone component) (seal) 攴 *pū* "to beat." The *Shuōwén* defines "攴" as "to administer a small beating." The graph depicts a hand holding a club-like object. Later the form of this object became the same as "卜" *bǔ* "to divine." "攴" and "卜" are similar in pronunciation. Possibly when this was done, in order to make the graph "攴" have a concurrent phonetic function, the component resembling a club was purposefully changed to "卜". The meanings of characters having "攴" as a component often have to do with beating. In the standard script the component "攴" is usually changed to "攵" (derived from the clerical script component 攵); and it is popularly referred to as "*wén* (文) written in reverse" (反文).

(bone component) (seal) 殳 *shū* "a kind of weapon." The graph depicts a hammer-like implement used for hitting.

(bronze) (seal) 寇 *kòu* "thief, bandit." The graph depicts a person with a weapon in hand entering a house to attack someone.

(iconograph) (bone) (seal) 伐 *fá* "chop." The graph depicts a person being decapitated with a dagger-ax. The *Shuōwén*'s explanation of the graph as the depiction of a person holding a dagger-ax is incorrect.

(bone) (bronze) (seal) 執 *zhí* "hold." (The modern simplified form is 执.) The graph depicts a captive or criminal being handcuffed. 拿 was originally a depiction of wood handcuffs; in dictionaries it is read *niè*. In both the clerical and standard scripts, it is written "幸" which has the same form as "幸" *xìng* "fortunate." (According to the *Shuōwén*, "幸" is composed of "夭" *yāo* and "屰" *nì*; in the Han clerical script it was written 𡍮.)

(bronze) (seal) 縣 *xiàn* "county." (The modern simplified form is "县".) "縣" is the protoform of "懸 *xuán* "suspended." The graph depicts a decapitated head suspended in a tree. The seal form given above is from a Han seal. In the *Shuōwén* it is said that the seal form is composed of "系" *xì* "tie" and an inverted "首" *shǒu* "head"; this is the source of the printed form "縣".

(bone) (seal) 毓 *yù* "give birth, rear." The *Shuōwén* considers "毓" a variant of "育" *yù* "give birth to". The graph depicts a mother giving birth to a child. Later the component "母" *mǔ* "mother" was changed into "每". An inverted "子" plus dots representing droplets of blood were combined to form the element "流".

(bone) (Zhou) 棄 *qì* "abandon." (The modern simplified form "弃" was originally an ancient script form; see Sec. 4.3.) The character "棄" depicts the abandonment of a baby in a winnowing basket or dustpan.

In ancient times cases of babies being abandoned for superstitious or economic reasons were rather frequent. Hòujì, the earliest ancestor of the Zhōu was named 棄 *qì*; it is said that he received this name because he had been abandoned after birth.

(bone) (bronze) 曰 *yuē* "say, speak." The graph depicts speech coming from a mouth.

(bone) (seal) 益 *yì* "benefit." This is the protoform of "溢" *yì* "overflow"; it depicts water overflowing a vessel.

(bone) (seal) 析 *xī* "split wood." The graph depicts splitting wood with an ax. The character "折" which is close to "析" in form originally also depicted chopping wood with an ax; see Sec. 3.2.

(bone) (seal) 至 *zhì* "reach, arrive." This graph depicts an arrow reaching some place.

(bone) (seal) 彘 *zhì* "pig." In antiquity "彘" meant "wild pig." Wild pigs were one of the types of animals pursued in hunting. The word is written by adding the graph "矢" *shǐ* "arrow to the graph "豕" *shǐ* "pig." The word represented by "彘" is the name of an object; in this respect "彘" is the same as a pictograph, but if one eliminates the "矢" from the bone graph, what remains is not a pictographic symbol of a wild pig but simply the graph "豕". For this reason we place it in the category of pictorial syssemantographs and do not consider it a simple pictorial graph.

The graphs "射", "立", "並", "羣", "折", "戌", "雌", referred to earlier, when examined in light of their earliest written forms, should all be classified as pictorial syssemantographs. Graphs of this category all appeared very early.

7.1.5.2 Type B. Syssemantographs that Employ the Positional Relationship of Graphic Components

The graphs in this category in actuality were mostly created on the principle of expressing meaning by means of pictographic form. The positional relations of their components have an important function in the expression of meaning, but at the time of creation, these graphs either clearly used symbolic means (as in the case of using "止" to mean "advance, go forward" in "步" and "涉" which were referred to in Sec. 3.2) or purposely used semantic symbols as pictographic symbols (as in the case of the character "臣" "servant" mentioned in Sec. 6.1 as an element in the character "宦", referring to a servant serving in the house of his master). As a consequence, the pictographic sense of their graphic forms was weakened. It is for this reason that we have distinguished them from pictorial syssemantographs. Below are some examples.

(bone) (bronze) 正 *zhèng* "upright." This is the protoform of "征" *zhēng* "to travel afar." The component □ represents a destination. A

foot ("止") going toward a destination □ expresses the meaning "to go toward a destination."

 (bone)  (seal) 之 *zhī* "go." The original meaning of "之" was "to go somewhere." The element "一" shows the place being left; the foot ("止") going forward suggests the meaning "leave here to go somewhere else."

 (bone)  (seal) 韋 *wéi*. (The modern simplified form is "韦".) This is the protoform of "違" *wéi* "avoid, get away from." The foot ("止") is not going toward a destination (□); this expresses the meaning "to go away from."

  (bone) (bronze)   (seal) 出 *chū* "go out." The ancients lived in pits; the element ∪ or depicts a pit. (The pictographic protoform of "坎" *kǎn* "pit" was ∪.) The entire graph shows a foot stepping out of a pit dwelling. The first seal character is from the *Shuōwén*; the second one is taken from a Han seal.

  (bone) (bronze) 各 *gè* "each." This is the protoform of "徦" *gé* "to come or go to." (In *Fāngyán* 1 and 2 it is defined respectively as "to arrive" and "to come".) The graph expresses the meaning of "arrive" by showing a foot moving toward a pit dwelling. In ancient texts "格" is often borrowed to write "徦".

 (bone)  (seal) 陟 *zhì* "climb." 𨸏 is the graph "阜" *fù* "mound." Many think that it depicts a wall or mound, but this is open to question. The upward facing feet show a person climbing up to a high place.

 (bone)  (seal) 降 *jiàng* "descend." The downward facing feet show a person descending from a high place.

 (bone)  (bronze) (seal) 逐 *zhú* "pursue." A foot ("止") going toward a pig ("豕") represents a person pursuing a pig or some similar animal.

  (bronze) 祭 *jì* "offer a sacrifice." The graph shows meat being offered to a deity. The more primitive form of "示" in the bone script was , possibly the depiction of a spirit tablet (神主).

 (bone)  (seal) 相 *xiàng* "examine." The original meaning of "相" was "to examine carefully." The graph shows an eye examining a tree.

 (bone)  (seal) 朙 *míng* "bright." This is a variant form of the character "明" (concerning the structure of "明", see Secs. 4.3, 4.5). The form of the graph shows a moon shining on a window. "囧" is the same as "冏"; it is said to resemble a window with carved openings, but this may be questionable.

 (bronze)  (seal) 閒 *jiān* "interval" (the original form of "間"; written "间" in the simplified script). The graph shows a gate with an opening through which moonlight can be seen.

  (bone)   (seal)   (clerical) 朝 *zhāo* "morning." The graph depicts an early morning view of the sun coming up while the moon is still visible at the time of the last quarter of the waning moon. Concerning the evolution of the graphic form of "朝", see Sec. 4.5.

  (bone) (seal) 莫 *mò* "no one." The protoform of "暮" *mù* "evening." A sun in a grove of trees or in an expanse of grass indicates that it is about to set.

 (seal) 杲 *gǎo* "bright." The *Shuōwén* defines "杲" as "明" *míng* "bright" and says that it is composed of a sun ("日") above a tree ("木").

 (seal) 杳 *yǎo* "dark." In the *Shuōwén* "杳" is defined as "冥" *míng* "dark" and is said to be composed of a sun below a tree.

 (seal) 竄 *cuàn* "flee." (The modern simplified form is 窜.) In the *Shuōwén* "竄" is defined as "匿" *nì* "to hide"; it is comprised of a rat (鼠 *shǔ*) in a hole (穴 *xuè*).

 (seal) 突 *tū* "sudden." In the *Shuōwén* "突" is defined as a dog suddenly emerging from a hole; it consists of a dog (犬 *quǎn*) in a hole.

 (bronze) 閑 *xián* "idle." (The modern simplified form is "闲".) In the *Shuōwén* "閑" is defined as "闌 'a door covered,' it is comprised of 木 *mù* 'wood' in a 門 *mén* 'doorway.'"

 (bronze) 原 *yuán* "source." This is the protoform of "源". It shows a spring (泉 *quán*) coming from under a cliff (厂 *hǎn*) and expresses the meaning of "a spring or water source." The element "泉" in the standard script form is close to the way this element is usually written in the clerical script.

 (seal) 庫 *kù* "storehouse." (In the modern simplified script it is written "库".) According to the *Shuōwén* "庫" depicts a war chariot stored away; it depicts a chariot (車 *chē*) in a shed (广 *ān*).

 (seal) 囷 *jūn* "round granary." According to the *Shuōwén* "囷 means 'a round granary'; the graph depicts "禾" *hé* 'grain' inside an enclosure 囗 *wéi*."

If we define "pictorial" (圖形式) in a wider sense, then the majority of the above characters could be placed in the class of pictorial syssemantographs. On the other hand, if we explain the sense of "pictorial" in a narrower way, then many of the pictorial syssemantographs cited above should be included in this category. There is not a clear boundary between these two categories of characters.

Syssemantographs which employ the relationship of the position of their components were mostly created in the period of the ancient script. But after the Chinese script had completely lost its pictographic character, syssemantographs of this type were still created occasionally as in the case of "尒" *tǔn* cited in Sec. 6.1. Some further examples are the following:

嬲 *niǎo* "to tease." The graph shows a girl "女" between two boys "男".

尖 *jiān* "pointed, sharp." The graph "小" *xiǎo* "small" above "大" *dà* "large" forms "尖" *jiān*. (The word {尖} *jiān* was originally written "鐵"; the graph "尖" appeared later.) There is also a character "尒" *yǎn* which according to the *Guǎngyùn* means "large on top, small below." The child's toy called "嘎嘎" *gága*, which is pointed at both ends, is also sometimes written "尜尜".

灭 *miè*. This is the simplified form of "灭". The graphic form shows a fire being stamped out. The component "一" above "火" *huo* "fire" in actuality functions as a pictographic symbol and should not be confused with the numeral "一" *yī* "one."

The character "泵" *bèng* "pump," which is a recent loanword based on the English word "pump," is also a possible example of a semantic character based on the relationship of the position of its components. A pump can be used to put increased pressure on water. The graphic form of "泵" probably uses the image of a stone above water to express the meaning of "put pressure on water." Some believe that the reason "泵" was written in this way is that the sound of a large stone falling into water resembles the sound of the word pump. If this explanation is accepted, then the graphic form of "泵" uses the syssemantic principle to express sound; "泵" should, in this case, be viewed as a special kind of phonogram which cannot be classified in our tripartite system.

7.1.5.3 Type C. Syssemantographs Comprised of a Principal Part Plus a Body Part

Characters of this category join graphs or graphic symbols depicting a person or animal to graphs or graphic symbols depicting body parts (occasionally components depicting other relevant objects are added) in order to represent certain actions or states related to the body parts thus employed. Yáng Shùdá (1954:207) called graphs of this type "syssemantographs consisting of a body and body parts" (主名與官名的會意字). Since the terms "主名" *zhǔmíng* and "官名" *guānmíng* are not easily understood, we have changed them to "principal part" ("主体") and "body part" ("器官"), respectively, since in effect they refer to characters or graphic symbols consisting of a principal part and a body part. Below some examples are given.

 (bone)  (seal) 見 *jiàn* "see." To see is a function of the eye; in this graph the meaning "see" is expressed by superimposing "目" mù "eye" over the graph "人" *rén* "person."

 (bone)  (bronze) 望 *wàng* "gaze into the distance." The word {望} *wàng* "to gaze into the distance" in ancient times was written "朢". The "eye" element is directed upward to show that it does not represent ordinary looking but refers to gazing into the distance or looking as far as the eye can see. Below the component "人" a "土" is sometimes added. "人" and "土" joined together become the component "壬" (pronounced *tǐng*; not to be confused with the cyclical sign "壬" *rén*, which is a totally different element). In the *Shuōwén*  is taken as an ancient script form of "朢". In the bronze script "望" is written  which is composed of "月" *yuè* "moon" and "朢" ("朢" is both a phonetic and a semantic symbol simultaneously); this graph was originally derived from "朢" as an exclu-

sive way of writing {望} "the fifteenth of the lunar month." (This meaning derives from the fact that on the fifteenth of the lunar month the sun and the full moon, so to speak, gaze at one another.) "望" in origin was a variant or a differentiated form of "朢", in which the component "臣" in "朢" was replaced by the phonetic 𠂤 (亡) which is rather similar to "臣" in graphic form. Later both "朢" and "朢" were discarded and only "望" was used.

 (bone)  (bronze)  (seal) 監 *jiàn* "inspect." (In the modern simplified script it is written "监".) The graph depicts a person lowering his head to see his face in a vessel holding water. In *Shàngshū*, "Jiǔgào" there is the passage 古人有言曰: 人無於水監, 當於民監 "The ancients had a saying: 'a man ought not gaze at himself in the water; he should gaze at himself in the people.'" In this passage "監" has its original meaning of "to gaze at one's reflection (in water)." This original meaning was later most often represented by "鑒" or "鑑". The meaning "inspect" is an extension of the original sense.

 (bone)  (bronze component) 尺 (clerical component) 欠 *qiàn* "yawn." The original meaning of "欠" was "to open the mouth to breathe freely, to yawn." (This sense is preserved in the word 欠伸 *qiànshēn* "to stretch and yawn.") The graphic form has "口" *kǒu* "mouth" placed vertically above "人" to express the meaning of "opening the mouth." Many characters which have "欠" as a component, such as "吹" *chuī* "blow," "飲" *yǐn* "drink," "歎" *tàn* "sigh", "歌" *gē* "sing" have to do with opening the mouth. (Concerning the pictorial form of "欠" see Sec. 4.5.)

 (bone)  (bronze)  (seal) 酓 飲 (clerical) 飲 *yǐn* "drink." (The modern simplified form is "饮".) The graphic form depicts a person lowering his head in order to drink wine from a wine container. The character "舌" *shé* "tongue" was written  or  in the ancient script; from this we can see that in the first graph cited above the element  placed under the inverted "口" *kǒu* "mouth" represents a tongue. Later this character took "今" *jīn* as a phonetic making it a phonogram. In the clerical script it was simplified and became a syssemantograph. The seal form is taken from a Han seal. The *Shuōwén* form of "欠" has undergone corruption.

 (bone)  (seal) 既 *jì* "finish." The graph depicts finishing a meal. The component "口" *kǒu* "mouth" at the top of the graph is not facing the food but is facing away from it. The seal form cited is from the Tri-script Stone Classics. In the *Shuōwén* this graph is written  , which is a corruption.

 (bone)  (bronze)  (seal) 聖 *shèng* "sage." (The modern simplified form is "圣".) Both "聖" *shèng* and "聽" *tīng* "hear" have developed from the same graph. The ancient pronunciations of the two graphs were similar and there are examples of their being used for one another in ancient texts. The oracle bone forms cited above can in fact also be

explained as "聽". In the bone script "聽" is generally written "耶" (the ancient script form in the Tri-script Stone Classics appears as such); the graph shows an ear listening to sounds from a person's mouth. The only difference between this graph and the bone forms of "聖" cited above is the presence or absence of the element person ("人"); the two in origin were probably allographs of one character. In the first bone form shown above, a "耳" (ear) is placed above a "人" (person); on the analogy of "見" which is similar in structure, it ought to have been the protoform of "聽". Later the form of "人" became "壬" (as in the case of 堲). The left part of "聽" is "𦔻"; the *Piānhǎi*'s (篇海) explanation of "𦔻" as an ancient script form of "聽" (*apud Kāngxī zìdiǎn*) is perhaps based on good reason. From a linguistic point of view, {聖} should be a derivative of {聽}; its original meaning perhaps was close to that of {聰} *cōng* "astute." In antiquity a "聖人" (sage) was roughly equivalent to a clever or smart person (e.g., *Zuǒzhuàn*, Xiāng 22: 春, 臧武仲如晉, 雨, 過御叔. 御叔在其邑. 將飲酒, 曰, 焉用聖人 "In the spring, Zāng Wǔzhòng went to Jìn; it rained and he stopped by to see Yùshū. Yùshū was in his capital. As he was about to drink, he said, 'Why should one employ a bright person?'" about which Dù Yù comments, "Wǔzhòng possessed much knowledge; his contemporaries called him 聖 (bright, clever)." Its use to refer to a morally superior person probably began after the time of Confucius.

 (bone)  (seal) 企 *qǐ* "stand on tiptoe." According to the *Shuōwén*, "企" means "to lift the heel." 企望 *qǐwàng* "to look forward to" originally meant to gaze while standing on tiptoes. The graph depicts a foot (止) below a person (人).

 (bronze)  (seal component) 走 *zǒu* "run." The element depicts a running man flinging his arms at his side; later it evolved to "夭". The original meaning of "走" was something like "to jog" or "trot." (In the *Shìmíng*, "shì zī róng," it says "to walk slowly is 步 *bù*, to walk fast is 趨 *qū*, to run is 走 *zǒu*.") For this reason below the element a "止" (foot) is added. In the *Shuōwén*, both the character "夭" and the component "夭" have been corrupted into . The seal form cited above is from a Han dynasty seal.

 (bronze)  (Stone Drum)  (clerical) 奔 *bēn* "run fast, rush." "奔" refers to an even faster run than "走"; for this reason, the meaning is expressed by placing three "止" (feet) below the element "夭". Later the three "止" were changed to "卉" *huì* "grass" which was similar in graphic form. In the *Shuōwén*, "賁" *bēn* is said to be the abbreviated phonetic in "奔"; but "卉" is itself phonetic in "賁". It would appear then that "奔" should be analyzed as having "卉" as its phonetic; however, the pronunciations of "卉" on the one hand and "賁" on the other are not very compatible.

 (bone)  (seal) 臭 *chòu* "stink." This is the protoform of "嗅" *xiù* "smell" (written 臄 in the *Shuōwén*). Dogs are well known for their sense of smell; it is for this reason that the character is composed of "犬" *quǎn* "dog" and "自" *zì* "nose." "自" was in origin the depiction of a nose (see Chapter 1). The word {臭} *chòu* "stink" represents an extension of the meaning of {臭} (嗅).

 (bone)  (bronze)  (seal) 鳴 *míng* "to crow." (The modern simplified form is "鸣.") The rooster is well known for its (auspicious) crowing; for this reason a mouth ("口") was placed beside a chicken to express this meaning. Later the element depicting a chicken was replaced by that for bird ("鳥").

 (seal) 吠 *fèi* "to bark." The *Shuōwén* says that "吠" means "'a dog barking'; it is composed of 口 *kǒu* 'mouth' and 犬 *quǎn* 'dog.'"

 (seal) 臭 *jú* "gaze like a dog." According to the *Shuōwén* "臭" is "'the appearance of gazing like a dog'; it is comprised of 目 'eye' and 犬." "臭" is phonetic in the character "闃" *qù* which occurs in the phrase 闃無一人 "all was quiet and not a soul was to be seen."

 (seal) 瞿 *jù* "gaze like an eagle." According to *Shuōwén* "瞿" means "to gaze like an eagle or falcon." The character "趯" on the "Máogōng *dǐng*" has the component in which there is only one "目".

 (from a Six States period seal) 犨 *chù* "butt." A graphic variant of "觸" (perhaps the protoform of "觸"). Bulls frequently like to butt with their horns. The graph has a horn above an ox to express this meaning.

The characters belonging to this category were for the most part created during the ancient period of the script. Among this type of graph, those that combine a principal part with a graph or graphic symbol denoting a body part, such as "見", "堲", "欠", "既", "監", "飲", have a rather strong pictographic aspect and appeared quite early. After the Chinese script had totally lost its pictographic aspect, characters like "鳴" and "吠" were occasionally created; an example of this is "咩" *miē* "the sound of a sheep bleating."

7.1.5.4 Type D. Syssemantographs Created by Repeating a Component

Semantographs created by repeating a component are not all syssemantographs. Some graphs such as "艸" and "絲", in comparison with their components, represent more elaborated and simpler forms and should be considered pictorial graphs. Even if they are syssemantographs, they do not necessarily belong to the present category; for example, the character "从" *cóng* "to follow," which depicts one person following another is a pictographic syssemantograph. However, the majority of characters formed by repeating a component can be put in this category. Below are a few examples:

 (seal) 玨 *jué* "two pieces of jade joined." The *Shuōwén*'s definition is the same.

 (bone) 林 *lín* "forest." Trees growing in groups form a forest; the graph shows two "木" *mù* "tree."

 (seal) 芔 *huì* "grass." The *Shuōwén* defines "芔" as "the general name for grasses." The graph consists of three "屮" *chè* "newly sprouted grass."

 (seal) 䒑 *máng* "much grass." According to the *Shuōwén* "䒑" is the orthograph for 莽 (the *Shuōwén*'s explanation of 莽 is "in Nánchāng a dog good at pursuing rabbits in grass is called 莽"), but this graph does not occur in ancient texts. Among ancient graphs already discovered, "䒑" occurs only as a graphic component and does not appear to differ in meaning from "艸" *cǎo*.

  (bone) (seal) 蚰 *kūn* "insect." According to the *Shuōwén*, "蚰" is the orthograph for "昆", but "蚰" is not found in ancient texts. Whether the *Shuōwén* character and the oracle bone forms represent a single character needs further study.

 (seal) 蟲 *chóng* "insect." (The modern simplified form is "虫".) Derived from three 虫 *chóng* "insect."

 (bronze)  (seal) 毳 *cuì* "fine hair." The *Shuōwén* defines "毳" as "'the fine hair of animals'; it is composed of three 毛 *máo* 'hair' graphs."

 (seal) 磊 *lěi* "many stones." The *Shuōwén* defines "磊" as "'many stones'; it is composed of three 石 *shí* 'stone' graphs." The seal form given in the *Shuōwén* is written  ; this is different from the seal form of "石" found in bronze and stone inscriptions, so we have changed the seal form accordingly. "石" was originally written and can be considered a pictorial graph. The "口" *kǒu* "mouth" was added later and was probably used to distinguish "石" from other similar graphs.

 (seal) 森 *sēn* "forest." According to the *Shuōwén*, 森 means "'the appearance of many trees'; it is composed of three 木 *mù* 'tree' graphs."

淼 *miǎo* "great quantity of water." This graph describes great quantities of water; it consists of three 水 *shuǐ* "water." It is also written "渺". (But note that "渺小" "tiny" cannot be written "淼小".) The character "淼" is not in the *Shuōwén*. In Xú Xuàn's edition of the *Shuōwén* it is included among the newly appended characters (see Dīng 1928:5119).

  (bone) (seal) 羶 *shān* "rank odor of sheep." This is the protoform of "膻". The *Shuōwén* defines "羶" as "'the rank odor of sheep'; it is composed of three 羊 *yáng* 'sheep.'" Whether the "羶" of the *Shuōwén* and the bone forms represent the same word still needs further study.

 (bronze)  (seal)  *xiān* "fresh." This is the orthograph for "鮮". (According to the *Shuōwén* "鮮" was originally the name of a kind of fish. "鮮" was borrowed to write "" *xiān* "fresh)." The primitive meaning of "" may have referred to the fresh odor of fish, just as "羶" referred to the odor of sheep.

 (seal) 猋 *biāo* "the appearance of running dogs." The *Shuōwén* defines "猋" as "'the appearance of running dogs'; it consists of three 犬 *quǎn* 'dog.'"

 (seal) 麤 *cū* "coarse." According to the *Shuōwén* "麤" means "'to walk far'; it consists of three 鹿 *lù* deer." In ancient texts "麤" was mainly borrowed to write the word {粗} *cū* "coarse." It is now considered to be an allograph of "粗".

 *bēn* "startled (of cows)." The *Guǎngyùn* defines "" as "startled (of cows)." It is generally considered an allograph of "奔".

 (seal) 轟 *hōng* "the sound of many vehicles." (The modern simplified form is "轰".) According to the *Shuōwén* "轟" means "'the sound of many vehicles'; it consists of three 車 *chē* 'vehicle.'"

Among syssemantographs which repeat the same component, there are some graphic forms that employ the positional relationship among the components. For example, there are two graphs comprised of two "朿" *cì* "thorn" elements. When the components are side by side, the graph is "棘" *jí* "sour jujube"; when the components are placed one above another, the resulting graph is "棗" *zǎo* "jujube." (棘 refers to the sour jujube, a very thorny bush; the ordinary jujube tree is larger and taller than the sour jujube.) The character "炎" is explained by the *Shuōwén* as "'the light of fire rising upward' (composed of two "火" *huǒ* 'fire,' one above the other)"; "矗" *chù* is 'stand upright, towering' (composed of three 直 *zhí* 'upright'). In both these cases the placing of the repeated components one above another can be considered significant. There is no good reason why characters of this type cannot be put in category B of syssemantographs.

7.1.5.5. Type E. Syssemantographs Whose Components Form a Meaningful Phrase when Read Together

This category of syssemantographs contain characters like "歪" *wāi* mentioned in Chapter 2. They are composed of two or more components (the great majority consist of only two components) which can be read together to yield a meaningful phrase; the phrase resulting from reading the components together will make clear or hint at the meaning of the graph. Examples:

 (seal) 凭 *píng* "lean on." The *Shuōwén* defines "凭" as "'to lean on a table'; the graph is composed of 几 *jī* 'table' and 任 *rén* lean.'"

 (seal) 劣 *liè* "weak, inferior." The *Shuōwén* defines "劣" as "'weak'; it is composed of 力 *lì* 'strength' and 少 *shǎo* 'little, few.'"

 (seal), 扁 *biǎn* "flat; tablet." The *Shuōwén* defines "扁" as "'inscribe, inscription'; it is composed of 戶 *hù* 'door' and 冊 *cè* 'inscribed board or bamboo strip'; the inscribed board of a door refers to the inscription written over a gate or door." This meaning is now expressed by "匾" *biǎn*.

尟 (seal) 尟 *xiǎn* "few." This is the orthograph for "鮮" *xiǎn* "few." The *Shuōwén* says that 尟 means "'few' and is composed of 是 *shì* 'this' and 少 *shǎo* 'few.'" "尠" is a variant of "尟"; it is also a syssemantograph comprised of "甚" *shèn* "very" and "少". Both "尠" and "尟" are now written "鮮".

暹 *xiān* "rise (of the sun)." The *Shuōwén* defines "暹" as "'the sun's light rises'; it is comprised of 日 *rì* 'sun' and 進 *jìn* 'advance.'"

昶 *chǎng* "long (of daylight)." The *Shuōwén* says that "昶" means "'the day is long'; it is composed of 日 *rì* 'day' and 永 *yǒng* 'long lasting, perpetual.'"

甦 *sū* "revive." The word "蘇" *sū* "revive" is sometimes written "甦". The graph is a combination of "更" *gèng* "again" and "生" *shēng* "live."

楞 *léng* "edge." A variant of "棱", as in 邊棱 *biānléng* "edge, border." (In some combinations like "威棱" *wēiléng* "power" and "模棱" *móléng* "inconclusive," the allograph "楞" is rarely used.) This graph is composed of "四" *sì* "four," "方" *fāng* "side" and 木 *mù* "wood (tree)."

In addition to these graphs, there are a few others that also belong to this syssemantic category: 拿 *ná* "take, grasp" (from "合" *hé* "close" and "手" *shǒu* "hand); "孬" *nāo* "not good" (from "不" *bù* "not" and "好" *hǎo* "good"); "汆" *cuān* "quick-boil" (from "入" *rù* "put in" and 水 *shuǐ* water"); "羶" a variant form of "膻" *shān* "rank odor of mutton" (from "羊" *yáng* "sheep" and "臭" *chòu* "stink"); the simplified form of "塵" *chén* "dust," "尘" (from "小" *xiǎo* "small" and "土" *tǔ* "soil"); the respective simplified forms of "糴" *dí* and "糶" *tiào*, 籴 *dí* "buy rice (from "入" *rù* bring in" and "米" *mǐ* "rice") and "粜" *tiào* "sell rice" (from "出" *chū* "send out" and "米").

In the *Shuōwén* there are also syssemantographs which combine four elements which can be read together to form a phrase: the protoform of "曝" *pù* "expose to the sun" was "㬥" and the orthograph for "暴" *bào* "sudden" was "㬧":

㬥 "to dry." It is composed of 日 *rì* "sun," 出 *chū* "come out," 収 *gǒng* "take in the hands," and 米 *mǐ* "rice". (According to Duàn Yùcái's commentary, the sense is "when the sun comes out, to offer up rice to dry it—combining four graphs to form the meaning.")

㬧 "to hurry quickly to some place"; it is composed of 日 *rì* "sun," 出 *chū* "come out, 夲 *tāo* "hurry" and 収 *gǒng* "take in the hands." Note that "夲" is not the same as "本" *běn*; in the *Shuōwén* "夲" is defined as "to advance and hurry (somewhere)."

The character "㬥" in the clerical script is usually simplified as "暴"; the word {暴} *bào* "sudden" is generally expressed with "暴" in the clerical script. Later "暴" was further simplified to "暴".

However, the *Shuōwén*'s analysis of the protoform of "曝" and the orthograph for "暴" "sudden" is open to question. The element 屮 found in

these characters has a different form from the seal character "出" found in the *Shuōwén*. (Qing editions mostly change 屮 to 山 whereas Song editions do not do so.) In the graphs found on the wooden tablets in the tomb of Marquis Yǐ of Zēng, there is one composed of 市 with 𣅀 as phonetic. The element 𣅀 resembles two hands holding some grass or tree-like object under the sun in order to dry it; this must be the protoform of "㬥", which translates to "𣅀" in modern script. (On an ancient seal from the state of Yān there is a character composed of 𣅀 plus "日" which should probably be explained as "𣅀".) In the *Shuōwén* the characters "㬥" and "㬧" are both analyzed as having "暴" as their abbreviated phonetic; these two characters probably originally had "𣅀" as their phonetic. The character "㬥" in all likelihood is a later character consisting of a phonetic "𣅀" and a signific "米" and is not actually a syssemantograph composed of "日出収米" as the *Shuōwén* claims. Likewise, "㬧" must be composed of "𣅀" as a phonetic and is not a syssemantograph composed of "日出夲収". (On the stone inscription at Yìshān this character is written 㬧 in which the central vertical stroke is unbroken; in origin it is possible that it was a variant writing of "𣅀".) Therefore, in actuality, syssemantographs consisting of four elements that when read in sequence form a meaningful phrase do not exist. ("暴" written as "暴" can already be seen in epigraphic materials at the beginning of the Han dynasty; it must have first appeared even before then. On Qin bamboo slips "暴" is written "暴"; the element "共" must be a simplification of 𣅀. However in the seal script found on Han seals "暴" is for the most part written 㬥 or 㬧; there is no 屮 below "日". The graphic form shows two hands lifting rice under the sun for drying; it can be viewed as a syssemantograph of the A or B type. In Han clerical script "暴" is sometimes written "㬥" which is a continuation of the above graphic form. If such graphic forms are not simplifications of "㬥" and have earlier precedents, "暴" may also possibly be an amalgamation of "𣅀" and "㬥".)

Among obsolete ancient popular graphs one can find a number of syssemantographs of this category: 𠒎 for "老" *lǎo*: former (先) people (人) are old (老); 𢍏 (also written erroneously as "𢍏") for "辯" *biàn*: clever (巧) words (言) make a dispute (辯); 𨒫 for "歸" *guī*: pursue (追) hither (來) is to return (歸); 𤗃 for 斛 *hú*: one hundred (百) pints (升) are a picul (斛). (The above characters were all used in the Southern and Northern Dynasties period.) In the work *Lóngkān shǒujiàn* one finds the following: 夛 for "多" *duō*: not (不) a few (少) is many (多); 𡱈 for "矮" *ǎi*: not (不) long (長) is short (矮); 𣆶 for "暗" *àn*: not (不) bright (明) is dark (暗); 奃 for "寬" *kuān*: large (大) clothing (衣) is wide (寬). Other similar examples are 𨳝 for "嫖" *piáo*: to ruin (敗) one's gate or household (門) is to visit prostitutes; 𡚶 for 嫩 *nèn*: newly (初) born (生) is tender (嫩), and so on.

Syssemantographs in which the elements when read in succession form a meaningful phrase for the most part were created after the script had totally lost its pictographic character; such forms are very rare in the ancient script.

7.1.5.6 Type F. Other

Among syssemantographs there are still many that cannot be accommodated in the above classification scheme:

 (bone)  (seal) 劓 *yì* "cut off a person's nose (as a punishment)." The bone form is a syssemantograph consisting of "刀" (*dāo* 'knife') and "自" (*zì* "nose"). In the seal script, "自" was replaced by "鼻". (The component "畀" in "鼻" is an erroneously evolved  as given in the *Shuōwén*; it has been revised on the basis of the seal forms found on Han seals, etc.)

 (seal) 刪 *shān* "excise." In antiquity a small knife was used to excise mistakes from texts written on bamboo and wooden slips; therefore, the character "刪" is a syssemantograph composed of 冊 *cè* "a bundle of bamboo slips" and 刀 *dāo* "knife."

 (seal) 魝 *jié* "to clean fish." According to the *Shuōwén* "魝" was the Chǔ word for "to clean fish," comprised of 魚 *yú* "fish" and 刀 *dāo* "knife." "魝" is phonetic in "薊" *jì* "thistle." (The phonogram "魡" *dāo* "a sort of anchovy" was differentiated from "魝" since the element "刀" was not altered.) If the term "pictographic" is understood in a wider sense, then there is no reason why graphs like "劓", "刪" and "魝" cannot be placed in category A syssemantographs.

掃 *sǎo* "sweep." (The modern simplified form is "扫".) The graph is comprised of "手" *shǒu* "hand" and "帚" *zhǒu* "broom"—a hand holding a broom expresses the meaning "sweep." In the *Shuōwén* it is written "埽" (with 土 *tǔ* "earth, soil" as a signific)—the meaning of sweep is expressed by a broom removing soil or dirt. (The *Shuōwén*'s "埽" and the "埽" *sǎo* of 堤埽 *dīsǎo* which refers to bags of willow branches or straw used in the construction of dikes are homographs. From the point of view of pre-Han phonology "帚" and "掃" were close in pronunciation; "掃" and "埽" can also be viewed as syssemantographs that simultaneously belong to the phonogram category.)

擤 *xǐng* "to blow the nose." The graph is composed of "手" *shǒu* "hand" and "鼻" *bí* "nose." The meaning is expressed as "blow the nose using the hand."

掰 *bāi* "to divide or break open something with the hands." The graph is composed of two hands (手 *shǒu*) and "分" (*fēn* "divide"); *bāi* is the colloquial reading of "擘" *bò*, as in 分擘 *fēnbò* "to divide." The *Xīnhuá zìdiǎn* and the *Xiàndài Hànyǔ cídiǎn* both consider "擘" as an allograph of "掰".

 (bone)  (seal)  (clerical) 邑 *yì* "(capital) city." "邑" refers to a place

where people reside; the meaning is expressed by placing the graph for a kneeling person under the graph for a region or area, □. In the standard script, when "邑" is used as a component on the right, it is usually written "阝".

 (bone)  (seal) 啚 *tú* "area around a city." This is the protoform of "鄙" *bǐ*. (The *Shuōwén* treats "啚" and "鄙" as two separate characters; this is incorrect. Before the script was simplified "图" *tú* was written "圖"; many people use "啚" as a simplified form of "圖". In antiquity, the area on all sides of a city was called 鄙; the people living in this area were mainly engaged in agricultural production. The graph consists of "亩" below the element □; "亩" is the protoform of "廩" *lǐn* "a storage house for grain.")

 (seal) 占 *zhān* "to divine." The original meaning of "占" was to examine the cracks on a divinatory shell or plastron in order to determine whether something was auspicious or not. The graph consists of "卜" *bǔ* "divine using shells or plastrons" and "口" *kǒu* "mouth."

 (seal) 銜 *xián* "bit of a bridle." (The modern simplified form is "衔".) The *Shuōwén* definition of "銜" is "'a horse's bridle-bit in the mouth'; the graph is composed of 金 *jīn* 'metal' and 行 *xíng* 'go'; 銜 is what makes a horse go." (From the point of view of Old Chinese phonology, "金" and "銜" were close in pronunciation; "銜" may also be viewed as a syssemantograph which is simultaneously a phonogram.)

 (bone) 明 *míng* "bright." In the bone script there are examples of "明" with "囧" as a component as well as those with "日". In the Six States period "明" was used (see Sec. 4.3.5).

 (bone)  (bronze)  (seal) 名 *míng* "name." The *Shuōwén* glosses "名" as: "'*míng* means command (*míng*)'; derived from 口 *kǒu* 'mouth' and 夕 *xī* 'night.' The night is dark (*míng*). At night [people] cannot see each other, so they let their (names >) identities be known by mouth."

斌 *bīn* "both elegant and simple." This graph is an alternate way of writing "彬". In ancient times "彬彬" described someone who was both elegant (文 *wén*) as well as simple and honest (質 *zhì*). The person who created the graph "斌" combined "文" *wen* "elegant" and 武 *wǔ* "martial" using "武" as a substitute for "質".

灶 *zào* "stove, range." The complex form for this graph is "竈" or "竈". A traditional stove was made of earth (土 *tǔ*); a fire (火 *huǒ*) was lit inside it—hence the syssemantic form consisting of "土" and "火".

笔 *bǐ* "writing" implement." The complex form is "筆". The shaft of a Chinese writing brush is made of bamboo (竹 *zhú*) and the brush part is made of hair (毛 *máo*); "竹" (written "⺮" as a component) and "毛" are joined to form this syssemantograph.

Examples of syssemantographs end here.

7.1.6 Altered Graphs

Graphs of this class are formed by altering the form of an already existing character; they are few in number. Basically there are two ways in which the forms of graphs are altered: by the addition or subtraction of strokes (subtraction being more common) and by the alteration of direction.

First we will give an example of the first type.

 (seal) 片 *piàn* "split tree, segment of wood." According to the *Shuōwén* "片 means 'split tree' from half a tree." In the seal script "木" *mù* "wood, tree" is written  ; if one writes only the right side, then it becomes  (片). A segment of wood is formed by splitting up a tree; hence the notion of a segment of wood is shown by half a tree. In addition, from the Warring States period until early Han, some people used the "half tree" form to represent 析 *xī* "split wood." On the Chǔ bamboo slips found at Yǎngtiān Lake near Chángshā and in the B version of the *Lǎozǐ* text written on silk found at Mǎwángduī, the character  (an allograph of 策 *cè* "tally" has the component "析" written with the "half tree." Moreover, in an inscription on a dagger-ax from the tomb of Marquis Yǐ of Zēng "析" is written  . In an inscription on a bronze vessel found in the Warring States tomb of the king of Zhōngshān, the component "析" in the character "  " is written  which is composed of the "half tree" plus "斤" *jīn* "ax"). In the inscriptional seal script of the Eastern Han, the character "析" *xī* is still written "  " or "  "; this perhaps can be viewed as a case where the script of the Six States period influenced the seal script.

 (碍) *ài* "obstacle." From the point of view of the ancient script, "得" and "  " are variant forms of a single graph; see the remarks on "得" *dé* "obtain" as a type A syssemantograph above. But after the Eastern Han some used "  " as a variant form of "礙" *ài* "obstacle." In the "Yángjūn Shímén sòng" inscription, "  " is used for "礙"; "  " is the right-hand component of "得". After the Southern and Northern Dynasties period, people often wrote "礙" as "  "; later a stone component "石" was added to form "碍", which is the current simplified form of "礙". The removal of the component "礻" from "得" and the use of the resulting form for "礙" to express the notion of "unobtainable because of an obstacle" should be viewed as a case of an altered graph.

 (惡) *è* "evil." "  " was a popular way of writing the left-hand component of "德" *dé* "virtue." "德" was originally composed of "礻" with "  " as its phonetic; its original meaning was "to ascend." The character "  " is composed of "心" *xīn* "heart" with "直" *zhí* "straight" as phonetic. (Some explain it as a syssemantograph composed of "直, 心" "upright heart.") "  " is the orthograph for "德". But in the Southern and Northern Dynasties period some people wrote "惡" as "  ". Evil (惡) is the opposite of virtue (德). The elimination of the component "礻" from the

character "德" to express the meaning "evil" is similar in intention to the elimination of "礻" from "得" to express the meaning "obstacle." In the Southern and Northern Dynasties period, "  " was a rather common popular variant of "惡". When Yán Zhītuī (*Yánshì jiāxùn*, "Shūzhèng") refers to "placing 西 over 惡" (惡上安西) to write *è* in his discussion of popular forms, he is in fact referring to this popular form. In Eastern Han inscriptions there are also cases of "惡" being written "  " (e.g., in the "Yángjūn Shímén sòng" inscription). The upper half of these versions of "惡" is possibly either an altered form of "  " or it is possibly a corrupted form of the "  " in the graph "  ". In Eastern Han inscriptions, "德" is sometimes written "  " (e.g., the "Zhāng Qiān *bēi* inscription). Therefore, it is possible that the use of  for "惡" already began in the Eastern Han period.

The character "世" discussed above with reference to the complex pictorial graph "  ", from the point of view of its creation, can be viewed as an altered graph formed by subtracting strokes from "  ". In the *Shuōwén* "  " *quǎn* "ditch between fields" and "  " *kuài* "water course between fields" are written  and  respectively; they can both be considered altered graphs formed by subtracting strokes from  (川 *chuān* "river, water course"). The characters  (孑 *jié*) and  (孓 *jué*) can be viewed as altered graphs formed by subtracting strokes from  (子 *zǐ*). Two further examples of characters belonging to this category are "" which for a time was a popular variant of "寂" *jì* "lonely" in the Eastern Han and the dialectal character "" *mǎo* which means "has not, there is not"; in the first case the two strokes , which resemble the character "人" *rén* "person," were removed from the component "豕" in the character "家" *jiā* "home" to express the idea of "no one at home," hence "lonely"; in the second case, two strokes have been removed from "有" *yǒu* "has, there is" to express the idea of "has not, there is not."

Some people think that "甩" *shuǎi* "throw away" is an altered character; the central vertical stroke of "用" *yòng* "use" has been extended and curved to the right forming the character "甩" used to express the meaning "throw away useless things" (see Liáng 1959:112).

Below we will discuss those altered graphs in which the orientation of strokes has been changed. According to the explanations of the *Shuōwén* there are a considerable number of characters formed by writing a certain character in reverse. Such reversed characters include cases of left-right reversal and top-bottom reversal. But in fact they were not created in this way. Such cases can in a general way be divided into three types; below we will separately give examples and explain them.

A. Some characters when examined in their earliest forms, are not, as the *Shuōwén* says, cases of a character being reversed. For example, the

Shuōwén says that "㠯" () is a reversed "巳" (). But the bone form of "㠯" is written  or  . (later evolved to "以" *yǐ*. "以" and "㠯" are in origin the same character; some think that "以" and the ancient form of "似", "佁", are the same character, but this is not so.) The bone form of "巳" was written  ; the two graphic forms are unrelated. The *Shuōwén* says that "帀" ( —now written 匝) is from an inverted "之" (). But the bone form of "之" was  and "帀" was written  ; again, the two graphic forms are unrelated. The *Shuōwén* says that "旡" (), the right-hand component of "既", which is different from "无", is a reversed "欠" (). In actuality "欠" was originally written  or ; "旡" was originally written  ; in these two characters only the direction of the upper mouth-shaped element is reversed; the characters as a whole are not related by being reversed. In the inscription on the Warring States period *hú* vessel from the tomb of the King of Zhōngshān, the character "乏" *fá* "lack" is written  . It would appear that the explanation of "乏" () as a reversed "正" ( *zhèng* "upright") found both in the *Shuōwén* and in *Zuǒzhuàn*, Xuān 15 is unreliable.

B. Some characters in actual practice are only used as components of other characters and cannot be used independently. For example, the *Shuōwén* says that  is from a reversed "止" *zhǐ* "foot." Actually "止" and depict a person's left and right feet, respectively, and is never used independently (see Sec. 3.2). The *Shuōwén* says that  is a reversed "邑", but only appears in a few graphs like  (鄉 *xiāng* "village") and cannot be used as an independent graph.

C. In some cases the character from which the *Shuōwén* believes another character derives, originally had the same graphic shape but later the direction of the character was used to differentiate them as two characters. For example, the *Shuōwén* says that "辰" ( , the protoform of 派) is a reversed "永" (). As a rule, in the ancient script, the regular and reversed forms of graphs are not used to represent separate words. In origin "永" and "辰" ought not to have represented two different graphs; in the bronze script "永" was frequently written  . Both and depict the tributary of a river; in relation to {派} *pài* "tributary" they can be regarded as pictorial graphs; in relation to {永} *yǒng* "long-flowing" they can be regarded as quasi-pictorial graphs. This is a phenomenon similar to that illustrated by 𐆜 and 𐆛 which represent both "月" *yuè* "moon" and "夕" *xī* "night." Only later, probably in order to make the meanings of the graphs clearer, was it decided to use the left-facing graph for "永" and the right-facing graph for "派".

Below we will give two examples of altered graphs in which the spatial orientation of an early graph was possibly changed.

  (bone)   (bronze)  (seal) 今 *jīn* "now." "今" is probably the protoform of "吟" *yín* whose original meaning was "close the mouth and remain silent." (E.g. *Shǐjì*, biography of the Marquis of Huáiyīn: [Zhōnghuá ed., p. 2625] 雖有舜禹之智, 吟而不言, 不如瘖聾之指麾也. "Even if one has the wisdom of Shùn and Yǔ, remaining silent and not speaking is of lesser value than the motionings of a deaf-mute." This meaning of "吟" is different from the more usual one of "moan".) The graphic form probably represents  、  (曰 *yuē* "speak, say") written upside down, but for convenience's sake, the rounded top was written in an angular form.

爿 *pán* "split bamboo or wood." In some dialects a split piece of bamboo or wood is called "爿" *pán*; it is also extended to be used as a measure word for stores. This character appeared relatively late and appears to have been created by reversing the graph "片" *piàn* "piece of wood." This character has the same graphic form as the standard script form of the protoform for " 牀" *chuáng* "bed," "爿".

The reversed form of "可" *kě* "can, may," "叵" *pǒ* "impossible" mentioned in Sec. 6.1 is also of this sort of altered graph.

In the cases of "今" (吟) and "曰" and "可" and "叵" the meanings as well as the graphic forms are reversed, but in the case of "片" and "爿" the meanings are similar.

Above we divided semantographs into six categories and have given examples of each category. It is possible that not all semantographs can be encompassed within these six categories. Moreover it is important to note the classification of some semantographs is ambiguous. For example, we have classified "牢" as a complex pictorial graph and have classified "㚔" as a type A syssemantograph because it is generally thought that the component  in "牢" is a graphic symbol used exclusively by "牢" and that the component  from which "㚔" is derived is the ordinary graph for "豕". But in the bone script there are not only examples of "牢" consisting of "牛" *niú* "cow" inside the component , there are also examples of "牢" derived from "羊" *yáng* "sheep" inside the component  ,  , and of forms derived from "馬" *mǎ* "horse" inside , . The form containing "羊" may perhaps be viewed as an allograph of "牢"; the form containing "馬" is probably the protoform of "廄" *jiù* "stable"; most scholars of the ancient script in fact explain this character as "廄". It is evident that is not exclusively used as a graphic symbol for the character "牢". If "㚔" can be classified as a syssemantograph, then there is no reason why "牢" cannot be so classified as well. To put it in another way, if "牢" can be viewed as a complex pictorial graph, then there is no reason why "㚔" cannot also be so classified.

The character  (圄) which we classified as a complex pictorial graph, in structure is very similar to "囷" which we classified as a type B syssemantograph. If we view the component  of the former graph as

"田" *tián* "field," then it can be classified as a syssemantograph. If we view the component ⬡ of the latter graph as the element "口" read *wéi*, and the whole graph as a simple graphic symbol for 禾囷 "grain bin," then it can be classified as a complex pictorial graph. The character "雨" *yǔ* "rain" was originally written  . In Old Chinese "雨" could be used both as a noun and as a verb. Viewed as a noun, "雨" is a complex pictorial graph depicting rain drops as well as the sky (represented by the top horizontal line). Viewed as a verb, "雨" should be viewed as a pictorial quasi-pictograph or as a type A syssemantograph. Therefore, in classifying semantographs, it is not necessary to be too punctilious. Our main purpose in speaking of semantographs has been to improve our ability to understand and analyze the graphic forms of semantographs. There is no real purpose served in haggling over to which particular category a given semantograph should be classified.

7.2 The Role of Graphic Form in the Study of Meaning

The main purpose of this section is to discuss the importance of graphic form in the study of meaning and several problems which must be addressed in employing the graphic form of semantographs when studying meaning. The significs of phonograms also have a semantic function. There are similarities between phonograms and semantographs in regard to the relationship between graphic form and meaning. In this section we will add a few examples of phonograms; in the chapter on phonograms, when we discuss the semantic function of significs, we will not make further reference to the problems discussed in this section.

The importance of the graphic forms of semantographs in the study of meaning is chiefly in that they can help us determine the original sense of the graphs in question. The original sense of a character is the meaning that it was meant to express when it was created, and it is ordinarily the usual contemporary meaning of the word for which the character was created. Determining the original meaning of a graph is a great help in understanding changes and development in graphic meaning, that is, the various phenomena concerning the meaning of the word for which the character was created, its later development and use in the derivation of new words. Below we will offer a few examples.

行. The character "行" *xíng* means "walk," "road" and in the pronunciation *háng* "rank, row." In our discussion of pictographs above we have already shown that from the point of view of the ancient script the original sense of "行" must have been "road" (in *Ěryǎ* 5.19, "行" is defined as "道" *dào* "road"). In ancient texts "行" is often seen in the sense of "road"; e.g., *Shījīng* Ode 197.6 行有死人, 尚或墐之 "There is a dead body on the road, someone will still bury him"; *Shījīng* Ode 154.2 遵彼微行 "They go

along those small roads (paths)." It is clear that the meanings "walk" and "rank" are respectively derived from an original meaning of "road." From the meaning of "walk" were derived such other meanings as 流行 *liúxíng* "current," 通行 *tōngxíng* "pass through," 施行 *shīxíng* "put into effect" and 經歷 *jīnglì* "go through, experience" (for this meaning see *Guóyǔ*, "Jìnyǔ" 4: 行年五十矣 "The number of years passed through must have been fifty," where the commentary says 行歷也 "行 is to pass through"), 巡視 *xúnshì* "make a tour of inspection" (see *Lǚshì chūnqiū*, "Jìxià jì": 乃命虞人入山行木 "[he] then ordered the forester to enter the mountains to inspect the trees," where Gāo's commentary says 行, 察也 "*xíng* means 'to inspect'"), and 行爲 *xíngwéi* "action" (formerly read *xìng* in this sense, as in 品行 *pǐnxìng* "conduct"). From the sense of "rank" are derived such meanings as 排行 *páiháng* (formerly read *hàng* in this sense) "seniority among siblings," and 行業 *hángyè* "trade, profession." The use of {行} in words like 商行 *shāngháng* "commercial firm" and 銀行 *yínháng* "bank" are probably derived from the sense found in 行業. The path of development of the graphic meaning is very clear. If "walk" is taken as the basic meaning of "行" as in the *Shuōwén*, then the development of the meaning cannot be understood accurately.

休. In ancient times, in addition to the commonly known meaning of "rest," "休" also meant "the shade of a tree" and "excellent." In Western Zhou bronze inscriptions "休" is often used to mean "bestow" and other similar senses (as in the "Xiào *yǒu*" inscription: 王錫公貝五十朋, 公錫厥□子效王休貝二十朋, which states that the duke presented his son "twenty of the strings of cowrie shells bestowed by the king," i.e., from among the fifty that the king had presented him, showing that "休" and "錫" were close in meaning). If the relationship among these various meanings is to be understood clearly, then the fundamental sense of "休" must be established on the basis of its graphic form.

In the bone script "休" is written  , showing a man resting by the side of a tree. In antiquity "休" could have the sense of "the shade of a tree," as in *Hànshū*, "Xiàochéng Bān Jiéxù zhuàn": 依松柏之餘休 "depending on the remaining shade of the pines and firs"; in Yán's commentary "休" here is defined as 蔭 *yīn* "shade." (In *Ěryǎ* 2.66 there is the gloss "庇, 庥, 廕也" 庇 *bì* and 庥 *xiū* mean 'shade'"; in Guō Pǔ's commentary it says "nowadays the shade of a tree is commonly called 庥—note that at the present time 廕 has been subsumed under 蔭. The Tang dynasty scholar Zhāng Shēn [776] in his *Wǔjīng wénzì* says that the character "休" depicts a man resting in the shade of a tree." When viewed in connection with the fact that "休" can mean "shade," Zhāng Shēn's explanation is clearly acceptable. In the bronze script "休" usually occurs written  , which depicts even more clearly "a man resting in the shade of a tree" [see Lóng 1984:256]. While it is generally thought that *xiū* in

the bronze script is derived in some instances from "禾" *hé* "standing grain," this is not true.) Therefore the original sense of "休" should be "a man resting in the shade of a tree." In *Shījīng* Ode 9.2: 南有喬木, 不可休思 "In the South there is a tall tree, but one cannot rest in its shade," the character "休" is used precisely in its original sense. This is also the case in the following passage from *Huáinánzǐ*, "Jīngshén": 今夫繇(徭)者揭钁臿, 負籠土, 鹽汗交流, 喘息薄喉. 當此之時, 得茇越下, 則脫然而喜矣 "Now those engaged in compulsory labor service raise their pickaxes and carry basketfuls of earth on their shoulders; their salty sweat flows to and fro and they pant and gasp. If at this moment they get a chance to rest in the shade, they surely will find joy in relaxation," about which Gāo Yòu's commentary says 茇, 蔭也. 三輔人謂休華樹下爲茇也. 楚人樹上大本小如車蓋狀爲越 [note: this character also occurs written 樾 *yuè* "the shade of a tree"--the author], 言多蔭也. "*Xiū* means 'shade.' The people of the Metropolitan Area refer to resting under a luxuriant tree as *xiū*. As for the people of Chǔ, as the upper part of a tree is large and its base is small like a chariot canopy whose shape [makes =] provides shade, it refers to plentiful shade." The character "茇" was differentiated from "休" to denote the latter's original meaning. (The *Huáinánzǐ* text above then continues as follows: 巖穴之間非直越下之休也 "[When one's] in a cave, it is not merely [like] resting in the shade," in which case *xiu* is written "休". Cf. *Jíyùn*, where "休" "庥" and "茇" are considered to be allographs of a single character. The character "薅" *hāo* "to weed" has an allograph "茇" that is a homograph of the "茇" under discussion.) From Gāo's commentary one can see that in the latter part of the Eastern Han many people still used the original sense of "休".

From the original sense of "休" developed the pure meaning of "to rest" as well as the meanings "shade of a tree" and "for a senior to protect a junior." From the meaning "to rest" come the subsidiary meanings found in 休假 *xiūjià* "take a holiday," 休止 *xiūzhǐ* "stop, cease" and 休要 *xiūyào* "don't (prohibitive)." The meaning "shade of a tree" is seen in the above quotations. The meaning "for a senior to protect a junior" can be seen in the *Zuǒzhuàn* and *Hànshū*; e.g., *Zuǒzhuàn*, Zhāo 3: 民人痛疾, 而或燠休之 "While the common people live in pain and suffering, there is someone who comforts and protects them," the Zhèngyì quotes a gloss of Jiǎ Kuí: 燠厚也; 休美也, "燠 *yù* means to treat generously; 休 means beautiful." From the context, however, "休" ought to mean "to protect"; the definition "beautiful" is inappropriate. The basic sense of "燠" here should be "to make warm"; "休蔭" *xiūyìn* originally had the meaning of "to make cool"; the meanings are complementary. The explanations of Fú Qiān and Dù Yù who thought that "燠休" *yùxiū* meant to make a sound with the mouth in order to comfort people in distress are probably also incorrect. In *Hànshū* "Wáng Mǎng zhuàn" A, there is the passage (Zhōnghuá ed., p. 4071): 誠上休陛下餘光而下依群公之故也, about which Yán Shīgǔ in his commentary says 休, 庇蔭也 "*xiū* means 'to protect, shield.'" So 休陛下餘光 means "to rely upon the protection of your Majesty's superabundant resplendence," thus "The reason is surely that while above [I] have had the protection of your Majesty's superabundant resplendence, below [I] have relied on a crowd of high ministers."

"休" in the sense of "protect, shield" can be used both as a verb and as a noun. For example, the instances of "休" seen in *Shījīng* Ode 304.4 "何(荷)天之休 "He received the protection of Heaven," and in *Zuǒzhuàn*, Xiāng 28: 以禮承天之休 "receive the protection of Heaven by means of the rites," as well as "休" in numerous bronze inscriptions and in *Shījīng* Ode 262.6: 對揚王休 "in reply he extolled the king's protection" should all be explained as meaning "protect" or "shield." In Zhèng Xuǎn's commentary to the *Shījīng* and in Dù Yù's commentary to the *Zuǒzhuàn*, explanations of "休" as 美 *měi* "beautiful" or as "福祿" *fúlù* "good fortune, grace" are all inappropriate (see Wang 1990, *juàn* 19:98 under the entry for 休). The phrase "休命" *xiūmìng* seen in bronze inscriptions and ancient texts (e.g., in the "Shīyǒu *guǐ*" inscription 對揚天子丕顯休命 "in response extol the Son of Heaven's gloriously protective charge," and in *Zuǒzhuàn*, Xī 28: 奉揚天子之丕顯休命 "receive and extol the Son of Heaven's gloriously protective charge") ought to have originally meant "an order to protect someone of lower status" and not "beautiful decree" as commentators have explained it.

As pointed out above, in bronze inscriptions, "休" is often used to mean "bestow" and similar senses. This must be an extension of the meaning "protect, shield." Yáng Shùdá's (1954a) explanation of these cases of "休" as being loans for "好" is probably not reliable. However, some instances of "休" in ancient texts really should be explained as meaning "beautiful." This meaning is possibly also in some sense an extension of the sense "protect, shield."

To sum up, in studying the various meanings of the character "休", if we pay sufficient attention to the character's graphic form, we can see that the various senses of "休" can be systematized in a logical way and at the same time we can correct some incorrect explanations of "休" appearing in commentaries on ancient texts.

In some cases the signific of a phonogram can also help us to determine the original sense of a character and to clarify the development of its meaning. For example, the character "理" *lǐ* has 玉 *yù* "jade" as its signific. Its original sense must have been "the veins seen in a piece of jade." To cut and polish a piece of jade guided by its veins was also called "理". It is for this reason that the *Shuōwén* defines "理" as to "work jade." From this

meaning comes such extended senses as those seen in 紋理 *wénlǐ* "vein, inner structure," and 道理 *dàolǐ* "principle, reason, propriety." From this latter meaning come the senses of "理" found in 治理 *zhìlǐ* "govern, administer," and 整理 *zhěnglǐ* "put in order." The way the graph's meaning has developed is very clear. However, the relationship between a signific and a phonogram's meaning is for the most part not very precise. In general they are not nearly as valuable in studying a word's meaning as are the graphic forms of semantographs.

Since most semantographs were created very early, we can sometimes use the graphic form of a certain semantograph to correct long-standing misunderstandings concerning the nuances of the word which it represents. For example, in ancient times the phrase 暴虎馮河 *bào hǔ píng hé* was used to describe a brave man; according to the Máo commentary to *Shījīng* Ode 195.6 and in *Ěryǎ* 3.102 "暴" is explained as "to fight barehanded." This was probably a traditional explanation. Beginning with the Máo commentary "暴" was glossed as meaning "fight with bare hands" (the Máo commentary to *Shījīng* Ode 195.6 says that "暴虎" means 空手以搏之 "to fight it with empty hands"). From the graphic forms of relevant ancient characters we can see that this explanation is problematic. The "暴" in the expression "暴虎" is a loangraph; the graph "虣" which is generally considered to be an allograph of "暴", is composed of the two elements: "武" *wǔ* "weapon" and "虎" *hǔ* "tiger"; it is actually the orthograph for the "暴" in the above phrase. In the bone script "虣" is written  ; in the "Zù Chǔ wén" inscription it is written  ; they depict fighting a tiger with a dagger-ax. It is evident that 暴虎 means to fight a tiger on foot and does not necessarily mean that no weapon is used. In ancient times hunting from chariots was very popular; to hunt such a fierce beast as a tiger not from a chariot but on foot was a very brave undertaking. 馮河 means to cross a river without a boat; 暴虎 is to hunt a tiger on foot; these two actions are completely parallel.

Sometimes one can even recover the long-lost original sense of a character relying on the graphic form of a semantograph. Below we have two examples of this.

保. According to the *Shuōwén* "保" *bǎo* means "to nourish." But this is not the original sense of "保". In the *Shàngshū*, "Zhào gào" passage: 夫知保抱攜持厥婦子以哀籲天. . . "The men knew enough(?) to carry on their backs and embrace in their arms, to lead and support their wives and children, and thereby (wail and call out =) appeal to Heaven . . ." "保" is used together with "抱" *bāo* "carry in the arms." In the ancient script, a primitive fashion of writing "保" was  (used as a clan name in a bronze inscription); the graph depicts a person carrying a baby on the back. For this reason Táng Lán (1981b:58-60) was of the opinion that the original sense of "保" was to support a baby on the back (in the *Shàngshū* "Zhào gào" passage above this is precisely the sense employed). This is quite correct. The meanings 保養 *bǎoyǎng* "take care of" and 保護 *bǎohù* "protect" are derived from this original sense. The cloth in which a baby is wrapped when being carried on the back is called 襁褓 *qiǎngbǎo*. "褓" *bǎo* (written "緥," in the *Shuōwén*) is probably derived from "保". If we did not have such graphic forms in the ancient script as evidence, the true original sense of the character "保" would probably not be recoverable.

追, 逐. In the *Shuōwén* "追" *zhuī* and "逐" *zhú* (both "pursue") are used to define one another. In ancient texts, moreover, one cannot see any clear difference in the use of these two characters. But Yáng Shùdá (1954b:15-16) on the basis of the graphic forms of these two characters and their use in oracle bone texts discovered their true original sense and was able to clarify an early difference in how they were used. In the oracle bone texts whenever reference is made to pursuing an enemy "追" is always used, as in "追羌" "pursue the Qiāng," "追龍" "pursue the Lóng (the name of a state)." Whenever reference is to pursuing wild animals, "逐" is always used, as in "逐鹿" "pursue a deer," "逐豕" "pursue a boar." The graphic form of "逐" in the oracle bone script is  which depicts a person pursuing a boar; "追" is written  which depicts a man pursuing the element  ; (追) in the oracle bone script is often used to represent the word {師} *shī* "troops." The component "𠂤" in "追" is probably both used phonetically ("𠂤" was pronounced *duī* and the *Shuōwén* says that "追" has "𠂤" as its phonetic) and as a signific. The graphic form expresses "to pursue someone's troops." The use of these two characters in the oracle bone script corresponds exactly to what is suggested by their graphic forms. It is obvious that the original sense of "追" was "to pursue a person" and "逐" was "to pursue an animal"; only later were their meanings confused.

The above discussion concerns the importance of graphic form in the study of a word's meaning. Below we will discuss some problems that must be kept in mind when using graphic form to explicate meaning.

In the first place, early graphs which have not undergone corruption must be used as the basis of any such study; otherwise there is no way to obtain correct results. In the *Shuōwén* there are many cases of incorrect explanations of the original senses of graphs; this is chiefly due to the use of problematic graphic forms. The case of "行" discussed above is a good illustration; the *Shuōwén*, based on a corrupted form of "行",  , mistakenly took "a man running on foot" to be the original sense of the character. Another example is the character "慶" *qìng* whose seal form is  which has as one of its components an altered form of "止" (趾): ;

as a result of using this graphic form, the *Shuōwén* says that the basic sense of "慶" is 行賀人 "walk to present a gift to a person." However it is difficult to see that the original sense of "慶" has any necessary connection with "行" "walk." In actuality "慶" was originally written  (in the bronze script); the corrupted component 夂 was added only later. If Xǔ Shèn had relied on the correct graphic form, he would not have groundlessly added the character "行" to his explanation of "慶". There are some characters which are free of corruption but which nevertheless are already very far removed from their primitive forms. Graphic forms of this variety are difficult to use as a basis for research on their original meanings of words. For example, if one were to employ the dramatically evolved forms of "保" ordinarily found in the ancient script ( ,  , etc.), it would not be easy to recover the original sense of "to carry a baby on the back."

A second but by no means secondary caution is that one must have a correct understanding of the relationship between script and language. It must be kept firmly in mind not only that writing consists of signs used to record language but that writing has a certain degree of independence. The appearance and disappearance of graphs and the appearance and disappearance of words in a language are not in a one-to-one relationship. A graphic form frequently is unable to express a meaning precisely; a graph created for word A can be borrowed to express word B, and so forth. One must at all costs avoid divorcing oneself from relevant linguistic material when using graphic form to explicate meaning and allowing graphic form to lead one by the nose. Speaking more specifically, special attention should be paid to the following points (the first three apply to phonograms as well as semantographs.)

A. The original sense of a graph is not equivalent to a word's original sense.

A graph created to write a certain word was not necessarily created immediately after the appearance of the word. This is naturally the case for words which existed before the formation of the writing system, but it is also the case for words which appear after the formation of the writing system; a loangraph may be used for a long period for such a word before an orthograph of its own is created. Therefore, when a graph is created for a certain word, the meaning of the word at that point is quite possibly already somewhat distant from its primitive meaning.

The basic sense of a graph is the meaning of the word it represented at the time of the graph's creation. For a majority of graphs, the basic sense is the oldest meaning which we can trace back for the words which they represent. But because of the factors alluded to above, such meanings are not necessarily the most primitive meanings of the words in question. Therefore in studying the meanings of words, one should not

simply equate a graph's basic sense with the basic meaning of the word it represents.

B. One cannot casually insert an equal sign between the meaning expressed by a graphic form and a graph's basic sense.

In dictionary definitions, a lot of ink is sometimes spent without being able to express a word's meaning precisely and completely. To express the basic meaning of a word using graphic form is even more difficult to accomplish. Not only is the relationship between the meaning of a phonogram's signific and the meaning of the graph itself often very loose, even the graphic form of a semantograph can often only offer a hint concerning the meaning of the graph. Therefore we cannot unconditionally place an equal sign between the meaning expressed by a graphic form and the basic sense of a character. What is especially important to note here is that the meaning expressed by a graphic form is often narrower than the basic sense of the graph. This sort of phenomenon was pointed out in the past. For example, Chén Lǐ (1880-82, *juàn* 11:4) in the section "Xiǎoxué" (philology) in his *Dōngshú dúshū jì* (Chén Lǐ's Critical Notes on the Classics) pointed out that in the case of some semantographs, "although the meaning of the graph does not refer exclusively to one thing, the form of the graph depicts only a single thing." Many people have also referred to the one-sidedness of the semantic components of phonograms. Below we will give some examples to clarify this point.

First we will illustrate our point with semantographs. Above we noted that the graphic form of "大" *dà* "large" resembles an adult person. The general notion of "large" is expressed by means of a specific thing which possesses the trait of largeness, but it would be a mistake to claim on the basis of this graphic form that the basic sense of "大" referred exclusively to the largeness of human beings and that when the largeness of other things is referred to as "大" that this is the result of semantic extension. Another example is provided by the character "相" *xiàng* "examine" discussed above in Sec. 7.1.5.2. The graphic form shows a person examining a tree, but the basic sense of the graph can scarcely be that narrow. The following *Shījīng* lines show that "相" can apparently refer to the examination of any object:

52.1 相鼠有皮 "Examine the rat, it has skin"
165.1 相彼鳥矣 "Look at those birds"
191.8 相爾矛矣 "(We) examine your lances"
204.5 相彼泉水 "Examine that spring water"

The *Shuōwén* definition says "相 means 'to examine; it is composed of 目 *mù* 'eye' and 木 *mù* 'tree'; the *Yìjīng* says 'of those things that can be observed on the earth, none is more observable than a tree.'" Duàn Yùcái

in his commentary says, "The eye sees many things and the reason that [相] is derived from "木" is that of the things that can be observed on the earth none is more observable than a tree." If one says that because the character "相" has "木" as a component, its original sense was "to observe a tree," he will be mistaken. In like manner, we cannot say that since "受" has "舟" as a component its basic sense was "to give and receive boats"; nor can we say that because "臭" has "犬" as a component, its basic sense was for "a dog to smell"; likewise we cannot say that the basic sense of "逐" was "to pursue a boar" just because the graph "逐" has "豕" as a component. There are countless similar examples.

Let us now look at two phonograms as examples. According to the *Shuōwén*, "群" *qún* "group, flock" means "a group; it is composed of 羊 *yáng* 'sheep' with 君 *jūn* as phonetic." "群" has "羊" as a signific because sheep like to form groups. This is the same sort of thing that is seen with the character 臭 with "犬" *quǎn* "dog" as a signific. We cannot conclude because of this that "群" originally referred exclusively to groupings of sheep and that when "群" refers to groupings of other animals it is an extension of its basic sense. The *Shuōwén* defines "瑱" *tiàn* as "'fill the ears with jade (a kind of ornament worn in the ears)'; it is composed of 玉 *yù* 'jade' with 眞 *zhēn* as phonetic." Jade was only one of the materials used for this sort of ear ornament in ancient times. Perhaps the ancients valued those made of jade more highly and therefore used "玉" as the signific in the character "瑱". Duàn Yùcái (1815) in his commentary says "not all *tiàn* were of jade; the reason Xǔ [Shèn] says in his work that they are of jade is to explain why the character contains the element 玉." This is to say that the only reason the *Shuōwén* says *tiàn* are made of jade is to explain why the character contains the component 玉 and that the reader should not directly take the definition 以玉充耳 "to fill the ears with jade" as the basic sense of the graph. This is quite correct. But in some parts of his commentary Duàn Yùcái confuses the meaning expressed by the graphic form with the basic sense of a graph. The character "群" mentioned above is an example of this: Duàn takes the view that all groupings expressed by "群" are semantic extensions of a basic sense that refers exclusively to groupings of sheep.

In any case, when we try to determine the basic sense of a graph, one must take into full account the relevant linguistic evidence and one should not pay excessive attention to questions of graphic form. Otherwise there is the danger of concocting a basic sense that in reality has never existed. When we discussed actual examples of semantographs in the previous section, we sometimes only explained the meaning expressed by graphic form without reference to the graph's basic sense. The reader should be careful not to take the meaning expressed by the graphic form to be the same as the basic sense of the graph.

C. In studying the development of a word's meaning, one should not be led astray by characters whose basic sense is the extension of a loangraph meaning.

Some words use as loangraphs characters that were created to write one of the word's extended meanings, which may include extended meanings in the broad sense of grammatically derived forms; in such cases, the original sense of the graph so employed is a semantic extension of the word in question. If one does not have a correct understanding of such loangraphs, then there is the possibility of inverting the order of development of the word's meaning. Below we will give several examples.

糾. In the *Shuōwén* we find the following two definitions: "𠂤 means to be entangled"; "糾 is a rope of three strands; it is composed of 糸 and 𠂤." "𠂤" and "糾" are homophonous; the meaning "a rope of three strands" is clearly an extension of "to be entangled"; the character "糾" should be viewed as having been differentiated from "𠂤". Later "𠂤" was abandoned and the meaning "to be entangled" was expressed by "糾" (one might also say that "𠂤" and "糾" merged). If we were to disregard "𠂤" and take only "糾" into consideration, then it might well appear that the meaning "to be entangled" was a semantic extension of "a rope of three strands." In both the 1979 edition of the *Cíhǎi* and the 1981 edition of the *Cíyuán*, "糾" is treated as such.

向. The *Shuōwén* definition of  is "a window that exits northward; it is composed of 宀 *miǎn* 'roof' and 口 *kǒu* 'mouth, opening.'" In *Shījīng* Ode 154.5 there is the line 塞向墐戶 "obstruct the north window and plaster sheet the door." In the past many scholars of the script, including Duàn Yùcái and Zhū Jùnshēng, thought the meaning "to face toward" associated with the character "向" was a semantic extension of an original sense of "a window that exits north." But the use of "向" to mean "face toward" is quite late; the explanations of Duàn and Zhū are actually unreliable. In the bone and bronze script {向} *xiàng* "to face toward" was written with the protoform of "饗", "卿" (see Sec. 7.1.5.1 of this chapter). In ancient texts "鄉" is the usual form for this word. In the seal script "鄉" was written  , a character derived from "卿" (in later times the character "嚮" was especially created to write {向} *xiàng* "face towards," but it has now been merged with "向"). The character "卿" originally depicted two people eating while facing one another, but it would not appear that "to face toward" could be a semantic extension of "to eat facing one another." The *Shuōwén* has a character  which is defined as 事之制 "the management of affairs." Some recent scholars believe that resembles two people facing one another and that it is the orthograph for {向} "face toward"; this is quite possible. The words {饗} *xiǎng* "face one another while eating," {鄉} *xiāng* "ward of a town" and {向} *xiàng* "a northerly facing window" should all be semantic extensions of {向} *xiàng* "face toward." (The semantic connection between {鄉} *xiāng* "ward

of a town" and {向} *xiàng* "face toward, direction" is quite clear: ancient city wards were mostly named after directions, like 東鄉 "the ward of the eastern direction.") Since the orthograph for {向}  "face toward, direction" fell from use, and the character "向" was borrowed to express this meaning, people erroneously came to believe that "向" in this sense was a semantic extension of "a northerly facing window."

A further note about "向" should be added here. Whether the basic meaning of "向" actually is a "northerly facing window" is still open to question. The graphic form possibly shows a mouth making a sound in a room producing an echo. If this is the case, "向" may be the protoform of "響" "make a sound, echo." (In the Mǎwángduī text 經法 *Jīngfǎ*, "Mínglǐ" section, the phrase 如向之隋聲 should be read as 如響之隨聲 "like the trailing sound of an echo"--the meaning expressed by this "向" may be its original sense.)

函. In the bone script 函 *hán* is written  , the original sense was an implement for containing arrows. (This can be proved from its graphic form as well as its use in the inscription on the "Xiǎochén Qiáng" bone. The *Shuōwén* definition of "函" as "tongue" based on an corrupted seal form is not reliable. This is another case of discovering a lost original sense on the basis of an ancient graphic form.) In ancient texts "函" is frequently used for {含} *hán* "to contain" (e.g., *Hànshū*, "Lǐyuè zhì": 人函天地陰陽之氣 "man contains the *qì* of the *yīn* and *yáng* of Heaven and earth"; regarding this passage, Yán Shīgǔ says that "函 is to contain; it is read like 含; elsewhere it is also like this"). In addition to the meaning "container for arrows, "函" also is used to mean "armor" (see the *Kǎogōng jì*: 燕無函 in which, according to Zhèng Xuǎn's commentary, "函, means armor," hence "Yān has no armor"), "envelope" and a "box for keeping things" (e.g., 劍函 "sword box," 鏡函 "box for a mirror"). All these things are used for containing other things ("armor" contains a person's body). If we consider "to contain" to be a semantic extension of the basic sense of "函", this seems quite logical. The character "含" *hán* "hold in the mouth," derived from 口 *kǒu* "mouth" with 今 *jīn* as a phonetic, clearly appeared late. This makes the view outlined above seem even more logical. But from the point of view of the general semantic development, it would be preferable to derive the meanings of "container for arrows," "armor," "envelope," etc. from the notion of "to contain" rather than to derive the meaning "to contain" from "a container for arrows." The characters "含" and "甘" were close in pronunciation in Old Chinese. The character "甘" *gān* "sweet" was originally written  , depicting a mouth holding some object. Some scholars believe that "甘" was a semantographic protoform for "含". People like to hold sweet things in their mouths, hence the word {甘} *gān* "sweet" can be considered as derived from {含} *hán* "to hold in the mouth"; later the character "甘" was used

exclusively to express this derived form and a separate character "含" was devised to write the word meaning "to hold in the mouth." This is probably correct. The character 甘 is already seen in the bone script; its appearance was very possibly earlier than that of "函". It is probable that after the meaning of "sweet" for "甘" became common, the character "函", which had been created to write various extended senses of {含}, was borrowed to represent the word {含}. This situation did not change until after the character "含" appeared. But the use of "函" as a loangraph partially continued. In short, the meaning "contain" for the character "函" superficially seems to be a semantic extension of "container for arrows," but in actuality it should be just the other way around: "container for arrows" is an extension of "to contain." Moreover, various meanings like "armor," "envelope," and "box for holding things" are probably also extensions of the basic meaning of "to contain" and not extensions of "container for arrows."

The component "糹" discussed above is, so to speak, the matrigraph from which "糾" emanated; therefore the false impression in the area of semantic relationship that was created when "糾" was subsequently borrowed to write "糹" is quite evident. The cases of "向" and "函" are somewhat more complicated. In cases where a certain word is written with a loangraph originally created to write one of the extended meanings of that word, and where further the orthograph for the word in question has been long forgotten (as in the case of long obsolete loangraphs), the false impression thus created is less than evident. When we use graphic form to study the meanings of words, we should fully bear in mind the possibility of the existence of situations like those described above in order not to invert the real succession of developments.

D. Two words once written with the same graphic form are not necessarily etymologically related.

In relatively early forms of the script, two words which differed greatly in pronunciation could share a single form of a semantograph. Above several examples of this type have been given. For example,  (or) could represent either "月" *yuè* "moon" or "夕" *xī* "night";  (or) could represent either "大" *dà* "great" or "夫" *fū* "man";  (or) could represent either "𠂢" *pài* "tributary" or "永" *yǒng* "long-flowing." In the study of the origin of graphic form, it is of course permissible to say that "月" and "夕", "大" and "夫", and "𠂢" and "永" were originally written with the same graph. (In fact, it would be better to say that they employ a single form; see Sec. 10.2.) However, in the study of the origins of words (as opposed to the origins of graphic forms), one may not conclude that "月" and "夕", "大" and "夫" and "𠂢" and "永" have the same etymological origin. If one wished to demonstrate an etymological link in such

cases, one would have to have extremely solid linguistic evidence. Some people confuse the origin of graphic forms with etymological origins and believe that just because two words were once written with a single form of a semantograph, that this is proof that they are etymologically related. This is an error.

To sum up, when using graphic form to study the meanings of words, one must adopt a very cautious attitude; one must keep in mind the problems mentioned above. Otherwise, work on the meanings of words based on graphic form will not only be useless, it will be harmful.

8

Phonograms

Since semantographs and phonograms have different structural characteristics, in this chapter we will not employ the method of classification and exemplification that we did in the chapter on semantographs but will use a method centered on various problems: we will explain the structure of phonograms by discussing the way they were created in the first place, the ways in which significs and phonetics are joined and the semantic and phonetic functions of the significs and phonetic components.

8.1 The Ways in which the Phonograms were Created

It has already been pointed out in Chapter 1 that the earliest phonograms were not directly composed from semantic and phonetic symbols but were created by adding a semantic symbol to a loangraph or by adding a phonetic symbol to a semantograph. Even after large numbers of phonograms had appeared, the direct creation of phonograms by joining semantic and phonetic symbols was still rather rare. The creation of certain scientific terms, especially chemical terms, by this method in the process of translating works on Western science after the end of the Qing dynasty (terms like "鋅" *xīn* "zinc," "鐳" *léi* "radium," and "鈾" *yóu* "uranium") was exceptional. The majority of phonograms were created on the basis of already existing semantographs and phonograms by a process of differentiation or through the transformation of semantographs into phonograms. (The semantographs and phonograms referred to here include characters used as loangraphs and those characters which had already become signs or semi-signs.) The chief processes of transformation and differentiation are the following four.

8.1.1 The Addition of a Phonetic Symbol to a Semantograph

In Chapter 1 we gave the example of adding the element "凡" *fán* [picturing a sail] to the protoform of the semantograph "風" *fēng* "phoenix, wind." In Sec. 7.1 we mentioned the case of "厈" *hǎn* "bank, shore" which arose from the addition of a phonetic element "干" *gān* to the protoform

of the semantograph "厂" *hǎn* "slope," and "歓" (飲) *yǐn* "drink" which was created by the addition of the phonetic element "今" *jīn* to the protoform of the semantograph in question. Below we shall give additional examples.

 (bone)  (bone)  (seal) 鷄 *jī* "chicken." ("鸡" is the simplified form.) The protoform of "鷄" *jī* "chicken" was a pictograph to which the phonetic symbol "奚" *xī* was later added. Still later the pictographic symbol for "鷄" *jī* was replaced by the component "鳥" *niǎo* "bird" and it became an ordinary phonogram. The transition of "鷄" *jī* from a pictograph to an ordinary phonogram is strikingly like what happened to the character "鳳" *fèng* "phoenix."

 (bone)  (bronze)  (bronze)  (seal) 裘 *qiú* "fur garment." The protoform of "裘" *qiú* "fur garment" was a pictograph; later the phonetic symbol "又" *yòu* was added. Still later the pictographic symbol that represented a fur garment was changed to the component "衣" *yī* "clothing" and it became an ordinary phonogram. Probably in order to accommodate a change in pronunciation, "又" *yòu* was later changed to "求" *qiú* "seek."

 (bone)  (seal) 齒 *chǐ* "teeth." (The current simplified form is "齿".) The protoform of "齒" *chǐ* "teeth" was a complex pictograph in which the principal object (i.e., the teeth) was depicted. Later a phonetic symbol "止" *zhǐ* was added to the protoform. The character "齒" *chǐ* "teeth" has retained its original pictographic symbol which resembles a person's teeth; in this respect it is like "厓" *hǎn* "bank, shore." In the past, such characters were considered pictographs to which a phonetic had been added.

 (bone)  (bronze)  (seal) 耤 *jí* "borrow." The protoform of "耤" *jí* was a pictorial syssemantograph; it depicted a man holding the handle of a plow plowing. Later, as a phonetic symbol, "昔" *xí* was added to the protoform; still later the graph was simplified to a phonogram consisting of "耒" *lěi* "handle of a plow" with "昔" *xí* as phonetic.

