

Compound Ideographs Formed through Two Stages

The Principle of Analogy at Work

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中文摘要

本文着重探讨一种合成字的形成方式。目前汉字学界对这一类合成字的分析存在分歧。有学者将其定位为会意字，而另一些学者则将其分类为形声字。本文采用历时分析方法对这一类字的形成过程进行了详尽分析，认为这一类字应该定义为会意字。他们的形成原因是受类似原则的影响，亦即，代表意义属于同一语义场的汉字往往会拥有相同的意义限定成分。

Introduction

In this paper, I study a group of compound characters, that is, characters that can be divided into two or more meaningful components. A typical example among them is the graph 祭, which in the OBI is written as 𩇑, and is added with a semantic determinative *shì* 示 (deity) form 𩇑 in bronze inscriptions. There have been different interpretations to the formations of these characters and conflicting suggestions as to what kind of characters they should be categorized into: compound ideograph or semantic-phonetic compound. They are two of the six categories of Chinese characters suggested by Xǔ Shèn (58-147?) in his etymological dictionary *Shuōwén Jiězì* 'Discourse on Graphs and Explanation of Characters'. Compound ideographs are usually characters that are formed with no part playing the phonetic role while in a semantic-phonetic compound,

one component, called a semantic determinative in this paper,¹ gives a general idea of the meaning represented by the graph, and the other suggests the pronunciation of the graph.

The aim of this paper is twofold: 1) to demonstrate that the formations of such graphs are governed by the principle of analogy; and 2) to argue, based on a diachronic study of the evolution of these graphs through different stages, that these graphs should be categorized as compound ideographs, because meaning representation is given the priority in their construction.

Case Studies

In this part, two groups of characters will be studied. The choice of these graphs for study is based on the fact that they can be used as typical examples of this kind of compound characters. The first contains graphs with *shì* 示 (deity) as a semantic determinative, the second contains graphs with *chuò* 辵 as a semantic determinative. 辵 often appears in the compound characters representing meanings related to motion. As will be revealed later, graphs in these two groups were formed following the same procedure.

Group 1: *jì* 𡇗 祭 (offer sacrifice, meat, to)

zhù < *tuk 𡇗 祝 (pray)








fú < *pək 𡇗 福 (offer sacrifice, wine, to)²







Starting with Xǔ Shèn's *Shuōwén Jiězhì*, Chinese dictionaries, especially those of Old Chinese, have been more or less compiled in the same way: the arrangement of characters having a common semantic determinative into the same category. In Xǔ Shèn's *Shuōwén Jiězhì*, there are 540 categories. Xú Zhòngshū 1989 follows suit in compiling *A dictionary of Bone Inscription characters*. However, many characters that have a common semantic component in *Shuōwén Jiězhì* turn out to have no common component of any kind in the OBI. Typical examples to be discussed in this section are the characters that have *shì* 示 (deity) as a component. In the *shì* 示 (deity) category of Xu Shen's *Shuōwén Jiězhì*, there are about 63 characters with 示 as a component





¹ Traditionally the semantic component in a semantic-phonetic compound has been called a 'radical', the term is not appropriate as the semantic components in such graphs are usually later additions to the original graphs. In this paper, I follow Creel's suggestion and use the term semantic determinative instead. See Creel 1936.

² Unless otherwise indicated, when the graphs studied in this paper appear for the first time, they will be listed first with the modern pronunciation in Pinyin, followed by an Old Chinese reconstruction by Schuessler 2006, the OBI script, Modern script and last English gloss in brackets. The reconstructions of Old Chinese are given here only for reference. Old Chinese refers to the Chinese language of Early and Mid Zhou dynasty. As a phonological system reconstructed largely based on literary works, it cannot reflect the whole linguistic situation of that time, let alone the Shang language used before it.



compared to the 21 characters in the same category in Xú Zhòngshū (1989, p.11-31), out of which nine characters are listed as undeciphered and a large percentage of the rest do not have 示 as a component. Compare the oracle-bone inscriptions (hereafter the OBI) forms and the small seal forms of the following five characters; the difference between them is quite obvious.


Modern form	The OBI	bronze inscriptions	Small Seal script	English gloss
社				spirit of the soil
祖				ancestor
祭				offer sacrifice (meat?) to
祝				prayer
福				offer sacrifice (wine?) to


As is shown in the table, in the OBI, graphs like *shè* < *da?  社 (spirit of the soil), *zǔ* < *tsha  祖 (ancestor) and *jì*  祭 (offer sacrifice to) do not have *shì*  示 as a component.³ In the OBI forms of the other two, *zhù* < *tuk  祝 (pray) and *fú* < *pək  福 (offer sacrifice to), each has two allographs, one with 示, the other without.


