Aus: WOON, Wee Lee 1987 – .
***Chinese Writing : Its Origin and Evolution* – .**
Macau: University of East Asia, 1987 (Keine ISBN).

1. INTRODUCTION

Although the evolution of Chinese characters has been very complicated, basically there have only been two general and important tendencies in this process. One tendency, which is found in the formal evolution, is the transformation from the original elaborate picture characters (圖畫文字 *túhuà wénzì*) into purely symbolic signs which were graphically composed of a narrow range of conventional strokes (Tang 1965b:81,86). These symbols gradually become simpler through usage. This tendency is generally referred to as simplification (簡化 *jiǎnhuà*). The other is seen in the structual evolution, i.e. the development of graphic structure from the primitive picture writing to phonetic compounds (形聲字 *xíngshēngzì*), where a character consists of two parts, one giving the meaning, the other indicating the sound. This particular feature of the structural evolution of Chinese characters shows that they have been evolving towards a phonetic system. The result is that the great majority of Chinese characters are phonetic compounds in structure. This tendency we here tentatively call 'phoneticization' (聲化 *shēnghuà*).[1]

From a modern point of view the main focus in the study of Chinese etymology (中國文字學 *Zhōngguó wénzìxué*) should be on the development and evolution of Chinese characters on the basis of their form and structure. Thus, both simplification and phoneticization have been the two main areas of research in modern Chinese etymological studies.

In the last 4000 years, Chinese characters have always been in a process of simplification. The transformation from true picture into the primitive picture characters was clearly a simplification.

Although picture characters very closely resemble pictures, when they are compared with true pictures, they are much more simple.

The continuation of the simplification process since the early stages of Chinese writing is observable from the earliest surviving Chinese picture characters in the bronze inscriptions (金文 *jīnwén*). However, the strong pictorial nature of the primitive characters meant that characters changed only gradually at the earliest stages.

One contributing factor generally thought to have caused Chinese picture characters to change drastically was the change of writing instrument. A closer observation of the early pottery inscriptions (陶 文 *táowén*) and oracle bone inscriptions (甲骨文 *jiǎgǔwén*) discloses that with an engraving-tool, only the outline of the object may be conveniently delineated; the elaborate drawing was inevitably simplified and replaced by a few summary lines. Thus, the change of writing instrument was a turning point in the process of simplification of Chinese characters, which gradually became symbols composed of certain types of strokes (Tang 1965b:81).

Take the graphic form of oracle bone writing for example, great changes took place after the primitive picture characters became symbols composed of simple thin lines. In oracle bone writing there is no limitation in the number of strokes, and no-fixed shape. It is especially in pictographs (象形字 *xiàngxíngzì*), that a tendency of evolution towards simplification is most obvious. But such arbitrary changes had gradually become less common in the later, more stable, period of the bronze inscriptions. This means that there was probably a standardization of writing during the Zhou (周) dynasty. However, the tendency to simplification did still continue. But a strictly disciplined unification of writing cannot be seen until the small seal style (小篆 *xiǎozhuàn*) appeared. The graphic form become simpler, and the writing of strokes was fixed. A closer analysis of the process of simplification of the archaic forms of Chinese characters will be given later in chapter three.

Besides simplification, Chinese characters have also produced the opposite phenomenon: a tendency to become more complex (繁化 *fánhuà*). In the early stages of archaic Chinese characters, this phenomenon evolved from a preference for symmetry and balance

of graphic form (Tang 1965a:46-48), to make it easy for recognition and writing. Thus, greater complexity on the one hand and simplification on the other have had practically the same effect. However, the tendency towards greater complexity was not so common as simplification and it occurs far less frequently in archaic Chinese writing; it is of only secondary importance.

Structurally speaking, before the method of composing phonetic compounds was invented, these tendencies towards greater complexity and simplification basically involved the addition and reduction of strokes; they had no effect on graphic structure in terms of the six principles of writing (六書 *liùshū*). However, after the method of composing phonetic compounds came into existence, and was extensively used, the tendencies towards greater complexity and simplification were usually subordinated to the dominant trend of making characters into phonetic compounds. Thus, the two tendencies caused a change in the structure of characters. However, the tendency to simplify also in turn exerts its influence on the changes inside the phonetic compound itself, thus simplifying either the semantic or phonetic element or both.