 (bronze)  (ancient script) 埜 (野) *yě* "uncultivated land." The protoform of "野" *yě* "uncultivated land" was the syssemantograph "埜" composed of "林" *lín* "forest" and "土" *tǔ* "earth, soil." In the *Shuōwén* "埜" is given as the ancient form of "野", in which "予" *yú* has been added as phonetic. In the Shuìhǔdì Qín bamboo slips "野" *yě* is mostly written in this way. In the received texts it is mostly written "埜" where the component "矛" *máo* "spear" is an error for "予" *yú* "I; give." In the seal script it is written  (see the Yìshān inscription), which is comprised of "田" *tián* "field," "土" *tǔ* "earth, soil" with "予" *yú* as a phonetic. At a later date "田" *tián* "field" and "土" *tǔ* "earth, soil" fused into "里" *lǐ* "hamlet"; in the *Shuōwén* the seal form already shows this fusion.

Phonograms created by the addition of phonetic symbols and the original semantographs on which they are based generally form single graphs

with two allographs. After the form with the phonetic symbol becomes current, the original semantograph is normally abandoned. But there are also cases where the two forms become differentiated into two different characters. An example is "晶" *jīng* and "星" *xīng* "star." In the bone script "晶" *jīng* "brilliant" was  or  ; these forms in origin were pictographs representing "星" *xīng* "star." When one looks at the stars, they appear smaller than the sun and moon, and while there is only one sun and one moon, there are many stars, so ancient people used three or more "o" symbols to represent stars (in the bone script the shape of this symbol is often □; this is analogous to the use of  for "日" *rì* "sun"). Only at a relatively late stage of the ancient script was the "o" representing a star changed to "日". A form of "星" *xīng* "star" with "生" *shēng* added as a phonetic is already found in the bone script written variously as or . From the Zhou dynasty onward it was altered to  , and then simplified to  . The character "晶" *jīng* "brilliant" was subsequently used to write a word etymologically related to {星} *xīng* "star," namely, the adjective {晶} *jīng* "brilliant" used to describe stars; and thus it was differentiated from "星" *xīng* and what was originally a single graph became two. In Sec. 7.1.2 we pointed out that according to the *Shuōwén* "罔" *wǎng* "net" is a variant of "网" *wǎng* "net" to which the phonetic "亡" *wǎng* "perish" has been added. At a later period "罔" *wǎng* was borrowed exclusively to write a word meaning "have not, there is not"; in this way "网" *wǎng* and "罔" *wǎng* (originally allographs of a single character) were differentiated into two different graphs. Sometimes when a phonetic is added to a semantograph, it has the direct effect of producing a separate graph; for example, when "司" *sī* "manage" is added to "食" *shí* "eat," the differentiated graph "飼" *sì* "to feed" is produced (see Sec. 11.1.1.3.3).

8.1.2 The Alteration of a Part of a Semantograph into a Phonetic Component

Some semantographs have been converted into phonograms by altering one part of its graphic shape into a phonetic. In Sec. 7.1.2 we referred to  *yòu* "garden enclosure" which was altered to "囿" *yòu*. Another example of this is "罝" *zhì* "a net for catching rabbits." In the bone script it was written with the semantograph (冤). Later the component "兔" *tù* "rabbit" was altered to "且" *qiě* and it became a phonogram comprised of "网" *wǎng* "net" with "且" *qiě* as phonetic.

Something that must be stressed is that people of ancient times in order to make an obvious link between old and new characters, often changed one part of a semantograph into a phonetic component that was similar or somehow related to this part in graphic shape. In Sec. 3.2 the example of changing  to "昃" *zè* " slanting" was given. Below we give a few additional examples of this type.

 (bone) 何. "何" *hé* "what" is the orthograph for "荷" *hè* "carry on the back" (the original meaning of "荷" is *hé* "lotus"; the use of "荷" to write {荷} "carry on the back" is a case of graphic borrowing). The semantographic protoform "何" depicts a man carrying something over his shoulder; later the part of the graph depicting a man was changed into the ordinary component "人" *rén* "human" and the part of the graph depicting the object being carried  was changed into "可", which is close in graphic shape, and the graph became a phonogram comprised of "人" *rén* with "可" *kě* "able" as phonetic.[1] In this case "何" should be classified together with the character "受" *shòu* discussed in Sec. 7.1.5.1—the change affecting "何" was a transition from a graph that was simultaneously a semantograph and a phonogram to a pure phonogram.

 (iconograph): 馘 (馘). In ancient times ears were cut off enemy soldiers killed in battle as trophies; this action was referred to as "馘" *guó* "cut off an ear." The semantographic protoform was comprised of "耳" *ěr* "ear" and "戈" *gē* "dagger-ax"; later "戈" *gē* was replaced with "或" *huò* and the graph became a phonogram comprised of "耳" *ěr* with "或" *huò* as a phonetic.

 (bone): 羞. The original meaning of "羞" *xiū* was "to present food." The semantographic protoform was comprised of "又" *yòu* "hand" and "羊" *yáng* "sheep, mutton"; later "又" *yòu* was changed to "丑" *chǒu* "a cyclical sign" which is close in graphic form (in the seal script, "丑" *chǒu* is written ); the graph then became a phonogram comprised of "羊" *yáng* with "丑" as phonetic.

 (seal): 弦. In the *Shuōwén*,  is defined as "'a bowstring'; it resembles a silken string drawn taut." On Han seals, this character is mostly written as a semantograph comprised of "弓" *gōng* "bow" and "糸" *mì* "silken string." Later the element  depicting a taut bowstring was replaced by "玄" *xuán* "dark" to which it was similar in graphic shape and the graph became a phonogram comprised of "弓" *gōng* with "玄" *xuán* as phonetic.

Among the various examples of phonograms which appeared rather late in the early history of the script, "何" *hé*, "馘" *guó*, "羞" *xiū* already appear in the bone script. "弦" *xián* does not appear until the stage of the clerical and standard scripts.

Some popular characters have also undergone a process whereby a part of their graphic shape has been changed into a phonetic component close in form; an example of this is the character "耻", the popular form of "恥" *chǐ* "shame," mentioned in Chapter 2 (in the Han clerical script, "心" *xīn* "heart" and "止" *zhǐ* "step, stop" were similar in shape). Other examples

1. Lǐ Xiàodìng (1965:2629) has pointed out that the object being carried in the bone script form of "何", namely , is the protoform of "柯" *kē* "ax handle," and that it also has a phonetic function.

are the popular form "宍" for "肉" *ròu* "meat" (in Old Chinese the pronunciation of "肉" *rou* "flesh" and "六" *liù* "six" were similar) and the popular form "㒳" of "曼" *màn* "spread." However, "恥" *chǐ* was a phonogram in origin; "曼" *màn* according to the *Shuōwén* was also a phonogram (it says that "曼" is comprised of "又" *yòu* "hand" with "冒" *mào* "emit" as phonetic, but this is not totally credible).

8.1.3 The Addition of a Phonetic Component to an Already Existing Character

A great number of phonograms were formed by adding a phonetic component to an already existing character. This was generally done to make the meaning of the graph clearer. On the basis of the nature of the character whose meaning was to be clarified, this process of adding phonetic components can be divided into three types.

8.1.3.1 Addition of a Semantic Symbol to a Loangraph

An example of this type is the character "師" *shī* which originally meant "army, host." In the Han dynasty it was used as a loangraph for {獅} *shī* "lion" (e.g., *Hànshū*, "Xīyù zhuàn," [Zhōnghuá ed., p. 3889], wherein Alexandria (烏弋山離國) is described as: 有桃拔, 師子, 犀牛 "They have *táobá* [a deer-like animal according to Mèng Kāng's commentary], lions and rhinoceroses"). Later the component "犬" *quǎn* "dog" was added to form a phonogram comprised of "犬" with "師" as a phonetic and was used exclusively for writing the meaning of the original loangraph. (In the *Shuōwén* the character "獅" is not found; in both of the Han histories the word for "lion" is written "獅子"; both the *Yùpiān* and the *Guǎngyùn* have the character "獅".) The bone character  mentioned in Chapter 1 as well as the words "徜徉" *chángyáng*, "蜈蚣" *wúgong* and "鶺鴒" *cānggéng* mentioned in Chapter 2 are all phonograms which were formed by adding phonetic symbols to loangraphs.

8.1.3.2 Addition of a Semantic Symbol to a Character Used in an Extended Meaning

The character "取" *qǔ* "take" had an extended meaning of "take a wife" (e.g., *Shījīng* Ode 158.1: 取妻如之何 "How does one go about taking a wife?"). Later when the element "女" *nǚ* "woman" was added, the differentiated graph "娶" *qǔ* was produced for writing the sense of this word exclusively. Graphs produced in this fashion are mostly phonograms that may be simultaneously considered syssemantographs. The graph "娶" can be analyzed both as a phonogram comprised of "女" "woman" with "取" *qǔ* as its phonetic or as a syssemantograph comprised of "取" "take" and "女" "woman" (cf. the *Shuōwén* definition: "'to take a wife', from 取 and 女; 取 is also phonetic").

The phenomenon described above whereby a new differentiated graph is created by the addition of a semantic symbol is extremely common. Since below we plan to discuss the younger orthographs of loangraphs (Sec. 9.1) and the differentiation of graphs (Sec. 11.1.1.3), we will not give further examples here.

8.1.3.3 The Addition of Semantic Symbols to Make an Original Meaning Explicit

In Sec. 7.1 in discussing concrete examples of semantographs, we mentioned the following relationships, where the first graph in the sets below is the protoform of the second:

它：蛇	止：趾	須：鬚
北：背	孚：俘	縣：懸
正：征	各：徉	原：源
爿：牀	州：洲	厷：肱
采：採	埶：藝	益：溢
韋：違	莫：暮	臭：嗅

It was in order to make the original sense of characters like "蛇" "牀", "趾", "洲" clearer that a semantic symbol was added to "它", "爿", "止", and "州" creating the younger forms. Some phonograms also have later forms created by the addition of semantic symbols; an example is "然" *rán* which is a phonogram comprised of "火" *huǒ* "fire" with "肰" *rán* "dog meat" as phonetic. This character was created to write {燃} *rán* "burn"; later a semantic symbol "火" *huǒ* was added to "然" *rán* creating the new graph "燃" *rán* "burn" (the *Shuōwén* does not have the graph "燃" *rán*; the *Guǎngyùn* considers "燃" *rán* a popular form of "然" *rán*; for further information on the addition of semantic symbols to phonograms to create new graphs, see the following section under "Multiple Semantic Components").

Characters to which there was a need to add a semantic symbol to make their original meanings more explicit mostly had a more common extended or loangraph sense. After the appearance of the new graph with the added semantic symbol, the graphic protoform gradually ceased to express the original meaning and was only used to express the extended or loangraph sense. After the appearance of the character "蛇" *shé*, for example, the character "它" *tā* gradually came to be used only for the demonstrative *tā* "others" which was a loangraph sense. After the character "趾" *zhǐ* appeared, "止" *zhǐ* came gradually to be used only for extended senses like "stop." In actuality these newly formed characters served a differentiating function and can be viewed as differentiated graphs which express the original meaning by means of adding a semantic symbol. Most people consider the protoforms they contain (the "它" of "蛇", the "止" of "趾", etc.) purely as phonetic components and do not think of them as the protoform of the characters in question. This is why they should be considered phonograms.

Some newly formed characters produced by the addition of semantic symbols were not differentiated from their protoforms, such as "牀" *chuáng* and "肱" *gōng* cited above and the characters "淵" *yuān* and "鉞" *yuè* mentioned in Sec. 3.2. The protoforms of all the characters mentioned here were pictographs. Logically the newly formed characters based on them are the same as the character "胃" *wèi* "stomach" mentioned in Sec. 7.1.2; they can be considered complex pictographs with added phonetic components (to those who do not know the origin of the graphic form they are half-sign, half-semantograph). However, if their protoform serves as a phonetic component in certain frequently used characters, most people will still view them as phonograms. For example, "爿" *qiáng* is phonetic in "壯" *zhuàng* "strong" and "狀" *zhuàng* "shape" (see Sec. 7.1.2), "厷" *hóng* is phonetic in "宏" *hóng* "vast" and "雄" *xióng* "hero," "戉" *yuè* is phonetic in "越" *yuè* "pass over"; therefore, most people also consider "牀" *chuáng*, "肱" *gōng* and "鉞" *yuè* to be phonograms. ("鼘" *yuān* is phonetic in "嫚", an allograph of "姻" *yīn* "relative by marriage," in "遻" *yuān* "manner of walking," and in "鼉" *yuān* "sound of drums," but these characters are all rarely used now.)

To sum up, the vast majority of newly created characters made by adding a phonetic symbol for the sake of clarity can be considered phonograms.

Sometimes when a phonetic symbol is added for clarification, the added component may be the same as a part of the protoform. For example, in the seal form of the character "益" *yì* (see Sec. 7.5), the top component is "水" *shuǐ* "water" written on its side; in the character "溢" *yì* "increase" a second "水" *shuǐ* is added. The character "莫" *mò* has "日" *rì* as a component; in "暮" *mù* "dusk, evening" a second "日" *rì* "sun" has been added; the character "然" *rán* has "火" *huǒ* "fire" as a component; in "燃" *rán* "burn" a second "火" *huǒ* has been added.

Some newly created characters were formed by adding two graphic components. For example, "亩" *lǐn* is the protoform of "稟" *lǐn* "granary." (In the bone script it was written  which may depict a pile of grain covered with a rush mat.) First the component "禾" *hé* "grain was added to create "稟" (now written "禀"); still later the component "广" *yǎn* "shelter" was added to form "廩" *lǐn* (now written "廪"). After the creation of "廩", "稟" was generally used to mean "disperse or receive grain." In the *Shuōwén* the characters "稟" and "廩" are already distinguished. Later "禀" was used exclusively to mean "receive (orders), report," an extended meaning associated with a different pronunciation, *bǐng*. The character "网" is the protoform of "網" *wǎng* "net"; first "亡" was added as a pho-

netic to create "罔" and later the component "糸" *mì* "thread" was added to form "網" *wǎng* (see Sec. 7.1.2 under the entry for "网" *wǎng*). However, the *Shuōwén*'s claim that "肱" *gōng* "arm" was originally written 𠂇 and first had "又" *yòu* "hand" added to form "𠂤" *hóng* and then had "肉" *ròu* "flesh" added to create "肱" *gōng* "arm" is open to question. In Sec. 7.1.2 we noted that "肱" *gōng* was originally written 𠬜; in the ancient script there is no independent graph 𠂇 that exists without the component "又" *yòu* "hand."

Among characters formed by adding a semantic symbol to a protoform, some never succeeded in ousting the protoform; some examples are "㵐" *quán* (for "泉" *quán* "spring"; see Han inscriptions for the expanded form), "𦰡" (for "園" *yuán* "garden"), "菓" (for "果" *guǒ* "fruit") and "韭" (for "韭" *jiǔ* "chives").

The Qing time scholar of the script, Wáng Yún (1837), called characters differentiated by the addition of a semantic symbol *fēnbiézì* 分別字 "separated graphs" and he referred to newly created graphs created by the addition of a semantic symbol which did have a differentiating function as *lěizēngzì* 累增字 "incremental graphs" (*juàn* 8). However among the "incremental graphs" cited by Wáng Yún, some can in fact be considered differentiated characters that refer to the original meaning.

8.1.4 Replacement of the Components of a Phonogram

It is common for one component of a phonogram to be altered to produce a new differentiated character to specify a particular meaning of the graph in question. The character "振" *zhèn* "shake, stir up" has an extended sense of "aid, relieve." (On the basis of the *Lǐjì*, "Yuèlìng" passage: 命有司發倉廩, 賜貧窮, 振乏絕 "Order the commander to disperse from the granaries, giving to the poor and indigent and aiding those who are deficient and who have exhausted their resources," some regard "aid, rescue" as the original meaning of 振 *zhèn*.) At a later period, the element "手" *shǒu* "hand" of "振" *zhèn* was altered to "貝" *bèi* "cowry shell" creating a new differentiated graph "賑" for use when it had this extended sense. Since we will discuss this phenomenon at greater length when treating graphic differentiation, we will not give further examples.

The four methods described above are the chief methods by which semantographs were converted to phonograms and new differentiated graphs were created on the basis of already existing characters. Phonograms produced by means of the third method are most numerous.

Some later graphs with the structure of phonograms, looked at superficially, are unrelated to their protoforms, and would seem to be newly formed from semantic and phonetic symbols. But in fact they have simply undergone a rather complicated process of formation. For example, the protoform of "箙" *fú* "quiver" was (the graph depicts a quiver; later

it was corrupted to "𦯎"); the two graphs in terms of graphic shape are totally different; however, "箙" *fú* was not created directly by adding "竹" *zhú* "bamboo" to "服" *fú*. In ancient times "服" *fú* was often borrowed for "𦯎" (e.g., *Shījīng* Ode 167: 象弭魚服 "There are ivory bow-ends and fish-[skin] quivers" [after Karlgren]; "魚服" *yúfú* is a kind of quiver made from fish skin), "箙" *fú* should be viewed as a differentiated graph created by adding "竹" *zhú* to "服" *fú* used as a loangraph for "𦯎".

In the process of graphic simplification, some phonograms were converted into semantographs: "  " *yǐn* "drink" became 飲; "  " () *shuān* "bar for a door" became "閂"; "  " *dí* "buy rice" became "籴"; "  " *yán* "cliff" became "岩". It also has happened that some late phonograms, because they were unable to compete with their semantographic protoforms, were eliminated. For example, there is a late phonogram "  " (comprised of "玉" *yù* "jade" with "  " *ké* "shell" as phonetic) for "玨" *jué* "two pieces of jade joined." For "  " *lì* "a kind of tripod" there was a later phonogram "" (comprised of "瓦" *wǎ* "tile" with "" *lì* "manage" as phonetic). Both of these later phonograms became obsolete very early.

8.2 Multiple Phonetic and Semantic Components

Chinese characters are monosyllabic. Logically a phonogram requires only one phonetic. Semantic components are used to show which semantic category a character belongs to, and there is no necessity to have more than one. But according to analyses given in the *Shuōwén*, some phonograms possess two phonetic components or two or more significs. We will refer to such cases as multiple phonetics and multiple semantic components. Below we will comment separately on multiple phonetics and multiple semantic components.

8.2.1 Multiple phonetics

The *Shuōwén* clearly identifies two characters "竊" *qiè* "rob" and "" () *jī* "crushed ginger or garlic" as having two phonetics:

 盜自中出曰竊. 从穴, 从米, , 廿皆聲. 廿, 古文疾. , 古文偰 To steal from within is called 竊 *qiè*; it is comprised of 穴 *xuè* "hole" and 米 *mǐ* "rice" with both 廿 and as phonetics. 廿 is the ancient script form of 疾 *jí* "ill"; is the ancient script form of 偰 *xiè*.

也. 从韭, 次,  皆聲.  , 或从齊 Crushed ginger or garlic; it is comprised of 韭 *jiǔ* "chives" with both 次 *cì* "time" and *zǐ* "stop" as phonetics. There is an alternate form () with 齊 *qí* as a component.

The *Shuōwén*'s analysis of "竊" *qiè* "rob" is clearly unacceptable. From the point of view of the ancient script, "廿" certainly cannot be an ancient

script form of "疾" *jí* "ill." Some scholars think that "竊" *qiè* is a syssemantograph. Gāo Hēng (1963:214) in his *Wénzì xíngyìxué gàilùn* (Introduction to the Study of Form and Meaning in Writing), says "it depicts a rat making a hole to bite things and steal rice"; this is worth considering. In the case of "籍" *jí* it would indeed seem that both "次" *cì* and "朿" *zǐ* could be phonetic components. It seems unlikely, however, that at the time the character was created that one phonetic component would be added to another in this fashion. Above we pointed out that phonetic symbols were added to semantographs in the course of use. Occasionally phonograms also have phonetic symbols added to them. In the Western Zhou bronze script, the character "福" *fú* "good fortune" which is comprised of "示" *shì* "reveal" with "畐" *fú* "full" as phonetic, is sometimes written  which has "北" *běi* "north" added as a phonetic (see *Jīnwén biān*, p. 9). There is also a character "  " (see the "Xiǎochén Bū *dǐng*" inscription); it seems to be the character "逋" *bū* "place name" with "夫" *fū* "man" added as a phonetic. Perhaps "籍" was originally an ordinary phonogram comprised of "韭" *jiǔ* "chives" with either "朿" *zǐ* or "次" *cì* as a phonetic and later had one or the other form added as a second phonetic component. In the Stone Drum inscriptions there is a graph "  "; Wáng Guówéi believed that this was the phonetic component in "籍"; if this is so, then "籍" is merely a phonogram with one phonetic and one signific. In the final analysis, there are very few characters with two phonetics; the ones that do exist were probably created by adding a phonetic symbol to a phonogram.

8.2.2 Multiple Semantic Components

Characters which the *Shuōwén* analyzes as having two or more semantic components are rather more numerous. The situation with these characters is fairly complicated.

The *Shuōwén* analyzes some characters that were originally semantographs as phonograms having multiple semantic components on the basis of corrupted forms. For example, the character "彘" *zhì* originally depicted a pig with an arrow through its belly. "The *Shuōwén* mistakenly analyzes it as being comprised of '彑', two 匕 components with 矢 *shǐ* 'arrow' as phonetic, and it thus becomes a character with one phonetic and three semantic components."[2]

Some characters that in actuality consist of one semantic component and one phonetic component, in the *Shuōwén* are analyzed as consisting of multiple semantic or phonetic components; in such cases the *Shuōwén* divides a single composite component into two parts. Below several examples are given:

2. See Táng Lán 1979:107. "矢" *shǐ* and "彘" *zhì* are similar in pronunciation; "矢" *shǐ* can be viewed as having a simultaneous phonetic function.

 *mèng* "dream." The *Shuōwén* entry is: , 寐而有覺也. 从宀, 从, 夢聲 "To have consciousness while sleeping; comprised of 宀 *mián* 'chamber' and *nè* 'sickness' with 夢 *mèng* 'dream' as phonetic." ("" *mèng* must have evolved from the bone graph . The *Shuōwén* defines "夢" as "unclear" and takes "" to be the orthograph for "夢" in the sense of "dream.") The element "" must originally have been "爿"; the *Shuōwén*'s seal form is in error on this point. The character "寐" *mèi* "sleep" for which the *Shuōwén* seal form is , in the "Shǐhuáng Tàishān *kèshí*" inscription is written . In the bone and bronze scripts there is a character ; some have pointed out that this is the component "" found in the character "" (see *Jīnwén biān*, p. 543, where the opinion of Gāo Jǐngchéng is quoted); this view is probably correct. The graphic form "" depicts a bed in a room; its meaning must be close to that of "寢" *qǐn* "sleep" and it is perhaps even the protoform of "寢". The character "" must originally have been an ordinary phonogram consisting of "" with "夢" *mèng* as phonetic. The *Shuōwén* not only mistook "" for "", it also failed to realize that this was originally an independent character; as a result, it analyzed "" erroneously.

 *wéi* "beautiful." The *Shuōwén* definition says 妙也, 从人, 从支, 豈省聲 "'Beautiful'; comprised of 人 *rén* 'person,' 支 *pū* 'strike' with 豈 *qǐ* as abbreviated phonetic." In the ancient script there existed the character ; the left component of "" derives from this. The character "" originally must have been an ordinary phonogram comprised of "支" with "" as its phonetic. The *Shuōwén* did not include the character "", so it analyzed "" erroneously.

飭 *chì* "firm," 蝕 *shí* "erode." The *Shuōwén* definition of "飭" *chì* is 致堅也. 从人, 从力, 食聲 "'To make firm'; comprised of 人 *rén* 'person,' 力 *lì* 'power' with 食 *shí* 'eat' as phonetic." The *Shuōwén* definition of "蝕" is "ruin, erode; comprised of 虫 *huǐ* 'kind of snake,' 人 and 食; 食 is also phonetic." In ancient times there was a character "  " (seen often in bronze inscriptions; see also the *Shuōwén* under the 食 radical); "飭" *chì* "firm" should be analyzed as "comprised of 力 with as phonetic"; and "蝕" should be analyzed as "comprised of 虫 with as phonetic" (cf. the *Liùshū gù*). As for the character "飾" *shì* "decorate," which the *Shuōwén* analyzes as "comprised of 巾 *jīn* 'napkin' and 人 with 食 as phonetic," it may be like "飭" *chì* and 蝕 *shí* and be comprised of "巾" *jīn* with "食" *shí* as phonetic, or it may be like "寶" *bǎo* "precious" and "埜" *yě* "uncultivated land" (see below).

Some characters are phonograms derived from adding a phonetic symbol to a syssemantograph. For example,

寶 *bǎo* "precious." The *Shuōwén* entry is  , 珍也. 从宀, 从玉, 从貝, 缶聲 "'Precious'; comprised of 宀 *mián* 'roof', 玉 *yù* 'jade', 貝 *bèi* 'cowry shell' with 缶 *fǒu* 'tile vessel' as phonetic." In the bone script "寶" is written

which depicts a cowry shell and jade, both items of value, under a roof; it was originally a syssemantograph. It became a phonogram only when the phonetic "缶" *fǒu* was added in the Zhou bronze script. The *Shuōwén*'s analysis of "寶" *bǎo* is not actually wrong, but to analyze it as 从宀从玉从貝會意, 缶聲 "a *syssemantograph* comprised of 宀, 玉 and 貝 with 缶 as phonetic" would be more appropriate.

The characters "埜" (野) *yě* "uncultivated land" and "歠" (飲) *yǐn* "drink" discussed in the previous section are similar to "寶" *bǎo*. The *Shuōwén* analyzes "歠" as "comprised of 欠 *qiàn* with 酓 as phonetic"; it really should be analyzed as "a syssemantograph comprised of 欠 and 酉 *yǒu* 'wine vessel' with 今 *jīn* as phonetic" (See Takata 1919: "Kenshu keifu" 建首系譜, 20b). The character " 飾" *shì* "decoration" just mentioned above originally meant "to wipe" ("拭" *shì* "to wipe" is probably a differentiated character created to represent the original meaning; see Duàn Yùcái's commentary to the *Shuōwén*). This character may originally have been a syssemantograph depicting a person, "人", holding a napkin, "巾", suggesting the meaning "to wipe" (in the bronze script there is a graph consisting of "人" and "巾" suggesting a person holding a napkin); it only later became a phonogram when "食" *shí* was added as a phonetic.

Some characters are late graphs created by adding a semantic symbol to a phonogram consisting of one semantic and one phonetic component. The following are examples:

奉 *fèng* "offer." The *Shuōwén* definition is 承, 承也. 从手, 从収, 丰聲 "To hold up; comprised of 手 *shǒu* 'hand,' 収 with 丰 *fēng* 'beautiful' as phonetic." The element "収" depicts two hands. Logically, there is no reason why it was necessary to use both "手" *shǒu* "hand" and "収" as semantic components when creating the character "奉" *fèng* "offer." In the bronze script 丰 was written 丯. In the "Sànshì *pán*" inscription there is the character 𢍏; scholars who study the ancient script generally consider this to be the protoform of "奉" *fèng*; this is probably the case. (The component "丰" *fēng* in this character not only functions as a phonetic symbol, it also represents the thing held up with the two hands; this is like the element "舟" *zhōu* "boat" which appears in the bone and bronze forms of the character "受" *shòu* "receive." Consequently the character can be viewed as a syssemantograph which is at the same time a phonogram.) This demonstrates that the element "手" *shǒu* "hand" in "奉" *fèng* was a later addition. In terms of structure, "奉" belongs to the same category as "燃" *rán* "burn" discussed above. However after the appearance of "燃", "然" *rán* remained in regular use as a loangraph. Once "奉" *fèng* appeared, however, its protoform was gradually forgotten.

In some cases, the *Shuōwén* clearly points out when an extra phonetic symbol is added to a phonogram:

菹, 酢 (醋) (*zū*) 菜也. 从艸, 沮聲. 蘧, 或从皿 "Sour (pickled) vegetables," comprised of 艸 *cǎo* "grass" with 沮 *jǔ* "prevent" as phonetic; a variant, 蘧 has 皿 *mǐn* "vessel" as a component.

匷 (匡) (*kuāng*), 飯器, 筥也. 从匚, 圭聲. 簠 (筐), 匡或从竹 "Vessel for cooked grain, a round bamboo container," comprised of 匚 *fāng* "container" with 圭 (*huáng*, see Sec. 6.3 of this chapter) as phonetic; a variant, 簠 (筐) has the component 竹 *zhú* "bamboo."

Xǔ Shèn did not know that "奉" *fèng* had developed from 丯 so he treated it like he treated "蘧" and "簠". It is more appropriate to view late graphs like "簠" and "燃" *rán* "burn," which in fact had already been differentiated from their protoforms, as phonograms consisting of one semantic and one phonetic component. There is nothing wrong with treating characters like "奉" *fèng* "offer," whose protoforms had long since been abandoned, as phonograms with multiple phonetics. (This is said only in reference to the seal form of "奉"; the clerical and standard script forms have already lost their phonetic function.) However, we must recognize that they went through a process in their development and that in the beginning they did not employ two semantic components.

There are some phonograms with two significs that appear to be late graphs created by adding a semantic symbol to a phonogram, but because of a lack of solid evidence, it is difficult to be certain. The following graphs are examples of this situation:

薄 *dú*. In the *Shuōwén* this character is defined as "'a variety of water plant,' comprised of 艸 *cǎo* 'grass,' 水 *shuǐ* 'water' with 毒 *dú* as phonetic." This character has a variant "蕵" (see, for example, the *Yùpiān*); the 水 component may be a later addition. However, the *Yùpiān* is later than the *Shuōwén* so this is not certain. In addition to "薄", the *Shuōwén* also considers 藻 (藻) *zǎo* "algae" and 蔦 (藕) *ǒu* "lotus root" to be comprised of two significs, "艸" and "水".

碧 *bì*. The *Shuōwén* defines this character as "'a kind of beautiful stone'; comprised of 玉 *yù* 'jade,' 石 *shí* 'stone' with 白 *bái* as phonetic." Under the 玉 radical, the *Shuōwén* includes many characters defined as "jade-like stones," "quasi-jade-like stones" or "a kind of beautiful stone"; except for the character "碧", they all consist of the signific "玉" plus a phonetic component. It may be that "碧" originally had only "玉" as a signific and "石" was a later addition. Note that the "珀" of "琥珀" *hǔpò* "amber" is unrelated to "碧"; "琥珀" was originally written "虎魄"; "珀" is a differentiated graph from "魄".

In the final analysis, phonograms with more than one signific were probably in a great majority of cases originally semantographs to which

phonetic symbols were added or phonograms to which semantic symbols were added.

8.3 Abbreviated Phonetics and Significs

In order to make graphic forms appear neat and well-balanced as well as convenient to write, those who create or use characters at times abbreviate the phonetics or significs of phonograms. This phenomenon is called abbreviation of phonetic and significs. These will be discussed separately below.

8.3.1 Abbreviated Phonetics

Abbreviated phonetics can be divided into three types.

8.3.1.1 Simplification of Complex and Overly Large Phonetics

Examples:

襲 *xí* "make a surprise attack." The *Shuōwén* analysis is "comprised of 衣 *yī* 'clothing' with 龖 *dá* as abbreviated phonetic." The *zhòuwén* form cited therein has "龖" unabbreviated.

秋 *qiū* "autumn." The *Shuōwén* definition is "  . . . composed of 禾 *hé* 'grain' with  *jiāo* as abbreviated phonetic; in the *zhòuwén* script it is not abbreviated:  ." In the bone script, {秋} is written  ( *qiú* "a hornless dragon"; in later dictionaries it has usually been corrupted to ) or  ( , which should have as phonetic; the character in the *Shuōwén* is probably a corrupt variant). These are both loangraphs; only later was the component "禾" added to create a special character for the word {秋}. The *zhòuwén* form recorded by the *Shuōwén* had already changed into . In Han time inscriptions "秋" is sometimes written (after the "Yáng Zhù *bēi*" inscription), preserving the more ancient form. The *Shuōwén* statement "with as abbreviated phonetic" should be corrected to "with as abbreviated phonetic" (see Táng 1981b:6-9).

潸 *shān* "weeping, sniffling." In the *Shuōwén* "潸" is analyzed as "comprised of 水 *shuǐ* 'water' with 散 (散) *sàn* 'disperse' as abbreviated phonetic."

珊 *shān* "coral" and 姍 *shān* "sauntering." In the *Shuōwén* "珊" is analyzed as "comprised of 玉 *yù* 'jade' with 刪 *shān* as abbreviated phonetic"; "姍" is analyzed as "comprised of 女 *nǚ* 'female' with "刪" as abbreviated phonetic." The character "跚", not included in the *Shuōwén*, should also be analyzed as having "刪" as an abbreviated phonetic. The situation with "柵" *zhà* is a bit more complicated. According to the *Shuōwén*, "柵" has "冊" as its phonetic: (under the 木 radical) "柵, 'to bind trees together'; comprised of 木 *mù* 'tree' and 冊 *cè* 'bamboo slips bound together'; 冊 is also phonetic." In the *Guǎngyùn*, there is "柵" with "冊" as its phonetic (in the entering tone rime 麥, with the *fǎnqiè* spelling 楚革切 [MC tṣhɛk]; it is defined as "erect trees as a palisade, also a village palisade." It also occurs in the entering tone rime 陌 with the *fǎnqiè* spelling 測戟切 [MC tṣhjɐk]; here it is defined as "a village palisade"; the *Shuōwén* says it means "to erect and join trees.") There is also a "柵" with "刪" as an abbreviated phonetic (in the departing tone rime 諫 with the *fǎnqiè* spelling 所晏切 [MC ṣan˒]; it is defined as "a hedge or palisade"). Nowadays, in the sense "palisade" "柵" is read *zhà*, a reading derived from the form with "冊" as its phonetic; in the compound "柵極" "electrical grid" it is read *shān*, a reading derived from the "柵" with "刪" as an abbreviated phonetic. Note, however, that in this case the level tone reading of *shān* does not agree with the *Guǎngyùn fǎnqiè* spelling 所晏切 [MC ṣan˒].

The abbreviated phonetics in characters of this type have already lost their phonetic function for most people.

8.3.1.2 Characters in which a Part of the Phonetic has been Deleted and Replaced with a Semantic Component

夜 *yè* "night." The *Shuōwén* definition is "  . . . comprised of 夕 *xī* 'evening' with 亦 *yì* 'also' as abbreviated phonetic." This way of writing "夜" is quite ancient and is already found in Western Zhou bronze inscriptions. In the standard script form of "夜" it is already quite impossible to see traces of a phonetic element "亦". In the ancient script, there are cases of "夜" with "亦" as an abbreviated phonetic such as the form "  " found on Chǔ bamboo slips.

畿 *jī* "area surrounding the capital." The *Shuōwén* analyzes "畿" as "comprised of 田 *tián* 'field' with 幾 *jī* as abbreviated phonetic."

徽 *huī* "emblem" and 黴 *méi* "mildew." The *Shuōwén* analyzes "徽" as "comprised of 糸 *mì* 'fine thread' with 微 *wēi* 'minute' as abbreviated phonetic." In a similar fashion the *Shuōwén* analyzes "黴" as "comprised of 黑 *hēi* 'black' with 微 as abbreviated phonetic."

蹇 *jiǎn* "lame," 褰 *qiān* "lift up or raise (one's gown)," *qiān* "lift high,"  *xiān* "fly upward." All the above characters are analyzed by the *Shuōwén* as having "寒" *hán* "cold" as an abbreviated phonetic. The character "搴" *qiān* "take" also has "寒" as an abbreviated phonetic but in the *Shuōwén* it is written "" without any abbreviation. The character "謇" *jiǎn* "stutter," not found in the *Shuōwén*, also has "寒" as an abbreviated phonetic.

8.3.1.3 Cases Where the Phonetic and Significs Share Strokes or a Graphic Component

齋 *zhāi* "purify, fast." In the *Shuōwén*, "齋" is analyzed as "comprised of 示 *shì* 'make manifest' with 齊 *qí* 'even' as abbreviated phonetic." The two horizontal lines in "齊" can be viewed both as the top two lines of "示" and as the bottom two lines in "齊". In actuality, they are strokes shared by the phonetic and significs. In Han inscriptions, this character is sometimes written "  " without any abbreviation.

黎 *lí* "multitude." In the *Shuōwén* "黎" is analyzed as "comprised of 黍 *shǔ* 'broomcorn millet' with 𥫱 (ancient script form of '利' *lì* 'profit') as abbreviated phonetic." In fact the upper left-hand part of "黎" can be viewed both as the upper part of "黍" and the left side of "𥫱".

羆 *pí* "brown bear." This character is analyzed in the *Shuōwén* as "comprised of 熊 *xióng* 'bear' with 罷 *bà* 'cease' as abbreviated phonetic." In actuality, the central part of "熊", "能", can be considered both the upper part of "熊" and the lower part of "罷".

桌 *zhuó* "elevated." The *Guǎngyùn* treats "桌" as an ancient script form of "卓"; it may be a variant form of the  found in the *Shuōwén*. Subsequently "桌" was generally used as a simplified form of "棹" *zhuō* "table" (note that this "桌" is a homograph of "棹" *zhào* "oar"; see Sec. 10.2). In this usage, "桌" can be viewed as a phonogram in which the signific "木" and the phonetic "卓" share several strokes.

Characters of this sort fall somewhere between those having abbreviated significs and abbreviated phonetics. However, following the lead of the *Shuōwén*, they are usually treated as cases of phonetic abbreviation.

From the examples cited above it can be seen that not all cases of abbreviated phonetics were abbreviated from the very beginning; some characters were transformed from ordinary phonograms into characters having abbreviated phonetics in the process of utilization. For example, the seal form of characters "襲" and "秋" were formed through a process of abbreviating their phonetics from ordinary phonograms in the ancient script. There are also characters that did not have abbreviated phonetics in the seal script that became characters with abbreviated phonetics only in the clerical or standard script. Examples of these are the following:

 abbreviated to 蠹 *dù* "boring insect"

 abbreviated to 島 *dǎo* "island"

 abbreviated to 釜 *fǔ* "kettle"

 abbreviated to 薔 *qiáng* "rose"

The character "釜" can be viewed as an abbreviated character in which the phonetic and signific share a portion of the strokes. In the clerical script found on Han bamboo slips it is written "釜" without any abbreviation (in the cursive script of the Han dynasty it is also written without abbreviation). The characters "嬙" and "檣" (not included in the *Shuōwén*) as well as the graphic variant "墻" for "牆" (now used as a simplified character), like "薔", all have "牆" as a phonetic in their abbreviated forms. In the Han Stone Classics "蘠" occurs unabbreviated.

Translators in the early part of the twentieth century in translating the third person feminine pronoun of European languages initially wrote it as "他女" (see for example vol. 6.1 of the magazine *Xīn Qīngnián* 新青年 issued in 1918 where it is written as such in a translation of the story "The Little Match Girl" by Hans Christian Andersen). Later Liú Bànnóng changed it to "她". This development can be viewed as a case of a change from an unabbreviated phonetic to an abbreviated phonetic.

In the case of some characters, whether or not they have abbreviated phonetics is ambiguous. Such characters can be divided into two categories.

A. The phonetics of some characters could originally be used independently, but later these phonetics existed only as components of later graphic forms to which a semantic symbol had been added. For example, in pre-Qín times there was a graph which depicted burning torches. This is the protoform of "熒" *yíng* "flicker"; it corresponds to the graphic component "" in the later script. At the time of the *Shuōwén*, "" had already been replaced by the later graphic form "熒" to which the signific "火" *huǒ* "fire" had been added. The *Shuōwén* analyzes "熒" as "comprised of 焱 *yàn* and 冂"; from this analysis, it is obvious that there was a character "". As a consequence, all the characters in the *Shuōwén* with the component "", such as "榮" *róng* "luxuriant" and "營" *yíng* "encampment," were explained as having "熒" as an abbreviated phonetic. From the point of view of how characters were actually used at that time it would seem that this analysis cannot be considered incorrect (see Chén 1979).

B. There are some characters that are differentiated graphs produced by altering the signific of a certain phonogram. Characters of this type can generally be viewed as ordinary phonograms, but they can also be viewed as characters which have their matrigraphs (i.e., the characters from which they are derived) as abbreviated phonetics. An example of this is the character "賑" *zhèn* cited earlier which is derived from "振" *zhèn*; "賑" can be analyzed as being composed of "貝" with "辰" as phonetic, or as composed of "貝" with "振" as its abbreviated phonetic. We can also cite several characters created in modern times to write chemical terms. When foreign works on chemistry were first translated, oxygen was called 養氣 *yǎngqì* "nourishing gas"; hydrogen was called 輕氣 *qīngqì* "light gas"; nitrogen was called 淡氣 *dànqì* "insipid gas"; chlorine was called 綠氣 *lǜqì* "green gas." It was not until later that the phonograms "氧" *yǎng*, "氫" *qīng* "氮" *dàn* and "氯" *lǜ* were created. These four characters can be analyzed both as phonograms comprised of "气" *qì* "gas" with "羊", "巠", "炎" and "彔" as phonetics, and as phonograms comprised of "气" with "養", "輕", "淡" and "彔" as abbreviated phonetics (see Yīn 1964). The analysis which views these characters as having abbreviated phonetics

reflects better the actual origins of such characters; moreover, such an analysis frequently better expresses the characters' pronunciations. However, if one lacks a correct grasp of a character's origin, this kind of analysis cannot be carried out.

Although the abbreviation of phonetics is by no means a rare phenomenon, we should not uncritically accept the *Shuōwén*'s claims about abbreviated phonetics. Many of the alleged abbreviated phonetics put forth in the *Shuōwén* are erroneous. These errors can in general be divided into three categories.

8.3.1.3.1 Erroneous Analysis of Graphic Form

The character "監" *jiàn* "reflect in a mirror" was a syssemantograph in origin (see Sec. 7.1.5.3). The seal form given by the *Shuōwén* is  which is wrongly analyzed as "comprised of 臥 *wò* 'lie down' with  *kān* 'congealed blood' as abbreviated phonetic." The character "龍" *lóng* "dragon" was in origin a pictograph (see Sec. 7.1.2). The seal form given by the *Shuōwén* is written  ; it is wrongly analyzed as "comprised of 肉 *ròu* 'flesh,' the shape depicting flight, with 童 *tóng* 'child' as abbreviated phonetic." The character "  " *wéi* "minute, tiny" is composed of a signific 攴 *pū* "strike" with "" as phonetic, but the *Shuōwén* failed to include the character "" and mistakenly analyzed "" as "composed of 人 *rén* 'person' and 攴 with 豈 as abbreviated phonetic" (see above).

8.3.1.3.2 Identification of an Ordinary Phonetic as an Abbreviated Phonetic

An example of this is the character "" *quǎn* "brawl"; the *Shuōwén*'s analysis is "comprised of 口 *kǒu* 'mouth' with 宣 *xuān* 'proclaim' as abbreviated phonetic." In fact, "宣" has "" as its phonetic; "" ought also to simply have "" as its phonetic. (This "" is pronounced either *xuān* or *huán*; it is a homograph of the "" *gèn* "extend" which is derived from "". On homographs, see Sec. 10.2.)

The *Shuōwén* says that "犢" *dú* "calf" is "comprised of 牛 *niú* 'cow' with 瀆 *dú* 'profane' as abbreviated phonetic." But in point of fact "瀆" itself has "  " as its phonetic; "犢" should also simply have "" as its phonetic. (This "" was originally written and pronounced *yù* ["sell"]; it is not the same character as "賣" *mài* "sell" which was originally written .) The two distinct characters "" and "" in the clerical script both became "賣" (now simplified to "卖"). Some mistakes of this type were possibly not mistaken in the original *Shuōwén* but are due to later erroneous emendations.

8.3.1.3.3 Confused Attributions of Abbreviated Phonetics

Táng Lán has pointed out that in ancient times there was a character "" (in the Zhou bronze inscriptions). The characters "傷" *shāng* "wound,"

"殤" *shāng* "die before reaching maturity," "  " *shāng* "distressed," and "觴" *shāng* "a kind of wine vessel" should all have "" as their abbreviated phonetic. The *Shuōwén* says that "傷" has "殤" as its abbreviated phonetic and that in turn "殤" has "傷" as its abbreviated phonetic, which is self-contradictory. The *Shuōwén* further says that "" has "殤" as its abbreviated phonetic and that "觴" has "" *shāng* as its abbreviated phonetic; this is all erroneous. ("" "distressed" is a character differentiated from "傷" "wounded"; "殤" is probably also a differentiated form of "傷"; from this point of view, it is proper for the *Shuōwén* to say that "殤" has "傷" as an abbreviated phonetic; "" can also be analyzed as having "傷" as an abbreviated phonetic.) Another example of this category can be seen in the *Shuōwén*'s analysis of a majority of characters containing the element "  " as having "熒" as their abbreviated phonetic. As stated above, this analysis is permissible. However, when the *Shuōwén* claims that "" *róng* "name of a sacrifice," "" *yíng* "confused" and "鶯" *yīng* "oriole" have "榮" *róng* "glory" as their abbreviated phonetic and further claims that "" *yǐng* "a deep pool" has 瑩 *yíng* "jade-like stone" as its abbreviated phonetic and that "" *qióng* "worry, anxious" has "" *yíng* "encampment" as its abbreviated phonetic, it has confused matters.

8.3.2 Abbreviated Significs

There are relatively few characters having abbreviated significs. There are basically two situations in which abbreviated significs are found.

8.3.2.1 The Simplification of Significs with Complex Graphic Forms

星 *xīng* "star." The *Shuōwén* says  . . . composed of 晶 *jīng* 'brilliant' with 生 *shēng* 'live' as phonetic . . . , is sometimes abbreviated."

晨 *chén* "morning." The *Shuōwén* says "  , the *fángxīng* (fourth of the 28 'Lunar Mansions') (makes =) signals the farming season; composed of 晶 with 辰 as phonetic. , is sometimes abbreviated." (This was originally exclusively used to write the "辰" of 辰星 *chénxīng* "name of a star." The meaning "morning" was written in the seal script; in the clerical script both characters were written "晨".)

8.3.2.2 A Part of the Signific is Abbreviated and Filled with a Phonetic

考 *kǎo* "old." The *Shuōwén* definition is  , 'old'; composed of an abbreviated 老 *lǎo* 'old' with 丂 *kǎo* as phonetic."

耆 *qí* "old." The *Shuōwén* definition is , old; comprised of an abbreviated 老 with 旨 as phonetic." In the seal script the element under "老" is written which is different from the top part of "旨"; in the standard script the two elements are undifferentiated. As a result the standard script form of "耆" can be considered a phonogram in which the signific and phonetic share several strokes.

屨 *jù* "shoe." The *Shuōwén* analyzes this character in the following way: "composed of an abbreviated 履 (履) *lǚ* 'shoe' with 婁 *lóu* 'name of a constellation' as phonetic." All the characters under the radical "履" such as "屩" *jué* "straw shoe," and "屐" *jī* "wooden shoe" have "履" as their abbreviated phonetics.

弒 *shì* "kill one's ruler." The *Shuōwén* analyzes this character as "composed of an abbreviated 殺 *shā* 'kill' with 式 *shì* 'form' as phonetic." From the point of view of simplified characters (where "殺" is written "杀"), it is not necessary to view "弒" as having an abbreviated signific.

In the *Shuōwén* there are some explanations involving abbreviated significs that are problematic. An example of this is the *Shuōwén*'s analysis of "鹼" *jiǎn* "alkali": "comprised of an abbreviated 鹽 *yán* 'salt' with 僉 *qiān* 'all' as phonetic." In actuality "鹽" itself is a phonogram composed of "鹵" *lǔ* "bittern" with "監" *jiān* "reflect in a mirror" as phonetic. The character "鹼" should also be analyzed as an ordinary phonogram composed of "鹵" with "僉" as phonetic.

The *Shuōwén* analyzes "橐" *tuó* "bag" as "composed of an abbreviated 橐 *gǔn* 'large bundle' with 石 *shí* 'stone' as phonetic." The characters "囊" *náng* "bag," "槖" *gāo* "bowcase" and "橐" *pāo* "open wide (of a bag)" are all said to have "橐" as their abbreviated signific. In the seal script the signific of all these characters is written  . The character "橐" occurs in the bronze script where its signific is written  ; this depicts a bag tied at both ends; this is probably the protoform of "橐".[3] When a small circle resembling a knotted cord is added to , is formed. Therefore "橐" belongs to the same category as "齒" and "斤" (see Sec. 8.1.1); that is, it is a phonogram composed of a pictographic protoform to which a phonetic has been added; it does not contain "橐" as an abbreviated phonetic. The character  (橐), on the other hand, is composed of the pictographic protoform of "橐" with "囷" *hùn* "privy" as abbreviated phonetic (actually it is an element in which the phonetic and signific share some strokes; the *Shuōwén*'s analysis of "橐" as "composed of "束" [*shù* "bundle"] with "囷" as phonetic is erroneous). The characters "槖" and "橐" also both have the pictographic protoform of "橐" as their significs. Since the pictographic protoform of "橐" has long since been replaced by the later graphic form, to which the phonetic "石" has been added, it is also possible to analyze the two characters above as having "橐" as an abbreviated phonetic. This is the same as the situation we have seen with those characters that have the phonetic "𤇾", which can be analyzed as containing "熒" as an abbreviated phonetic. It would also be possible to analyze "橐" as being "composed of an abbreviated 橐 as signific with 囷 as phonetic." The protoform of "囊" was written ; it depicted a bag with a bottom, tied at the top.[4] Later it became a phonogram composed of the pictographic protoform of "橐": . (The *Shuōwén* says that "囊" has "襄" [*xiāng* "aid"] as an abbreviated phonetic, but Duàn Yùcái thought that this was a later emendation and that Xǔ Shèn's original text said "with 𠬜 as phonetic." "𠬜" is the phonetic in "襄".)

From the point of view of the ancient script, the element "彳" is in reality an abbreviation of "行" *xíng* "crossroads" ("彳" is only used as a semantic symbol). The element "虍" is in reality an abbreviation of "虎" *hǔ* "tiger" ("虍" is used both as a semantic and as a phonetic symbol). Because the *Shuōwén* viewed "彳" (read *chì* in dictionaries) and "虍" (read *hū* in dictionaries) as independent characters, it generally does not indicate that "彳" and "虍" are abbreviated significs or phonetics.

There are also cases of graphic abbreviations in semantographs; here we will make mention of a couple. The character "塵" *chén* "dust" in the seal script was composed of three "鹿" *lù* "deer" and "土" *tǔ* "earth"; the graphic form expresses the notion of a flock of deer running and kicking up dust. In the *zhòuwén* script, the same word is written with three "𪚥" (depicting a deer head) and two "土"; "𪚥" is an abbreviation of "鹿". (In the *Shuōwén* the seal form of "塵" is analyzed as "composed of 麤 [*cū* "coarse"] and 土"; in this analysis "鹿" can be viewed as an abbreviation of "麤".) In the seal script "尿" *niào* "urine" is a syssemantograph composed of "尾" *wěi* "tail" and "水" *shuǐ* "water;" in the clerical and standard scripts, "尾" has been reduced to "尸". This is also a case of graphic abbreviation.

However, the explanations involving abbreviated components in the case of semantographs in the *Shuōwén* are often unreliable. A good example of this is the pictographic protoform of "箙" mentioned in the first section of this chapter. It was later deformed to 箙 (箙). The *Shuōwén* mistakenly held that the original meaning of this graph was 備具 *bèijù* ("complete") and analyzed its graphic form as "composed of 用 *yòng* 'use' and an abbreviated 苟." This is totally without foundation. The character "苟" is read *jí* and is defined by the *Shuōwén* as 自急敕 "to restrain oneself, be on guard." In terms of the ancient script, "苟" was originally comprised of  and "口" *kǒu* "mouth." Some take to be the character "羌" *qiāng* "name of an ancient tribe"; its lower part clearly resembles a person ("人" *rén* "person" in the ancient script was ). The *Shuōwén*'s analysis of "苟" as "composed of an abbreviated 羊 *yáng* 'sheep' and an abbreviated 包 *bāo* 'wrap', and 口 *kǒu* 'mouth' is also an error.

3. See Takata 1919: "Kenshu keifu" 建首系譜, 44a and 87.31, the entry for "橐"; also the biographies of Lì Shēng 酈生 and Lù Jiǎ 陸賈 in *Shǐjì*; the *Suǒyǐn* quotes the *Bēicāng*: "A bag with a bottom is called 囊; without a bottom it is called 橐" (Zhōnghuá ed., p. 2698). The kind of bag referred to by the character "橐" had no bottom, so when things were put into it, it was necessary to tie it at both ends.

4. In the Shang bronze script, there is a character  which seems to be a bag containing a shell; see Takata 1919:99.40 where is said to be an abbreviation of  ; this interpretation is probably wrong.

8.4 The Position of Phonetics and Significs

In Sec. 4.4 we already pointed out that the position of graphic components is not stable. This is particularly noticeable in the case of phonograms. In the mature standard script, this situation underwent a great change; although there were still some phonograms in which the signific and phonetic could be arranged in more than one way, such characters were already rather few in number (see Sec. 10.1.5). However, viewing phonograms as a whole, there were still numerous ways in which the signific and phonetic could be positioned within a character. These possibilities can be roughly divided into eight types:

1. *Signific on the left, phonetic on the right:* 防 *fáng* "defend" (composed of 阜 *foǔ* "mound" with 方 *fāng* as phonetic), 祥 *xiáng* "auspicious" (composed of 示 *shì* "reveal" with 羊 *yáng* as phonetic), 靳 *jìn* "stingy" (composed of 革 *gé* "leather" with 斤 *jīn* as phonetic), 峡 *xiá* "gorge" (composed of 山 *shān* "mountain" with 夹 *jiā* as phonetic), 肌 *jī* "muscle" (composed of 肉 *roù* "meat" with 几 *jī* as phonetic).

2. *Signific on the right, phonetic on the left:* 祁 *qí* "grand" (composed of 邑 *yì* "city" with 示 *shì* as phonetic), 欣 *xīn* "happy" (composed of 欠 *qiàn* "yawn" with 斤 *jīn* as phonetic), 斯 *sī* "this" (composed of 斤 *jīn* "ax" with 其 *qí* as phonetic), 雌 *cí* "female" (composed of 隹 *zhuī* "short-tailed bird" with 此 *cǐ* as phonetic), 胡 *hú* "what" (composed of 肉 *ròu* "meat" with 古 *gǔ* as phonetic).

3. *Signific on the top, phonetic on the bottom:* 宇 *yǔ* "eaves" (composed of 宀 *mián* "roof" with 于 *yú* as phonetic), 楚 *chǔ* "bramble" (composed of 林 *lín* "forest" with 疋 *shū* as phonetic), 芹 *qín* "celery" (composed of 艸 *cǎo* "grass" with 斤 *jīn* as phonetic), 崔 *cuī* "a surname" (composed of 山 *shān* "mountain" with 隹 *zhuī* as phonetic), 霖 *lín* "continuous rain" (composed of 雨 *yǔ* "rain" with 林 *lín* as phonetic).

4. *Signific below, phonetic above:* 盂 *yú* "vessel for liquids" (composed of 皿 *mǐn* "dish" with 于 *yú* as phonetic), 禁 *jìn* "prohibit" (composed of 示 *shì* "show" with 林 *lín* as phonetic), 斧 *fǔ* "ax" (composed of 斤 *jin* "ax" with 父 *fù* as phonetic), 岱 *dài* "name of a mountain" (composed of 山 *shān* "mountain" with 代 *dài* as phonetic), 肓 *huāng* "the vital organs" (composed of 肉 *ròu* "meat" with 亡 *wáng* as phonetic).

5. *The phonetic occupies one corner:* 旗 *qí* "flag" (composed of 扩 *yǎn* "fluttering streamer" with 其 *qí* as phonetic), 房 *fáng* "room" (composed of 戶 *hù* "door" with 方 *fāng* as phonetic), 病 *bìng* "ill" (composed of 疒 *nè* "ill" with 丙 *bǐng* as phonetic), 徒 *tú* "walk" (composed of 辵 *chuò* "run and stop" with 土 *tǔ* as phonetic), 近 *jìn* "near" (composed of 辵 with 斤 *jīn* as phonetic).

6. *The signific occupies one corner:* 疆 *jiāng* "border" (composed of 土 *tǔ* "earth" with 彊 *qiáng* as phonetic), 載 *zài* "convey" (composed of 車 *chē* "vehicle" with 𢦏 *zāi* as phonetic, 𢦏 is the same as 災 *zāi*), 穎 *yǐng* "glume" (composed of 禾 *hé* "grain" with 頃 *qǐng* as phonetic), 滕 *téng* "a surname" (composed of 水 *shuǐ* "water" with 朕 *zhèn* as phonetic), 修 *xiū* "arrange, repair" (composed of 彡 *shān* "feathery" with 攸 *yōu* as phonetic).

7. *Signific outside, phonetic inside:* 圓 *yuán* "round" (composed of 口 *wéi* "enclosure" with 員 *yuán* as phonetic), 閣 *gé* "loft" (composed of 門 *mén* "door" with 各 *gè* as phonetic), 匪 *fěi* "bandit" (composed of 匚 *fāng* "basket" with 非 *fēi* as phonetic), 衷 *zhōng* "inner feelings" (composed of 衣 *yī* "clothing" with 中 *zhōng* as phonetic), 衙 *yá* "government office" (composed of 行 *xíng* "walk" with 吾 *wú* as phonetic).

8. *Phonetic outside, signific inside:* 薑 *jī* "minced ginger or garlic" (composed of 韭 *jiǔ* "leeks" with 齊 *qí* as phonetic), 聞 *wén* "hear" (composed of 耳 *ěr* "ear" with 門 *mén* as phonetic), 篡 *cuàn* "usurp" (composed of 厶 *sī* with 算 *suàn* as phonetic; 厶 is the orthograph for 私 *sī* "private"), 哀 *āi* "sad" (composed of 口 *kǒu* "mouth" with 衣 *yī* as phonetic), 辯 *biàn* "dispute" (composed of 言 *yán* "speech" with 辡 *biàn* as phonetic).

Among the eight categories listed above, the most common type is number one.

Some of the components of the example characters cited above are written differently when they are graphic components than they are written when used independently. Familiar examples of this are the "阝" written on the left (阜), the "阝" written on the right (邑), as well as 月 (肉), 礻 (示), 艹 (艸), 讠 (言), and 氺 (水). Other (less familiar) examples are "𠂉" occurring in "滕" ("朕" as phonetic in the characters 騰 *téng* "gallop," 縢 *téng* "seal, close," 勝 *shèng* "overcome," 謄 *téng* "copy," is also written in this fashion); "冥" occurring in "篡" (another example of "算" *suàn* as phonetic written in this way is 纂 *zuǎn* "compile"); "攸" occurring in "修" (other examples of "攸" as phonetic written in this way are "倏" *shū* "sudden," and "絛" *tiáo* "strip"). The component "讠" is a simplified form of "言" introduced in the 1950s. The writing of the component "攸" as "𢘑" was not made standard until the 1960s (however, the "𢘑" of "倏" was already quite widespread in the past).

In some individual cases, the phonetics of certain phonograms were inappropriately dismembered by later writers; for example the character "褋", composed of "衣" with "集" *jí* as phonetic, was generally written

"雜" *zá* "miscellaneous" (now simplified as "杂"). The character "匯", composed of "匚" with "淮" as phonetic was also written "滙" *huì* "for rivers to converge" (now simplified as "汇"). The character "闊", composed of "門" with "活" *huó* as phonetic, in the past could also be written "濶" *kuò* "wide" (simplified to "阔").

In some cases, the same signific and phonetic can form two different phonograms due to a different arrangement of the components:

忡 *chōng* "worried"	≠	忠 *zhōng* "loyal"
怡 *yí* "happy"	≠	怠 *dài* "idle"
吟 *yín* "chant"	≠	含 *hán* "hold in the mouth"
旰 *gàn* "late"	≠	旱 *hàn* "drought"
枷 *jiā* "cangue"	≠	架 *jià* "rack"
裸 *luǒ* "naked"	≠	裹 *guǒ* "wrap"

This device whereby phonograms containing the same elements were differentiated by a different arrangement of their graphic components was virtually unknown in the ancient script prior to the Qín and Han dynasties. Some of the pairs of phonograms cited above which are composed of the same graphic components in ancient texts sometimes are not differentiated; for example, in the *Lǐjì*, "Qǔlǐ" A passage: 男女不雜坐, 不同椸枷 "Men and women do not sit intermingled, nor do they use the same clothes racks," the character "枷" is used to express {架}.

8.5 The Semantic Function of Significs

8.5.1 The Relationship of the Signific to Graphic Meaning

There are a small number of characters in which the signific has the same meaning as the character as a whole: "船" *chuán* "boat" (舟 *zhōu* "boat"), "頭" *tóu* "head" (頁 *yè* "head"), 爹 *diē* "father" (父 *fù* "father"), 爸 *bà* "father," and so forth. The great majority of significs in phonograms, however, have only a more general link to their graphic meaning. Examples:

黝 *yǒu* "somewhat greenish black" (*Shuōwén*); 黑 *hēi* expresses the general notion of "black."

楓 *fēng* "sweetgum, maple." "楓" is a kind of tree, hence the component "木" *mù* "tree" is used.

邾 *zhū* "the name of a city," hence the character has the element "邑" *yì* "city."

缸 *gāng* "crock." "缶" *fǒu* was a type of common ancient vessel; "缸" was a similar type of vessel, hence "缸" has "缶" as a component.

軸 *zhóu* "axle." "軸" refers to a part of a cart; hence it has "車" *chē* "cart" as a component.

紈 *wán* "fine silk." "紈" is a kind of silk fabric, hence it has "糸" *mì* "fine thread" as a component (for a discussion of "糸", see Sec. 7.1.2 under the entry "絲"). In addition to characters relating to silk, most characters having to do with cord and rope also have the component "糸".

逃 *táo* "flee." To flee one needs to walk, hence the character has "辶" *chuò* (concerning "辶", see Sec. 7.1.2 under the entry "行").

歐 *ōu* "vomit." "歐" was originally a variant of "嘔"; since to vomit, one needs to open the mouth, the character has the component "欠" (concerning "欠", see Sec. 7.1.5.3).

刻 *kè* "carve." In carving one ordinarily uses a knife, hence the character has "刀" *dāo* "knife" as a component.

銷 *xiāo* "smelt." Since the meaning of "銷" is "to melt metals," it has "金" *jīn* "metal" as a component.

醉 *zuì* "drunk." Drunkenness is the result of drinking liquor, hence the character has "酉" as a component (concerning "酉" see Sec. 7.1.2).

禍 *huò* "misfortune." The component "示" *shì* originally depicted a spirit tablet; the ancients believed that good and bad fortune was bestowed by gods, hence most characters having to do with good or bad fortune have "示" as a component.

啤 *pí* "beer." The "啤" of 啤酒 *píjiǔ* "beer" was in origin a loan from English "beer." Phonograms created to write foreign loanwords mostly have a "口" *kǒu* "mouth" as a component. Other examples are "咖啡" *kāfēi* "coffee," "咖喱" *gālí* "curry" and "噻唑" *sāizuò* "thiazole." In addition, phonograms used to write grammatical particles and interjections also frequently have "口" as a component: "哪" *na* "sentence particle," "吧" *ba* "sentence particle," "唷" *yō* "an interjection," and "噯" *ǎi* "an interjection."

From the examples quoted, it can be seen that between the meaning of the signific itself and the meaning of the particular phonogram there are many different relationships; the situation is quite complicated.

The way that significs express meaning is often one-sided; we discussed this problem in Sec. 7.2, so we will not repeat ourselves here.

Because of words' extended meanings and the loangraph phenomenon, the significs of many phonograms have lost their semantic function. Since this question was addressed in Chapter 2, we will not comment on it further here.

Sometimes changes in the perceptions of things themselves can affect the semantic function of significs. As an instance of this we can cite the fact that in ancient times bronze mirrors were used, therefore "鏡" *jìng* "mirror" has "金" *jīn* "metal" as its signific. Looked at from the point of view of our present-day glass mirrors, "金" is inappropriate. In antiquity the ruling classes deprecated women; for this reason, a number of characters with negative meanings have "女" *nǚ* "woman" as their signific;

some examples are "妄" *wàng* "absurd, rash," "婪" *lán* "avaricious," "嬾" (懶) *lǎn* "lazy." Looked at today, this is completely unfounded (see Jiǎng 1959:84).

8.5.2 The Interchange of Significs

In the case of many phonograms, two different components may occur as their signific; in some cases, first one component was used as a signific and later it was replaced by another component. We will refer to this state of affairs as signific interchange.

There are some significs which are close in meaning that can interchange; "鳥" and "隹" referred to in Sec. 7.1.1 are good examples of this. Below we cite further examples (characters marked with an asterisk are the standard or current forms at present).

豻 *án* "a kind of wild dog" = 犴*
獾 *huān* "badger" = 獾*
稭 *jīng* "round-grained non-glutinous rice" = 粳*
糠 *kāng* "chaff" = 糠*
幝 *kūn* "underwear" = 裩*
帬 *qún* "skirt" = 裙*
獻 *xiào* "whistle" = 嘯*
歎 *tàn* "sigh" = 嘆 (叹*)
詠 *yǒng* "chant" = 咏*
譁 *huá* "noise" = 嘩 (哗*)
迡 *cú* "go toward" = 徂*
跡 *jí* "footprint" = 迹*

The *Shuōwén* treats "歎" and "嘆" as different characters, but in fact there is no difference in the way they are used and they should be considered graphic variants of one another.

In selecting a signific for a phonogram, if one chooses a slightly different perspective toward the thing or process that the character represents, then the signific selected may be different. This is one reason for signific interchange. Examples:

鍊 *liàn* "smelt" = 煉
鎔 *róng* "melt" = 熔

The object of both 熔 and 煉 is some kind of metal; in both cases "fire" (火 *huǒ* "fire") is the means by which the metal is affected. Focusing on the first fact, one would select "金" *jīn* "metal" as a signific; focusing on the second fact, one would select "火" *huǒ* "fire" as significs.

缾 *píng* "vase" = 瓶
罃 *yīng* "jar" = 甖

Both 瓶 and 甖 are pottery vessels, that is, a kind of "缶" *fǒu* "pottery vessel"; hence their characters may have "缶" as their signific. Both 瓶 and 罃 are made of pottery, the same substance 瓦 *wǎ* "tile" is made of; hence they may also have "瓦" as their signific. Similar examples are "杯" *bēi* "cup" which can also be written "盃" and "槃" *pán* "plate, tray" which is also written "盤".

Changes in the materials out of which things are made or changes or extensions of their functions can also lead to the interchange of significs. For example, in addition to the graphic variant "槃" (with "木" *mù* "wood" as signific), there is also another variant "鎜" (with "金" *jīn* "metal" as signific). Another example of this situation is provided by "炮" *pào* "cannon"; it was originally written "礮", or in a simplified form "砲", both having "石" *shí* "stone" as signific because primitive cannons were nothing more than stone-throwing devices (catapults). Later these stone-throwing devices became cannons using gunpowder and fire and gradually the signific "石" was replaced by "火" *huǒ* "fire." Now "炮" has become the standard form (note that this "炮" and the "炮" of 炮炙 *páozhì* "processed drugs" are homographs).

Individual phonograms may have four or five interchangeable significs. Later when we discuss allographs, we will give examples (see Sec. 10.1.4).

8.6 The Phonetic Function of Phonetics

8.6.1 Phonetics and the Pronunciation of Graphs

Logically, a phonetic should express as accurately as possible the pronunciation of a phonogram. But due to various reasons to be discussed below, most phonograms are not homophonous with their phonetics and sometimes the discrepancy is quite great.

In the past some people, basing their study on the 7,504 characters in the *Xīnhuá zìdiǎn* whose graphic components can be identified (the great majority of these are phonograms), carried out a statistical analysis. The result was that only 355 phonograms were pronounced in exactly the way as their phonetics were; this amounts to 4.7%. There were only 753 cases where the initial and final were the same, but the tone was different; this is about 10%. Added together, these two categories amount to only 15% (see Yè 1965). It is likely that the proportion of phonograms in which the initial and final of the phonetic is identical to that of the character as a whole (including those cases where the tone is different) does not exceed one-fifth of all phonograms.

The phonetics of some phonograms have already changed so much that they serve no phonetic function; in such cases the characters have in fact become signs. We discussed this question in Chapter 2; we will not discuss it further at this point.

The impreciseness of the phonetic function of phonetics is also manifested in the fact that phonograms containing a single phonetic often have a wide variety of pronunciations. For example, phonograms containing "者" *zhě* "the one who . . ." have more than ten different pronunciations: 赭 *zhě*, 鍺 *zhē*, 諸 *zhū*, 煮 *zhǔ*, 箸 *zhù*, 奢 *shē*, 闍 *shé*, 書 (originally written 書) *shū*, 暑 *shǔ*, 楮 *chǔ*, 都 *dū*, 睹 *dǔ*, 屠 *tú*, 緒 *xù*, 鮭 *zhā*. If we add to these the reading *dōu* for "都" and the readings *zhuó*, *zháo*, *zhāo* and *zhe* (weak tone) of "着" which was earlier written "著" ("着" is actually a corrupt form of "著"; see Sec. 11.1.1.1), then there are altogether twenty different readings. Other similar cases can be cited. Cases where phonograms with a single phonetic are read in several different ways are innumerable.

However, looked at from the point of view of absolute quantity, the number of phonograms having homophonous phonetics is quite large. Occasionally, one encounters cases where all the characters with a single phonetic are homophonous; a typical example is provided by the characters having "皇" (*huáng* "august") as a phonetic that are pronounced *huáng*: "湟" "name of a river," "惶" "anxiety," "煌" "bright," "遑" "at leisure," "喤" "sound of bells and drums," "蝗" "locust," "篁" "bamboo grove," "鍠" "sound of bells and drums," "徨" (occurring in the binome 傍徨 *pánghuáng*) "go back and forth," "艎" "the name of an ancient boat belonging to the king of Wú," 凰 (occurring in the binome 鳳凰 *fènghuáng*) "phoenix," "鰉" "kind of fish," "餭" "cake," "隍" "a dry moat." Moreover, even if the initials and finals of the phonetic in a phonogram are not identical, in most cases they are rather close; for example, the initial of "空" "empty" is *k-* and the initial of its phonetic "工" is *g-*; both are velar consonants. The final of "貓" is *-ao*; the final of the phonetic "苗" is *-iao*; the only difference is the presence or absence of the medial *-i-*. Final consonants are for the most part the same. Exceptions like "朕" *zhèn* "I, my," "滕" *téng* "the name of an ancient state" and "騰" *téng* "gallop," and "兵" *bīng* "soldier" and the simplified character "宾" *bīn* "guest," wherein final consonants differ, are not numerous.

The pronunciation of some phonograms is very different from that of their phonetics, but among characters that share the same phonetic one can find instances of identical or similar pronunciation. An example is "堊" *è* "chalk" which has "亞" *yà* "secondary" as its phonetic; the pronunciation of the two graphs is very different. However, "惡" *è* "evil" also has "亞" as its phonetic and it is homophonous with "堊". If one makes a connection with "惡", then the pronunciation of "堊" is easy to remember. Some phonetics have been transformed into a totally non-homophonous character, but since the transformed element is used in more than one character, it can in fact still have a phonetic function. For example, the phonetic "亯" *chún* has been transformed to "享" *xiǎng* "enjoy" (see Sec. 5.3). The following characters all have "享" as phonetic: 淳 *chún* "plain," 醇 *chún* "mellow (of liquor)," 鶉 *chún* "quail," 敦 *dūn* "sincere," 惇 *dūn* "sincere," 諄 *zhūn* "earnest," and "埻" *zhǔn* "bull's eye (on a target)"; the pronunciation of all these characters is unrelated to that of "享". Nonetheless, "淳", "醇" and "鶉" are all homophonous as are "敦" and "惇"; "諄" and "埻" differ only by tone. If one is aware that all these characters share a common phonetic, and if one knows the pronunciation of one of the characters in the group, then it is easy to remember the pronunciation of the others in the group. The finals of these three groups of characters, except for tone, are identical; if one knows the pronunciation of any one group, it is easy to remember the pronunciation of the other two groups. It can be seen that the "享" element in these characters still plays a definite phonetic role.

In general, while avoiding the error of indiscriminately reading characters based on one of their components, we should still take full advantage of phonetic components to help remember the pronunciations of characters. Sometimes, due to the influence of the pronunciation of their phonetics or how the phonetic is read in other characters, phonograms undergo changes which are not in accord with the rules of phonological development. An example of this is provided by "怖" *bù* "fear"; the *fǎnqiè* spelling of this character in the *Guǎngyùn* is "普故切" [MC phuo$^{\text{ʾ}}$] which would regularly give a modern reading *pù*, but due to the influence of the phonetic "布" *bù* "cloth," it is now read *bù*. In the *Guǎngyùn* the character "礦" has the *fǎnqiè* spelling "古猛切" [MC $^{\text{ʿ}}$kɐng] and should now be read *gǒng*, but due to the influence of characters like 曠 *kuàng* "spacious," 壙 *kuàng* "grave" and 纊 *kuàng* "cotton floss" it is now read *kuàng*. Nowadays many people read 尋 *qián* "nettle" as *xún* and 檔 *dàng* "archive" as *dǎng*—these are similar cases. This demonstrates a kind of counter influence that writing has in language (see Lǐ 1984).

8.6.2 Reasons for the Discrepancy in the Pronunciation between Phonograms and Their Phonetics

Why do the pronunciations of most phonograms and their phonetics show such discrepancy? Moreover, why is the discrepancy so great? The reasons can be approached from two different angles.

First, at the time phonograms were created, not all homophonous characters could fulfill the role of phonetics. There are two important reasons for this.

A. Rare or excessively complex characters were not suitable to serve as phonetics. In order to take account of this requirement, it was sometimes unavoidable that phonetic requirements had to be eased somewhat. At the present time phonetics chosen for simplified characters having the structure of phonograms are not always homophonous with the character in question. In the character "审" (the simplified form of 審) *shěn* "careful,"

for example, the phonetic "申" *shēn* ("name of a cyclical sign") has a different tone. In the case of "灿" (the simplified form of 燦) *càn* "splendid," the phonetic "山" *shān* "mountain" differs both in initial and tone; in the case of "袄" (the simplified form of 襖) *ǎo* "lined jacket" and its phonetic "夭" *yāo* "tender," one has a medial *-i-* where the other lacks it; moreover, they have different tones. It stands to reason that when the ancients devised phonograms, there were similar cases.

B. There are many differentiated characters having the structure of phonograms which, at the time they were produced, were not homophonous with their phonetic components.

This requires some explanation. Words in Old Chinese often underwent subtle phonological changes and in turn yielded new derived forms. These derived forms which differed slightly in pronunciation from their etymons, in the study of writing can be referred to as phonologically altered extended meanings. In the first section of this chapter, we pointed out that differentiated characters created by adding a semantic symbol to express an extended meaning was one of the main ways phonograms were produced. Such characters clearly could not be homophonous with the original graphs from which they were created. The characters "懈" *xiè* and "解" *jiě* illustrate this; {懈} refers to a kind of psychological relaxation; it is a phonologically altered extended meaning of "解" *jiě* "untie, release." "懈" is a differentiated graph formed by adding "心" *xīn* "heart" to "解"; it differs from its phonetic in that one is in the departing (*qù*) tone and the other is in the rising tone (later the initials of "懈" and "解" came to differ as well).

Since the original pronunciation of a character and its pronunciation when used as a loangraph were not necessarily identical, differentiated graphs created by adding a semantic symbol to a loangraph also need not be homophonous with their phonetic components. For example, in ancient times "耆" was borrowed to write {嗜} (e.g., *Mèngzǐ*, "Gàozǐ" A: 曰: 耆秦人之炙, 無以異於耆吾炙 "[Mencius] said: '[My] enjoyment of a roast coming from a man of Qín differs not from [my] enjoyment of my roast'"); {耆} *qí* "old" and {嗜} *shì* "to relish, to enjoy" were not homophonous; therefore "嗜", which was formed by adding the element "口" *kǒu* "mouth" to "耆", was not homophonous with its phonetic component.

Among the younger graphs which were formed by adding a semantic symbol to a protoform are some which are intrinsically differentiated graphs, but which express the original meaning of a graph rather than an extended meaning (since most people were only familiar with the readings of the protoform when used as loangraphs or to express an extended meaning) in addition to certain others (namely, those in this same group having protoforms whose readings differ when they are used in their

basic sense vis-à-vis their loangraph or extended meanings) that can be viewed as phonograms which are not homophonous with their phonetic components, examples of which are the characters "蛇" and "懸" cited in Sec. 1 of this chapter.

There are also numerous differentiated graphs formed by replacing significs that are not homophonous with their phonetic components. The character "賑" cited in Sec. 1 of this chapter is an example of this; it is a differentiated graph created by altering the signific of its homophonous matrigraph "振". In any case, among differentiated graphs, there is a considerable number of phonograms which are not homophonous with their phonetic components.

Above we have discussed the first reason for the discrepancy between the pronunciation of phonograms and their phonetic components. The second reason to which we now turn is the evolution of pronunciation between ancient and modern times. Phonological change can cause or magnify differences between the pronunciation of a phonogram and its phonetic.

There is a small number of phonograms which were originally completely homophonous with their phonetic components that later, because of divergent conditions of phonological change, underwent changes in pronunciation. For example, the character "衡" *héng* "arm of a steelyard" and its phonetic "行" *xíng* "walk" were perfect homophones in Middle Chinese. Later "衡" did not undergo any great change, but the vowel of "行" became *i* and its initial changed from a velar to a prepalatal. In this way "衡" and "行" came to differ both in their initials and finals.

A more common situation is when a phonogram and its phonetic originally were already slightly different in pronunciation and subsequent phonological changes magnified the difference. The character "分" *fēn* "divide," for example, has a labiodental initial but "頒" *bān* "promulgate," which has "分" as its phonetic, has a bilabial initial. From Old Chinese down to the beginning of the Middle Chinese period, labiodentals were still not distinct from bilabials and what were to become labiodentals at a later period were still pronounced as bilabials. Therefore, originally "分" and "頒" had the same initial but different finals, but at present they differ both in initial and final. The character "者" *zhě* cited above vis-à-vis the characters "諸" *zhū* and "都" *dū* which have "者" as a phonetic have different finals: *-e* vis-à-vis *-u*. In Old Chinese they were all in the *yú* (魚) rime group and the differences in final were of course fewer. The present situation is the result of phonological change. Since similar examples are to be had for the asking, we will not cite further ones here.

There are also cases where, in the course of phonological development, phonograms and their phonetics have become closer in pronunciation and have even become identical where before they differed slightly. For

example, the character "受" *shòu* "receive" in Middle Chinese had the initial *chán* (禪 MC ź-) and was a rising tone word; the character "授" *shòu* "give," on the other hand, had the same initial but was a departing tone word. Later, because rising tone words with voiced obstruent initials became departing tone words, the two words became homophones. The character "焦" *jiāo* "scorch" in Middle Chinese had the initial *jīng* (精 MC ts-) and was in the rime 宵 *xiāo* [MC ˌtsjäu]; the character "噍" *jiào* "chew" had the initial *cóng* (從 MC dz-) and was in the rime 笑 *xiào* [i.e., MC ˌdzjäu]. Because of the devoicing of voiced initials, the initials of the two characters are now the same and differ only by tone.

Differences between phonograms and their phonetics were relatively minor at the time the characters were created. The greater differences we see at present were for the most part caused by historical sound change.

In addition to the two cases cited above, we can mention the influence of dialects on writing.

At present we can observe the following: a simplified phonogram created in a certain dialect region becomes accepted as a simplified character throughout the country. When this character is read by people in the region where it was created, the character and its phonetic are either homophonous or nearly so, but when pronounced in the standard language or in the dialect of another area, the phonetic and the character in question are not entirely homophonous and in some cases may be very different. For example, in some southern dialects "占" *zhàn* "occupy" and "鑽" *zuàn* "drill" are homophonous (formerly in Shànghǎi, jewelry stores often wrote "十七鑽" "seventeen jewels" as "十七占"). The simplified form of "鑽", "钻", must have been created in such a dialect region. But in the standard language, "钻" and "占" differ in both initial and final. In addition, simplified characters like "柜" (for "櫃" *guì* "cabinet") and "价" (for "價" *jià* "price") when read in the standard language, show a rather large discrepancy in pronunciation between the character and phonetic; it is likely that they were originally created in some dialect region where agreement existed. In antiquity, those who created characters could not all have been from the same dialect areas. The fact that the phonograms that have come down to us from ancient times show such a complicated relationship between the character and phonetic is probably to some extent due to dialect influence.

8.6.3 Interchange of Phonetics

Just like significs, phonetics can also be interchanged. Below some examples of phonetic interchange are shown. (Characters marked with an asterisk are the current standard or commonly used forms.)

舔 *shì* "lick" = 舐 = 舐*
詗 *xiōng* "argue" = 詗 = 诇* (詗)

簏 *lù* "foot of a mountain" = 麓*
譋 *chǎn* "curry favor" = 谄* (諂)
秔 *jīng* "round grain non-glutinous rice" = 粳 (粳*)
勛 (勛*) *xūn* "merit" = 勳
矜 *jīn* "pity" = 矜*
枏 *nán* "nanmu tree" = 楠* (冉 = 冉)
嘶 *tí* "weep" = 啼*
鞮 *xié* "shoe" = 鞋*
鞾 *xuē* "boot" = 靴*
椶 *zōng* "palm tree" = 棕*
擣 *dǎo* "pound" = 捣*
燈 *dēng* "lamp" = 灯*
嬭 *nǎi* "milk" = 奶*
蔕 *dì* "stem" = 蒂*
蹤 *zōng* "track" = 踪*
袴 *kù* "pants" = 褲 (裤*)

In the case of the graphic variants cited above, the ones placed second for the most part appeared later than the ones placed first.

Interchanged phonetics are largely non-homophonous. The use of a new phonetic in place of an earlier one would seem often to reflect better the changed pronunciation of a phonogram. The examples cited above can mostly be explained in this way.