The formations of the graphs 社 and 祖 follow a similar procedure. In the OBI, the graph *tǔ* < *thâ  土, with the original meaning ‘soil’, was also extended semantically to represent ‘spirit of soil’. In Zhou bronze inscriptions, a semantic determinative *shì*  示 was added to graph  土 to form *shè* < *da?  社 for the extended meaning ‘spirit of soil’ and 土 is kept for its original meaning.⁴ Here are two examples of the use of 土 in the OBI.


³ There is no Old Chinese reconstruction of 祭 in Schuessler 2006, nor in Baxter 1992. Their works mainly include characters that are used as rhyme characters in the *Shījīng* ‘Book of Songs’. 祭 is not a rhyme character.





⁴ From the phonological perspective, the graph *tǔ* < *thâ?  土 and *shè* < *da?  社 might not be related closely enough for 土 to represent 社 with the same reading at the same time. Hé Jiǔyíng 1994 suggests the existence of initial consonantal clusters in Shang phonetic system. According to Hé, the graph *tǔ* 土, when used in the OBI to represent the two meanings ‘soil’ and ‘spirit of soil’ was pronounced with an initial consonantal cluster, which in later stages split into parts, that explains the difference in pronunciation between *tǔ* 土 and *shè* 社.







贞燎于三小羊卯一牛沈十牛 (period 1: 779, front).⁵

Divined: Make burnt-offering to the spirit of soil with three sheep, one ox and drown ten oxen. ( is used for the spirit of land)

南受年吉 (period 5:36975)

The soil of the north will be blessed with a harvest, auspicious. ( is used for soil.)



In Zhou bronze inscriptions, *tǔ*  and *shè* 社 are used as two different graphs for two different meanings. The only example of the use of the graph *shè* 社 in bronze inscriptions is in the text inscribed in 中山王鼎 *Zhōng Shān Wáng Dǐng*, cast in the late Warring States period, the script used is a typical of the bird script popular at that time, thus *shè* 社, which might be expected to have the form , instead was written as  in 社稷, literally meaning ‘the spirit of soil and spirit of grain’. It was later used to mean ‘the nation’ as it still is used today. While *tǔ*  is still used to represent its original meaning ‘soil’, as in the example: 赐女土田 (award you with soil and field), in 多友鼎 *Duō Yǒu Dǐng*, cast in the late Western Zhou (Zhāng Yàchū, 2001, p.1513).



In the OBI, only *qiě* <*tsha  且 is used, representing ‘ancestor’ though there is no agreement as to what  depicts. Obviously a pictograph, Guō Mòruò (cited by Yú Shěngwú 1996) suggested as a phallus, used to represent male ancestors. Other scholars including Yú Shěngwú 1996 don’t agree, though no convincing suggestion has been offered.  continued to be used as ancestors in Zhou bronze inscriptions, though another graph *zǔ* < tsâ 祖, with 示 added to , was also used for the same meaning. The reason for the formation of the graph *zǔ* <*tsâ 祖 is perhaps due to the phonetic borrowing of  to represent a conjunction word ‘while’. Though no such evidence is found in Zhou bronze inscriptions,  且 is used to represent ‘while’ in a poem in the *Shījīng* ‘Book of Songs’, which is believed to be composed in Zhou Dynasty.⁶










The formation of the graph 社 and 祖 can be summarized into the following three stages. In the first stage, pictographs 土 and 且 were invented for ‘soil’ and ‘ancestor’. In the second stage, both graphs were used multivalently, that is to say, except for their original meanings, 土 was used to represent ‘spirit of soil’ and 且 was borrowed phonetically for ‘while’. The third stage saw a semantic determinative *shì* 示 added to 土, forming 社 for ‘spirit of soil’ and to 且 forming 祖 for ‘ancestor’. In contrast to these two graphs which were formed in three stages, the graphs focused upon in this section did not experience the multivalent stage, that is to say, they or their original forms were not used, either as a meaning extension, or phonetic borrowing for another word. Apart from that, while the graphs discussed above are formed to differentiate them from the original graphs, the graphs in this section are formed to replace the







⁵ In this paper when examples of how a graph is used in the OBI are given, modern script will be used except for the graph in question. The examples of the OBI are taken from Yáo Xiàosui & Xiāo Dǐng 1989. The English translation is mine.