With the development of the clerical style (隸書 *lìshū*), great changes took place in the graphic form of Chinese characters. The pictorial nature of characters was largely lost, the form of characters became square and the writing of strokes became fixed. Of course, the graphic form has naturally become simpler.

The birth of two subsequent forms of script, cursive writing (草書 *cǎoshū*) and running hand (行書 *xíngshū*), which achieved a greater degree of abbreviation, was due to the need for simple and rapid writing. But because their extravagant and arbitrary modifications cause difficulty in recognition, they were not adopted as the normal script. It was another variant writing style, the regular style (楷書 *kǎishū*), that took the place of the clerical style and became the standard script. From that time onwards, though the written style of Chinese characters has been fixed, there has still always been a tendency to simplification. Thus, numerous simpler forms (簡體 *jiǎntǐ*) of characters, many of which have been despised as 'vulgar characters' (俗字 *súzì*) have been created in all periods.

Some of these popular forms have been officially accepted after a long period of co-existence with the complex standard form (繁體 *fántǐ*). Today, the evolution of the form of Chinese characters is still orientated towards the direction of simplification.

When viewed from the point of view of structural development, on the other hand, only about 27 per cent of identified oracle bone characters fall in the category of phonetic compound; in the process of time, however, the percentage of phonetic compounds increased rapidly.[2] From the time of the small seal script onwards, almost all newly created characters have been phonetic compounds. Moreover, some pictographs and ideographs (象意字 *xiàngyìzì*)[3] have been converted into phonetic compounds. Thus, the number of phonetic compounds kept rising until it comprised about 80 per cent of Chinese characters in Han (漢) times, as seen in the etymological dictionary *Shuowen jiezi* (說文解字 'The explanation of simple graphs and analysis of compound graphs', *SW*) compiled in the years c. AD 96 -100 by Xu Shen (許愼 c. 30 - c. 124). It is now more than 90 per cent. All of this confirms that the structural evolution of Chinese characters is proceeding in the direction of phoneticization. Thus, if we had a better understanding of the rules governing this phoneticization tendency, it would make it possible to give a better explanation of other features of the structural evolution of Chinese characters. This is the main problem we intend to discuss in the present study.

The entire process of phoneticization may be divided into three stages:

In the first stage, phoneticization takes place mainly through phonetic loan (假借 *jiǎjiè*). In this method a character is used to represent another word (which has no character of its own) which happens to have the same or similar sound but has no connection whatever in meaning. This is using a character as a purely phonetic symbol. It is generally believed that had the Chinese character continued its development in the direction of the phonetic loan, the Chinese writing system might have become syllabic or even alphabetic (Chao 1968:105; Creel 1936:165). As it happened, when coupled with the strength of the semantic element (which was

gradually formed from the development of the ideograph), this tendency gave birth to the phonetic compound, which rapidly increased until it constituted the great majority of Chinese characters. Thus, the phenomenon of phonetic loan signalled the beginning of the phoneticization process and exerted a great influence on the rise of the phonetic compound. Meanwhile, the semantic extension (引申 *yǐnshēn*) like the phonetic loan had the effect of using existing character for different words instead of creating new characters. However, this method is restricted in that it can only be used for cognate words. It made a great contribution to the development of a particular group of ideographs which can be interpreted as phonetic compounds in structure (see section 4.2.2 below). Thus to some extent, it contributed to the development of the phonetic compound.

In the second stage, the tendency to phoneticization is carried out by two methods: one is to add a semantic element to a loan character, thus composing a separate character for a homophonous word which originally had no graph. This method of phonetic loan had employed one character to represent two or more homophonous words, so that no meaning except for the original one were reflected in the structure of the character. This easily led to ambiguity and confusion, although the meaning intended could be made clearer by the context. Thus this borrowing brought about a discrepancy between the form and meaning of each loan character. As a consequence, a means of distinguishing the original meaning (本義 *běnyì*) and the loan meaning (借義 *jièyì*) was needed. This was supplied by the use of a semantic element added to the borrowed character to make a new graph (structurally a phonetic compound) to represent the loan sense. This method of composing phonetic compounds became widely used. Not only can a pictograph or an ideograph be used as a phonetic, with a semantic element, to make a phonetic compound, but also a phonetic compound itself may in turn be used as a phonetic element, and by adding a further semantic element a new phonetic compound may be created.