Sometimes the replacement of a phonetic is purely in order to reduce the number of strokes in a character. The character "灯" cited above clearly belongs to this category, as probably do "鞋" and "靴". (Note that the simplified graph "灯" is a homograph of another "灯" *dīng* glossed in dictionaries as "fire.")

Some phonetics apparently were replaced because the character represented by the phonetic had lost its independent status. For example, in the seal script the characters "匡" *kuāng* "rectify," "狂" *kuáng* "mad," "汪" *wāng* "puddle" and "枉" *wǎng* "crooked" all had "㞢" as their phonetic. In the clerical and standard scripts "㞢" was no longer used independently, so the phonetic in these characters was replaced with "王" *wáng* "king." (According to traditional dictionaries, "㞢" was read *huáng*; in reality it was the protoform of "往" *wǎng* "go toward"; in the bone script it was written  . The character "往" was earlier written "𨓜" where its right-hand side was an altered form of "㞢". In Han clerical script "枉" was also written with "主" on the right.)

8.6.4 Deformation of Phonetics

Because of graphic evolution, graphic corruption and confusion of graphic elements, the phonetics of some phonograms were deformed. Examples of this process are the characters "年" *nián* "year" and "春" *chūn*

"spring" mentioned in Chapter 2, the element "昏" discussed in Sec. 5.3.5 which was altered to "舌" and again in Sec. 8.6.1 in relation to "羹" being alterted to "享". Further examples are given below; after each character the structure of the original graphic element is noted.

泰 *tài* "peaceful." Composed of 𠬜 and 水 *shuǐ* "water" with 大 *dà* "large" as phonetic.

賊 *zéi* "thief." Composed of 戈 *gē* "dagger-ax" with 則 *zé* "rule" as phonetic.

隆 *lóng* "grand." According to the *Shuōwén*, it is composed of 生 *shēng* "live" with 降 *jiàng* "drop" as phonetic. In the ancient script and in clerical script forms found on Han bamboo slips, it is composed of 土 *tǔ* "earth" with 降 as phonetic.

責 *zé* "duty." Composed of 貝 *bèi* "cowry" with 朿 *cì* "thorns on a tree" as phonetic.

在 *zài* "be located." Composed of 土 *tǔ* "earth" with 才 *cái* "talent" as phonetic.

布 *bù* "cloth." Composed of 巾 *jīn* "towel" with 父 *fù* "father" as phonetic.

那 *nuó* "ample." Composed of 邑 *yì* "city" with 冉 (冉) *rǎn* "a surname" as phonetic.

抛 *pāo* "throw." Composed of 手 *shǒu* "hand" with 尣 *páo* "cow's shin" as phonetic.

志 *zhì* "will." Composed of 心 *xīn* "heart" with 𠂤 (之) *zhī* "go" as phonetic. It can also be viewed as a syssemantograph composed of 士 *shì* "scholar" and 心.

寺 *sì* "temple." Composed of 寸 *cùn* "inch" with 𠂤 (之) *zhī* as phonetic.

細 *xì* "fine." Composed of 糸 *mì* "fine thread" with 囟 *xīn* "fontanelle" as phonetic.

屑 *xiè* "fragment." Composed of 尸 *shī* "corpse" with 肖 *xì* "vibrate" as phonetic.

龕 *kān* "niche for a religious image." Composed of 龍 *lóng* "dragon" with 今 *jīn* "now" as phonetic.

稚 *zhì* "young, immature." "稚" was originally written "稺" which was composed of 禾 *hé* "grain" with 屖 *xī* "to tarry" as phonetic. In the Han dynasty people sometimes wrote "屖" as 𡰥 (on Han seals); in this way it was corrupted to "稚".

辞 *cí* "decline." Originally written "辭", composed of 辛 *xīn* "pungent" with "台" *yí* "first person pronoun" as phonetic. In ancient times "辭" and "辭" were interchangeable. At present "辞" has been designated as the simplified form of "辭".

廄 *jiù* "stable." Composed of 广 *yǎn* "shelter" with 皂 *guǐ* as phonetic. 皂 is the protoform of 簋 *guǐ* "a kind of ritual vessel."

蛋 *dàn* "egg." Composed of 虫 *huǐ* "insect" with 延 *yán* "extend" as phonetic.

查 *zhā* "hawthorn." Originally the same graph as "柤" (also written 楂, at present written 楂); composed of 木 *mù* "tree" with 且 *qiě* "grammatical particle" as phonetic. The character 柤 was sometimes written 查 which was corrupted to 查.

Due to phonological change, there are some characters among those cited above whose phonetics no longer have a phonetic function despite the fact that their phonetics have not been deformed.

8.7 The Relationship between Phonetics and Graphic Meaning

8.7.1 Phonetics that Convey Meaning

The phonetics of some characters also have at the same time a semantic function; they may be referred to as semantophoric phonetics. When discussing the ways phonograms were created, we already stated that if a semantic symbol were added to a certain character to create a differentiated graph expressing an extended sense, then the newly created character would be both a phonogram and a syssemantograph at the same time. Semantophoric phonograms for the most part refer to characters of this type. As an example, we can cite the character "娶" *qǔ* "take a wife", referred to earlier in this chapter, which has "取" *qǔ* "take" as its phonetic, or the character "懈" *xiè* "relax, let up" which has "解" *xiè* "untie, relax" as its phonetic. Below we give further examples of semantophoric phonetics.

惛 *hūn* "confused" : 昏 *hūn* "dim, unclear"

駟 *sì* "a four-horse team" : 四 *sì* "four"

牭 *sì* "a four- (四 *sì*) year-old cow"

舫 *fāng* "a kind of square (方 *fāng*) shaped wine vessel in antiquity." "舫" has a homograph; see Sec. 10.2.3.

誹 *fěi* "to slander." Related to "非" *fēi* in the sense of "blame" or "censure."

琀 *hán* "to place a piece of shell or jade in the mouth of a dead person." (In ancient books "含" *hán* "to put in the mouth" is frequently used to represent {琀}.

菜 *cài* "legumes which are picked (采 *cǎi*) for food." (In the Qín bamboo slips from Shuìhǔdì and in some ancient texts "采" is used to write {菜}.)

祫 *xiá* "name of a combined (合 *hé*) ritual sacrifice to all of one's ancestors."

鯿 *biān* "bream." A kind of very flat (扁 *biǎn*) fish.

輛 *liàng* "measure word for vehicles." The term is derived from the fact that in antiquity vehicles had "two" (兩 *liǎng*) wheels. (In many ancient texts "兩" is used for {輛}.)

Most of these phonograms are probably differentiated graphs formed by adding semantic components to a matrigraph in order to express an

extended meaning. There can be no doubt that the meaning expressed by these graphs is an extended meaning of the character used as their phonetics; this can be either an extended meaning of the original sense of the graph or the extended meaning of a frequently used loangraph sense. For example, {鈁} is an extended meaning of the loangraph sense of "方" *fāng* "square."

If the matrigraph itself is a phonogram, then its signific is often altered in order to create a differentiated graph which expresses the extended meaning. The characters "賑", "氬","氧", "氮" and "氯" cited above were all created in this way. In discussing the question of abbreviated phonetics, we pointed out that characters like "賑" and "氬" can be viewed either as ordinary phonograms, or as characters with abbreviated phonetics. If the latter view is adopted, the phonetics of these characters can be recognized as having a semantic function.

In the Chinese script there is a large number of phonograms created to express the extended meaning of a certain character. However, such characters do not necessarily use the graph in question as a phonetic; this means that the phonetic in such cases does not necessarily have a semantic function. If the extended meaning of a certain character was written with a loangraph and a semantic symbol was subsequently added to it, then the phonetic of the phonogram created in this way will not play a semantic role. For example the word {塗} *tú* "smear, spread" gave rise to {搽} *chá* with the extended meaning of "apply (powder or ointment)"; at first "塗" was used to express this sense. In the *Guǎngyùn* "塗" has a *fǎnqiè* spelling 宅加切 [MC ʂ̣a], glossed as "to apply, to smear"; this *fǎnqiè* regularly gives a modern pronunciation *chá*. Somewhat later, this extended sense of "塗" was sometimes written "茶" (it occurs, for example, in the *Liú Zhīyuǎn zhūgōngdiào* 劉知遠諸宮調, an anonymous work of the Song-Jin era, No. 12, 仙呂調, 繡帶兒: 强人五百威猛如虎, 茶灰抹土 "five hundred stout fellows, fierce as tigers, smeared with ash and covered with soil"). Finally the signific "手" *shǒu* "hand" was added and the differentiated form "搽" came into being as the exclusive way of writing *chá* "smear" (see Lǐ Róng 1980:12). The character "茶" from which "搽" comes has only a phonetic function. Some differentiated graphs formed by adding a signific to a matrigraph in order to express an extended meaning sometimes subsequently substituted a homophonous character for the matrigraph, becoming in this way a phonogram whose phonetic had no semantic function. An example of this process is the character "柄" *bǐng* "handle"; it was originally written "棅" with "秉" *bǐng* "hold" as its phonetic. Since a handle is something one holds, {柄} clearly is an extended meaning of {秉} and "秉" is the matrigraph of "棅". When at a later time "秉" was replaced by "丙" *bǐng* "the third of the Heavenly Stems" as the phonetic, the phonetic element "丙" had no semantic function. Naturally

there are other reasons as well why phonograms representing an extended meaning of a certain character do not use this or that character as its phonetic. Therefore, phonograms containing phonetics with a semantic function do not constitute a large proportion of phonograms.

Phonetics with a concurrent semantic function are extremely useful in the study of lexical meaning and especially in the study of etymology. However, if one erroneously attributes meaning to phonetics which do not have a semantic function, then he will go seriously astray and bring unneeded complication to the study of lexical meaning. Hence we should approach the question of whether a particular phonetic has a semantic function or not with the greatest caution.

Lastly, let us add a few words about phonograms created for terms in modern chemistry in which the phonetics express meaning in a special way. At issue are three characters which refer to the three isotopes of hydrogen designated by the mass numbers 1, 2, and 3: "氕" *piě* "protium" (H1), "氘" *dāo* "deuterium" (H2) and "氚" *chuān* "tritium" (H3). The phonetics of these three characters are "丿" (a semantograph for "撇" *piě* "a left-falling stroke in Chinese writing"), "刂" (a variant of "刀" *dāo* "knife") and "川" *chuān* "river." In addition to their phonetic function, each of these phonetics also expresses the (atomic number) of the isotope, hence they can also be regarded as having a semantic function. However, this semantic function is based on the graphic shape of the phonetics and is totally unrelated to the words which they represent independently. Formerly, some people called characters like "凹" *āo* "concave" and "凸" *tū* "convex," which are pictographic characters created after the script had ceased being pictographic, "graphic monsters." In comparison to "氕", "氘" and "氚", they do not appear so monstrous after all.

8.7.2 The *Yòuwén* Theory

Sometimes, phonograms that all represent words of a common etymological origin use the same phonetic. Such phonetics, regardless of whether they are the sort of meaningful phonetics discussed above, are all important clues in studying the meanings of this particular group of words, and are especially useful in the study of their etymologies. Since most phonetics are on the right-hand side of a character, the theory concerned with the above type of characters is called the *yòuwén* theory ("the theory of the right-side graphic element").

Yáng Quán in the Jìn dynasty already alludes to such a notion when in discussing the graphic element "殹", says "In regard to metal and stone, we say 堅 *jiān* 'solid'; in regard to grass and trees, one says 緊 *jǐn* 'tight'; and with regard to men, one says 賢 *xián* 'worthy'" (see the *Tàipíng yùlǎn*, *juàn* 402, 人事部 *rénshì bù* 43). The *yòuwén* theory was formally proposed in the Song dynasty. Shěn Guā (c. 1085) in his *Mèngxī bǐtán* (*juàn* 14) says,

> In his study of the script, Wáng Shèngměi (王聖美 = Wáng Zǐsháo 王子韶 [fl. 1060]) demonstrated the meanings of the graphic elements on the right (*yòuwén*). Ancient dictionaries all observe the elements on the left. The category of a graph is always on the left and its meaning is indicated on the right. For example, those in the category of trees, have a 木 on the left. As for the so-called right-hand graphic elements, they are like 戔 which means "small." Smallness with regard to water (水 *shuǐ*) is referred to as 淺 *qiǎn* "shallow"; smallness with regard to metal (金 *jīn*) is referred to as 錢 *qián* "coins"; something mean (歹 *dǎi*) and small is referred to as 殘 *cán* "deficient"; the smallness of a shell (貝 *bèi*) is referred to as 賤 *jiàn* "cheap." All cases like this express meaning by means of 戔.

Song dynasty studies of *yòuwén*, however, were rather crude. The examples cited by Shěn Guā are questionable; they will be discussed in more detail below. Scholars in the Qing dynasty and in more recent times have proposed more representative examples of the *yòuwén* phenomenon. For example, Wáng Niànsūn pointed out in his *Guǎngyǎ shūzhèng* (*juàn* 7B) that characters containing the element "彗" *huì* mostly have to do with "smallness":

> In the *Shuōwén* it says, "畺 *wèi* is the end of a cart's axle; it is sometimes written 轊." . . . The sense of 轊 is 銳 *ruì*. In *Zuǒzhuàn*, Zhāo 16, the commentary says "銳 means small, minute." The place on both ends of an axle outside the hub is very small. A small sound is called 嘒 *huì*; a small tripod is called 鐆 *suì*; a small coffin is called 槥 *suì*; a small star is called 嘒 (曀) *huì*; fine cloth from Shǔ is called 繐 *suì*; the tip of a bird's feather is called 翽 *huì*; the two ends of a cart's axle are called 轊 *wèi*. The meanings of all these are the same.

These examples are quite convincing. All these characters having 彗 *huì* as their phonetic probably represent a group of cognates.

In using the *yòuwén* theory to study meaning, one must maintain a very cautious attitude; one should not under any circumstances use a single explanation for the meaning of a group of characters simply because they share the same phonetic. Take for example the group of words having "戔" as a phonetic which were cited from the Song source above. In actuality their meanings should be divided into two different sets; one set is related to the meaning "injure, harm," the other to the notion of "shallow" or "small." In the bone script "戔" was written  which depicts two dagger-axes pointed at one another. In the past some scholars have proposed that "戔" is the protoform of "殘"; this is convincing. Therefore the original meaning of "殘" must have been "to destroy, to damage." The explanation of "殘" as "mean and small" is totally without foundation.

In ancient times "錢" was the name of an important tool of production. The later word "鏟" *chǎn* "spade" is derived from "錢". This tool clearly took its name from the fact that it was used for digging ("剗" *chǎn*) earth. There is little doubt that "殘", "剗" and "錢" have a common etymological source; they are all connected with the idea of destruction or damage. Before the formal beginning of the use of money, spades probably served as a kind of currency in trade relations; this is why early coins were often made in the shape of spades, and this is the reason that coins minted from metal were called "錢". The explanation of "錢" as "small as regards metal is called coins" is totally unconvincing. Only "淺" and "賤" can be explained in the way the Song source indicates. When a layer of earth has been shoveled away, the earth is shallower than before; when things are damaged or destroyed, they are smaller than before. It is conceivable that the ideas of shallowness and smallness are related to that of destruction or damage; that is, it is possible that the words having the element "戔" are all related after all. But even if this is the case, the explanation of "錢" as "small as regards metal" and "殘" as "mean and small" is wrong.

In fact there are numerous cases of characters having the same phonetic which have sets of meanings which are clearly etymologically unrelated. The late Shěn Jiānshì (1935) in his article "Yòuwénshuō zài xùngǔxué shàng zhī yángé jí qí tuīchǎn" [The *Yòuwén* Theory in the Development of Textual Studies and its Elucidation] points out:

> Characters having a right-hand phonetic component have developed in numerous different ways. There are characters with the same phonetic whose meanings have developed in quite divergent ways; for example, most characters with the phonetic "非" are related to the notion of opposition, but the characters "菲" [*fēi* "luxuriant"], "翡" [*fěi* "jadeite"] and "痱" [*féi* "prickly heat"] express the notion of "redness." Characters having "吾" as a phonetic are mostly related to the notion of clarity, but "齬" [*yǔ* "discord," in the binome "齟齬" *jǔyǔ*], "語" [*yǔ* "dispute"], "圄" [*yǔ* "prison"] and "牾" [*wǔ* "contradict"] all have a sense of adversity or contradiction (p. 120).

As pointed out by Shěn, there is clearly no etymological relationship between the two meanings found with characters having "非" and "吾" as their phonetic; at least this is clearly the case with those characters containing "非". Some people who advocate the *yòuwén* theory are fond of saying things like, "all characters with a certain phonetic have a certain meaning." This is not in accord with the facts.

For one thing, characters having the same phonetic are not always connected semantically; moreover, phonograms that were created to write cognates with a clear semantic connection do not always share the same phonetic. It is altogether possible for them to have different phonetics

with which they are homophonous or nearly homophonous. Shěn Jiānshì, in the article cited above, gave several examples of this state of affairs. There are a number of characters having to do with spaciousness or leisure which have "與" *yǔ* "give," "余" *yú* "I, me," or "予" *yú* "I, me" as phonetics; another group of characters expressing the notion of containment have either "今" *jīn* "now" or "禁" *jìn* "forbid" as phonetic (*ibid.* p. 121). In the case of words like these, which are close in sound and meaning, although they use different phonetic elements, in general they should be etymologically related. Therefore, when we use the phonetic components of phonograms as clues to etymology in our research, we cannot limit our scope to those phonograms which share a common phonetic.

9

Loangraphs

In previous chapters we have referred to loangraphs many times. Several basic concepts have already been introduced, including the following: A loangraph is a homophonous or nearly homophonous graph borrowed to write another word; the process of graphic borrowing and the process of semantic extension should be kept separate; phonological borrowing in the narrow sense should be considered part of the loangraph phenomenon. These are all points already treated in previous chapters and will not be considered further here. Below loangraphs will be discussed in more detail under several specific headings.

9.1 Orthographs and Loangraphs

The term "orthograph" is not used in a single sense in the formal study of the Chinese script. Sometimes "orthograph" refers to a more primitive graphic shape, like "" for "舜" *shùn* "name of a mythical king of antiquity." Sometimes the term "orthograph" is used to refer to the graph from which a differentiated graph originates; for example, "取" *qǔ* "take" is considered to be the orthograph of "娶" *qǔ* "take a wife." What we propose to discuss in this section is the notion of orthograph relative to loangraphs.

In general an orthograph is taken to be a graph that expresses a graph's original meaning. Looked at from the point of view of a word, a graph that expresses a certain word's fundamental meaning is the orthograph for this word. This definition is completely appropriate for those scholars of the script who include semantic extensions in the category of loangraphs. But we propose that semantic extensions and loangraphs be kept separate. Hence we cannot fully agree with this definition. In our view, even a graph which expresses a word in an extended meaning, looked at in relation to a loangraph for this word, is an orthograph just the same. For example, the character "間" *jiàn* was originally written "閒"; its original meaning was "a spatial interval." Due to an extension of the meaning, it also came to be used for temporal intervals (*Mèngzǐ*, "Gōngsūn Chǒu" A: 賢者在位,能者在職,國家閒暇 "When the worthy hold position

and the capable are in office, the country will be at leisure for a while." In this sense, it underwent a change of pronunciation to *xián*. Later, "閑" *xián* "palisade" was borrowed to express this extended meaning (on the original meanings of "閒" and "閑", see Sec. 7.1.5.2). In relation to the extended meaning of "閒", that is, in relation to the word {閑} *xián* "leisure," "閑" is a loangraph and "閒" is the orthograph.

Another question that needs to be discussed is whether a differentiated graph created for the extended meaning of a certain character can be considered the orthograph for this meaning. In Sec. 8.1.3.2 we cited the example of "娶" which is a differentiated graph for an extended meaning of "取". Looked at from the point of view of those who include semantic extensions in the loangraph category, "取", when it is used to express the word {娶} *qǔ* "to take a wife", is a loangraph, and "娶" is its orthograph which was created at a later time. In our view, if there were a separate character which expressed the meaning {娶}, then in relation to this loangraph, "娶" should be considered its orthograph. However, "娶" in relation to the character "取" from which it is derived cannot be called an orthograph. The meaning "to take a wife" for {娶} is a semantic extension of the basic sense of "取" *qǔ* "to take." The use of "取" for {娶} is not a case of the loangraph phenomenon but simply the result of semantic extension. If one takes "娶" to be the orthograph for "取" when it is used to express {娶}, then the notion of semantic extension and graphic borrowing will be confused.

In Sec. 6.1 we pointed out that Zhū Jùnshēng advocated keeping the notions of semantic extension (which he called 轉注 *zhuǎnzhù*) and graphic borrowing separate. But in his work *Shuōwén tōngxùn dìngshēng* he still explains "取" as a loangraph for "娶". This contradicts his own principle. The reason Zhū does this is that, like other Qing dynasty scholars of the script, he was too much in awe of the *Shuōwén*, accepting it as a sort of ultimate authority in questions of script analysis. Qing scholars generally believed that if in the *Shuōwén* there was a "proper graph" (正字 *zhèngzì*) which expressed a certain meaning (what we now call a word) as its basic meaning, then other characters expressing this meaning found in ancient texts should all be viewed as loangraphs for this proper graph. The *Shuōwén* has the character "娶"; therefore "取" when it is used to express the meaning of {娶} can only be considered a loangraph. If the *Shuōwén* did not contain the character "娶", then Zhū Jùnshēng would certainly have regarded "取" used in the sense of {娶} as a case of his so-called *zhuǎnzhù*, that is, as a case of semantic extension.

Sometimes Zhū Jùnshēng does not use the *Shuōwén*'s proper graph. For example, the *Shuōwén* defines "荒" *huāng* "famine" as "蕪" *wú* "weeds" and "穌" *huāng* as "empty and without food." In the *Shuōwén tōngxùn dìngshēng*, under the entry for "荒", it says that the sense of "famine" is a

case of *zhuǎnzhù*; but he adds a comment, "according to Xǔ Shèn's work, it is a loan for 穌." The reason for this comment is probably that too few people used the character "穌". Actually, the relationship between "取" and "娶" is the same as that between "荒" and "穌".

Based on the above discussion, we may define "orthograph" in the following way: A character used to express its own original meaning or an extended meaning vis-à-vis another character that has been borrowed to express this meaning is an orthograph. Looked at from the standpoint of a word, a character which expresses the fundamental or extended sense of a word, vis-à-vis a loangraph for this word, is the orthograph for this word.

Based on our description, someone may ask, in cases where there is no corresponding loangraph, does this mean that a character that expresses an original meaning does not qualify being termed an orthograph. Not at all. If one wishes to show that such characters are not loangraphs, of course they may be called orthographs. The sense of "orthograph" which we are concerned with is a term relative to the concept of "loangraph." Apart from this concept, it has no meaning. However, this does not mean that if a character is unrelated to a corresponding loangraph, it should not be called an orthograph.

Above we stated that the term orthograph is used in several senses; we should be careful not to confuse these various senses. Some have criticized the views of other scholars concerning orthographs based on their own understanding of the term. For example, some people who define orthographs in relation to differentiated and younger graphs criticize as illogical those who refer to differentiated graphs expressing a loangraph meaning of a matrigraph as orthographs (see Sec. 8.1.3.1 in reference to the character "獅"). But this is improper. We do not refer to graphs from which differentiated graphs originate as orthographs; we refer to them as matrigraphs in order to keep them separate from orthographs which are defined by their relationship to loangraphs. On the basis of whether or not the words they express have orthographs, loangraphs can be divided into three categories: those which have no orthograph, those whose orthograph appeared only later, and those that have orthographs. Below we will give examples of these three categories along with explanations. (In Chapter 2, we pointed out that many loangraphs in actuality become signs or semi-signs; in our examples here, we will not refer further to such cases.)

9.1.1 Loangraphs Without an Orthograph

Some words are only expressed by means of loangraphs; these are loangraphs without an orthograph. Good examples of this are the Old Chinese grammatical morphemes {其} *qí* "modal particle" and {之} *zhī* "subordinative particle" and certain binomes such as {猶豫} *yóuyù* "hes-

itate" that are written only with loangraphs. Further examples are the sentence final particle {耳} *ěr* written with the character for "ear" and the grammatical particle {夫} *fú* and the demonstrative {夫} *fū* written with the character "夫" *fū* "man"; the interrogative {何} *hé* "what" written with "何", which is the original graph for "荷" *hè* "carry on the back"; and the interrogative {奚} *xī* "what" written with the character "奚", which originally referred to a kind of slave ("奚" was originally written  , which probably depicts a slave being held by a braid or a rope; the *Shuōwén*'s definition of "奚" as a "large belly" is probably wrong); the adverb {亦} *yì* "also" written with what was the protoform of either "腋" *yè* "armpit" or "液" *yè* "fluid." The binome {陸離} *lùlí* "uneven" is written with "陸" *lù* "land" and "離" *lí*, which originally had to do with birds. These are all cases of words for which there is no orthograph.

Many phonetic transcriptions of foreign words are recorded only by means of loangraphs. Examples of such words are: "達魯花赤" *dálǔhuāchì* "darugaci (Mongolian)," "沙發" *shāfā* "sofa," "尼龍" *nílóng* "nylon," "蘇維埃" *sūwéiāi* "Soviet," "布爾什維克" *bùěrshíwéikè* "Bolshevik." Other examples are medieval loans introduced along with Buddhism: "羅漢" *luóhàn* "arhat," "比丘" *bǐqiū* "bhikṣu," "頭陀" *tóutuó* "dhūta," "夜叉" *yèchā* "yakṣa," etc. In modern times such words have been introduced from Western languages: "巧克力" *qiǎokèlì* "chocolate," "麥克風" *màikèfēng* "microphone," "法西斯" *fǎxīsī* "fascist," "阿司匹林" *āsīpǐlín* "aspirin" (sometimes transliterated as "阿司匹靈" *āsīpǐlíng*); many place and personal names from all periods of history also belong to this category.

9.1.2 Loangraphs whose Orthographs were Created Later

Some words were originally written with loangraphs, but later orthographs were created for them. Examples of such words are: "獅" *shī* "lion," "蜈蚣" *wúgong* "centipede," "鶬鶊" *cānggéng* "Chinese oriole," and "徜徉" *chángyáng* "pace up and down" (these words have already been cited above). Below additional examples are given.

栗: 凓, 慄. The {凓} of 凓冽 *lièliè* "bitterly cold" (close in meaning to "凜冽" *lǐnliè* "piercing cold") as well as the {"慄"} of "戰慄" *zhànlì* "tremble, shiver" were both loangraphs based on "栗" *lì* "chestnut." See *Shījīng* Ode 154.1: 二之日栗烈 "The days of the second [month] are bitterly cold"; see also *Lúnyǔ* 3.21: 使民戰栗 "cause the people to tremble." Only later were orthographs created by adding "冫" ("冰" *bīng* "ice") and "心" *xīn* "heart" to "栗" (the *Shuōwén* has "凓" but not "慄"). At present both "凓" and "慄" are considered allographs of "栗" and have been consolidated under the latter graph (in the *Xiàndài Hànyǔ cídiǎn* "凓" is still an entry).

戚: 慼. The {慼} in the word 憂慼 *yōuqī* "sorrowful" was expressed by a loangraph based on "戚" *qī* which originally was a kind of ax used as a weapon. (Cf. *Shījīng* Ode 207.3: 自詒伊戚 "I have brought this grief upon myself"; *Lúnyǔ* 7.37: 小人長戚戚 "Petty men are always sorrowful.") Later a "心" was added to create an orthograph "慼" (written "慽" in the *Shuōwén*). Now both "慼" and "慽" have been consolidated under "戚".

胃: 謂. The word {謂} *wèi* "say, call" was originally written with the loangraph "胃" *wèi* "stomach." (In the Eastern Zhou "Jírì rěnwǔ" sword inscription, the phrase 胃之少虡 "It is called a small pedestal" is found. There are also examples of "胃" used as a loangraph for "謂" in the Chángshā Chǔ silk manuscripts.) Later an orthograph was created by the addition of "言" *yán* "speech." The character "謂" is already found in the Qín bamboo slips and in the *Shuōwén*, but in bamboo and silk manuscripts of the beginning of the Western Han dynasty, "胃" is still commonly used as a loangraph for "謂".

毒冒: 瑇 (玳) 瑁. The word {玳瑁} *dàimào* "hawksbill turtle" was originally written" 毒冒" (e.g., *Hànshū*, "Sīmǎ Xiàngrú *zhuàn*" A: 毒冒鱉黿 "hawksbill turtles and soft-shelled turtles"). Only later was the element "玉" *yù* "jade" added to create "瑇瑁"; "玳" *dài* is an allograph which has now replaced "瑇". The *Shuōwén* does not contain "瑇"; the character "瑁" in the *Shuōwén* refers to a kind of jade implement used by the emperor to cover the jade tablet (圭) of a feudal lord; it is a homograph of the "瑁" discussed above (on homographs, see Sec. 10.2).

In general we will refer to orthographs coined after the fact as younger orthographs. Some younger orthographs were little used after their creation and soon became obsolete or rare. Some examples are given below.

須: 𩒨. The original meaning of "須" *xū* was "whiskers"; its use in the sense of "wait" is a loangraph usage. The *Shuōwén* has the graph "𩒨" meaning "wait," "comprised of 立 *lì* "stand" with 須 as phonetic." This is a younger orthograph for "須" in the meaning "wait." It occurs only in the *Hànshū* ("Biography of Zhái Fāngjìn") and in a few other texts.

無: 橆. In origin "無" *wú* "not have, not be" was the same graph as "舞" *wǔ* "dance." The use of this graph to express the meaning of "not be" was a loangraph usage. The *Shuōwén* has the character "橆" defined as "'not be', from 亡 *wáng* 'perish' with 無 as phonetic." This is a younger orthograph for "無". It is rarely seen in ancient texts but occurs often in Han inscriptions.

衰: 𧘇. The character "衰" is written  in the seal script. It depicts grass on clothing and is the protoform for "蓑" *suō* "grass raincape." The use of {衰} *shuāi* in the sense of "decline, weak" is a borrowed usage. The *Shuōwén* has the character "𧘇" defined as "'decline'; from 疒 *nè* 'ill' with 衰 as phonetic." This is a younger orthograph for "衰" in the sense of "decline, weak." It rarely occurs in ancient texts.

然: 嘫. The character "然" *rán* is the protoform of "燃" "burn." Its use in the sense of "thus" is a loangraph usage. The *Shuōwén* has the character

"嗽": "'the sound of talking'; from 口 *kǒu* 'mouth' with 然 as phonetic." This is a younger orthograph for "然" "thus" and is rarely seen in ancient texts. There are still other younger orthographs in the *Shuōwén* which we will not discuss here.

9.1.3 Loangraphs which Originally had Orthographs

There are many words that originally had orthographs but were later written with loangraphs. Some of these loangraphs subsequently took the place of their orthographs. When we say that a loangraph replaces its orthograph, we mean that the loangraph in question replaces its orthograph in those senses for which it is used. In some cases this means that the loangraph replaces the entire range of meanings of the orthograph; e.g., the character "糾" referred to in Sec. 7.2 completely replaced "丩". In other cases the loangraph replaces only part of the total range of meanings; e.g., the replacement of "何" by "荷" and "閒" by "閑" referred to previously; that is, "荷" only replaces "何" in the sense of "carry a load," not in the sense of "what"; "閑" does not replace the "閒" which is later written "間". Below are a few additional examples of loangraphs which have replaced already existing orthographs.

艸: 草. The character "艸" is the orthograph for "草". (See Sec. 7.1.2; in the *Zhōulǐ*, "Qiūguān, shùshì" line: 嘉草攻之 "He attacks them with *jiācǎo* [a kind of herb?]," the text in the *Jīngdiǎn shìwén* has "艸" for "草". The *Hànshū* sometimes uses an allograph "屮" for "艸".) The character "草" is from "艸" with "早" as phonetic; its original meaning was "早斗" *zàodòu* "acorn." (The *Shuōwén* defines "草" as 'acorn'; "草" in this sense was later written "皁" and "皂".) In received ancient texts "草" has for the most part been borrowed to write "艸"; at present "艸" has been consolidated under "草".

耑: 端. The *Shuōwén* defines  (耑) as "'the forehead of a newly born thing'; the upper portion depicts something growing with the lower portion depicting its roots." This is the orthograph of "端" *duān* "beginning." (In *Hànshū*, "Yìwénzhì," commenting on the line: 言感物造耑, 材知深美 "It refers to being spiritually moved by things and creating (clues =) allusions [to them], such that one's abilities and knowledge become profound and perfect," Yán Shīgǔ says that "耑" is the ancient form of "端".) The character "端" is from "立" *lì* "stand" with "耑" as phonetic; its original meaning is "upright." In most traditional texts "端" has already been borrowed for "耑". (In the past "耑" was sometimes borrowed to write {專} *zhuān* "exclusive"; the character "耑" has now been consolidated under "专", the simplified form of "專".)

猒: 厭. In the *Shuōwén* "猒" *yàn* is defined as "sated," and analyzed as comprised of "甘" *gān* "sweet" and "肰" *rán* "dog meat." This is the proto-

form of "饜". (In the bronze script "猒" is written  ; it is probably a syssemantograph consisting of a principal part and bodily organs); the graph expresses the meaning "sated" by depicting a dog eating meat. From this original sense of "sated," the meaning was extended to "weary of, bored." (In the Eastern Han "Lóushòu *bēi*" inscription there is the line 好學不猒 "to be fond of learning without becoming weary"; in *Huáinánzǐ*, "Zhǔshù" there is the line 是以君臣彌久而不相猒 "Thus the ruler and his ministers go for a long time without tiring of one another.") The character "厭" is comprised of "厂" *hǎn* "cliff" with "猒" as phonetic; its original meaning was "oppress." (In the *Shuōwén* it is defined as "笮" *zé*, concerning which Duàn Yùcái says "under the bamboo radical, the character 笮 is defined as 'oppress'; for this meaning people at present use the character 壓 [*yā*]; this is a case of different usage in antiquity and at present." The character "壓" is from "土" *tǔ* "earth" with "厭" as phonetic; in the *Shuōwén* it is defined as "bad"; now it has been simplified to "压".) In traditional ancient texts "厭" is borrowed for "猒". Later a "食" *shí* "eat" was added to "厭" producing the differentiated graph "饜" to express the original meaning of "猒". For the senses "weary of" and "bored" the character "厭" was borrowed.

陝: 狹. In the *Shuōwén* "陝" *xiá* is defined as "narrow" and is analyzed as "comprised of 阜 *fù* 'mound' with 夾 *jiā* as phonetic." (e.g., *Ěryǎ* 5.23: 陝而脩曲曰樓 "Structures which while narrow are [long =] broad and [winding =] irregular are called *lóu*." In the Yínquèshān bamboo text of *Sūnzǐ* "廣狹" *guǎng xiá* "broad and narrow" is written "廣陝". In ancient texts "陝" has an allograph "陜". (Note that "陝" and the "陝" of "陝西" *Shǎnxī* are different graphs; "陝" has as its phonetic "夾" *shǎn* "hide a stolen object.") In most received ancient texts "狹" (an allograph of "狎" *xiá* "be improperly familiar") has already been borrowed to write "陝". (In the *Yùpiān* under the entry for "狎", "狹" is given as a variant writing with a note that it was used in the sense of "narrow" at that time.)

剏: 創. In the *Shuōwén* "剏" is defined as "to create." "It is comprised of 井 *jǐng* 'well' with 办 *chuāng* as phonetic." This is the orthograph for "創" *chuàng* "to create." The form "剏" is a later corrupted variant. The character "創" is comprised of "刀" *dāo* "knife" with "倉" *cāng* "granary" as phonetic. (The *Shuōwén* treats "創" as a younger variant of "办"). In traditional ancient texts "創" has already been borrowed to write "剏". (The character "剏" is seen in Western Zhou bronzes where it represents the ancient place name {荊} Jīng in "荊楚" Jīngchǔ "alternate name of the ancient state of Chǔ"; whether or not the original sense of "剏" is "create" is still unresolved).

毬: 球. The orthograph for "球" *qiú* "ball" is "毬". In antiquity a ball was called {鞠} *jú*; later its pronunciation became {毬} *qiú*. The character "毬" was not in the original *Shuōwén* but is included in the newly appended

characters in Xú Xuàn's edition (see Dīng 1928:2773). "球" is composed of "玉" *yù* "jade" with "求" *qiú* as phonetic; this graph originally referred to a kind of fine jade, e.g., *Shūjīng*, "Yǔgòng," 厥貢惟球, 琳, 琅玕 "Its tribute consists of *qiú*, *lín*, and *lánggān* stones." The borrowing of "球" to write "毬" occurred very late. This usage is still not found in the *Kāngxī zìdiǎn*. At present "毬" has been consolidated under "球".

Some loangraphs, after a longer or shorter period of being used simultaneously with their orthographs, fell out of use. Below are several fairly well-known examples.

冊: 策. According to the *Shuōwén*, the original meaning of "策" *cè* was "a horse whip," e.g., *Lǐjì*, "Qūlǐ" A: 君車將駕, 則僕執策立於馬前 "When the ruler's chariot is about to be harnessed, a servant stands in front of the horses holding a whip." In ancient times "策" was often borrowed to write "冊" *cè* "register, book" (e.g., *Yílǐ*, "Pìnlǐ": 百名以上書於策 "More than one hundred names are written on a register." In ancient texts the word {冊} in expressions such as "冊命" *cèmìng* "a recorded charge" and "簡冊" *jiǎncè* "books" is often written as "策"). At present, "策" cannot in general be used for "冊"; only when writing certain ancient terms such as "簡冊" *jiǎncè* and "遣冊" *qiǎncè* "a list of funerary items buried with the dead" can "策" be used.

飛: 蜚. According to the *Shuōwén* the original meaning of "蜚" *fěi* was a kind of insect (e.g., *Zuǒzhuàn*, Yǐn 1: 有蜚不爲災 "There were insects, but they did not constitute a plague"). In ancient times "蜚" was often borrowed to write "飛" *fēi* "to fly" (e.g., *Hánfēizǐ*, "Wàichǔ shuō," *zuǒ* A: 墨子爲木鳶, 三年而成, 蜚一日而敗 "Mòzǐ made a wooden eagle; it was finished in three years but flew one day and failed." In Han dynasty sources the use of "蜚" as a loangraph for "飛" is especially common). At present it is generally not permissible to use "蜚" for "飛"; only in a few set phrases like "流言蜚語" "rumors and slander" and "蜚聲海內" "renowned throughout the country" is "蜚" still substituted for "飛".

眉: 麋. In ancient times "麋" *mí* "a kind of deer" was frequently used as a loangraph for "眉" *méi* "eyebrow" (e.g., *Xúnzǐ*, "Fēixiàng": 伊尹之狀, 面無須麋 "As for Yī Yǐn's appearance, he had neither beard nor eyebrows on his face." On Qín bamboo slips, "麋" is also found as a loangraph for "眉"). This loangraph usage of "麋" is no longer found.

There are loangraphs possessing orthographs that are not only no longer used, but that appear only rarely even in ancient texts. For example, in *Zhōulǐ*, "Chūnguān, chàngrén" there is a phrase 廟用脩 "In the temple one uses a *yòu*-vessel." Zhèng Xuǎn says that the character "脩" (ordinarily read *xiū*) should be read like "卣" *yòu* "a kind of wine container" in this passage. The use of "脩" as a loangraph in this way is very rare. In

Sec. 7.1.2 in discussing "栗" we have already pointed out that "卣" and "鹵" were originally allographs of a single character; therefore the use of "卣" in the sense of a "wine container" is already a loangraph usage. In the ancient script there is a character "盧" formed with "皿" "container"; this is the orthograph for the word {卣} used in the meaning of a wine container.

Why should a loangraph be used for a word that already has an orthograph? The reasons are complex.

Some loangraphs for which orthographs exist are in nature no different from modern *biézì* 別字, that is, erroneous homophonous characters. Examples of rare loangraphs like "脩" cited above probably belong to this category. The commentator Zhèng Xuǎn is quoted as saying concerning some characters in use in transmitted texts: 其始書之也, 倉卒無其字, 或以音類比方, 假借爲之, 趣於近之而已 "When someone first wrote them, he was hurried, and there being no proper graph, he sometimes wrote the word with a loangraph based on similarity of sound with only the intention of being close [to the actual sound]" (*Jīngdiǎn shìwén, xùlù*). Zhèng Xuǎn here is referring to cases of this kind. Even some loangraphs that were widely used and eventually replaced their orthographs, are probably sometimes this sort of erroneous homophonous character. As time passed these erroneous forms were used more and more and their status changed.

Some loangraphs that originally had orthographs have the effect of dispersing the lexical loads of the graphs. For example, above we referred to the fact that "何" is the orthograph for "荷" *hè* "to carry." The reason that "荷" was borrowed to write the original meaning of "何" was probably to allow the graph "何" to be used as a loangraph to represent the high frequency interrogative pronoun {何} *hé* "what, why, etc." In Sec. 11.1.2, when the dispersal of the lexical loads of graphs is discussed, this phenomenon will be explained more fully.

The use of loangraphs to disperse the lexical loads of characters is often clearly for the purpose of allowing graphs to express their pronunciation better. The use of "閑" to express the extended meaning of "leisure" of "閒" and the borrowing of "荼" to express the extended meaning of "smear" of "塗" are both examples of this. These two graphs were discussed previously (for the second example, see Sec. 8.7.1). In Sec. 4 of this chapter, when we speak of the relationship between loangraphs and pronunciation, we will return to this phenomenon.

Some loangraphs are differentiated forms based on an original orthograph; an example of this is the character "糾" which is a loangraph for "丩" and is also a derived character based on "丩". The reason this sort of loangraph is used is in order to consolidate graphs that people saw no need to differentiate. In Sec. 11.2 when we discuss character consolidation, we will explain this phenomenon more fully.

Sometimes loangraphs which have orthographs are used in order to simplify graphic form. In the modern simplified script, the use of "斗" *dǒu* "a peck measure" for "鬥" *dòu* "struggle" is an example of this. This state of affairs is often encountered in so-called popular characters (俗字). Examples are the use of "只" *zhǐ* "only" for "隻" *zhī* "measure word," "參" *shēn* "name of a constellation" for "葠" *shēn* "ginseng," "姜" *jiāng* "a surname" for "薑" *jiāng* "ginger," "灵" *líng*, originally "small heat" according to the *Guǎngyùn*, for "靈" *líng* "spirit" (in the *Zhèngzì tōng*, "灵" is said to be a popular form of "靈"; in the modern simplified script "灵" has replaced "靈"). Further examples are: "杰" for "傑" *jié* "hero"; in antiquity "杰", which is homophonous with "傑", was mostly used in personal names (see *Yùpiān*) and in both the *Guǎngyùn* and *Kāngxī zìdiǎn* it is considered a popular form of "傑"; "勾" *gōu* "hook" for "夠" *gòu* "enough" (as seen in Ming drama scripts, etc.); "吊" *diào* "hang" for "掉" *diào* "fall" (as seen in Liú È's [1903] *Lǎocán yóujī* 老殘游記, etc.). Some popular characters of this kind have been in continuous use down to the present day, and in the 1950s in the process of character reform were made the official forms; this is the case with the first five characters discussed above. Some others, after a period of use, lost their currency. This happened with the last two examples given above. The borrowing of "球" to write "毬" may also have been for the purpose of simplification since the component "玉" is easier to write than "毛" (see Sūn 1956:389). The borrowing of "球" to write "毬" was once considered to be a vulgarism.

Another motive for the use of loangraphs is the desire to avoid the confusion of graphic form; to this end characters with a greater number of strokes may be consciously borrowed to write certain words. Examples of this is the borrowing of "四" *sì* "four" to write "三" and "員" *yuán* "round" to write "〇"; both of these cases were mentioned in Sec. 7.1.1. At present the complex forms for numerals, which already have a long history, are all loangraphs. (The original meanings of some of these loangraphs are semantically linked to the original numerical characters they substitute for; this will be discussed in the following sections of this chapter. The situation with the character "柒" "seven" is a bit special. In the Han dynasty, the complex form for "七" *qī* "seven" was "黍"; later "漆" was used; "柒" originally was an allograph of "漆", but at present "柒" and "漆" are distinct characters, the former being used exclusively to write the complex form of the numeral "seven" and the latter used only to write "漆" *qī* "lacquer.") In ancient times some units of measure also had complex forms; in the Han dynasty, for example, "尊" was used for "寸" *cùn* "inch" (see the "Shāng Yāng *liàng*" inscription and the *Rìshū* discovered among the Qín bamboo slips found at Shuìhǔdì). During the Tang dynasty "觔" (in origin an allograph of "筋" *jīn* "sinew") was used for "斤" *jīn* "catty"; in addition "碩" was used for "石" *dàn* "a dry measure" and

"勝" was used for "升" *shēng* "dry quart." The complex form of "斗" *dǒu* "peck measure" was often written with an added phonetic element: "斛". The use of "觔" to write "斤" continued down to pre-modern times. The use of "元" *yuán* as a monetary unit in late imperial history was originally based on the fact that silver currency was round. The orthograph for "元" used as a unit of currency is "圓" *yuán* "round"; "元" is a loangraph serving as a simpler form. At present "圓" is the complex form for "元"; this is a special case of a complex form actually being the orthograph. (Some people consider "元" used as a monetary unit to be a contraction of "元寶" *yúanbǎo* "shoe-shaped gold or silver ingots once used as money in China"; if this etymology is accepted, then "圓" is a loangraph.)

The borrowing of "草", "策", "蜚", and "棐", to write "艸", "冊", "飛", and "眉", respectively, may be related to a psychology that preferred phonograms to semantographs (especially non-syssemantic semantographs). The graphic component "艸" in the character "草" is actually the orthograph for "草". The graphic component "竹" used to write "策" has a clear semantic relationship to the word {冊} for which "策" is borrowed as a loangraph. The meaning of "虫" *huǐ* "insect" used as a graphic component of "蜚" *fěi* can, with some stretching of the imagination, be considered as having semantic links to {飛} (since many insects can fly). These are some reasons for which people may have preferred these loangraphs. In Sec. 10.2 we will discuss this phenomenon from the point of view of homography.

In addition there are other special reasons why in some cases loangraphs were used for words having orthographs. For example, prior to the Republican period "邱" *qiū* "mound" was used in order to avoid the taboo on using the character "丘" which was the personal name of Confucius; for similar reasons "元" was substituted for "玄" to avoid the taboo on the personal name of the Kāngxī emperor: 玄燁 Xuányè. Sometimes loangraphs were used because of other taboos. For example, "used clothing" was originally called "故衣" *gùyī*; but in traditional China stores that sold used clothing wrote this word as "估 (still pronounced *gù*) 衣". This was undoubtedly because "故" had the meaning "deceased" and "故衣" would cause people to think of clothing of the dead. Beginning in the Ming dynasty, fearing that the character "元" in expressions like "元來" *yuánlái* "originally" and "元由" *yuányóu* "reason" would be misunderstood as referring to the Yuan (元) dynasty, the character "原" *yuán* was substituted (see the following section of this chapter). This can also be viewed as the use of a loangraph to avoid a taboo. Occasionally people used loangraphs in order to appear more elegant. For example, *Shījīng* Ode 164 "常棣" *chángdì* "a kind of tree" speaks of the friendship that should exist between older and younger brothers; consequently "常棣" came to be an allusion to brotherly relations. In early Chinese the characters " 棣" and "弟" *dì*

"younger brother" differed only in that one was in the rising tone and the other was in the departing tone; later they became completely homophonous. In ancient poetry "棣" sometimes refers to "弟" (with "棣" ordinarily still read in its original tonal category). In later times, when people referred to a younger brother in a letter, "棣" was directly used as a loangraph for "弟"; for example, the expression "賢弟" *xiándì* "worthy younger brother" would be written "賢棣". In origin, this was for the purpose of sounding more elegant; in actuality it ended up as a common cliché.

At any rate, there were numerous reasons why loangraphs were used for words having their own orthographs. In the case of a small number of loangraphs having original orthographs, additional orthographs were created later. This is the case for "厭" borrowed for "猒" for which later the new orthograph "饜" was coined. In Sec. 8.1 we mentioned the loangraph "服" *fú* "quiver"; originally there was an orthograph 箙 (箙), but later a new orthograph "箙" was created. In Sec. 8.7.1 we mentioned the loangraph "荼" as in 荼粉 *cháfěn* "to apply (powder)" for the already existing orthograph "塗", for which "to apply (powder)" was a semantic extension; later an additional orthograph "搽" was created.

For loangraphs and orthographs in which one is not embedded in the other, as is the case with "艸" and "草" or "胃" and "謂", if we lack historical data concerning the circumstances of their use, it is very difficult to determine which one of the two was used first. For example, in ancient texts the character "疲" *pí* "tired" and its loangraph "罷" are both frequently seen. It is difficult to determine whether the use of "罷" to represent the word {疲} preceded or postdated the use of "疲" (it would appear that the use of "疲" was later, but we lack solid evidence). In ancient texts the word {早} *zǎo* "early" is often represented by "蚤" *zǎo* "flea," a loangraph. In the past "早" was considered to be a pre-existing orthograph. However, in the Qín and Western Han bamboo slips and silk manuscripts now available, the word {早} is generally written with the loangraph "蚤" or occasionally by the loangraph "棗" *zǎo* "jujube" but never with the character "早". Therefore we must reconsider earlier opinions concerning the character "早". (In the Western Zhou "Yǔ *guǐ*" bronze inscription there is a character 𣪊 which is generally explained as "早", but in the inscription it is used as a place name. It is still problematic whether "早" is actually the orthograph for the word {早}. Perhaps "早" is a loangraph with respect to the word {早} and may in fact be a later usage than "蚤". In the inscription on the great tripod unearthed at Píngshān from the tomb of a Warring States period king of Zhōngshān, {早} is written "𣪊." This is a completely authentic orthograph, but it is probably a younger orthograph created by adding the component "日" to the loangraph "棗".) Since it is often difficult to determine the temporal sequence of the appearance of orthographs, sometimes it is best not to try to distinguish between pre-existing and

younger orthographs, and simply to be satisfied with the more general designation "a loangraph possessing an orthograph."

In Sec. 6.2 we have already stated that a borrowed graph (通假字) is a homophonous or nearly homophonous graph borrowed to write an already existing graph. Therefore, a loangraph already possessing an orthograph is a typical case of graphic borrowing. Loangraphs for which an orthograph was created later, in the period before the younger orthograph was created, are loangraphs lacking an orthograph. After the creation of the orthograph, if the loangraph continues to be used, it may be viewed as a borrowed graph. But since it is difficult to determine the precise date of the appearance of younger orthographs, it is sometimes hard to distinguish the two cases just alluded to above. Therefore, some people do not use the notion of temporal sequence and consider loangraphs which have only younger orthographs also to be borrowed graphs.

To treat those loangraphs which were seldom used or were generally unknown younger orthographs as borrowed graphs is illogical. If one wishes to characterize such characters accurately, then they can be referred to as loangraphs having younger orthographs not in common use.

9.2 Cases in which the Meaning of the Borrowed Character and the Loangraph Meaning are Related

In previous sections, we have already referred to some cases of this type; for example, the borrowing of "糾 to represent {丩}, the borrowing of "函" to write {含}, and the borrowing of "卿" (饗) or "鄉" to represent {向} (see Sec. 7.2). Below a few more examples will be discussed.

The borrowing of "衷" to write {中}. In the *Shuōwén*, "衷" is defined as "'an inner garment'; comprised of 衣 *yī* 'garment' with 中 *zhōng* 'middle, interior' as phonetic." The original meaning of "衷" was a kind of undergarment and was probably a semantic extension of "中". In ancient texts when the word {中} has a psychological or moral meaning, "衷" is often used to represent this word. For example, in the *Guóyǔ*, "Zhōuyǔ" A, there is the line 國之將興, 其君齊明衷正 "When a country is about to arise, its ruler is totally enlightened and upright" (in Wéi Zhāo's commentary "衷" is defined as "中"). In *Zuǒzhuàn*, Zhāo 6, there is the line 楚辟我衷 "Chǔ is perverse but we are upright." Dù Yù's commentary says 辟邪也, 衷正也 "*pì* means 'perverse' and *zhōng* means 'upright.'" Even at present "衷" is preserved in certain words and phrases such as "折衷" *zhézhōng* "compromise" (also written "折中"), "衷心" *zhōngxīn* "heartfelt" and "言不由衷" "speak insincerely." The "衷" in such contexts clearly does not express a semantic extension of the original meaning of "衷" but is an extension of the original meaning of "中"; or to put it another way, it is borrowed to

express the word {中}. This is similar to the borrowing of "糾" for writing "丩".

The borrowing of "畔" to write {叛}. In the *Shuōwén* "畔" is defined as "'the boundary of a field'; comprised of 田 *tián* 'field' with 半 *bàn* 'half' as phonetic." A field boundary divides a field into sections; hence, "畔" must be cognate to {判} *pàn* "divide into sections" and may be derived from {判}. In ancient texts "畔" is often used for {叛} *pàn* "revolt" (e.g., *Lúnyǔ* 17.5 公山弗擾以費畔 "Gōngshān Fúrǎo held Bì in a state of rebellion"; *Mèngzǐ* 4.1 親戚畔之 "One's relatives revolt against him"). The character "叛" was probably derived from "畔" by altering the semantic component. The *Jīngdiǎn shìwén* on the line in *Zuǒzhuàn*, Zhuāng 18, 初, 楚武王克權, 使鬬緡尹之, 以叛 "Initially, when King Wǔ of Chǔ defeated the state of Quán, he sent Dòu Mín to serve as governor and he used [his position there] to revolt" has "畔" for "叛" and says "the text originally had 叛 but this is a vulgarism." The *Shuōwén* analyzes "叛" as "comprised of 半 with 反 as phonetic"; it would be more accurate to say that it is comprised of "反" with "半" as phonetic. The basic meaning of {叛} is to "cause divisions, to rebel" and is probably derived from {判}. This is supported by a line in the *Zhèngyì* commentary to *Zuǒzhuàn*, Xiāng 26 叛者, 判也. 欲分君之地以從他國, 故以叛爲名焉 "To revolt is to cause division; it is to divide the territory of the ruler in order to subordinate it to another state; therefore it is called 叛." Thus {畔} and {判} should be cognates; "畔" when used to represent the word {判} ought to be a loangraph whose original meaning and loangraph meaning are related (some think that {叛} and {反} *fǎn* "reverse" are cognates and not cognate with "畔" ; the characters "畔" and "叛" can be studied further).

The borrowing of "說" to write {悅} and {脫}. The character "說" in the first line of the *Lúnyǔ*, 子曰: 學而時習之, 不亦說乎 "The Master said, 'To learn [something] and at the proper time put it into practice, is this not a pleasure?'" is to be read like "悅" *yuè* "be pleased." Anyone who has studied the ancient literature knows this. The use of "說" *shuō* "explain" for "悅" is in fact very common in ancient texts. The character "悅" is derived from "說" by a change of semantic component. The original sense of {說} was "to explain in words"; see *Mòzǐ*, "Jīngshàng," where it says 說所以明也 "To explain is the means by which something is made clear." The word {悅} referred to a relaxation of pent-up feelings; the relationship of {說} and {悅} is parallel to that between {釋} *shì* "explain" and {懌} *yì* "pleased, happy" (see Wáng Niànsūn's *Guǎngyǎ shūzhèng* under the entry 怠, 愉, 兌, 解, 說也). The words {說} and {悅} are clearly cognates. In ancient texts "說" is also often used to write {脫} *tuō* "be liberated from" (*Yìjīng*, Hex 4, "Méng": 用說桎梏 "and thereby remove the shackles"; Gān Bǎo's commentary defines "脫" as "解" *jiě* "to release." In *Shījīng* Ode 264 the line 女覆說之 "On the contrary release them," is cited in the biography of Wáng Fú in the *Hòu Hànshū* as 汝反脫之. In the *Shuōwén* "挩" is defined as "to release"; "挩" is the orthograph for "脫" in the sense of "be liberated." According to the *Shuōwén* the original meaning of "脫" is "emaciated"). The words {說} and {脫} are also clearly cognates. The three words {說}, {悅}, and {脫} are all part of an etymon denoting "release" or "liberate." Perhaps all three words were originally written "兌" *duì* "exchange," but there does not seem to be a relationship of semantic extension among them. From the point of view of graphic structure, "說" with "言" as its semantic component must have been created to write the word {說}. The borrowing of "說" to write {悅} and {脫} is similar to the borrowing of "畔" to write {叛}.

The borrowing of "原" to write {元}. The pronunciations of "原" *yuán* "source" and "元" *yuán* "beginning" are the same and their meanings are close. The original meaning of "元" was "a human head" (see Sec. 7.1.2). The meanings of {首} *shǒu* "head" and {頭} *tóu* "head" both have the extended meaning of "beginning" and "first (in rank)"; the meaning of {元} was likewise extended to "beginning" and "primary." The character "原" is the protoform of "源" *yuán* "spring, source" (see Sec. 7.1.5.2). From the meaning of "spring (of water)" developed the meaning of "origin," very close to the extended meaning of "元". In his *Chūnqiū fánlù*, "Zhòngzhèng," Dǒng Zhòngshū says 是以春秋變一謂之元, 元猶原也 "Thus the Chūnqiū alters 一 *yī* 'one' and calls it 元; 元 is like 原." This is a case of using "原" as a sound gloss for "元". For {原} "origin" ancient texts originally used "元"; this is a semantic extension of "元". At the beginning of the Ming dynasty, fearing that "元" would be confused with the name of the preceding Yuan {元} dynasty, it was replaced with "原" (cf. Gù Yánwǔ, *Rì zhī lù, juàn* 23, under the entry "元". Hǎo Yìxíng [1816] in his *Jìn Sòng shūgù* under the entry "元由" says: "元 means 'beginning'; 由 means 'sprout.' When speaking about the origin of an event, we sometimes say 元起, sometimes 元來, sometimes 元舊; nowadays people write 原 in all these cases. . . . This presumably began in the previous Ming dynasty and concerns the affairs of the dynasty; in all kinds of writing 元 was changed to 原"). This use of "原" for "元" can be considered a case of a loangraph related to the meaning of the original character. However, since the meaning of "原" was extremely close to "元" which it replaced, even if we do not consider it to be a loangraph the meanings of the relevant phrases would not be misconstrued. At present it is impossible to decide whether {原} and {元} are etymologically related.

Several of the complex characters used to write numerals that were discussed in the previous section are loangraphs whose loangraph meanings are related to the original meanings of the borrowed graphs; for example, the *Shuōwén* defines "壹" (complex character for "一" *yī* "one") as "exclusive, concentrated"; "貳" (the complex character for "二" *èr* "two")

is defined by the *Shuōwén* as "'secondary, increase'; comprised of 貝 with 弍 as phonetic; 弍 is an ancient script form of 二"; "參" (the complex character for "三" *sān* "three") was originally written "𢆶" and was the name of a constellation (pronounced *shēn* in this sense). The constellation of this name is comprised of three bright stars, hence its name (e.g., *Shījīng* Ode 118.1: 三星在天 "three stars are in the sky"; according to the Máo commentary "三星" refers to the constellation *Shēn*). The complex character "伍" for "五" *wǔ* "five" originally meant a detachment of five men (cf. *Zhōulǐ*, "Dìguān, Xiǎo sītú": 五人爲伍 "five men constitute a five-man unit"); likewise the complex form "佰" for "百" *bǎi* "hundred" was in origin a group of one hundred men (cf. *Shuōwén*). The complex character "仟" for *qiān* "thousand" is defined in the *Guǎngyùn* as "the leader of a thousand men."

The situation wherein a loangraph and the word for which it is borrowed have a semantic relationship was in many cases probably unintentional. We have already referred to this problem in Chapter 2. There must also have been cases where the borrowing of a semantically related character in order to write a certain word (generally a word for which there was already an orthograph) was intentional. For example, the borrowing of "說" in ancient times to write {悅} and {脫} instead of using a character closer in sound may have been because {說}, {悅} and {脫} were cognates. The borrowing of "原" for "元" in the Ming dynasty was probably because the meanings of these two words were close. Moreover, cases like the borrowing of "糾" for "丩" whereby a differentiated form expressing an extended meaning took over all the functions of a matrigraph probably was motivated by a desire to consolidate characters. This was mentioned in the preceding section.

For those who are unaware of the relationship of the loangraph meaning and the original meaning of the character for which it is borrowed in the cases discussed above, this type of loangraph is no different from ordinary loangraphs. For example, the average person would not notice the semantic link between {畔} and {叛}; therefore, they would not feel that borrowing "畔" to write {叛} was different from any other loangraph.

There are some loangraphs whose loangraph meaning is clearly related to the meaning of the graph for which it is borrowed, especially those for which the orthograph has been eliminated, which are generally viewed as orthographs; this is the case for "原" in the word "原來" and for the "糾" in "糾纏" *jiūchán* "be entangled" (the component "糸" of "糾" also has a connection with the loangraph meaning).

One can also observe cases where people mistakenly take a homophonous or nearly homophonous character to be the orthograph of a certain word and then use the erroneous character in place of the true orthograph. This sort of error generally occurs in disyllabic words. A good example is

the word "利害" *lìhài* "terrible, severe"; nowadays many people write "厲害" for this word. The word "利害" originally connoted both "benefit and harm"; its meaning was extended to "serious" (matters that entail benefit and harm are generally considered serious). Later a further semantic extension yielded "terrible, severe." The average person feels that the meaning "利" "benefit, profit" is unrelated to "terrible" or "severe"; hence they substitute "厲" *lì* "strict, severe" for "利"; such people clearly view "厲" as the orthograph (some do not even know that the word can also be written "利害"). Other examples of this kind are the writing of "年輕" *niánqīng* "youthful" as "年青", "交代" *jiāodài* "explain" as "交待", "流連" *liúlián* "linger" as "留連", "照相" *zhàoxiàng* "take a photo" as "照像", etc. (In some dialects "相" and "像" have different pronunciations; in such dialect areas, people would not miswrite "照相" as "照像".) Such alternate ways of writing these words were earlier considered to be the erroneous use of homophonic characters, but at present most of them are recognized by dictionaries. We can call the use of "厲" in "厲害" and "青" in "年青" popular orthographs. Some monosyllabic words also have popular forms. For example, the "望" in "望東" *wàngdōng* "eastward" and "望西" *wàngxī* "westward" is now often written "往" *wǎng*. Moreover, many people read this character which should be in the departing tone as a rising tone according to the basic tone of the character "往". This amply demonstrates that they consider "往" to be the orthograph (in the *Pǔtōnghuà yìdúcí shěnyīnbiǎo* published in December of 1985, "往" is to be read *wǎng* in all cases; this recognizes the popular pronunciation as official). Another example is the {坑} in the word "坑害" *kēnghài* "entrap"; originally this syllable was written "傾" and was a semantic extension of "傾" with a variant pronunciation. Beginning in the Ming dynasty many people began to write this word with "坑" (see Lǐ Róng 1980:18–19). At present very few people know that this word can be written with "傾"; this may be because they have mistakenly taken "坑" as the orthograph.

9.3 Cases in which Several Characters are Borrowed to Write One Word and Cases Where a Single Character is Borrowed to Write Several Words

The situation wherein a single word uses two or more loangraphs (or, in the case of disyllabic or polysyllabic words, two or more sets of loangraphs) is frequent. Sometimes between different characters used to express the same word there is a clear relationship of succession. Some examples are given below.

女: 汝. The second person pronoun {汝} *rǔ* was first expressed by "女" *nǚ* "woman." (In the pre-Han source materials written in ancient script

this is always the case. There are also examples of the use of "女" in the received texts, e.g., *Hànshū*, "Wàiqī zhuàn," B: 女自知之 "You yourself know it," about which Yán Shīgǔ says, "女 is read like 汝".) Later "汝" *rǔ* "the name of a river" was borrowed to write this word. In the received pre-Han texts the use of "汝" as a loangraph for the second person pronoun seems due to alteration by later editors. In the Han Stone Classics of Xīpíng and in the Tri-script Wei dynasty Stone Classics, the second person pronoun {汝} is always written "女". The line in *Shūjīng*, "Yáodiǎn": 汝陟帝位 "You ascend the emperor's throne" is written 女登帝位 in the *Shǐjì*. In the same section of the *Shūjīng*, the line 汝作秩宗 "You be the regulator of the ancestral [temple]" is written with "女" in place of "汝" in Zhèng Xuǎn's commentary to the *Zhōulǐ*, "Chūnguān, xùguān." Similar examples are numerous.

皮: 彼. The demonstrative {彼} *bǐ* "that" was initially written with the loangraph "皮", as for example, in the line 丞皮淖淵 (= 蒸彼淖淵) "Magnificent is that miry abyss" in the Stone Drum inscriptions. Later the loangraph "彼", which the *Shuōwén* defines as "往有所加" "to go where there is something to (hit >) shoot"(?), replaces "皮". (In the Mǎwángduī silk manuscript of *Lǎozǐ*, version B, there is the line 故去彼而取此 "Thus he rejects that and takes this" [after Henricks 1989:210–211]) in the "Dàojīng" section. In the Mǎwángduī silk manuscripts {彼} is also often written "罷"; in the A version of Lǎozǐ, {彼} is also written "罷", "皮", or "彼"; in the B version {彼} is written "罷" or "彼".

可: 何. The interrogative {何} *hé* "what" was first written with the loangraph "可" *kě* which the *Shuōwén* defines as "肯" *kěn* "permissible." (The Stone Drum Inscriptions have the line 其魚隹可 (= 其魚惟何) "What are its fishes?"; "可" is also borrowed to write "何" in the Qín bamboo slips.) Later the orthograph for {荷} *hè* "to carry," "何", was borrowed to write this word (in the B version of the Mǎwángduī *Lǎozǐ*, "Déjīng" there is the line: 夫何故也 "Now, why is that so?" (after Henricks 1989:122–123).

顚: 願. The word {願} *yuàn* "desire, aspiration" was originally mostly written with the loangraph "**顚**" which the *Shuōwén* defines as "top of the head." In the Han dynasty people often wrote this word with the characters "**顓**" (see, for example, the Han bamboo slips from Yínquèshān), "**顛**" or "**顫**" (the last two occur in Han inscriptions). In the Southern and Northern Dynasties and Tang periods, these graphs were further simplified to "**顛**". The character "願" which is defined by the *Shuōwén* as "large head" was already used in the Han dynasty to write {願} (see, for example, the bamboo slips from the Han tomb no. 40 in Dìng County reported in *WW* 1981.9, slip no. 94). However, the use of this graph does not seem to be widespread. After the Six Dynasties period the use of "願" became common. By the Song dynasty the character "**顛**" was probably no longer used and only "願" was used.

Sometimes different loangraphs for a single word show no clear relationship of succession.

祇 (秖): 只. In ancient times the loangraph "**祇**", a graphic variant of "緹" *tí* "pale crimson," was used to write the adverb of extent {只} *zhǐ* "only" (e.g., *Shījīng* Ode 188.3: 亦祇以異 "you only have erred"); the character "只", defined by the *Shuōwén* as a grammatical particle, also served as a loangraph for this word (e.g., in reference to *Shìshuō xīnyǔ*, "Rèndàn": 襄陽羅友有大韻 "Luó Yǒu of Xiāngyáng had great poise and bearing," the commentary quotes the "Jìnyáng qiū" 晉陽秋: 我只見汝送人作郡 "I have only seen you dispatch people to serve as officials in the prefectures." The character "**祇**" was also written "秖" (see *Gānlù zìshū*). In traditional texts these characters are often written mistakenly as "**祗**" and "**秖**". Other erroneous forms are "祇" and "**祗**". (Qián Dàxīn did not consider "祇" to be erroneous but viewed "**祇**" as a Six Dynasties vulgar form; see his *Shíjiàzhāi yǎngxīn lù, juàn* 1, under the entry "祇". The *Yùpiān* has the character "秖" with the definition "grain newly ripe"; some hold that this character was borrowed to write {只}.) In the past "只" and the erroneous variant "**祇**" were both used, but following the simplification of the script, only "只" is now used. (According to the *Guǎngyùn*, "只" and "**祇**" in the sense of "only" are read in the level tone; "只" as a grammatical particle is read in the rising tone; nowadays the rising tone reading has also been adopted for the meaning "only.")

纔: 裁: 財: 才. For the word {才} *cái* "only, then" the character "**纔**" (defined in the *Shuōwén* as "a kind of silk the color of a sparrow's head") was sometimes borrowed (see *Hànshū*, "Cháo Cuò zhuàn" [Zhōnghuá ed. p. 2285]: 遠縣纔至則胡又已去 "By the time [the troops sent to] the distant prefectures have barely arrived, the Hú tribesmen will already have left again." Yán Shīgǔ's commentary defines "**纔**" as "shallow," like saying "just arrived,"). At other times the character "裁", defined in the *Shuōwén* as "to make clothing," was borrowed (in the "Gāo Huì Gāo Hòu Wéngōng chén biǎo" of the *Hànshū* there is the line 裁什二三 "only two or three out of ten" for which the commentary says "裁" is the same as "**纔**"). In the same source, in the preface to the biographies of Wáng Jí, Gòng Yǔ, Gōng Shèng, Gōng Shě, and Bào Xuān, there appears the line "裁日閱數人 "In only a day he examined several people" (*Hànshū*, Zhōnghuá ed, p. 3056), about which the commentary says "裁" is the same as "才". In some texts "財", defined by the *Shuōwén* as "that which people treasure," is borrowed (e.g., the biography of Dù Zhōu and Sūn Qīn in the *Hànshū* has the line 高廣財二寸 "was only two inches in height and width"; the commentary says "財 is the same as **纔**, they were interchangeable in antiquity"). In the same source (p. 2699) in the biography of Lǐ Guǎnglì, there is the line 士財有數千 "As for the soldiers there were only

several thousand"; the commentary says "財 is the same as 才." Sometimes "才", whose original meaning is unclear, is borrowed; in the biography of Wú Zhì and Wú Zhǔ in the *Sānguó zhì*, a line from Gān Bǎo's *Jìn jì* is quoted by the commentator Péi Sōngzhī: 眾才七千 "In the host were only seven thousand men." The *Shuōwén* defines "才" as "the beginning of grass and trees." According to this explanation {才} meaning "only" is a semantic extension of "才". However, in the bone script "才" is written ↓; this clearly does not resemble the new growth of grass and trees; hence, the *Shuōwén*'s explanation is unacceptable. In the Qín bamboo slips from Shuìhǔdì and in the "Wǔshíèr bìng fāng" found at Mǎwángduī, "毚" is borrowed to write {才}; this way of writing {才} is not found in the received texts. In recent centuries both "纔" and "才" have been used; in the modern simplified script only "才" is used.

猗儺: 猗那: 阿那. The word {婀娜} *ēnuó* "graceful" (earlier read *ěnuǒ*, a riming binome in Old Chinese) was sometimes written with the loangraphs "猗" *yī* (defined in the *Shuōwén* as "a castrated dog") and "儺" *nuó* (according to the *Shuōwén* "walk with measured steps"); e.g., *Shījīng* Ode 148 猗儺其枝 "graceful are its branches." Sometimes "那" *nuó* ("a country of Western Yí" according to the *Shuōwén*) was borrowed; e.g., *Huáinánzǐ*, "Xiūwù": 今鼓舞者 . . . 扶於猗那 "As for the drum dance . . . bends are done gracefully." The character "阿" *ē* (defined as a "large hill" by the *Shuōwén*) was borrowed and used together with "那"; e.g., Zhāng Héng's "Nándū fù" (*Wénxuǎn, juàn* 4): 阿那蓊茸 "graceful and luxuriant" and the poem of Lù Jī "Nǐ qīngqīng hé biān cǎo" (*Wénxuǎn* 30): 皎皎彼姝女, 阿那當軒織 "So lustrous is that beautiful girl, as she gracefully weaves by the window." At other times the first character is "猗" or "阿" and the second character is "儺" or "那". In *Shījīng* Ode 228, in the lines 隰桑有阿, 其葉有難 "The mulberry trees of the wetlands are graceful, their leaves are elegant"; here the binome {婀娜}, which seems to be split, uses "難" as the second character. (Some scholars believe that the individual syllables of the binome were first used independently and only later joined in the form {猗儺}. The writing "婀娜" consists of younger orthographs. At present the expression exists only in the written texts, and the writing "婀娜" has become standard.

猶豫: 猶預: 猶與: 由豫: 由與. In the *Shuōwén* "猶" *yóu* is defined as "a kind of large [female] ape" and "豫" is defined as "a large elephant." Taken together these two characters were borrowed to write the word {猶豫} *yóuyù* "to hesitate" (e.g., *Chǔcí*, "Lísāo": 欲從靈氛之吉占兮, 心猶豫而狐疑 "I wanted to follow Líng Fēn's auspicious oracle, but I faltered and could not make up my mind" [after Hawkes 1959:31]). This word is also written "猶預" (e.g., *Shǐjì*, biography of Lǔ Zhònglián [Zhōnghuá ed. p. 2460]: 平原君猶預未有所決 "Lord Píngyuán hesitated and had not yet made up his mind"). Another variant is "猶與" (e.g., *Lǐjì*, "Qǔlǐ" A: 卜筮者 . . . 所以使民決嫌疑定猶與也 "By divining with shells and stalks . . . [they] made the people solve their problems and settle their uncertainties," about which the *Jīngdiǎn shìwén* says "與 is pronounced like 預 [*yù*], originally it was also written 豫"). In the *Lǚshì chūnqiū*, "Lùnwēi," it is written "由豫"; commenting on 心無有慮 "There is no worry in the heart," Gāo Yòu glosses it as meaning 無有由預之慮 "free of the anxieties accompanying indecision." Another form is "由與" (e.g., *Lǚshì chūnqiū*, "Xiàxián": 就就乎, about which Gāo Yòu comments, "就就 is read like the 由 of 由與"; Bì Yuán in his commentary here says "由與 is the same as 猶豫"). For the first syllable either "猶" or "由" is borrowed; for the second syllable "豫", "預", or "與" are borrowed. At present only "猶豫" is used.

Many foreign transcriptions have employed different loangraphs. For example, around the time of the Han dynasty there was a northern nomadic ethnic group referred to as the "丁零" Dīnglíng (see *Hànshū*, "Xiōngnú *zhuàn*," A). This ancient ethnonym is written a number of different ways in ancient sources: "丁靈" (*Shǐjì*, "Xiōngnú *zhuàn*"), "丁令" (*Hànshū*, "Xiōngnú *juàn*," A), "釘靈" (*Shānhǎi jīng*, "Hǎinèi jīng"). Between the Sui and Yuan dynasties Taiwan was referred to as "流求" Liúqiú. In various ancient sources this name is written as "流虯", "留仇", "留求", "琉求", and "瑠求". In more recent times a number of transcriptions have become standardized only gradually; examples of this are the various ways of transcribing Marx: before becoming standardized as "馬克思" *Mǎkèsī*, it was written "馬克斯" and "馬克司" (phonetically more deviant transcriptions like "馬格斯" *Mǎgésī*, "馬爾格時" *Mǎěrgéshí* and "麥喀士" *Mǎikāshì* were also found).

Among the loangraphs used to write a word lacking an orthograph there is generally one character (or, in the case of disyllabic or polysyllabic words a set of characters) with which people are more familiar. In such cases, these less familiar loangraphs are often viewed as borrowings used to write the more familiar loangraphs, just like those borrowed graphs which in actuality are loangraphs for words having their own orthographs. Loangraphs used in this fashion can be called quasi-orthographs. In addition to cases where a single word is written with different loangraphs, there are also cases where a single character is used as a loangraph for different words. Below we will cite two examples.

匪. "匪" is the protoform for "篚" *fěi* "a kind of basket" (e.g., *Zhōulǐ*, "Chūnguān, sìshì": 共設匪瓮之禮 "[He] prepares and arranges the ritual offerings in baskets and jars"). The *Shuōwén* has a character "篚" defined as a "cart screen (used to fend off wind and dust)"; this appears to be a homograph of "篚" "cart screen"). In ancient texts, "匪" has several other loangraph uses as illustrated below.

1. Used to write the negative {匪} with the same function as {非} *fēi* "marker of nominal negation," e.g., *Shījīng* Ode 58: 匪來貿絲, 來即我謀 "It was not that you came to barter silk, your coming was for the purpose of approaching me"; according to the commentary of Zhèng Xuǎn, "匪" has the same meaning as "非".

2. Used to write the demonstrative {匪} with the same function as {彼} *bǐ* "that," e.g., *Shījīng* Ode 195: 如匪行邁謀, 是用不得于道 "They are like those wayfarers who consult and thus make not progress on the road." This line is quoted in the *Zuǒzhuàn*, Xiāng 18, where the commentator Dù Yù says that "匪" has the same meaning as "彼".

3. Borrowed to write "斐" *fěi* "elegant," e.g., *Shījīng* Ode 55: 有匪君子 "there is an elegant lord." This line is quoted in the *Lǐjì*, "Dàxué," where "匪" is written "斐".

4. Borrowed for "分" *fēn* "divide" or "𠬜" *bān* "distribute (work)," e.g, *Zhōulǐ*, "Dìguān, lǐnrén": 掌九穀之數, 以待國之匪頒, 賜賜, 稍食 "[He] is in charge of keeping accounts of the nine grains so as to anticipate the country's disbursements, subsidies for relief and emoluments, and government consumption." According to the commentary of Zhèng Xuǎn, "匪 is read like 分." In Old Chinese "匪" and "分" differ in that one ends in a nasal and the other in a non-nasal. Some people think that this "匪" is a loangraph for "𠬜"; in the *Shuōwén* "𠬜" is defined as "'to distribute work', read like 頒 *bān* 'distribute'; another source says it is read like 非." According to the *Yùpiān* and the *Jíyùn*, "𠬜" is read as a homophone of either "頒" or "匪".

5. Reduplicated, "匪" may be borrowed for "騑騑" *fēifēi* "run without stopping," e.g., *Lǐjì*, "Shǎoyì": 車馬之美, 匪匪翼翼 "The beauty of the chariots and horses is in their unceasing movement and well-ordered advance." In commenting on this passage, Zhèng Xuǎn cites *Shījīng* Ode 162 where "騑騑" is taken to mean "run without stopping" in the Máo commentary.

These various loangraph uses of "匪" for the most part no longer exist. Only the use of "匪" as a negative persists in a few literary expressions still current: 匪夷所思 "fantastic, unimaginably strange," 獲益匪淺 "obtained no small benefit." The use of "匪" in the sense of "bandit" can be viewed as an extension of "匪" used as a negative; "匪" in this sense must derive from "匪人", that is, "a person in the wrong."

干. According to the *Shuōwén* the basic meaning of the character "干" *gān* is "to encroach" or "to offend"; the *Shuōwén* entry is "𠂆, 'to encroach'; comprised of an inverted 入 *rù* 'enter' and 一 *yī* 'one'." The "干" in the words "干求" *gànqiú* "request" and "干涉" *gānshè* "interfere" are probably semantic extensions of this basic meaning. In ancient texts and Han inscriptions, "干" has the following loangraph uses.

1. Used for {干} *gān* "shield," e.g., *Shījīng* Ode 250: 干戈戚揚 "Displayed shields and dagger-axes" (Zhèng Xuǎn defines "干" as "shield" in this passage). The *Fāngyán* says that "East of the Pass, some call [a shield] 干." In Sec. 4.4, in discussing the character "戎", we pointed out that it originally resembled the graph 𠙵, which has the shape of a shield. This graph may have been homophonous with "干" and was the orthograph for "干" in the meaning "shield." The *Shuōwén* contains the character "戟" which is defined as "shield"; this must be a later graph. (In ancient times "干" was also borrowed to write {扞} *hàn* "defend"; this must be a semantic extension of "干" in the sense of "shield"; "扞" then is a differentiated form which expresses an extended meaning of "干" when it is used as a loangraph for {干} "shield.")

2. Used to write {干} meaning "bank" or "shore," e.g., *Shījīng* Ode 112: 寘之河之干兮 "Place it on the bank of the river"; in the Máo commentary "干" is explained as "bank" (涯).

3. Used to write {干} meaning "creek, stream in a ravine," e.g., *Shījīng* Ode 189: 秩秩斯干 "Pure is this stream"; in the Máo commentary "干" is explained as "creek, stream" (澗).

4. Borrowed to write "豻" *án* "a kind of wild dog," e.g., *Yílǐ*, "Dàshè": 大候九十, 參七十, 干五十 "The great target is set up at ninety strides, that with leopard and deer decor is set up at seventy strides, and that made of wild dog skin is set up at fifty strides"; Zhèng Xuǎn's commentary states that "候 *hóu* is a piece of cloth at which arrows are shot. . . . 干 is read like 豻. As to the *án* target (豻侯), it is a target made with wild dog (豻) decor." The term 豻鵠 *ángǔ* refers to a target made from the skin of a wild dog.

5. Borrowed to write "乾" *gān* "dry" (in the present-day simplified script "干" is regularly used for *gān* "dry"), e.g., *Zhuāngzǐ*, "Tián Zǐfàng": 老聃新沐, 方將被髮而乾 "Lǎo Dān had just washed his hair and was about to let down his hair and dry off." In the text on which the *Jīngdiǎn shìwén* relied, "乾" was written "干". (Some believe that "乾" is itself a loangraph used for the word {乾} *gān* "dry".)

6. Used to write {杆} *gān* "flagpole," e.g., *Shījīng* Ode 53: 孑孑干旄 "Prominent is the oxtail banner with its pole (干首)"; the Máo commentary says "When an oxtail is attached to the top of a pole, it is the standard of a grandee." In ancient times {杆} was written "竿". In the *Zuǒzhuàn* Dìng 9, the above verse is quoted with "竿" instead of "干". Therefore some maintain that "干" is a loangraph for "竿"; however, the character "竿" is clearly a later way of writing {杆} than is "干". (It is also possible that "干" is the orthograph for {杆}; see below).