⁶ Examples of the use of  in the *Shījīng* ‘Book of Songs’ can be found in Wáng Lǐ 2000.

former ones. To explain in detail, the formation of the graph *zǔ* 祖 is to stand for ‘ancestor’, the original meaning of *qiě* 且. After the formation of *zǔ* 祖, *qiě* 且 with the meaning ‘ancestor’ was gradually discarded and used only to represent ‘while’. In contrast, the character *jì* 祭 (to offer a sacrifice to), a typical example of the graphs examined in this section, was written as  in the OBI, which was supplemented with a semantic symbol *shì* 示 (deity) in the Zhou bronze inscriptions, forming the graph as we know it today, while , as the protoform, was gradually discarded.

The following is a detailed study of the evolution of *jì*  (the Small Seal Script) 祭 (offer sacrifice to) from , together with an examination of the different interpretations to the formation of the character.

Xǔ Shèn interprets 祭 as a compound ideograph, composed of 示 (deity), with the upper part , indicating a hand offering meat, to bring down influence heaven. Lǐ Xiàodìng also puts the graph in the Oracle Bone Script into the category compound ideograph. Nevertheless, the graph in the OBI, , is different from the one in the Small Seal Script, , which Xǔ Shèn based his study on. Apart from the calligraphic change, in which  (meat) evolved into , the other part  (hand) remains basically the same, the difference between the two graphs is that another element 示 (deity) was added to the graph  from Zhou bronze inscriptions to form . The OBI script  simply depicts a hand holding a piece of meat; though there are cases when the graph is written with dots surrounding the meat to indicate blood. As a frequently used graph, it appears in all the five periods of the OBI, see Yáo & Xiāo, 1989, pp. 1197-1202. Though there is no objection to putting 祭 into the category compound ideograph, previous studies fail to offer a reasonable suggestion to why a semantic component 示 was added to it after the OBI.

Qiu Xigui 2000 puts *jì* 祭 into his category of compound ideograph that are formed by employing the positional relationship of graphic components, citing , one of the bronze inscription forms, as his example, explaining that the graph, with  示, a deity, on the left, and a hand  holding meat  on the right, shows meat being offered to a deity; but he completely ignores the original form . Another problem with Qiu’s interpretation is that  is not the only form, nor the earliest form found in Zhou bronze inscriptions. Here is a list of the different forms of *jì* 祭 in chronological as used in the Zhou bronze inscriptions.

- a. , having all the three components,  meat,  hand and  deity, but arranged differently from , is found on 史喜鼎, the Shǐ xǐ Dǐng cast in the early Western Zhou.
- b. , most closely resembles the modern form 祭, used on a bell cast in the late Spring and Autumn period.
- c.  with 支 (strike), a hand holding a stick as a component instead of the usual  (hand), is used on a jar cast in the early Warring states period.
- d. , the one cited by Qiu Xigui, is used on a ancient eating vessel cast in the middle Warring States.

e. 𠄎, with the meat part under the hand, instead of the usual position, is used on an ancient eating vessel cast in the late Warring states period.

祭 in different forms appears about ten times in Zhou bronze inscriptions. 𠄎, which is also written as 𠄎 and 𠄎, and 𠄎, also written as 𠄎, are the most frequent forms, both used three times. 𠄎 is used twice, in the same set of vessels, while the other two forms, 𠄎 and 𠄎 are used only once. If the component arrangement of the graph 𠄎 can be explained as depicting ‘meat offered to a deity’, all the other forms, 𠄎, 𠄎, 𠄎 and 𠄎 counter such an interpretation. There is no remaining evidence that the graph in the oracle bone script 𠄎 continued to be used in bronze inscriptions, although it might have been.

The adding of 示 to 𠄎 to form 𠄎 changes neither the meaning nor the sound represented by the original 𠄎, neither there have been any evidence to suggest that 𠄎 was used either phonetically for another word, or semantically extended for another meaning. However, the new graph 祭, having 示 as a component, does stand out as one of a category of characters, including 社 and 祖, that all have 示 as a semantic determinative, and that their original meanings are all related to ‘worship, sacrifice’.