Another method of phoneticization in this second stage is to add a phonetic element to a pictograph or an ideograph, to form a

phonetic compound. This is because the resemblance between some pictographic and ideographic characters can easily lead to confusion; it is therefore necessary to add a phonetic element specifying their pronunciation in order to differentiate one word from another. Although this is not a common phenomenon, it is also a factor contributing to the development of the phonetic compound.

The third stage started after the method of composing phonetic compounds had evolved. This new method is indeed very convenient for composing new characters by selecting a semantic and a phonetic element and combining them. In this way, as many new characters as required can be created for the expression of any possible spoken form. In addition, by the influence of this new method, some characters which were originally pictographs or ideographs were gradually converted into phonetic compounds in structure. One way was to employ a pictograph or an ideograph as a phonetic element, adding a semantic element to form a phonetic compound. This was obviously brought about by analogy (類推作用 *lèituī zuòyòng*) with some other phonetic compounds of the same semantic category, and merely had the effect of altering the original graph into a phonetic compound in structure, without changing the meaning of the original character. Another way was to replace a pictograph or an ideograph with a phonetic compound. Changes taking place in the phonetic compound itself were also chiefly a result of substitution (替代作用 *tìdài zuòyòng*). This is also the main way in which variant forms (異體字 *yìtǐzì*), standard and popular forms (正俗字 *zhèngsúzì*), and ancient and modern forms (古今字 *gǔjīnzì*) were created. It also happened in this third stage that some pictographs and ideographs were converted structurally into phonetic compounds due to corruption (訛變 *ébiàn*). However, this was not a common phenomenon.

This tentative suggestion of a three-stage periodization is merely for the convenience of analysis and description of the whole process of the phonecization tendency. Further evidence on each stage will be given and discussed later in chapters four and five.

We have now discussed the etymlogical features and significance of the two general tendencies in the historical development of Chinese characters, the phoneticization of the structure, and the

simplification of the form. Although they play two different roles, they were mutually related. The combination of the two promoted the evolution of Chinese characters.

According to our tentative periodization above, in the first stage of the phoneticization process, any picture character might be used exclusively for its phonetic value, disregarding its original meaning. Thus its pictorial form completely lost its conventional semantic value when phonetic loan took place. This phonetic loan was presumably an important factor in stimulating the changes taking place in the form of picture characters, and thus accelerating the process of simplification, which gradually led characters to the loss of their pictorial nature.

In the second stage of the phoneticization process, either the addition of a semantic element, or the addition of a phonetic element, inevitably enlarges the original character. This appears to be contrary to the general tendency to simplification. In fact, these sorts of changes in graphic structure are intended to make the recognition and use of characters easier. In this, they have the same purpose and effect as simplification. It is all the more important to note that those characters which have been enlarged in form also have a tendency to be simplified later. Besides, when a semantic element was added to a loan character, the intention was to create a new character for a new word; it was not a case of merely adding to a character without a change in meaning. (Cf. Liang 1965:50-1).

In the third stage of the phoneticization process, after the principle of the phonetic compound came into extensive use in forming new characters, there was another augmentation, when a semantic element was added by analogy to a character to form a further phonetic compound but without any change in the meaning. This is not common. Pictographs and ideographs could also make themselves easier to use and recognize by evolving into phonetic compounds through corruption. Such structural corruption is again not a widespread phenomenon. A more general phenomenon is the creation of a new phonetic compound variant to supersede the original pictograph or ideograph, usually for the sake of simplification. Changes in the phonetic compound itself are also made prin-

cipally by means of substitution, by supplanting the original complicated form with a new simplified form.

On the other hand, some phonetic compounds have become ideographs, even if sometimes they cannot be classified by means of the six principles of writing. Obviously this defies the general tendency of phoneticization, but fulfils its purpose of simplification (see chapter six).

Thus, phoneticization is fundamentally, so to speak, the impetus for simplification. It effects very radical changes in graphic form, and such changes will be continued by the process of phoneticization. Although there was sometimes a trend towards forms becoming more complicated, the general tendency was towards simplification. Even when characters were made more complicated, they still underwent simplifcation afterwards. Sometimes simplification in the forms also produced the structural changes mentioned above, and hence the trend opposed to phoneticization. All of this evidently shows that the tendencies to phoneticization and simplification are interrelated and interact with each other.