7. Used for {干} *gān* "the Heavenly Stems." The expression "干支" takes its origin from "幹" *gàn* "trunk of a tree" (written "干" in the modern simplified script) and "枝" *zhī* "branch." (The "Heavenly Stems," [more

properly called the "Heavenly Trunks"—tr.] are basic like the trunk of a tree, and the "Earthly Branches" are subsidiary, like the branches of a tree. The character "幹" was originally written "榦".) The *Guǎngyǎ*, "Shì tiān" says, "甲 *jiǎ* and 乙 *yǐ* are trunks; trunks are sun deities. 寅 *yín* and 卯 *mǎo* are branches; branches are moon spirits." Thus "干" in the sense of "Heavenly Trunk" is a loangraph used to write a semantic extension of "幹" *gàn* "trunk." (In the sense of Heavenly Trunk" the character "干" is read in the level tone, whereas "幹" is a departing tone word; it is frequently the case that the basic sense of a word and a semantic extension based on it have different tones; however, it is also possible that "干" in the sense of "Heavenly Trunk" was originally a departing tone word and only later became level tone.

8. Borrowed to write "幹" *gàn* "title of a petty official" (at present written "干" in the simplified script). Beginning in the Eastern Han, "干" was often borrowed to write "幹" in the sense of a "petty official"; on the reverse side of the "Zhèng Jìxuān *bēi*" inscription there is "直事干" "administrative official" and on the reverse side of the "Sīmǎ Zhèng *bēi*" inscription there is 諸曹干十三人 "the various section administrative officials, number thirteen persons." This sort of official (幹吏) was so called because he was in charge of affairs. The idea of being in charge comes from the fact that the trunk of a tree (幹) is the chief part of a tree; hence "幹" "to be in charge" must be a semantic extension of "幹" in its basic sense of "tree trunk." In Han bamboo slips "干" is also borrowed to write the "幹" in the expression "箭幹" *jiàn'gàn* "arrow shaft." It would appear that "干" could in fact be borrowed to express most of the meanings of "幹" in ancient times.

9. Used in the expression "丹干" *dān'gān*, e.g., in *Xúnzǐ*, "Wáng zhì," "丹干" is mentioned in parallel with "曾青" *céngqīng* (= 銅之精 "copper ore," according to Yáng Jīng's commentary); in the same source ("Zhènglùn" section) this expression is also written "丹矸"; "丹干" may be an alternate name for cinnabar (see Yáng Jīng's commentary).

10. Used in the expression "若干" *ruògān* "several," e.g., *Hànshū*, "Shíhuòzhì," B (Zhōnghuá ed., p. 1154): 或用輕錢, 百加若干 "Some use light coins, so an appropriate amount is added per hundred"; Yán Shīgǔ's commentary to this passage says, "若干 refers to establishing a quantity; 干 is used like 箇 *gè* [now written '個' or '个' in the simplified script]; so 若干 refers to an appropriate amount'."

11. Used to write the second syllable in the word {闌干} "crisscross."

In addition to the examples given above, "干" also has a number of other loangraph uses which we will not discuss individually.

Our discussion of "干" here is based on the definition found in the *Shuōwén*. However, the *Shuōwén* explanation of the graphic shape of "干" is a bit farfetched; its contention that "encroach" or "offend" is the basic meaning of the graph is probably wrong. In the bone script, the graph "  " (read *yǎn* in the *Guǎngyùn*), which depicts a flag, is written  ; the graph  (干) may depict a flagpole. If this is in fact the case, then the loangraph meaning in item number 6 above would really be the graph's basic meaning and "encroach" would be a loangraph meaning. However, the character "干" became a sign graph very early so the question of its basic meaning is actually not too important.

In the modern simplified script "干" has replaced both "乾" "dry" and "幹" (which itself already had replaced "榦"). Therefore, although many of the ancient loangraph uses of "干" no longer exist, nonetheless among the Chinese graphs still in use, it still has a relatively large number of loangraph uses.

9.4 Loangraphs and Phonology

The pronunciation of a loangraph (that is, the original pronunciation of the loangraph) and the pronunciation of the word for which it is borrowed are not necessarily identical but may be merely close. Therefore, the pronunciation of a character taken in its basic meaning and its pronunciation when used as a loangraph are often different. Sometimes a character may have two or more pronunciations which are different from its pronunciation when it is used in its basic meaning; the pronunciations of different loangraph uses may also be different from one another. Below a few examples of this phenomenon will be given. For the sake of convenience we will use the pronunciations the graphs have in the standard language. The character "夫" in its basic sense of "man" is read *fū;* but when borrowed to write a grammatical particle in Classical Chinese, it is read *fú* (this difference, although now a difference of tone, was in Old Chinese a difference of voicing in the initial). The character "女" in its basic sense of "woman" is read *nǚ*, but when borrowed to write the second person pronoun {汝}, it is read *rǔ*. The basic pronunciation of "干" is *gān* but when it is borrowed to write "幹" it is read *gàn* and when borrowed to write "豻", it is read *án*.

Just as in the case of the difference in pronunciation of a phonetic component and the graph in which it occurs, the pronunciation of a graph in its basic sense and its pronunciation in a loangraph usage, even though they may not have been identical initially, were at least close in sound; the rather clear differences between the two at present are generally caused by later phonological change. For example, in modern pronunciation the difference in pronunciation between "女" and "汝" is considerable; in rime table phonology "女" has the initial *ní* 泥 (MC n-) and "汝" has the initial *rì* 日 (MC ńź-). However in Old Chinese these two initials were

exceedingly close to one another (some would even say that they were identical). Therefore, at that time "女" could be borrowed to write {汝}. In some cases we can see that the pronunciation of a graph used as a loangraph and its pronunciation when used in its original sense were originally the same but later became different. For example, in ancient texts "麋" is often borrowed to write "眉" (see Sec. 1 of this chapter); sometimes "麋" was also borrowed to write "湄" "edge (of a stream)," e.g., *Shījīng* Ode 198: 居河之麋 "situated on the edge of the Yellow River." According to Middle Chinese rimebooks all three of these characters have the same *fǎnqiè* spelling (武悲切 MC ˌmji), but in the current standard language "麋" is read *mí* and "眉" and "湄" are read *méi*; thus "麋" has different pronunciations in its basic and loangraph uses. In the 1979 edition of *Cíhǎi*, "麋" is read *mí* even when used as a loangraph for "眉" or "湄"; this is an error.

Sometimes the use of loangraphs can reduce the phenomenon of a single graph having multiple readings and in this way allow the writing system to reflect pronunciation better. For example, after a character develops an extended meaning associated with a different pronunciation, if a separate derived character is not created, sometimes a character homophonous with this extended meaning is borrowed to write it. In Sec. 1 of this chapter, when we discussed loangraphs having their own original orthographs, we mentioned the borrowing of "閑" to write an extended meaning of "閒" and the borrowing of "荼" to write an extended meaning of "塗". In Sec. 2, in discussing popular forms of characters, we gave the example of "坑" for "傾" in the expression "傾害". All of these examples have the effect of reducing the number of graphs with multiple readings. Above we pointed out that the initial consonants of "女" and "汝" were originally very close but that later because of phonological change they became distinctly different. The borrowing of "汝" to write the second person pronoun earlier written with "女" is also an example of allowing writing to represent the sounds of the language better through the rise of loangraphs. In Sec. 11.1.2 we will encounter further examples of this in our discussion of graphic differentiation.

Sometimes one of the syllables of a polysyllabic word undergoes a change in pronunciation for one reason or another; sometimes, in actuality, this happens due to the retention of a more ancient pronunciation. In such situations, a character which reflects the actual pronunciation is borrowed to substitute for the character which has undergone change. For example, people write the "家" of "張家 (*ge*) 莊" and "龐家 (*ge*) 莊" as "各" because the latter character expresses the actual sound better; similarly, the "化" of "叫化子" *jiàhuāzi* "beggar" is rewritten as "花" *huā*; and the "糜" (also written 糜) of "木糜肉" *mùxiròu* "pork shreds stir fried with scrambled eggs and fungus" and "木糜湯" *mùxitāng* "soup made from

pork shreds, eggs and fungus" as "須" (concerning "木須", see Lǐ Róng 1965:117).

On the question of how to pronounce loangraphs there is another disputed problem; it is the problem of whether borrowed characters should be read like the orthographs they represent. For example, there is a character which originally has pronunciation A; now it is borrowed to write a character with pronunciation B. Must the borrowed character be read like B or should it preserve its original reading A? Logically this should not be a problem. The pronunciation of a graph should reflect the pronunciation of the word it represents. A borrowed graph is used to represent the sound of the word whose orthograph it is used for. The pronunciation of such a borrowed graph should be identical with the orthograph for which it is borrowed. A borrowed character whose pronunciation is different from that of the orthograph for which it substitutes must be read like the character in place of which it is used. However, there are in fact many people who believe that a loangraph does not necessarily have to be read like the orthograph it represents. An example of this is the character "麋" which was borrowed to write "眉" and "湄" which, as mentioned above, the *Cíhǎi* still reads *mí*. Borrowed characters belong to the category of graphic interchange. In Sec. 12.2 we will devote a small section of the chapter to the question of the pronunciation of borrowed characters. In order to avoid repetition, we will not go more deeply into the question of whether borrowed characters should be read like their orthographs at this point.

9.5 Several Errors Concerning Loangraphs in the Study of Texts

Some erroneous tendencies found in textual study are related to mistaken notions about the phenomenon of loangraphs. Below we will briefly discuss several important issues encountered in the study of lexical meaning and in the interpretation of ancient texts.

9.5.1 Mistaken Tendencies in the Study of Lexical Meaning

There are two critical issues in this area.

9.5.1.1 Strained Explanations of Loangraph Meanings as Semantic Extensions

Loangraphs are ready-made graphs which themselves have meanings; therefore it is easy for people to mistake the polysemy caused by the fact that a character can have several meanings as being due to semantic extension. The founder of the study of writing in China, Xǔ Shèn, confuses these two notions; he often misinterprets what we call the loangraph phenomenon as semantic extension. For example, the character "來" *lái* which originally meant "wheat" is used to write {來} *lái* "come"; this is

clearly a case of the loangraph phenomenon and has nothing to do with semantic extension. Xǔ Shèn, however, gives the following explanation "Wheat (*lái*) is the auspicious wheat and grain received by the Zhōu. . . . It is caused to come by Heaven; thus it used for *lái* meaning 'come.'" Another example is "韋" *wéi* which is the protoform of "違" *wéi* (see Sec. 7.1.5.2); the original meaning is "to be separated" and it has an extended sense of "violate, go against" (in the *Shuōwén* "be separated" is given as the basic meaning of "違" and "go against" as the basic meaning of "韋", but this is an error). The use of "韋" to write {韋} *wéi* "rawhide" is also clearly a case of the loangraph phenomenon; nevertheless, Xǔ Shèn explains "韋" as follows: 相背也 . . . 獸皮之韋可以束枉戾相韋背, 故借以爲皮韋 "*Wéi* 'to go against' . . . it is borrowed to write *wéi* 'rawhide' because the skin of wild animals can be used to tie up topsy-turvy things that give resistance." This definition of how "韋" "rawhide" gets its name is clearly without foundation.

Xǔ Shèn's habit of misinterpreting loangraph usage as a type of semantic extension had a great influence on later students of the script. Duàn Yùcái's commentary frequently makes errors of this sort. For example, in his commentary he holds that "莫" which originally meant "dusk" (the protoform of "暮" *mù*) "has as a semantic extension the meaning of "無" *wú* 'not have.'" Here he, without any basis, takes the negative {莫} *mò* "no one" as a semantic extension of {暮} *mù* "dusk." Concerning "格" *gé*, Duàn says "The basic sense of 格 is the appearance of a tree growing; in an extended sense when something grows, it has a destination to arrive at; therefore [*Ěryǎ*] 'Shìgǔ' says 格 means to arrive." But in fact "格" in the sense of arrive is a loangraph borrowed to write "各" (see Sec. 7.1.5.2) and is totally unrelated to the "appearance of a tree growing."

Even at present, some write articles stating things like the reason that "須" *xū* "beard" can be used to write "須" *xū* "necessary, obligatory" is because in the minds of the people in antiquity "beards" were *necessary* for young men; or the reason that the "蚤" in 跳蚤 *tiáozǎo* "flea" can be used to write the "蚤" in 蚤 (早) 晚 *zǎowǎn* "morning and evening" is that in ancient times sanitation was undeveloped and fleas and lice being rampant, people upon arising in the morning had to catch and kill them, giving rise to the habit over time of calling the early part of the day "蚤時" *zǎoshí* "flea time." This goes far beyond what even the ancients said.

In studying lexical meaning it is best to be reserved in cases where it is difficult to determine whether a certain graphic usage is a case of semantic extension or a loangraph phenomenon. It is preferable to pass over some cases of semantic extension rather than to commit the error of misconstruing loangraphs as cases of semantic extension. We ought to strive to study linguistic phenomena objectively and avoid "creating" linguistic phenomena.

We should like to add, however, that in the study of lexical meaning, there is an erroneous approach just the opposite of the approach described above; this is, in an attempt to be overly profound, to insist that the basic meaning or extended meaning of a graph is actually a loangraph usage. For example, {張} *zhāng* in the sense of "sheet of paper" is clearly derived from {張} in the sense of "to spread out." Not only is "張" the measure word for "紙" *zhǐ* "paper," it is also a measure for other things that can be opened out. However, some people insist that the orthograph for "張" "sheet of paper" is "箋" *qián* "a screen used in making paper" ("張" and "箋" belong to different rime categories in Old Chinese and would thus be phonologically incompatible in a loangraph relationship). This kind of self-defeating approach should be carefully avoided.

9.5.1.2 Confusion of Cognate Relationship with Loangraph Relationship

Some loangraphs lack an orthograph and others, although they have an orthograph, it has been forgotten. Therefore, it is impossible or very difficult to find orthographs for some loangraphs. Some Qing time scholars of the script, when they were unable to find a true orthograph for a loangraph, would look for a character close in sound and meaning to fill in for the orthograph. For example, Duàn Yùcái's commentary to the *Shuōwén* considers "所" *suǒ* in the sense of "place" to be a loangraph for "處" *chù* "place" (the character "所" is comprised of "斤" *jīn* "ax" with "戶" *hù* "door" as phonetic; according to the *Shuōwén* its original meaning was "the sound of chopping a tree"). Zhū Jùnshēng viewed the negative "莫" as a loangraph for "𢍏" (無); Zhū's explanation of "所" was the same as that of Duàn Yùcái. This sort of searching for orthographs is clearly not reasonable.

Some might wish to ask if the situation of "所" and "處" and "莫" and "無" are not comparable to that of "閑" and "閒" discussed above; "閑" is used as a loangraph to write a phonologically altered semantic extension of "閒". That is to say, is it not possible that "所" *suǒ* "place" was borrowed to write a phonologically altered semantic extension of "處" *chù* "place"? And is it not possible that "莫" *mò* "no one" was borrowed to write a phonologically altered semantic extension of "無" "not have"? Such possibilities cannot be excluded, but even so, in order to avoid misunderstanding, one ought to say that "所" is borrowed to write a semantic extension of "處" and "莫" is borrowed to write a semantic extension of "𢍏" (無). This is all the more desirable since this is an unproven conjecture. If one thinks that {所} and {處} and the negatives {莫} and {無} are etymologically related, then this is no more than a hypothesis that may be studied. On the other hand, to say that "所" is a loangraph for "處" and that "莫" is a loangraph for "𢍏" is arbitrary and unreasonable.

Zhū Jùnshēng's *Shuōwén jiězì tōngxùn dìngshēng* sometimes gives two orthographs for a loangraph. For example, under the entry for "庸" *yōng*

it says that in the sense of "commonplace, mediocre" "庸" is a loangraph for both "中" and "眾". This is even more unreasonable. The word {庸} *yōng* "commonplace, mediocre" is probably even etymologically unrelated to {中} and {眾}.

The erroneous tendencies on the part of the Qing dynasty scholars mentioned above have been very influential among later scholars of the script. In current works on language and the script, one can still encounter such claims as that "爾" *ěr* "you" is a loangraph for "你" *nǐ* "you" and that "豆" *dòu* "bean" is a loangraph for "菽" *shú* "bean." There can be no doubt that the second person pronoun {爾} is etymologically very closely connected to {你}. Likewise {菽} and {豆} have a similar relationship (in Old Chinese the pronunciations of "菽" and "豆" were closer than at present). However, because of differences between the literary and spoken language or other reasons these words became differentiated at an early date; therefore we cannot simply say that "爾" is a loangraph for "你" and that "豆" is a loangraph for "菽". If one wishes to explain the relationship between {豆} in the sense of "bean" and {菽} and the relationship between {爾} in the sense of "you" and {你}, then one should use linguistic terms rather than the term "loangraph" which properly belongs to the study of the script.

In addition, we find other explanations that are even more unreasonable than the few explanations cited above. Some people, for example, have claimed that "身" *shēn* "body" is the orthograph for the first person pronoun "朕" *zhèn*, when in fact "身" and "朕" were very different in pronunciation in Old Chinese ("身" belongs to the "眞" *zhēn* rime group and "朕" to the 侵 *qīn* rime group; their initials are also different). Not only is it not possible for "身" to be the orthograph of "朕", the two words {身} and {朕} are not even necessarily related etymologically. Someone has said that "跋扈" *báhù* "domineering" is a loangraph writing of "暴橫" *bàohèng* "violent." Although there are examples of {暴} and {橫} being used together in ancient texts, they did not form an actual compound; {跋扈}, on the other hand, is an inseparable binome; the two forms are quite different. From the point of view of Old Chinese, "扈" and "橫" belong to closely related rime groups differing only by having nasal and oral endings; "跋" and "暴", on the other hand, belong to quite different rime groups (in Old Chinese "跋" belongs to the 月 *yuè* rime group and "暴" to the 宵 *xiāo* rime group). From the point of view of the script "暴橫" and "跋扈" cannot possibly have a loangraph relationship; moreover, linguistically, they cannot possibly be related etymologically either.

Zhū Jùnshēng has been criticized for saying that "匄" (丐) *gài* "beg" is the orthograph for "乞" *qǐ* "request, beg"; it is claimed, on the other hand, that "祈" *qí* "supplicate" is the orthograph of "乞". In reality, from the point of view of the loangraph phenomenon, to say that "乞" is borrowed for "祈" or that "乞" is borrowed for "丐" is equally without foundation. From the point of view of etymology it is difficult to say which alternative is better. Arguments of this sort only serve to confuse beginning students of the script.

Beginning in the Qing dynasty, many people engaged in trying to find orthographs for dialect and vernacular words. There is no need to speak of cases where these attempts have been erroneous; even in cases where the results have been more successful, the characters identified as orthographs frequently are not true loangraphs but mostly are merely characters with an etymological link.

Ancient scholars of course knew nothing of modern linguistics and were unable to make a clear distinction between the loangraph phenomenon and etymology; this is naturally excusable. But people at the present time should not follow in the footsteps of these earlier scholars (the situation of earlier scholars is not uniform: Wáng Niànsūn, for example, was more insightful in this regard than were Duàn Yùcái and Zhū Jùnshēng—see Sec. 12.2.3 concerning the relationship between "農" and "努").

In recent years, many dialectologists have insisted on strict phonological correspondences in searching for loangraphs and have, in large measure, corrected earlier erroneous tendencies. This is very praiseworthy. Unfortunately, there are still people pursuing antiquated approaches.

9.5.2 Erroneous Tendencies in the Explication of Ancient Texts

There are two major erroneous tendencies that are found in the explication of ancient texts.

9.5.2.1 Explaining Borrowed Graphs as if They were Ordinary Graphs

Ancient texts contain many borrowed graphs; under "borrowed graph," we include those quasi-orthographs mentioned in Sec. 3 of this chapter. If such borrowed graphs are treated like ordinary graphs, then one will either not be able to make sense of ancient texts or will misunderstand them. Rare borrowed graphs which have the nature of erroneous homophonic characters are frequently not entered in dictionaries. Some borrowed graphs which were current for a time in antiquity but then fell out of use at an early date are often unrecognized by later scholars. Borrowed graphs of this type create many difficulties for people reading ancient texts.

The level of Qing dynasty scholarship on the reading of ancient texts greatly surpassed that of earlier times. One aspect of this was that Qing scholars were able to find orthographs for many borrowed graphs in ancient texts which had not been correctly understood. Many examples of this are found in Wáng Niànsūn's (1832) *Dúshū zázhì* and his son Wáng Yǐnzhī's (1797) *Jīngyì shūwén*; we will not give illustrations here. Below,

we will explain the importance of correctly understanding borrowed graphs based on a problem encountered in our work on the bamboo manuscripts from the Han tomb at Yínquèshān.

In the *Qí Sūnzǐ* (*Sūn Bīn bīngfǎ*) found in a Han tomb at Yínquèshān, in the section called "Wēi wáng wèn," there is the term "篡卒" (see Wénwù Press 1985, "Shìwén-Zhùshì section," p. 51). From the context we could see that the term referred to "crack troops" capable of "cutting off the ranks and capturing the general." At first we believed that "篡" *cuàn* had its original meaning and defined it in the following way: "篡, to take by force; 篡卒 *cuànzú* refers to agile and fierce troops capable of snatching away the standard and beheading the general." Later, following hints found in other material on bamboo slips from the same tomb, we realized the "篡" must be a borrowed graph for "選" *xuǎn* "select" (e.g., for *Yànzǐ chūnqiū* 3.20: 選賢進能 "select the worthy and advance the capable," the Yínquèshān bamboo texts have "篡" in place of "選" in this line); "選" and "算" have similar pronunciations and there are examples of their interchanging in ancient texts (e.g., the line in *Lúnyǔ* 何足算哉 "How are they worthy of being taken into account?" is quoted in the *Yántiělùn* as 何足選哉). The character "[redacted]" is derived from "食" *shí* "eat" and "算" as phonetic and is also written "饌". The character "選" appears three times on slip no. 43 in the *Yìlǐ*, "Tèxìng" text written on bamboo slips discovered in a Han tomb at Wǔwēi County, Gānsù, where all present editions of this text have "[redacted]" (see Wénwù Press 1964). The character "篡" has "算" as its phonetic; so its phonetic element could also interchange with "選". The phrase "選卒" means "select" or "crack troops"; this phrase occurs repeatedly in ancient texts: *Zhànguó cè* "Qícè 1": 其良士選卒亦殪 "Its best officers and crack troops may be eradicated"; *Lǚshì chūnqiū*, "Àilèi": 非必堅甲利兵, 選卒練士也 "It is not that strong armor and crack troops or select soldiers and well-trained officers are necessary." In retrospect, our original overly literal interpretation appears rather silly.

Students just undertaking the study of Classical Chinese of course are not qualified to identify borrowed graphs not found in standard lexical sources. However, such students must make an effort to master those borrowed graphs that are explained in lexical sources, especially the more commonly used ones; otherwise, they will never be able to learn Classical Chinese well. In the "Kǎogǔ yǔ wénwù" (Archaeology and Cultural Relics) supplement no. 94 to the *Guāngmíng rìbào*, a newly discovered article written in Classical Chinese by Lǔ Xùn was published, titled "會稽禹廟窆石考" "A Note on the Buried Stone at the Yǔ Temple at Guìjī." In it there are two sentences that should be punctuated thus:

> 豈以無有圭角, 似出天然, 故以爲瑞石與? 晉宋時不測所從來, 乃以爲石船, 宋元又謂之窆石, 至於今不改矣. Might it be that since it lacked shaped edges and appeared to be natural that it was thus thought to be an auspicious stone? During the Jin and Song periods, its origin was not questioned, so it was thought to be a stone boat. During the Song and Yuan periods it was also called *biǎnshí* "buried stone" and has continued to be called such to this day.

However, when the article was published, the last character of the first sentence (與) was made the first character of the second sentence, making the sense of the two lines difficult to understand. The character "與" *yǔ* "and" should be read like "歟" *yú* "interrogative particle." The use of "與" for "歟" is part of a person's basic knowledge about Classical Chinese, but the editor of this article was apparently unaware of this and so concluded the first sentence after "瑞石". This example illustrates the importance of a good knowledge of commonly used borrowed graphs.

9.5.2.2 Indiscriminate Use of Borrowed Graphs in Explicating Texts

Originally, the discussion of graphic borrowing by Qing scholars was a good thing. But once the fashion began, it led to abuses. Some people, without fully taking note of the actual circumstances in which graphic borrowing occurs in ancient texts, and without diligently studying the contents of their texts, have recourse to graphic borrowing in a very reckless way. They frequently interpret graphs as borrowed graphs which in fact are not borrowed graphs, and when they encounter a genuine case of graphic borrowing, the orthograph they identify is almost always wrong. Because of the large numbers of homophones and near homophones in Chinese, as well as several other reasons, it is sometimes indeed very difficult to find orthographs for borrowed characters. Even scholars with a serious attitude and broad learning will often unavoidably make mistakes.

Generally speaking only characters with the same or close pronunciation can be borrowed to write another character. But a lot of people who are fond of resorting to the principles of "alliteration and riming" (雙聲疊韻) or "what rimes can be borrowed" (疊韻通假), believe that if two characters have the same or close initials or finals then they can be borrowed for each other; even if some other phonological element is quite different, it does not matter. In this way the scope of graphic borrowing scarcely has any limits. When ancient writers used borrowed graphs, they based themselves on contemporary pronunciation. One of the chief reasons that Wáng Niànsūn and other Qing scholars were able to go beyond the work of previous scholars in explication of graphic borrowing was that they understood pre-Han phonology. Nowadays some people speak of graphic borrowing in ancient texts on the basis of their own pronunciation, regarding characters that had very different pronunciations in ancient times as

homophones or as near homophones that can be written in place of one another. These problems concerning the role of phonology in the area of graphic borrowing have increased the possibility of making mistakes when speaking of graphic borrowing.

The confused treatment of graphic borrowing alluded to above has not only continued right down to the present, it has a tendency to become ever more widespread. If we carefully examine books and articles on Classical Chinese published in the last twenty or thirty years, we can see the seriousness of the problem. Below we cite two examples of false analysis, one from an article and the other from a book.

In an article concerning graphic borrowing, the author states that in the phrase 唯不幸死而伐棺槨者 appearing in the "Qín lǜ (tián lǜ)" found in the Han tomb at Shuìhǔdì, the character "伐" is a loangraph for "乏". In actuality "伐棺槨" means "to chop wood for making inner and outer coffins" (hence, "Only in instances of a misfortunate death does one chop wood for making a coffin and its outer covering"). In *Shījīng* Ode 158 the expression "伐柯" means "to chop wood for an ax handle" (in the Máo commentary "柯" is defined as "ax handle"). In *Shījīng* Ode 112 the expressions "伐輻" and "伐輪" mean "to chop wood to make wheel spokes," and "to chop wood to make wheels," respectively. These examples are analogous to "伐棺槨". There is no need to change "伐". Moreover, in Old Chinese "伐" belonged to the 月 *yuè* rime group whereas "乏" belonged to the 葉 *yè* rime group; their final consonants were different. From the point of view of phonology, it is very problematic to consider "伐" a loan for "乏".

In *Hánfēizǐ*, "Wàichǔ shuō," *zuǒxià*, there is the following passage:

> 管仲父 . . . 庭有陳鼎, 家有三歸. 孔子曰: "良大夫也, 其侈偪上." 孫叔敖相楚, 棧車牝馬, 糲餅 [an error for "飯"] 菜羹 . . . 面有饑色, 則良大夫也, 其儉偪下. In Guǎn Zhòngfù's . . . courtyard tripods were displayed and his family had the "three-returns" income. Confucius said, "He was a good official but his extravagance brought pressure on his superior." On the other hand, when Sūnshū Áo served as prime minister of Chǔ, he rode in a low and degrading cart drawn by mares; he ate coarse rice and thick vegetable broth . . . and his face had a famished look. He was a good official whose thrift brought pressure on those below him.

In the same book, in the "Yáng Quán" section there is the phrase: 毋貴人而逼焉 ("Do not while placing others in high esteem, be intimidated by them"). Chén Qíyóu (1974) in his *Hánfēizǐ jíshì* in his note 84 on page 140 says,

> 逼 and 偪 are the same; 偪 must be a homophonous loangraph for 匹. The meaning is that Zhōng's extravagance is comparable to that of the ruler and the frugality of Sūnshū Áo is comparable to that of a lowly person. If one understands 偪 as 迫 *pò* "compel, threaten," then how could Sun's frugality threaten those below him? This would make no sense. The phrase 毋貴人而逼焉 means "do not honor ministers as if they were comparable to rulers." In the section "Shuōyí piān" there is the passage 無尊嬖臣而匹上卿, 無尊大臣以擬其主 "do not revere favored ministers and compare them to high officers; do not revere great ministers and make them like their lords." This has an identical sense. Giving 偪 the sense of "comparable" or "make like" we can demonstrate that 偪 is a loangraph for 匹."

Hóng Chéng (1979:364) in his article "Notes on Textual Interpretation," criticizes Chén's views:

> Chén, because he misunderstands the principles of textual analysis, makes a subjective and strained interpretation. His note [as cited above] contains three errors. 1) In Old Chinese 偪 belonged to the 職 rime group and had 滂 as its initial; 匹 belonged to the 質 rime group and had the initial 滂; the two characters were neither homophones nor did they belong to the same rime group. 2) Whether one uses 偪 or 匹, both have their proper meanings which are unrelated to one another. How can one be so presumptuous as to revise texts on behalf of ancient writers? Both 匹 and 擬 are used in reference to equals or superiors; I have not seen them used in reference to inferiors. To change 偪下 to 匹下 is not in accordance with the original meaning. The expression 偪下 means "to pressure one's inferiors, to make them feel uncomfortable because they are unable to match the frugality of Sūnshū Áo." Why is this so hard to understand? . . .

Hóng Chéng's argument is very much to the point. It is regrettable that in present-day publications erroneous explanations involving graphic borrowing are as numerous as the hairs on an ox. Unfortunately, criticism like that of Hóng Chéng cited here is rare.

Dǒng Tónghé in the introduction to his translation of Bernhard Karlgren's (1964) *Glosses on the Book of Odes*, pointed out that Karlgren was very rigorous and careful concerning the question of loangraphs. He says:

> Karlgren does not treat loangraphs lightly. When some earlier person says that such and such a character is a loan for some other character, he without fail uses current knowledge about Old Chinese phonology to see whether they are in fact homophonous (both the initial and final taken into account). If they are homophonous, he determines whether or not there are other reliable similar examples in

> ancient texts. However, even when the characters are completely homophonous and there exist other examples, if the passage can be explained on the basis of the original graph, he still will not claim that the graph in question is a loangraph. More than once he has criticized Mǎ Ruìchén [1782–1849] for rashly saying some character is a loangraph. In his opinion Chinese has an abundance of homophonous characters; if we use graphic borrowing indiscriminately, we can easily use our own subjective notions to explain any line of verse. This is an inappropriate way of doing things.

Karlgren's method in some ways goes too far, but his rigorous and careful attitude is something that we can emulate.

Both the lack of understanding and the misuse of graphic borrowing are bad, but of the two, the misuse of the principle of graphic borrowing is more likely to mislead beginners and is generally more harmful.

10

Allographs, Homographs and Synonymic Interchange

10.1 Allographs

Allographs are characters which have the same pronunciation and meaning but have different outward forms. Strictly speaking, only characters which are used in completely the same way, that is, alternate forms of a single graph, can be called allographs. However, what are commonly referred to as allographs often include characters which only partially have the same usage. Allographs that tally with the strict definition can be termed "allographs in the strict sense," while those which have only a partial identity of usage can be called quasi-allographs. The two types taken together comprise allographs in a broad sense.

The "First List for the Consolidation of Allographs" ("Dìyī pī yìtǐzì zhěnglǐ biǎo") published in 1955 (below referred to as the "Consolidation List") contains a great number of quasi-allographs. For example, in the chart, four allographs were consolidated under "雕": "鵰", "彫", "琱" and "凋" (in actuality "凋" is still used; in "A List of the Printed Forms of Chinese Characters in Common Use" ["Yìnshuā tōngyòng Hànzì zìxíng biǎo"] published in 1965, the character "凋" is listed). The character "雕" has three principal meanings: (1) a type of fierce bird (original meaning), (2) carve, sculpt (loangraph sense), and (3) withered (loangraph sense). "鵰" is an allograph of "雕" only in the first sense. "凋" is an allograph of "雕" in the second and third senses. "琱" is an allograph of "雕" only in the third sense (see Lǔ 1980:26–27).

The different usages of quasi-allographs can for the most part be divided into two types. One type can be termed inclusion or embedding; this refers to cases where the usage of one character is included in that of another character (see Gāo 1975). For example, the usage of "採" is embedded in "采". The sense of "鵰" is shared by "雕". The other type is non-inclusive; this refers to cases where two characters share a certain usage but each also has separate usages not shared by the other; e.g., "女" and "汝" are interchangeable when used to represent the second person

pronoun in Old Chinese, but "汝" cannot be substituted for "女" in the sense of "female"; moreover, "女" cannot be substituted for "汝" when it is used as a river name (the Rǔ river). Another example is provided by "記" *jì* and "紀" *jì*; when they are used to express the notion of "record" in such combinations as {記錄} *jìlù* "record," {記念} *jìniàn* "commemoration," {記要} *jìyào* "summary," {大事記} *dàshìjì* "record of important events;" they are interchangeable, but when {記} is used as an independent word or when occurring in the combinations {記憶} *jìyì* "memory," {記號} *jìhào* "symbol" or {記者} *jìzhě* "reporter, journalist," "紀" cannot be substituted. (In ancient times, {記} used alone as a word could sometimes be written "紀". "紀" in the sense of "discipline" and the {紀} in the combinations {紀年} *jìnián* "annals," {世紀} *shìjì* "century," {本紀} *běnjì* "basic imperial annals" cannot be written "記".)

The way non-inclusive quasi-allographs are used is often very complex; moreover, sometimes it is impossible to find any regularity and it is difficult to generalize. This can be illustrated by the case of "記" and "紀" cited above. The {記} of {記錄} and the {記} of {記者} semantically show no clear distinction; while the former can be written as "紀", the latter can only be written with "記". The {記} of {記憶} and the {記} of {記念} also show no clear semantic difference, but the former cannot be written with "紀"; the latter not only can be written as "紀", most people do write it this way.

The boundary between allographs in the strict sense and quasi-allographs is by no means immutable. Allographs in the strict sense may be transformed into quasi-allographs in the process of use. An example of this situation are the two characters "雕" and "鵰" cited above; originally this was clearly a case of one character with alternate forms which were used identically. Later, because "鵰" could not be used to express the loangraph senses of "雕", the two characters became quasi-allographs. Quasi-allographs, in the eyes of the average person, also have the possibility of becoming allographs in the strict sense; the allograph "颿" for "帆" cited in the "Consolidation List" was originally a loangraph for {帆}; its original meaning was "to run swiftly (of horses)" (see the *Shuōwén*. In the *Wú Yuè chūnqiū*, "Gōujiàn rù chén wàizhuàn," there is the line 颿颿獨兮西往 "moving swiftly alone, heading west," where "颿" is used in its original sense). Since this original meaning became obsolete very early, most people have probably taken "颿" and "帆" to be allographs in the strict sense.

Among quasi-allographs, characters which derive from one graph having different forms but with the same meaning are in a minority. The vast majority of quasi-allographs are different characters that can be used interchangeably; that is, they are interchangeable characters, which we will discuss in Sec. 12.2. Therefore we will not discuss quasi-allographs here any further.

Below, allographs in the strict sense can be divided into eight categories based on the nature of the structural or formal differences between them. In the examples, the characters marked with an asterisk are the present standard or current forms.

1. Different, depending on whether a graphic component is added or not.

兒: 貌* *mào* "appearance" (with "豹" as an abbreviated phonetic; some think that the "豸" is the protoform of "貓" *māo* "cat," and that "貌" originally had "豸" as its phonetic.)

匧: 箧 (箧*) *qiè* "a kind of box."

齧: 嚙 *niè* "bite." (Now the simplified form of another variant: "嚙", is current: "啮"*.)

凳* (also written 凳): 櫈 (also written 櫈). See further examples of this type cited in Sec. 8.1.3.

2. Different in terms of whether the variants are semantographs or phonograms.

看* *kàn* "look" (a syssemantograph comprised of "手" *shǒu* "hand" above "目" *mù* "eye"): 瞰 (a phonogram consisting of "目" and plus "倝" *gàn* as a phonetic.)

羶 *shān* "rank odor" (of "羊" *yáng* "sheep" with 亶 *dǎn* "trust" as phonetic): 羴 (a syssemantograph comprised of "羊" and "臭" *chòu* "foul-smelling." Also written "膻"*.)

豔 *yàn* "gorgeous" (a phonogram consisting of "豐" *fēng* "beautiful in appearance" with "盍" *hé* "why not" as phonetic): 艷 (a syssemantograph comprised of "豐" and "色" *se* "color"). Currently the simplified form "艳"* is used.

淚 *lèi* "tear" (a phonogram consisting of "水" *shuǐ* "water" and 戾 *lì* "perverse" as phonetic): 泪* (a syssemantograph comprised of "水" and "目" *mù* "eye").

Further examples of this type are cited in Sec. 8.1. The examples cited above are all cases where one of the characters is a semantograph and the other a phonogram. In addition special cases like "恥" and "耻" and "曼" and "㬎" cited in Sec. 8.1 can be included here.

3. Both are semantographs but are formed from different graphic elements.

尠: 尟 *xiǎn* "few." (Now the loangraph "鮮"* is used for this word.)

羶: 羴 *shān* "rank odor." (Now "羶"* is used.)

塵: 尘* *chén* "dust." (塵 was originally written "", see Sec. 8.3.2.)

躰: 体* *tǐ* "body." (Originally written "體", a phonogram consisting of 骨 *gǔ* "bone" with 豊 *lǐ* "a kind of ritual vessel" as phonetic.)

4. Both are phonograms but are formed from different graphic elements.
響: 响* *xiǎng* "make a sound."
桮: 杯*: 盃 *bēi* "cup" (also 棓, in the *zhòuwén* script it was written 匹).
速: 迹*: 蹟: 跡 *jī* "footprint."
韈: 韤: 襪: 襪: 袜: 帓: 袜: 袜* *wà* "stocking."
See Sec. 8.5.2 where a list of variant phonograms with different significs is given, and Sec. 8.6.3 where a list of variant phonograms with different phonetic components is given.

5. Characters with the same graphic components positioned differently.
拿*: 舒 *ná* "hold in the hand."
翡: 翅* *chì* "wing."
蟹: 蟹* *xiè* "crab."
棊: 棋* *qí* "chess."
鑑: 鑒 *jiàn* "mirror" (鉴*; in the non-simplified form of this character, the component "監" has transformed an original "皿" *mǐn* "vessel" into "罒" *mù* "eye" and has been moved to the right-hand side.)
鵝: 鹅 (鹅*): 鵝 *é* "goose." (In the *Kāngxī zìdiǎn* an ancient form 鸃 is also listed.)
There are a small number of graphs that can be placed in this category which, although they are of the same type, have one component that is similar to that in its variant but not absolutely identical; e.g.:
緜: 綿 (绵*) *mián* "silk floss."
蟁: 蚊* *wén* "mosquito."
Among the graphs cited in the above section, "拿" and "綿" are semantographs, while the rest are phonograms.

6. Abbreviated forms, a part of which differs from the corresponding full forms.
灋: 法* *fǎ* "law"
淀 (with 旋 *xuàn* as an abbreviated phonetic): 漩* *xuàn* "whirlpool."
雖 (composed of 虫 *huǐ* with 唯 *wéi* as phonetic): 虽* *suī* "although."
聲: 声* *shēng* "sound."

7. Special cases where simplified and full forms are different.
辦: 办* *bàn* "manage."
對: 对* *duì* "facing."
歲: 岁* *suì* "year of age."
頭: 头* *tóu* "head."

8. Characters written somewhat differently or which differ due to corruption.
矦: 侯* *hóu* "target."

匄: 匀: 丐* *gài* "beg" (probably a corruption of 匄).
弔: 吊* *diào* "suspend."
皋*: 臯 *gāo* "high area near water."
虛*: 虚 *xū* "empty."
丛: 並* *bìng* "side by side."
悤: 忽 *cōng* "hurried" (now consolidated with "匆"*. "匆" was originally a variant of "匆".)
姊*: 姉 *zǐ* "elder sister."
珍*: 珎 *zhēn* "treasure."
祕: 秘* *mì* "secret."
霸*: 覇 *bà* "hegemon."
呪: 咒* *zhòu* "curse."
Characters truncated because of taboo, like "尸" (for "民" *mín* "people") used during the Tang dynasty because of the taboo on using the characters in 世民 Shìmín, the personal name of Táng Tàizōng (r. 763–779), or like "玄" (for "玄" *xuán* "profound") tabooed because of the personal name of the Kāngxī emperor (r. 1662–1722), Xuán Yè 玄燁, can be viewed as belonging to this category of allographs. The differences between handwritten and printed forms can also be placed in this category.
The eight categories given above are not based on a completely unified criterion; as a result, the classification of some characters is ambiguous. The characters "皃" and "貌" of category one, for example, could just as well be placed in category two.

10.2 Homographs

The term homograph is created on analogy to the term homophone. If different words are pronounced the same, they are homophones; if different graphs have the same shape, they are homographs. Homographs are the opposite of allographs. Although the outward form of allographs is different, in reality they can function as a single character. In the case of homographs, although their outward appearances are the same, in actuality they are different characters.
The scope of homographic characters can be understood in wider and narrower senses.
Homographs in the narrow sense are those graphs which were created separately to write different words; that is, graphs whose forms are accidentally the same. In ancient times there was a character "鉈" (*shé* or *shī*, also written "鉇" and "鎈") which referred to a kind of spear (the "蛇" in the term 丈八蛇矛 "a kind of spear" may be a loangraph for this word). In the pre-modern era, there was a character "鉈" *tuó* which was an allograph of "砣" *tuó* "weight used on a steelyard." Modern chemists have created the character "鉈" *tā* for the chemical element thallium (Tl). These

three characters written "鉈" belong to the category of homographs in the narrowest sense.

Homographs in the wide sense are all those graphs of the same shape used to express different words. According to this mode of understanding, loangraphs and the characters borrowed to write them should be considered homographs; e.g., "花" *huā* "flower" and "花" "spend (money)" are homographs. Even characters used to express a graph's original meaning and the same character used in a derived or extended sense should also be viewed as homographs; e.g., "行" *xíng* "road" and "行" *háng* "line, row" are homographs in this sense.

However, because the phenomenon whereby a character created on the basis of extended meaning may express two or more cognates is well known to all, there is no real necessity to use the separate notion of the homograph to explain it. Borrowing is a very important graphic phenomenon. Generally since it is necessary to discuss this phenomenon separately in a treatment of Chinese writing, there is no need to explain it from the standpoint of homographic characters. Therefore, we will not discuss homographs in this broad sense. (Some people call different morphemes which have the same written form homographs [同形字 *tóngxíngzì*]; for example, they refer to the {行} in 行走 *xíngzǒu* "walk" and {行} in 行列 *hángliè* "rank" as homographs. This is a different matter from what we mean by homograph. We would suggest that this kind of homography be referred to more concretely as "morphemes with the same graphic form".)

But we feel that if we only consider as homographs only those graphs that were created to write different words and accidentally have the same graphic shape, the scope will be a little too narrow. In Sec. 7.1.5.1 when we discussed the character "隻", we referred to "borrowing of graphic form" (形借). The "borrowing of graphic form" refers to cases where a character is borrowed purely for its graphic form without reference to its original sound and meaning. (Note that the original sound and meaning of a graph are the sound and meaning of the word which the graph originally stood for; this is a different matter from the phonological and semantic functions of the graphic symbol used to express the word in question.) In our view, the phenomenon whereby different words are represented by the same character because of the borrowing of a single graphic form should be viewed as part of the phenomenon of homography. For example, "隻" used to express {獲} *huò* "capture" and {隻} *zhī* "one of a pair" (now written "只") should be considered homographs, since between the word originally represented by a character and the word for which its graphic shape is borrowed, there is neither an original semantic nor a loangraph relationship; nor are they related on the basis of original meaning and a semantic extension of that meaning. In terms of the graphic shape of such a character, in both cases the meaning can be considered the original meaning. In other words, if one disregards historical circumstances, such a character can be regarded as having been created for the word for which the graphic shape has been borrowed. (The *Shuōwén* considers "隻" to have been created to write {隻} "one of a pair.") Sometimes because of a lack of material, it is impossible to determine whether a homograph which represents different words was created separately or is like the case of "隻" which represents both {獲} "capture" and {隻} "one of a pair." Hence, it is best to include uses of the same character brought about by the borrowing of graphic form as cases of homography.

In addition, there are some characters which originally were written differently but which because of changes or simplification of graphic shape or corruption (or other reasons) later became identical. Characters of this type should naturally be regarded as homographs.

Ancient texts do not make clear reference to homographs, but a few individuals noticed the existence of this phenomenon.

In the Wǔ Dì Annals of the *Hànshū*, Yán Shīgǔ has a note on the passage 怵於邪說: "Rúchún says that 怵 is read as in the expression 怵惕 *chùtì* 'apprehensive,' [and the phrase] means 'he was seduced by heterodox theories.' I, Shīgǔ . . . maintain that the explanation of 怵 as 'be seduced' is correct, but it is incorrect to say that 怵 is pronounced like the 怵 of 怵惕; 怵 is a variant of 誎; 誎 means 'seduce' and it is pronounced like the 戌 *xū* in 戌亥 *xūhài* [the last two of the twelve Earthly Branches]." Yán Shīgǔ points out here that "怵" in the sense of "seduce" is a variant of "誎" and is unrelated to the "怵" in the expression 怵惕. In point of fact, this is tantamount to considering these two "怵" graphs to be homographs. (In the 1979 edition of the *Cíhǎi*, "怵" in the sense of "seduce" is glossed *chù*; this is an error.)

Zhèng Qiáo in his *Liùshū lüè* classifies characters according to the *liùshū* (six graphic principles); at the end of his section on loangraphs he sets up an additional category which he calls "non-loangraphs with paired sound and parallel meaning" (雙音並義不爲假借). The characters he includes in this category are for the most part our homographs; e.g.,

把 *bà* "handle."

把 *pá* "implement for harvesting wheat."

At present the "把" meaning an "implement for harvesting wheat" is written "耙" and the "把" meaning "handle" has been consolidated with "把". In creating a character either for {把} *bà* "handle" or {耙} *bà* "implement for harvesting wheat," one could create a graph consisting of "木" *mù* "wood" with "巴" *bā* as a phonetic; therefore Zhèng Qiáo describes the two characters written "把" as having "paired sound and parallel mean-

ing" and considers both of them to be orthographs [i.e., one is not simply borrowed to write the other—tr.]. In our terms the two "杷" characters are homographs.

Duàn Yùcái also noticed the phenomenon of homographs. Under the *Shuōwén* entry "泰, 滑也" Duàn's commentary to the *Shuōwén* says "滑 *huá* means 'comfortable, composed' and is extended to mean 縱泰 *zòngtài* . . . as well as 泰侈 *tàichǐ* (like the expression 汰侈 in the *Zuǒzhuàn* . . . where 汰 is an abbreviated clerical script form of 泰 and has the same form as the 汰 meaning "to wash rice" [a reference to the *Shuōwén* use of 汰 to gloss 淅瀝]; the use of 汰 is an error." Duàn's claim that the "泰" in 泰侈 "haughty and extravagant" is an extension of the meaning of "comfortable, composed" and that the "汰" of "汰侈" "excessively extravagant" is an abbreviated form of "泰" is not altogether convincing, but the passage quoted demonstrates that Duàn was aware of the existence of homographs in the Chinese script.

Zhū Jùnshēng in his *Shuōwén tōngxùn dìngshēng*, in addition to characters carrying their original meaning, distinguishes three other categories: *zhuǎnzhù* (corresponding to what is generally called extended meaning), loangraphs, and what he terms *biéyì* 別義 (different meaning). In the *biéyì* category, most of the characters can be explained as homographs. For example, the character "篿" in ancient texts has two meanings. In the *Shuōwén* "篿" *tuán* is defined as a "'round bamboo vessel,' from 竹 *zhú* 'bamboo' with 叀*zhuān* as phonetic." In the "Lísāo" section of the *Chǔcí*, for the line 索藑茅以筳篿 "find the bindweed for prognostication" the commentary of Wáng Yì says "The people of Chǔ call prognostication by means of tying grass and breaking bamboo 篿 *zhuān*." Both in the case of {篿} *tuán* "round bamboo vessel" and {篿} *zhuān* "prognosticate by tying grass and breaking bamboo," creating a graph consisting of "竹" and "叀" is appropriate. Therefore, the "篿" seen separately in the *Shuōwén* and the "Lísāo" should be considered homographs. In the *Shuōwén tōngxùn dìngshēng*, in the "乾" *qián* group, the meaning of "篿" in the "Lísāo" is considered to be a case of "*biéyīyì*" 別一義 ("additional different meaning"). (In Duàn Yùcái's commentary to the *Shuōwén*, "篿" in the sense of "a kind of prognostication" is also said to be *biéyì* "a separate meaning," but Duàn does not make use of *biéyì* as a regular technical term in his commentary.) However in the *Shuōwén tōngxùn dìngshēng* there are quite a number of homographs which are still treated as cases of an original meaning and loangraph relationship; obviously Zhū Jùnshēng did not have a very clear notion of homographs.

Present-day scholars have clearly raised the question of homographs. Wáng Lì (1953) in discussing the phenomenon of two readings for a single character, points out that most cases of double readings of characters reflect a difference in word class:

> Nevertheless there are also cases where two meanings are fortuitously represented by the same graphic form; examples of this are the use of "哪" to represent both the interrogative pronoun *nǎ* and the final sentence particle *na*, and the use of "咳" to write the *ké* of 咳嗽 *késou* "cough" and the *hāi* in the interjection *hāiyō*; semantically these alternate readings are unrelated (p. 27).

Wáng Lì also points out that when the masses create separate characters, "some of these characters fortuitously have the same form as certain rare characters found in dictionaries (e.g., "份" is the same as 彬), but only experts in the writing system have seen such characters and the general masses are unaware of them" (p. 9). What he is referring to here is the fact that the differentiated graph "份" *fèn* "a share," which the masses created to write the extended meaning of "分" *fēn* "divide," has the same graphic form as an ancient allograph of "彬" *bīn* "refined." Lǐ Róng (1980) gives a similar example. In the bronze inscriptions of the Zhou dynasty the character "鋁" referred to the material from which bronze vessels were cast. The Han dynasty work *Fāngyán* also contains the character "鋁" where it is defined as a whetstone (磨錯). Now there is also a character "鋁" used in the sense of aluminum. Lǐ Róng writes:

> The chemist who created the character "鋁" for "aluminum" did not necessarily know that this character was in the *Fāngyán* and it is even less likely that he knew that this character is found in the bronze script of the Zhou dynasty; for him it was a new creation. From antiquity until the present time, a character consisting of 金 with 呂 as phonetic was created independently by men of the Zhou, Han and the present time; the character was used differently but the psychology that created it was the same (p. 6).

In the past when scholars saw the phenomenon of character creation described above, they often criticized the masses for mistakenly using and creating characters. An example of this is the character "賑" *zhèn* defined by the *Shuōwén* as "rich"; the character "賑" differentiated from "振" mentioned in Sec. 8.1 just happens to have the same form. Yán Shīgǔ in his commentary to the *Hànshū* says concerning the "振" of 振救 *zhènjiù* "aid, relieve" that in his time the popular form written with the element 貝 was incorrect and that this form had its own separate meaning. (See his commentary to the "Annals of Wén Dì"; see also the same author's *Kuāngmiù zhèngsú*, *juàn* 7, under the entry for "振".) In actuality, the relationship of the two characters written "賑" was the same as the relationship of the two characters written "忯" also found in Yán's commentary to the "Annals of Wén Dì," but to Yán Shīgǔ the use of "賑" in the expression 賑救 was a vulgarism; so his attitude toward it was different. Some

scholars have referred to the sort of character creation mentioned above as "the popular borrowing of original *Shuōwén* characters for other uses" (Qián Dàxīn 1829: *juàn* 4), or as "the appropriation of characters already in existence to refer to other things" (Zhāng Bīnglín 1958: "*Dìngwén*" 訂文). These views are also inappropriate. (We might mention in passing that in Zhū Jùnshēng's *Shuōwén tōngxùn dìngshēng* the "賑" in "賑救" is treated as a loangraph meaning.) Lóng Yǔchún (1984:147) in his *Zhōngguó wénzìxué* writes:

> . . . Some characters which in the past were viewed as cases of graphic borrowing were in reality two different characters, one a phonogram and the other a *zhuǎnzhù* character [the reference is to characters differentiated by the addition of a semantic symbol to an existing graph—author], which accidentally had the same form. An example is the character 紅 (*hóng* "red") which in the *Shuōwén* is analyzed as being comprised of 糸 with 工 *gōng* as phonetic; in ancient texts 紅 in the sense of "(needle) work" is written the same way; thus for the line in the *Shǐjì* ("Biography of Lì Shíqí") 工女下機, the corresponding text in the *Hànshū* writes 紅 for 工. Scholars have said that this is a case of borrowing the character 紅 meaning "red" to write 工 meaning "work." It is not known whether this latter character had a pronunciation different from that of 紅 meaning "red"; in the beginning it was simply written as 工; the character written 紅 is a *zhuǎnzhù* 轉注 character consisting of 工 with the element 糸 added to it. Another example is found in the Wén Dì Annals of the *Hànshū* in the passage 服大紅十五日, 小紅十四日 "wear the *dàgōng* [a kind of mourning garment] for fifteen days and the *xiǎogōng* [another kind of mourning garment] for fourteen days," where 大紅 and 小紅 stand for 大功 and 大功, respectively; here "紅" is again used as a *zhuǎnzhù* character for "功" and is a different character from the 紅 meaning "red."

Lóng's view is quite well founded.

Below we will divide homographs into four categories based on features of their structure or form and give illustrations.

10.2.1 Homographs Whose Graphic Structure is Different

Sometimes semantographs and phonograms which share exactly the same graphic form are encountered:

体 *bèn*: 体 *tǐ*. The more ancient character "体", pronounced *bèn*, is a phonogram comprised of "人" *rén* "person" with "本" *běn* "base" as its phonetic (see the *Guǎngyùn*; in the 混 rime in the rising tone section, "体" is cited with the *fǎnqiè* spelling 蒲本切 [MC ʻbuən] and the meaning "coarse, bad"; in the *Zīzhì tōngjiàn*, *juàn* 252, for the 12th year of the Xiántóng era

in the reign of Táng Yìzōng, there is the passage 春正月辛酉葬文懿公主 . . . 賜酒百斛, 餅餤四十橐駝, 以飼体夫 "In the first month of spring on the day *xīnyóu* Princess Wényì was buried . . . 100 *hú* of wine and 40 camel loads of biscuits were bestowed to feed the common laborers." In the Hú commentary, "体" is glossed with the *fǎnqiè* spelling 蒲本翻 [MC ʻbuən] and defined as "men who carried the coffin.") "体", the simplified form of "體" *tǐ* "body," appeared later; it is a syssemantograph consisting of "人" *rén* "man" and "本" *běn* "basis, foundation."

姥 *mǔ*: 姥 *lǎo*. The older character "姥" meaning "old lady" was pronounced the same and had the same meaning as "姆" *mǔ*. (It is found in the 姥 rime in the rising tone section of the *Guǎngyùn* where it has the *fǎnqiè* spelling 莫補切 [MC ʻmuo] and defined as "old mother; also sometimes written 姆, a female teacher; also found in the name 天姥山 'Mt. Tiānmǔ'; also a surname found in Hé Chéngtiān's "*Zuǎnwèn*." In the "Biography of Wáng Xīzhī" in the *Jìnshū* there is the passage 又嘗在戢山, 見一老姥, 持六角竹扇賣之 "Moreover, [he] was once at Mt. Ji where he saw an old woman who was holding hexagonal bamboo fans for sale.") In more recent times, people in the north of China have created a phonogram consisting of "女" *nǚ* "woman" and "老" *lǎo* "old" as phonetic as a specific character for writing the *lǎo* of *lǎolao* "maternal grandmother." (This graph is a differentiated form of 老 "old," since the phonetic element also has a semantic value.)

Professor Zhū Déxī (1954:113) believes that the character "忐" found in a Warring States period bronze inscription from Chǔ should be analyzed as a phonogram consisting of "心" with "下" as phonetic, a homograph of the later syssemantograph "忐" found in the expression "忐忑" *tǎntè* "perturbed."

10.2.2 Homographs All of which are Semantographs

甭 *bà*: 甭 *qì*: 甭 *béng*. In the "Záyì" section of Yán Zhītuī's *Yánshì jiāxùn*, the author refers to a popular character "甭" used for "罷" in the sense of "not use" which was current in the Northern Dynasties. In the dictionary *Lóngkān shǒujiàn* by the Liao monk Xíngjūn, "甭" is given as an allograph of "棄" *qì* "to throw away." The "甭" now in common use is used to write the word *béng* which is a fusion of 不 + 用 *bù yòng* "unnecessary." If we take into account that the current character "甭" is not only a syssemantograph but that it also represents a phonological fusion, then we can consider it a homograph of the ancient character "甭" which had a different structural makeup.

The "隻" used to write both {獲} and {隻} discussed in Sec. 7.1.5.1 as well as the 𠂤 used to write both {片} and {析} discussed in Sec. 7.1.6 are both cases of homographs, both of which are semantographs.

In Chapter 1, in explaining the primitive nature of early semantographs,

we mentioned the phenomenon of a single graphic form being used in several ways; 朏, for example, was used both for "月" *yuè* "moon" and "夕" *xī* "evenings"; 盖 was used both for "夫" *fū* "man" and "大" *dà* "big." In Sec. 7.1.6 we also mentioned the example of 𠂤. The 𠙵 that is used for both {月} and {夕}, the 𠂆 used both for {夫} and {大}, and the 𠂤 used both for {𠂢} and {永} can all be viewed as semantographs used as homographs. However, we should recognize that the difference between early and late uses of homographs are quite different. In the early Chinese script, the phenomenon of one graphic form serving several functions was rather widespread; moreover, this phenomenon generally existed in a single time and a single place. In later periods of the Chinese script, the phenomenon of homography was rare; moreover, homographs were very seldom utilized in a single time and place. In addition, the homograph "甭" cited above, which belongs to a late period of the Chinese script, is a syssemantograph formed from semantic symbols; this is different from the situation in the early script where the multiple use of a single graphic form ordinarily had to do only with pictographic symbols.

10.2.3 Homographs Both of which are Phonograms

This is the most common type of homograph. The examples "鉈", "怵", "杷" and "篡" discussed above are all of this type. Several more examples are given below.

椅 *yī*: 椅 *yǐ*. In the *Shuōwén* "椅" is defined as "'a kind of tree (Catalpa ovata)'; the graph is comprised of 木 *mù* 'tree' with 奇 *qǐ* 'strange' as phonetic." It is read in the level tone (e.g., *Shījīng* Ode 50: 椅桐梓漆 "[He planted it with] catalpa, *tóng* and lacquer trees"). In its later use to mean "chair" it is a differentiated form of "倚" *yǐ* "to lean" because chairs have backs that one leans on. Originally the word for chair was written "倚" and only later was a special differentiated character created in which the "人" of "倚" was replaced by "木". (In the work *Jìng kāng xiāngsù zájì* by Huáng Zhāoyīng of the Song, there is the comment 今人用倚卓字多從木旁 "Nowadays people in general write the words for 'chair' and 'table' with a 木 component"; Fāng Yǐzhì of the Ming in his *Tōng yǎ* ("Záqì" section) says "倚卓之名, 見於唐宋 . . . 楊億 '談苑' 云: '咸平, 景德中, 主家造檀香倚卓.' 谷以爲椅字, 棹子" "The names *yǐ* 'chair' and *zhuō* 'table,' are seen in the Tang and Song . . . in the 'Tányuàn' of Yáng Yì it says, 'In the Xiánpíng and Jǐngdé periods, householders made chairs and tables of sandalwood.' These words are popularly written 椅子 ('chair') and 棹子 ('table')." This "椅" is homophonous with "倚"; both are rising tone words. The binome "旖旎" *yǐnǐ* used to describe frail or weak trees was in ancient times sometimes written "椅柅". This "椅" can also be viewed as a homograph of the words written "椅" above.

棹 *zhào*: 棹 *zhuō* "name of a tree": 棹 *zhuō* "table." The first "棹" is an allograph of "櫂" *zhào* meaning "oar" (at present "棹" has replaced "櫂"). In ancient times "棹" was the name of a certain kind of tree (see *Nánfāng cǎomù zhuàng*). To the character "卓" *zhuō* for "table" an element "木" was later added giving rise to a new character "棹". (See the preceding section; at present "棹" has been replaced by "桌".) Tables ("卓" *zhuō*) are so called because they stand erect (卓 *zhuō*) from the floor. In both the case of "椅" and "棹" the phonetics also have a semantic function.

鈁 *fāng* "a vessel shaped like a square jug": 鈁 *fāng* "a pot-like vessel": 鈁 *fāng* "francium [a chemical element]." In the *Shuōwén* "鈁" is defined as "'a square wine jug,' comprised of 金 *jīn* 'metal' with 方 *fāng* 'square' as phonetic." The phonetic element of "鈁" is used semantically (see Sec. 8.7.1). In the *Guǎngyùn* "鈁" is found in the level tone rime 陽 with the *fǎnqiè* spelling 府良切 [MC ˌpjang], where it is defined as "a kind of cooking pot." In modern times chemists have created a new "鈁" to stand for the radioactive element francium; the phonetic "方" in this case represents the first syllable of the original name.

枋 *bìng*: 枋 *fāng* "name of a tree": 枋 *fāng*, "wood used in a protective weir": 枋 *fāng* "raft": 枋 *fāng* "a square piece of wood." In the *Zhōulǐ*, "Chūnguān," nèishǐ section, there is the line 內史掌王之八枋之法 "The interior clerk is in charge of the king's system of eight powers"). In the *Jīngdiǎn shìwén* "八枋" is written "八柄"; the commentary says "originally also written 枋." This "枋" is an allograph of "柄". In the *Shuōwén* "枋" is defined as "'a tree from which vehicles are made,' from 木 *mù* 'tree' with 方 *fāng* as phonetic." This "枋" refers to a kind of tree. In the *Guǎngyùn*, "枋" is found in the level tone rime "陽" with the *fǎnqiè* spelling 府良切 [MC ˌpjang] and is defined as a kind of wooden weir. In the *Shuǐjīng zhù* (part 9, "Qíshuǐ"), a *fù* of Lú Zhàn of the Jìn is quoted: 後背洪枋巨堰, 深渠高堤 "Behind were vast weirs and great barriers, deep courseways and high dikes." Here "枋" must be used in the sense of a wooden weir; perhaps it is a differentiated character derived from "防" *fáng* which has the sense of "dike or embankment." In regard to the *Hòu Hànshū* passage in the "Biography of Cén Péng": 乘枋筏(排)下江關 "Taking a raft down to Jiāngguān," the commentary of Lǐ Xián says "枋筏, made of bamboo or wood, it floats on the water. The *Ěryǎ* says '枋 *fāng* means 汸 *fú* raft'; Guō Pǔ's commentary to this gloss says 'a raft on the water.'" This "枋" must have the sense of "wooden raft"; it is also written "舫" (and this is in turn a homograph of "舫" *fǎng* "boat"). In later times "枋" is used to mean "a square wooden column"; here the phonetic also has a semantic function. In addition, the "枋" in the tree name "蘇枋" found in the *Nánfāng cǎomù zhuàng* can also be considered a homograph of the characters cited above.

怕 *bó*: 怕 *pà*. In the *Shuōwén* "怕" is defined as "still, inactive." This is the orthograph of the "泊" of 澹泊 "free of worldly desires." (In *Wénxuǎn*,

juàn 7, in the "Zǐxū fù" of Sīmǎ Xiāngrú there is the line 怕乎無爲, 憺乎自持 "[He] was tranquilly at ease with the world and was peacefully self-composed"; in Sīmǎ Xiāngrú's biography in the *Shǐjì* in the same line "怕" and "憺" are replaced by "泊" and "澹", respectively.) The "怕" meaning "fear" (read *pà*) is a homograph of the "怕" cited above. (The earliest surviving example of "怕" in the sense of "fear" is probably in the *Lùnhéng*, "Sìhuì" section: 孝者怕入刑辟 "A filial person fears undergoing punishment"; however some believe that the "怕" in this passage should be read like "迫" *pò* "compel.")

Homographs that are phonograms have a characteristic different from other types of homographs. Other types of homographs have clearly differentiated pronunciations. Homographs which are phonograms have the same phonetic component; their pronunciations are for the most part either identical or very similar. Therefore it is very difficult to find a perfectly clear boundary between cases of homographs which consist of phonograms and cases of loangraphs. If a phonogram is borrowed to write another word, this phonogram is not only homophonous or close in sound to the word that it is used to express, its component can also be connected semantically to the word it is used to represent; this creates a situation in which the borrowed character can be viewed both as a loangraph and as a loan based on graphic shape (形借). In other words, the graph in question can be considered both a loangraph and as a homograph of the borrowed character. In 9.1 we have already alluded to examples of this kind; among these the case of "策" being borrowed for "冊" is rather typical. "冊" *cè* refers to a bundle of wooden or bamboo slips used for writing; the bamboo ("竹") component of "策" is appropriate for writing {冊}. (The ancient script form given for "冊" in the *Shuōwén* is comprised of "冊" with "竹" as a signific.) Therefore, "策" used to represent {冊} can be viewed as a loangraph and it also can be viewed as a borrowing of graphic form; the "策" used to represent {冊} can be considered a loangraph and at the same time be viewed as a homograph of the "策" meaning "horse whip." The character "糾" borrowed to write "丩", mentioned several times previously, may also be viewed as a homograph of the "糾" that means a "three-strand rope" because the "糸" component can be connected to the meaning "entangled" of {丩}. Many other additional examples of this kind can be found. Another example is the word {硯} *yàn* "inkstone" which is derived from the {研} meaning "to grind." (The *Shìmíng* says 硯 *yàn* "inkstone" is 研 *yàn* "to grind—to grind ink in order to mix and moisten it.") Originally this word was written "研" (*Hànshū*, "Biography of Xuē Xuān," 下至財用筆研, 皆爲設方略 "made provision even for his expenses, writing brushes and inkstones." Only later was "硯", which meant "smoothness of stones," borrowed to

write this word. (In the *Shuōwén* "硯" is defined as "'smoothness of stone,' comprised of 石 with 見 as phonetic.") Inkstones are all made of stone; the "石" component of "硯" can be related to the {硯} meaning "inkstone," and can be considered a loan based on graphic form. A further example is the simplified form of "願" *yuàn* "be willing" written "愿". It is generally believed to be a loangraph from "愿" *yuàn* "respectful, cautious." The "心" element of "愿" semantically can be connected to {願}. This was clearly an important factor in its being borrowed to write "願". In recent times chemists have borrowed "鑪" (simplified as "炉"), an allograph of "爐" *lú* "stove," to represent the 104th element of the periodic table, rutherfordium (Rf). This was clearly influenced by the fact that the component "金" could be semantically linked to the 104th element rutherfordium. Therefore there is no reason not to regard both "愿" (used for "願") and "鑪" (used for the element rutherfordium) as loans based on graphic form.

The phenomenon described above can be described as concurrent loangraphs and loans based on graphic form. Cases like "策" (used for "冊") and "硯" (used for "研") can be considered loans based on sound and graphic form simultaneously. Earlier in this chapter we criticized the notions of "borrowing an original *Shuōwén* character for a different use" and "appropriating an already existing character for referring to another thing"; if these descriptions were merely used for cases like "策" and "硯", then there would be no great harm. Since we do not clearly know the actual history of many characters, it is often difficult to distinguish homographic phonograms from loans based on sound and graphic form simultaneously. We can be fairly positive that most of the homographic phonograms cited by us above were created separately. But it is very difficult to be sure that among them there are no loans based simultaneously on sound and graphic form.

10.2.4 Homographs Caused by Change in Graphic Form

There are some characters which originally were not homographs that became homographs because of graphic alteration, simplification or corruption. The following graphs are illustrations.

漯 *lèi*: 漯 *tà*. In the *Shuōwén* "  " is defined as "a river rising at Mt. Léitòu at Yīnguān in Yànmèn which flows eastward to the sea; it is comprised of 水 *shuǐ* 'water' with  *lèi* 'rope' as phonetic." This character, read *lèi*, is simplified to "漯" in the clerical and standard scripts. In the *Shuōwén* "濕" is defined as "a river originating in Dōng Wǔyáng in Dōngjùn; it flows into the sea; from 水 with  *é* as phonetic." ("濕" *shī* "wet" can be considered a homographic phonogram of this "濕"; "濕" *shī* "wet" is written "溼" in the *Shuōwén*.) This character is read *tà*; in the clerical script it was first simplified to "溻" and later mistakenly changed to "漯"

and became a homograph of the "漯" read *lèi*. (In Hénán there is a place called 漯河市 Luòhéshì; this "漯" is probably a homographic phonogram of the "漯" pronounced *lěi*.)

适 *kuò*: 适 *shì*. In the *Shuōwén* "適" is defined as "'swift,' composed of 辵 with 昏 *kuó* as phonetic." This character is read *kuò*; in the clerical and standard scripts it was changed to "适". In ancient times it was often used as a personal name. The modern simplified form of "適" is a homograph. At present, in order to keep the two graphs separate, it has been stipulated that the older 适 *kuò* (used in personal names) should be written "㫃".

萑 *zhuī*: 萑 *huán*. In the *Shuōwén* "萑" is defined as "'the appearance of a lot of grass,' from 艸 *cǎo* 'grass' with 隹 *zhuī* 'bird' as phonetic." This character is read *zhuī*. (The ancient name of motherwart "萑" is also pronounced *zhuī*; it can be considered a homographic phonogram.) Another character "萑" is defined in the *Shuōwén* as "'a young reed,' composed of 艸 with 萑 *huàn* as phonetic." This character is read *huán*. In received ancient texts it is already simplified to "萑" (as in "萑葦" "reeds and rushes," "萑符" "a kind of willow"). In addition, some people write "萑" as "萑" (see, for example, the *Kāngxī zìdiǎn*; "萑" is an owl-like bird.)

這 *yàn*: 這 *shì*, *zhè*. Both the *Yùpiān* and the *Guǎngyùn* have the character "這" glossed as "to greet, to meet." This character is comprised of "辵" *chuò* "stopping and going" with "言" *yán* "speak" as phonetic. (The *Lóngkān shǒujiàn* contains "這" as a popular form of "唁" *yán* "condolence"; this is a homographic phonogram.) The character "適" in ancient times was also written "這". (In the *Dàzhèng xīnxiū dàzàngjīng* 大正新修大藏經, *juàn* 14, in the scripture titled "Wēnzhūshīlì wèn Púsā shǔjīng," the character "這" is used in place of "適" and the commentary points out that in Song, Yuan and Ming editions as well as in the Gōngnèi shěng túshūliáo 宮內省圖書寮 edition, the "這" is written "適".) In the Tang dynasty, Xuán Yīng's *Yīqièjīng yìnyì* remarks several times that in the *Sāncāng* 三蒼, the ancient script form of "適" was written "這". Actually, "這" must have been an old popular form. It was this character that was borrowed to represent the demonstrative {這} *zhè* "this." Nowadays "這" has been simplified to "这". The character "適" in ancient times had the *fǎnqiè* spelling 之石切 [MC tśjäk]; the early pronunciation of the demonstrative {這} must also have been "之石切" [MC tśjäk]. (The views expressed in this entry are based on Chén 1964).

Furthermore, a number of other graphs already mentioned belong to this category: "歹" *dǎi* and "歹" *è* which merged as "歹" (see Sec. 6.3); the homographs "疋" *pǐ* (a corruption of "匹") and "疋" *shū*; the homographs "亘" *huān* or *huán* and "亘" *gèn*, an altered form of "亙"; the homographs "广" (the simplified form of "廣" *guǎng* "wide") and its original graphic component "广" *yǎn* "shelter"; and the homographs "厂", the simplified

form of "廠" *chǎng*, "厂", the protoform of "厈" *hǎn* "bank, shore", as well as "厂", an old simplified form of "庵" *ān* "hut."

In the process of script simplification, some phonograms, due to using phonetics with few strokes, have become homographs of already existing characters: "仆", the simplified form of "僕" *pú* "servant," has become a homograph of "仆" *pū* "fall forward"; "证" *zhèng* "prove," the simplified form of "證" has become a homograph of "证" (証) *zhèng* "remonstrate"; "柜" *guì* "cabinet," the simplified form of "櫃" has become a homograph of "柜" *jù* "a kind of willow"; "吁" *yù* "appeal," the simplified form of "籲" has become a homograph of "吁" *xū* "sigh." Due to the fact that "幾" *jī* "small, slight," both as an independent character and as a graphic component, has been simplified to "几", both "饑" *jī* "famine" and "飢" *jī* "hungry" are now written with the homograph "饥" (however, there are already examples of the confusion of these two characters in ancient texts). Sometimes two different phonograms, when simplified, become homographic phonograms; this is the case with "鐘" *zhōng* "bell" and "鍾" *zhōng* "wine vessel," both simplified as "钟"; "纖" *xiān* "fiber" and "縴" *qiàn* "rope for hauling boats" have both been simplified to "纤"; "髒" *zāng* "dirty" and "臟" *zàng* "internal organ" have both been simplified to "脏". Homographs created in this way, like "证" *zhèng* "prove" and "remonstrate" and "钟" *zhōng* "bell" and "wine vessel" can be classified either as homographs caused by graphic change or as homographic phonograms. (The "鐘" cited above, which is simplified to "钟", represents both *zhōng* "wine vessel" and at the same time is an allograph of "盅" "cup"; in ancient times these were two very different things. The "鍾" meaning "wine vessel" and the "鍾" which is an allograph of "盅" may be considered homographs. Therefore the modern graph "钟" can be viewed as a homograph representing three different words. The orthograph of "冲" *chōng* in the compound 冲虛 *chōngxū* "carefree" is "盅": the *Shuōwén* defines "盅" as "'a vessel's emptiness,' from 皿 *mǐn* "vessel" with 中 as phonetic." The "盅" meaning "cup" is a homograph of this "盅" defined in the *Shuōwén*.)

Above we discussed the phenomenon of characters which are simultaneously loangraphs and loans based on graphic shape. Here we will give a further, rather special example of this phenomenon: the borrowing of "罪" to write "辠".

The word {罪} *zuì* "crime" was originally represented by the character "辠". In the Qin dynasty the rulers felt that "辠" was too close in graphic form to "皇" *huáng* "emperor" (in the seal script "皇" was sometimes written "皇" with the element "自"), so they borrowed "罪" which originally referred to a kind of "bamboo fishing net" to represent the word {罪}. (In the *Shuōwén* it says regarding this, "辠, 'to transgress the law,' comprised of 自 and 辛 . . . in the Qin dynasty because of the graphic resemblance to 皇, it was changed to 罪." The character "罪" is defined as "'a bamboo

fishnet,' comprised of 网 and 非; in Qin times 罪 was used for 辠." As pointed out by Lǐ Róng [1980:7], judging from the bamboo slips of Qin and Han date, as well as the silk manuscripts from Mǎwángduī [see Wénwù Press 1980b], "辠" was actually changed to "罪" in the Qin. Further evidence of this is seen in the bamboo slips discovered in Qin tomb no. 6 at Lónggǎng in 1989, which is somewhat later than Qin tomb no. 11 discovered at Shuìhǔdì, wherein the character "辠" had already been replaced by "罪" [see Liú and Liáng 1990:83]. In the facsimile which has come down to us of the Guìjī stone inscription of the 37th year of Qín Shǐhuáng [210 B.C.], the character "辠" is found; this appears to be a counterexample to the claim that there was a change in the Qin dynasty. However, as we pointed out in Sec. 4.4, the present facsimile of the Guìjī inscription is suspected of being a forgery; hence this example does not carry much weight. Even if the "辠" in the Guìjī inscription is genuine, however, we still cannot revise the claim that "罪" was substituted for "辠" in the Qin dynasty because of the possibility that the change took place during the reign of the second Qin emperor. The *Shuōwén* merely says that the substitution took place in the Qin dynasty and it does not specify that it took place in the reign of Qín Shǐhuáng.) The present editions of the *Shuōwén* saying that the character "罪" is from "网非" ("to net the wrong") does not accord with the meaning "a bamboo fishnet"; there should originally have been a "聲" after "非" that was excised by later editors. This seems quite likely. In Old Chinese "辠" and "非" were in the same rime group but their initials were quite different. The original pronunciation of "罪" in its basic meaning probably was not entirely the same as that of "辠". The reason that the Qin rulers chose to borrow "罪" rather than some other character close in pronunciation was because "罪" could be viewed as a syssemantograph consisting of "网" *wǎng* "to net, capture in a net" and "非" *fēi* "wrong, wrongdoing." (Duàn Yùcái's commentary to the *Shuōwén* concerning "辠" says, "罪 originally was a phonogram for a bamboo net for catching fish; Qín Shǐhuáng was the first one to change it from a phonogram to a syssemantograph consisting of 网 'to net' and 非 'wrongdoing.'") "To net wrongdoing" does not really correspond to the real sense of "辠" but the notion of "netting wrongdoers" was indeed the aspiration of the rulers. The deletion of "聲" after "非" by later editors must have been because they had this same notion in mind. The treating of the phonogram "罪" as if it were a syssemantograph is a special case of borrowing based on graphic form. However if "罪" and "辠" were not words with similar pronunciations belonging to the same Old Chinese rime group, "罪" would probably not have been chosen to replace "辠"; therefore the borrowing of "罪" to write "辠" can be considered a rather special case of a loangraph simultaneously based on sound and graphic form.

The borrowing of "**飄**" to write {帆} *fān* "sail" (mentioned in Sec. 1 of this chapter) is in some ways similar to the borrowing of "罪" to write "辠". The element "風" *fēng* "wind" used as the phonetic in "**飄**" has a semantic link to {帆}; this is undoubtedly one of the reasons that "**飄**" was chosen to represent {帆}. Perhaps some people even viewed "**飄**" as a syssemantograph consisting of "風" "wind" and "馬" *mǎ* "horse."

Most homographs were not current at the same time. For example, at the time that the "姥" of "姥姥" *lǎolao* "maternal grandmother" appeared, most people no longer used the syssemantograph "姥" *mǔ* consisting of "女" *nǚ* "female" and "老" *lǎo* "old." When the "鈁" meaning "francium" was created, people had long abandoned the "鈁" that meant "a kind of square vessel." The reason that "广" could be used as the simplified form of "廣" was because the "广" read *yǎn*, except as a semantic component, had long since fallen into disuse. On the other hand, since the simplified form of "麼" *ma* "interrogative particle" used the component 么 *yāo* which was still a relatively frequently used character, the simplification process had no choice but to alter "么" to "幺" *yāo* in the sense of "one" (this was in fact the original way "么" was written) in order to avoid confusion. By comparison, the simultaneous use of homographs which are phonograms is somewhat more common.

Finally we will comment on homographs used to write disyllabic compound words. Sometimes binomes with different meanings created at different periods are written with the same graphs. Following are some examples: 女工 *nǚgōng* "woman worker" and 女工 *nǚgōng* (also written 女功 and 女紅) "needlework;" 拍子 *pāizi* "bat, racket" and 拍子 *pāizi* "beat, time (in music);" 儀表 *yíbiǎo* "appearance" and 儀表 *yíbiǎo* "meter;" 妻子 *qīzi* "wife" and 妻子 *qīzǐ* "wife and children" (perhaps some would not consider this a compound); 反正 *fǎnzhèng* "come over from the enemy side" and 反正 *fǎnzheng* "anyway, anyhow." If one considers such disyllabic forms as aggregates, then the above examples can also be considered homographs.

10.3 Synonymic Interchange

Sometimes people disregard the original pronunciation of a character and use it to represent another word whose meaning is either identical or close to the word that the character in question originally represented. (In most cases this involves words that have their own graphic representation.) The pronunciation of the two words may be vastly different. Among recent scholars who have taken notice of this phenomenon are Shěn Jiānshì, Lǚ Shūxiāng and Lǐ Róng. Shěn (1947) refers to this phenomenon as "異音同用" ("different sound, same use") or "義同換讀"

("meaning the same, reading interchanged"). Lǐ Róng (1965:126) calls this phenomenon "the interchange of synonyms" or "synonymic substitution" (see Lǐ Róng 1980:1). We will use a variant of Shěn's term, "同義換讀" "synonymic interchange."

Lǚ Shūxiāng (1980:31) has pointed out that synonymic interchange is in its essence similar to the phenomenon known as *kunyomi* in Japanese. *Kunyomi* refers to the use of Chinese characters to write native Japanese words. When this is done, the original Chinese pronunciation of the character is disregarded and the character is given the reading of the native Japanese word that it represents. For example, "人" (in Chinese *rén* "person") is used to represent Japanese *hito* "person"; in a similar way "山" (Chinese *shān* "mountain") is used to write the Japanese word for "mountain" *yama*. One might say that synonymic interchange is a kind of purely Chinese *kunyomi*. The phenomenon of *kunyomi* can also be seen in purely alphabetic writing systems; this is the case when, for example, an English speaker reads the Latin abbreviation *i.e.* as "that is" or the Latin abbreviation *etc.* as "and so forth," respectively. Below we give several examples of synonymic interchange.

The characters 俛 and 頫 are interchangeably read as 俯 *fǔ*. In the *Shuōwén* "頫" is glossed as "to lower the head" and "俛" is taken to be an allograph of "頫". Many dictionaries and commentaries to ancient texts take "俛" and "頫" in the sense of "to lower the head" as allographs of "俯". (In Lǐ Shàn's commentary to the "Shànglín fù" in the *Wénxuǎn*, the *Shēnglèi* is quoted as saying that "頫" is an ancient form of "俯". In his commentary to the *Hànshū*, Yán Shīgǔ says several times that "頫" is an ancient form of "俯". In Tang, Yán Yuánsūn's *Gānlù zìshū* says that "俯" and "俛" are both "the 俯 of the expression 俯仰; popularly 俛 is read like 免 [*miǎn*]; this is incorrect.") The "Consolidation List" has lumped "俛" and "頫" together under "俯". In actuality, both "俛" and "頫" were originally completely different in pronunciation from "俯". "俛" is comprised of "人" with "免" as phonetic and originally should have been read like "免". In Duàn Yùcái's commentary to the *Shuōwén* this is discussed in detail under the entry for "頫". In the *Wèiliáozǐ*, "Bīngtán," a book written on bamboo strips discovered at Yínquèshān, there is a passage 俛者不得仰 which can be understood as 俛者不得仰 "one who lowers the head cannot look upward." The components "𠂤" and "免" are close in pronunciation, so "俛" must have been an allograph of "俛". This demonstrates that "俛" "to lower the head" originally was read like "免" and not like "俯". It was only because "俛" and "俯" were synonyms that they were both interchangeably read like "俯". As for the character "頫", Duàn Yùcái, basing himself on a *fǎnqiè* spelling in the *Yùpiān*, says that it should be homophonous with "俛". Huáng Shēng (1984) in his *Zìgǔ* under the entry for "頫" claims that "頫", "俛", and "俯" were synonyms but were

pronounced differently; "俯" should be pronounced like "眺" *tiào* (when "頫", in the senses of "inquire" or "inspect," occurs in ancient texts, it is read *tiào*). Huáng says that "later people mistakenly read them all like '俯' because they had the same meaning." To sum up, reading "頫" the same as "俯" must also be a case of synonymic interchange.