The evolution of *zhù* < *tuk 祝 (pray) from 𠄎 follows the same procedure as the evolution of 祭 (offer sacrifice to) from 𠄎. 𠄎 and 𠄎 are both used in the OBI, appearing in the first period. Xú Zhòngshū 1988 explains that the graph 𠄎 depicts a person kneeling in front of a spirit tablet praying. In the OBI, it is used to represent ‘perform a sacrifice’. As to why 祝 was written as 𠄎, the usual explanation is to dismiss 𠄎 as the simplified form, implying that the standard form should be 𠄎, see Yú Shěngwú 1996, p.348 and Xú Zhòngshū, 1989, p.24). Qiu Xigui 2000 also comments that ‘Graphic shapes [in bone script] were simplified radically.’ and ‘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’. However, as far as the graph *zhù* 祝 is concerned, the ‘simplified version’ hypothesis is not very convincing because the graph 𠄎 is also used in bronze inscriptions. A good example is the use of it in a bronze vessel cast in early Western Zhou (祝) 父乙 (performing a sacrifice ritual to Father Yi ?).⁷ From Zhou bronze inscriptions and later, *zhù* 祝 became established while 𠄎 died out.

The evolution of *fú* < *pək 福 (offer sacrifice to) from 𠄎 𠄎 is more complex.⁸ Xú Zhòngshū 1989 explains that 𠄎 is a kind of wine container, used in the OBI representing a kind of sacrifice ritual, which most likely involved the offering of wine to

⁷ 父乙 ‘Father Yi’, also known as Xiao Yi, was the twentieth King in Shang.

⁸ Karlgren reconstructed *b’iük for 𠄎 and *piük for 福, while Schuessler 2006 did not give the reconstruction of 𠄎, neither did Baxter 1992, because 𠄎 is not a rhyme character in the *Shījīng* ‘Book of Songs’.

ancestors. Its allographs in the OBI include 𠄎, 𠄏, 𠄐 and 𠄑. Xú Zhòngshū 1989 holds that the graph *fú* 福 is composed of *shì* 示 and 畀 or with *shì* 示 omitted, implying that the graph with no with *shì* 示 is a simplified version whereas the other one is the standard form. 畀 is found in both Shang and Zhou bronze inscriptions, thus excluding the assumption that 畀 is a simplified version. Examples include the appearance of 畀 on 畀父辛爵 *Fù Fùxīn Jué* (Offering sacrifice to Father Xin) cast in Shang,⁹ on 季寧尊, the Jì Níng Zūn cast in the early Western Zhou and on a bronze vessel cast in the late Spring and Autumn period. Besides that, 畀 is also used in Shuǐhǔdì Qin Bamboo Slips 睡虎地秦簡, in which 畀 represents ‘happiness, blessing’, the same as 福 in Zhou Bronze inscriptions and 福 in modern Chinese, see Hé Línyí 1998. As far as the evolution from 畀 to 福 is concerned, there is a time when the different allographs were used until finally one of them, in this case 福, was established and the others gradually died out.

As the two examples 社 and 祖 show, there may be different reasons behind the addition of a semantic determinative to a unit character, including meaning extension of the original graphs, and phonetic borrowing of the original graphs for a word related in sound but unrelated in meaning. Compound characters constructed out of these would usually go through three stages. However, graphs like 祭, 祝 and 福 belongs to a different type of compound characters. They were added with a semantic determinative for no apparent reason. More examples belonging to this type will be discussed in Group 2.

Group 2: *gòu* <*kôh 𠄒 講 遘 (encounter, meet)
nì <*ŋrak 𠄓 逆 (go to meet)
cóng <*tshôŋ 𠄔 從 (follow).¹⁰

Judging from their OBI forms, these three graphs share a common component 𠄒, which evolved into *chuo* 辵 in the small seal script.¹¹ However, the original forms of these

⁹ 父辛 ‘Father Xin’, was the nineteenth King in Shang.

¹⁰ 講, 逆, and 從 are small seal script.

¹¹ 辵 in the OBI is interpreted as the original form of 辵 by Xú Zhòngshū 1989 and Lǐ Xiàodìng 1986, though not every one agrees. Yú Shěngwú 1996 suggests that the graph should be considered an allograph to *yán* 延 (extend, lengthen). In fact, in spite of his interpretation, Xú explains that 辵 in the OBI is used to represent the same meaning as 延 (extend, lengthen). 辵 is a very frequently used graph in the OBI, but not 延. There are over 600 inscriptions with the graph 辵 but only five with the graph 延. Neither 延 nor 辵 were used in Zhou bronze inscriptions. However, the graph 辵 is included in Xú Shèn’s *Shuōwén Jiězì* and explained as ‘composed of 辵 (road) and 止 (foot), representing the meaning ‘walk one moment and stop the next’. That is why 講, the seal form of 遘, is explained as

three graphs share nothing in common. There have been conflicting accounts of the formation of these three graphs offered by Chinese scholars since Xǔ Shèn. My suggestion is that they are formed in the same way as that of 祭, 祝 and 福. Detailed examination follows.