Chinese characters, by virtue of these two tendencies, evolved mostly into phonetic compounds in structure, and became simpler in form, causing them to lose their pictorial nature and become largely symbolic.

Almost all traditional Chinese etymoligists have concentrated their attentions on the studies of the *SW* and the six principles of writing which were both based on the small seal script. From Song (宋) times, with the development of epigraphy (金石學 *jīnshíxué*), some scholars began to study bronze inscriptions, but they had no great effect on traditional Chinese etymology (see P. Hu 1937:157-60; Tang 1965b:20-21). The leading etymologists of the Qing (清) dynasty, such as Duan Yucai (段玉裁 1735-1815), Wang Yun (王筠 1784-1854), Zhu Junsheng (朱駿聲 1788-1858), and Gui Fu (桂馥 1733-1802), are all known for their extensive studies of the *SW* and the six principles.

The discovery of the Shang (商) oracle bone inscriptions in 1899 was a significant turning point in the history of Chinese etymology. This newly discovered material attracted the attentions of most

scholars of Chinese palaeography (中國古文字學 *Zhōngguó gǔwénzìxué*) at that time. Since then, the centre of gravity of Chinese etymology has been in the study of pre-Qin (秦) writing. Owing to the rich materials and advanced methods of research, the study of the oracle bone and the bronze inscriptions has made much progress in the last few decades. The small seal script has been used as a stepping-stone for investigating the early structure and evolution of Chinese characters.

Although the study of archaic script has become the most important part of Chinese etymology and a special field of learning, however, most scholars have concentrated their attentions on tracing the development of individual characters. An attempt at founding a new graphic theory in order to interpret the structure of archaic characters found in new material was not made until the outstanding Chinese paleographer, Tang Lan (唐蘭), completed his *Guwenzixue daolun* (古文字學導論 'An introduction to Chinese palaeography') in 1934. Tang set forth his famous theory of 'the three principles of writing' (三書說 *sānshū shō*) regarding graphic structure and the classification of characters.[4] A theory of archaic Chinese etymology was thus established. Since then, theoretical discussion in the field of Chinese etymology has, on the whole, been limited to the theories of the traditional six principles and the new three principles.

Compared with the traditional graphic theory of the six principles, Tang's new theory was without doubt more advanced and scientific but it is still not generally accepted. Furthermore other scholars have rarely been interested in finding a new theory of graph analysis. Most commonly, the traditional graphic composition theory of the six principles is explained by citing examples from pre-Qin writing. It is therefore necessary to make a theoretical study of the derivations and structural evolution of Chinese characters and to propose a more pertinent theoretical explanation of their structural development.

The present study places its emphasis on the observation of phenomena in the structural evolution of Chinese characters from a historical point of view. It is intended to give a systematic analysis and reconstruction of the details of this process by introducing a

notion called phoneticization. It is hoped to develope this idea into a theory of the structural evolution of Chinese characters, progressing beyond the traditional graphic analysis theory of the six principles which has dominated the literature in the field of Chinese etymology since Han times. Of course, it will also be necessary to take the traditional theories into account.

2. THE EARLY POTTERY INSCRIPTIONS

2.1 Introduction

Writing in general is believed to have begun with pictures (Gelb 1969:190), and in all likelihood Chinese is no exception. But due to the lack of data on the earliest periods, scholars have been unable to give a full picture of the origins of Chinese writing.

Most of the early data now available is in the form of inscriptions on oracle bones and shells, dating from the late Shang dynasty. The main principles for composing Chinese characters had already been established in this oracle bone writing, and the characters incised on the bones and shells were far removed from the original drawings. This suggests that the writing of Shang times had already reached a fairly advanced stage. Other important materials available, such as inscriptions on bronze vessels, are mostly later in date. As a result of the lack of material, we have very little knowledge of Chinese writing before the Shang period; and the discussions of the important question of the origins of Chinese writing are therefore purely conjectural.

In the past quarter of a century, the discovery by archaeologists of Shang and pre-Shang pottery inscriptions has made a great contribution to the discussion on the origins of Chinese writing and other related problems. Although no certain conclusions can be drawn from these materials, the problems can at least be discussed in a more concrete manner, now that these pottery inscriptions have been analysed.

Pottery is one of the most important cultural remains in archeaology and the practice of incising signs on pottery vessels has a long history in China. Early inscriptions, however, are very limited