The character 圩 is interchangeably read as 圍 *wéi*. Beginning in the Five Dynasties and Song periods (or perhaps even earlier), in the area between the Huái river and the Yángzǐ, in low lying areas dikes were often constructed around fields to prevent flooding and to allow cultivation. These dikes were referred to as 圩 or 圍 and the fields within the dikes were called 圩田 or 圍田. "圩" was originally read like "于" *yú* but since it was synonymous with "圍" *wéi*, its pronunciation was later often interchanged with that of "圍". In the *Xīnhuá zìdiǎn* and the *Xiàndài Hànyǔ cídiǎn*, in the sense of "dike," "圩" is only given the reading *wéi*; its original pronunciation *yú* seems to have been eliminated. (Note that "圩" is also read *xū* in the sense of a "periodic market"; this is a simplified way of writing "墟" and it should be considered a homograph of the "圩" read *wéi*.)

The character 石 is interchangeably read as 擔 *dàn*. "石" *shí* "stone" can also be used to refer to a unit of weight or volume: one hundred and twenty catties are one "石" (in the *Shuōwén* this was written "𥏌"), and ten *dǒu* (斗) equal one "石". In many places this measure of weight or volume was called "擔" (literally a "load" or "burden"). In the biography of Xuān Bǐng in the *Hòu Hànshū* [Zhōnghuá ed., p. 929], there is the passage 自無擔石之儲 "He himself had not a *dàn* or *shí* of provisions"; in the commentary of Lǐ Xián it says, "Nowadays in the area between the Huái and Yángzǐ one "石" (*shí*) is called one "擔" (*dàn*)." After the Tang the use of *dàn* for *shí* was no longer limited to the people of this area. Subsequently people began to use "石" as a simplified form of "擔". This use of "石" is not found in the *Kāngxī zìdiǎn* and other traditional dictionaries, but present-day dictionaries all include it (see Lǚ 1980:30–31).

The character 腊 is interchangeably read as 臘 *là*. In ancient times dried meat was called "腊" *xí*. In later times a kind of salted preserved meat was called "臘肉" *làròu*; some people began to use "腊" as a simplified form of "臘" in this expression. Modern script reform has formally adopted "腊" as the simplified form of "臘" and, by analogy, writes "獵" *liè* "hunt" and "蠟" *là* "wax" as "猎" and "蜡" respectively; thus the new simplified form "猎" becomes a homograph of the "猎" that is an allograph of "猟" *shuò* "startled (of dogs)," and "蜡" becomes a homograph of "蜡" *là* "a year end sacrifice."

In Fújiàn, Táiwān and Guǎngdōng some read "田" "field" as "塍", "黑" "black" as "烏" and "香" "fragrant" as "芳", reflecting the pronunciations in their respective dialects, e.g., Mǐnnán ˌtshan, ˌɔ, and ˌphang, respec-

tively (see Lǐ Róng 1980:10–11). Some Northern Chinese read "尿" *niào* "urine" as *suī* (in ancient times "urine" was sometimes called "私" *sī*; some think that {*suī*} has developed from this use of "私"). In the past some people read "骰子" *tóuzi* "dice" as *shǎizi*. In the Ming and Qing dynasties "馹" *rì* "send by post" was used as a simplified form for "驛" *yì* "post station." These are all cases of synonymic interchange.

Synonymic interchange and the use of loangraphs and loans based on graphic form constitute a kind of borrowing. The borrowing of the graphic form of a character originally created to write another word which happens to be appropriate to the writing of a second word is borrowing based on graphic form (形借). Loangraphs are characters borrowed to write words which are either identical or nearly so in pronunciation. Synonymic interchange takes place when a character identical or close in meaning is borrowed to write a second word. The processes underlying loangraphs and synonymic interchange could be called phonetic and semantic borrowing respectively. In Sec. 9.1 we pointed out that some loangraphs for which orthographs already exist are in reality nothing more than erroneous graphs which happen to be homophonous or nearly so in pronunciation; in like manner, some cases of synonymic interchange are cases of erroneous graphs which happen to be identical or near in meaning.

Cases of synonymic interchange, loangraphs and loans based on graphic form all have their own characteristics, but sometimes they can be difficult to distinguish.

Above we have pointed out that some instances of graphic borrowing, chiefly when the borrowing involves phonograms, can be viewed either as cases of loangraphs or cases of borrowing based on graphic form. In addition, it would seem that a few examples of graphic borrowing can be viewed either as synonymic interchange or as loangraphs where the meaning of the borrowed character and the loangraph are related. A case in point is the reading of "仇" as "讎".

Both "仇" and "讎" can have the sense of "enemy" or "foe"; both frequently occur in ancient texts. According to medieval rimebooks, "仇" is read *qiú* (巨鳩切); "讎" is read *chóu* (市流切); they are in the same rime but have different initials. In the "Yòngqì" section of the *Shìmíng*, under the entry "仇矛", "仇" is defined by "讎". In a note to the *Zhōulǐ* ("Chūnguān, diǎnruì"), Zhèng Xuǎn says 難, 仇讎 "*nán* [refers to] enmity and disputes"; and in *Zhōulǐ*, "Dìguān, tiáorén," he comments: 難, 相與爲仇讎 "*nán* [refers to] mutual enmity and disputes." In all the above examples "仇" and "讎" are used together; "仇" clearly cannot be pronounced the same as "讎". However, already in the Tang dynasty many people were reading "仇" "enemy" the same as "讎". Later this became accepted practice. At present "讎" is considered an allograph of "仇" and the two graphs have been

consolidated under "仇". ("讎" in the word "校讎" *jiàochóu* "collate" is retained however.) Yán Shīgǔ in his *Kuāngmiù zhèngsú* under the entry of "僅" says,

> 仇 in the sense of "enmity toward another" has the same meaning as 讎 *chóu*; 嘗 "experience" has the same meaning as 曾 *céng*; 邀 "seek, solicit" has the same meaning as 要 *yào*; in all these cases the pronunciations are different and they should not be interchanged. But nowadays in popular usage 仇 is read like 讎, 嘗 is read like 曾 and 邀 is read like 要; this is all clearly erroneous.

According to Yán Shīgǔ, the reading of "仇" as "讎" as well as the reading of "嘗" as "曾" were both cases of synonymic interchange. This of course makes sense. (His comment about "reading 邀 as 要" requires some explanation; in the *Guǎngyùn* "邀" with the meaning "impede" has two *fǎnqiè* spellings, 於霄切 [MC ʔjäu] and 古堯切 [MC kieu]. Yán Shīgǔ apparently thought that in the sense of "seek, solicit" "邀" should be read 古堯切 [MC kieu]; if it were read 於霄切 [MC ʔjäu], then it would be read like the character "要".) However the pronunciation of "仇" and the pronunciation of "讎" are actually rather close; it would appear that there is nothing to prevent us from explaining the use of "仇" to write "讎" as a case of using a closely related graph with fewer strokes which is closer in sound and meaning to write "讎" which is a more complex graph. Perhaps it would be more appropriate to consider this example as being both a case of simultaneous synonymic interchange and borrowing based on sound or something in between these two. In Sec. 12.2.1 we will speak of similar examples.

There are some other types of graphic borrowing, mainly concerned with borrowing semantographs, that can be viewed both as synonymic interchange and as cases of borrowing based on graphic form. Below we will illustrate this with the character "凸".

Since people from different regions often use the character "凸" to represent the most frequently used words for "convex," "raised" or "protruding," its pronunciation is quite divergent from place to place. In the *Guóyīn zìdiǎn* published in 1949, under "凸" the pronunciations *tū*, *dié* and *gǔ* are given. In the *Zhōngxiáng fāngyán jì* (Chao 1939) the colloquial pronunciation of "凸" is given as [puŋ ˥]. In the Southwest, in some areas "凸" is pronounced *gǒng*. Undoubtedly there are still other pronunciations. The words written with the character "凸" in various regions are all identical or very close in meaning. Therefore one can explain the various pronunciations of "凸" as cases of synonymic interchange. However, since all the words represented by the character "凸" can be considered the basic meaning of "凸", there is no reason for us not to consider this

phenomenon as borrowing based on graphic form and to consider the various non-homophonous words represented by "凸" as homographic semantographs.

There are individual cases of graphic borrowing that are related to borrowing based on sound and graphic shape and may be considered synonymic interchange as well. An example of this is the character "閘" which originally was a phonogram comprised of "門" *mén* "gate" with "甲" *jiǎ* as phonetic; "閘" is a homophone of "押" *yā* "place a signature or mark on a document." (In the A version of the Mǎwángduī *Lǎozǐ*, in the phrase 母閘其所居, "母閘" are loangraphs for "毋狎"). In the *Shuōwén* "閘" is glossed as "to open and close a gate." During the Ming and Qing dynasties, "閘" was borrowed to write "牐" referring to a "sluice gate" ("牐", read *zhá*, was not originally used exclusively to refer to sluice gates; in the *Guǎngyùn* the expression "下嶄" is defined as "to close a city gate"; at present "嶄" is considered an allograph and has been consolidated with "閘"). The original meanings of "嶄" and "閘" were close; furthermore if one disregards its original structure, and views the character only from the point of view of its external form, it indeed looks a bit like a sluice valve within a gate. In terms of their original pronunciation, the initials of "牐" and "閘" are clearly different, but their finals are similar (both are second division entering tone words in the *xián* 咸 group). When earlier people borrowed "閘" to write "牐", factors of graphic shape, pronunciation and meaning were probably all taken into account; phonetic reasons alone are insufficient to explain this sort of borrowing. Therefore this is a special case of borrowing that can be viewed as simultaneously involving borrowing based on sound and graphic form as well as a case of synonymic interchange.

11

Graphic Differentiation and Consolidation

11.1 Graphic Differentiation and Other Means of Dispersal of the Lexical Loads of Graphs

Due to semantic extensions, graphic loans, and so forth, multi-functional graphs, that is, graphs which denote two or more meanings or which have two or more readings and meanings, are a common phenomenon in Chinese script (see Sec. 12.1). To facilitate discussion, we shall term graphs which denote two or more meanings or which have two or more readings and meanings "polysemic graphs." Historically speaking, the production of multi-functional graphs has gone on endlessly. On the other hand, to insure precision of expression, the dispersal of the lexical loads of polysemic graphs has also been endless. In this section we shall discuss the primary methods of dispersing the lexical loads of polysemic graphs. The methods of dispersing the lexical loads of polysemic graphic forms that represent two or more homographs by and large are the same as those applied to most polysemic graphs. In this section, several examples of load dispersal involving polysemic graphic forms of this kind will also be mentioned in passing.

11.1.1 Graphic Differentiation

The primary method of dispersing the lexical loads of polysemic graphs is to differentiate them by two or more graphs, so that the lexical load which originally was borne by one graph is now distributed among two or more graphs. We call new graphs which now bear a part of this load "differentiated graphs," and the graphs from which they are derived "matrigraphs." Not all graphic differentiations were necessarily successful. Some differentiated graphs never gained currency, and some were later reunited with their matrigraphs. In more concrete terms, the methods used to differentiate graphs can be divided roughly into four types: a) the division of lexical loads among variant forms; b) the creation of differentiated forms which differ from their matrigraphs by only subtle calligraphic

differences; c) the creation of differentiated forms by adding or changing character components; and d) the creation of differentiated forms which are formally unrelated to their matrigraphs. Examples of each of these methods of differentiation are cited and discussed below.

11.1.1.1 Division of Lexical Loads among Variant Forms

The differentiation of some polysemic graphs was realized by the division of lexical loads among allographs in the strict sense. For example,

猶 : 猷. Aside from its original meaning of a kind of monkey, "猶" *yóu* was also used to denote {猷} as in 謀猷 *móuyóu* "strategy," {猶} as in 猶如 *yóurú* "like, as if," and {猶} as in 猶可 *yóukě* "probably." "猷" *yóu* and "猶" *yóu* originally were allographs whose character components differed in their positions within the graphs but whose usages were not distinguished. (The *Shuōwén* includes only the form "猶".) At an earlier period, {猷} as in *móuyóu* was also written "猶" (e.g., *Shījīng* Ode 195.1 謀猶回遹 "The counsels and plans are crooked and malevolent"). {猶} as in *yóurú* and *yóukě* was written "猷" (e.g., *Ěryǎ* 2:91 猷, 若也 "*yóu* means 'like, as if,'" and 猷, 肯, 可也 "*yóu* means 'willing, can.'" The usages of "猷" and "猶" in the Yínquèshān bamboo slips are totally indistinguishable). Later on, "猷" was used exclusively to denote its sense of *móuyóu* "strategy," whereas "猶" was used to denote its sense of *yóurú* "like, as if," and so forth. Thus what had been allographs became separate characters with distinctive usages.

邪 : 耶. "邪" is derived from "邑" *yì* "city" and "牙" *yá* as phonetic and originally was a place name (read *yá*, an old reading of which was *yé*; the place name 瑯琊 Lángyé was anciently written 琅邪). "邪" was borrowed for {邪} as in 邪正 *xiézhèng* "heterodoxy and orthodoxy" (read *xié*, it originally was written "  ", as is seen in the *Zhōulǐ*, *Shuōwén*, etc., but this was seldom used in later times) and it was also borrowed to denote the sentence-final interrogative particle {耶} (read *yé*; e.g., *Shǐjì*, "Xiàngyǔ běnjì": 羽豈其苗裔邪 "Well how about Yǔ's descendants?"). Aside from these, the graph has other usages but they will not be discussed here. In Han clerical script, the element "牙" was often written in such a way as to render it nearly indistinguishable from "耳"; consequently, "邪" had an allograph written "耶".[1] Originally there was no difference in their usages. Later on, {邪} as in *xiézhèng* was no longer written "耶", and {耶} as an interrogative particle was no longer written "邪"; thus what had been allographs became characters with distinctive usages.

1. Yán Yuánsūn (Tang dynasty) in his *Gānlù zìshū* divides the styles of script into three types: 正 *zhèng* "formal," 通 *tōng* "popular," and 俗 *sú* "vulgar." In his book he classifies "邪" as the "formal" form and "耶" as the "popular" form.

享 : 享. "亨" and "享" originally were allographs whose usages were indistinguishable. (In bronze inscriptions this graph was written  ,  , etc. The *Shuōwén* gives two forms: and . In the inscription on the "Jiā *liàng*" of Wáng Mǎng's time, "享" in 享傳億年 "to enjoy and pass [it] down for a hundred million years" is written  .) At a relatively early period, {享} as in 祭享 *jìxiǎng* "to sacrifice," 享受 *xiǎngshòu* "to receive," etc. was also written "亨" (e.g., *Yìjīng*, Hex. 14, Lines 9–3: 公用亨于天子 "The duke thereby offers [it] to the Son of Heaven"; the "Liú Xióng *bēi*" of Eastern Han has 子孫亨之 "sons and grandsons make sacrifices to him"). {亨} *hēng* as in 亨通 *hēngtōng* "go smoothly" and {烹} *pēng* as in 烹飪 *pēngrèn* "cookery," was also written "享" (e.g., for "亨" in *Yìjīng*, Hex. 17: 元亨利貞, the Mǎwángduī silk manuscript redaction of the *Yìjīng* text and the "Zhāng gōng shén *bēi*" inscription both have "享" in this line. The *Rìshū*, a text written on bamboo slips discovered at Shuìhǔdì, Yúnmèng, Húběi, has: 享而食之 "Eat it after having cooked it," in which "享" stands for {烹}. Ancient texts usually have "亨" for {烹}, as in *Shījīng* Ode 154.6 七月亨葵及菽 "In the seventh month [we] cook the *kuí* plant and beans." Later on, they were assigned separate lexical roles and the two subsequently became separate characters with distinctive usages. (The *Gānlù zìshū* says that "亨" is the form properly used in 亨通 *hēngtōng* "to proceed smoothly" and 亨宰 *hēngzǎi* "to dress and cook food," and "享" in 祭享 *jìxiǎng* "to offer sacrifices." The discontinued use of "亨" for "享" probably took place later than the discontinued use of "享" for "享". The *Tàipíng guǎngjì*, *juàn* 252, under the entry "Páiyōurén," contains the line: 經年與人旋磴亨利 "For years [he] gave [his donkey] to people to turn [their] millstones and reap benefits," in which "亨" was still being used for {享}.) Moreover, the differentiated form "烹" was created through the addition of a semantic symbol to "亨", after which what had been originally one character was now differentiated by three graphs.

箸 : 著 : 着. "著" originally was an allograph of "箸" *zhù* "chopsticks." (In Han clerical script, the top elements "竹" "bamboo" and "艸" "grass" were usually not distinguished; so "箸" was changed to "著". The *Shuōwén* does not have "著".) Later on, "箸" was used solely to denote its original meaning (also written "筯"), whereas "著" was used to denote its borrowed and extended meanings; so what had been allographs became characters with distinctive usages. (In ancient texts we still encounter cases where "著" was used to denote the borrowed and extended meanings denoted by "箸". We find "箸" denoting {著} *zhù* "to manifest" in *Xúnzǐ*, "Wángbà": 箸仁義 "display humaneness and benevolence"; and in *Lièzǐ*, "Zhòngní": 形物其箸 "The formation of things will be manifested." We find "箸" denoting {著} *zhù* "to adhere to" in the Bāo Biāo edition of the *Zhànguócè*, "Zhào" 1: 兵箸晉陽三年矣 "For some three years now the troops have held fast at Jìnyáng." We find "箸" used for {著} *zhuó* "to wear" in *Shìshuō*

xīnyǔ, "Fāngzhèng": 今見鬼者云箸生時衣服 "Now, the ones who see the ghosts say they wear [the same] clothing as when they were alive." "箸" denotes quite a number of meanings, and aside from its less frequently used meanings, its readings can be divided into two series. The first consists of readings in the departing tone, such as "箸" *zhù* as in 顯箸 *xiǎnzhù* "notable," 箸作 *zhùzuò* "writings." The second series consists of what originally had been entering tone readings, e.g., "箸" *zhuó* as in 著衣 *zhuóyī* "to wear clothing," 附著 *fùzhuó* "to adhere to," 著落 *zhuóluò* "whereabouts," including the grammatical particle "箸" *zhe*. "箸" in the latter series is usually written "着" now. (The various meanings denoted by "着" when read as *zhāo* and *zháo* are extensions of "箸" which originally was read in the entering tone.) Originally "着" was an allograph of "箸". (In the script of the Han-Wei and Six Dynasties period, the component "日" "sun" was at times corrupted into "目" "eye," e.g., "莫" was also written "莫". The *Gānlù zìshū* takes "着" as the vulgar form of "箸". If the grass component 艸 at the top of 箸 is written a little lower and its downward diagonal stroke is written without its upper projection, the result is the character "着".) Yán Mǐnchǔ (n.d.; fl. Sui-Tang period) in his *Súshū zhèngwù* under the character "着" notes: 原箸, 今着實 "Originally [written] '箸' but now [written 着 as in] *zhuóshí* 'concrete and substantial.'" It would appear that already during the Tang dynasty there was a tendency to distinguish "箸" and "着" in popular script. (Perhaps the character "着" in Yán's original work was written "箸" just as it was in the *Gānlù zìshū*. On the date of Yán's work, see Wáng 1972:1725–1726.) But in the eyes of the literati of antiquity, the character "着" was a vulgar form which should not be used. Even by the time of the *Cíyuán*'s compilation during the early Republican period, the character "着" had consistently been excluded as an entry in dictionaries; thus below the character "箸" a note was appended stating: "Whenever it is read in the entering tone, it is popularly written 着." In the *Xīnhuá zìdiǎn* and *Xiàndài Hànyǔ cídiǎn* of more recent times, all the meanings of "箸" belonging to the entering tone series are placed under "着". In the eyes of most people, "着" and "箸" at an early period were already two separate characters with distinctive usages. "箸" as in 土箸 *tǔzhù* "aborigines" originally took its meaning from 附著 *fùzhuó* "to adhere to" and thus should be read *zhuó*. But on account of the fact that the written form of this character was not changed to "着" as was generally true for those which originally had entering tone readings, it was subsequently read *zhù* by everyone (cf. Sec. 12.2.1).

The distribution of lexical loads among allographs is common in Chinese writing. Aside from the examples cited above, "鴉" *yā* "crow" vis-à-vis "雅" *yǎ* "refined," "諭" *yù* "to notify by a directive" vis-à-vis "喻" *yù* "to liken; to compare," "讎" *chóu* "enemy" vis-à-vis " 售" *shòu* "to sell," "吏" *lì* "a civil officer" vis-à-vis "事" *shì* "to serve," "烏" *wū* "blackbird" vis-à-vis "於" *yú* "in, on, at" (the *Shuōwén* takes 於 as an ancient abbreviated form of "烏"), "句" *gōu* "winding" vis-à-vis "勾" *gōu* "cancel," "弁" *biàn* "a conical cap worn at ceremonies" vis-à-vis "卞" *biàn* "hurriedly" ("卞" originally was an abbreviated form of "弁"), "沈" *shěn* "a surname" vis-à-vis "沉" *chén* "to sink" ("沈" originally was a corrupted form of "沉"), and so forth, are all cases of graphs which in origin were allographs in the strict sense but later became graphs with distinctive usages through differentiation.

Roughly the same methods that were used to divide lexical loads among allographs were usually used to differentiate the graphic shapes of homographs. For example, originally 𝔻 and 𝔻 were both used to denote {月} *yuè* "moon" as well as {夕} *xī* "evening." Later on, however, they were differentiated and 𝔻 was used exclusively to denote {月} and 𝔻 was used exclusively to denote {夕}, after which they became two graphically distinct characters. The cases of "大" *dà* "large" vis-à-vis "夫" *fū* "man," and "发" *pài* "to send" vis-à-vis " 永" *yǒng* "eternal" are of this same type. These examples have already been discussed above (see Chapter 1 and Sec. 7.1.6). In another case, the characters "鐘" and "鍾", which in recent times were simplified to "钟", in the ancient script could be used to denote the {钟} in 钟鼓 *zhōnggǔ* "bells and drums" as well the {钟} in 钟壺 *zhōnghú* (a kind of wine vessel). The character "鐘" denoting the *zhōng* in *zhōnggǔ* and the *zhōng* in *zhōnghú*, and the character "鍾" denoting *zhōng* in *zhōnggǔ* and *zhōng* in *zhōnghú* should be regarded as homographs. Later on, however, they were differentiated and "鐘" was used exclusively to denote the {钟} in *zhōnggǔ* and "鍾" was used exclusively to denote the {钟} in *zhōnghú*. This is a case that closely resembles those in which there was a division of lexical loads among allographs. At present, however, "鐘" and "鍾" have been mixed up once more in the form "钟".

11.1.1.2 Creation of Differentiated Forms which Differ from their Matrigraphs by Only Subtle Calligraphic Differences

In some instances part of a polysemic graph's lexical load was vested in a new character created by making subtle changes in the composition of its matrigraph. For example,

母 : 毋. In the ancient script "母" *mǔ* "mother" was borrowed to denote the negative {毋} *wú* "do not." By the Warring States period, the two dots in "母" had been changed to a single stroke, yielding the differentiated form  (毋) which was used exclusively to denote this word. (The character "毋" occurs in the Warring States period stone inscription "Zhù Chǔ wén" from the state of Qín and in the bamboo slips excavated from Chǔ tomb no. 1 at Wàngshān in Jiānglíng, Húběi. These are probably the earliest occurrences of this character available at present. During the Warring

States period, however, it appears that "母" was still normally used for {毋}. In the Warring States period "Xīnqī *hǔfú*" inscription from Qín, "母" was still being used to denote {毋}.) By the Qin-Han period "毋" was already in widespread use (yet in written materials dating from the Qin-Han period, we still encounter a small number of examples where "母" was used to denote {毋}).

已 : 已. Originally the character "已", as in 辰已 *chénsì* (the fifth and sixth signs of the Twelve Branches [十二支]), was borrowed to denote {已} *yǐ* "to stop; already" as in 已然 *yǐrán* "be already so." (In the late Spring and Autumn period "Càihóu *pán*" inscription, "母已" stands for {毋已} *wúyǐ* "do not stop." During the Han period, aside from cases where "以" *yǐ* was borrowed on occasion to denote {已}, "已" was regularly used to denote {已}, scores of examples of which appear in Han time bamboo slips and stele inscriptions, e.g., "Kǒng Hé *bēi*": 事已即去 "When the affairs are finished, [one] then leaves.") Later on, the upper, left-hand corner of "已" was left open, yielding the differentiated form "己" with its distinctive usages. (The *Shuōwén* does not have "己".)

刀 : 刁. In antiquity the character "刀" *dāo* had a reading of "刁" *diāo*. (The name Shū Diāo, a favorite courtier of Duke Huán of Qí, appears in *Mòzǐ*, "Suǒrǎn" and in the *Gōngyáng zhuàn*, Xī 18 written 豎刀. 刁斗 *diāodǒu* [a pan used for cooking by day and beating the watches by night] appears in the *Hànshū*, "Lǐ Guǎng zhuàn" written 刀斗. In Han time seals the surname {刁} *diāo* is regularly written "刀".) Later on, the leftward downstroke in "刀" was changed to an upward stroke, yielding the differentiated form "刁" which replaced "刀" when read "刁" *diāo*. (The *Shuōwén* does not have "刁".)

荼 : 茶. Originally the character "荼" *tú* "Sonchus oleraceus" was used to denote {茶} *chá* "tea" as in 茶葉 *cháyè* "tea leaves." (According to *Ěryǎ* 14:63, 檟, 苦荼 "*Jiǎ* is bitter tea." The *jiǎ* was indeed a tea tree. Originally 荼 *tú* was the name of a bitter plant, and since tea leaves are also bitter, {茶} *chá* most likely was derived from {荼} *tú*. Qián Dàxīn [1829: *juàn* 19] in his *Shíjiàzhāi yǎngxīnlù*, under the entry 于皕茶山詩述 "Notes on Yú Dí's Cháshān poems," cites Qú Jìngtāo's remarks: "In the pieces signed by Yuán Gāo and Yú Dí, the character 茶 *chá* appears five times and in each case is written 荼. People during the Tang were well-versed in the six scripts and were unwilling to frivolously write vulgar characters such as this." The differentiation of "茶" from "荼" by the omission of one stroke probably did not take place until the Tang dynasty. The character "槚" at one point was devised to denote {茶} and differentiate it from "荼", but this differentiated form was eventually supplanted by "茶".)

In addition to these, "气" *qì* was differentiated from "乞" *qǐ* (originally the character "气" had been borrowed to denote {乞} *qǐ* "to beg" as in 乞求 *qǐqiú* "to implore"). "角" *lù* was differentiated from "角" *jiǎo* (originally "角" also had a reading of *lù*). "佘" *shé* was differentiated from "余" *yú*; "冼" *xiǎn* was differentiated from "洗" *xǐ* (both "佘" and "冼" were used as surnames), etc., all of which are further examples of differentiations of this sort.

In the examples of differentiation cited above, nearly all the readings of the differentiated forms differ from those of their matrigraphs. It is apparent that reducing the variant readings of a graph was one of the most important objectives of differentiation.

When source materials are inadequate, the process of differentiation described above is usually not easily distinguished from that of distributing lexical loads among allographs which differ only slightly from one another (e.g., "著" vis-à-vis "着", "享" vis-à-vis "享", "句" vis-à-vis "勾", and so forth). Possibly some of the examples cited above should be included among those allographs which assumed part of the lexical loads of their matrigraphs but have been misconstrued due to a paucity of source materials.

In a small number of cases, the creation of differentiated forms fell somewhere between making slight alterations in the strokes comprising matrigraphs and changing altogether components in matrigraphs, which will be discussed below. For example,

陳 : 陣. {陳} *chén* "display" as in 陳列 *chénliè* "to set out, display" by extension meant {陣} *zhèn* "battle array" as in 戰陣 *zhànzhèn* "battle front." This sense of the word was originally denoted by "陳" (e.g., *Lúnyǔ* 15.1 衛靈公問陳於孔子 "Duke Líng of Wèi asked Master Kǒng about the deployment of troops"). Later on, the element "東" in "陳" was changed to "車", yielding the differentiated form "陣" (e.g., on *Hànshū*, "Xíngfǎ zhì" 善師者不陳 "One who is good at mobilizing an army does not deploy it in full battle array" (Zhōnghuá ed., p. 1088), Yán Shīgǔ comments:

> As to its meaning of battle formation, while originally it was derived from 陳列 *chénliè* "to display," its reading was changed. The graph was written 陳 as there was no other form. That scholars of late have often changed the element [on the right] to 車 is not the original form [seen in] the classics and the histories (p. 1089).

The *Shuōwén* does not have "陣". In the "Shūzhèng" chapter of the *Yánshì jiāxùn* it is stated that the character "陣" is seen for the first time in Wáng Xīzhī's *Xiǎoxuézhāng*; Gù Ǎijí in his *Lìbiàn* points out that this graph is already found in the Eastern Han "Sīnóng Liú fūrén *bēi*" inscription.) Vehicles played an important part in ancient warfare, and semantically speaking, there is a connection of sorts between "車" *chē* "vehicle" and "陣" *zhèn* "to deploy troops." Initially, however, the reason why "車" was substituted for "東" in "陳" most certainly was related to their graphic similarity. If the two downward strokes in the lower part of "東" are written

as one, the result is "車". Thus the transformation of "陳" into "陣" can be regarded as a case which falls somewhere between making slight alterations in the strokes comprising a matrigraph and changing altogether character components in the matrigraph (see below).

辨 : 辨. The *Shuōwén* says, 辨, 判也. 从刀, 辡聲 "*Biàn* means 'to judge' and is derived from *dāo* 'knife' and 辡 as phonetic." That the element "刀" in "辨" is written "刂" is attributable to graphic distortion in the clerical and standard scripts. {辨} *biàn* "to discriminate" as in 辨別 *biànbié* "to distinguish" was extended to mean {辦} *bàn* "to manage" as in 辦理 *bànlǐ* "to attend to," a meaning which originally was denoted by "辨" (e.g., *Xúnzǐ*, "Yìbīng": 城郭不辨 "The inner and outer city walls were not [attended to >] maintained"). Later on, the element "刀" was changed to "力", yielding the differentiated form "辦" (the *Shuōwén* does not have "辦"). While "力" and "辦" do share something of a semantic connection, initially the reason why "力" was substituted for "刀" in "辨" most certainly was related to their graphic similarity, much like the case of "陳" and "陣".

The differentiation of 鄉 (卿) from 鄉 (鄉) may also be regarded as an example of this phenomenon (see Sec. 7.2).

11.1.1.3 Creation of Differentiated Forms by Adding or Changing Character Components

This is the most common method of differentiating graphs. Our discussion below will be divided into three parts: a) the addition of semantic symbols (i.e., semantic components), b) the alteration of semantic symbols, and c) the addition or alteration of phonetic symbols (i.e., phonetic components). The addition or alteration of phonetic symbols is less commonly encountered, so these methods will be grouped together. Finally, we shall devote some discussion to the use of these methods in differentiating binomes.

11.1.1.3.1 The Addition of Semantic Symbols

Some commonly used characters with borrowed or extended meanings were differentiated by the addition of semantic symbols to denote their original meanings. In sections 7.1 and 8.1, examples of these kinds of characters were mentioned. For example, as "它" was commonly borrowed to denote the demonstrative pronoun {它} *tā*, the signific "虫" *huǐ* "insect" was added, yielding the differentiated form "蛇" *shé* "snake" to denote its original meaning. (The *Shuōwén* takes "蛇" as an alternate form of "它".) As "孚" was commonly borrowed to denote {孚} *fú* in its sense of "trust," the signific "人" *rén* "human" was added, yielding the differentiated form "俘" to denote its original meaning. (The *Shuōwén* does not take "孚" as the protoform of "俘".) As "韋" *wéi* "to go against" was commonly borrowed to denote {韋} *wéi* "tanned leather" as in 皮韋 *píwéi* "hide," the signific "辵" *chuò* "run and stop" was added, yielding the differentiated form "違" to denote its original meaning. (The *Shuōwén* does not take "韋" as the protoform of "違".) As "莫" was commonly borrowed to denote the negative particle {莫} *mò* "there are none," the signific "日" *rì* "sun" was added, yielding the differentiated form "暮" *mù* "dusk" to denote its original meaning. (The *Shuōwén* does not have "暮".) As "暴" was commonly borrowed to denote {暴} *bào* as in 疾暴 *jíbào* "sudden," the signific "日" *rì* "sun" was added, yielding the differentiated form "曝" *pù* "to expose to sunlight" to denote its original meaning. (The *Shuōwén* does not have "曝".) As "然" was commonly borrowed to denote {然} *rán* as in 然否 *ránfǒu* "affirmative and negative" and its extended meanings, the signific "火" *huǒ* "fire" was added, yielding the differentiated form "燃" *rán* "to burn" to denote its original meaning. (The *Shuōwén* does not have "燃". The differentiated form "嚥" at one point was created to denote {然} as in *ránfǒu* but it never gained currency.) As "止" was commonly used in its extended sense of {止} *zhǐ* as in 停止 *tíngzhǐ* "to stop," the signific "足" *zú* "foot" was added, yielding the differentiated form "趾" *zhǐ* "toe" to denote its original meaning. (The *Shuōwén* does not have "趾".) As "州" was commonly used in its extended sense of {州} *zhōu* as in 州縣 *zhōuxiàn* "prefectures and counties," the signific "水" *shuǐ* "water" was added, yielding the differentiated form "洲" *zhōu* to denote its original meaning. (The *Shuōwén* does not have "洲".) As "北" was commonly used in its extended sense of the directional word {北} *běi* "north," the signific "肉" *ròu* "meat" was added, yielding the differentiated form "背" *bèi* "back" to denote its original meaning. (The *Shuōwén* does not take "北" as the protoform of "背".) As "益" was commonly used in its extended sense of the {益} *yì* as in 增益 *zēngyì* "to gain" and 利益 *lìyì* "to profit," the signific "水" *shuǐ* "water" was added, yielding the differentiated form "溢" *yì* "to overflow" to denote its original meaning. (The *Shuōwén* does not take "益" as the protoform of "溢".) As "臭" was commonly used in its extended sense of {臭} *chòu* as in 腐臭 *fǔchòu* "putrid and stinking," the signific "鼻" *bí* "nose" was added, yielding the differentiated form "齅" *xiù* "to smell" to denote its original meaning. (Later on "齅" was changed to "嗅". The differentiated form "殠" at one point was created to denote {臭} as in *fǔchòu* but it never gained currency.) As "原" was commonly used in its extended sense of {原} *yuán* as in 本原 *běnyuán* "source" as well as its borrowed sense of {原} as in 原野 *yuányě* "open country," the signific "水" *shuǐ* "water" was added, yielding the differentiated form "源" *yuán* "source" to denote its original meaning. (The *Shuōwén* does not have "源". According to the *Shuōwén*, the orthograph of {原} as in 原野 *yuányě* is {邊}. The latter was written 邊 in bronze inscriptions; the *Shuōwén*'s form is in error.) In addition, as "埶" was frequently used to denote {勢} as in

形勢 *xíngshì* "situation," (on "Kǎogōngjì," "Gōngrén": 射遠者用埶 "Those who shoot far use [= avail themselves of] the circumstances," Zhèng Xuǎn comments: 埶謂形埶 "*shì* refers to the circumstances"), the signific "艸" *cǎo* "grass" was added, yielding the differentiated form "藝" *yì* "sow and plant" to denote its original meaning. (Later on, the differentiated form "勢" was also created to denote {勢}, after which "埶" was discarded. "势" is the simplified form of "勢". The *Shuōwén* does not have "藝" and "勢".) As "縣" was frequently used to denote {縣} as in 州縣 *zhōuxiàn* "prefectures and counties," the signific "心" *xīn* "heart" was added, yielding the differentiated form "懸" *xuán* "feel anxious" to denote its original meaning. (The *Shuōwén* does not have "懸".) As "正" was frequently used to denote {正} as in 糾正 *jiūzhèng* "to correct" and 偏正 *piānzhèng* "biased and upright," the signific "彳" *chì* "short step" was added, yielding the differentiated form "征" *zhēng* "to go on an expedition" to denote its original meaning. (The *Shuōwén* does not take "正" as the protoform of "征".) Opinions differ as to whether {勢}, {縣}, and {正} should be construed as extended or borrowed meanings of "埶", "縣", and "正" but the issue will not be taken up here. Below we will cite two more examples of the addition of semantic symbols to denote the original meanings of graphs.

氣 : 饩. The original meaning of "氣" was to present someone a gift of grain, fodder and the like. (The *Shuōwén* says: 氣, 饋客芻米也. 从米, 气聲. 春秋傳曰: '齊人來氣諸侯.' "*Xì* means to present a guest a gift of fodder and rice. It is derived from *mǐ* 'rice' and *qì* as phonetic. The Spring and Autumn Commentary says: 'The people of Qí came and presented grains to the feudal lords.'" The character "氣" should be read *xì* here.) Since it was borrowed for the "气" in 雲氣 *yúnqì* "clouds" ("气" was the orthograph of {氣} as in *yúnqì*. Since the Han dynasty, "氣" has been consistently borrowed for "气"; the simplified script has renewed the use of the character "气"), the signific "食" *shí* "food" was added, yielding the differentiated form "饩" *xì* "to present as a gift" to denote its original meaning. (The *Shuōwén* takes "饩" as an alternate form of "氣".)

禽: 擒. The original meaning of "禽" was 擒獲 *qínhuò* "to capture" (e.g., *Zuǒzhuàn*, Āi 23: 齊師敗績, 知伯親禽顏庚 "The army of Qí was utterly routed, and Zhī Bó personally captured Yán Gēng". In the oracle bone inscriptions {擒} is denoted by  , which originally resembled a kind of net used in hunting. Later on, "今" was added as a phonetic; was also written more complexly as  , becoming the seal form  . The element "今" was corrupted in the clerical script). It was extended to mean {禽} as in 禽獸 *qínshòu* "animals." (The *Běitáng shūchāo*, *juàn* 89, and the *Tàipíng yùlǎn*, *juàn* 526, quote the *Báihǔtōng*, "Tiánliè," as follows: 禽者何? 鳥獸之總名, 明爲人所禽制也. "What does *qín* mean? It is a general term for birds and beasts, and it makes clear that they are what man captures and overpowers.")

Consequently, the signific "手" *shǒu* "hand" was added, yielding the differentiated form "擒" *qín* "to capture" to denote its original meaning. (While the *Shuōwén* does not have "擒", it already misconstrues the original meaning of "禽" as 走獸總名 "a general term for beasts on the run.")

In some cases differentiation by the addition of semantic symbols yielded new characters to denote extended meanings. A number of examples of this were cited earlier in the chapter covering phonograms, e.g., "娶" *qǔ* "to take in marriage" was differentiated from "取" *qǔ* "to take," "懈" *xiè* "negligent" was differentiated from "解" *jiě* "to loosen," "棅" *bǐng* "a handle" was differentiated from "秉" *bǐng* "to grasp," and so forth (see Sec. 8.7.1). Additional examples are given below.

景: 影. The *Shuōwén* defines the former as follows: 景, 光也. 从日, 京聲 "*Jǐng* means bright. It is derived from *rì* 'sun' and *jǐng* as phonetic." {景} as in 光景 *guāngjǐng* "situation" was extended to mean {影} *yǐng* "shadow" as in 陰影 *yīnyǐng* "shadow." "景" was originally used to denote its usage in this sense (e.g., *Zhōulǐ*, "Dìguān: dàsītú": 正日景以求地中 "[The dàsītú] fixes the exact [length of the] sun's shadow and thereby finds the earth's center"). Later on, the signific "彡" *shān* "feathery" was added, yielding the differentiated form "影" *yǐng* "shadow." (The element "彡" usually denotes decorations and embellishments. The *Shuōwén* does not have "影".)

奉 : 俸. "奉" *fèng* originally meant to present with both hands and was extended to mean 供給 *gònggěi* "to furnish"; the latter was further extended to mean 俸祿 *fènglù* "government salary." This sense was originally denoted by "奉" (e.g., *Hànshū*, "Wáng Mǎng *zhuàn*" [Zhōnghuá ed., p. 4048]: 其令公奉, 舍人賞賜皆倍故 "Let it be ordered that your salary, Duke, and the rewards granted to the members of your suite shall all be double what they were previously" [after Dubs 1938–55:3.148]). Later on, the signific "人" *rén* "human" was added, yielding the differentiated form "俸" *fèng* "emolument." (The *Shuōwén* does not have "俸".)

慈 : 磁 (磁). {慈} as in 慈愛 *cíài* "kind" was extended to mean {磁} as in 磁石 *císhí* "magnet." (The ancients likened the way a magnet attracts iron to the way a caring mother loves her child.) This sense of the word was originally denoted by "慈" (e.g., *Lǚshì chūnqiū*, "Jīngtōng": 慈石召鐵 "a magnet beckons iron.") Later on, the signific "石" *shí* "stone" was added, yielding the differentiated form "磁" *cí* "magnet"; "磁" is a simplified form thereof. (The *Shuōwén* does not have "磁". The *Guǎngyùn* has "磁" in the level tone, in rime *zhī* [之], with the *fǎnqiè* spelling 疾之切 [MC ˌdzjï], where it is glossed as: 磁石可引針也 "The magnet can direct a needle." According to the *Hóngwǔ zhèngyùn* [*apud Kāngxī zìdiǎn*], 磁本作磁省从茲 "*Cí* originally was written 磁, but was reduced to 茲". Since Ming and

Qing times, the character "瓷" "porcelain" was also written "磁", which is said to be related to the place name Cízhōu [磁州], renowned for its porcelains.)

兩: 緉, 輛. {兩} *liǎng* "two" was extended and became the measure word {緉} for a pair of shoes as well as the measure word {輛} *liàng* for vehicles (regarding "輛", see Sec. 8.7.1). The two extended meanings originally were denoted by "兩" (e.g., *Shījīng* Ode 101.2: 葛屨五兩 "Dolichos shoes, five pairs." *Shījīng* Ode 12.1: 之子于歸, 百兩御之 "This young lady goes to her new home, a hundred carriages meet her.") Later on, the significs "糸" *mì* "silk" and 車 *chē* "vehicle" were added, yielding the differentiated forms "緉" and "輛". (On the former the *Shuōwén* says: 緉, 屨兩枚也 "*Liǎng*, means two [i.e., a pair of] shoes." The *Shuōwén* does not have "輛".)

In addition, "境" *jìng* "boundary" was differentiated from "竟" *jìng* "to complete," "返" *fǎn* "return" from "反" *fǎn* "turn over," "座" *zuò* "a seat" from "坐" *zuò* "to sit down," etc., all of which are examples of semantic symbols having been added to matrigraphs to differentiate extended meanings.

In some cases differentiation generated new graphs by the addition of semantic symbols so as to denote borrowed meanings. As was pointed out in our chapter on loangraphs, differentiated graphs that denote a matrigraph's borrowed meanings constitute younger orthographs. In that chapter examples were cited of younger orthographs to which semantic symbols were added, and in our chapter on phonograms a few examples of this were cited (e.g., "獅" *shī* "lion" in Sec. 8.1 and "嗜" *shì* "to be fond of" in Sec. 8.6.2). Other examples of younger orthographs which were differentiated from their matrigraphs are given below.

牟 : 麰, 眸, 侔, 趀. The original meaning of "牟" *móu* was "to bellow" (e.g., *Shuōwén*:  , 牛鳴也. 从牛, 象其聲气从口出 "*Móu* means the bellowing of oxen. It is derived from *niú* 'ox' and resembles the sound being emitted from its mouth"). In antiquity it was borrowed to denote {麰} *móu* "barley" (e.g., *Shījīng* Ode 275.1: 貽我來牟 "You have given us barley"), {眸} as in 眸子 *móuzi* "the pupil of the eye" (e.g., *Shuōwén*: 盲, 目無牟子 "*máng* means the eyes have no pupils [i.e., 'blind']"), as well as {侔} *móu* "equal" (e.g., *Hànshū*, "Sīmǎ Xiāngrú zhuàn" [Zhōnghuá ed., vol. 8, p. 2604]: 德牟往初 "[My] virtue is equal to what it was in the beginning"). It was also borrowed to write the disyllabic reduplicative phrase {牟牟} (e.g., *Guǎngyǎ*, "Shì xùn": 牟牟, 進也 "*Móumóu* means to advance"). Later on, the significs "麥" *mài* "wheat," "目" *mù* "eye," 人 *rén* "human," and 心 *xīn* "heart" were added, yielding the differentiated forms "麰", "眸", "侔", and "恈" (e.g., *Xúnzǐ*, "Róngrǔ": 恈恈然惟利之見 "Greedily, [they] are only aware of profit"), all of which are younger orthographs. (However, "恈" was seldom used. The *Shuōwén* does not have "眸" and "恈".)

11.1.1.3.2 The Alteration of Semantic Symbols

Differentiated forms which originated from the alteration of semantic symbols in most cases denoted extended meanings of their respective matrigraphs, as in the case of "賑" *zhèn* "to relieve" mentioned earlier, which was differentiated from "振" *zhèn* "to shake," as well as "氧" *yǎng* "oxygen," "氫" *qīng* "hydrogen," "氮" *dàn* "nitrogen," and "氯" *lǜ* "chlorine" which were differentiated from "養" *yǎng* "to rear," "輕" *qīng* "light (in weight)," "淡" *dàn* "light (in color)," and "綠" *lǜ* "green," respectively (see Sec. 8.3.1); another example is "椅" *yǐ* "chair" which was differentiated from "倚" *yǐ* "to lean against" (see Sec. 10.2.3). A few denote borrowed meanings of the matrigraphs, as in the case of "叛" *pàn* "to betray" which was differentiated from "畔" *pàn* "the border of a field," and "悅" *yuè* "to delight" from "說" *shuō* "to speak," and so forth (see Sec. 9.2). Additional examples are given below.

Examples of characters denoting extended meanings of their matrigraphs will be cited first.

赴 : 訃. The original meaning of "赴" was "to hasten" and by extension, "rush to announce somebody's death." This sense of the graph was originally denoted by "赴" *fù* (e.g., *Lǐjì*, "Wénwáng shìzǐ": 死必赴 "[His] death must be announced." *Shǐjì*, "Zhōu běnjì" [Zhōnghuá ed., vol. 1, p. 134]: 昭王 . . . 其卒不赴告, 諱之也 "King Zhāo . . . To conceal it, his underlings did not announce his death"). Later on, the element "言" *yán* "words" was substituted for "走" *zǒu* "to walk" in "赴", yielding the differentiated form "訃" *fù* "to announce somebody's death." (The *Shuōwén* does not have "訃". At present, "訃" is only used in connection with death notices and is no longer used in the sense of "to rush.")

張 : 脹, 帳. {張} as in 張開 *zhāngkāi* "to open wide" was extended to mean {脹} as in 腫脹 *zhǒngzhàng* "swelling" and {帳} as in 帳幕 *zhàngmù* "tent" (e.g., *Shuōwén*: 帳, 張也 "*Zhàng* means tent"). These two senses originally were denoted by "張" (e.g., on *Zuǒzhuàn*, Chéng 10: 將食, 張, 如廁, the Dù commentary says: 張, 腹滿也 "*zhāng* means glutted," hence: "When [he] was about to eat, he felt glutted and went to the privy." In the *Shǐjì jíjiě*, "張" *zhāng* in *Shǐjì*, "Yuán Àng zhuàn": 乃以刀決張, is read as "帳" "tent," hence: "[He] thereupon used a knife and slit open the tent"). Later on, the element "弓" *gōng* "bow" in "張" was replaced by "肉" *ròu* "meat" and "巾" *jīn* "napkin," yielding the differentiated forms "脹" *zhàng* "glutted" and "帳" *zhàng* "tent," respectively. (The *Shuōwén* does not have "脹". {賬} as in 賬簿 *zhàngbù* "account book" was originally denoted by " 帳"; "賬", which was differentiated from "帳" by replacing its signific, appeared rather late.)

障 : 嶂, 墇, 幛. {障} as in 障隔 *zhànggé* "to partition" was extended to mean {嶂} as in 山嶂 *shānzhàng* "a mountain barrier," {墇} as in 墇癘

zhànglì "a disease attributed to miasma" (it is likely that 瘴氣 *zhàngqì* "miasma" was so named on account of its being a barrier-like, dense mist) and {幛} as in 幛軸 *zhàngzhóu* "congratulatory scrolls." These extended meanings were originally all denoted by "障" (see *Wénxuǎn*, *juàn* 27, Qiū Xīfàn's "Dàn fā yú Pǔtán": 櫂歌發中流,鳴鞞響沓障 "Boating chants emanate from amid the current's flow; drum beats resound along the layer upon layer of mountains." With regard to *zhàng* in this line, Lǐ Shàn in his commentary says: 爾雅曰: 山正曰障 "The *Ěryǎ* says, 'Mountains which have flat tops are called *zhàng*.'" This is an example of "障" standing for {嶂}. In his commentary to *Zhōulǐ*, "Dìguān: tǔxùn," Zhèng Xuǎn writes: 地慝, 若障蠱然, about which Sūn Yíràng in his *Zhōulǐ zhèngyì* says: 障即障氣 "*zhàng* means miasma," hence: "As for 'the evils of the earth,' they are of the miasmal and poisonous sorts." This is an example of "障" standing for {瘴}. In his poem "Tí Lǐ Zūnshī sōngshù zhàngzǐ gē" [題李尊師松樹障子哥], Dù Fǔ [712–770] writes: 手提新畫青松障 "In his hand he held the newly painted green pine banner." This is an example of "障" standing for {幛}). Later on, the element "阜" *fù* "a mound" in "障" was replaced by "山" *shān* "mountain," "疒" *nè* "sickness," and "巾" *jīn* "napkin," yielding the differentiated forms "嶂", "瘴", and "幛", respectively. (The *Shuōwén* does not have these three graphs.)

綿 : 棉. Originally China had silk floss but not kapok or cotton. After the Chinese began planting kapok and cotton during the middle ages, the character "綿" was used to denote them. Later on, the element "糸" *mì* "silk" in "綿" was replaced by "木" *mù* "wood," yielding the differentiated form "棉". (Yú Zhèngxiè [1833] in his *Guǐsì lèigǎo*, *juàn* 7, under his entry on the terms 吉貝 *jíbèi* and 木棉 *mùmián*, writes:

> Again in the case of 木棉 *mùmián*, originally it was only written 木綿 and referred to tree-cotton. Yuán Wén in his *Wèngyǒu xiánpíng* says: "木 *mù* and 綿 *mián* were merely combined to make this character *mián*; today the character 棉 also appears in dictionaries in the sense of *mùmián*." The character 棉 also began to appear during the Song dynasty. This character can be said to be a new addition rather than a vulgar form. In terms of the six principles of writing, it is derived from 木 *mù* "tree" and an abbreviated form of 綿 *mián*, serving both as phonetic and signific.

Mr. Yú's analysis of "棉" as being "derived from 木 *mù* 'tree' and an abbreviated form of 綿 *mián*" is acceptable. Yet as "棉" is found already in the *Yùpiān* and *Guǎngyùn*, it must have appeared before Song time.)

The alteration of semantic symbols to differentiate characters was usually applied to phonograms. The character "綿" was a syssemantograph; the differentiation of "棉" from "綿" is a rather unique case.

澹 : 贍. The original meaning of "澹" *dàn* was 水搖貌 "the appearance of water when disturbed" (e.g., *Shuōwén*: 澹, 水搖也 "*Dàn* means water which is disturbed." Lǐ Shàn in his commentary to the line 淥水澹澹 in Zhāng Píngzǐ's "Dōngjìng fù" [*Wénxuǎn*, *juàn* 3] cites the *Shuōwén*'s gloss as 水搖貌也 "the appearance of water being disturbed"). In antiquity the graph was borrowed to denote {贍} *shàn* as in 贍足 *shànzú* "abundant" (e.g., on *Hànshū*, "Shíhuò zhì" [Zhōnghuá ed., vol. 4, p. 1126]: 猶未足㠯 [= 以] 澹其欲也, Yán Shīgǔ says: 澹古贍字也. 贍, 給也 "澹 was the ancient character for 贍. *Shàn* means 'to provide'"; hence: "It was as if there was not enough to fulfill his desires"). Later on, the element "水" *shuǐ* "water" in "澹" was replaced by "貝" *bèi* "cowrie," yielding the younger orthograph "贍" through graphic differentiation. (In his *Shuōwén xīnfù kǎo*, Zhèng Zhēn [1833] writes: "贍, derived from 貝, is seen for the first time in the Jin period "Yòujiāngjūn Zhèng Liè *bēi*" inscription, and thus was probably created sometime during the Wei-Jin period.")

11.1.1.3.3 The Addition or Alteration of Phonetic Symbols

Examples of the addition of phonetic symbols include:

午 : 牾. "午" *wǔ* in bronze inscriptions is written  ;  (舂) *chōng* "to pound (grain)" is derived in part from it. It most likely was the protoform of "杵" *chǔ* "a pestle." In antiquity "午" was borrowed to denote {牾} as in 牾逆 *wǔnì* "recalcitrant" (e.g., *Lǐjì*, "Āigōng wèn": 午其眾以伐有道, in which "午" should be read "牾", hence: "[They] put themselves in opposition to the multitudes and undermine those who possess the Way." The *Shuōwén* holds that the original meaning of "午" was "牾" *wǔ* "to oppose," but this seems unlikely). Later on, the phonetic symbol "吾" *wú* was added, yielding the differentiated form "牾" to denote this sense of the word. (The *Shuōwén* says: 牾, 逆也. 从午, 吾聲 "*Wǔ* means to oppose and is derived from *niú* 'ox' and *wú* as phonetic." "牾" is nothing more than a corrupted form of "牾". "牾" also means "to conflict." Later on, the character "忤" was created and used solely to denote the sense of "牾" as in *wǔnì* "recalcitrant." At present the character "牾" is generally used only in the sense of "to conflict.")

食 : 飼. "食" *shí* as in 飲食 *yǐnshí* "to drink and eat" was extended to mean "to feed, to raise" (e.g., *Zhànguócè*, "Qícè" 4: 左右以君賤之也, 食以草具 "[His] attendants thought that it was because the lord had looked down on him that he fed [him] coarse fare"). Later on, the phonetic symbol "司" *sī* was added, yielding the differentiated form "飼" *sì* to denote this sense of the word. (Originally "飼" was used in connection with both humans and animals. In *Jiù Tángshū*, "Lù Zhì *zhuàn*": 張頤待飼 "Zhāng Yí waited to be fed," *sì* is used in connection with a human. In ancient texts "飼" was also written "飤". The *Shuōwén* has "飤" but not "飼". Yet "飤" is

glossed therein as "糧" *liáng* "grains, provisions," suggesting that "飼" was unrelated to its allograph "飤".)

Examples of the alteration of phonetic symbols include:

潦 : 澇. Originally "潦" *lǎo* meant "heavy rains" or "a puddle" (read *lǎo*), and was extended to mean "to flood" (read *lào*, and earlier also *lǎo*; e.g., *Zhuāngzǐ*, "Qiūshuǐ": 禹之時十年九潦 "During Yǔ's time, there were nine floods within a span of ten years"). Later on, the phonetic element "尞" (read *liáo*, and earlier *liào*) in "潦" was changed to "勞" *láo*, yielding the differentiated form "澇" *láo* to denote this meaning. (The *Shuōwén* has "澇" but glosses it as the name of a river, read *láo*. "澇" as in 水澇 *shuǐláo* "waterlogged" can be regarded as its homograph.)

濫 : 灠. "濫" was used to denote steeped fruits (read *lǎn*, and earlier as *làn*; e.g., on *Lǐjì*, "Nèizé": 漿, 水, 醷, 濫, Zhèng Xuǎn says, 濫, 以諸和水也 "*Lǎn* is a blend of *zhū* with water," about which Lù Déming [*Shìwén*] says, 乾桃乾梅皆曰諸 "Dried peaches and dried plums are called *zhū*"; hence, "congee, water, plum syrup, and a drink made from macerated dried fruits"). Later on, in order to distinguish this sense of the graph from its other usages such as "濫" in 汎濫 *fànlàn* "to flood," the phonetic "監" *jiàn* in "濫" was changed to "覽" *lǎn*, yielding the differentiated form "灠" *lǎn* "steeped fruits." (The *Jíyùn* has "灠" in the rising tone, under rime 敢 *gǎn*, with the *fǎnqiè* spelling 魯敢切 [MC ˈlâm], where it is glossed as: 灠, 漬果也,一曰染也, 或作濫 "*Lǎn* means steeped fruits. One [source] says it means 'to dye'; some write it 濫." Some areas nowadays have what they call 灠柿子 *lǎnshìzi*, which refers to steeping persimmons in hot water or lime-wash to remove their astringency. "灠" and "澇" are synonyms, both of which are now read *lǎn*; "灠" is usually regarded as an allograph of "澇". In the *Jíyùn*, however, "澇" is placed in rime 感 *gǎn* and is not treated as an allograph of "灠". The *Guǎngyùn* does not have "灠" and "澇" is also placed in rime 感 *gǎn*.) "濫" used in the sense of "steeped fruits" and "濫" in the sense of "to flood" may well have been homographs. If this was indeed the case, the differentiation of "濫" from "灠" would then be an example of the differentiation of homographic forms.

華 : 花. {花} *huā* as in 花草 *huācǎo* "flowers and plants" was originally denoted by "華" *huá* (e.g., *Lǐjì*, "Yuèlǐng," under the last month of autumn, 鞠有黃華 should be read as 菊有黃花 "the chrysanthemums have yellow blossoms"). According to the *Shuōwén*, 𠷎, 草木華也 "*huā* means the blossoms of plants and trees"; and 𦰩, 榮也. 从艸, 从𠷎 "*huā* means 'luxuriant' and is derived from *cǎo* 'grass' and *huā*." The element "𠷎" from which the clerical and standard script forms of "華" are derived is a corrupted form of 𠷎 and originally was concurrently a phonetic and semantic symbol. (For most people, however, it has already become a sign.) The character "花" may be regarded as a differentiated form that was created by substituting the purely phonetic element "化" *huà* for 𠷎 in "華". (In the *Shuōwén*, "𦰩" is given as an alternate form of 𠷎. Some say that "花" was a differentiated form derived from "𦰩".)

When graphs were being differentiated, the phonetic symbols in matrigraphs were accidentally transformed into semantic symbols at times. For example,

稱 : 秤. According to the *Shuōwén*, "𠇍" *chēng* was the orthograph of {稱} as in 稱舉 *chēngjǔ* "to lift, to raise"; "偁" was the orthograph of {稱} as in 稱揚 *chēngyáng* "to praise," and "稱" was the orthograph of {稱} as in 稱量 *chēngliáng* "to weigh." (From a linguistic standpoint, *chēngliáng* "to weigh" and *chēngyáng* "to praise" are both semantic extensions of *chēngjǔ* "to raise." "偁" and "稱" most likely are differentiated forms representing semantic extensions of "𠇍".) Later on, "𠇍" and "偁" fell into disuse and {稱} as in *chēngjǔ* and *chēngyáng* was subsequently denoted by "稱", for which reason the element "𠇍" in "稱" was changed to "平" *píng* "level," yielding the differentiated form "秤" which was used exclusively to denote its sense of "to weigh." {秤} *chèng* as the name of a weighing instrument was a phonetically altered semantic extension of {稱} as in *chēngliáng*, which originally had been denoted by "稱" (e.g., *Yánshì jiāxùn*, "Shūzhèng": 開皇二年五月, 長安民掘得秦時鐵稱權 "During the fifth month of the second year of the Kāihuáng era, people in Cháng'ān uncovered a Qin time iron steelyard weight"). The character "秤" is now used exclusively to denote this meaning, whereas its use in the sense of "to weigh" is normally denoted by "稱". The element "𠇍" in "稱" is concurrently a phonetic and a semantic symbol (even though it already has become a sign for most people), whereas the element "平" in "秤" is a purely semantic symbol.

In addition, the "圄" in 囹圄 *língyǔ* "a prison" was originally written "圉", a syssemantograph derived from "囗" and "幸" (幸 in origin resembled hand-shackles; cf. Sec. 7.1.5.1 under the entry for "執" *zhí*). "圄" *yǔ* is derived from "囗" and "吾" *wú* as phonetic, and seemingly could be regarded as a differentiated graph in which the semantic symbol in the matrigraph was transformed into a phonetic. But there are examples in ancient sources in which "圄" is used for "圉" *yǔ* in its sense of "horse stable." Therefore, "圄" initially may possibly have been merely an allograph of "圉" in the narrow sense and only later were their assigned functions distinguished. (The *Shuōwén* already treats them as two different characters; "圉" is placed under the "幸" radical [sec. 10b in the *Shuōwén*] and "圄" is placed under the "囗" radical [sec. 6b].)

11.1.1.3.4 *Differentiation of Binomes by the Addition or Alteration of Graphic Components*

The differentiated forms of this type were discussed to some extent in chapters 2 and 9 above, e.g., "蜈蚣" *wúgong* "centipede" was derived from the addition of the element "虫" *huǐ* "insect" to "吳公"; "鶺鴒" *cānggéng* "oriole" was derived from the addition of the element "鳥" *niǎo* "bird" to "倉庚"; "徜徉" *chángyáng* "lingering, loitering" was derived from the addition of the element "彳" *chì* "left step" to "尚羊"; "瑇(玳)瑁" *dàimào* "hawksbill turtle" was derived from the addition of "玉" *yù* "jade" to "毒冒"; and "婀娜" *ēnuó* "graceful" was derived from the addition of the element "女" *nǚ* "woman" to "阿那". Two more examples are the following:

綠耳 : 騄耳 : 騄駬. In ancient legends, we encounter a variety of horse called "綠耳" *lùěr* (e.g., *Mùtiānzǐ zhuàn* [*juàn* 1]: 天子之駿 . . . 綠耳 "The Son of Heaven's grand steed . . . the *lùěr*," about which Guō Pǔ in his commentary says: 魏時鮮卑獻千里馬, 白色而兩耳黃, 名曰黃耳, 即此類也 "During the Wei period, the Xiānbēi people presented a 'thousand *lǐ* horse' [i.e., a horse with enormous speed and stamina] which was white with two yellow ears; it was called 'yellow ears' and was of this sort"). Later on, the element "糸" in "綠" was changed to "馬" *mǎ* "horse," yielding "騄耳" (see *Shǐjì*, "Qín běnjì"); and "馬" was also later added to "耳", yielding "騄駬" (see *Guǎngyǎ*, "Shìshòu).

蒲陶 : 蒲萄 : 葡萄. {葡萄} *pútao* "grape" was a transliteration of a foreign word which was introduced to China from the Western Regions during the Han period. In the "Dàwǎn zhuàn" section of the *Shǐjì* and the "Xīyù zhuàn" section of the *Hànshū*, this word is written "蒲陶", the two having been borrowed for their sound values. In the "Xīyù zhuàn" section of the *Hòu Hànshū* and in the *Yùpiān*, this word is written "蒲萄", in which the element "阜" in the second character "陶" was dropped and "艸" *cǎo* "grass" was added, whereas the first was left unchanged since it already contained this element. Later on, the phonetic "浦" in "蒲" was changed to "匍, further enhancing their appearance of being inseparable, after which the two became dedicated forms. (The *Shuōwén* has "萄" glossed as 草也 "grass." "萄" *tao* in *pútao* may be regarded as its homograph; yet there is also a possibility that the relationship was one of a borrowed graph to a loangraph involving the borrowing of both the sound and the form of the borrowed graph.)

In addition to them, the element "艸" *cǎo* "grass" was added to "夫容" and "日宿" yielding "芙蓉" *fúróng* "hibiscus" and "苜蓿" *mùsù* "alfalfa," respectively; "虫" *huǐ* "insect" was added to "科斗" and "即且" yielding "蝌蚪" *kēdǒu* "tadpole" and "蜚蛆" *jiéjū* "cricket," respectively; "山" *shān* "mountain" was added to "空同" and "昆侖" yielding "崆峒" *kōngtóng* "Mt. Kōngtóng" (in Gānsù Province) and "崑崙" *kūnlún* "Kūnlún Mts.," respectively (at present, "崑崙" has been merged again with "昆侖"); "口" *kǒu* "mouth" was added to "分付" and "丁寧" yielding "吩咐" *fēnfu* "to instruct" and "叮嚀" *dīngníng* "to exhort," respectively; "車" *chē* "vehicle" was added to "鹿盧" yielding "轆轤" *lùlú* "windlass, winch"; "彳" *chì* "left step" was added to "方皇" yielding "彷徨" *pánghuáng* "walk back and forth irresolutely" (also written 仿偟); to the characters for the place name "琅邪" Lángyé, the element "邑" *yì* "city" was added to the first character and "玉" *yù* "jade" to the second, yielding "瑯琊" (written "琅玡" at present); "消搖" was changed to "逍遙" *xiāoyáo* "free and unfettered"; "流黃" to "硫黃" and "硫磺" *liúhuáng* "sulphur"; "馬腦" to "馬瑙" and "瑪瑙" *mǎnǎo* "agate," and so forth, all of which are examples of this class of characters. In the case of some written forms recording binomes, elements were added to only one of the characters in them; e.g., "門" *mén* "gate" was added to the first character in "伐閱" yielding "閥閱" *fáyuè* "influential"; "車" *chē* "vehicle" was added to the first character in "展轉" yielding "輾轉" *zhǎnzhuǎn* "to turn"; "爛漫" *lànmàn* "bright-colored" is written by some as "爛熳".

From the examples cited above it can be seen that users of Chinese characters have usually been keen on altering the appearances of characters used to write binomes so that both members share components in common. This is to say that they have sought to write binomes using two characters that have an obvious formal relationship. Among the examples cited above, for instance, not only was the element "艸" *cǎo* "grass" used as a signific in both characters comprising the term "葡萄" *pútao* "grape" but the element "勹" was used in the phonetics of each as well; both of the characters comprising the place name "瑯琊" Lángyé have the element "邑" *yì* "city" on the right as well as "玉" *yù* "jade" on the left. These are truly classic examples of this phenomenon. So as to achieve such uniformity, sometimes the principles of graphic construction were even ignored altogether when making such changes. For example, "鳳凰" *fènghuáng* "phoenix" was originally written "鳳皇". "鳳" *fèng* was derived from "鳥" *niǎo* "bird" and "凡" *fán* as phonetic, whereas the element "几" in "凰" had neither a phonetic nor a semantic value and was added solely for the sake of enhancing their formal relationship.

11.1.1.4 *Creation of Differentiated Forms which are Unrelated to Their Matrigraphs*

Some differentiated forms are not based on the graphic shapes of their matrigraphs but represent innovations. For example,

鮮 : 尠 (尟). According to the *Shuōwén*, while the original meaning of "鮮" *xiān* was the name of a kind of fish, it was regularly borrowed to

denote {鮮} *xiān* as in 新鮮 *xīnxiān* "fresh" (which, according to the *Shuōwén*, was originally written "  ") as well as {鮮} as in 鮮少 *xiǎnshǎo* "few" (read *xiǎn*, e.g., *Shījīng* Ode 92.1: 終鮮兄弟 "In the end, few indeed are [true] brothers"). Later on, the character "尟" was created to denote the latter borrowed meaning, in addition to its allograph "尠". (The character "尟" is already found in the *Shuōwén*. But even after the appearance of this younger orthograph, the borrowed graph "鮮" was still used rather extensively. "尟" [尠] is now regarded as an allograph and has been merged with "鮮".)

蘇 : 甦. The character "蘇" originally denoted the name of a plant. {蘇} *sū* "revive, come to" as in 死而復蘇 "come back to life" is a borrowed meaning. (In antiquity this word was borrowed to stand for "穌" *sū*, the original meaning of which is given in the *Shuōwén* as 把取禾若 "to glean," wherein 禾若 corresponds to 禾葉 "leaves of standing grain.") During the Southern and Northern Dynasties period, the character "甦" was created to denote this borrowed meaning of "蘇" (see *Yánshì jiāxùn*, "Záyì"). At present, "甦" *sū* is regarded as an allograph and has been merged with "蘇".

In the case of some differentiated forms, while it would seem that their matrigraphs had been forsaken in favor of other forms, in actuality they had undergone rather circuitous developments. For example, {陽} *yáng* as in 陰陽 *yīnyáng* "yīn and yáng, the opposing forces in nature" was extended to mean {佯} *yáng* "to pretend" as in 佯裝 *yángzhuāng* "to feign." This sense had originally been denoted by "陽". (See *Hànshū*, "Tián Dān zhuàn" [Zhōnghuá ed., vol. 7, p. 1847]: 儋陽爲縛其奴, about which Yán Shīgǔ comments: 陽卽僞耳 "*Yáng* itself means 'false,'" hence: "[Tián] Dān as a pretense hogtied his slave." As *yīn* pertains to the internal and *yáng* to the external, it was possible to extend {陽} *yáng* to mean "superficial, to feign.") While the character "佯" would appear to be a case where a matrigraph had been forsaken in favor of another differentiated form, this is not what actually happened. In antiquity, "詳" in most cases was borrowed to denote {佯} as in *yángzhuāng* "to feign." (The example cited above from the "Tián Dān zhuàn," for example, appears in the *Shǐjì* [Zhōnghuá ed., vol. 8, p. 2643] written 田儋詳爲縛其奴. For the character "佯" in *Sūnzǐ*, "Jūnzhēng": 佯北勿從 "Do not pursue [an army] feigning retreat," the Yínquèshān bamboo-slip redaction of this text has "詳".) "佯" most likely represented a differentiated form created by changing the element "言" *yán* "speech" in the borrowed character "詳" to "人" *rén* "person." Similarly, while on the surface, the character "搽" *chá* "to rub on the skin" mentioned in Sec. 8.7.1 would appear to be a differentiated form created by forsaking its matrigraph "塗" *tú* "spread on, apply" in favor of another form, in actuality it was created by adding the element "手" *shǒu* "hand" to the borrowed graph "茶" *chá* "tea."

11.1.2 Other Means of Dispersal of the Lexical Loads of Polysemic Graphs

In addition to the differentiation of graphs, there are two other relatively important methods of dispersing the lexical loads of polysemic graphs which will be discussed separately below.

11.1.2.1 The Use of Loangraphs to Bear Part of the Lexical Loads of Polysemic Graphs

In order to disperse the lexical load of a polysemic graph, sometimes a graph was borrowed to denote its borrowed or extended meanings.

In Sec. 9.3 we discussed the successive use of different loangraphs for a word. For example, the second person pronoun {汝} *rǔ* was first denoted by the loangraph "女" and later by "汝"; the demonstrative pronoun {彼} *bǐ* was first denoted by "皮" and later by "彼"; and the interrogative particle {何} *hé* was first denoted by "可" and later by "何". Insofar as the characters "女", "皮", and "可" are concerned, this involved borrowing other characters to denote one of their borrowed meanings. Aside from their borrowed meanings, i.e., "女" for {汝}, "皮" for {彼}, and "可" for {何}, these characters also had their own established meanings; moreover, their readings differed from those of the borrowed meanings. It is quite easy for confusion to set in when the same character is used to denote different words, such as using {女} *nǚ* "female" as in 男女 *nánnǚ* "male and female" to denote {汝} *rǔ* "you" as in 爾汝 *ěrrǔ* "thou and thee (used pejoratively)," or using {可} *kě* "able" as in 可以 *kěyǐ* "can" to denote {何} *hé* "what" as in 何以 *héyǐ* "by means of what." So it became necessary to borrow other characters to denote these borrowed meanings. (Yet the phenomena underlying some altered loangraphs cannot be explained in this way. For example, "  " and "願" which were borrowed successively to denote {願} as in 願意 *yuànyì* "be willing" did not have a commonly used meaning of their own apart from this borrowed meaning. The switch to "願" was probably due to the fact that its phonetic element functioned better phonetically.) Another example of the borrowing of one graph to denote the borrowed meaning of some other graph is the following:

臧: 藏. According to the *Shuōwén*, 臧, 善也. 从臣, 戕聲 "*Zāng* means 'good' and is derived from *chén* 'servant' and *'qiāng'* as phonetic."[2] In antiquity "臧" was borrowed to denote {臧} as in 儲藏 *chǔcáng* "to store up" (e.g., *Hànshū*, "Lǐyuè zhì": 今叔孫通所撰禮儀與律令同錄, 臧於理官 "Now, the ceremonies and rules drawn up by Shūsūn Tōng are stored with the regulatory officials," about which Yán Shīgǔ says: 古書懷藏之

2. Some believe that "臧" originally referred to a slave of some sort. Whether the original meaning of "臧" was in fact "good" or "slave" has no immediate bearing on the issues under discussion here.

字本皆作臧, 漢書例爲臧耳 "In ancient texts *cáng* as in *huáicáng* 'to cherish and keep' is always written 臧; the writing of it as 臧 in *Hànshū* is just such an example.") In Qin and Han bamboo slips and the Mǎwángduī silk manuscripts, "臧" is consistently used for {藏}). Probably sometime during the Eastern Han period, due to the fact that "臧" was commonly used in the sense of "good," the character "藏", which originally had denoted the name of a plant, was also borrowed to denote this borrowed meaning. (The plant name "藏莨" *cángláng* occurs in Sīmǎ Xiāngrú's "Zǐ xū fù." Commenting on this term in *Hànshū*, "Sīmǎ Xiāngrú zhuàn," part 1, Yán Shīgǔ cites Guō Pǔ's remark: 藏莨, 草中牛馬芻, which suggests that it was a kind of fodder fed to horses and cattle.) In Eastern Han stele inscriptions, "臧" and "藏" were both used (e.g., the "Héng fāng *bēi*": 用行舍臧 "When employed, act; when set aside, hide"; and the "Sūnshū Áo *bēi*": 聚藏於山 "collectively store in the mountains"). In later times "藏" was used exclusively to denote {藏} as in *chǔcáng* "to store up." (Originally "臧" or "藏" were used to denote the extended meanings of {藏} as in {贓} *zāng* "stolen goods, booty" and {臟} as in 五臟 *wǔzàng* "the five internal organs." "贓" represents a differentiated form created by the addition of the element "貝" *bèi* "cowrie" to "臧"; similarly, "臟" was created by the addition of "肉" *ròu* "meat.")

Several examples were cited above of cases where a character was borrowed to denote the extended meaning of some graph such as "閑" which denoted the extended meaning of "閒" as {閑} *xián* "unoccupied" as in 閑暇 *xiánxiá* "leisure" (see Sec. 9.1); "荼" which denoted the extended meaning of "塗" as {搽} *chá* "to rub on" (see Sec. 8.7.1); and "詳" which denoted the extended meaning of "陽" as {佯} *yáng* "to feign" (see Sec. 11.1.1.3.4). The reason for doing this, of course, was to avoid confusion between a graph's original and extended meanings. Several more examples of this sort are given below.

見 : 現. {見} *jiàn* as in 看見 *kànjiàn* "to see" was extended to mean {現} as in 呈現 *chéngxiàn* "to appear." This extended sense of the word was originally denoted by "見" (e.g., *Lúnyǔ* 8.13: 天下有道則見, 無道則隱 "When the Way prevails in the world, then reveal [one's self]; but when the Way does not prevail, then hide"). Later on, in order to distinguish the two, the character "現", which has "見" as phonetic, was borrowed to denote this meaning (according to the *Jíyùn*, "現" *xiàn* originally meant 石之次玉者 "stones which are inferior to jade" or 玉光 "the glitter of jade").

視 : 示. {視} *shì* "to look at" as in 視察 *shìchá* "to inspect" was extended to mean {示} *shì* as in 顯示 *xiǎnshì* "to show, manifest" and 指示 *zhǐshì* "to indicate" (i.e., making people look is to show). This extended meaning was originally denoted by "視" (e.g., *Shījīng* Ode 161.2: 視民不恌 "They show the people not to be mean," about which Zhèng Xuǎn comments:

視, 古示字也 "視 is the ancient character for 示." In the Qín bamboo slips and the Mǎwángduī silk manuscripts {示} is consistently written "視"). Later on, in order to distinguish the two, "示", which serves as phonetic in "視" and originally meant "an ancestral tablet," was borrowed to denote this meaning. (The *Shuōwén* mistakes the borrowed meaning of "示" for its original meaning: 示, 天垂象見 [read 現 *xiàn*] 吉凶, 所以示人也 "The phenomena hanging down from the sky manifest the auspicious and inauspicious. It is whereby [Heaven] reveals them to man." The Yínquèshān bamboo books "Qí Sūnzǐ," "Qínpángjuān," etc. already use "示" to denote {示} as in *xiǎnshì* "to show, manifest." On *Yílǐ* "Shì hūnlǐ": 視諸衿鞶 "Manifest them in the sash and girdle," Zhèng Xuǎn comments: "'Showing them by means of a sash and girdle' means transferring the warnings so as to make one cognizant of them . . . 視 is thus the correct form of the character. While in present-day script [i.e., clerical script] it is written 示, this is a vulgar error now in vogue." Zhèng Xuǎn regarded the use of "示" as a vulgar error since he could not avoid being tied down by conventions.)

指 : 旨. {指} *zhǐ* as in 手指 *shǒuzhǐ* "finger" was extended to mean {指} as in 指示 *zhǐshì* "point out, indicate," and the latter was further extended to mean {指} *zhǐ* "intention" as in 意旨 *yìzhǐ* "intent, meaning." This sense originally was denoted by "指" (e.g., on *Hànshū*, "Héjiān Xiànwáng Dé zhuàn" [Zhōnghuá ed., vol. 8, p. 2411]: 文約指明 "writings are terse and [their] intent is clear," Yán Shīgǔ comments: 指謂義之所趨, 若人以手指物也 "*Zhǐ* suggests that the tenor of their meaning is like a person using a finger to point out things"). Later on, in order to distinguish these meanings from its original meaning, "旨" *zhǐ*, which serves as phonetic in "指" and originally meant "savory," was borrowed to denote this meaning. (While the differentiated form "恉" *zhǐ* was created to denote this extended meaning of "指", or this borrowed meaning of "旨", it never gained currency.)

伯 : 霸. {伯} *bó* as in 伯仲 *bózhòng* "the eldest and second eldest brothers" was extended and used as a title for the chief of the various nobles of the feudal states in antiquity, and is usually rendered as "earl" (e.g., on *Zhōulǐ*, "Chūnguān," under "dàzōngbó": 九命作伯 "The ninth command [i.e., honor] is to serve as earl," Zhèng Zhòng comments: 長諸侯爲方伯 "Senior nobles serve as regional earls"). This latter usage was further extended to mean {霸} *bà* as in 霸主 *bàzhǔ* "hegemon." This extended sense originally was denoted by "伯" (e.g., *Xúnzǐ*, "Zhòngní": 五尺之豎子, 言羞稱乎五伯 "Even youngsters in their discourses are ashamed to mention the five hegemons," about which Yáng Liàng writes: 伯讀爲霸 "*bó* should be read *bà*"). Later on, in order to distinguish this meaning from the graph's original meaning, "霸" (read *pò*), which is glossed in the *Shuōwén* as 月始生魄然也 "like the moon when it begins to wane," was borrowed to denote this meaning.

In some instances, after a character had taken on a commonly used borrowed or extended meaning, another character was borrowed to denote its original meaning. We have already discussed above the fact that "何" *hé* was the orthograph of "荷" *hè* "to bear on the back" as in 負荷 *fùhè* "to carry, sustain" (see Sec. 8.1.2) and that "各" was the orthograph of "格" as in 來格 *láigé* "come and go" (see Sec. 7.1.5.2). Thus the reason why "荷" and "格" were borrowed to denote the original meanings of "何" and "各", respectively, was probably due to the fact that "何" was more commonly used to denote the interrogative pronoun {何} *hé* "what, why" and "各" was more commonly used to denote the adverb {各} *gè* "each, all." The *Shuōwén* glosses "各" *gè* as 異辭 "dissenting words," showing that its borrowed meaning had already been mistaken for its original meaning. Originally "可" was borrowed to denote the interrogative pronoun {何} *hé*; later on, in order to reduce the lexical load of "可", "何" was borrowed to denote this meaning. After "何" was used to denote this meaning, in order to reduce the lexical load of "何", "荷" was borrowed to denote its original meaning. The transference of graphic loads via a chain-reaction process of this sort is common to the Chinese script.

Another example is given below of a character which took on a commonly used borrowed or extended meaning and was eventually replaced by a borrowed character to denote its original meaning.

前 : 翦. Originally "前" was written "歬" and was thus the protoform of "剪" *jiǎn* "shears; to cut." (According to the *Shuōwén*, 歬, 齊斷也. 从刀, 歬聲 "*Jiǎn* means 'uniformly cut' and is derived from *dāo* 'knife' and *qián* as phonetic." "歬" was the orthograph of "前" *qián* "front" as in 前進 *qiánjìn* "to advance." As for "歬", the *Shuōwén* says: 歬, 不行而進謂之歬, 从止在舟上 "While not acting one advances is called *qián*; it is derived from *zhǐ* 'to stop' above *zhōu* 'boat.'") Since "前" had been borrowed to denote {前} as in *qiánjìn* "to advance," "翦" was borrowed to denote the original meaning of the graph. ("翦" originally was written "翦". According to the *Shuōwén*, 翦, 羽初生也. 一曰矢羽. 从羽, 歬聲 "*Jiǎn* means 'the feathers are beginning to grow.' One [source] says [it means] 'arrow feathers.' It is derived from *yǔ* 'feathers' and *qián* as phonetic.") Relatively early texts nearly all borrow "翦" to denote {剪} (e.g., *Shījīng* Ode 16: 勿翦勿伐 "Do not cut it down, do not hew it"). Later on, the character "剪", derived in part from "刀" *dāo* "knife," was specially created to denote this meaning, after which the loangraph "翦" gradually fell out of use. (The *Gānlù zìshū* treats "剪" as a vulgar form of "翦".)