Different hypotheses have been suggested for the formation of *gòu* < *kôh 𨾏 講 遘 (encounter, meet) as well as the relation between *gòu* < *kôh 𨾏 葍 and *gòu* < *kôh 𨾏 講 遘 (encounter, meet). According to Xǔ Shèn, *gòu* 𨾏 葍 is a pictograph and *gòu* 𨾏 遘 a semantic-phonetic compound, with *gòu* 𨾏 葍 as the phonetic indicator and *chuò* 辵 as the semantic classifier, representing the meaning: ‘meet, come across, encounter’. Lǐ Xiàodìng 1986 also calls *gòu* 𨾏 葍 a compound ideograph and *gòu* 𨾏 講 遘 a semantic-phonetic compound. Xú Zhòngshū 1989 explains that the graph 𨾏 葍 depicts a picture of two fish 𩺰 鱼 bumping against each other, thus highlighting the meaning ‘encounter’.

The evolution of the graph *gòu* 𨾏 講 遘 from *gòu* 𨾏 葍 can be clearly tracked through the studies of how the two graphs were used in different periods in the OBI. Generally speaking, only *gòu* 𨾏 葍 was used in the first period of the OBI, representing the verb ‘to encounter’, ‘perform a kind of worship’, ‘a person’s name’ as well as ‘a place name’. Examples of the use of *gòu* 𨾏 葍 in period 1 are as follows:

- 贞勿呼𨾏见捍 (period 1, number 4892) Divined: Not order *Gòu* 𨾏 (the name of a person) to observe the *Han* (the name of a country).
- 贞其𨾏雨五月 (period 1, number 12570) Divined: Encounter rain in the fifth month. (𨾏 means ‘encounter’)
- 其𨾏有 (period 1, 22554) Perform the Gong ritual. Blessed.

Among the 500 inscriptions in Yáo & Xiāo (1989, p1196-1202), over 100 belong to period 1, in which only 𨾏 is used. In Period 2, in addition to the continued use of 𨾏 with the meaning ‘encounter’ and ‘perform a kind of worship’, another two graphs, 𨾏 and 𨾏, appeared, though it seems 𨾏 was the more frequently used one. In the 39 inscriptions in Yáo & Xiāo 1989 which belongs to Period 2, only one inscription numbered 22644 has the graph 𨾏 and one, numbered 22715, has the graph 𨾏, both represent ‘performing a kind of worship ceremony’, with the rest having 𨾏. In period 3, another graph 𨾏 was added to the above three, that is to say, four different graphs were used to represent the same word. Examples of the use of these four to represent the

composed of 辵, with 葍 as the phonetic indicator. 彳 (road), 止 (foot) and 彳 were interchangeable in early times when used as semantic determinative. My suggestion is that 辵 in 講 evolved from 彳, which happens to be written as 辵 in later times, having nothing to do with 𨾏 or 𨾏.

meaning ‘encounter’ in the phrase 遘大风 ‘encounter strong wind’ in period 3 are as follows:

- 王其田其 𠄎 大风 (period 3: 28554)
The King goes hunting, encounters strong wind
𠄎 大风 (period 3: 28555) Encounter strong wind
不 𠄎 大风 (period 3: 29234) Not encounter strong wind
其 𠄎 大风 (period 3: 30239) Encounter strong wind

In period 3, though 𠄎 was still used more frequently than other forms, the use of others, especially 𠄎, was on the increase. Judging from the OBI, as far as this particular character is concerned, the use of different graphs for one word stopped in period 5. There are almost 50 inscriptions belonging to period 5, in most cases 𠄎 was used, meaning ‘encounter’ and ‘perform a kind of worship’, except for one inscription, numbered 36630, in which 𠄎 was used.

The use of the different graphs in the bronze inscriptions shows the same trend: in bronze vessels cast in Shang, different allographs of 𠄎 遘 were used, including 𠄎 and 𠄎, but not 𠄎. In the bronze inscriptions in Zhou, 𠄎 is used once for a person’s name on a vessel cast in early Western Zhou (Zhāng Yáchū, 2001, p. 9239). 𠄎 and 𠄎 are used respectively for the same meaning in the same text in 保尊 the Bǎo Zūn and 保卣 the Bǎo Yǒu; both are ancient drinking vessels cast in early Western Zhou, obviously belonging to the same set (ibid, pp. 3387, 3693). In all other cases only 𠄎 is used on vessels ranging from early to late western Zhou. In 康熙字典 Kāngxī Dictionary, 遘 is included, but not 𠄎.¹²

No character in the OBI or in the bronze inscriptions has 𠄎 as a phonetic indicator. Though in *Shuōwén Jiězhì*, Xǔ Shèn did put two characters zài < *tsrəm 𠄎 (the small seal script) 再 (again) and chēng < *thəŋ 𠄎 再 (weigh) in the same category as 𠄎. According to him, the lower part of the two is the abbreviated 𠄎 𠄎. There is no evidence to support Xǔ Shèn’s suggestion. The origin of 𠄎 再 (again) remains unclear, while the OBI form of chēng 𠄎 再 (weigh) is 𠄎, a hand 𠄎 grabbing a 𠄎 (fish?) from above.

Qiu Xigui’s suggestion is not applicable here. Qiu holds that such graphs should be put into the category ‘semantic-phonetic compound’ because the original part, in this case gòu 𠄎 𠄎, is used as a phonetic indicator in many other compound characters. However

¹² One explanation of the relation between 𠄎 and 遘 is that the former is an abbreviated form of the latter. See Yú Shěngwú 1996. This hypothesis can hardly be supported from the studies of the use of these graphs through different periods of the OBI. Clearly, 𠄎 is the earliest form, with 𠄎 evolving gradually from it.

from the study above, it seems that at least in small seal script, *gòu* 𠄎 is not used as a phonogram in other characters.

Compared with the graph 祭, the formation of the graph 遘 took place much earlier and is a little bit complicated, as it has more allographs, including 𠄎 and 𠄎. The added part in the three allographs, *chí* 𠄎 (road), *zhǐ* 止 (foot), or *chuò* 辵, all represent meaning related to ‘motion’. Perhaps that is why they are all acceptable as semantic classifiers added to 𠄎. It seems that there was a trial period when graphs representing similar meaning were all used as semantic classifiers, though eventually one of them became established while others die out.¹³

There are also many different hypotheses about the formation of the graph 逆 and the relation between 𠄎 and 逆. Xǔ Shèn explained *nì* 逆 (small seal script) 逆 representing ‘move forward to meet’ as a semantic phonetic compound, with *chuò* 辵 as the semantic classifier and *nì* 𠄎 as the phonetic indicator while 𠄎 also a compound ideograph standing for ‘not compliant’. Lǐ Xiàodìng 1986 puts both *nì* 𠄎 and *nì* 逆 into the category compound ideograph. Xú Zhòngshū 1989 explains that 𠄎 depicts an inverted person, representing the meaning ‘move forward to meet somebody coming from the opposite direction’, *nì* 逆 as a compound ideograph composed of 𠄎 and 辵, representing the same meaning.

According to Qiu Xigui 2000, 𠄎 is a deictic graph, formed by adding a deictic symbol to a pictograph; but he doesn’t explain which part in 𠄎 is the deictic symbol and which part is the pictograph. Qiu holds that 𠄎 is a protoform of 逆. The formation of 𠄎 and 逆, according to Qiu Xigui is as follows: In the first stage, *nì* 𠄎 was invented to stand for ‘not compliant’, later was also used to represent ‘go to meet’, a meaning extended from the original one, then another graph *nì* 逆 was formed, with 辵 added to 𠄎 for the extended meaning ‘go to meet’ only. In the last step, 逆, the later invention, was used also to represent ‘not compliant’, therefore gradually taking the place of 𠄎, and 𠄎 died out, a process termed by Qiu as the consolidation of graphs: the transference of all the functions of one graph to another graph.

The problem with Qiu’s study is that he depends heavily on Xǔ Shèn’s explanation of the original meaning of *nì* 𠄎, without doing any study based on any graphic evidence of how the two graphs were used. As will be demonstrated next, based on how the graphs used in the OBI and Zhou bronze inscriptions, it is more convincing to suggest that the original meaning of the graph 𠄎 is ‘go to meet’, which gradually evolved into 逆, after a period of trial with several other allographs such as 𠄎 and 𠄎. The meaning ‘go against, counter’ is extended from ‘move forward to meet’, rather than the original meaning of 𠄎 as suggested by Xǔ Shèn.