Loangraphs which took on the meanings of polysemic graphs in most cases were not homophonous with the graphs from which the meanings had been transferred. Of the examples cited above, only {指} *zhǐ* and {旨} *zhǐ*, and {陽} *yáng* and {佯} *yáng* are homophonous pairs. {視} *shì* [MC źjiʾ] and {示} *shì* [MC dźjiʾ] had different initials in Middle Chinese ("視" had initial 禪 *chán* [MC ź-], whereas "示" had initial 船 *chuán* [MC dź-]) and only later became homophonous.

Viewed from the examples cited above, the roles of loangraphs—whose primary purpose after all was to decrease the lexical loads of polysemic graphs—usually were filled by graphs whose own meanings and the borrowed meanings they were intended to denote were sufficiently distinct to prevent the possibility of confusion between them; moreover, many characters had meanings which were seldom used, such as "彼" *bǐ* (the original meaning of which, according to the *Shuōwén*, was 往有所加 "to go where there is something to (hit >) shoot"(?), "現", "藏", "翦", "霸", and so forth. If this had not been the case, on the one hand, the possibilities of confusing the earlier meanings of graphs would have been reduced, and, on the other, the possibilities of confusing the new meanings of characters would have been increased.

So as to decrease the number of homographs, loangraphs were sometimes selected for this very purpose. For example,

訟 : 頌. With regard to "訟" *sòng*, the *Shuōwén* says: 訟, 爭也. 从言, 公聲. 一曰謌 [= 歌] 訟 "*Sòng* means 'to argue' and is derived from *yán* 'words' and *gōng* as phonetic. One [source] says [it means] 'to sing the praises of.'" "訟" *sòng* as in 歌訟 *gēsòng* "to sing the praises of" and "訟" as in 訟爭 *sòngzhēng* "to litigate" are homographs. The character "頌" is derived from "頁" *yè* "the head" and "公" *gōng* as phonetic and was the orthograph of "容" *róng* as in 容貌 *róngmào* "appearance." The reason why "頌" was usually borrowed to denote "訟" as in *gēsòng* "to sing the praises of" most likely was to prevent its being confused with "頌" as in *sòngzhēng* "to litigate."

11.1.2.2 Dispersal of the Lexical Loads of Polysemic Graphs through the Concentration of Lexical functions

The concentration of lexical functions refers to bringing together two or more different graphs which share certain identical functions and assigning these functions to one of the graphs involved. Insofar as those graphs that still retained their own functions after having relinquished certain of them are concerned, the concentration of lexical functions in effect served to disperse their functions. (If a graph whose functions had been relinquished had no other functions, then the concentration of lexical functions in such cases amounted to graphic consolidation. This phenomenon will be discussed in the section dealing with this topic below.)

Examples of the concentration of lexical functions were presented in our chapter on loangraphs. For example, the characters "纔", "裁", "財", and "才" for a time were all used to denote {才} *cái* in its sense of "only."

Later on, however, following gradual changes, only "才" was used to denote this meaning (see Sec. 9.3). For a time "麋" was used to denote {眉} *méi* "eyebrows," but later on the exclusive use of "眉" to denote this meaning was resumed (see Sec. 9.1.) Cases of this sort are commonplace and will not be further discussed. Below we shall discuss a rather special type of concentration of lexical functions, namely, the alternate concentration of lexical functions among two graphs.

In cases where, say, graphs A and B could both be used to denote two words, sometimes during the course of their uses graph A would be allowed to denote only one of the words and graph B, the other. This is what we term the alternate concentration of lexical functions of two graphs. (It was possible that graphs A and B might also have been used to denote words other than the two denoted by them; nevertheless, attention here will be focused solely on the usages of the two words of concern.) Cited below are a few examples.

又 : 有. For a period of time in antiquity (the lower limit of which was probably the Western Han), the characters "又" *yòu* and "有" *yǒu* could both be used to denote {有} as in 有無 *yǒuwú* "have and not have." (In ancient script, "又" originally was used to denote {有}. We still find examples of this in the received ancient texts, such as *Shījīng* Ode 276.2: 亦又何求 "And what is there to look for?" *Xúnzǐ*, "Yìbīng": 人之情, 雖桀跖, 豈又肯爲其所惡賤其所好者哉 "As to human emotions, even in the case of [the tyrant] Jié and [the robber] Zhí, how could they possibly assent to harming one they love for the sake of one they despise?" In the Mǎwángduī silk manuscripts we find cases where both "有" and "又" were used to denote {有} within one and the same line; e.g., *Lǎozǐ*, Manuscript B: 又周車无所乘之, 有甲兵无所陳之, in which 又周車 stands for 有舟車, hence: "[Even though] they have boats and carts, they will have no occasion to ride in them; [even though] they have armor and weapons, they will have no occasion to display them." Again in *Jīngfǎ*, "Liùfēn": 王天下者之道有天焉, 有人焉, 又地焉, wherein 又地 stands for 有地, hence: "As for the Way of those who rule over the empire, there is Heaven, there are people, and there is earth" [Wénwù Press 1980b:49]. On the other hand, these two characters could also be used to denote {又} in its adverbial sense of "further; again." (The Qín bamboo slips and the Mǎwángduī silk manuscripts regularly use "有" to denote {又}. Examples of this sort are also still found in the received ancient texts, e.g., *Shījīng* Ode 30.3: 終風且曀, 不日有曀 "There is wind indeed and wind-blown dark skies; [in less than a day =] at every time of the day there are wind-blown dark skies" [after Karlgren 1950a]; also, *Lǐjì*, "Yùzǎo": 既搢必盥, 雖有執於朝, 弗有盥矣 "After having stuck it [i.e., the official tablet] into his girdle, he had to wash his hands; even if he had occasion to hold it at court, he did not have to wash them again.") The first occurrence of "有" in the preceding line stands for "有", as in *yǒuwú*, and for "又" in the second.) Later on, aside from their being used in the sense of {又} "and" in expressing whole and fractional numbers, in which case both "又" and "有" (read *yòu*) could be used interchangeably, "又" and "有" were assigned clearly defined lexical loads. "又" was no longer used to denote {有} as in *yǒuwú* and "有" was no longer used to denote adverbial {又}.

氏 : 是. For a period of time in antiquity (probably during the Han dynasty for the most part), the characters "氏" *shì* and "是" *shì* interchanged freely. "氏" could be used to denote the demonstrative pronoun {是} *shì* (e.g., "氏" standing for "是" is already found in the Zhōngshān inscriptions, e.g., 氏以寡人許之 "Thus I, the Unworthy, assented to it" as seen in the "Zhōngshān wáng Cuò *dà dǐng*" inscription. This same usage occurs frequently in Han time texts, e.g., *Yílǐ*, "Shì hūnlǐ": 惟是三族之不虞 "It is that these three relations are not in distress [i.e., in mourning]" is quoted in *Báihǔtōng*, "Zōngzú" with "氏" in place of "是". On *Hànshū*, "Dìlǐzhì," B [Zhōnghuá ed., vol. 6, p. 1641]: 至玄孫, 氏爲莊公, Yán Shīgǔ comments: 氏與是同, 古通用字 "氏 is the same as 是. In antiquity the two were interchangeable graphs"; hence, "As to [his] great-great grandson, the one who became Duke Zhuāng . . ." In the Mǎwángduī silk manuscripts there are also examples where "氏" stands for {是}, e.g., *Zhànguó zònghéngjiā shū* no. 15: 願君之以氏慮事也 "[I] hope that his lordship on account of this will be concerned about the matter"). "是" could also stand for {氏} as in 姓氏 *xìngshì* "surname." (Already in the late Spring and Autumn "Hóumǎ méngshū" texts we find "是" used for {氏}. This usage is even more common in Han time texts. For example, the name 龐糲氏 Pángxiàn shì as seen in *Hánfēizǐ*, "Nán sān," appears in *Lùnhéng*, "Fēi Hán" written 龐糲是. In the "Zhāng Qiān *bēi*" inscription: 張是輔漢 "Mr. Zhāng assisted the Hàn," "張是" stands for "張氏". "是" is frequently found used for {氏} in Han time seals, in the Mǎwángduī silk manuscripts, and in the Yínquèshān bamboo slips. In the Mǎwángduī silk manuscript redaction of the *Zhànguó zònghéngjiā shū* no. 8, "趙氏" *Zhàoshì* "Mr. Zhào" and "趙是" *Zhàoshì* occur simultaneously; similarly, we find "梁氏" *Liángshì* "Mr. Liáng" and "梁是" occurring simultaneously in no. 12, and "安陵氏" Ānlíngshì "Mr. Ānlíng" and "安陵是" in no. 16, all of which amply reflect the arbitrary usage of these two graphs during that time.) Later on, the usages of "氏" and "是" which had prevailed prior to their arbitrary usage (as seen in Western Zhou and Spring and Autumn period bronze inscriptions) were restored; "氏" no longer was used to denote {是}, and vice versa.

常 : 嘗. According to the *Shuōwén*, "常" was an allograph of "裳" *cháng* "skirt (worn in old China)." It was usually borrowed to denote {常} *cháng* as in 經常 *jīngcháng* "regularly." The original meaning of "嘗" was "to taste," and it was also used to denote {嘗} *cháng* used in the sense of 曾經

céngjīng "to have had the experience of" (which may well be a semantic extension of "嘗" as in 嘗試 *chángshì* "attempt"). For a period of time in antiquity, "常" and "嘗" interchanged freely. "常" could be used to denote {嘗} used in the sense of *céngjīng* "to have had the experience of," and "嘗" could be used for {常} as in *jīngcháng* "regularly." This phenomenon is seen frequently in Tang period writings, several examples of which are cited below from the *Tàipíng guǎngjì*:

> 唐柳州刺史河東柳宗元, 常自省郎出爲永州司馬 During the Tang, Liǔ Zōngyuán of Hédōng, the regional chief of Liǔzhōu, had left the [position of] departmental functionary to serve as adjutant of Yǒngzhōu (*juàn* 467, under "Liǔ Zōngyuán 柳宗元"; source: *Xuānshìzhì* 宣室志).

> 中宗常召宰相蘇瓌, 李嶠子進見. 二子皆僮 (童) 年, 上迎撫於前, 賜與甚厚 Emperor Zhōngzōng had summoned the sons of the prime minister Sū Guī and Lǐ Qiáo for an audience. The two were both in their childhood and they went up to greet and caress [him] and thus were rewarded quite generously (*juàn* 493, under "Sū Guī Lǐ Qiáo zǐ 蘇瓌李嶠子"; source: *Sōngchuānglù* 松窗錄).

> 昔者霍王小女將欲上鬟, 令我作此, 酧 (酬) 我萬錢, 我嘗不忘 Formerly, when the young daughter of the king of Huò was about to dress her hair in a topknot [i.e., approaching womanhood], she had me make this; they rewarded me ten thousand cash and I will (always not =) never forget it (*juàn* 487, in which Jiǎng Fáng's 蔣防 *Huò Xiǎoyù zhuàn* 霍小玉傳 is recorded).

> 蜀市人趙高好鬥, 嘗入獄. 滿背鏤毗沙門天王, 吏欲杖背, 見之輒止 Zhào Gāo of Shǔshì liked to brawl and often landed in jail. His entire back was tattooed with a likeness of Vaiśravaṇa. A clerk wished to flog him on his back, but on seeing it [i.e., the tattoo], he abruptly stopped (*juàn* 264, under "Zhào Gāo 趙高"; source: *Yǒuyáng zázǔ* 酉陽雜俎).

Based on the meanings of the above passages, "常" in the first two should be read as "嘗", while in the second two "嘗" should be read as "常". The last passage was selected from the *Yǒuyáng zázǔ* (前集 "Qiánjì," *juàn* 8) under the entry heading "黥" *qíng* "the ancient punishment of tattooing the face." Present editions of this work do indeed have "常" for "嘗" here. (Other similar examples of such usages of "常" and "嘗" which occur in the *Tàipíng guǎngjì* will not be cited here.) Examples of the indiscriminate interchange of "常" and "嘗" are also found in the *Shǐjì* and *Hànshū*. The line 高祖常繇 (徭) 咸陽 occurs in *Shǐjì*, "Gāozú běnjì" and in *Hànshū*, "Gāodì jì" A; and as was pointed out by Liú Bīn during the Song dynasty, "常" should be read "嘗" in this line, hence: "Gāozú had performed compulsory labor service at Xiányáng." "常" should also be read as "嘗" in the line 常以十倍之地 from Jiǎ Yì's "Guò Qín lùn" as cited in *Shǐjì*, "Shǐhuáng běnjì zàn" and in *Hànshū*, Chén Shèng Xiàngjí zhuàn zàn," hence: ". . . had used ten times the amount of land." In Jiǎ Yì's *Xīnshū*, this character is indeed written "嘗". Other examples of this sort where "嘗" should be read as "常" in the *Shǐjì* and the *Hànshū* are given below. Based on the meaning of the line 廣所居郡, 聞有虎, 嘗自射之 from *Shǐjì*, "Lǐ jiāngjūn lièzhuàn," "嘗" should be read as "常", hence: "Whatever prefecture [Lǐ] Guǎng stayed in, when he heard there was a tiger [nearby], [he] always went in person to shoot it." This same line does indeed appear in *Hànshū*, "Lǐ Guǎng zhuàn" with "常" for "嘗". Also, the following passage from *Hànshū*, "Xún Lì, Gōng Suì zhuàn":

> 臣聞膠西王有諛臣侯得 . . . 王說 (悅) 其諂諛, 嘗與寢 (寢) 處, 唯得所言, 以 (以) 至於是 I, your servant, have heard that the king of Jiǎoxī had a toadying minister [named] Hóu Dé. . . The king adored his flattery and often had him in his resting quarters; it was solely due to what Dé said that the situation came to that.

Based on the meaning of this passage, "嘗" here should also be read as "常". Since Ming and Qing times, apart from some unusual cases (for instance, some of those who liked to write in the style of the ancients at times used "常" for "嘗"; and during the late Ming dynasty writers regularly used "嘗" in place of "常", since 常 occurred in Emperor Guāngzōng's given name, 常洛 Chángluò, and thus was a taboo word whose use had to be avoided), "常" and "嘗" were no longer interchanged freely.

Aside from these, other graphs such as the grammatical particles "無" *wú* and "毋" *wú*, "以" *yǐ* and "已 *yǐ*, "由" *yóu* and "猶" *yóu*, etc. all underwent the process of the alternate concentration of lexical functions.

In the examples given above, if only one graph had been used to denote the two words involved, the possibility of varying textual interpretations would have arisen. For example, in his *Jīngyì shùwèn* Wáng Yīnzhī (1798) called attention to the phenomenon in the classical texts of "有 *yǒu* having been borrowed for 又 *yòu* and commentators later misconstruing it as standing for 有 *yǒu* as in 有無 *yǒuwú* 'have and not have'" (see under his entry 遲有悔 in *juàn* 1, and under 經義假借 in *juàn* 32). In the case of the character "氏" *shì* in the line 氏爲莊公 cited above from *Hànshū*, "Dìlǐzhì," Yán Shīgǔ held that it should be read as "是" *shì*; some Qing time scholars, however, felt that it still should be construed in its ordinary sense of "氏" *shì* (see Wáng 1900:853; yet such a view is probably untenable). The indiscriminate interchanging of "常" *cháng* and "嘗" *cháng* led people to misconstrue the meanings of texts even more so. So there was a definite need for the alternate concentration of lexical functions in such cases.

In some instances, after two characters had undergone the process of indiscriminate interchange of one for the other and the eventual alternate concentration of lexical functions, the meanings denoted by each were meanings which originally had been denoted by the other graph; this in turn gave rise to the mutual exchange of lexical functions. Examples include the following:

扁 : 匾. "扁" *biǎn* "flat" is derived from "戶" *hù* "door" and "冊" *cè* "volume" and was the orthograph of {匾} *biǎn* as in 匾額 *biǎn'é* "a horizontal inscribed board." The use of {匾} in the sense of 匾薄 *biǎnbáo* "flat and thin" was a borrowed usage. The *Yùpiān* and *Guǎngyùn* both gloss "匾𡋾" *biǎntī* as "薄" *báo* "thin"; so "匾" must have been a differentiated form created to denote this borrowed meaning of "扁". Most ancient texts since Tang times have used "匾" to denote {扁} as in *biǎnbáo* (e.g., *Yǒuyáng zázǔ xùjí, juàn* 4: 今言梟鏡者, 往往謂壁間蛛爲鏡, 見其形規而匾, 伏子, 必爲子所食也 "As to what is now referred to as the *xiāo* ['mother eater'] and the *jìng* ['father eater'], we often call the wall spider *jìng* ['mirror'], as it appears to be round and flat [i.e., like a mirror]. If it were to hatch its eggs, it most certainly would be eaten by its offspring." The term 扁擔 *biǎndan* "shoulder pole" was anciently also written "匾擔"—see *Xù chuándēng lù, Shuǐhǔ*, etc.) However, after "匾" came into use, the use of "扁" in the sense of "flat and thin" was by no means discarded; rather "匾" was frequently borrowed later on to denote *biǎn* as in *biǎn'é* "a horizontal inscribed board," creating a situation in which the usages of the two were interchanged freely. But after undergoing the process of the alternate concentration of lexical functions, "匾" was used exclusively to denote {匾} as in *biǎn'é*, while "扁" was used exclusively to denote {扁} as in *biǎnbáo*; that is, the original meanings of the two had been switched from one to the other. (However, {匾} *biǎn* as used in reference to round shallow objects made of bamboo was still usually written "匾" rather than "扁", such as in "針線匾" *zhēnxiànbiǎn* "a wicker sewing tray.")

童 : 僮. As for "童", the *Shuōwén* says, 童, 男有辠 (罪) 曰奴, 奴曰童, 女曰妾, 从辛, 重省聲 "*Tóng*: A male who commits a crime is called *nú* and *nú* are called *tóng*; a female is called *qiè*. [It] is derived from 辛 and an abbreviated *zhōng* as phonetic." As for "僮", the *Shuōwén* says, 僮, 未冠也. 从人, 童聲 "*Tóng* means not yet capped and is derived from *rén* 'person' and *tóng* as phonetic." Thus according to the *Shuōwén*, the original meaning of "童" *tóng* was 僮僕 *tóngpú* "servant," whereas the original meaning of "僮" *tóng* was 童子 *tóngzǐ* "child." In ancient texts, *tóng* in both senses was denoted by "童". (In antiquity, slaves and children did not wear their hair long, so they were both called 童 *tóng*, just as a mountain without vegetation is also called *tóng*.) "僮" was a differentiated form derived from "童" (see *Zuǒzhuàn*, Āi 11: 公爲與其嬖僮汪錡乘 "Gōng Wéi and his favorite servant Wáng Jī mounted [the carriage]." According to the glosses on this line in the *Jīngdiǎn shìwén* and as cited by Zhèng Xuǎn in his commentary to *Lǐjì*, "Tángōng" B [*SBBY* ed., 3.13], "僮" here originally was written "童"). Yet following the appearance of "僮" on the one hand, the use of "童" to denote "child" was by no means discarded; on the other hand, "僮" was frequently used to denote "servant." In other words, the usages of the two interchanged freely. After having undergone the process of the alternate concentration of lexical functions, "童" was used exclusively to denote {童} as in *tóngzǐ* "child" and "僮" was used exclusively to denote {僮} as in *tóngpú* "servant"; that is, the original meanings of the two had been switched. (The *Gānlù zìshū*, under its entry "童, 僮" says, 上童幼, 下僮僕, 古則反是, 今所不行, "The first *tóng* means 'youth,' and the second *tóng* means 'servant;' in antiquity the reverse was true, but at present this is not the case." Under "常: 嘗" above, however, we cited a line from the entry "Sū Guī, Lǐ Qiáo zǐ" as given in *Tàipíng guǎngjì* in which the phrase "童年" *tóngnián* "childhood" is found written "僮年", which shows that during the Tang period "僮" was still used to denote *tóng* as in *tóngzǐ* "child.")

The *Shuōwén* uses "醋" to denote {酢} *zuò* as in 酬酢 *chóuzuò* "to exchange toasts." On the other hand, the *Shuōwén* uses "酢" to denote {醋} *cù* as in 醬醋 *jiàngcù* "soy sauce and vinegar" (cf. *Jíjiùpiān*: 酸鹹酢淡辨濁清 "the sour, salty, vinegary, insipid distinguish the murky and the clear" also uses "酢" to denote {醋} *cù*. Phonetically, "乍" *zhà* and "昔" *xī* were very close in Old Chinese). As the use of these two characters was exactly the opposite of the way they were used later on, it is quite possible that they had undergone the process of indiscriminate interchange of one for the other and eventual alternate concentration of lexical functions. However, with "酢" denoting {醋} *cù* as in *jiàngcù* "soy sauce and vinegar" vis-à-vis "酢" denoting {酢} *zuò* as in *chóuzuò* "to exchange toasts," and with "醋" denoting {醋} *cù* as in *jiàngcù* "soy sauce and vinegar" vis-à-vis "醋" denoting {酢} *zuò* as in *chóuzuò*, they may also be viewed as having been homographs. In that case, settling on "醋" to denote {醋} and on "酢" to denote {酢} was much like the case of "鍾" vis-à-vis "鐘" discussed in the section on the differentiation of graphs above; that is, they are examples of the differentiation of homographic forms. (At present, "酢", which is still used to denote {醋} *cù* in "酢漿草" *cùjiāngcǎo* "creeping oxalis," is an unusual usage of "酢".)

11.1.3 The Use of Different Characters to Denote the Different Usages of One and the Same Word

Under most conditions, the dispersal of graphic lexical loads involved assigning different graphs to denote different words that originally had

been denoted by a single character. However, sometimes we also find cases where different characters were used to distinguish the different usages of one and the same word. The most commonly cited examples of this are the characters "他" *tā*, "她" *tā*, and "它" *tā*, all three of which were used to denote the third person pronoun.

The personal pronoun {他} *tā* was derived from the ancient Chinese demonstrative pronoun {他} *tā*. The demonstrative pronoun {他} *tā* originally was denoted by "它", which was the protoform of "蛇" *shé* "snake," or by "佗" *tuō* "a load," both of which were borrowed for this purpose (see *Shījīng* Ode 184.1: 它山之石, 可以爲錯 "The stones of that mountain, can serve as whetstones." Also, *Zuǒzhuàn*, Yǐn 1: 制, 岩邑也. 虢叔死焉. 佗邑唯命 "Zhì is a dangerous city. Guóshū died there. But as for any other city, [you] need only command [me]"). Originally "他" was an allograph of "佗" (the element "它" in graphs ordinarily evolved into "也"; see Sec. 5.2). Later on, the character "蛇" was created to denote the original meaning of "它", after which the lexical loads of "佗" and "他" were distinguished. Both "它" and "他" in reality became dedicated forms denoting the pronoun {他} *tā*. These two characters originally were totally interchangeable without any detectable differences; but following the eventual use of {他} *tā* as a third person pronoun, "他" was normally used to denote this meaning (the probable reason for this was that people felt that the character "他", which is derived in part from "人" *rén* "person," was a more appropriate form to denote a personal pronoun; see Sec. 10.2.3 regarding borrowings based on graphic shapes). By the latter part of the 1910s of this century, some individuals, having been influenced by the Western languages which distinguish pronouns by gender, developed the differentiated form "她" *tā* (derived in part from "女" *nǚ* "woman") to refer to females (see Sec. 8.3). They further differentiated "牠", or "它", to refer to things other than humans. (A few translators in recent times have even created a third person pronoun used exclusively to refer to God, namely, "祂", derived in part from "示" *shì*.) Those who advocated using "她" and "牠" (它) "originally had hoped to establish a distinction in the spoken language (with '她' read as '伊' *yī*, and '它' as '拖' *tuō*)." But this hope was not realized and everyone continued to read them in the same way they read "他" *tā* (see Wáng 1958:274). The character "她" has already been widely accepted; however, as for "牠", following the consolidation of variant forms in the 1950s, it was merged with "它". At present, "它" is essentially used solely to refer to things other than humans. (Some people still write "其它" *qítā* "other" for "其他", but this is rarely seen now.) In most cases, the personal pronoun "他" *tā* is no longer used to refer to females and things other than humans, and by and large is no longer interchangeable with "她" or "它". The pronouns "她" *tā* used for females, "它" *tā* used for things other than humans, and "他" *tā* used for males all

have identical readings, so most regard them as still denoting the same word and signifying nothing more than distinctions made in the appearance of the characters to reflect differences in this word's usages.

However, it is very difficult to find a clear-cut standard that can be used to distinguish what constitutes homophonous cognates from what constitutes different usages of one and the same word. If we were to say that "他", "她", and "它" should be regarded as graphs which denote different usages of one and the same word, then should we also regard "炭" *tàn* "charcoal" vis-à-vis "碳" *tàn* "carbon," "溶化" "*rónghuà* "to dissolve" vis-à-vis "熔化" *rónghuà* "to melt," as well as "棉" *mián* "cotton" vis-à-vis "綿" *mián* "silk floss" discussed above, in the same way? Again, in the cases of "岔" "to branch off" as in 溝岔 *gōuchà* "branch of a channel," "汊" "branch of a river" as in 港汊 *gǎngchà* "branching stream," "杈" "branch of a tree" as in 樹杈 *shùchà* "tree branch," and "衩" "slit in the sides of a garment" as in 衣衩 *yīchà* "garment slit," all of which are read *chà*, should they be regarded as denoting different usages of one and the same word? Going yet another step, even though "娶" *qǔ* "to take a wife," a differentiated form derived from "取" *qǔ* "to take," had a departing tone reading in antiquity,[3] at present it is read the same as "取"—so what is its relationship to "取"? If, say, we were to place this graphic form aside, should {*qǔ*} as in "*qǔ* 錢 *qián*" to withdraw money" and {*qǔ*} as in "*qǔ* 媳婦 xífù" "take a wife," be treated rationally as cognates or as two different usages of one and the same word?

We are unable to discuss in detail here the questions raised above. Our reason for raising them is to call attention to the fact that Chinese characters on the surface do indeed distinguish numerous meanings that are not distinguished phonologically in the language. Among them, not only are there ordinary homonyms which do not share any close relationships with one another, but also homophonous cognates which share extremely close relationships, as well as a number which fall in the category of different usages of one and the same word.

Some graphs which denote one and the same word by nature fall somewhere between allographs and graphs of the same sort as "他", "她", and "它". For instance, when {疙瘩} *gēdá* is used in the sense of a small knot or lump, it can be written "疙瘩" ("瘩" is sometimes written "疸"), as well as "圪墶" ("墶" is sometimes written "塔"), "屹嵦", "紇縖", or "咯噠" ("噠" is sometimes written "嗒"). However, "圪墶" and "屹嵦" are mostly used in relation to ground bumps; "紇縖" is used mostly in relation to yarn, thread, and weaving knots; and "咯噠" is used mostly in relation to edible lumps of food such as dough drops and the cluster-like stalks of mustard

3. In the *Guǎngyùn* and *Jīngdiǎn shìwén*, "娶" is read in the departing tone, whereas it is given rising and departing tone readings in the *Jíyùn*.

greens; even though their usages are not as distinctive as those of "她" and "它", nevertheless, each of them have their respective well-defined points of emphasis. When {疙瘩} *gēdá* is used to describe swelling on the skin or hard lumps in the muscles, or when it is used to describe knotty problems, it is usually written "疙瘩", and sometimes as "圪墶" or "屹嗒" but never as "紇縖" or "咯噠". Whether or not {疙瘩} *gēdá* used in these senses should be treated as the same word as {疙瘩} *gēdá* written "紇縖" and "咯噠" is also a problem.

11.2 The Consolidation of Graphs

The consolidation of graphs refers to the transference of all the functions of one graph to another graph. If, say, all the functions of graph A are transferred to graph B, and the former is no longer used, we could then say that graphs A and B have merged, or that they have been consolidated. In some instances, graph B, which was consolidated with graph A, originally had the very same functions as graph A (e.g., matrigraphs which were consolidated with differentiated forms; these will be discussed below). The consolidation of graphs under such circumstances can also be explained in terms of the concentration of lexical functions (see Sec. 11.1.2.2 above).

During the course of development of Chinese characters, people, on the one hand, unceasingly differentiated graphs, and, on the other, unceasingly consolidated them so as to control their numbers, to simplify their structures (using characters with fewer strokes in place of characters with more strokes), or to satisfy certain practices in the use of characters.

The consolidation of characters normally presupposes graphic differentiation. Some matrigraphs were later merged with their own differentiated forms. After having been used for varying lengths of time, some differentiated forms were reunited with their own matrigraphs through mergers.

Let us first give some examples of matrigraphs which were merged with their differentiated forms.

𠂤: 逆. For "𠂤", the *Shuōwén* says, 𠂤, 不順也 "*Nì* means 'not compliant.'" And for "逆" it says, 逆, 迎也. 从辵, 𠂤聲 "*Nì* means 'go to meet' and is derived from *chuò* 'run and stop' and *nì* as phonetic." "𠂤" *nì* was the orthograph of {逆} as in 順逆 *shùnnì* "compliance and defiance" (see also Sec. 7.1.4). Greeting someone and being greeted by someone involve movements in opposite directions. {逆} *nì* as in *shùnnì* "compliance and defiance" is an extended meaning. "逆" was a differentiated form used to denote this extended meaning of "𠂤". Later on, "𠂤" was totally discarded and "逆" was also used to denote {逆} *nì* as in *shùnnì*.

叚: 假. For "叚", the *Shuōwén* says, 叚, 借也 "*Jiǎ* means 'to borrow.'" And for "假" it says, 假, 非眞也. 从人, 叚聲 "*Jiǎ* means 'not real' and is

derived from *rén* "person" and *jiǎ* as phonetic. "叚" is the orthograph of {假} *jiǎ* as in 假借 *jiǎjiè* "to borrow." {假} as in 眞假 *zhēnjiǎ* "true and false" is an extended meaning of {假} as in *jiǎjiè* "to borrow." (In the Qín bamboo slips from Shuìhǔdì, "叚" is used for {假} as in *zhēnjiǎ* "true and false," e.g., in 今叚父盜叚子, 可論, which should be read as 今假父盜假子, 何論 "Now, when a foster father steals from a foster son, how does one appraise [that]?") "假" was a differentiated form used to denote this extended meaning of "叚". Later on, "叚" was totally discarded and "假" was also used to denote {假} *jiǎ* as in *jiǎjiè* "to borrow."

㚔: 陰. The *Shuōwén* says, 霒, 雲覆日也. 从雲, 今聲. 㚔, 古文或省 "*Yīn* means 'clouds cover the sun' and is derived from *yún* 'clouds' and *jīn* as phonetic. 㚔, the ancient form was sometimes abbreviated." For "陰" the *Shuōwén* says, 陰, 闇 (暗) 也, 水之南山之北也, 从阜, 㚔聲 "*Yīn* means 'dark' as on the south sides of rivers and the north sides of mountains. It is derived from *fù* 'a mound' and *yīn* as phonetic." "㚔" was the orthograph of {陰} *yīn* as in 陰晴 *yīnqíng* "overcast and clear." {陰} as in 陰陽 *yīnyáng* "the opposing forces in nature" was an extended meaning of {陰} as in *yīnqíng* "overcast and clear." (In antiquity, the northern sides of mountains were called *yīn* and the southern sides *yáng*. The northern sides rarely received sunlight and thus were called *yīn*.) "陰" was a differentiated form used to denote this extended meaning of "㚔". Later on, "㚔" was totally discarded and "陰" was also used to denote {陰} *yīn* as in *yīnqíng* "overcast and clear."

褱: 懷. The *Shuōwén* says, 褱, 俠 [which possibly should be read as 挾] 也 "*Huái* means 'to hold.'" And for "懷" it says, 懷, 念思也. 从心, 褱聲 "*Huái* means 'to think lovingly of' and is derived from *xīn* 'heart' and *huái* as phonetic." "褱" *huái* was the orthograph of {懷} as in 懷抱 *huáibào* "to cherish." (The *Shuōwén* says, 褢, 褱也 "*Bào* means 'to hold.'" "褱褢" is equivalent to "懷抱" *huáibào* "to cherish." For "懷" in *Lǎozǐ* 70: 是以聖人被褐而懷玉 "Therefore, the sage, while clad in serge, conceals on his person a piece of jade," Mǎwángduī manuscripts A and B have "褱".) 懷念 *huáiniàn* "to think lovingly of" is an extended meaning of 懷抱 "to cherish." "懷" was a differentiated form used to denote this extended meaning of "褱". Later on, "褱" was totally discarded and "懷" was also used to denote {懷} *huái* as in *huáibào* "to cherish."

Earlier it was mentioned that "丩" was merged with "糾" *jiū* (see Sec. 7.2) and that "冓" was merged with "稱" *chēng* (see Sec. 11.1.1.3), both of which represent mergers of the same type as the examples above. The matrigraphs and the differentiated forms with which they merged at the same time also had a relationship like that of an orthograph to a borrowed graph.

Additional examples will be given below of differentiated forms which merged with their matrigraphs. After 1949, numerous differentiated forms

were merged with their matrigraphs during the reformation of the script. For example,

嚐: 嘗. The *Shuōwén* says, 嘗, 口味之也. 从旨, 尚聲 "*Cháng* means 'the mouth tastes it' and is derived from *zhǐ* 'tasty' and *shàng* as phonetic." "嚐" was a differentiated form used to denote the original meaning of "嘗" that appeared rather early. (The *Kāngxī zìdiǎn* does not have this graph.) During the process of consolidating variant forms, it was merged with "嘗" which was simplified to "尝".

荳: 豆. Originally "豆" referred to a kind of food vessel (see Sec. 7.1.2), whereas its sense of {豆} *dòu* as in 豆麥 *dòumài* "beans and grains" was a borrowed usage. The character "荳" was a differentiated form created to denote this borrowed meaning. (The *Shuōwén* does not have this graph.) However, following the appearance of "荳", the character "豆" was still used widely to denote the {豆} in *dòumài*. During the process of consolidating variant forms, "荳" was merged with "豆".

捨 : 舍. {舍} *shè* as in 屋舍 *wūshè* "a house" was an extension of {舍} *shè* as in 舍止 *shèzhǐ* "to stop, to rest." The latter was further extended to mean {舍} *shě* as in 舍棄 *shěqì* "to abandon." "捨" was a differentiated form created to denote this extended meaning of "舍". During the simplification of the script, it was merged with "舍".

Aside from these, other examples of differentiated forms having been merged with their respective matrigraphs include: "雲" *yún* "cloud" merging with "云" (in the *Shuōwén* "云" is given as the ancient form of "雲"); "採" *cǎi* "to pick" with "采" (the *Shuōwén* does not have "採"); "鬚" *xū* "whiskers" with "須" (the *Shuōwén* does not have "鬚"); "迴" *huí* "to return" with "回" (the *Shuōwén* does not have "迴"); "樑" *liáng* "a bridge" with "梁" (the *Shuōwén* does not have "樑"); "剋" *kè* "to overcome" with "克" (the *Shuōwén* has this written "勊"); "併" *bìng* "combine" with "幷"; "阨" *è* "a strategic point" with "厄"; "誇" *kuā* "to exaggerate" with "夸"; "譭" *huǐ* "to destroy" with "毀" (the *Shuōwén* does not have "譭"); "颳" *guā* "to blow" with "刮" (the *Shuōwén* does not have "颳"); "揹" *bèi* "the back" with "背" ("揹" appeared rather late; the *Kāngxī zìdiǎn* does not have this graph. The same applies to "睏" and "錶" below); "睏" *kùn* "sleepy" with "困"; "錶" *biǎo* "clock" with "表"; "佔" *zhàn* "to take by force" with "占" ("佔" appeared rather late. The meaning given to "佔" in the *Kāngxī zìdiǎn* is different and thus it is a homograph); "鬍" *hú* "beard" with "胡" (the *Kāngxī zìdiǎn* does not have "鬍"; however, under the radical 毛, it lists the character "毼" and cites the *Hǎipiān*: 俗鬍字, 見 "字學元元" "[毼 is] the vulgar form of 鬍; see the *Zìxué yuányuán*"); "慼" *qī* "mournful," along with its allograph "慽", with "戚"; "漂" and "慓" *piāo* "to drift about" with "票" (the *Shuōwén* does not have "慓"; see Sec. 9.1); "尟" *xiǎn* "rare,"

along with its allograph "尠", with "鮮"; "嚮" *xiàng* "to incline towards" with "向" ("嚮" may also be viewed as a differentiated form of "鄉". The *Shuōwén* does not have "嚮"); "陞" *shēng* "to ascend" and "昇" *shēng* "to ascend" with "升" (the *Shuōwén* does not have "陞" or "昇"); "甦" *sū* "to come back to life" with "蘇" (the *Shuōwén* does not have "甦"); "崑崙" *kūnlún* "the Kūnlún mountains" with "昆侖" (the *Shuōwén* proper does not have "崑崙", but it does appear in the newly appended characters in *Shuōwén*), and so on.

While some differentiated forms appear in dictionaries, giving one the impression they are still in use, in actuality most people only use their matrigraphs, such as "扁" *biǎn* for its differentiated form "藊" as in 藊豆 *biǎndòu* "hyacinth bean," "甜" *tián* for its differentiated form "恬" as in 恬菜 *tiáncài* "beet," and "酸" *suān* for its differentiated form "痠" as in 痠痛 *suāntòng* "to ache." (None of these differentiated forms is found in the *Shuōwén*.) Differentiated forms of this sort can generally be merged with their matrigraphs.

During the simplification of the Chinese script, matrigraphs and differentiated forms were allowed to share the same simplified forms. For example, the complex form of "历" *lì* as in 经历 (經歷) *jīnglì* "undergo, experience" is "歷", and the complex form of "历" *lì* as in 历法 (曆法) *lìfǎ* "calendar" is "曆". "曆" in origin was a differentiated form created to denote this extended meaning of "歷". (As a calendar is based on the observation and calculation of the sun's and moon's courses [歷程 *lìchéng*], it is therefore called 歷 *lì*. The *Shuōwén* does not have "曆".) The complex form of "获" *huò* as in 获得 *huòdé* (獲得) "to obtain" is "獲", while the complex form of "获" *huò* as in 收获 (收穫) *shōuhuò* "to gather" is "穫". "穫" was originally a differentiated form created to denote this extended meaning of "獲". The complex form of "尽" *jìn* as in 竭尽 (竭盡) *jiéjìn* "to exhaust" is "盡", and the complex form of "尽" *jǐn* as in 尽量 (儘量) *jǐnliàng* "to do one's utmost" is "儘". "儘" in origin was a differentiated form created to denote this extended meaning of "盡". (The *Shuōwén* does not have "儘".) The complex form of "复" *fù* as in 返复 (返復) *fǎnfù* "to restore" and 恢复 (恢復) *huīfù* "to resume" is "復", and the complex form of "复" *fù* as in 重复 (重複) *chóngfù* "to repeat" is "複". "複" in origin was a differentiated form created to denote this extended meaning of "復". ("複" *fù* as in 單衣複衣 *dānyī fùyī* "single and double lined garments" in most cases is written "復" in Han time bamboo texts. In the *Shuōwén* "复" is glossed as 行故道 "to travel along an old path," and "復" is glossed as 往來 "go and come." Based on this, "復" in origin should have been a differentiated form of "复"; however, there is also a possibility that "复" and "復" originally represented the complex and simplified forms of one graph.) The phenomenon described above can also be explained in terms of differentiated forms merging with their respective matrigraphs.

Historically speaking, the merging of differentiated forms with their matrigraphs has been a common phenomenon. In Sec. 9.1 it was mentioned that most people early on did not use younger orthographs such as "𡐞", "𢠵", "𤸃", and "嘫", all of which can be treated as differentiated forms that had already merged with their matrigraphs. Below are several more examples of differentiated forms which most people early on stopped using to denote their respective matrigraphs.

勥. The *Shuōwén* says, 勥, 迫也. 从力, 强聲 "*Qiáng* means 'to compel' and is derived from *lì* 'strength' and *qiáng* as phonetic." {强} *qiáng* as in 强弱 *qiángruò* "strong and weak" was extended to mean {强} as in 强迫 *qiángpò* "to coerce"; the character "勥" was a differentiated form used to denote this extended meaning of "强". (The character "强" is derived from "虫" *huǐ* "insect" and originally was the name of an insect. According to the *Shuōwén*, "强" *qiáng* as in *qiángruò* "strong and weak" was a loangraph for "彊" *qiáng*. In more precise terms, "勥" was a differentiated form used to denote this borrowed meaning of "强".)

愓. The *Shuōwén* says, 愓, 憂也. 从心, 殤省聲 "*Shāng* means 'sorrowful' and is derived from *xīn* 'heart' and an abbreviation of *shāng* as phonetic." (The explanation of the phonetic given here is unreliable; see Sec. 8.3.) {傷} *shāng* as in 創傷 *chuāngshāng* "to wound" was extended to mean {傷} *shāng* as in 憂傷 *yōushāng* "distressed"; thus "愓" was a differentiated form used to denote this extended meaning of "傷" *shāng*.

殌. The *Shuōwén* says, 殌, 大夫死曰殌. 从歺, 卒聲 "*Zú*: when the grandees die we say *zú*; it is derived from *dǎi* 'bad' and *zú* as phonetic." {卒} *zú* as in 終卒 *zhōngzú* "to finish" was extended to mean {卒} *zú* as in 亡卒 *wángzú* "to perish"; thus "殌" was a differentiated form used to denote this extended meaning of "卒" *zú*. (The original meaning of "卒" was probably 兵卒 *bīngzú* "soldiers." In more precise terms, what "殌" denoted was an extension of this borrowed meaning of "卒" *zú*.)

殠. The *Shuōwén* says, 殠, 腐气也. 从歺, 臭聲 "*Chòu* means 'foul air' and is derived from *dǎi* 'bad' and *chòu* as phonetic." "臭" was the protoform of "嗅". {嗅} was extended to mean {臭} *xiù* "smell, odor" and was further extended to mean {臭} *chòu* as in "foul air." "殠" *chòu* was thus a differentiated form used to denote this extended meaning of "臭" *xiù*.

All these differentiated forms in fact merged with their matrigraphs at an early date.

In the past, scholars of the script who advocated taking the "proper graphs" in the *Shuōwén* as a norm liked to use in their writings matrigraphs which had long since merged with their differentiated forms as well as differentiated forms which had long since merged with their matrigraphs. Such practices as this that run counter to the customary uses of script are most undesirable.

Aside from graphic mergers between matrigraphs and their differentiated forms, other kinds of mergers are also found. The most common among them is an orthograph merging with an ordinary loangraph.

Above we discussed the two phenomena of matrigraphs merging with differentiated forms and differentiated forms that are intrinsically younger orthographs merging with their matrigraphs, which at the same time amount to orthographs merging with loangraphs. In the present chapter (Sec. 11.1.1.3.3), we already mentioned that the orthograph of "稱" as in 稱揚 *chēngyáng* "to praise" was "偁". "偁" merging with "稱" is also a case of an orthograph merging with a loangraph. Both "偁" and "稱" were differentiated from "爯"; the two are closely related cognates but in a rather unique way. The ordinary loangraphs under discussion here are graphs that neither have a relationship like that of a matrigraph to a differentiated form, nor one like that of "偁" to "稱".

During the reformation of the script, a number of orthographs were merged with ordinary loangraphs. For example, "彊" *qiáng* "strong" was merged with "强" (cf. "勥" above); "艸" *cǎo* "grass with "草"; "毬" *qiú* "a ball" with "球"; "蓡" *shēn* "ginseng" with "參"; "隻" *zhī* "classifier of birds, ships, etc." with "只"; "薑" *jiāng* "ginger" with "姜"; "靈" *líng* "spirit" with "灵"; "傑" *jié* "hero" with "杰" (cf. Sec. 9.1.3 above); "穀" *gǔ* "grain" with "谷"; "葉" *yè* "leaf" with "叶" ("叶" originally was an allograph of "協" *xié* "union"); "幾" *jǐ* "several" with "几"; "醜" *chǒu* "ugly" with "丑"; "鬥" *dòu* "to struggle" with "斗"; "蔔" *bo* as in "蘿蔔" *luóbo* "radish" with "卜"; "臺" *tái* "terrace," "擡" *tái* "to carry" and "颱" *tái* "typhoon" with "台" and so forth. The loangraphs cited above in most cases had all been used before; moreover, some of these loangraphs had essentially already replaced their orthographs, as in the cases of "强", "草", "參", "球", and so forth. However, there are also a small number of loangraphs whose histories are quite short such as "斗" for "鬥", "卜" for "蔔", and so forth.

In the case of some loangraphs which were consolidated with orthographs such as "草" *cǎo* "grass," "球" *qiú* "ball," "灵" *líng* "spirit," "杰" *jié* "hero," etc., most people early on were not aware of what their original usages had been prior to their having been borrowed. So these characters seemingly resemble allographs in the strict sense of orthographs that had undergone consolidation.

With respect to the consolidation of graphic forms, in some cases it is rather difficult to determine what exactly the relationship was between a character which had undergone consolidation and the character with which it was consolidated. For example, during the simplification of the Chinese script, "裏" *lǐ* "inside" was merged with "里". The character "裏" already appeared in bronze inscriptions as early as the Western Zhou dynasty. The relationship between it and the graph with which it was consolidated "里" seemingly could be viewed the same as that between

an orthograph and an ordinary loangraph. However, "裏" is derived from "里" as phonetic; moreover, in Western Zhou bronze inscriptions we occasionally find examples where "里" was borrowed to denote {裏} (e.g., in the "Héng hóu *dǐng*"). We also find a case of "里" borrowed for "裏" in the *Sùwèn*, "Cī yāotòng lùn": 肉里之脈, 令人腰痛 . . . "The arteries and veins in the flesh cause people to develop lumbago . . ." So there is also a possibility that "里" originally was borrowed to denote {裏} and that the character "裏" was later created for it. In that case, the relationship of "裏" to "里" would be that of a younger orthograph to a matrigraph. (Above we cited the case of "颱" *tái* "typhoon" which was merged with "台"; but we cannot completely rule out the possibility that it was a differentiated form of "台".)

In our discussion of homographs in Sec. 10.2, it was pointed out that some graphs that had dissimilar shapes later became homographs due to changes in graphic shape and so forth. If attention is focused solely on the external form of graphs, then this also can be regarded as a form of graphic consolidation.

In some cases only a portion of the functions of a polysemic graph or a polysemic graph which represents two or more homographs was consolidated with another character. Yet on account of the fact that one or another of its functions had fallen into disuse early on, it can in fact be viewed as having merged totally with the other character. For the average user of Chinese script, at least, this is the case. A number of similar cases arose during the reformation of the script. For example, in Sec. 10.1 we discussed the case of "**飜**" *fān* "to run swiftly (of horses)." Even though its borrowed usage was merely merged with "帆" *fān*, yet since its usage in the sense of "to run swiftly" had long since fallen into disuse, it was in fact totally merged with "帆". Other examples include the following:

彙: 匯. During the simplification of the Chinese script, "匯" *huì* and "彙" *huì* were simplified to "汇". This can be explained as the merging of "彙" as in 彙集 *huìjí* "to compile" with "匯", since from the standpoint of graphic shape, "汇" is a simplified form of "匯". According to the *Shuōwén*, "彙" originally was the ancient form of "猬" *wèi* "the hedgehog." Its use to denote {彙} as in *huìjí* "to compile" was a borrowed usage. On account of the fact that "彙" and "猬" early on had already been differentiated, becoming two characters, the merging of "彙" denoting its borrowed meaning with "汇" was in fact tantamount to the total mergence of "彙" with "汇". ("彙" as in *huìjí*, like "猬", was originally read like "胃" *wèi* and only later acquired the same reading as "匯" *huì*. The meaning of *huìjí* is "to compile by class," which differs from the meaning of 匯合 *huìhé* "to converge." The commentary to *Yìjīng*, Hex. 11 says, 彙, 音胃, 類也 "彙, read *wèi*, means 'class,'" which shows that "汇" denoting {彙} as in *huìjí* should be treated as a loangraph.)

摺 : 折. The character "摺" primarily has two readings: in its sense of 摧折 *cuīzhé* "to break, to snap" it is read *lā*, and in its sense of 摺疊 *zhédié* "to fold" it is read *zhé* (the two can be treated as homographs). During the simplification of the script, "摺" in its reading of *zhé* was merged with "折" *zhé*. On account of the fact that "摺" in its reading of *lā* had long since fallen into disuse, "摺" was in fact totally merged with "折". (Where "摺" is read *lā* in old texts, it was not simplified to "折". "摺", in its reading of *zhé*, and "折" were read differently in Middle Chinese. "摺" was in the rime *yè* [葉 MC -jäp], whereas "折" was in the rime *xuē* [薛 MC -jät]. The meanings of 摺疊 *zhédié* "to fold" and 折斷 *zhéduàn* "to break off" originally did not have any connection whatsoever. So "折" used to denote {摺} as in *zhédié* may be treated as a case of the borrowing of both the sound and form of the borrowed graph.)

Sometimes the consolidation of graphs or merger of a part of a graph's functions with another graph reflect the mixing up of two synonymous or nearly synonymous words in the language. For example,

鬱: 郁. Both "鬱" *yù* and "郁" *yù* were used in the sense of 芳香 *fāngxiāng* "fragrant." However, in antiquity they had different readings ("鬱" in Middle Chinese was in the rime *wù* [物 MC -juət], whereas "郁" was in the rime *wū* [屋 MC -uk]) and by no means did they represent the same word when used in the sense of "fragrant." In the line 言鬱郁於蘭芷 "One's words are more fragrant than orchids and angelica" from Liú Xiàobiāo's "Guǎng juéjiāo lùn" (*Wénxuǎn*, *juàn* 55), we find these two graphs used together, about which Lǐ Shàn says, 鬱郁, 香也 '上林賦' 曰: 芬芳漚鬱, 酷烈淑郁' "*Yùyù* means 'fragrant.' The 'Shànglín fù' says, 'fragrantly redolent and intoxicatingly aromatic.'" By the time these two graphs became homophonous, there no longer was any distinction made in the language between {鬱} and {郁} used in the sense of "fragrant." During the simplification of the script, "鬱" was merged with "郁" and the two became completely indistinguishable. ("鬱伊" *yùyī* and "郁伊" *yùyī*, both of which mean "melancholy," originally may not have been homophonous and probably should not be treated as different writings of one and the same word. After simplification, there was no way to distinguish one from the other. According to the *Shuōwén*, the original meaning of "鬱" was "luxuriant vegetation." "郁", which is now used to denote this meaning, and "鬱" have a relationship of an ordinary loangraph to an orthograph.)

於: 于. "於" *yú* and "于" *yú* were both used as prepositions whose usages were strikingly similar. But in antiquity they were by no means homophonous ("於" [MC ʔjwo] had initial *yīng* [影] and was in the rime *yú* [魚], whereas "于" [MC ju] had third division initial *yú* [喻] and was in rime *yú* [虞]), so they cannot be treated simply as different writings of one and

the same word. (Possibly due to dialectal or temporal differences, the prepositions {於} and {于} may well represent differentiated forms derived from what was originally one word. Yet some linguists maintain that at a relative early stage there was a certain difference between their usages as prepositions.) According to the rules of phonological change, the preposition "於" should have changed to *yū*. Yet at present it is read *yú*, or the same as "于". Many people treat them as interchangeable graphs. During the process of consolidating variant forms, "於", read *yú*, was simply merged with "于", and the two became totally indistinguishable. ("於" when read *wū* and "於" when read *yū* and used as a surname are still written "於" and have not been consolidated with "于".)

寘: 置. While "寘" was synonymous with "置" *zhì* as in 放置 *fàngzhì* "to place," they were not homophonous in antiquity ("寘" [MC tśjeˀ] had third division initial *zhào* [照] and was in the rime *zhì* 寘, whereas "置" [MC ṭiˀ] had initial *zhī* [知] and was in the rime *zhì* [志]), so they cannot be treated simply as different writings of one and the same word. Later on, they did become homophonous, after which some treated them as interchangeable graphs. During the process of consolidating variant forms, "寘" was simply merged with "置". (In the *Xiàndài Hànyǔ cídiǎn*, " 寘" and "置" are correctly distinguished.)

貲: 資. "貲" *zī* "property" originally was a differentiated form derived from "訾" as in 訾量 *zīliàng* "to estimate." However, in antiquity "貲" was not homophonous with "資" as in 資貨 *zīhuò* "property" ("貲" [MC ˌtsje] was in the rime *zhī* [支], whereas "資" [MC ˌtsji] was in the rime *zhī* [脂]), so they were not different writings of one and the same word. For the sake of tax collection and so forth, the Qín and Hàn governments frequently made estimates of the wealth of every household and residence in the country, consequently "訾" *zī* was extended to mean "the estimates of a family's property" and "family property" in general. In the records of property holdings found among the Jūyán bamboo slips, we find notations such as 凡訾直 (值) 十五萬 "all the property is valued at 150,000"; 訾直萬五千 "the property is valued at 15,000," etc. On a jar dated the fourth year of the Xīpíng era (A.D. 175) we find the notation 訾財千億 "estimated property [value] one hundred billion," all of which use "訾" to denote this meaning. Later on, the element "言" *yán* "words" was changed to "貝" *bèi* "cowrie," yielding the differentiated form "貲". (After the appearance of "貲", {訾} as in *zīliàng* was usually written "貲". The *Shuōwén* says, 貲, 小罰以財自贖也 "*Zī* means in the case of a minor punishment, one uses one's property to ransom one's self" (i.e., payment of a fine to escape punishment). "貲" *zī* used in this sense is frequently found in the Qín legal codes unearthed from the Qín tomb at Shuìhǔdì. "貲" in 貲財 *zīcái* "property" and 貲量 *zīliàng* "to estimate" can be regarded as its homograph.) In the *Shǐjì* and *Hànshū* "貲" as in 家貲 *jiāzī* "family property"

originally was also written "訾", but later on was emended to "貲" in some cases. For instance, for "訾" in *Shǐjì*, "Biography of Zhāng Shìzhī": 以訾爲騎郎, current editions of *Hànshū*, "Biography of Zhāng Shìzhī" have "貲". For "訾" in *Shǐjì*, "Biography of Sīmǎ Xiāngrú" 以訾爲郎, current editions of *Hànshū*, "Biography of Sīmǎ Xiāngrú" have "貲". Since the meanings of "貲" and "資" were quite close, after the two became homophonous, they were usually treated as interchangeable characters. During the process of consolidating variant forms "貲" as in *zīcái* "property" was simply merged with "資" and the two became wholly indistinguishable. ("資" as in *zīliàng* "to estimate" and "貲" in its sense of "payment of a fine to escape punishment" are both still written "貲" and were not consolidated with "資".)

徵: 征. "徵" *zhēng* as in 徵求 *zhēngqiú* "to seek" and "征" *zhēng* as in 征稅 *zhēngshuì* "to collect taxes" are semantically quite close; yet in antiquity they were not at all homophonous ("徵" [MC ˌ ṭjəng] in Middle Chinese had initial *zhī* [知] and was in the rime *zhēng* [蒸], whereas "征" [MC ˌtśäng] had third division initial *zhào* [照] and was in the rime *qīng* [清]). Later on the two did become homophonous and some began treating them as being interchangeable. Nevertheless, the "征" of *zhēngshuì* usually was never written "徵", and the "徵" of *zhēngqiú* usually was never written "征". During the simplification of the script, "徵" was merged with "征", after which the "征" of *zhēngshuì* and the "征" of *zhēngqiú* became indistinguishable. ("徵" *zhǐ*, one of the five musical notes in the Chinese scale, is still written "徵".)

In addition, during the process of consolidating variant forms, "斲" and "斮" were both merged with "斫" *zhuó* "to hack (with an ax or sword)." Although all three are now read *zhuó*, their ancient readings were not identical. (In Middle Chinese, "斫" [MC tśjak] had third division initial *zhào* [照] and was in the rime *yào* [藥]; "斲" [MC ṭåk] had initial *zhī* [知] and was in the rime *jué* [覺]; and "斮" [MC tṣåk or tsjak] had second division initial *zhào* [照] and was in both the rimes *yào* [藥] and *jué* [覺].) Even though their meanings were quite close, their usages were markedly distinctive and on the whole they were not confused for one another in the past. Therefore, the treatment of "斲" and "斮" as allographs that merged with "斫" is most inappropriate. The *Xiàndài Hànyǔ cídiǎn* correctly distinguishes the three and does not treat them as allographs.

The related problem of "麤" (also written "麁"), "觕", and "粗" is worthy of mention here. During the process of consolidating variant forms, "麤" and "觕" were merged with "粗" *cū* "coarse." In the past, these three characters could indeed be used interchangeably so there was some rationale for consolidating them. (According to the *Shuōwén*, the original meaning of "麤" was 行超遠 "in advancing, leap high and far." We have no ancient

textual examples of "麤" in this usage.) In some old texts, however, we find "麤" and "粗" or "犆" used together. For example,

> *Chūnqiū fánlù, juàn* 6:4 "Yú xù": 是亦始於麤粗,[4] 終於精微 "This also begins in the coarse and ends in the profound."
>
> *Lùnhéng*, "Zhèng shuō": 略正題目麤粗之說 "slightly correct the coarse explanations of the headings."
>
> In the commentary to *Zhuāngzǐ*, "Zéyáng," Sīmǎ Biāo is quoted: 鹵莽猶麤粗也 "*Lǔmǎng* 'rude; foolhardy' is like *cūcū*."
>
> *Hànshū*, "Yìwénzhì" ("Shùshù lüè" section [Zhōnghuá ed. vol. 6, p. 1775]): 庶得麤犆 "[They] nearly attained a rough approximation [of it]."
>
> *Gōngyángzhuàn*, Yǐn 1, Hé Xiū's comment: 用心尚麤犆 "Exercise caution and still be coarse."

How should these be interpreted? Originally "粗" and "犆" both had readings of *cū* and *zù* in antiquity but without any distinct differences in meaning. "粗" and "犆" used in combination with "麤" should have been read *zù* (on this reading see Wang 1832:473–474). "粗" and "犆" here ought not be confused with the "粗" and "犆" which interchanged with "麤". Some have maintained that "粗" and "犆" originally only had a reading of *zù* and that the reason for their also having had a reading of *cū* was due to their confusion with "麤". In that case, the relationship of "粗" and "犆" to "麤" would be of the same sort as the relationship of "仇" to "讎" discussed in Sec. 10.3. (As mentioned above, "於" should be read *yū* but is in fact read *yú*. This may also have been due to its confusion with "于".)

As was mentioned above, the consolidation of characters normally presupposes graphic differentiation. On the other hand, after graphs have been differentiated, there then exists the possibility of their being redifferentiated. For example,

丞, 垂 : 垂 : 垂, 陲. According to the *Shuōwén*, the orthograph for "垂" *chuí* as in 下垂 *xiàchuí* "hang down" was "丞". (The *Shuōwén* says, 丞, 艸木華葉丞, 象形 "丞: 'The blossoms and leaves of vegetation that are drooping.' Pictograph." The character "丞" is sometimes found in Han time stele inscriptions, e.g., "Kǒng Zhòu *bēi*": 歿丞令名 "to leave behind a good name after one's death.") "垂" was the protoform of "陲" as in 邊陲 *biānchuí* "frontier." (The *Shuōwén* says, 𨐈, 遠邊也, 从土, 丞聲 "*Chuí* means 'a distant frontier' and is derived from *tǔ* 'earth' and *chuí* as phonetic.") In the received ancient texts, {垂} as in *xiàchuí* "hang down" is in most

4. This is taken from Lú Wénchāo's 盧文弨 collated edition. The Wǔyīngdiàn jùzhēn 武英殿聚珍 edition has "糲" for "粗", which is an error.

cases denoted by "垂", and {陲} as in *biānchuí* "frontier" is denoted by "陲", which coincides with their usages at present. Judging from its evolution, "丞" most likely first merged with "垂", after which "陲" was differentiated from "垂" in order to denote the original meaning of "垂". (The *Shuōwén* has the character "陲" glossed as "危" *wēi* "perilous," which may be viewed as a homograph of "陲" as in *biānchuí* "frontier." Even if we do regard the character "陲", which the ancients glossed as *wēi* "perilous," as having denoted the original meaning of "垂", nevertheless, since the use of "陲" in this sense fell out of use at an early date, there was in fact no longer any distinction between it and the differentiated form derived from "垂".)

尻, 居: 居: 居, 踞. According to the *Shuōwén*, the orthograph of "居" as in 居處 *jūchù* "occuy, dwell" was "尻". (The *Shuōwén* says, 尻, 處也. 从尸得几而止 "*Jū* means 'to dwell' and is derived from 尸 which comes to a halt after obtaining a bench.") "居" was the protoform of "踞" as in 蹲踞 *dūnjū* "to squat." (The *Shuōwén* says, 居, 蹲也. . . . 踞, 俗居从足 "*Jū* means 'to squat'. . . 踞: the popular form of *jū* is derived from *zú* 'foot.'" In Xú Kǎi's [c. 986] edition of the *Shuōwén*, "踞" is written "倨" [see Dīng 1928:3778].) In the received ancient texts, {居} as in *jūchù* "occupy, dwell" in most cases is denoted by "居", and {踞} as in *dūnjū* "to squat" is denoted by "踞", which coincides with their usages at present. Judging from its evolution, "尻" most likely first merged with "居", after which "踞" was differentiated from "居". Some believe that "尻" originally resembled a person sitting on a bench and that "踞" originally connoted a posture of sitting with legs downward (see Féng 1985:156, 169, note 22). "尻" may possibly be the protoform of "踞" "to squat" and "occupy, dwell" is an extended meaning of "居". The *Shuōwén* takes "處" *chù* as the original sense of "尻", and "蹲" "squat" as the original meaning of "居", but this is not necessarily reliable.

From the standpoint of the normal process of differentiation of graphs, it seems quite probable that "垂" was differentiated from "丞" and that "居" was differentiated from "尻". Thus the two series of characters cited above most likely underwent differentiation and consolidation twice.

12

The Intricate Relationship between Graphic Form and Sound and Meaning

The relationship between the graphic forms of the Chinese script and their sounds and meanings is a most complex one. Not only are homophonous words in the vast majority of cases denoted by different graphic forms, but one and the same word is quite often written in two or more different ways. On the other hand, one and the same graphic form can often be used to denote two or more different words, so that many graphs have two or more different readings. We shall use the terms "polygraphy" in reference to cases of the former type and "concurrently polypohonic and polysemic forms" in reference to cases of the latter type. Below we shall first discuss the phenomenon of concurrently polyphonic and polysemic forms, and then discuss polygraphy.

12.1 Concurrently Polyphonic and Polysemic Forms

Described below are the four principal underlying causes that give rise to concurrently polypohonic and polysemic forms.

1. *Semantic extensions.* Semantic extensions are extremely common in Chinese. The original meaning of a character ordinarily may generate several extended meanings. Extended meanings themselves as well as borrowed meanings can again be extended to produce new meanings. For example, the extended meaning of "行" *háng* "row" was further extended to mean "trade, profession" (see Sec. 7.2). The borrowed meaning of {强} *qiáng* "strong" was extended to mean "compel" (see Sec. 11.2 under "勨"). Extended meanings and the meanings from which they have been extended at times represent different meanings of one and the same word, such as the "昏" in 昏暗 *hūn'àn* "dim" and in 昏庸 *hūnyōng* "dim-witted," in which *hūn* connotes being mentally dim; and at times they represent different words altogether and thus amount to etymons and

derivates, such as the "少" *shǎo* in 多少 *duōshǎo* "more or less" and *shào* in 年少 *niánshào* "young in years." In many instances, derivates lack total homophony with their etymons. Consequently, semantic extensions have contributed significantly to the creation of concurrently polyphonic and polysemic forms.

2. *Loangraphs.* Loangraphs are extremely common in Chinese script. The number of graphs which have acquired borrowed meanings is quite large; moreover, a single graph may possess numerous borrowed meanings (see Sec. 9.3). The original meaning of a graph vis-à-vis its borrowed meanings and the different borrowed meanings of a graph usually represent different words whose readings also often differ to some extent from one another (see Sec. 9.4). As a result, loangraphs have also played a major role in the creation of concurrently polyphonic and polysemic forms. The popular orthographs discussed earlier (see Sec. 9.2) can be treated as loangraphs.

3. *Synonymic interchange.* "Synonymic interchange" refers to cases in which a graph has been borrowed to denote a word whose meaning is the same or nearly the same as that of the loangraph but whose pronunciations differ from one another (see Sec. 10.3), thereby necessitating the creation of concurrently polyphonic and polysemic forms. (We also treat cases where one character has been used to denote two synonyms as a case of polysemy.)

4. *Different graphs sharing the same graphic shapes.* These are the homographs we discussed earlier (see Sec. 10.2). Homographs represent different words. Aside from some of those homographs which are concurrently phonograms, their readings differ from one another. So this category of graph has also been a contributing factor in the rise of concurrently polyphonic and polysemic forms. Cases of borrowing both the sound and form of a borrowed graph (see Sec. 10.2) can be classified as both loangraphs and homographs.

In addition to the four causes described above, there remain various others which gave rise to concurrently polyphonic and polysemic forms, such as divergent classical and vernacular readings of graphs, corrupted readings, and so forth, none of which will be discussed here. (Regarding the variant readings of graphs, see Lǔ 1980:28–32.)

Among the causes responsible for the creation of concurrently polyphonic and polysemic forms described above, extensions and loans account for the majority of them. Those caused by different graphs sharing the same graphic shapes are less common than those attributable to extensions and loans. Those attributable to synonymic interchange are the least common of all.

Concurrently polyphonic and polysemic forms attributable to semantic extensions, loangraphs, and synonymic interchange can also be termed concurrently polyphonic and polysemic characters. Strictly speaking, however, those which are attributable to homographs cannot be so termed. Even though they may appear to be identical, they are in fact different graphs nonetheless.

The occurrence of concurrently polyphonic and polysemic forms in Chinese script is most problematic. If one flips the pages of any large Chinese dictionary such as the *Kāngxī zìdiǎn*, one frequently encounters single characters that have three or four different readings and ten or more definitions. Some characters have even more readings and definitions than this. For example, in the 1980 edition of the *Cíyuán* the character "齊" is given six different readings and nineteen definitions. If we were to add the readings and meanings of graphs which were excluded from these dictionaries, the situation would become even more complicated. Such complexities, of course, are attributable to the fact that nearly all the various usages of a graph throughout history are included in these dictionaries. However, if one focuses on the actual usages of a graph during a given period of shorter duration, one finds an immensely different situation. Factors such as the termination of the use of a certain meaning denoted by a polysemic graph, graphic differentiation, in addition to other measures used to disperse lexical functions have all contributed to the reduction of the meanings, and even the readings, of graphs. Moreover, homographs are seldom used concurrently; this point was explained above in our discussion of homographs in Sec. 10.2.

Nevertheless, even if we exclude those readings which are no longer of any import, the presence of concurrently polyphonic and polysemic forms in Chinese script remains fairly problematic just the same. One need only turn the pages of a modern Chinese dictionary to appreciate this point. According to the statistics given in one study, the 1971 edition of the *Xīnhuá zìdiǎn* contains 734 polyphonic graphs, which accounts for nearly ten percent of the total number of graphs appearing therein (see Zhōu 1979). Some characters have three or four different readings; what is more, there is usually more than one definition encompassed by each of the various readings. According to the *Xiàndài Hànyǔ cídiǎn*, for instance, the character "著" has four different readings and nineteen definitions.

As was stated in Sec. 3.2, on account of the unique structural features of Chinese characters, the number of them in actual use at any given time usually is not excessively large, otherwise their use would be most cumbersome. So the existence in Chinese script of rather grave problems resulting from the occurrence of concurrently polyphonic and polysemic forms is

inescapable. This phenomenon, of course, poses certain inconveniences. Such cases often lead people to misread graphs. If the commonly used meanings of a graph are too numerous, or if the different meanings it denotes are easily confused, problems will also arise, causing people to misconstrue meanings in the worst cases, or at least slow down their reading speeds in less serious cases. Historically, therefore, people on the one hand have continuously increased the lexical loads of existing graphs and, on the other, have continuously reduced the lexical loads of polysemic graphs, so as to prevent the problems associated with concurrently polyphonic and polysemic forms from developing to the point of becoming unduly grave.

During the 1950s and into the 1960s, the Committee for the Examination of the Pronunciations of Standard Chinese undertook the task of examining and approving standard readings for "words with variant readings" (see the *Pútōnghuà yìdúcí sāncì shěnyīn zǒngbiǎo chūgǎo* [Third Draft List of Variant Pronunciations in Standard Chinese] published in 1963 and the *Pútōnghuà yìdúcí shěnyīn biǎo* [List of Variant Pronunciations in Standard Chinese] published in 1985). Since the committee's examination focused on the pronunciations of words rather than graphs, and since the variant readings it abolished in numerous instances were no longer recognized in most dictionaries anyway, the results of its work did not amount to much insofar as the reduction of the variant readings of graphs was concerned. Although the variant pronunciations of numerous words were abolished, the characters that denoted them still had other usages that were read like the abolished ones, which meant that these variant readings still existed. Of course, there indeed were cases where the variant readings of graphs were reduced as a result of these efforts. For example, the character "勝" *shèng* as in 勝任 *shèngrén* "competent," which had popularly been read in the level tone, was changed to a departing tone reading. The old reading of "葉" as *shè* in its use as a place name was changed to *yè*, and so forth. On the other hand, during the reformation of the script, the readings of some differentiated forms that differed from those of their matrigraphs were included with them following their consolidation (e.g., "捨" *shě* was consolidated with 舍 *shě*; 儘 *jǐn* was consolidated with 盡 *jìn*); some graphs with dissimilar readings were transformed into homographs (e.g., "纖" *jiān* and "縴" *qiàn* were simplified to "纤"). Moreover, the borrowing process involving phonetically close characters was also employed (e.g., "斗" *dǒu* was borrowed for "鬥" *dòu*; "卜" *pǔ* was borrowed for "蔔" *bo*), so that the old variant readings of graphs at times were restored or new ones were added.

During the reformation of the script, a small number of homophonic graphs whose meanings could easily be confused with one another were consolidated. For example, "並" *bìng* as in 相並 *xiāngbìng* "side by side" was merged with "幷" *bìng*; "彙" *huì* as in 彙集 *huìjí* "collection" was merged with "汇" as in 汇合 *huìhé* "to converge"; "摺" *zhé* as in 摺疊 *zhédié* "to fold" was merged with "折" *zhé*, and "疊" *dié* as in 重疊 *chóngdié* "one on top of another" was merged with "迭" as in 交迭 *jiāodié* "to cross over." (These sets of characters were not homophonous in antiquity. "並" [MC ʿbieng] in Middle Chinese was a rising tone word with the initial *bìng* [並] and was in the rime *jiǒng* [迥], whereas "幷" *bìng* [MC pjängˀ] was a departing tone word with the initial *bāng* [幫] and was in the rime *jǐng* [勁]. With regard to the next two pairs, see Sec. 11.2. "疊" [MC diep] was in the rime *tiē* [帖] and "迭" [MC diet] in the rime *xiè* [屑].) The *Jiǎnhuàzì zǒngbiǎo* (p. 11) initially stipulated: "In those cases where the meanings of 折 and 摺 may be confused, 摺 will continue to be used for 摺" (p. 11); and "in those cases where the meanings of 迭 and 疊 may be confused, 疊 will continue to be used for 疊" (p. 7). "疊" and "迭" are treated separately in the *Xīnhuá zìdiǎn* and the *Xiàndài Hànyǔ cídiǎn*, and "迭" is not regarded as a simplified form of "疊". The new edition of the *Jiǎnhuàzì zǒngbiǎo* published in October 1986 formally stipulates that "疊" will no longer be taken as the complex form of "迭". If this class of homophonous or nearly homophonous graphs whose meanings might easily be confused were to be consolidated on an even wider scale, the clarity of the script as an expression of language would surely be gravely affected.

12.2 Polygraphy

With regard to polygraphy, as there are a number of questions that need to be addressed, we have divided this section into three subsections.

12.2.1. An Overview of Polygraphy

What gave rise to polygraphy? Simply stated, there were two causes. The first was due to the existence of allographs in Chinese script. Once a character had an allograph, it implied that the word that it represented now had a different written form (regarding allographs, see Sec. 10.1). The second cause was due to the fact that a character denoting some word could be replaced by another one. Cases where one and the same word is successively or simultaneously denoted by two or more different characters are quite common in Chinese script. (If the words in question are disyllabic or polysyllabic, they then constitute two or more sets of different characters.) Below we shall term phenomena of this sort "polygraphy."

Put in more concrete terms, polygraphy for the most part entails primarily the following four situations:

A. The use of loangraphs for words that already have orthographs (see Sec. 9.1, 2).

B. The use of two or more different loangraphs to denote one and the same word (see Sec. 9.3).

C. Cases in which words originally had characters to represent them but for which dedicated, differentiated forms were later created to denote them or one of their usages (see Sec. 11.1.1, 3).

D. Cases resulting from synonymic interchange involving words which already have graphs to denote them (e.g., the measure word for units of weight and capacity {擔} *dàn* was denoted by both "擔" and "石"; see Sec. 10.3).

The first three situations noted above are quite common.

Differentiated forms which were created to denote words that originally had denoted the borrowed meanings of graphs amount to younger orthographs. If we were to rephrase the first situation above as "words that already have orthographs as well as loangraphs to denote them" and were to disregard the relative time of the appearances of their orthographs, we could then incorporate the phenomenon of polygraphy attributable to the creation of younger orthographs as described in the third situation above into the first situation.

When different graphs are used to denote one and the same word, their ranges of usage may not necessarily be identical. For example, as was pointed out in Sec. 9.1, the borrowing of "棣" *dì* for "弟" *dì* "younger brother" due to its use in a literary allusion to brotherhood (i.e., 常棣 *chángdì*) was never used as such in ordinary writings, which is to say that not all usages of "弟" could be replaced by "棣". Again, as was pointed out in Sec. 10.1 in our discussion of "記" and "紀", when {記} was used in the sense of 記錄 "a record," the two could be used interchangeably in certain compound words, whereas they could not in certain other compounds, nor could {記} *jì* be written "紀" when used as a free morpheme. With regard to those graphs which denoted respectively the different usages of one and the same word as discussed in Sec. 11.1.3, their ranges of usage differed altogether. However, the circumstances surrounding the latter were unique; we seldom find cases where considerable discrepancies arose immediately following the use of different graphs to denote one and the same word. Their usages in most cases were identical or essentially identical, or initially were identical or essentially identical and only later became discrepancies of considerable magnitude, such as the cases discussed in Sec. 9.1 of "飛" and "蜚" which were used to denote {飛} *fēi* "to fly," and 冊 and 策 which were used to denote {冊} *cè* "volume."

Among the different written forms which can be used interchangeably to denote one and the same word, that form which is recognized as conforming to the standard written form can be termed the *zhèngtǐ* or "standard form" of that graph. The views of what constitutes a standard form have varied from period to period. In earlier times, the more conservative scholars of the script regarded written forms which conformed with those in the *Shuōwén* as constituting standard forms. Nowadays we regard the forms written in the simplified script as proper graphs.

In the past, those who discussed grammatology liked to use the technical term *zhèngzì* "proper graph" in connection with the problems related to the phenomenon of polygraphy. As was pointed out in Sec. 9.1, most scholars of the script in the past based their discussions of proper graphs on the *Shuōwén*. They held that if the *Shuōwén* treats some meaning (i.e., what we call a "word") as having been the original meaning of some graph, then that graph must indeed be the proper graph denoting that meaning. In those cases in *Shuōwén* where graphs were not treated as denoting the original meanings of graphs, some would then seek out a character in the *Shuōwén* that could be construed as a semantic extension of this meaning, and let it in turn serve as the proper graph denoting this meaning. However, as for graphs which do not occur in the *Shuōwén*, especially those that appeared rather late, even if they had indeed been created to denote some meaning, these scholars of the script would not recognize them as the proper graphs for these meanings. In our opinion, there is simply no real value in discussing "proper graphs" as they did; when discussing questions pertaining to polygraphy, "conventional form" as a concept is far more useful than the concept of "proper graphs."

In those instances where different graphs could be used to represent one and the same word, there usually was one graph among them that was used most commonly to denote that word. This is what we call a "conventional form." Conventional forms and proper graphs might coincide or they might be two different graphs. Over the course of time, characters which served as conventional forms may well have differed from one period to another.

As for words of the type which could be denoted by two or more characters, many of them in fact did not have proper graphic forms of their own (such as those words which were denoted solely by loangraphs), or it is very difficult to identify their proper graphs. (Scholars of the script in the past frequently made mistakes in this regard when identifying proper graphs.) On the other hand, words not denoted by a conventional form are exceedingly rare; and we seldom have any problem identifying the conventional form used to denote a word. The proper graphs for some words are virtually unknown to most people as a consequence of, for example, younger orthographs that had been discarded early on discussed in Sec. 9.1, as well as the differentiated forms that denoted the extended meanings of their matrigraphs but that had been discarded early on, and matrigraphs that merged with their differentiated forms at an early date

as discussed in Sec. 11.2. Conventional forms, of course, did not experience such problems. If our intent is to eliminate the phenomenon of polygraphy, we should make every effort to preserve conventional forms and need not consider whether or not they are proper graphs. With respect to the elucidation of old texts, the concept of conventional forms is also far more useful than the concept of proper graphs. Later when we discuss interchangeable graphs, we will discuss this matter.

In Chinese script, the problems of polygraphy like those related to concurrently polyphonic and polysemic forms are also quite grave. We have already cited examples of a graph's having a multitude of allographs and a host of different characters being used for a word; for instance, no less than eight different graphs have been used for "襪" *wà* "stockings" (see Sec. 10.1). In addition to "才" used in its sense of {才} *cái* "only," the loangraphs "毚", "纔", "裁", and "財" were also used for it (see Sec. 9.3).

With regard to the writing of allographs denoting binomes, the situation is even more complex than that involving monosyllabic words. In Sec. 9.3 we cited {婀娜} *ēnuó* and {猶預} *yóuyù* as examples of words denoted by several sets of different loangraphs. In the case of {婀娜}, in addition to "猗儺", "猗那", "阿那", and "婀娜" (perhaps we should also add "阿難" here) cited earlier, "妸娜", "旖旎", "𧙃袲", "榱橠" (all of which appear in the *Guǎngyùn* and *Jíyùn*), and "𧙃榱" (as seen in Xuán Yìng's *Yīqièjīng yīnyì* 19, where the *Zìshū* is cited), were also used to denote this word. (The forms "旖旎", "𧙃袲" and "榱橠" appear to have been used primarily to describe the supple beauty of banners, clothing and vegetation, respectively; their ranges of usage were rather narrow.) In addition, the binome {逶迤} *wēiyí* which is used to describe various types of winding, has been variously written as "委它", "委佗", "委陀", "委蛇", "委虵", "委螔", "蜲蛇", "蜲螔", "踒虵", "逶蛇", "逶虵", "逶陀", "逶迱", "逶迤", "逶迆", "[illegible]迆", "蟡迤", "逶移", "委移", "萎移", "崣移", i.e., over twenty different ways.[1]

1. See the related entries for each of these forms in the *Cítōng* and the *Liánmián zìdiǎn*. "蟡迤" appears in Huì Lín's *Yīqièjīng yīnyì* 49, and also under the head character "逶" *wēi* in the *Jíyùn* under level tone rime *zhī* [支], where it is given the *fǎnqiè* spelling 邕危切 [MC ꜀ʔjwe]. "萎移" and "崣移" were used to describe the sinuous and winding appearances of vegetation and mountains, or of mountain chains, respectively, and thus had rather narrow usages. {逶員} has two readings: *wēiyí* and *wēituó*. With regard to "逶迤", Huì Lín's *Yīqièjīng yīnyì* 15 comments: "The first [graph] is read 畏爲反 [MC ꜀ʔjwe] and the second 以伊反 [MC ꜀jii] . . . 迤 is also read 徒何反 [MC ꜀dâ]." In *Xùyīnyì* 5 under "逶迤", Xī Lín comments, "The first is read 於爲反 [MC ꜀ʔjwe] . . . the second is read 弋支反 [MC jiək] . . . Note: 逶迤 is descriptive of winding and twisting. The second graph is also read 達羅反 [MC ꜀dâ] and has the same meaning as above." The *Jíyùn* places "蛇" and "迤" in "委蛇" and "委迤" used in the sense of 委曲自得貌 "the appearance of being self-content in every way" in the rime *zhī* [支] with the *fǎnqiè* spelling 余支切 [MC ꜀jie] under the head character 移 *yí*; and it places "迱" and "迤" in "逶迱" and "逶迤" used in the sense of 行貌 "descriptive of walking" in the rime *gē* [戈] with the *fǎnqiè* spelling 唐何切 [MC ꜀dâ] under the head character 駝 *tuó*. There does not seem to be any evidence to support the *Jíyùn*'s treatment of these graphs as such. On *Hànshū*, "Rén guāng Pī Tóng zhuàn zàn": 委佗還旅, 二守焉依, Lǐ Xián comments: 委音於危反, 佗音移, 行貌也 "委 is read *yú* + *wēi*, and 佗 is read like *yì*, and it is descriptive of walking." Lǐ Xián's comment clearly reveals that 佗 was not read 唐何切 [MC ꜀dâ]. Again, in the rime *gē* [戈 MC -uâ] under the character "迱", the *Jíyùn* says "迱" in "逶迱" is also written 佗 and 他, revealing in turn that {逶員} was also written "逶佗" and "逶他".

As was mentioned in the preceding section, the different readings and meanings of one and the same graphic form were by no means all used concurrently, nor were the different written forms of one and the same word all used concurrently. The periods of currency of matrigraphs and differentiated forms which denoted one and the same word, or of orthographs and loangraphs, usually occurred successively for the most part. In some cases different loangraphs which denoted one and the same word also shared this sort of relationship (see Sec. 9.3). Cases in which the periods of currency of allographs being essentially successive are also quite common. Sometimes the situations are such that the two written forms of a word are never even found occurring together during the same period. This is to say, by the time one form gained currency, the other had already fallen out of use at some point. What is more, there are also quite a number of graphic forms that seem never to have gained currency and are now only found in dictionaries. Of course, cases where two or more written forms of a word were used simultaneously over a long period are also common. Among the allographs listed in the *Yìtǐzì zhěnglǐ biǎo*, quite a number of them were used simultaneously over long periods. Yet while the various written forms of a word were being used simultaneously, among them was one that was used more frequently, that is, what we have described as a conventional form; among the allographs of a graph there also was usually one that was more commonly used. Rarely did these competing forms share equal dominance.

Sometimes we find cases where following the fall from currency of some written form of a word, it was still used in certain specially designated situations. The most common situation of this sort was this: Some written form of a word is no longer used in ordinary situations. But due to the influence of older conventions, it is still used to denote some special usage of that word or to represent it as a component of one or another idiom or compound, to the extent that in some instances its use is obligatory. For example, as was mentioned above, in antiquity {飛} *fēi* "to fly" could be written "飛" as well as "蜚." At present, {飛} is normally no longer written "蜚." However, {飛} in expressions such as 飛短流長 "spread embroidered stories and malicious gossip" and 流言飛語 "rumors and gossip" can still be written "蜚"; and, according to the usual convention,

{飛} as in "飛聲" "to make a name for one's self" must only be written "蜚" (such as in 蜚聲海內 "famed throughout the country"). Similarly, "褲", "袴", and "絝" are allographs. The *Yìtǐzì zhěnglǐ biǎo* disposes of "袴" but retains "褲". As the character "袴" had fallen out of currency long ago, it was of no concern to the compilers of the *Zhěnglǐ biǎo*. However, since the term {紈褲} *wánkù* "the expensive dress of children from wealthy families" had come into existence long before the appearance of "褲" as a graphic form, and had already become a well-established literary expression, most people to this day still follow the writing of this word as it appears in old texts, writing it as "紈絝" or "紈袴."

The phenomenon described above at times caused confusion as to which word a character represented. For example, {返} *fǎn* as in "回返" *huífǎn* "to return" was originally written "反" ({返} *fǎn* is an extended meaning of {反} *fǎn* as in 反覆 *fǎnfù* "repeatedly"). After the character "返" gained currency, "反" no longer was used to denote {返}. Yet on account of the fact that {返} *fǎn* as in "反正" *fǎnzhèng* "in any case" had become a well-established literary expression in the lexicon, the character "反" was never changed to "返". Most people probably are no longer even aware that "反" denotes {返} here (with regard to "反正" *"fǎnzhèng"* see Sec. 10.2). Phenomena of this sort even led to changes in the readings of graphs. As was already pointed out in Sec. 11.1.1.1, due to the fact that "著" (read *zhuó*) as in "土著" *tǔzhù* "aborigines" was never changed to "着", it is read by everyone as *zhù*. Similarly, {曝} *pù* "to expose to sunlight, to sun" originally was written "暴". After "曝" gained currency, "暴" *bào* generally was no longer used to denote {曝}. (Some people still write "暴" for "曝" in 一暴十寒 "work hard one day and do nothing for ten—i.e., work by fits and starts.") However, in the case of the "暴" in "暴露" *bàolù* "to expose," even though it originally denoted {曝} (i.e., "暴露" originally was read *pùlù*), it was never changed to 曝. Consequently, it is read by many people like the "暴" in "殘暴" *cánbào* "savage, brutal." At present this reading is regarded as the proper reading; by contrast, its reading of "曝" *pù* in time was viewed as a variant reading and finally was discarded. In the jargon of photography there exists the term "暴光" *bàoguāng* "exposure," as well as "曝光". "暴光" came into being under the influence of "暴露" (the December 1985 revised version of the *Pǔtōnghuà yìdúcí shěnyīn biǎo* stipulates that the "曝" in "曝光" should also be read *bào*).

Below we shall cite several more examples of one and the same word having been read in two ways on account of its having been written in different ways. The ancient readings of "遲" *chí* and "夷" *yí* were phonetically very close, and the two were interchangeable. In ancient texts, originally "陵遲" vis-à-vis "陵夷" (*língyí* "to decline), "倭遲" and "逶遲" vis-à-vis "倭夷" and "逶夷" (*wēiyí* "winding"), and "威遲" vis-à-vis "威夷" (*wēiyí* "winding and stretching over a long distance"), were all variant

written forms of one word (see Yán Shīgu, *Kuāngmiù zhèngsú*, *juàn* 8, under the entry "陵遲"). Later on, however, they were read differently based on the surface readings of the graphs comprising them. The expressions "於戲" vis-à-vis "嗚呼" and "於乎" also represented variant written forms of one word, all of which should be read as "嗚呼" *wūhū* "alas." During the Tang dynasty, however, they were used distinctively. According to the *Kuāngmiù zhèngsú* (*juàn* 2, under the entry "嗚呼"): "If used in eulogies and sacrificial messages, one then uses 嗚呼; in bestowing honors and making appointments, one then uses 於戲. 於 is read the same as the character [i.e., *yú*] and 戲 is read like 羲 *xī*."

As was mentioned above, {逶迤} had two readings: *wēiyí* and *wēituó*. (These two readings may possibly have evolved from the same phrase in Old Chinese.) However, in most cases "逶迤", "委蛇", "委移", etc. were all read *wēiyí*, whereas "委陀", "逶陀", etc. were usually read *wēituó*. This may also be viewed as a case where two different readings were assigned to what originally was one word on account of its having been written in different ways.

On the other hand, there also exists the phenomenon of graphs having similar readings and meanings, or similar readings and identical meanings, being read alike, and treated as variant written forms of one and the same word. When discussing synonymic interchange in Sec. 10.3, the reading of "仇" as "讎" was cited as an example, in which we can see this phenomenon at work. Two more examples are cited below.

The phrase "尤豫" occurs numerous times in the *Hòu Hànshū*, and its meaning is the same as "猶豫" "to hesitate" (e.g., "Lái Xī zhuàn": 故久尤豫不決 "Therefore [he] hesitated for a long time"; see also "Mǎ Yuán zhuàn" and "Dòu Wǔ zhuàn"). Lǐ Xián gives "淫" *yín* as a sound gloss for "尤". As "尤豫" and "猶豫" were phonetically very close and shared identical meanings, they must have represented closely related cognates. The *Guǎngyùn* places "尤" as in "尤豫" in the rime *yóu* [尤] under the head graph 猷 *yóu* with the *fǎnqiè* spelling 以周切 [MC ˌjiəu]. According to a reading of this sort, "尤豫" and "猶豫" would have amounted to variant written forms of one and the same word. While most wordbooks of later times adopted this notion, it does not seem plausible. (In the *Jíyùn* the character "尤" is given the readings: "淫" *yǐn* and "猶" *yóu* and the graph appears in the rimes *qīn* [侵 MC -jəm] and *yóu* [尤 MC -jəu]. Huáng Shēng [1984] in his *Yìfǔ* [*juàn xià*] under "猶豫" states that "尤" as in "尤豫" is equivalent to 尤 *yóu*, but this is very doubtful.)

In *Zhuāngzǐ*, "Yìng dìwáng," there is the story about the shaman of the gods, Jì Xián, physiognomizing Húzǐ, which also appears in *Lièzǐ*, "Huángdì" but with slight textual disparities. For "Yìng dìwáng": 吾與之虛而委蛇 "I came at him empty, wriggling and turning," the "Huángdì" chapter has 吾與之虛而猗移. The readings and meanings of "猗移" *yīyí* and "委

蛇" *wēiyí* were quite close, and the two shared a relationship to one another similar to that of "尤豫" vis-à-vis "猶豫". ("委蛇" *wēiyí* in the "Yìng dìwáng" chapter means "bending and compliant" and may be viewed as an extended usage of "委蛇" *wēiyí* used to describe bending and yielding. "委蛇" *wēiyí* used in this sense is not usually written "逶迤".) However, Yìn Jīngxùn (Tang dynasty) in his *Lièzǐ shìwén* gives a reading of 於危切 [MC ʔjwe] for "猗" and treats "猗移" *yīyí* and "委蛇" *wēiyí* as variant written forms of one and the same word, and most people have followed him ever since. Linguistically speaking, from the standpoint of the sound system of Old Chinese, apart from "猗移", "倚移" *yǐyí* (see *Shuōwén gǔlín*, p. 3096), "旖施" *yǐyí* (see *Shuōwén gǔlín*, p. 2971), which was also written "檹施" (see *Shuōwén gǔlín*, p. 2473), "檹匜" (see the *Jíyùn*, rising tone, in the rime *zhǐ* [紙], under the head graph 倚, where it is spelled 隱倚切 [MC ʔje]), "婀娜" *ēnuó* (also written "猗儺" and "旖旎", see above), "婑婠", "婐姬" (姬 was sometimes corrupted into 姬), etc. must all have been cognates of "逶迤" (委蛇). But probably at a very early date they were differentiated from "逶迤" and came to represent different words. From the standpoint of their readings, the relationship between "猗移" *yīyí* vis-à-vis "倚移" *yǐyí* and "旖施" *yǐyí* ought to have been much closer than was its relationship with "委蛇" *wēiyí*, showing that reading it directly as "委蛇" *wēiyí* is inappropriate.

As was stated above, in addition to "才" used in the sense of {才} *cái* "only," the loangraphs "毚", "纔", "裁", and "財" were also used. However, originally there was a distinct difference between the finals of "毚" and "纔" vis-à-vis those of "才", "裁", and "財" (the former was in the rimes *xián* [咸 MC -ăm] or *xián* [銜 MC -am] and in Old Chinese rime group *tán* [談]. The latter was in the rime *hāi* [咍 MC -əi] and in Old Chinese rime group *zhī* [之]). There is also a possibility that "毚" and "纔" used in the sense of "only" were originally borrowed to denote a word that differed phonetically from {才} *cái* as in 方才 *fāngcái* "just now"; but due to the fact that the readings of these two words were close and their meanings identical, "纔" was later read the same as "才" *cái*, much like the reading of "仇" as "讎" *chóu*.

There are also some graphs whose readings and meanings were close, or whose readings were close but whose meanings were identical, that became homophonous due to phonological changes, as a result of which people later treated them as variant written forms of one and the same word. In Sec. 11.2 examples of this were cited, such as "鬱" *yù* and "郁" *yù* used in the sense of "aromatic," "寘" *zhì* and "置" *zhì* used in the sense of "to place," "貲" *zī* and "資" *zī* used in the sense of "property," "徵" *zhēng* and "征" *zhēng* used in the sense of "to seek," etc. An additional example will be given here. As was mentioned above, the expressions "威夷" *wēiyí* and "逶夷" *wēiyí* are both synonymous with "逶迤" *wēiyí* "winding, meandering," yet originally the three were not homophonous. In Old and Middle Chinese, "威" vis-à-vis "逶", and "夷" vis-à-vis "迤" were not in the same rimes. In time, however, they became homophonous. Consequently, many people treat "威夷" *wēiyí*, "逶夷" *wēiyí*, and "倭夷" *wēiyí* vis-à-vis "逶施" *wēiyí* and "委蛇" *wēiyí* as variant written forms of one and the same word (see Sec. 12.2.1).

Due to the considerable complexities in Chinese of phonological and lexical changes, in addition to the occurrences of polygraphy in Chinese script, sometimes we are simply unable to determine whether or not different written forms should be read alike and treated as variant written forms of a word. For example, in Han time stele inscriptions and ancient texts we find the phrase "逶隨" *wēisuí* ("隨" is sometimes written "遹") and "委隨" used in the same way as "委蛇" *wēiyí* (see the relevant entries in the *Cítōng* and the *Liánmián zìdiǎn*). For the phrase "委蛇" in *Zhuāngzǐ*, "Tiānyùn," the *Jīngdiǎn shìwén* cites an edition which had "委施" here. Viewed from the standpoint of ancient phonology, there is a possibility that they could interchange with "委蛇", but no clear-cut evidence to support this is found in dictionaries or old commentaries. Did the ancients actually use them to denote cognates of "委蛇"? Or were they used to denote {委蛇}? Should we actually read them according to their original readings, or should we read them in the same way as "委蛇?" The problems here are not easily solved.

By the Han, Wei and Six Dynasties periods, polygraphy had become a severe problem. In most cases, after the Tang and Song dynasties, the variant written forms of words were continuously reduced. Since the 1950s, thanks to the efforts undertaken to sort out variant forms and simplify the script, as well as to the influence of new dictionaries such as the *Xīnhuá zìdiǎn*, etc., polygraphy has been eliminated for the most part (see Chapter 13). Since many allographs had already fallen into disuse at an early date, the number of variant writings of the written forms of words which had not yet been standardized was quite small. Seldom are words with three or four or more written forms encountered. We are speaking here, of course, of written forms that conform to the standards of printed matter, and do not include the relatively small number of publications using complex forms. Yet due to the use of semi-cursive and cursive scripts, as well as the influence of the traditional usages of graphs, allographs are still fairly numerous.

Theoretically, while there is no way to eradicate the phenomenon of concurrently polyphonic and polysemic forms, polygraphy essentially can be eliminated. Yet polygraphy still exists in Chinese to a considerable degree among the graphs in use at present. The main reason for this is that when variant graphic forms were being sorted out and the script was undergoing simplification, those responsible lacked sufficient time to

deal with the variant written forms (consisting mostly of quasi-allographs) of some words (mostly in the cases of binomes). For example, {酸} *suān* as in 酸痛 *suāntòng* "to ache" has two forms: "酸" and "痠"; {攙} as in "攙合" *chānhé* "to mix" has two forms: "攙" and "摻"; {糨} *jiàng* used in the sense of "thick, dense" has three forms: "糨", "糨", and "漿"; (most people use the loangraph "漿", especially in the case of "漿" in "漿糊" *jiànghú* "paste"; few use "糨" or "糨" here). "逶施" *wēiyí* "winding" is also written "委蛇"; "折中" *zhézhōng* "to compromise" is also written "折衷"; "含義" *hányì* "meaning" is also written "涵義"; "烏賊" *wūzéi* "cuttlefish" is also written "烏鰂"; "甜菜" *tiáncài* "beet" is also written "恬菜"; "扁豆" *biǎndòu* "hyacinth bean" is also written "稨豆", "稨豆", and "萹豆"; "年輕" *niánqīng* "young" is also written "年青"; "記錄" *jìlù* "record" is also written "紀錄", and so forth.

In addition, we also encounter several cases where allographs remain because people have failed to observe the prescribed forms as stipulated following the reformation of the script. For example, the *Zhěnglǐ biǎo* merges "蹚" *tāng* with "趟" *tāng* (a measure word for trips), yet "蹚" in fact is still widely used. Consequently, {蹚} as in 蹚水 *tāngshuǐ* "to wade through water" and 蹚地 *tāngdì* "turn up the soil" has two forms: "蹚" and "趟". The *Hànzì jiǎnhuà fāng'àn* merges "暸" *liǎo* "sharp-eyed" with "了" *liǎo* but many people in fact still use the former, as a result of which {暸} has two forms: "暸" and "了" (the "Yìnshuā tōngyòng Hànzì zìxíngbiǎo" includes the character 暸, which is normally used in the sense of 瞭望 *liàowàng* "to look down from a higher place;" the 1986 revised edition of the *Jiǎnhuà zǒngbiǎo* stipulates that the "暸" in *liàowàng* would no longer be simplified as "了"). The *Jiǎnhuà fāng'àn* merges "疊" *dié* "to pile up" with "迭" *dié*, "像" *xiàng* "portrait" with "象" *xiàng*, "餘" *yú* "surplus" with "余" *yú*, "摺" *zhé* "to fold" with "折"; the *Jiǎnhuàzì zǒngbiǎo*, however, stipulates that in cases where confusion may result, the complex forms "疊", "像", "餘", and "摺" may still be used. Handling the problem in this way has also led to the use of two graphs for one word. (The 1986 revised edition of *Jiǎnhuà zǒngbiǎo* stipulates that "迭" and "象" should no longer be used as simplified forms of "疊" and "像" and restores usage of the latter two.)

12.2.2 Some Relevant Technical Terms

12.2.2.1 Interchangeable Graphs

The term "interchangeable" as used in the field of grammatology refers to the substitution of different graphs for one another in one or more of their usages. Graphs which can be so interchanged constitute interchangeable graphs. When Chinese grammatologists speak of interchangeability, they usually have in mind the usages of Chinese characters in toto from antiquity up to the present. So what they refer to as interchangeable graphs

are by no means limited to graphs that can be interchanged at present. Even though certain common usages shared by some graphs were never used concurrently, nevertheless as long as they were used interchangeably at some point in the past, they can be termed interchangeable graphs just the same. For example, in antiquity the character "塗" was used to denote {搽} *chá* "smear, spread"; later "茶" was used to denote this meaning; and still later the differentiated form "搽" was created for this usage. After "搽" was created, "塗" was no longer used in the sense of {搽}; so while they never were used concurrently, they constitute interchangeable graphs nonetheless. If there is a need to distinguish graphs of this sort from the interchangeable graphs of the present, we could call them "historically interchangeable graphs."

In the standard Chinese script of the present, the number of interchangeable graphs in use is rather small. In most cases we only encounter them when reading ancient texts.

As was mentioned in the preceding section, the different written forms of one and the same word can be divided into two types. One type consists of allographs, and the other consists of different graphs used to denote one and the same word. Graphs of the latter type are essentially the same as interchangeable graphs; only a small number of them were ever used consistently to denote the different usages of one and the same word, such as "她" *tā* "she, her" and "牠" (它) *tā* "it," which cannot be counted as interchangeable graphs.

Some of the different written forms used to denote one and the same word are viewed by some as allographs and by others as interchangeable graphs. The relationship between a differentiated form which denotes the original meaning of a matrigraph and the matrigraph itself poses certain problems. Let us illustrate this using the case of "洲" *zhōu* "an island in a river" and "州" *zhōu* "prefecture" as an example. Some look upon "洲" and "州" as having been created to denote {洲} and thus regard "洲" and "州" in this usage as allographs. By contrast, some people look upon "洲" and "州" as being no different from other types of matrigraphs and differentiated forms whose principal usages differ and thus regard the graphs "洲" and "州" used to denote {洲} as being interchangeable graphs (the *Kāngxī zìdiǎn* says that "洲" is "also interchangeable with 州"). Both of these points of view have their respective rationales. Yet since we want to deal with each type of differentiated form uniformly, we prefer the latter viewpoint. (However, when viewed from the standpoint of the original meanings of matrigraphs, we can still regard matrigraphs and the differentiated forms which denote their original meanings as protoforms vis-à-vis younger graphic forms.)

The distribution of the lexical loads of allographs also poses problems in relation to the nature of the different written forms of related words.

For instance, "猶" *yóu* and "猷" *yóu* originally were allographs; both could be used to denote {猷} *yóu* as in 謀猷 *móuyóu* "strategy," and both could be used to denote the sundry common usages of "猶"; but it was not until later on that their respective lexical loads were distinguished from one another (see Sec. 11.1.1.1). It stands to reason that "猷" and "猶" as used in relatively old texts to denote {猷}, or which were used to denote the sundry common usages of "猶", should be treated as allographs. But as people became accustomed to the usages of "猶" and "猷" following the division of their lexical loads, they usually were treated from then on as interchangeable graphs.

In Sec. 10.1 it was stated that the combination of allographs in the strict sense and quasi-allographs constitute allographs in a broad sense. Viewed from the standpoint of words, what we call allographs in the broad sense consist of various different written forms of one and the same word. Allographs in the strict sense for the most part consist of the variant written forms of a graph, and quasi-allographs for the most part consist of interchangeable graphs. However, the allographs of some graphs later evolved into quasi-allographs, such as "雕" *diāo* "to engrave" and "鵰" *diāo* "a bird of prey"; and since the unique usages of some interchangeable forms have fallen out of use, in most people's eyes they have become allographs in the strict sense, such as "帆" *fān* "sailcloth" and "  " *fān*. These were discussed in Sec. 10.1.

As noted in Chapter 6, the term *tōngjiǎ* "borrowing" has both broad and narrow senses. The scope of the terms *tōngjiǎ* "borrowing" and *tōngyòng* "interchange" in their broadest senses are identical. So as to avoid confusion with the narrow sense of the term "interchange" (i.e., loans for words having orthographs), it is best that we not use the term "borrowing" in its broad sense and use instead the technical term "interchange."

The term "interchangeable graphs" (*tōngyòngzì*) also has two different meanings, since it is also used in reference to graphs which have existed both in ancient and modern times and are still in use at present. So as to avoid confusion, we prefer to call semantically interchangeable graphs of that sort *tōngxíngzì* "current forms."

In recent years, some of those who have discussed grammatology have come up with a new way of explaining the technical term *tōngjiǎzì* in its broad sense. They hold that *tōng* in *tōngjiǎzì* refers to graphic interchanges while *jiǎ* refers to graphic loans, so that the combination of interchangeable graphs and borrowed graphs constitutes the *tōngjiǎzì*. They deal with loangraphs apart from interchangeable graphs, which is at odds with the way the term "interchangeable graphs" was used by earlier individuals. For example, in *Hànshū*, "Dù Qín zhuàn": 迺 (乃) 爲小冠高廣財二寸 "[He] thereupon made a small hat which was only two inches in height and width," Yán Shīgǔ's commentary says: 財與纔古通用字 "財 and 纔 were

anciently interchangeable graphs." These two graphs termed "interchangeable graphs" (*tōngyòngzì*) by Yán are in fact both loangraphs. Our feeling is that there is no need to revise the traditional usage of the technical term "interchangeable graphs."

Some of those who treat loangraphs apart from interchangeable graphs maintain that the latter are nothing more than "cognate graphs" (*tóngyuánzì*). For instance, the characters "張", "帳", "脹", and "漲", which represent a series of cognate words, are all treated by them as interchangeable graphs. Treating all of the so-called cognate graphs as interchangeable graphs is also unacceptable. To say that "張" interchanges with "帳", "脹", and "漲", is quite acceptable, since they are all differentiated forms of "張"; thus "張" had the same usages as them. Yet in the case of a graph like "帳" vis-à-vis "脹" and "漲", even though they are all cognates, they never shared common usages, so how could it be said that they were interchangeable?

Based on our analysis of the actual conditions underlying polygraphy, the relationship between interchangeable graphs can be divided into the following four types: orthographs vis-à-vis loangraphs, loangraphs vis-à-vis loangraphs, matrigraphs vis-à-vis differentiated graphs, and synonymic interchange vis-à-vis orthographs or other types of graphs. Due to the corruption of graphic shapes, and insufficient evidence pertaining to the original meanings of graphs, including extensions and loans which are nearly indistinguishable, it is usually rather difficult to determine the specific relationships between interchangeable graphs. Most scholars of the script in the past relied on the *Shuōwén* when determining such relationships. Yet, in reality, many of the opinions expressed in the *Shuōwén* about the original meanings of words are not credible. This problem was discussed above; another example will be given here. The *Shuōwén* says:  (異), 分也. 从  , 从畀, 畀, 予也 "*Yì* means 'to distinguish' and is derived from and *bì*. *Bì* means 'to give'"; and  (异), 舉也. 从  , 㠯 (以) 聲 "*Yì* means 'to raise' and is derived from and *yì* as phonetic." There are examples of these two graphs having been used interchangeably in antiquity. During the process of consolidating variant forms in the 1950s, "異" was merged with "异". According to the *Shuōwén*'s explanation of these two forms, "異" was the orthograph and "异" was a loangraph. However, "異" in relatively early ancient script was written  , which resembles a human form carrying something on its head. Many scholars of the script regard it as having been the protoform of "戴" ("戴" and "異" were phonetically quite close in Old Chinese). The *Shuōwén*, on the other hand, erroneously identifies it as the orthograph of {異} as in 分異 *fēnyì* "differentiate." Thus "異" and "异" ought to have been a pair of loangraphs. While in many cases we know that the *Shuōwén*'s explanations of graphs are unreliable, we really do not know what the correct explanations of

them are. So we often have to be satisfied with just pointing out that two graphs were interchangeable, as we have no way of determining their specific relationship. Furthermore, in some cases such as in preparing the average commentary to some ancient text, as long as one examines the interchanges between graphs, one can then solve such problems; one need not go looking for trouble by discussing the specific relationship between interchangeable graphs. Thus the concept of interchangeable graphs is a most useful one.

When indicating graphic interchanges, the ancients in most cases used formulaic expressions such as A 讀爲 B: "A should be read as B"; A 讀曰 B: "A should be read in the same way as B"; A 與 B 同: "A is the same as B"; A 與 B 通: "A is interchangeable with B"; and so forth. Below are some examples:

On *Zhōulǐ*, "Chūnguān: sìshī": 治其禮儀 "[He] administers [the rules of] etiquette [in such cases]," Zhèng Xuǎn comments: 故書儀爲義. 鄭司農云: 義讀爲儀 "In ancient texts 儀 stands for 義. Zhèng Sīnóng says, '義 should be read as 儀.'"

On *Hànshū*, "Sīmǎ Xiāngrú zhuàn" A: 雍容閒雅 "stately and graceful," Yán Shīgǔ says: 閒讀曰閑 "閒 should be read in the same way as 閑."

On *Hànshū*, "Gāodì jì" A: 毋得鹵掠 "not allowed to take captives and plunder," Yán Shīgǔ says: 應劭曰: 鹵與虜同 "Yīng Shào says, '鹵 is the same as 虜.'"

On *Hànshū*, "Wéndì jì": 遺財足 "Let there remain just enough," Yán Shīgǔ comments: 財與**纔**同. **纔**, 少也 "財 is the same as **纔**. **纔** means 'few.'"

On *Xúnzǐ*, "Xiūshēn": 端愨順弟 "be upright and honest, and be obedient and show brotherly love," Yáng Liàng says: 弟與悌同 "弟 is the same as 悌."

On Zhāng Héng's "Xījīng fù" (in *Wénxuǎn*, A): 慘則勘於歡 "When in sorrow, one seldom finds joy," Lǐ Shàn comments: 勘, 少也. 與鮮通也 "勘 means 'few, rare' and is interchangeable with 鮮."

In addition, there are other formulas of this same sort such as A 讀與 B 同 "A is read the same as B," A 與 B 古字通 "As for A and B, in antiquity the graphs were interchangeable," etc., none of which will be enumerated here. At present, formulas such as A 同 B "A is the same as B" or A 通 B "A is interchangeable with B" are commonly used and represent simplifications of the formulas A 與 B 同 and A 與 B 通, respectively.

Aside from indicating relationships involving interchanges, the character "同" "same" in these expressions also indicates relationships between allographs. For example,

Commenting on *Hànshū*, "Sīmǎ Xiāngrú zhuàn" B: Yán Shīgǔ says, 埜與**壄**同, 古野字也 "埜 is the same as **壄**; it was the ancient form of 野."

Commenting on *Xúnzǐ*, "Quànxué," Yáng Liàng says, 蹟與跡同 "蹟 is the same as 跡."

On the other hand, the use of "通" *tōng* to indicate relationships between allographs is rare. A number of people in recent years have advocated letting "同" and "通" fulfill specific tasks, with "A 同 B" used solely in relation to allographs, and "A 通 B" used solely in relation to interchangeable graphs. Yet the *Xīnhuá zìdiǎn* and the *Xiàndài Hànyǔ cídiǎn*, both of which are quite influential dictionaries, use "同" to indicate relationships involving interchanges. This is probably due to the fact that "同" is more easily understood by novices than is "通".

The formulas cited above which were used to indicate the relationships between graphs that involved interchanges were used primarily to elucidate the meanings of graphs appearing in old texts. The role of B was to elucidate A in such instances. So as to facilitate comprehension, a conventional form was normally selected to play the part of B. As to whether or not it was the "proper graph" was immaterial (see Sec. 12.2.1). Instances where unconventional proper graphs were used to play the part of B are quite rare. In the examples cited above ranging from Zhèng Xuǎn's comment on the line in the *Zhōulǐ* to Lǐ Shàn's comment on the *Wénxuǎn* text, the conventional forms of their respective eras were used to play the part of B in each case (aside from the character "纔", all these characters are still conventional forms at present). Among them, "虜" and "悌" were at the same time proper graphs. Yet as "悌" does not appear in the *Shuōwén*, some conservative scholars of the script have regarded it as a vulgar form. "閑", "纔", and "鮮" were all loangraphs. The character "勘" (written in the *Shuōwén* as "勘") glossed by "鮮" on the contrary was the proper graph. Whether the proper graph of {儀} as in 禮儀 *lǐyí* "rite" is "義" or "儀", opinions differ.

When dictionaries use "通" *tōng* in such formulas, they sometimes use unconventional proper graphs to play the part of B as a means of distinguishing proper graphs from loangraphs. For instance, according to the *Shuōwén*, the orthograph of {强} *qiáng* as in 强弱 *qiángruò* "strong and weak" is "彊". (The *Shuōwén* says, 彊, 弓有力也. 从弓, 畺聲 "*Qiáng* means a strong bow and is derived from *gōng* 'bow' and *jiāng* as phonetic." "畺" was the protoform of "疆" *jiāng* "boundary.") The original meaning of "强" was the name of a kind of insect, whereas "强" as in *qiángruò* "strong and weak" was a loan for "彊". Thus the *Kāngxī zìdiǎn* under "强" notes that it is "interchangeable with 彊," in which case it uses the proper graph "彊" to gloss the conventional form "强". Dictionaries sometimes also use conventional forms to gloss proper graphs. This is especially true of dictionaries compiled of late, which seldom have a need to get involved in distinguishing proper graphs from loangraphs. For example, the 1980 edi-

tion of the *Cíyuán* under "彊" notes that it is "interchangeable with "强"; although it points out under "强" that "in ancient texts it is often borrowed for 彊," it does not use the formula "通强". (The old edition of the *Cíyuán* has the same explanation here as the *Kāngxī zìdiǎn*.)

Some hold that when a dictionary uses a formula of the type A 通 B "A is interchangeable with B," if the word denoted by A has an orthograph, then that graph should be used to play the part of B. For example, in ancient texts "澹" *dàn* is often used to denote "tranquillity"; sometimes "贍" *shàn* was also used to denote this same word. The 1979 edition of the *Cíhǎi* says that this usage of "贍" is interchangeable with "澹". According to the *Shuōwén*, however, the original meaning of "澹" was 水搖 "water in motion," and it states that the original meaning of "憺" was "安" *ān* "tranquil." This is to say that with respect to that word meaning "tranquillity," not only was "贍" a loangraph but "澹" was also a loangraph; "憺" alone was an orthograph. Consequently, some maintain that the 1979 edition of the *Cíhǎi*'s remark that "贍" is interchangeable with "澹" is incorrect and that it should state that it is interchangeable with "憺". Our feeling is that such a claim is unfounded. As was already stated earlier, the formula "A is interchangeable with B" was employed to indicate the interchangeability of graphs and was used primarily to elucidate the meanings of graphs in old texts, for which reason a conventional form was normally used to play the part of B. This kind of formula is of a different sort grammatologically from one of the type "A (a loangraph) 通假爲 B (an orthograph)" "A is borrowed for B" to indicate a borrowing in the narrow sense. The character "澹" is frequently used in old texts, whereas "憺" was seldom used to denote {憺}. So when the ancients elucidated old texts, they sometimes used "澹" to gloss "憺". The character "憺" occurs in Sīmǎ Xiāngrú's "Zīxū fù" (*Wénxuǎn* 7), about which Lǐ Shàn comments: 憺與澹同 "憺 is the same as 澹." When general reference dictionaries such as the 1979 edition of the *Cíhǎi* perpetuate a traditional gloss found in old commentaries, stating that "贍" is interchangeable with "澹", instead of stating that it is interchangeable with "憺", there is really no room for criticism in such cases. (The *Kāngxī zìdiǎn* also says that "贍" in this usage "is the same as 澹.") Similarly, the 1980 edition of the *Cíyuán* does not state that "强" is interchangeable with "彊" but states that "彊" is interchangeable with "强", which is also reasonable, since most people need only know that "彊" was interchangeable with "强" and not that "强" was interchangeable with "彊". Of course, if we were, say, to compile a sophisticated dictionary which rigorously discusses the original meanings of graphs, that would be quite another matter. In such a dictionary, a precise method of explaining the concrete relationships between interchangeable graphs of all kinds would have to be employed, avoiding sweeping formulas of the type "A is interchangeable with B," which are basically of no practical value.

With respect to the formula "A is interchangeable with B," some individuals introduce yet another requirement. They hold that B must be a graph that was already in use prior to the existence of A. In their view, explanations such as 坐通座 "*zuò* 'to sit' is interchangeable with *zuò* 'seat'" and 說通悅 "*yuè* is interchangeable with *yuè* 'pleased,'" wherein B is played by a younger differentiated graph, are untenable. They argue that since "座" and "悅" had not yet been created at the time the ancients used "坐" and "說" to denote {座} and {悅}, there essentially was no way that they could have been interchangeable. A requirement of this sort is also most unreasonable. When commentators used a formula such as "A is interchangeable with B," usually their only intent was to explain that a certain usage of the word denoted by A is more commonly denoted by the word denoted by B, so there is no need to consider the relative times of the appearance of A and B.

The primary merit of the formula "A is interchangeable with B" is that when selecting a character to play the part of B, one need only consider whether or not it is a conventional form and need not consider other conditions. By doing so, vexing questions relative to the identification of orthographs and so forth can be avoided. Moreover, since conventional forms are used, they are more easily understood by novices. If the restrictions described above were to be imposed, these merits would be lost and there would no longer be any real need for formulas of this sort.

Examples of the misuses of "通" *tōng* can be found in dictionaries and in commentaries to ancient texts. Some examples selected from commonly used dictionaries are cited below.

Under the character "倭" *wēi* in the *Kāngxī zìdiǎn*, it is stated that "倭遲" *wēichí* "is interchangeable with 逶迤 *wēiyí*, 逶迤 *wēiyí*, 威遲 *wēichí*, and 委移 *wēiyí*." When we discussed the phenomenon of polygraphy earlier (Sec. 12.2), we pointed out that "逶迤" *wēiyí* (also written "委蛇", etc.), "逶夷" *wēiyí* (also written "倭遲", etc.), and "威夷" *wēiyí* (also written "威遲", etc.) cannot simply be viewed as being different written forms of one and the same word. That the *Kāngxī zìdiǎn* treats "倭遲" *wēichí* and "威遲" *wēichí* and the various written forms of "逶迤" *wēiyí* as "all being interchangeable" is inappropriate. The 1980 edition of the *Cíyuán* under the entry "倭蛇" *wēiyí* states that "倭蛇" "is also written . . . 倭遲 *wēichí*, 威遲, *wēichí* 威夷 *wēiyí*, etc." and thus, like the *Kāngxī zìdiǎn*, is in error on this point.

One of the definitions given under the character "蕭" *xiāo* in the 1980 edition of the *Cíyuán* states: "It is interchangeable with 肅 *sù*; see 蕭牆

xiāoqiáng." Under the entry "蕭牆", Zhèng Xuǎn's comment on this word as cited in Hé Yàn's *Lúnyǔ jíjiě* is quoted:

> 蕭之言肅也, 牆謂屏也. 君臣相之禮, 至屏而加肅焉, 是以謂之蕭敬牆 *Xiāo* refers to *sù* "reverent" and *qiáng* means "screen." According to the rules of etiquette governing a meeting between a ruler and his minister, when the latter reaches the screen, he intensifies his [sense of] reverence, and on account of this, it is called a "reverential screen."

No one has ever read "蕭" in "蕭牆" as "肅" *sù*. Even if we were to accept Zhèng Xuǎn's explanation, we would only be able to conclude that, linguistically, "蕭" in "蕭牆" was related to "肅", or that "蕭牆" was derived from "肅敬" *sùjìng* "respectful." Simply stating that "蕭" was interchangeable with "肅" is inappropriate. We would by no means rule out a possibility of this sort: {蕭} as in "蕭牆" was a semantic extension of 肅 with an altered reading; "蕭牆" was originally written "肅牆". Later on, so as to make allowances for the actual reading of the word, "蕭" was then borrowed to represent "肅", in much the same way as "花" in 叫花子 *jiàohuāzi* "beggar," which originally was written "叫化子", was later borrowed for "化" (see Sec. 9.4). However, as we have not found any textual evidence to prove that "蕭牆" was originally written "肅牆", the most we can do at this point is speculate, and thus have no reason to state with certainty that "蕭" was interchangeable with "肅". We already covered problems of this sort in Sec. 9.5.1.2.

Let us now further illustrate how to determine whether or not we should speak in terms of "interchangeability," using the case of "哈" *hā* "breathe out with the mouth open" as an example. The 1979 edition of the *Cíhǎi* asserts that "哈" used in the sense of "breathe out with the mouth open" is interchangeable with "呵" *hē*. Such an explanation is acceptable. The character "呵" *hē* has this meaning; and according to the *Guóyīn zìdiǎn* published in 1949, "呵" is pronounced *hā*. We can treat the characters "呵" and "哈" when read *hā* and used in the sense of "breathe out with the mouth open" as interchangeable graphs. However, under the character "呵", the *Cíhǎi* only gives the definition "to blow on and make warm," with a reading of *hē*, which is something of a paraphrasing of "breathe out with the mouth open." Thus there is no assured source which would permit us to say that "哈" is interchangeable with "呵". If we were to hold that there is no need to give the character "呵" this definition along with a reading of *hā*, when stating that "哈" is interchangeable with "呵", we would note that "呵" in such cases originally was pronounced *hā*. Otherwise, it should not be said that "哈" is interchangeable with "呵". Even though "哈", read *hā*, and "呵", read *hē*, shared identical meanings, they still cannot be regarded as having been interchangeable.

In dictionaries we find cases where, on the one hand, graphs are described as being "interchangeable" when they should not be, and, on the other, cases where graphs are not described as being "interchangeable" when they should be. Let us give one example of this below.

The first definition given for "詘" *qū* in the 1979 edition of the *Cíhǎi* is 屈曲, 折疊 "to bend, to fold," and it notes that it is interchangeable with "屈" *qū* "to bend"; the second definition given is 屈服, 敗退 "to surrender, to retreat in defeat," yet it does not note that it is interchangeable with "屈". Its treatment in the 1980 edition of the *Cíyuán* in this regard is about the same. Prior to the Western Han dynasty, "詘" was ordinarily used to denote {屈} as in 屈曲 "to bend" and 屈服 "to surrender" (which ought to have been an extended meaning of 屈曲), whereas "屈" was used in the sense of "to exhaust" (in which case it was read *jué*.) Later on, after the borrowed usage of "屈" for {屈} as in 屈曲 and 屈服 became widespread, "詘" was subsequently less commonly used. Thus "詘" used in the sense of 屈服 and "詘" used in the sense of 屈曲 are alike and are both interchangeable with "屈" as well. That the *Cíhǎi* and *Cíyuán* treat only "詘" used in the sense of 屈服 as being interchangeable with "屈" is inappropriate. Nothing at all is said about the interchangeability of "詘" and "屈" in the *Xīnhuá zìdiǎn* under its entry for the character "詘", which is even more inappropriate.

12.2.2.2 Ancient and Modern Graphs

The term "*gǔjīnzì*" (古今字) "ancient and modern graphs" is also a technical term used in relation to the phenomenon of polygraphy. The periods of currency of the different written forms of one and the same graph usually occur in succession. The one which appeared before the other is the ancient form, and the one which appeared after the other is its modern form.

Formulas such as A, 古 B 字 "A is an ancient form of B" or A, B, 古今字 "A and B are ancient and modern forms [respectively]," were ordinarily used to indicate relationships between ancient and modern forms. A and B could be allographs, for example,

Commenting on *Hànshū*, "Sīmǎ Xiāngrú zhuàn" A, Yán Shīgǔ notes, 絝, 古袴 (褲) 字 "絝 is the ancient form of 袴 (*kù*) 'pants.'"

Commenting on *Hòu Hànshū*, "Guāngwǔdì jì" A, Lǐ Xián notes, 珤, 古寶字 "珤 is an ancient form of *bǎo* 'precious.'"

They could also be various interchangeable forms, e.g.,

Commenting on *Guóyǔ*, "Wúyǔ," Wéi Zhāo notes, 北, 古之背字 "*běi* is an ancient form of *běi* 'the back of the body.'" ("背" is a differentiated form which denoted the original meaning of "北" [see Sec. 7.1.5.1].)

Commenting on *Hànshū*, "Shíhuò zhì" A: 猶未足㠯(以)澹其欲也, Yán Shīgǔ says, 澹, 古贍字也 "澹 is an ancient form of *shàn* 'to provide.'" (In antiquity "澹" was borrowed to denote {贍} as in 贍足 *shànzú* "plentiful"; "贍" was a younger orthograph [see Sec. 11.1.1.3.2].)

Commenting on *Hànshū*, "Lǐyuè zhì," Yán Shīgǔ notes: 屮, 古草字 "屮 was an ancient form of *cǎo* 'grass.'" ("屮" is the same as "艸" *cǎo* "grass"; "草" as in 草木 *cǎomù* "grass and trees, vegetation" was a loan for "艸".)

Commenting on *Lǐjì*, "Qǔlǐ" B: 予一人 "I, the one person," Zhèng Xuǎn notes: 余, 予, 古今字 "*Yú* 'I' and *yú* were ancient and modern forms." (The characters "余" and "予" used to denote the first person pronoun were probably both loangraphs.)

To say that two graphs are ancient and modern forms is to say that they are two written forms of one and the same word whose periods of currency occurred in succession. There is no need to consider such questions as to whether they actually were allographs or were interchangeable graphs, or, if they were interchangeable graphs what the nature of their interchangeability was. This is consistent with our saying that when "A is interchangeable with B," there is no need to consider what the nature of their interchangeability was.

In antiquity the formulas "A is the ancient form of B" and "A and B are ancient and modern forms [respectively]" were used primarily to elucidate the meanings of characters in ancient texts. The modern form that was used to elucidate the ancient written form of a word was ordinarily the written form of that word which was in use at the time. So in terms of their actual content, there normally was no difference whatsoever between these formulas and those of the type "A is interchangeable with B." For instance, the character "饟" appears twice in *Hànshū*, "Shíhuò zhì" B. Commenting on its first occurrence, Yán Shīgǔ says 饟字與餉同 "The character 饟 is the same as 餉 *xiǎng* 'to banquet,'" and of its second occurrence says 饟古餉字 "饟 is an ancient form of 餉." (The character 饟 also occurs in "Shíhuò zhì" A, about which Yán makes this same comment.) The character "罨" appears twice in *Hànshū*, "Jiāosì zhì" A. Commenting on its first occurrence, Yán Shīgǔ says 罨古遷字 "罨 is an ancient form of *qiān* 'to remove,'" and of its second occurrence says 罨與遷同也 "罨 is the same as 遷." Of course, if the periods of currency of A and B lacked a rather clear temporal sequence of appearance, then only a formula of the type "A is interchangeable with B" could be used, and not one of the type "A is the ancient form of B."

The words "ancient" and "modern" in the term "ancient and modern graphs" are relative. We frequently encounter situations in which due to the appearance of new modern graphs, what had been modern graphs in an earlier period became ancient graphs in a later one. For example, we cited above an example taken from Yán Shīgǔ's commentary to the "Sīmǎ Xiāngrú zhuàn," in which he treats "絝" and "袴" as ancient and modern forms of one another. After the character "褲" gained currency, "袴" became an ancient form. ("褲" is not found in the *Kāngxī zìdiǎn*, as it probably appeared quite late.) Commenting on the entry for "誼" in the *Shuōwén*, Duàn Yùcái writes:

> There is no set time that separates the ancient from the modern. When the Han period was regarded as the modern era, the Zhou was regarded as the ancient era; when the Jin and the Song were regarded as the modern era, the Han was regarded as the ancient era. The terms ancient and modern characters depend on who uses them and when.

Duàn's reasoning here is quite correct.

Since the object of speaking in terms of ancient and modern graphs lies primarily in the elucidation of the meanings of graphs in old texts and not in explaining the history of script, the term "ancient and modern" does not necessarily reflect the relative times of usage of the different written forms of a word. If A began being used later than B, but later on B became current once A was no longer used, then A can be treated as the ancient form of B. For example, in regard to the phrase 氐羌徠服 in *Hànshū*, "Wǔdì jì," Yán Shīgǔ says, 徠, 古往來之來也 "徠 was an ancient form of 來 as in *wǎnglái* 'come and go.'" {來} as in *wǎnglái* obviously first involved a borrowing of the character "來" whose original meaning was "grain"; only later was the younger orthograph "徠" created to denote the former. During Yán Shīgǔ's time, however, the loangraph "來" was still current, whereas "徠" was no longer used. Consequently, he treated "徠" as the ancient form of "來" as in *wánglái* "come and go." (At present, {徠} as in 招徠 *zh1aolái* "to solicit," which is an extended meaning of {來} *lái* "to come," is written "徠"; whereas {來} in most cases is not written "徠".)

In some instances we encounter situations where the temporal sequences of ancient and modern forms have been inverted, as a result of which the modern forms of one era became the ancient forms of a later one, and the ancient forms of an earlier era became the modern forms of a later one. For instance, the character "線" is given in the *Shuōwén* as the ancient form of "綫" *xiàn* "thread." With regard to the line 不絕如綫 in *Hànshū*, "Gāo Huì Gāo Hòu wéngōng chén biǎo," Yán Shīgǔ cites Jìn Zhuó's comment on it: 綫, 今線縷字也 (which meant that "綫" corresponded to modern "線". Jìn Zhuó lived during the Jìn period.) This led Duàn Yùcái to write: "During Xu's (i.e., Xǔ Shèn) time, 線 was the ancient form and 綫 was the modern form. During Jìn's (i.e., Jìn Zhuó) time, 綫 was the ancient form and 線 was the modern form. In sum, the ancient and modern forms of graphs were shifted about in this fashion." At

present, we have discarded "線" and use a simplified form of "綫" in its place, and thus have gone full circle in making "線" the ancient form and "綫" the modern form. (During the process of consolidating variant forms, "線" was officially discarded; nevertheless, both the *Xīnhuá zìdiǎn* and the *Xiàndài Hànyǔ cídiǎn* still list "線" as a headgraph.)

When studying ancient and modern forms, we cannot rely totally on the received texts, since during the course of their transmission, the graphs originally used by their authors were usually converted into modern forms by copyists and engravers of later times. Some examples of this are given below.

In his commentary to *Lǐjì*, "Qǔlǐ B," Zhèng Xuǎn, commenting on the term 予一人 "I, the one person," states that "余" and "予" were ancient and modern forms. This is absolutely correct. In all the Shàng oracle bone inscriptions and the Western Zhou and Spring and Autumn period bronze inscriptions available to us at present, the first person pronoun {余} is always written "余". The use of "予" to denote {余} by the ancients did not take place earlier than the Spring and Autumn period. Yet in the Western Zhou period writings as represented in the received versions of the *Shūjīng* and the *Shījīng*, the first person pronoun "余" was consistently changed to "予" by later individuals. If one were to refute Zhèng Xuǎn's explanation of "余" and "予" being ancient and modern graphs on the basis of the received versions of these texts, it would be a mistake.

It is commonly held that Sīmǎ Qiān used mostly modern graphs when composing the *Shǐjì* and that Bān Gù used mostly ancient graphs when composing the *Hànshū*. The *Hànshū* does indeed contain ancient forms. However, the examples of the *Shǐjì*'s use of modern forms and the *Hànshū*'s use of ancient forms cited by some are clearly questionable, such as the *Shǐjì*'s use of "烹" *pēng* "to cook" vis-à-vis the *Hànshū*'s use of "亨", the *Shǐjì*'s use of "早" *zǎo* "early" vis-à-vis the *Hànshū*'s use of "蚤", and so forth. (In his commentary to the *Hànshū*, Yán Shīgǔ states repeatedly that 蚤古早字 "蚤 was an ancient form of 早." Based on our present knowledge of the usages of characters in antiquity, during the time of Sīmǎ Qiān and Bān Gù, the character "烹", derived from "火" *huǒ* "fire," had simply not appeared as yet (see Sec. 11.1.1.1 under the entry 亨 : 烹). The writing of {早} as in 早晚 *zǎowǎn* "early and late" as "蚤" was quite common during Bān Gù's time, and was even more so during Sīmǎ Qiān's (see Sec. 9.1). Originally the *Shǐjì* most certainly coincided with the *Hànshū* in its use of "亨" to denote {烹} and "蚤" to denote {早}, and only later on were changed to "烹" and "早" by copyists and engravers. On the basis of these two examples, it is clear that the authors of the *Shǐjì* and the *Hànshū* both used graphs that were current at the time, so the question of one using more ancient graphs than the other is irrelevant; rather it was simply that the characters which had been used in the *Shǐjì* were changed

by later individuals into the current forms used by them. The number of graphs in the *Hànshū* that were changed by later individuals is much smaller than in the *Shǐjì*. This is one of the main reasons why people have developed an impression that the *Shǐjì* uses mostly modern forms and the *Hànshū* mostly ancient forms. In sum, in studying ancient and modern script, one must pay close attention to the extant written materials remaining from each period and not readily place one's trust in ancient texts that have been copied and engraved over and over by later individuals.

Like those who mistakenly describe graphs representing cognates as orthographs and loangraphs, there are also those who mistakenly describe characters of this sort as ancient and modern forms. For instance, in his commentary to the *Shuōwén*'s entry for "赤" (菽) *shū* "beans and peas," Duàn Yùcái writes: 赤, 豆, 古今語, 亦古今字 "As for 赤 and *dòu* 'beans,' they represented ancient and modern words respectively, and they also represent ancient and modern forms." Duàn is correct in stating that *shū* and *dòu* were ancient and modern words. Yet to say that they were ancient and modern graphs is inappropriate. Ancient and modern forms ought to represent different written forms of one and the same word. {菽} and {豆} cannot be treated directly as representing one word, the reasons for which were explained in our criticism of the explanations of "豆" serving as a loangraph for "菽" (see Sec. 9.5.1.2). Nevertheless, most of Duàn's arguments in relation to ancient and modern forms are correct. From his statement that "赤" and "豆" were ancient and modern words and concurrently ancient and modern graphs, it can be seen that he detected the distinctions between them as well as between ordinary ancient and modern forms.

In present-day writings on linguistics and grammatology, we find cases where two graphs representing cognates are explained in terms of ancient and modern forms. For example, as was mentioned in Sec. 9.1 in regard to the characters "鞠" *jū* "a leather ball" and "毬" (球) *qiú* "a ball," some have labeled them ancient and modern forms. Still others term "毬" a "younger 'alternate' form" of "鞠", which is even more inappropriate. If we deem {球} as originally having represented an altered form of {鞠} in the spoken language, then we should say so more clearly. If we use the concept of "ancient and modern forms" to explain their relationship, we end up making a mess of the boundary line which separates speech and writing.

Some of those who have discussed grammatology in recent times have at times used the term "ancient and modern graphs" to explain graphic derivates and have used it primarily to refer to matrigraphs and differentiated graphs. In recent years, still others have explicitly advocated using the term "ancient and modern graphs" expressly to refer to graphs which

shared "derivational relationships." Not only does the relative extent of the ancient and modern graphs of which they speak differ from that discussed by the ancients, but their basic concepts differ as well. When discussing ancient and modern forms, the ancients set out to elucidate the meanings of graphs in old texts. While this sense of the term "ancient and modern graphs" naturally encompasses orthographs and differentiated forms, yet as to which was ancient and which was modern is determined by the actual usages of graphs. An orthograph was not necessarily an ancient form, nor was a differentiated graph necessarily a modern form. The example of "來" and "徠" cited above is just such a case. There is a vast difference between this and discussing ancient and modern forms from the standpoint of "derivational relationships."

12.2.2.3 The So-called "Yìtǐcí" "Variant Word Forms"

Since the 1960s, a number of individuals have labeled the different written forms of one and the same word "*yìtǐcí*" (異體詞) or "*yìxíngcí*" (異形詞) "variant word forms." The various variant written forms of one and the same word, of course, can be termed "*yìtǐzì*" (異體字) "allographs." But since the term "*yìtǐzì*" is also used to refer allographs in a narrow sense, some are unwilling to label as "*yìtǐzì*" the different written forms of one and the same word, including interchangeable graphs. Those who discuss allographs usually limit their discussions to the different written forms of monosyllabic words, and rarely pay any attention to the different written forms of disyllabic and polysyllabic words. This in turn has made some unwilling to use "*yìtǐzì*" or "allographs" as a cover term for the different written forms of one and the same word. This is essentially what has led to the appearance of the terms "*yìtǐcí*" and "*yìxíngcí*." As the implied meanings of these two terms are in no way different, we shall only use the term "*yìtǐcí*" in our discussion below.

While the intent underlying the proposal of the term "*yìtǐcí*" is good, the name itself is not at all good. If we are unwilling to label as allographs the different written forms of one and the same word and further regard the phrase "different written forms of one and the same word" as being too wordy, we could term them "variant written forms of a word." The term "variant word forms" (*yìtǐcí*), on the other hand, should be eliminated.

Labeling the variant written forms of a word as "variant word forms" reflects a clear lack of understanding of the distinction between speech and writing. This can be seen very clearly in the explanations given for the term "*yìtǐcí*." One person writes: "The meanings and readings of words [may be] wholly identical but differ in their shapes, such as *ànyǔ* 'note' which is variously written '按語' and '案語'. . . . Words of this sort which denote one and the same word but whose shapes differ can be called words having variant shapes" (Jiǎng 1978:103). Obviously, what the author

here refers to as "words which denote one and the same word but whose shapes differ" corresponds to what we term "the different written forms of one and the same word." How can the different written forms of a word possibly be called "words" which differ in their shapes? Yet another person has written, "The so-called variant forms of words amount to words whose readings are identical or are close to one another and whose meanings are identical, but whose shapes are different" (Zhāng 1979:29). The scope of what he refers to here as the variant forms of words is rather broad. "Words whose readings are identical . . . and whose meanings are identical but whose shapes differ" connotes the same idea as "words which denote one and the same word but whose shapes differ" which was criticized above. Taken literally, words whose "readings are close to one another and whose meanings are identical but whose shapes are different" would seem to refer to cognate words whose written forms differ and whose readings are close and meanings identical; but then the ones who are asserting this are referring to the written forms of such cognate words. Differences in the written forms of cognate words having the same meanings but different readings reflect the disparities which actually exist in language. Differences in the written forms of one and the same word amount to nothing more than disparities that exist at the surface level of the script. Confusing these two types of intrinsically dissimilar disparities with one another and using "words differing in their shapes" as a cover term for them stems from a failure to make a clear distinction between speech and writing.

In recent writings on spoken and written language, we all too frequently encounter a failure to distinguish speech from writing. Even though some individuals may not make use of a term such as "words differing in their shapes," they nonetheless still confuse the different written forms of cognates having identical meanings but different readings with the different written forms of one and the same word. For instance, we find "筋斗" *jīndǒu* "tumble, somersault" and "斤斗" *jīndǒu* being treated as different writings of "跟頭" *gēntou* "to fall, somersault"; "魯蘇" *lūsu* and "嚕蘇" *lūsu* "loquacious" being treated as different writings of "囉唆" *luōsuo* "long-winded"; "文莫" *wénmò* and "密勿" *mìwù*, which appear in old texts and were phonetically and semantically close to "黽勉" *mǐnmiǎn* "to exert one's efforts," being treated as different writings of "黽勉" *mǐnmiǎn*, and so forth.

Yet another person has assigned the following definitions to the terms "interchange" and "loan":

> Two words whose readings are identical or close, whose meanings correspond to one another, and which in antiquity could be written in this way or that are known as interchanges.

> Two words whose readings are identical or close but whose meanings differed, and which in antiquity could at times be borrowed to replace another graph are known as loans (Zhōu 1981:263).

The writer here has gone so far as to describe the relationship of interchangeability existing between graphs as relationships between words. (What he refers to as "interchanges" and "loans" falls within the scope of what we refer to as "interchanges.") This is no different from calling the variant forms of a word "a word having variant forms."

When we discussed the problems related to loangraphs, interchangeable graphs, and the ancient and modern graphs above, we criticized several erroneous theories of them. Most of these theories have in fact resulted from a failure to distinguish the difference between speech and writing.

12.2.3 The Problem of the Readings of Interchangeable Graphs

In recent years the following problem has been discussed in several journals: Should a borrowed graph whose reading is not wholly identical to that of an orthograph be read like the orthograph? The borrowed graphs referred to by those who have discussed this issue are only so in a broad sense, and the orthographs cited have in fact not been true orthographs. So the question should be rephrased in this way: When two graphs which originally were not completely homophonous are mutually interchanged, should they be read alike? Or, put another way: Should interchangeable graphs whose original readings are not wholly identical to the conventional forms be read like the latter?

In the main, three opinions have been put forward in these discussions.

(1) "Borrowed graphs generally should not be read like orthographs but should be read . . . according to their own readings" (Zhào 1979).

(2) "In those cases where a borrowed graph is recorded in an ancient dictionary, rime book or in some early commentary and is given a reading that coincides with the orthograph as indicated by a *fǎnqiè* spelling or homophonous speller (*zhíyīn*), then the modern reading of such a borrowed graph should be the same as that of the orthograph," otherwise the borrowed graph should be read according to its original reading.

(3) "Regardless of whether or not a borrowed graph is found recorded in an ancient dictionary, rime book or in some early commentary and has been given a reading that coincides with the orthograph as indicated by a *fǎnqiè* spelling or homophonous speller (*zhíyīn*), as long as it is definitely a borrowed graph, its modern reading should be the same as that of the orthograph."[2]

2. The latter two views are cited from Shèng 1980. In that essay, the author advocates the third viewpoint.

We agree with the third viewpoint.

When we discussed the problems related to the readings of loangraphs in Sec. 9.4, it was pointed out that loangraphs and orthographs represent one and the same word, so they must be read alike. When we say that two graphs are mutually interchangeable, we are in effect saying that the two graphs were used to denote one and the same word. Thus when other types of graphs are interchanged, they, like loangraphs and orthographs, must be read alike. Interchangeable graphs whose original readings differ from those of conventional forms should be read like the conventional forms. The ancients ordinarily used the formulas "A should be read as B," "A should be read in the same way as B," "A is read the same as B," etc. to indicate interchanges and to clarify this point as well.

Why is it that some do not acknowledge the necessity of reading mutually interchangeable graphs alike? There are basically two reasons for this. First, certain graphs which are only related to one another by virtue of their being phonologically and semantically close have been misconstrued by some as being interchangeable. Secondly, in old commentaries to ancient texts and in wordbooks (including rime books), we encounter phenomena of this sort: When a particular character was used to denote a particular meaning of a word which was already represented by a character, as to whether the two phonetically similar graphs involved were interchangeable or not was a matter of disagreement among the ancients. Of relevance here is the fact that characters of this sort had two types of readings: one either involving the altering of the reading of a phonetically close graph, or one which was read according to the original reading of the graph concerned. However, some people, on the one hand, treated graphs of this sort as phonetically close interchangeable graphs, and on the other still read them according to their original readings. The two situations described here create conditions which obviate the need to read mutually interchangeable graphs alike.

Let us give some examples of the first of these misconceptions as described above.

In pre-Qin texts we find cases where "矢" *shǐ* "arrow" is glossed "誓" *shì* "to swear, to vow" (e.g., *Shījīng* Ode 45.1: 之死矢靡它, about which the Máo commentary says: 矢, 誓也 "*shǐ* means *shì* 'to vow,'" hence, "Until death he swore to have no other" [after Karlgren 1950a]). Since the readings of "矢" and "誓" were close, many people have held that the "矢" which is glossed as "誓" is a loan for "誓". (The 1979 edition of the *Cíhǎi* says that "矢" is interchangeable with "誓".) Yet according to its traditional reading, "矢" in this usage should not be read like "誓" *shì* at all but should still be read like "矢" as in 弓矢 *gōngshǐ* "bow and arrow." This is therefore construed as a concrete example of a case where it is unnecessary to read a borrowed graph like the orthograph it denotes. Yet in reality this example is problematical. In ancient texts the character "矢" was

frequently borrowed to denote a word which was semantically close to "陳" *chén* as in 陳列 *chénliè* "to display" (e.g., *Shījīng* Ode 236.7: 矢于牧野, about which the Máo commentary says: 矢, 陳也 "*Shǐ* means 'to set forth,'" hence: "They marshaled their forces at Mùyě" [after Waley 1937]) and in the sense of *chén* as in 陳述 *chénshù* "to state" (the preface to the *Shūjīng* states: 皋陶矢厥謨, about which the apocryphal Máo commentary says: 矢, 陳也 "*shǐ* means 'to set forth,'" hence: "Gāoyáo set forth his plan of action." Commenting on *Shījīng* Ode 252.10: 矢詩不多, Zhèng Xuǎn says: 矢, 陳也. 我陳作此詩不復多也 "*Shǐ* means 'to set forth.' As for my composing this poem, it is not much," hence: "I have composed a few verses" [after Karlgren 1950a]). "矢" used in the sense of "誓" *shì* "to swear, to vow" is most likely an extension of its sense of "to state." ("矢" in *Lúnyǔ*, "Yōngyě": 夫子矢之 is usually glossed as "誓", whereas it was glossed by Cài Mó [Jìn dynasty] as "陳" [*apud Jīngdiǎn shìwén*]. In his *Ěryǎ yìshū*, "Shìyán," Hǎo Yìxíng (1865), commenting on the entry "矢, 誓也," points out that since "陳" and "誓" were close in meaning, "矢" could be glossed as "陳", and it could also be glossed as "誓". However, he was misled by Yú Fān's [164–233] erroneous interpretation: 矢古誓字 "矢 was an ancient form of 誓," which implies that "矢" and "誓" could be interchanged in antiquity. This is inappropriate. Zhū Jiàn [1769–1850] in his *Shuōwén jiějiè yì zhèng* also mistakenly interprets "矢" standing for "誓" as a loan for the latter. To prove his point, he went so far as to emend an ancient text to suit his own purposes. He wrote:

> 若表記引詩 '信誓旦旦,' 釋文 '信' 本作 '矢,' 此當爲下 '誓' 字之誤, '信' 與 '矢' 義未合也. With regard to the line *xìn shì dàn dàn* [from *Shījīng* Ode 58.6] cited in the "Biǎojì" [chapter of *Lǐjì*], the [*Jīngdiǎn*] *shìwén* [states that] 信 *xìn* originally was written 矢 *shǐ*. This seems to be an error for '誓' which follows, as the meanings of '*xìn*' and '*shǐ*' do not correspond. [Ding 1928, *bǔyí*, vol. 11:336]

In actuality, allographs appearing in different editions of the ancient classics do not necessarily share the same meanings. "矢誓" means to state one's pledge, the meaning of which is most clear and coherent. That one edition had "矢誓旦旦" for "信誓旦旦" is entirely possible. This is also proof that "誓" used in the sense of "矢" was an extension of its use in the sense of "陳" "to display.") That the pronunciations of "矢" *shǐ* and "誓" *shì* are close is purely coincidental. Moreover, "誓" [MC źjäi$^{\text{ʔ}}$] had Middle Chinese initial *shàn* [禪] and was in Old Chinese rime group *jì* [祭], whereas "矢" [MC $^{\text{ʂ}}$śji] had Middle Chinese initial *shū* [書] and was in Old Chinese rime group *zhǐ* [脂]. Generally speaking, the pronunciations of the two may be regarded as having been fairly close; yet viewed from the standpoint of their serving as an orthograph and a loangraph, the difference between them becomes more marked yet. In sum, there is a lack of evidence which would support construing "矢" used in the sense of "誓" as a loan for "誓".

One writer states: "In *Shàngshū*, 'Hóngfàn:' 農用八政, 農 is a loan for 努 *nǔ* 'to exert (effort)' but is not read like *nǔ*" (Zhào 1979), and takes this as evidence that a borrowed graph need not be read like its orthograph. Yet with regard to the character *nóng* in this line, interpretations of it by the scholars of antiquity have varied. Not until the Qing period was it glossed as "努" by Wáng Niànsūn. Yet even Wáng did not actually regard it as a loan for "努". In his *Guǎngyǎ shūzhèng* (*juàn* 3:310) under the entry "薄, 恕, 文, 農, 勉也," Wáng writes: "農 is like 努 and is only a turn of a phrase. The 'Hóngfàn' chapter [in the *Shūjīng*] says '農用八政,' which refers to striving to apply the eight rules of government." Wáng Yīnzhī cites Wáng Niànsūn's remarks and further adds: 農力猶努力語之轉也 "*Nónglì* is like *nǔlì* 'to make great efforts' and is a turn of a phrase." The expression "turn of a phrase" (語之轉 or 一語之轉) was a technical term which was frequently used to indicate the cognate relationships between words and was not used to indicate borrowings or interchanges. During the Qing dynasty, some scholars such as Zhū Jùnshēng actually did explain *nóng* as a loan for *nǔ* (see Zhū 1833 under the character 農 *nóng*). It was already pointed out in Sec. 9.5.1.2 that Zhū and others more often than not confused relationships between cognates with relationships between orthographs and loangraphs. This is yet one more example of this tendency. This theory of loangraphs of theirs cannot serve as a basis for the discussion of the readings of interchangeable graphs.

There are also those who cite the phrase "暴虎馮河" "to hunt a tiger on foot and cross a river without a boat" as proof that a borrowed graph need not be read like an orthograph. According to their analysis, "暴" *bào* here interchanges with "搏" *bó* "attack" but should be read *bào* rather than *bó*. Yet the claim that "*bào* interchanges with *bó*" here is nothing more than an unfounded supposition. Even though the ancients glossed the 暴 *bào* in 暴虎 *bàohǔ* as "徒搏" *túbó* "to seize barehanded," nevertheless they never suggested that "暴" and "搏" were interchangeable graphs. The orthograph for "暴" here ought to have been "虣" *bào*, which has the same reading as "暴" (see Sec. 7.2).

Below are some examples of the second type of misconception described above.

In pre-Qin writings we frequently encounter the character "錫" *xī* which is synonymous with "賜" *sì* "to bestow" which in turn has posed a question: is it indeed interchangeable with *sì*? Over the long haul, there have been two views on this question. In the past, most people treated *xī* as a phonetically close synonym of *sì* and continued to read it like *xī* as in 銅錫 *tóngxī* "copper and tin." A small number treated *xī* as a graph which interchanges with *sì* and thus read it in accord with the reading of *sì*. In

reference to the line 王三錫命 ("The king thrice bestows commands") in *Yìjīng*, Hex. 7, the *Jīngdiǎn shìwén* states that Xú Yuán (394–475) read *xī* here as *sì*. The *Jíyùn* places *xī* with this reading in the departing tone rime *zhì* [寘 MC -jet]. The *Kāngxī zìdiǎn* also gives this reading for *xī*. Nowadays, however, many people treat the character *xī* as being interchangeable with *sì* and continue to read it like *xī* as in *tóngxī* "copper and tin" (it is treated as such in the 1979 edition of the *Cíhǎi*). Some people further use this example to prove that borrowed graphs need not be read the same as orthographs. This is absurd. Since they treat *xī* as being interchangeable with *sì*, they then should read it like *sì*, as did those in antiquity who held this view. (However, even if we were to read *xī* used in the sense of *sì* in pre-Qin writings as *sì*, it should still be read according to its original reading when used in the sense of *sì* in post-Qin writings, since it has usually been read as such since then. If we were to read "九錫" *jiǔxī* "the nine gifts" in post-Qin writings as "九賜" *jiǔsì*, we most assuredly would look foolish.)

Some cite the line 公候干城 (from *Shījīng* Ode 7.1) as proof that a borrowed graph need not be read like the orthograph it denotes. According to their analysis, "干" *gān* here is a loan for "扞" *hàn* "to defend" but should not be read as *hàn*. Two different interpretations have in fact been given for the character *gān* here along with two analogous readings. Some of the ancients held that *gān* here stands for "干" as in 干戈 *gāngē* "shields and dagger-axes, i.e., weapons of war," whereas some held that *gān* here is interchangeable with "扞" as in 扞衛 *hànwèi* "to defend." The *Jīngdiǎn shìwén* states:

> 干城, 如字. 爾雅 [釋言] 云: 干, 扞也. 孫炎注云: 干, 楯 [= 盾], 所以自蔽扞也. 鄭云: 干也, 城也, 皆以禦難也. 舊戶旦反. *Gānchéng* is [read] like the character. The *Ěryǎ* ["Shìyán"] says: "*Gān* means *hàn* 'to defend.'" Sūn Yán's commentary says: "The *gān* 'shield' and *dùn* 'shield' are what shields and protects one's self." Zhèng [referring to Zhèng Xuǎn's commentary to the *Shījīng*] states: "As to *gān* 'shield' and *chéng* 'wall,' both are used to ward off harm." Its old reading was *hùdàn fǎn*.

The *Shìwén* is in agreement with the interpretations of Zhèng Xuǎn and Sūn Yán in maintaining that *gān* should be explained in its sense of *dùn* "shield," and thus its reading is glossed as "如字," which means that it should be read in its normal reading. The *Shìwén* also includes the old *fǎnqiè* spelling 戶旦反 [MC ɣân ˀ]. This was the *fǎnqiè* spelling for "扞" *hàn* and was the reading used by those who treated "干" as being interchangeable with "扞" (see Karlgren 1964, Gloss 27). How can one justify confusing matters by adopting the interpretation of *gān* as being interchangeable with *hàn*, on the one hand, and reading it according to the reading *gān* given it by those who interpret it in the sense of *dùn* "shield," on the other?

In the light of the analyses presented above, it is clear that the argument that borrowed graphs need not be read like orthographs and that mutually interchangeable graphs need not be read alike is untenable.

The character readings recorded in extant ancient wordbooks and in the commentaries to ancient texts are not all-inclusive. It is not possible for us to find in them the readings of every interchangeable graph. Therefore, the second view regarding the readings of borrowed graphs mentioned above, i.e., judging whether or not a borrowed graph should be read like an orthograph on the basis of readings given in ancient wordbooks, rime books, and commentaries, is also quite arbitrary. For example, in none of these sources is the character "擇" *zé* "to select" ever given the reading "釋" *shì* "let go, be relieved of." Yet in handwritten materials and some old texts dating from the Qin-Han period, we actually find numerous cases where *zé* interchanged with *shì*; e.g., *Mòzǐ*, "Jiézàng": 爲而不已, 操而不擇 "He does not stop when doing [it] and does not let go [of it] when enacting [it]"; *Hánfēizǐ*, "Wǔdù": 布帛尋常, 傭人不釋 "[Even] a dolt would not throw out yards of cloth," is quoted in *Lùnhéng*, "Fēi Hán" with *zé* in place of *shì*, and so forth (see Huáng 1938; also Qiú 1979). *Zé* in such cases should of course be read *shì*, and should by no means be read in its usual way simply on account of the fact that ancient sources do not give it such a reading. Again, in ancient handwritten materials and in ancient texts, examples of "有" *yǒu* interchanging with "又" *yòu* and "又" with "有" are found (see Sec. 11.1.2.2 under "又 : 有"). However, in wordbooks of the past, while "有" was given a reading of "又", "又" was not given a reading "有". Consequently, in the 1979 edition of the *Cíhǎi* "有" which interchanges with "又" is read like "又" *yòu*, whereas "又" which interchanges with "有" is still read like "又". This is most arbitrary. On the other hand, the 1979 edition of the *Cíyuán* correctly gives "又" which interchanges with "有" a reading of "有".

In Sec. 9.3 we cited cases in ancient texts of "匪" *fěi* having been borrowed to denote the negative adverb {匪} *fěi* and the demonstrative pronoun {匪} *fěi*, and cases of "干" having been borrowed to denote {干} *gān* used in the sense of "岸" *àn* "shore, bank" and {干} used in the sense of "澗" *jiàn* "a mountain stream." Some hold that "匪" in such usages interchanges with "非" *fēi* "not" and "彼" *bǐ* "that," respectively, and that "干" in such usages interchanges with "岸" *àn* "shore, bank" and "澗" *jiàn* "a mountain stream," respectively. Since "匪" and "干" in such cases are usually read according to their original readings, we did not adopt these explanations. If we were to agree with explanations of this sort, then we would have to read them according to the readings of "非" *fēi*, "彼" *bǐ*, "岸" *àn*, and "澗" *jiàn*.

In ancient texts there are cases recorded where some interchangeable graphs were read according to the readings of conventional forms but which were not adopted in the 1979 edition of the *Cíhǎi* and the 1980 edition of the *Cíyuán*. For example, in ancient texts "蚤" *zǎo* was sometimes borrowed to denote {爪} *zhǎo* as in 爪牙 *zhǎoyá* "talons and fangs" (the orthograph was written "叉"; see Sec. 7.1.3). In the *Jíyùn* "蚤" used in this sense is given the same reading as "爪" (see rising tone rime *qiǎo* [巧], under the head rime 爪 *zhǎo*, where it is spelled 側絞切 [MC ʿ dzau]). In the latest editions of the *Cíhǎi* and *Cíyuán*, however, "蚤" which interchanges with "爪" in such instances is still read *zǎo* and not *zhǎo*. This is totally unacceptable.

In sum, when dealing with the readings of interchangeable graphs, we should in principle scrupulously adhere to the rule that mutually interchangeable graphs must be read alike. We first must take note of the fact that one should not describe graphs which are not interchangeable as graphs which are. Once it is determined that a given graph is interchangeable with a conventional form, we must then read it according to the reading of the conventional form.

13

The Systematization and Simplification of Chinese Script

As Chinese writing consists of semantic and phonetic symbols that are structurally complex, that have numerous variant forms, and that are easily corrupted, governments over the centuries in China have laid a good deal of stress on the unification of the script.

In describing the duties of the "*Wàishǐ*" or "External Secretary," the *Zhōulǐ*, "Chūnguān," states:

> 外史掌書外令, 掌四方之志, 掌三皇五帝之書, 掌達書名於四方 The External Secretary is in charge of writing external directives; he is in charge of the annals of the (four quarters =) empire; he is in charge of the records of the Three August Ones and the Five Emperors; he is in charge of propagating the written word throughout the (four quarters =) empire.

"*Shūmíng*" here refers to script, so "propagating the written word throughout the (four quarters =) empire" ought to have been a measure designed to unify script throughout the country (see Sūn 1899: *juàn* 52.4–6). The compilation of the *Shǐzhòupiān* by King Xuān's grand scribe may have represented a similar effort in this regard.

During the Warring States period, the scripts used in each of the states differed in shape, so there arose an intense need in society for a unified writing system. It is commonly thought that it was this very issue that was raised in the Warring States period work *Guǎnzǐ* ("Jūnchén" A), which refers to 書同名 "writing has the same written forms" in its discussion of the ideal government. When Qín Shǐhuáng unified the empire, he successfully implemented a "unified script" and abolished the variant forms of the Six States which did not conform with those of Qín, and thus fulfilled the people's dream.[1]

1. The *Lǐjì*, "Zhōngyōng," says 今天下車同軌書同文 "Now in the world vehicles have the same tracks and writing has the same forms." Some think that this line was added into the text by some Confucian scholar sometime after Qín Shǐhuáng's unification

Nevertheless, Qín seal script itself contained variant forms; the forms of many graphs written in the clerical script had not been standardized as yet, so variant forms naturally were even more numerous. In early period standard script, variant forms were also quite numerous. During the Southern and Northern Dynasties, since the country was divided and the political scene turbulent, the script was especially thrown into confusion. One need only peruse the materials collected in a work such as the *Bēi biézì* ("Incorrectly Written Characters Appearing in Stele Inscriptions") to gain some appreciation of the seriousness of the problem at that time.

As heir to this chaotic situation, the Tang dynasty government paid especially close attention to the rectification of the script. Scholars also wrote works on this topic. (We have frequently cited above the *Gānlù zìshū*, which is one of the more important works of this type.) During the twenty-third year of the Kāiyuán era (735) of Emperor Xuánzōng (r. 712–755), the *Kāiyuán wénzì yīnyì* 開元文字音義 (now lost) was issued and is said to have played a major role in the unification of the standard script.

Beginning in the Song dynasty, thanks to the rigid requirements imposed by the development of the printing industry as well as the imperial examinations, graphic shapes continuously tended to become stabilized. By the modern era, in pace with further developments in the printing industry as well as the rise and spread of new educational institutions, this tendency became even more pronounced.

Aside from the problem of variant forms in Chinese script, there also exists the phenomenon of polygraphy. Since the Tang and Song dynasties, the tendency towards uniformity in the use of characters has become increasingly more evident (see Sec. 12.2.1).

The role played by governments in the unification of the script over the centuries cannot be underrated. However, the attitude of the ruling class of earlier times toward the script was usually rather conservative. It generally rejected popular simplified forms and was incapable of combining in a positive way the tasks of the unification and simplification of the script. Historically speaking, the simplification of Chinese script was primarily implemented spontaneously among the people.

Since the 1950s, the government has placed considerable stress on the task of reforming the script. On the one hand, it actively made preparations for the romanization of Chinese script, and, on the other, it undertook extensive systematization of the script, giving priority to the simplification of graphic forms and the abrogation of variant forms (i.e., variant forms in the broad sense).

In 1952, the Committee on Script Reform was established and began

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of the empire, for which reason we have not cited it in connection with the quote from the *Guǎnzǐ* above.

drafting a plan for the simplification of Chinese script. In January 1955, the Committee on Script Reform issued "A Draft Plan for the Simplification of Chinese Script" ("Hànzì jiǎnhuà fāng'àn cǎoàn," which included a draft list of the variant forms that were slated for abolition), and openly solicited the opinions of the public at large. After the draft was examined and revised by the State Council's Committee for Examining and Revising the Draft Plan for the Simplification of Chinese Script and revised again following discussions held at the National Conference on the Reform of the Script in October 1955, it was finally issued by the Committee on Script Reform in two formal documents titled "A List of the First Group of Consolidated Variant Graphs" ("Dìyī pī yìtǐzì zhěnglǐ biǎo") and "A Plan for the Simplification of Chinese Script" ("Hànzì jiǎnhuà fāng'àn"). The former was issued jointly by the Ministry of Culture and the Committee on Script Reform in December 1955, and the latter by the State Council in 1956.

"A List of the First Group of Consolidated Variant Graphs" contains 810 sets of variant forms and altogether 1,055 abrogated variant forms. (This list was issued separately by the Rénmín jiàoyù chūbǎnshè in February 1956.) In March 1956, the Committee on Script Reform and the Ministry of Culture once again jointly issued a supplementary notice, stipulating that the character "阪" *bǎn* would no longer be listed in the "坂" *bǎn* set, and that the character "挫" *cuò* would no longer be listed in the "銼" *cuò* set. Consequently, the number of abrogated variant forms totaled 1,053 (among which are a small number of graphs that were still used later on, such as the characters "凋" *diāo*, "蹚" *tāng*, etc., which were mentioned earlier).

In "A Plan for the Simplification of Chinese Script" (hereafter, "Plan"), 564 complex forms were simplified into 515 forms; it further provided for the simplification of 54 radicals. At times three complex forms were merged into one simplified form in the "Plan," so the total number of complex forms that were abolished exceeds the total number of simplified forms. Some proper graphs (*zhèngtǐ*) in "A List of Consolidated Variant Graphs" ("Yìtǐzì zhěnglǐ biǎo") such as "寶" *bǎo*, "備" *bèi*, etc. had already been treated as complex forms in the "Plan" and had been abolished. The simplified graphs and **ra**dicals presented in the "Plan" were put into use in four stages between 1956 and 1959. In March 1964, the the Committee on Script Reform, the Ministry of Culture, and the Ministry of Education jointly issued a notice which further stipulated that when 93 of the simplified graphs such as "爱" *ài*, "罢" *bà*, etc. are used as character components, they should likewise be simplified and that 46 of the simplified radicals such as "贝" *bèi*, "宾" *bīn*, etc. should likewise be simplified when used as independent graphs. During that same year the Committee on Script Reform printed *A Comprehensive List of Simplified Characters* (*Jiǎnhuàzì zǒngbiǎo*) based on the new regulations. Aside from the simplified forms

stipulated in the "Plan" these tables further included analogically simplified forms based on the simplified character components in general use, for a total of 2,238 graphs. (Since "须" *xū* and "佥" *qiān* appear in both the first and third tables, the actual number is 2,336 graphs. See Chén 1981:305.)

In addition to the abrogation of variant forms and simplification of the script, other tasks related to the systematization of the Chinese script were also undertaken.

From 1955 to 1964, as sanctioned by the State Council, rare characters appearing in the place names of over thirty-five counties were changed to homophonous or nearly homophonous common graphs; e.g., "闐" *tián* in 和闐 Hétián, 于闐 Yútián, etc. was changed to "田" *tián*; 鄱陽縣 Póyáng-xiàn was changed to 波陽縣, etc. (鄱 in 鄱陽湖 Póyánghú "Lake Poyang" was not changed. Place names in which characters were changed were to be read according to the original readings of the substitions, e.g., "波" in 波陽 was read *bó* and not like "鄱" *pó*.)

In January 1965, the Ministry of Culture and the Committee on Script Reform jointly issued "A List of the Printed Forms of Chinese Characters in Common Use" ("Yìnshuā tōngyòng Hànzì zìxíng biǎo"). This list prescribed the standard graphic shapes commonly used in printing (i.e., the Song style type) for 6,196 characters so as to make the printed forms conform as closely as possible to handwritten standard script forms. This in turn played a major role in the standardization of Chinese characters.

In August 1977, the Committee on Script Reform and the Bureau of National Standards drafted "A Partial List of Standard Forms Used as Measure Words" ("Bùfēn jìliàng dānwèi míngchēng tǒngyī yòngzì biǎo"), which abolished composite-type forms read as two syllables such as "瓩" (= 千瓦) *qiānwǎ* "1000 watts," "哩" *yīnglǐ* "English mile," "浬" *hǎilǐ* "nautical mile," and so forth.

In December 1977, the Committee on Script Reform issued "The Second Draft Plan for the Simplification of Chinese Script" ("Dìèrcì Hànzì jiǎnhuà fāng'àn [cǎoàn]"). This draft simplified 1,116 complex forms into 853 simplified forms. If analogically obtained forms are not counted, altogether it contains 462 simplified graphs. Forty-five of them can serve as simplified graphic components, in addition to another 16 simplified graphic components which cannot stand alone as graphs, making a total of 61 simplified graphic components. After this draft was put into use on a trial basis, numerous complaints about every aspect of it were voiced. Consequently, the Committee on Script Reform in July 1980 established a committee to review and revise the the second draft plan.