¹³ At this stage, it is hard to give a reasonable explanation for why one semantic classifier became established while the others were discarded

Studies from the actual use of the graph *nì* 𠄎 and its allographs suggest strongly that the evolution of the graph *nì* 逆 from *nì* 𠄎 is almost identical with that of *gòu* 𠄎 from *gòu* 𠄎. Like the graph *gòu* 𠄎, the character *nì* 逆 also had three other allographs in the OBI, 𠄎, 𠄎, formed with a 𠄎 (foot) added to 𠄎, and 𠄎, formed with *chì* 彳 (road) added to 𠄎. But while the evolution of the different allographs of 𠄎 are evident from the use of them through different stages of the OBI, the evolution of the graph *nì* 逆 from *nì* 𠄎 is not that obvious as all the allographs, 𠄎, 𠄎, 𠄎, and 𠄎 were used in period 1 of the OBI. Furthermore compared with around 500 oracle bones ranging from period 1 to period 5, on which the graph 𠄎 and its allographs are found, the number of bones on which 𠄎 and its allographs occur is only about one hundred, most belonging to period 1. It seems that at least in this particular instance the evolutionary process began before the OBI.

Examples of the use of the different graphs in the OBI

辛丑卜恣贞巩方其来王勿 𠄎伐 (period 1: 6198)

Crack-making on Day Xinchou, Que divined: “the *Gǒngfāng* will come; the King should not strike head-on.”

呼 𠄎 取 (period 1: 8851) Order *Ni* (the name of a person) to get...

.....贞乎豕 𠄎 又商 (period 1: 21626)divined: ‘order Shi to go to meet the *Yòu Shāng*’.

王于南门 𠄎 姜 (period 4: 32036) The King will meet the *Jiāng* at the south gate.

𠄎 appears in bronze inscriptions in Shang and early western Zhou, mostly alone, sometimes with the name of the ancestor, as in 𠄎 父辛 (meet Father Xin?). The other two graphs used in the bronze inscriptions in Zhou are 𠄎 and 𠄎, with 𠄎 as the more common form. On a bronze vessel cast in late Western Zhou (Zhāng Yàchū, 2001, p. 2864), 𠄎 was used to represent the meaning ‘go against’ in 𠄎 王命, ‘go against the King’s order’, a meaning extended from its original meaning ‘go to meet’. In 中山王方壺 *Zhōng Shān Wáng Fāng Hú*, cast in the late Warring States period (Zhāng Yàchū, 2001, p. 5144), 𠄎 逆 is used for the same meaning in the phrase 唯 𠄎 生祸 ‘go against the order will lead to disaster’. Though included in Xǔ Shèn’s *Shuōwén Jiězhì*, *nì* 𠄎 is not found in Wangli’s *Old Chinese Dictionary*, nor in the *Comprehensive Chinese Dictionary* compiled by Lǐ Géfēi 1990, indicating that *nì* 𠄎 was completely replaced by *nì* 逆.

The last graph discussed here is *cóng* < *tshôn 𠄎 從 (follow), which is evolved from *cóng* 𠄎 从 (follow). *Cóng* 𠄎 从 (follow), composed of two *rén* 人 (person)

appeared in the OBI from Period 1 to period 5 (Yáo & Xiāo, 1989, p55-58),¹⁴ at the same time, 𠄎 and 𠄍 were also used, though not often in the inscriptions we have. In Yáo & Xiāo (1989, p.874) only one inscription is listed which has the character 𠄎, but the text is incomplete, with the meaning represented by 𠄎 left unclear. In Xú Zhòngshū (1988, p. 918), two inscriptions with the character 𠄍 are illustrated, one representing the same meaning as 𠄎, the other as a person's name. In the OBI, 𠄎 is the most frequently used graph, while in Zhou bronze inscriptions, it is *cóng* 𠄎 從 that is most frequently used, though at the same time the other three, 𠄎, 𠄍 and 𠄎 are also used. In Xǔ Shèn's *Shuōwén Jiězì*, only 从 and 從 are included, the same is true for 康熙字典 the Kāngxī Dictionary in which 从 is explained as the original form of 從.

Examples of the use of the different graphs in Zhou bronze inscriptions standing for the meaning 'follow' are as follows:

𠄎王南征 'Follow the King to go to the South on a punitive expedition' (Zhāng Yàchū, 2001, p.1322) on 工鳥叔鼎 the Gōng Shǔ Dǐng cast in early Western Zhou.

𠄍赵征 'Follow Zhao on a punitive expedition' (Zhāng Yàchū, 2001, p.1403) on a cauldron cast in Shang or early Western Zhou.