In 1985, the Committee on Script Reform was changed to the National Working Committee on Language and Writing (usually called the Language Committee for short). In June 1986, the State Council sent the Language Committee a directive titled "Concerning the Abrogation of 'The Second Draft Plan for the Simplification of Chinese Script' and the Rectification of the Chaotic Use of Characters in Society," which proclaimed the abolition of the second draft plan and further stated, "From now on, caution must be exercised where simplification of the script is concerned, so as to enable the graphic forms of Chinese script to remain relatively stable for a period of time and in turn facilitate their use by society."

In October 1986, the Language Committee issued a new edition of *A Comprehensive List of Simplified Characters*, which stipulated that "叠", "覆", "像", and "囉" would no longer be simplified as "迭", "复", "象", and "罗", respectively (however, "囉" would continue to be written with the simplified element 罗, or as "啰"; and "瞭", when read *liào* as in 瞭望 *liàowàng* "look down from a higher place," would no longer be simplified as "了").

In March 1988, the Language Committee and the News Publication Commission jointly issued *A List of Modern Chinese Characters in Common Use* (*Xiàndài Hànyǔ tōngyòngzì biǎo*). Some 7,000 characters comprise the list, and it contains additions and deletions to "A List of the Printed Forms of Chinese Characters in Common Use."

The newly issued version of *A Comprehensive List of Simplified Characters* and *A List of Modern Chinese Characters in Common Use* contain the standard written forms of Chinese characters presently used in China.

Plates

Fig. 1

A B C D

Fig. 2

A B C D

E

Fig. 3

A

B

Fig. 4

Fig. 5

Fig. 6

(front)

(back)

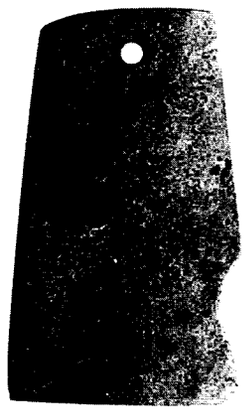
Fig. 7

A

B

Fig. 8

Fig. 9



A

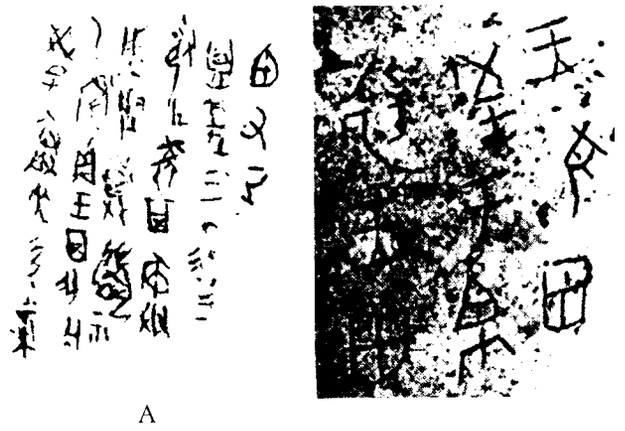
B

C

Fig. 10

Fig. 11

Fig. 12



A

B

Fig. 13

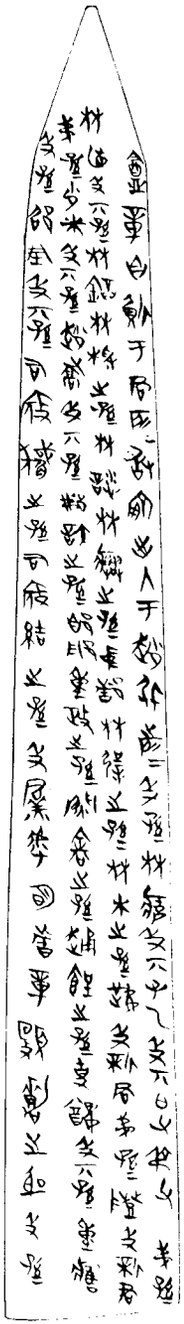
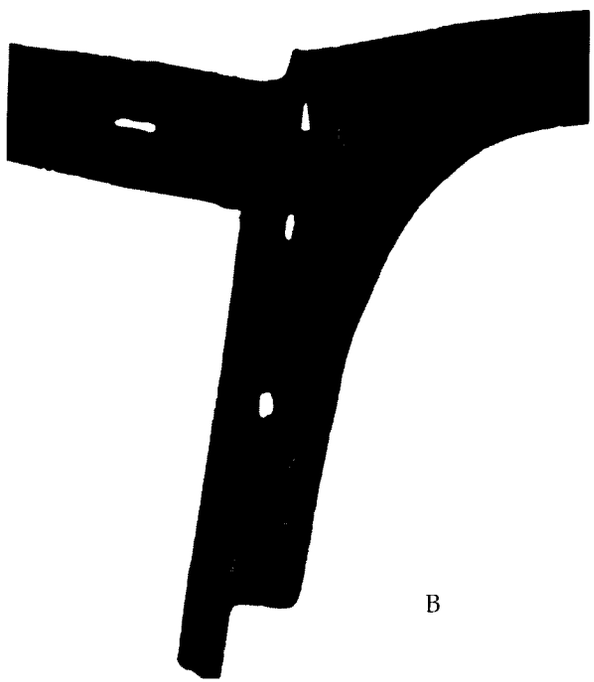


Fig. 14

Fig. 15

A



B

Fig. 16

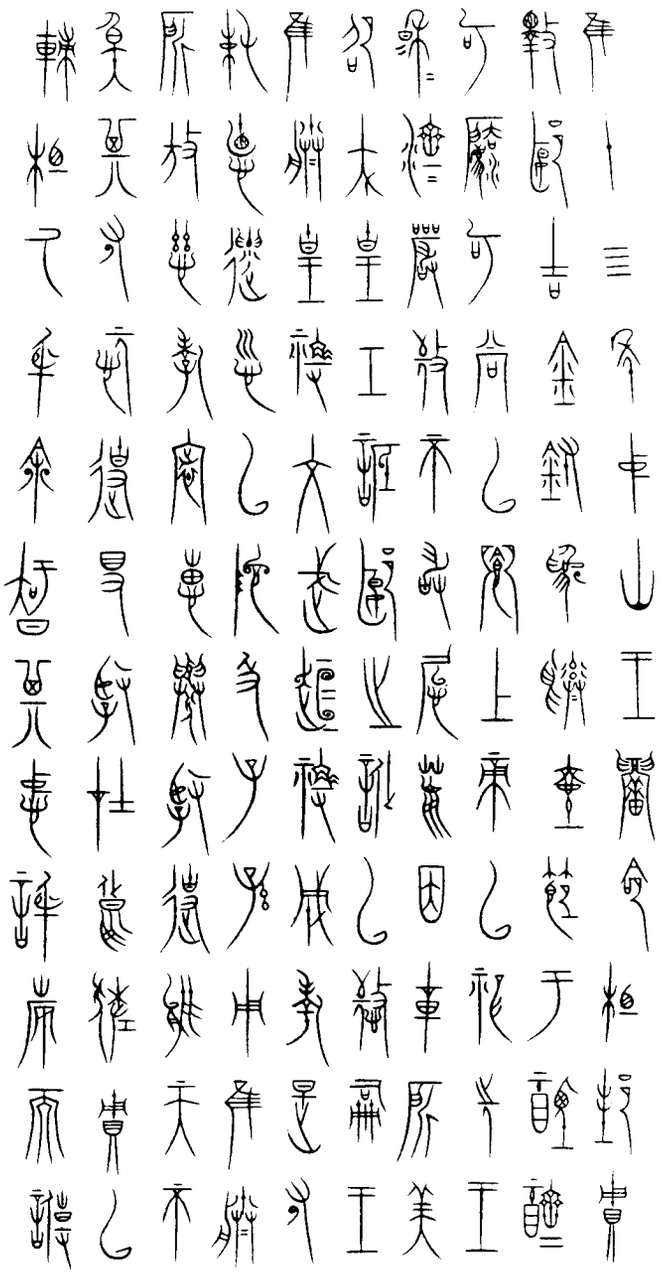
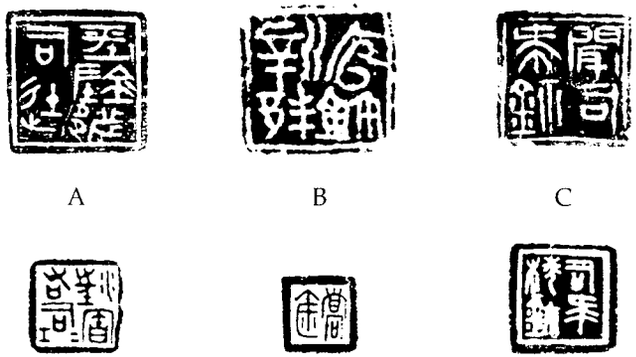


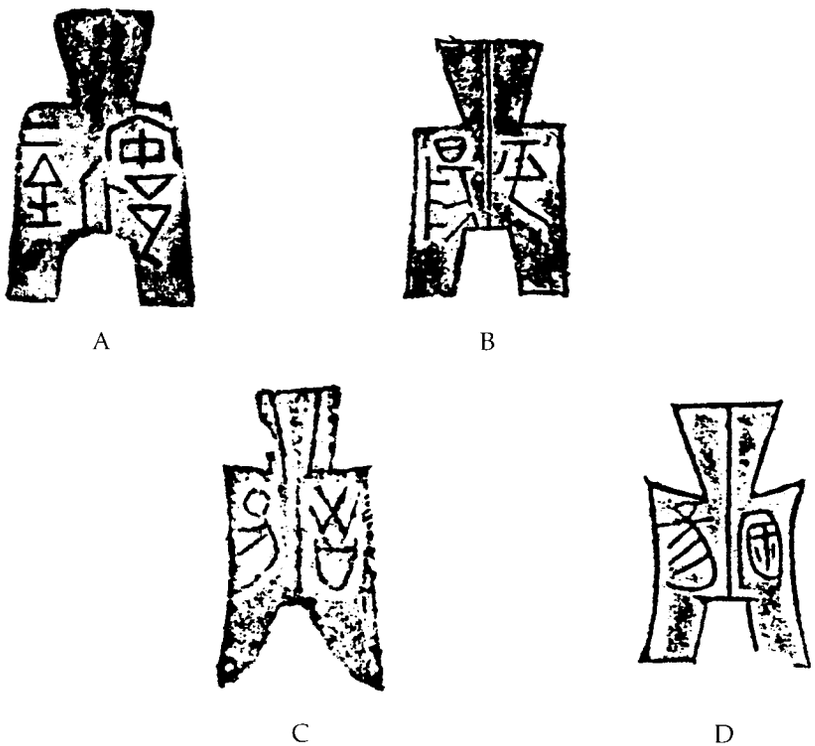
Fig. 17



A B C

D E F

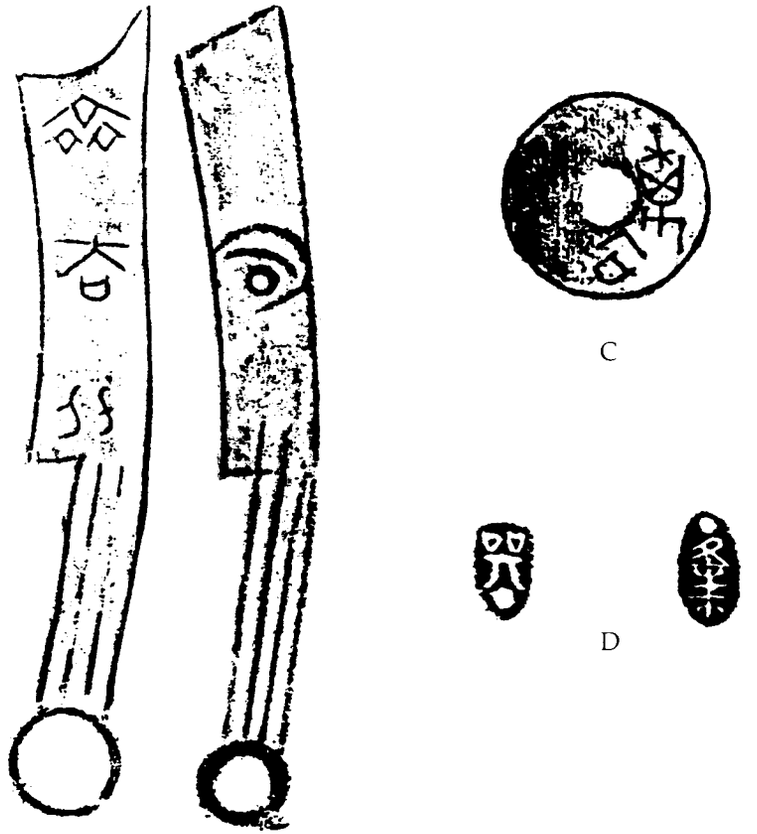
Fig. 18



A B

C D

Fig. 19



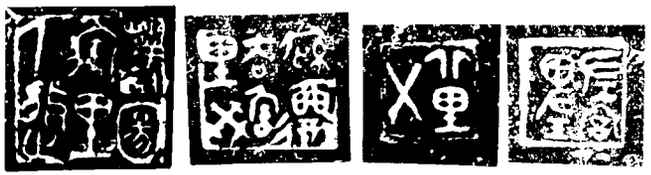
A B

C

D

E

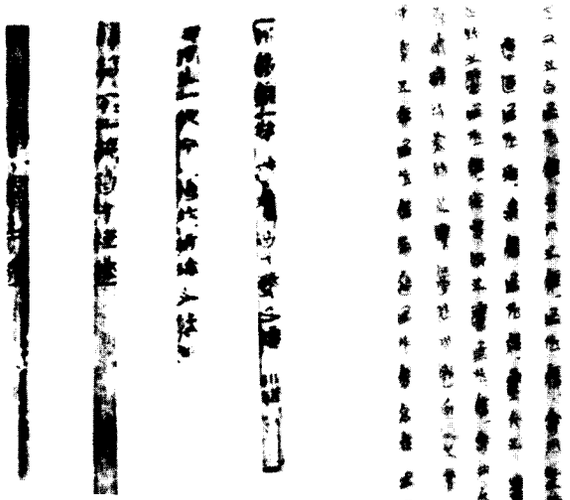
Fig. 20



A B C D

E F G H

Fig. 21



A

B

Fig. 22

Fig. 23

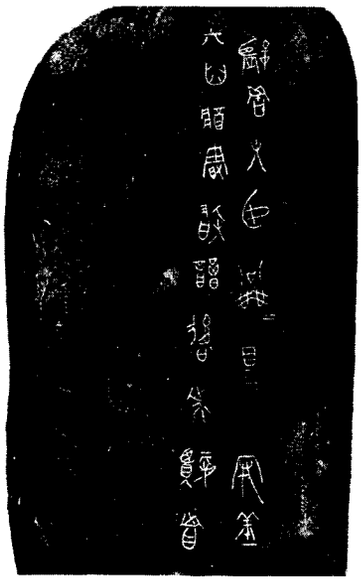


Fig. 24

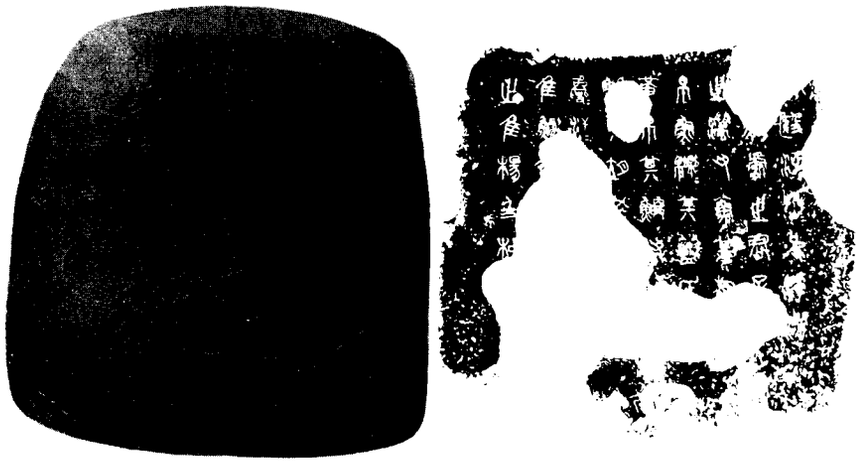
Fig. 25

Fig. 26

Fig. 27

Fig. 28

Fig. 29



A

B

Fig. 30

Fig. 31

Fig. 33

Fig. 32

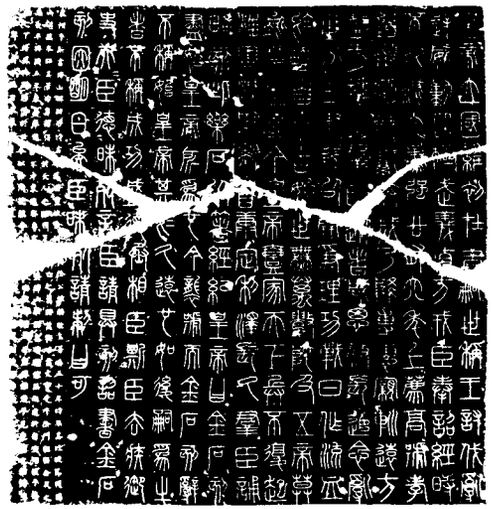
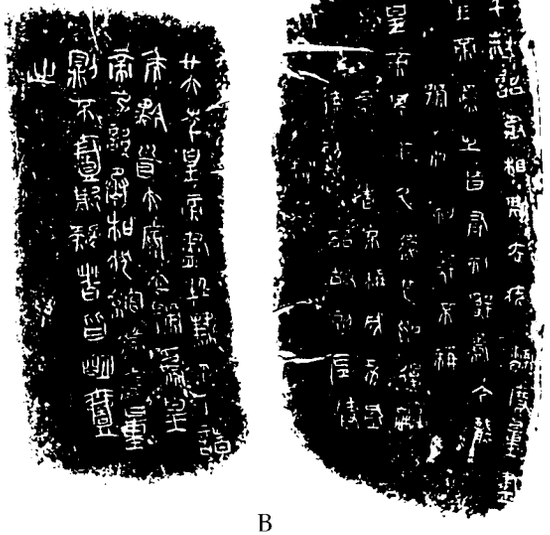


Fig. 34

Fig. 36

A



B

Fig. 35

Fig. 37

Fig. 38

A

B

C

D

E

F

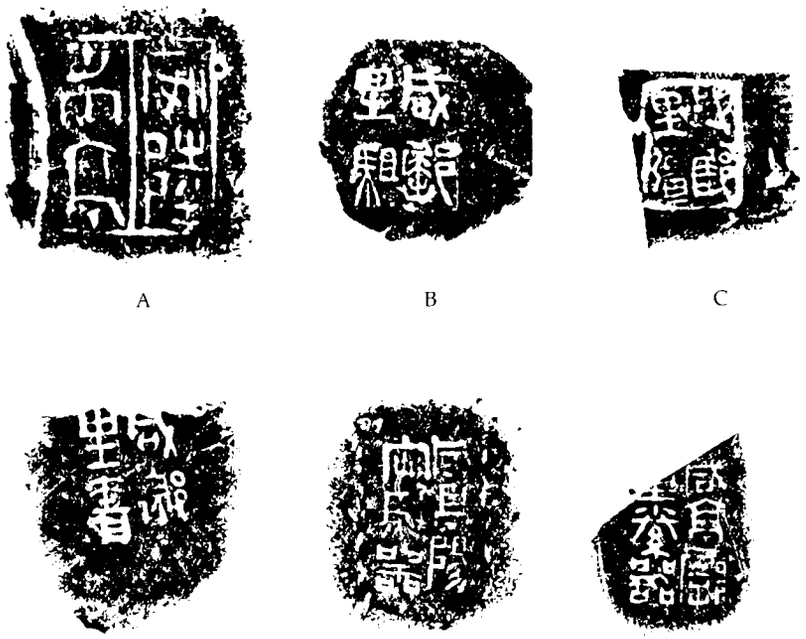
G

H

Fig. 39

A B C

Fig. 40



A B C

D E F

Fig. 42

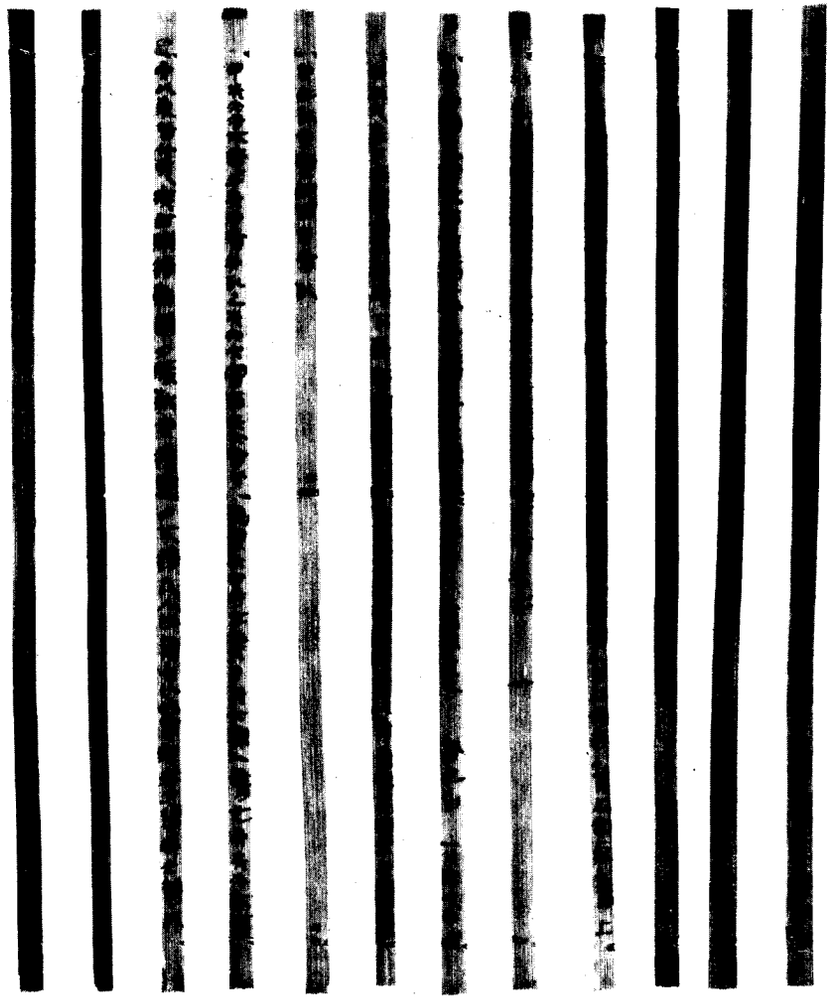


Fig. 41

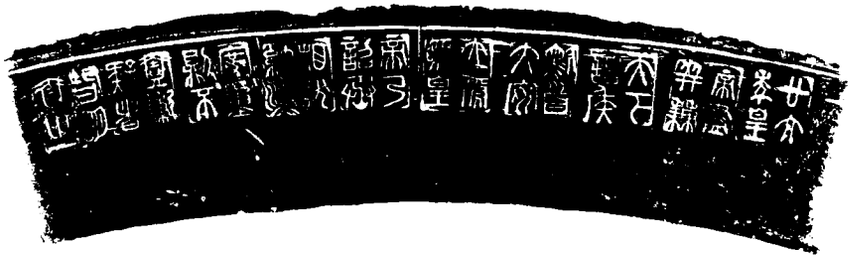


Fig. 43

A

B

Fig. 44

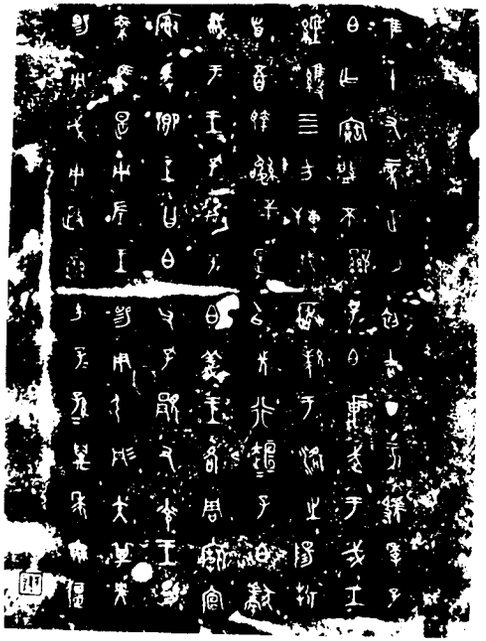


Fig. 45

A

Fig. 46

B

Fig. 47

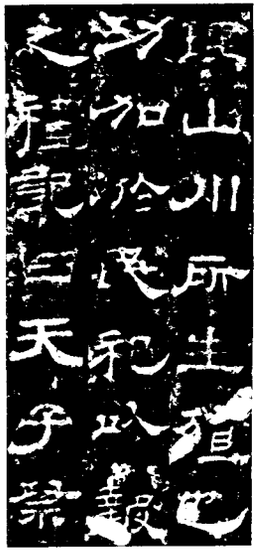
A

B

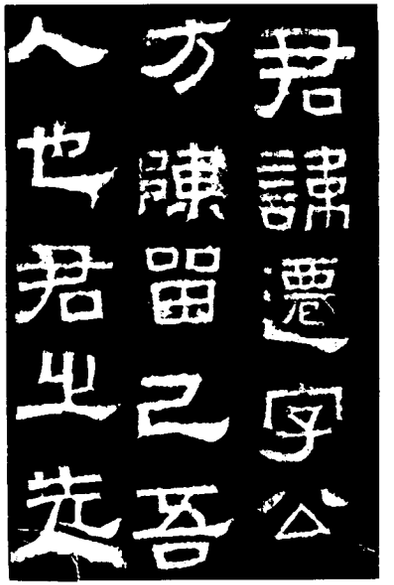
C

D

Fig. 48



A

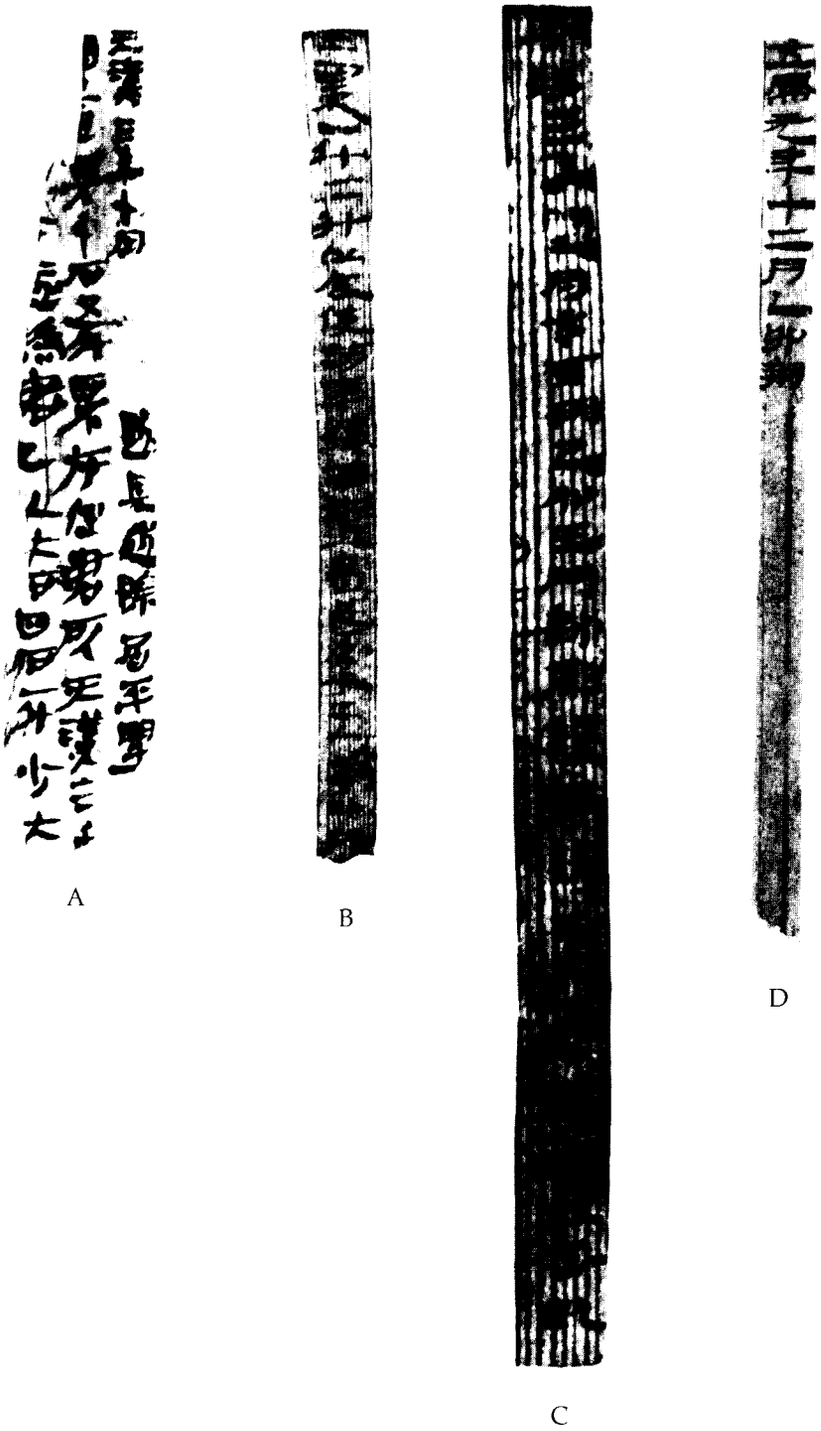


C

B

D

Fig. 49



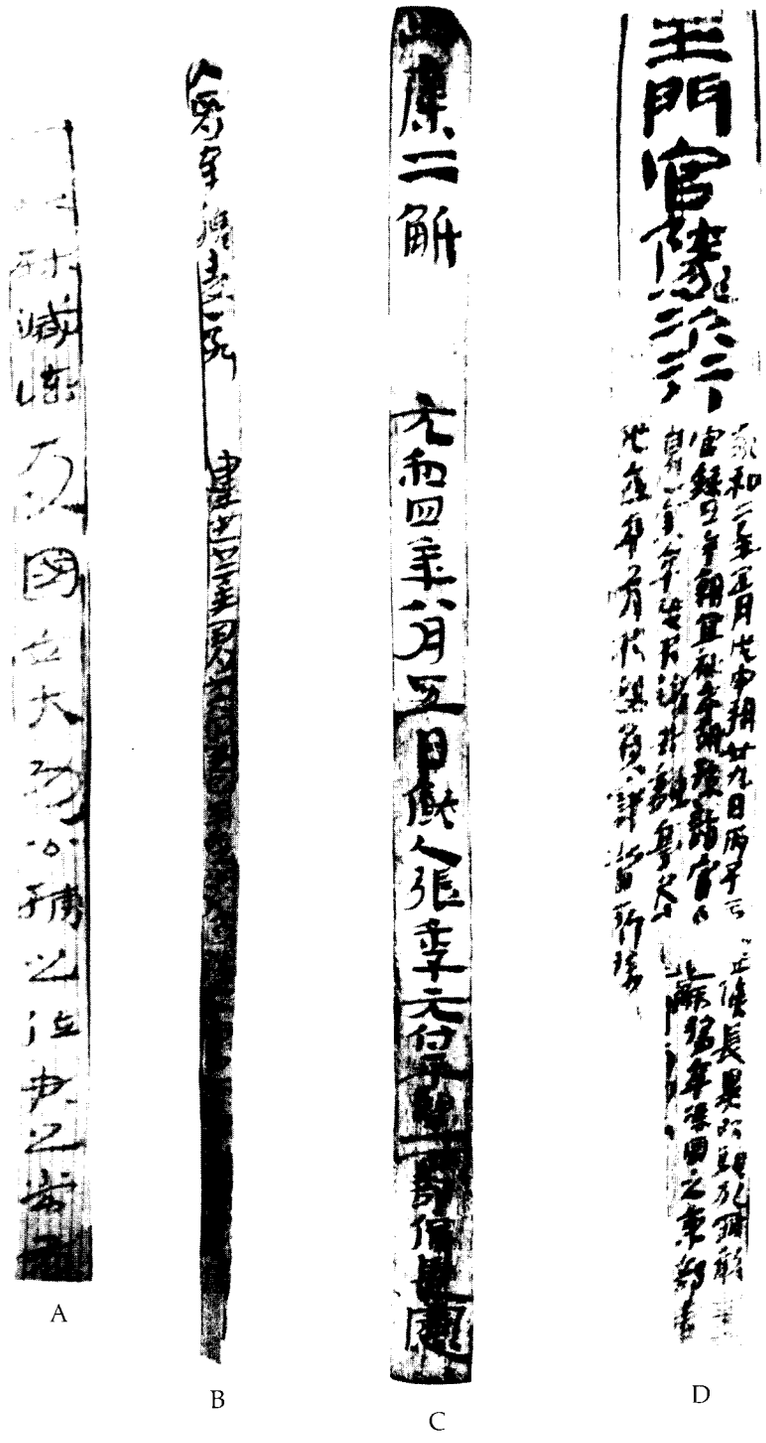
A

B

C

D

Fig. 50



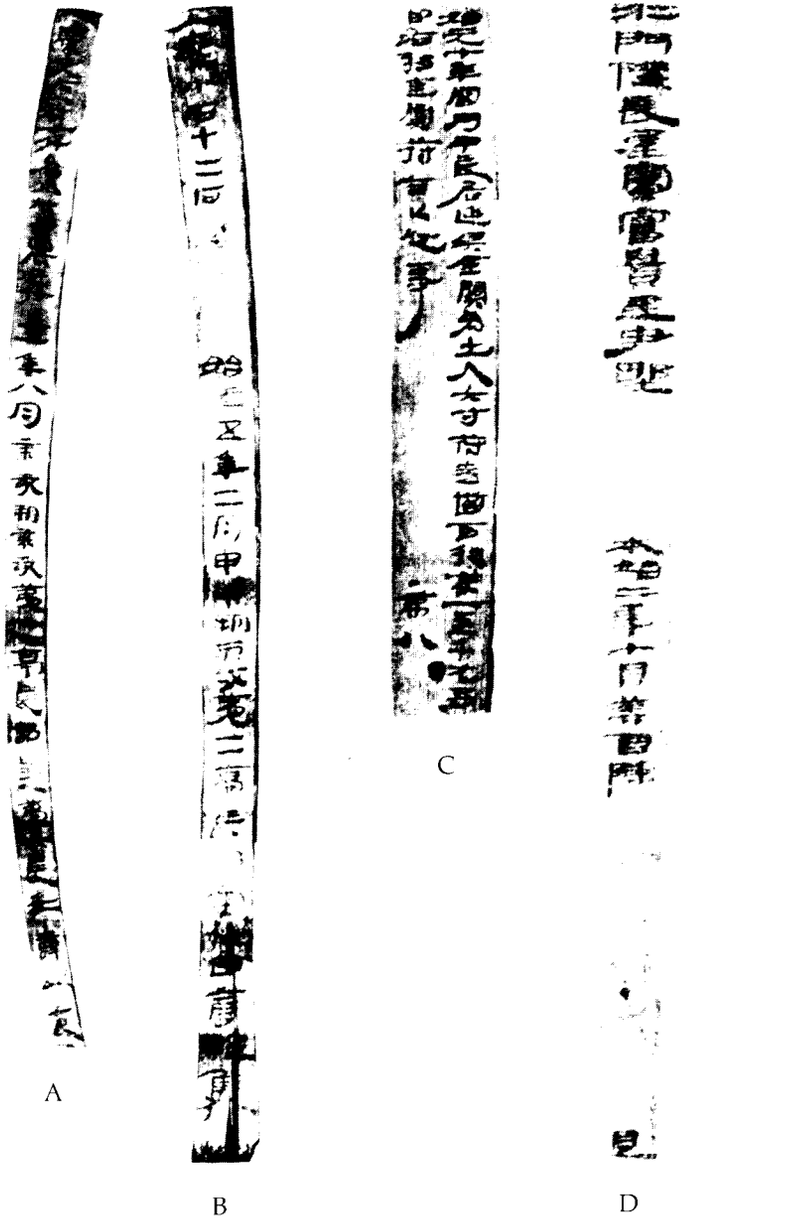
A

B

C

D

Fig. 51



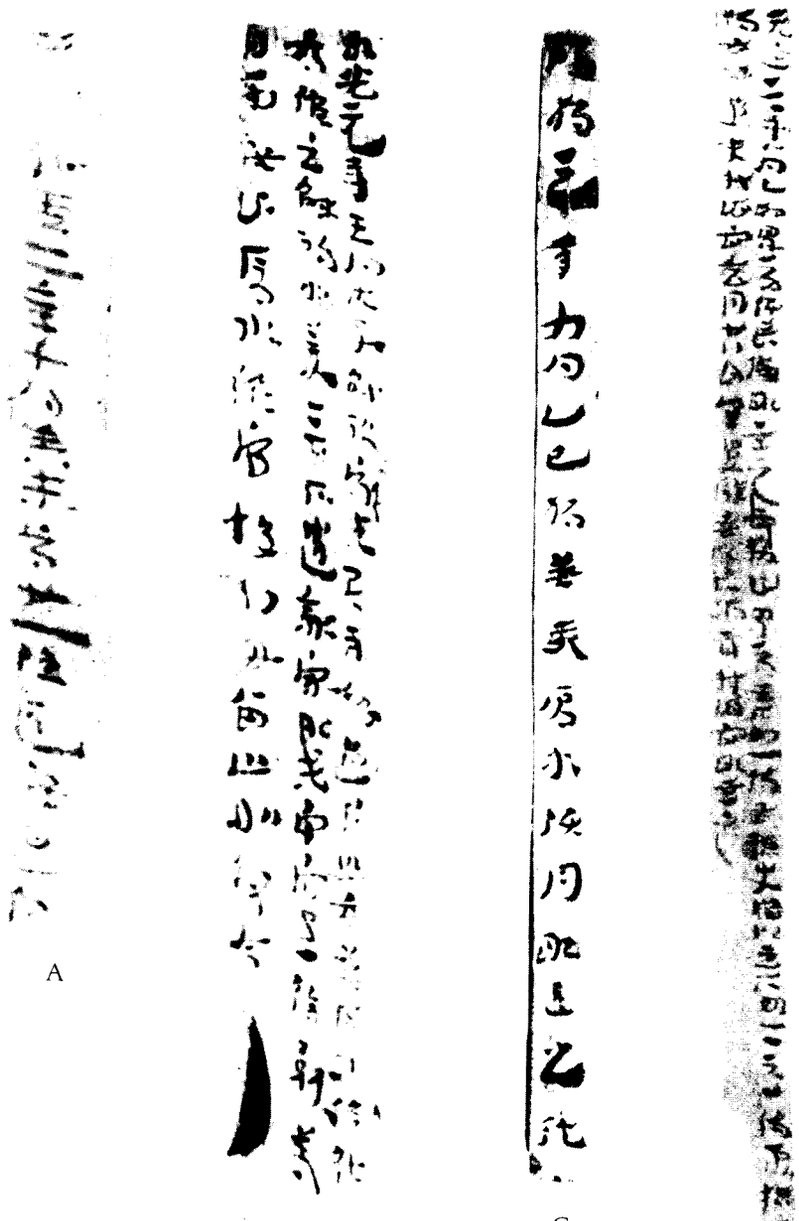
A

B

C

D

Fig. 52



A

B

C

D

Fig. 53

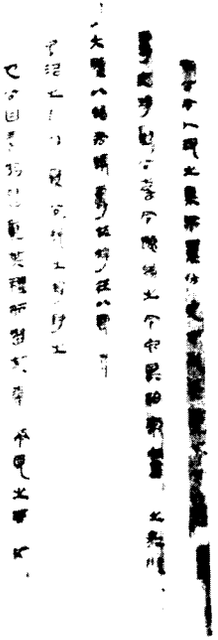


Fig. 54

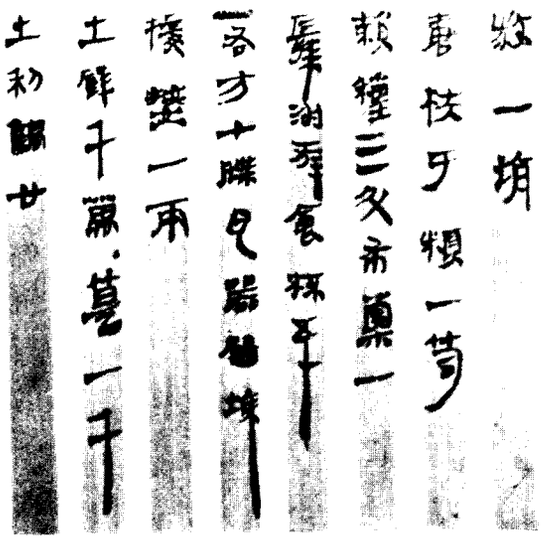
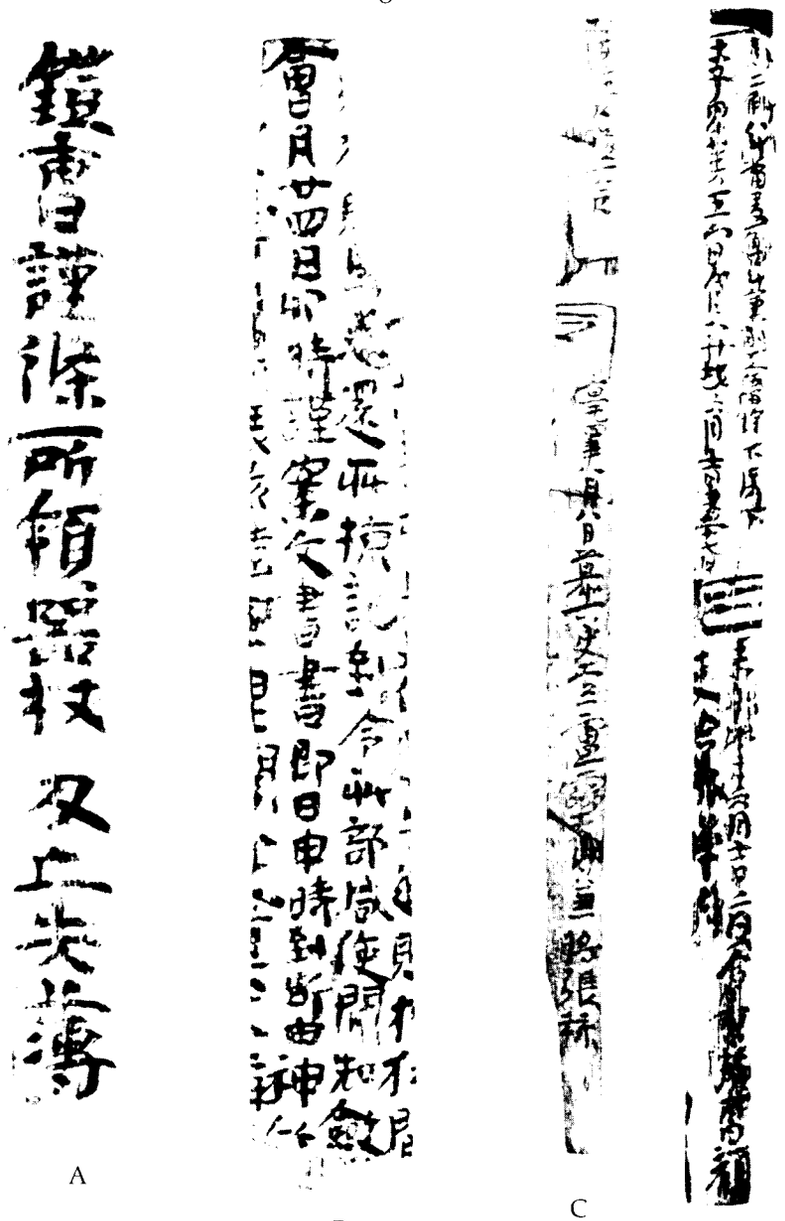


Fig. 55



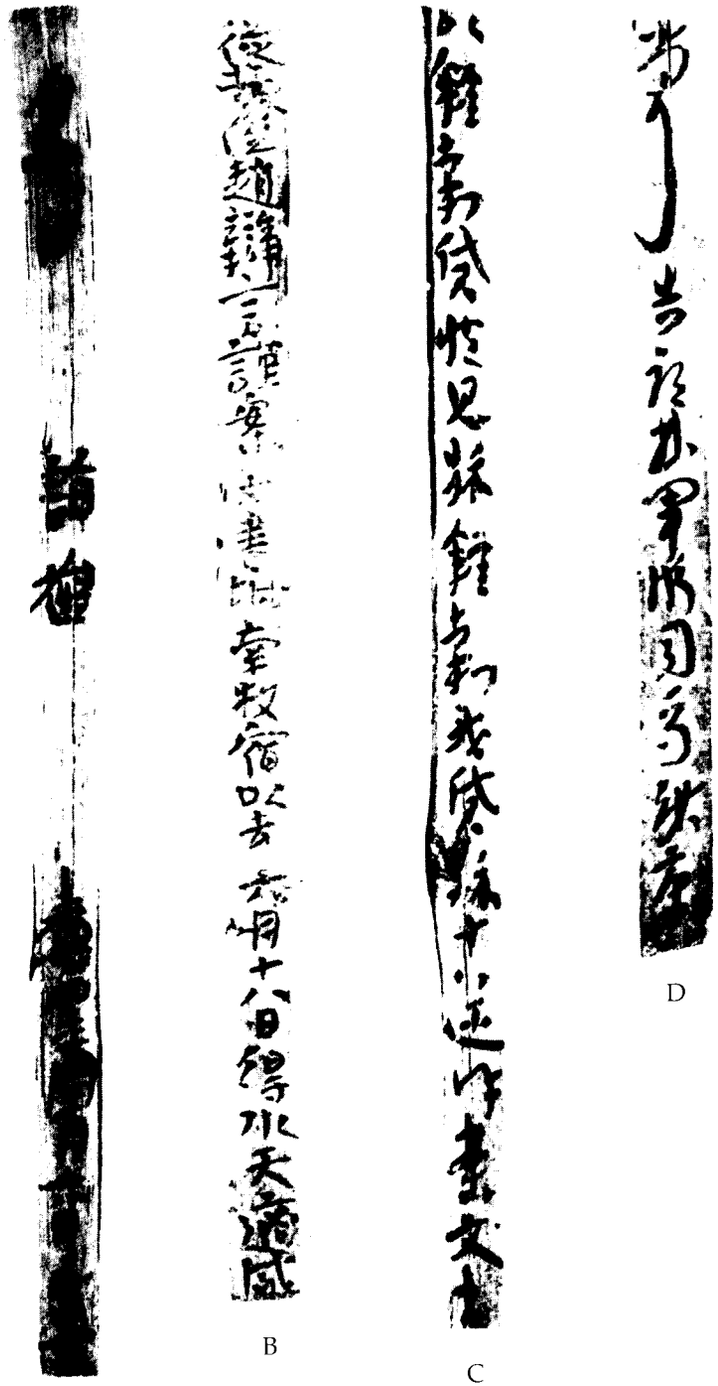
A

B

C

D

Fig. 56



A

B

C

D

Fig. 57

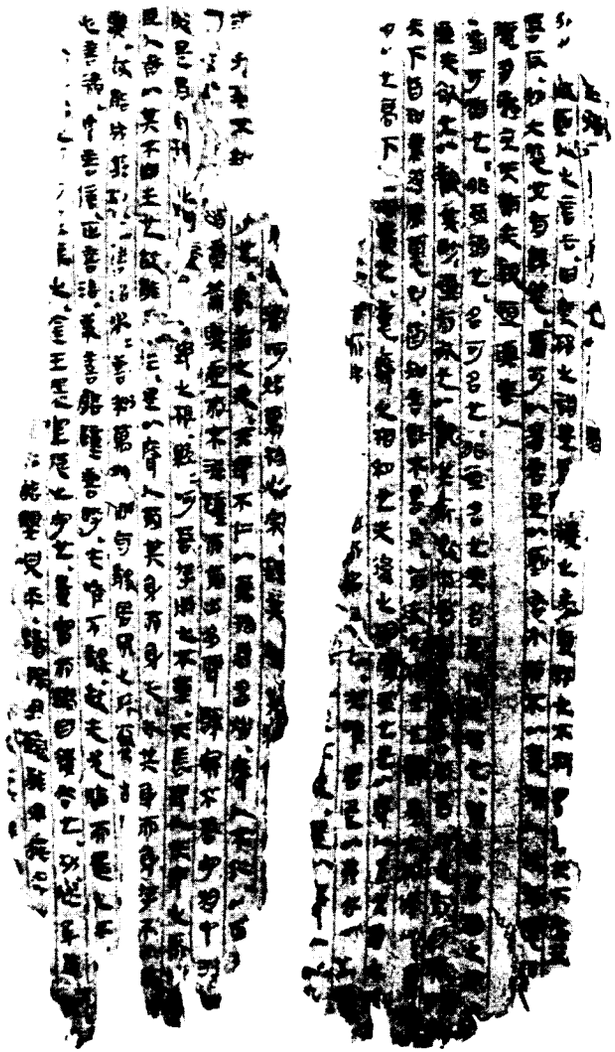
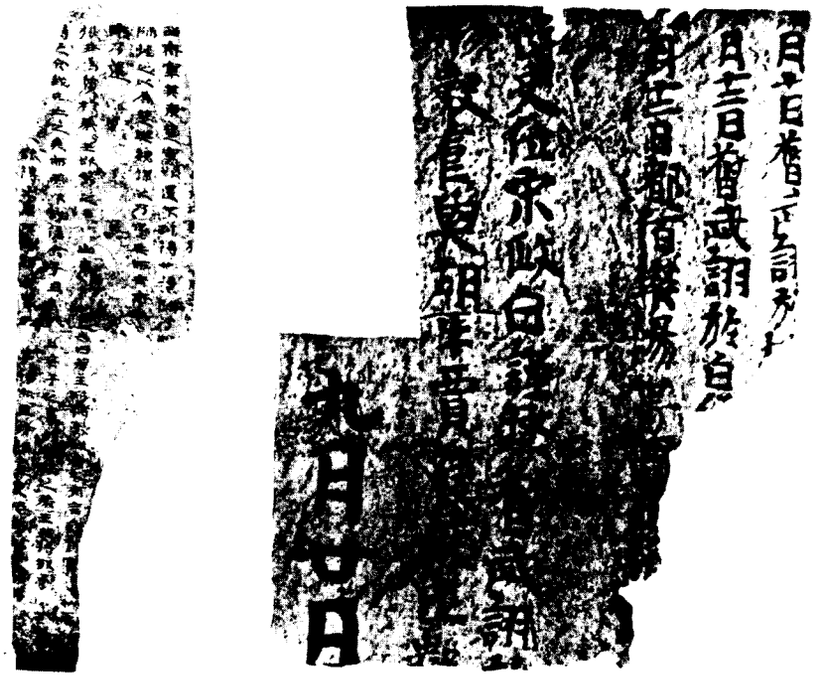


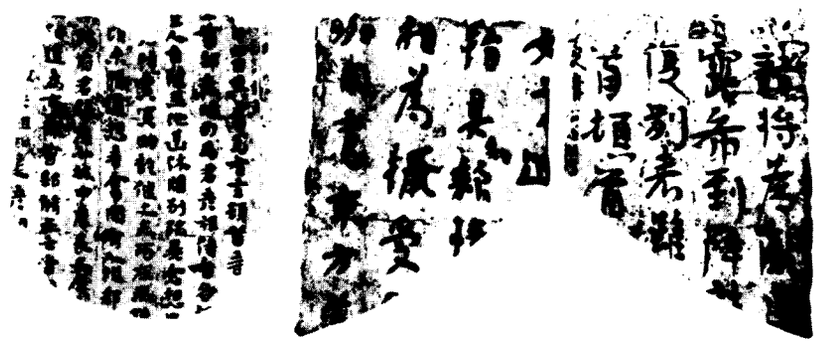
Fig. 58

Fig. 59



A B

Fig. 60



A B

Fig. 62

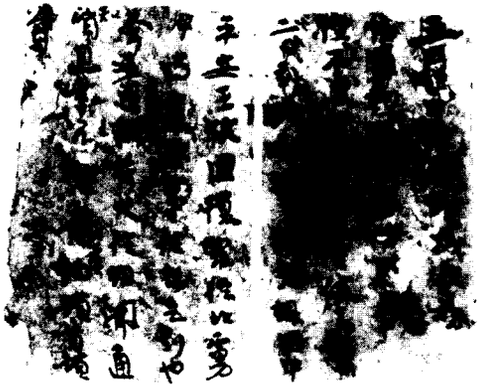
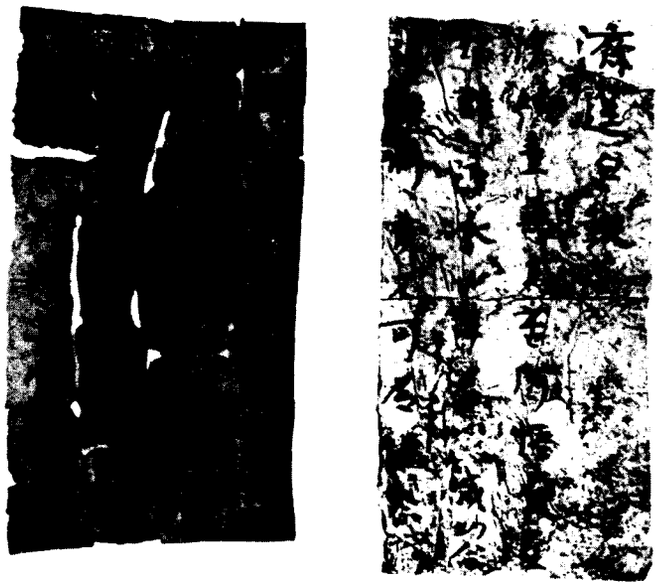


Fig. 61



A

B

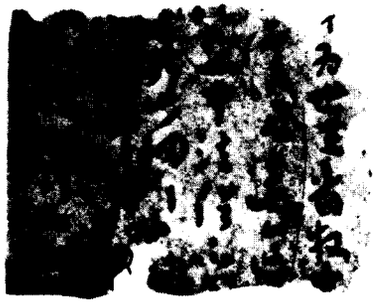
Fig. 63

Fig. 64

Fig. 65

A

B



C

Fig. 66

Fig. 69

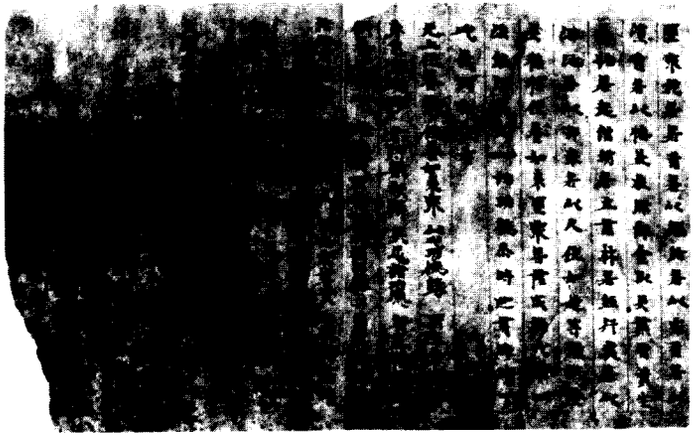


Fig. 67

Fig. 68

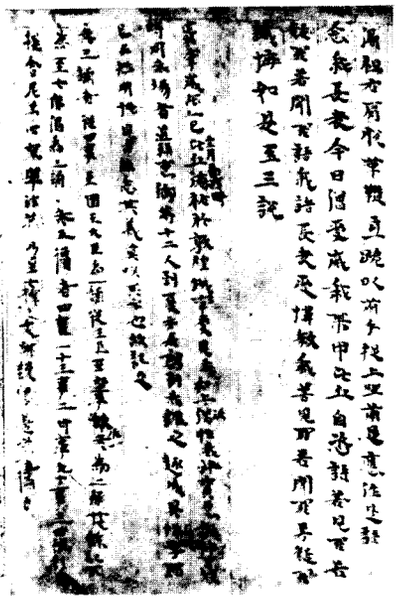
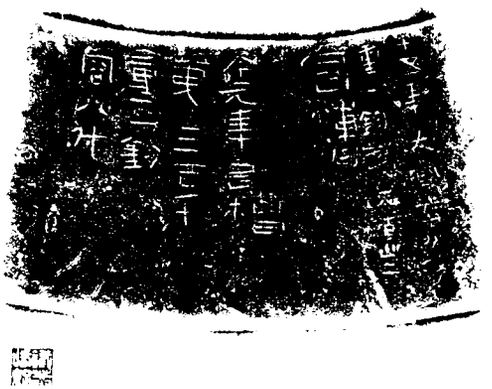


Fig. 70



A

B

Fig. 71

A

B

C

Fig. 105

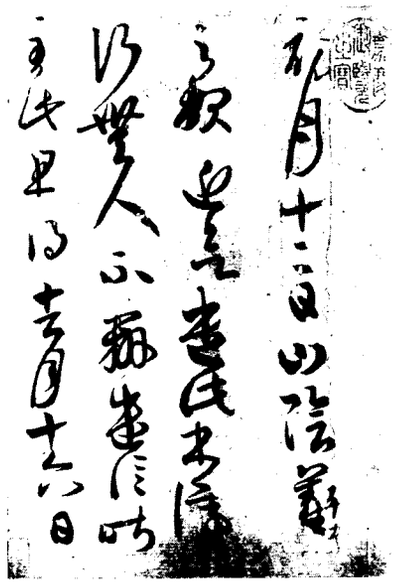


Fig. 106

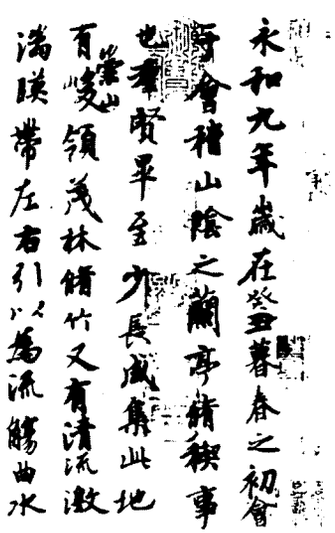
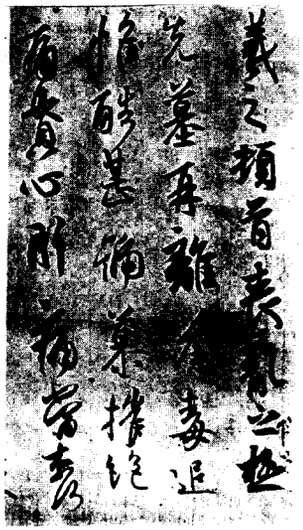


Fig. 107



Glossary

A. English-Chinese

abbreviated phonetic	shěngshēng	省聲
abbreviated signific	shěngxíng	省形
abstract graph	chōuxiàngzì	抽象字
abstract representations	chōuxiàng de xiàng xíng fúhào	抽象的象形符號
abstract symbol	chōuxiàng de xíngfú	抽象的形符
allograph, variant, alternate way of writing	yìtǐ (zì)	異體 (字)
altered graph	biàntǐzì	變體字
alternate concentration of functions between two graphs	liǎngge zì de zhíwù de jiāohù jízhōng	兩個字的職務的交互集中
alternate form, variant form	huòtǐ	或體
alteration of phonetic symbols	gǎihuàn yīnfú	改換音符
alteration of semantic symbols	gǎihuàn yìfú	改換意符
ancient and modern forms/graphs	gǔjīnzì	古今字
ancient script form	gǔwén	古文
binome	shuāngyīnjiécí	雙音節詞
borrowed graph, borrowing	tōngjiǎzì	通假字
borrowed meaning	jiǎjièyì	假借義
borrowing of both the sound and form of the borrowed graph	xíngyīn jiān jièzì	形音兼借字
borrowing of graphic shape	xíngjiè	形借
bronze clan inscription	zúhuī jīnwén	族徽金文
bronze clan name	zúmíng jīnwén	族名金文
Chinese characters in common use	tōngyòng Hànzì	通用漢字
Chinese characters in general use	shǐyòng de Hànzì	使用的漢字
clan emblem	zúhuī	族徽
classifier	lèifú	類符

clerical script	lìshū	隸書
close in pronunication	yīn jìn	音近
cognate	tóngyuáncí	同源詞
complex pictorial graph	fùzá xiàngwùzì	復雜象物字
component, element	páng	旁
composite graph/character	hétǐzì	合體字
compound graph	héwén	合文
concentration of lexical functions	wénzì zhíwù de jízhōng	文字職務的集中
concurrently polyphonic and polysemic forms	yìxíng(zì) duōyīnyì	一形(字)多音義
consolidation of variant forms	yìtǐzì zhěnglǐ	異體字整理
conventional form	xíyòngzì	習用字
corruption	ébiàn	訛變
current forms	tōngxíngzì	通行字
dedicated form	zhuānyòngzì	專用字
deformation of phonetics	shēngpáng de pòhuài	聲旁的破壞
deictic	zhǐshì	指事
deictic graph, deictograph	zhǐshìzì	指示字
deictic symbol	zhǐshì fúhào	指示符號
derivational relationship	zàozì xiāng chéng de guānxi	造字相承的關系
derivation of new words	pàishēng xīncí	派生新詞
derivate, derived form	pàishēngcí	派生詞
determinative	dìngfú	定符
differentiated graph/form	fēnhuàzì	分化字
differentiation	fēnhuà	分化
differentiation of graphic forms	zìxíng fēnhuà	字形分化
different graphs sharing the same graphic shapes	yìzì tóngxíng	異字同形
dispersal of the lexical loads of graphs	fēnsàn wénzì zhíwù	分散文字職務
dispersal of the lexical loads of polysemic graphs	fēnsàn duōyìzì zhíwù	分散多義字職務
distribution of lexical loads among allographs	yìtǐzì fēngōng	異體字分工
disyllabic	shuāngyīncí	雙音詞
disyllabic compound	shuāngyīnjié fùhécí	雙音節復合詞
disyllabic morpheme	shuāngyīnjié yǔsù	雙音節語素
disyllabic reduplicative phrase	diézì shuāngyīncí	疊字雙音詞
emblem	túxíng	圖形
etymology	yǔyuán	語源
etymon	mǔcí	母詞
extended meaning/sense	yǐnshēnyì	引申義

free morpheme	dāndúcí	單獨詞
fully integrated writing system	wánzhěng de wénzì tǐxì	完整的文字體系
grammatology	wénzìxué	文字學
graphic abbreviation	shěnglüè piānpáng zìxíng	省略偏旁字形
graphic borrowing	jiǎjiè yòngfǎ	假借用法
graphic component	piānpáng	偏旁
graphic consolidation	wénzì de hébìng	文字的合并
graphic derivates	wénzì zǐrǔ	文字孳乳
graphic form	zìtǐ	字體
graphic form, graphic shape	zìxíng	字形
graphs having multiple uses	yízì duōyòng	一字多用
graphic loans	wénzì jiǎjiè	文字假借
graphic symbol	wénzì fúhào	文字符號
graphic symbol	zìfú	字符
historically interchangeable graphs	lìshǐ tōngyòngzì	歷史通用字
homography/homograph	tóngxíngzì	同形字
homophone	tóngyīnzì	同音字
homophonous cognates	tóngyīn de tōngyuáncí	同音的同源詞
homophonous or nearly homophonous graph	tóngyīn huò yìnjìn de zì	同音或音近的字
homophonous speller	zhíyīn	直音
iconograph	tú	圖
identification mark	biāojì	標記
identificational inscription	jìmíng jīnwén	記名金文
ideographic writing	biǎoyì wénzì	表意文字
indiscriminate interchange	bǐcǐ húnyòng	彼此混用
interchange of phonetics	shēngpáng de dàihuàn	聲旁的代換
interchange of significs	xíngpáng de dàihuàn	形旁的代換
interchangeable graphs	tōngyòngzì	通用字
late semanto-phonetic script	hòuqī yì(fú) yīn(fú) wénzì	後期意(符)音(符)文字
lexical meaning, a word's meaning	cíyì	詞意
linearization	xiàntiáohuà	線條化
loaned phonetic symbols	jièyīnfú	借音符
loangraph, jiajie, borrowing	jiǎjiè	假借
matrigraph	mǔzì	母字
mature standard script	chéngshú de kǎishū	成熟的楷書
meaning	yìyì	意義
modern form/graph	jīnzì	今字
monosyllabic morpheme	dānyīnjié yǔsù	單音節語素
morphemes with the same graphic form	tóngxíng yǔsù	同形語素
morphemic graph	yǔsùzì	語素字

morphemic symbol	yǔsù de fúhào	語素的符號
morphemic writing/script	yǔsù wénzì	語素文字
morphemo-syllabic script/writing	yǔsù—yīnjié wénzì	語素——音節文字
multi-functional graph	yízì duōzhí	一字多職
multiple phonetics	duōshēng	多聲
multiple semantic components	duōxíng	多形
mutual exchange of lexical functions	zhíwù hùyì	職務互易
neo-clerical script	xīnlìtǐ	新隸體
new derived form	pàishēngchū xīncí	派生出新詞
new graph, later form, younger graph	hòuqǐzì	後起字
non-composite characters	dútǐzì	獨體字
non-phonetic type characters	fēi xíngshēng jiégòu	非形聲結構
non-syssemantic	fēi huìyìzì	非會意字
numerical symbols	jìshù fúhào	記數符號
one syllable ending in a nasal and the other in a non-nasal	yīnyáng duìzhuǎn	陰陽對轉
original meaning	běnlái yìyì	本來意義
original meaning, original sense	běnyì	本義
orthograph	běnzì	本字
phonemic script	yīnsù wénzì	音素文字
phonetic	shēngpáng	聲旁
phonetic, phonetic symbol/element	yīnfú	音符
phonetic component	biǎoyīn piānpáng	表音偏旁
phonetic script	pīnyīn wénzì	拼音文字
phonetic symbol	biǎoyīn fúhào	表音符號
phonetic symbol, phonetic	zhùyīnfú	注音符
phonogram	xíngshēngzì	形聲字
phonogram, phonetic letters	biǎoyīnzì	表音字
phonological borrowing, borrowing	tōngjiǎ	通假
phonological variation	shēngyùn tōngzhuǎn	聲韻通轉
phonology	yǔyīn	語音
pictograph	xiàngxíngzì	象形字
pictographic	xiàngxíng	象形
pictographic aspect	túhuà yìwèi	圖畫意味
pictographic protoform	xiàngxíng chūwén	象形初文
pictographic sense	túxíng yìwèi	圖形意味
pictographic symbol	xiàngxíng fúhào	象形符號
pictographic symbol	xíngfú	形符
pictorial	túxíngshì	圖形式
pictorial graph	xiàngwùzì	象物字
pictorial semantogram	túxíngshì biǎoyìzì	圖形式表意字
pictorial syssemantograph	túxíngshì huìyìzì	圖形式會意字
picture, pictorial representation	túhuà	圖畫

polygraphy	yìcí duōxíng	一詞多形
polysemic graph	duōyìzì	多義字
polysyllabic	duōyīncí	多音詞
popular character, vulgarism	súzì	俗字
popular form, vulgar form	sútǐ	俗體
popular orthograph	súběnzì	俗本字
popular script	tōngsú wénzì	通俗文字
primitive meaning	yuánshǐ de yìyì	原始的意義
primative writing	yuánshǐ wénzì	原始文字
pronunciation of characters	zìyīn	字音
proper graph	zhèngzì	正字
protoform	chūwén	初文
purely phonetic element	chún yīnfú	純音符
quasi-allographs	bùfēn yìtǐzì	部分異體字
quasi-composite characters	zhǔnhétǐzì	準合體字
quasi-composite semantograph	zhǔnhétǐ biǎoyìzì	準合體表意字
quasi-pictorial graph	xiàngshìzì	象事字
radical	bù	部
reading and meaning	yīnyì	音義
reading, pronunciation	dúyīn	讀音
scholars of the script, grammatologist; students of the script	wénzìxuézhě	文字學者
seal script	zhuànwén	篆文
segmentation of graphs into strokes	bǐhuàhuà	筆畫化
semantic	zìyì	字義
semantic component	biǎoyì piānpáng	表意偏旁
semantic extension	yǐnshēn	引申
semantic extension	yǔyì yǐnshēn	語義引申
semantic symbol	biǎoyì fúhaò	表意符號
semantic symbol	yìfú	意符
semantograph	biaǒyìzì	表意字
semantographic protoform	biaǒyì chūwén	表意初文
semantographic symbol	yìfú	義符
semanto-phonetic script	yìfú yīnfú wénzì	意(符)音(符)文字
semanto-phonetic-sign script	yìfú yīnfú jìhào wénzì	意符音符記號文字
semantophoric phonetic, semanto-phoric phonogram, phonetics that convey meaning	yǒuyì de shēngpáng	有意的聲旁
semi-semantograph	bànjìhào bànbiǎoyìzì	半記號半表意字
semi-sign (character)	bànjìhàozì	半記號字
semi-sign and semi-phonogram	bàn jìhào bàn biaǒyīn zì	半記號半表音字
sign	jìhào	記號
sign, sign graph	jìhàozì	記號字

significic, semantic component	xíngpáng	形旁
significic, semantic symbol	zhùyìfú	注意符
simplification of Chinese script	Hànzì jiǎnhuà	漢字簡化
simultaneously syssemantic and phonetic compound graph	huìyì jiān xíngshēngzì	會意兼形聲字
simultaneously a phonetic and a significic, phonetic symbols which are concurrently semantic symbols	yīnfú jiān yìfú	音符兼意符
six principles theory of Chinese script	liùshū shuō	六書說
standard form	zhèngtǐ	正體
standard script	kǎishū	楷書
syllabic script	yīnjié wénzì	音節文字
syllabograms	yīnjié fúhaò	音節符號
symbol	fúhào	符號
synonymic interchange	tógyì huàndú	同義換讀
syssemantograph	huìyìzì	會意字
three principles theory of Chinese script	sānshū shuō	三書說
transitional writing	guòdù wénzì	過度文字
Tri-script Stone Classics	Sāntǐ shíjīng	三體石經
trisyllabic morpheme	sānyīnjié yǔsù	三音節語素
variant forms associated with different writing traditions	chóngwén	重文
variant forms of a single graph	yízì yìtǐ	一字異體
wordbook	zìshū	字書
word writing	cí wénzì	詞文字
word-syllabic writing/script	cí—yīnjié wénzì	詞——音節文字
writing system	wénzì tǐxì	文字體系
younger orthograph	hòuqǐ běnzì	後起本字

B. Chinese-English

bànjìhào bànbiǎoyìzì	半記號半表意字	semi-semantogram
bàn jìhào bàn biǎoyīn zì	半記號半表音字	semi-sign and semi-phonogram
bànjìhàozì	半記號字	semi-sign (character)
běnlái yìyì	本來意義	original meaning
běnyì	本義	original meaning, original sense
běnzì	本字	orthograph
biàntǐzì	變體字	altered graph
biāojì	標記	identification mark
biǎoyì chūwén	表意初文	semantographic protoform
biǎoyì fúhào	表意符號	semantic symbols
biǎoyì piānpáng	表意偏旁	semantic component

biǎoyì wénzì	表意文字	ideographic writing
biǎoyìzì	表意字	semantogram
biǎoyīn piānpáng	表音偏旁	phonetic component
biǎoyīn fúhào	表音符號	phonetic symbol
biǎoyīnzì	表音字	phonogram, phonetic letters
bǐcǐ húnyòng	彼此混用	indiscriminate interchange
bǐhuàhuà	筆畫化	segmentation of graphs into strokes
bù	部	radical
bùfēn yìtǐzì	部分異體字	quasi-allographs
chéngshú de kǎishū	成熟的楷書	mature standard script
chóngwén	重文	variant forms associated with different writing traditions
chōuxiàng de xiàng xíng fúhào	抽象的象形符號	abstract representations
chōuxiàng de xíngfú	抽象的形符	abstract symbol
chōuxiàngzì	抽象字	abstract graph
chún yīnfú	純音符	purely phonetic element
chūwén	初文	protoform
cí wénzì	詞文字	word writing
cíyì	詞意	lexical meaning, a word's meaning
cí—yīnjié wénzì	詞——音節文字	word-syllabic writing/script
dāndúcí	單獨詞	free morpheme
dānyīnjié yǔsù	單音節語素	monosyllabic morpheme
diézì shuāngyīncí	疊字雙音詞	disyllabic reduplicative phrase
dìngfú	定符	determinative
dútǐzì	獨體字	non-composite characters
duōshēng	多聲	multiple phonetics
duōxíng	多形	multiple semantic components
duōyìzì	多義字	polysemic graph
duōyìncí	多音詞	polysyllabic
dúyīn	讀音	reading, pronunciation
ébiàn	訛變	corruption
fēi huìyìzì	非會意字	nonsyssemantic
fēi xíngshēng jiégòu	非形聲結構	non-phonetic type characters
fēnhuà	分化	differentiation
fēnhuàzì	分化字	differentiated graph/form
fēnsān duōyìzì zhíwù	分散多義字職務	dispersal of the lexical loads of polysemic graphs
fensan wénzì zhíwù	分散文字職務	dispersal of the lexical loads of graphs
fúhaò	符號	symbol
fùza xiàngwùzì	復雜象物字	complex pictorial graph
gǎihuàn yìfú	改換意符	alteration of semantic symbols
gǎihuàn yīnfú	改換音符	alteration of phonetic symbols

gǔjīnzì	古今字	ancient and modern forms/graphs
gǔwén	古文	ancient script form
guòdù wénzì	過度文字	transitional writing
Hànzì jiǎnhuà	漢字簡化	simplification of Chinese script
hétǐzì	合體字	composite graph/character
héwén	合文	compound graph
hòuqī běnzì	後起本字	younger orthograph
hòuqī yì(fú) yīn(fu) wénzì	後期意(符)音(符)文字	late semanto-phonetic script
hòuqǐzì	後起字	new graph, later form, younger graph
huìyì jiān xíngshēngzì	會意兼形聲字	simultaneously syssemantic and phonetic compound graph
huìyìzì	會意字	syssemantograph
huòtǐ	或體	alternate form, variant form
jiǎjiè	假借	loangraph, jiajie, borrowing
jiǎjiè yòngfǎ	假借用法	graphic borrowing
jiǎjièyì	假借義	borrowed meaning
jiěyīnfú	借音符	loaned phonetic symbols
jìhào	記號	sign
jìhàozì	記號字	sign, sign graph
jìmíng jīnwén	記名金文	identificational inscription
jīnzì	今字	modern form/graph
jìshù fúhào	記數符號	numerical symbols
kǎishū	楷書	standard script
lèifú	類符	classifier
liǎngge zì de zhíwù de jiāohù jízhōng	兩個字的職務的交互集中	alternate concentration of functions between two graphs
lìshǐ tōngyòngzì	歷史通用字	historically interchangeable graphs
lìshū	隸書	clerical script
liùshū shuō	六書說	six principles theory of Chinese script
mǔcí	母詞	etymon
mǔzì	母字	matrigraph
paìshēngcí	派生詞	derivate, derived form
paìshēngchū xīncí	派生出新詞	new derived form
pàishēng xīncí	派生新詞	derivation of new words
páng	旁	component, element
pīanpáng	偏旁	graphic component
pīnyīn wénzì	拼音文字	phonetic script
sānshū shuō	三書說	three principles theory of Chinese script
Sān tǐ shíjīng	三體石經	Tri-script Stone Classics
sānyīnjié yǔsù	三音節語素	trisyllabic morpheme
shěnglüè piānpáng zìxíng	省略偏旁字形	graphic abbreviation
shēngpáng	聲旁	phonetic
shēngpáng de dàihuàn	聲旁的代換	interchange of phonetics

shēngpáng de pòhuài	聲旁的破壞	deformation of phonetics
shěngshēng	省聲	abbreviated phonetic
shěngxíng	省形	abbreviated signific
shēngyùn tōngzhuǎn	聲韻通轉	phonological variation
shǐyōng de Hànzì	使用的漢字	Chinese characters in general use
shuāngyīncí	雙音詞	disyllabic
shuāngyīnjié fùhécí	雙音節復合詞	dislyllabic compound
shuāngyīnjiécí	雙音節詞	binome
shuāngyīnjié yǔsù	雙音節語素	disyllabic morpheme
súběnzì	俗本字	popular orthograph
sútǐ	俗體	popular form, vulgar form
súzì	俗字	popular character, vulgarism
tōngjiǎ	通假	phonological borrowing, borrowing
tōngjiǎzì	通假字	borrowed graph, borrowing
tōngsú wénzì	通俗文字	popular script
tōngxíng yǔsù	同形語素	morphemes with the same graphic forms
tōngxíngzì	通行字	current forms
tóngxíngzì	同形字	homography/homographs
tóngyì huàndú	同義換讀	synonymic interchange
tóngyīn de tōngyuáncí	同音的同源詞	homophonous cognates
tóngyīn huò yīnjīn de zì	同音或音近的字	homophonous or nearly homophonous graph
tóngyīnzì	同音字	homophone
tōngyòng Hànzì	通用漢字	Chinese characters in common use
tōngyòngzì	通用字	interchangeable graphs
tóngyuáncí	同源詞	cognate
tú	圖	iconograph
túhuà	圖畫	picture, pictorial representation
túhuà yìwèi	圖畫意味	pictographic aspect
túxíng	圖形	emblem
túxíng yìwèi	圖形意味	pictographic sense
túxíngshì	圖形式	pictorial
túxíngshì biǎoyìzì	圖形式表意字	pictorial semantogram
túxíngshì huìyìzi	圖形式會意字	pictorial syssemantic graph
wánzhěng de wénzì tǐxì	完整的文字體系	a fully integrated writing system
wénzì de hébìng	文字的合幷	graphic consolidation
wénzì fúhào	文字符號	graphic symbol
wénzì jiǎjiè	文字假借	graphic loans
wénzì tǐxì	文字體系	writing system
wénzìxué	文字學	grammatology
wénzìxuézhě	文字學者	scholars of the script, grammatologist; students of the script
wénzì zīrǔ	文字孳乳	graphic derivates
wénzì zhíwù de jízhōng	文字職務的集中	concentration of lexical functions

xíyòngzì	習用字	conventional form
xiàntiáohuà	線條化	linearization
xiàngshìzì	象事字	quasi-pictorial graph
xìngwùzì	象物字	pictorial graph
xiàngxíng	象形	pictographic
xiàngxíng chūwén	象形初文	pictographic protoform
xiàngxíng fúhào	象形符號	pictographic symbol
xiàngxíngzì	象形字	pictograph
xíngfú	形符	pictographic symbol
xíngjiè	形借	borrowing of graphic shape
xíngpáng	形旁	signific, semantic component
xíngpáng de dàihuàn	形旁的代換	interchange of significs
xíngshēngzì	形聲字	phonogram
xíngyīn jiān jièzì	形音兼借字	the borrowing of both the sound and form of the borrowed graph
xīnlìtǐ	新隸體	neo-clerical script
yìcí duōxíng	一詞多形	polygraphy
yìfú	意符	semantic symbol
yìfú	義符	semantographic symbol
yìfu yīnfú wénzì	意 (符) 音 (符) 文字	semanto-phonetic script
yì(fú) yīn(fú) jìhào wénzì	意 (符) 音 (符) 記號文字	semanto-phonetic-sign script
yīnfú	音符	phonetic, phonetic symbol/ element
yīnfú jiān yìfú	音符兼意符	simultaneously a phonetic and a signific, phonetic symbols which are concurrently semantic symbols
yīnjié fúhào	音節符號	syllabogram
yīnjié wénzì	音節文字	syllabic script
yīn jìn	音近	close in pronunication
yīnshēn	引申	semantic extension
yīnshēnyì	引申義	extended meaning/sense
yīnsù wénzì	音素文字	phonemic script
yīnyáng duìzhuǎn	陰陽對轉	one syllable ending in a nasal and the other in a non-nasal
yīnyì	音義	reading and meaning
yìtǐ(zì)	異體 (字)	allograph, variant, alternate way of writing
yìtǐzì fēngōng	異體字分工	distribution of lexical loads among allographs
yìtǐzì zhěnglǐ	異體字整理	consolidation of variant forms
yìxíng(zì) duōyīnyì	一形 (字) 多音義	concurrently polyphonic and polysemic forms
yìyì	意義	meaning

yízì yìtǐ	一字異體	variant forms of a single graph
yízì duōyòng	一字多用	graphs having multiple uses
yízì duōzhí	一字多職	multi-functional graph
yìzì tóngxíng	異字同形	different graphs sharing the same graphic shapes
yǒuyì de shēngpáng	有意的聲旁	semantophoric phonetic, semantophoric phonogram, phonetics that convey meaning
yuánshǐ de yìyì	原始的意義	primitive meaning
yuánshǐ wénzì	原始文字	primitive writing
yǔsù de fúhào	語素的符號	morphemic symbol
yǔsùzì	語素字	morphemic graph
yǔsù wénzì	語素文字	morphemic writing/script
yǔsù—yīnjié wénzì	語素——音節文字	morphemo-syllabic script/writing
yǔyì yǐnshēn	語義引申	semantic extension
yǔyīn	語音	phonology
yǔyuán	語源	etymology
zàozì xiāngchéng de guānxi	造字相承的關系	derivational relationship
zhèngtǐ	正體	standard form
zhèngzì	正字	proper graph
zhǐshì	指事	deictic
zhǐshì fúhào	指示符號	deictic symbol
zhǐshìzì	指示字	deictic graph, deictograph
zhíwù hùyì	職務互易	mutual exchange of lexical functions
zhíyīn	直音	homophonous speller
zhuànwén	篆文	seal script
zhuānyòngzì	專用字	dedicated form
zhǔnhétǐzì	準合體字	quasi-composite characters
zhǔnhétǐ biǎoyìzì	準合體表意字	quasi-composite semantogram
zhùyìfú	注意符	signific, semantic symbol
zhùyīnfú	注音符	phonetic symbol, phonetic
zìfú	字符	graphic symbol
zìshū	字書	wordbook
zìtǐ	字體	graphic form
zìxíng	字形	graphic form, graphic shape
zìxíng fēnhuà	字形分化	differentiation of graphic forms
zìyì	字義	semantic
zìyīn	字音	pronunciation of characters
zúhuī	族徽	clan emblem
zúhuī jīnwén	族徽金文	bronze clan inscription
zúmíng jīnwén	族名金文	bronze clan name

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