Like the evolution of the graph *nì* 𠄎 逆 (go to meet) and *gòu* 𠄎 遘 (to encounter), *cóng* 𠄎 從 (to follow) was gradually established as the standard form with 从 becoming archaic, though 从 replaces 從 in modern simplified script. The formation of the above compound characters 遘, 逆, 從 followed a striking similarity: in the first stage, a unit character, in this case 𠄎, 𠄎 and 从, was formed. The second stage saw the appearance of different allographs, the original plus three others augmented respectively with either 辵 (road) or 止 (foot) 止 or both, the meaning represented by the later formed graphs remains the same with the original ones. After a period of the use of different allographs, the one with 辵 as the semantic determinative became established while the others gradually faded away.

The principle of analogy at work

Boltz 1999, 2003 outlines three stages through which, he claims, almost every compound character in the Chinese writing system evolved. His three-stage theory can be summarized as follows: the first stage saw the invention of unit characters; in the second stage, these unit characters were used multivalently, either to represent words related in meaning but unrelated in sound, or to represent word related in sound but

¹⁴ Apart from the original meaning 'from', *cóng* 𠄎, 从 in the OBI was also used to represent 'from' and 'sudden', the former is considered a meaning extension of 'follow' and the latter a phonetic borrowing. See Xú Zhòngshū (1989, p.917).

unrelated in meaning; in stage three, this seemingly chaotic state was checked by adding either a phonetic or a semantic determinative to the multivalent graph.¹⁵ Boltz's theory cannot provide a convincing explanation for the formation of the above discussed graphs: *jì* 祭 (offer sacrifice, meat, to), *zhù* 祝 (pray), *fú* 福 (offer sacrifice, wine, to), *gòu* 遘 (encounter, meet), *nì* 逆 (go to meet) and *cóng* 從 (follow). As demonstrated clearly, the evolution of these graphs from the original characters are not triggered by any linguistic factor, that is to say, neither by a meaning extension nor a phonetic borrowing of the original graphs. Instead of three different stages graphs like *zǔ* 祖 (ancestor) and *shè* 社 (spirit of soil) went through, the formation of the above six went only two stages: the formation of the original graphs, and the evolution of compound characters through the addition of semantic determinatives to the original graphs.

Neither can Chén Mèngjiā 1988's three-stage theory explain the formation of such graphs. Chén's is different from Boltz's in that his first stage includes traditionally defined compound ideographs and his second stage includes only phonetic borrowing. Four (out of the six) characters, 福, 遘, 逆 and 從, are categorized as semantic-phonetic compounds by Xǔ Shèn, both 逆 and 𠄎 are put into the category compound ideograph by Lǐ Xiàodìng 1986. Studies like this will shed no light on the way these graphs were formed. There is no doubt that these six graphs should be categorized as compound ideographs, because no component in each of these compound graphs is invented to represent the pronunciation of the graph in question. The question left unanswered is why a semantic determinative was added to a graph when there is no phonetic or semantic demand, there might be suggestions that the adding of a semantic determinative to a original graph, like *shì* 示 to the original 𠄎 and 𠄎 and 𠄎, was to create clarity and to bolster the meaning represented by the original pictographs. It is unquestionable that with *shì* 示 as a component, the compound graphs are more efficient in representing the meaning 'offer sacrifice; perform a kind of sacrifice ceremony'. However, after the invention of 𠄎 in the OBI, 𠄎 continued to be used with the same meaning for almost another thousand years, 𠄎 was used in the OBI as the only form without causing any trouble, why did it need to be clarified after at least 150 years of use?

In my opinion, the formation of these graphs conforms to Coulmas 2003's suggestion that a writing system is auto-indexical, namely, a writing system 'contains a key to its own decipherment'. The adding of a common semantic determinative to graphs representing meaning belonging to the same semantic field will undoubtedly facilitate the interpretation of the writing system. I suggest that the formation of such graphs as 祭, 祝, 福, 遘, 逆 and 從 is aided by the principle of analogy, that is, the tendency for graphs representing meaning belonging to the same semantic field to have one common component. In the Chinese writing system, a large percentage of compound characters are semantic-phonetic compounds formed when a graph is borrowed phonetically to designate another word, then a semantic determinative is added to form a new graph for the second meaning in order to differentiate the two graphs. For graphs discussed in this paper, the adding of a semantic determinative is out of analogy rather than linguistic

¹⁵ A detailed study of Boltz's three-stage theory can be found in Zhiquan Chen 2008.

necessity. The adding of 示 to form 祭, 祝, 福 and 辵 to form 邁, 逆 and 從 puts otherwise unrelated graphemes into the same category: graphs that represent meanings belonging to the same semantic field. Graphs formed in this way will bring no change to the language that the writing system records, but they contain one of the keys to deciphering Chinese characters.

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