

Research on Newly-Found Writing of ox Bone in Warring States

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Supported by the Educational Ministry Social Science Fund Planning Project “Research on Chinese casting and Chinese Character’s Development and Evolution” (12YJA740023).

Received 2 December 2014; accepted 8 February 2015
Published online 26 March 2015

Abstract

Writing of ox bone found in Zheng and Han areas is another important discovery for characters of Warring States. It presents the true appearance of Jin writing of Warring States. “鹵”, “叔” in the previous report should be “𠄎”, “先”. And “起” is not explained in the previous report. Based on the way of writing of “巳 (己)”, “卩” in Han Dynasty wooden tablets should be explained as “巳 (己)”. The characters of ox bone were written curtly, briefly and optionally, they demonstrate changing sign like Qin characters changing into Clerical script, such as radical “水” is “彡”, like clerical script. Evolution of clerical script includes two concepts such as generalization and narrow sense, and generalization sense have characters of six countries. The discovery of writing of ox bone further demonstrates that evolution of clerical script is a common evolution trend of characters in different countries in Warring States.


Key words: Characters of warring states; Writing of ox bone explanation of a word; Evolution of clerical script

Ma, C. (2015). Research on Newly-Found Writing of ox Bone in Warring States. *Cross-Cultural Communication*, 11(3), 88-91. Available from: <http://www.cscanada.net/index.php/ccc/article/view/6709>
DOI: <http://dx.doi.org/10.3968/6709>

INTRODUCTION

In 2014, the fourth *Huaxia Archaeology* issued four account books written in writing of ox bone in Han country in the Warring States. Those materials were found in H2164 ash pit of Zheng and Han areas in Xinzheng city. Introduced by Mr. Cai Quanfa, the amount of discovered ribs are 48, 45 after combination. The largest reaches 29.4 cm, while the shortest 6.4 cm. And 39 ribs were written with different characters (Cai, 2014). From issued photos, most of writing of ox bone were destroyed, we can just see some intermittent strokes in some photos, while we can explain some characters in some photos. The writing of ox bone boasts very important value. It provides us new materials to do research about Jin character evolution, evolution of Chinese characters and generation of clerical script.

1. EXPLAIN “𠄎”

Characters of ox bone record nearly 40 personal debit and credit accounts.¹ And the involving article is “”.

Following are shapes of this character in articles:




Relative complete examples involving this characters in ox bone are:

(Letter “W” replaces this character below)

a) seventy nine 𠄎舒W three bundles.

b) 𠄎口W twenty bundles, W nineteen-nine.

¹ About “”, writer thinks it is “布”. However, characters in issued photo are not very clear, I cannot make a clear judgment. Now, according to Mr. Cai Quanfa, it can be explained as “貸”, as a result, characters in ox bone are debit and credit record.

- c) Eighteen-four: 蜀虎W sixteen bundles.
- d) Fifteen-nine: 全牝W twenty bundles.
- e) 全牝W twenty-nine bundles.
- f) Sixty-nine: □□W, W six bundles.
- g) □建W ten bundles.

From examples above, 盲舒, 蜀虎, 全牝 are people's name, W is a unit of "bundle" of some article. Because above part "田" of "胃" in old characters can be seen as "𠂔"; "𠂔"; "𠂔" and "𠂔", Cai Quanfa thinks above part "田" of "胃" can also be seen as 米, 十, 人, / or \. He also thinks that W in ox bone should be simplified style of "𠂔"

(鹵)" in bronze script. In the article, it sounds "縹", means "today's cotton and twine" (Cai, 2014).

It is unbelievable that make a law of a character's evolution analogize to other words. Mr. Zhang Zhenglang explains 𠂔 in oracle bone script as "𠂔". He points that the Xiao Zhuan shape of "𠂔" is "𠂔", from 𠂔 (Zhang, 2012, p.11). In other word, original writing of 𠂔 is 𠂔, later it was changed into 𠂔.

Inscribed wooden slip in Baoshan of Chu area No. 260: "一奠 (郑) 弓 一纷斂夫 𠂔", Mr. Liu Zhao explains "𠂔" as 𠂔. He thinks "夫𠂔" is "𠂔", namely oversleeve. Moreover, Mr. Liu Zhao in his article further explains "𠂔" in oracle bone script and bronze script and verifies originality and evolution of 𠂔 (Liu, 2004, pp.149-156).

In *Inscribed wooden slip in Guodian of Chu area*, "𠂔" is written as "𠂔":

𠂔 (Xing Zi Ming Chu 34) 𠂔 (Xing Zi Ming Chu 35) 𠂔 (Yu Cong Er 7) 𠂔 (Yu Cong Er 30) (Li, 2003, p.615)

"W" in account book of writing has similarity with "𠂔" in *Inscribed wooden slip in Baoshan of Chu area* No. 260 and "𠂔" in *Inscribed wooden slip in Guodian of Chu area*, therefore, no doubt, it should be explained as "𠂔". In examples, "people's name + 𠂔 + number + bundle", in it, the unit of "𠂔" is bundle, as a result, it cannot be explained as "oversleeves", it means "縹". Duan Yucai said "It can be made clothes, and made fire, and be a rope." (Duan, 1981, p.1162) From it, "縹" means habijabi. It can be used in people's daily life widely, such as knitting, lighting a fire and cable braiding. It is quite suitable for habijabi to regard bundle as unit.

2. EXPLANATION OF "ORIGINALITY OF 先"

In photo H12643, from the fifth rank of right, Mr. Cai Quanfa explains as: 叔□取縹十七束, 巳 (己). The first character is "𠂔", while the copy of Mr. Cai "𠂔". We think this word should be explained as "先". In *Shuo*

Wen, the description of "先" is "advance, following 儿 and 之". Its shape in oracle bone script: 𠂔, 𠂔; in bronze script of Xizhou: 𠂔, 𠂔; in bronze script of Chunqiu: 𠂔, 𠂔; characters in warring states: 𠂔, 𠂔. In *Gu Wen Zi Pu Xi Shu Zheng*, "In terms of '先', 止 or 之 in the above of 人, as if that someone is in front of others. It means advance." (Huang, 2007, p.2767) From the photo and the copy of Mr. Cai Quanfa, the upper part of the character is 之 and the under part of it is 人. It should be explained as "先".

The original report did not explain the second character. This character could be 𠂔. Although it is severely damaged, with careful observation we can see the right side of this character is "si" while the upper-left side is "yao" and the left-lower side may be seen as shape of "zhi" indistinctly. Therefore this character can be identified as "qi". (It means "up" in the Chinese character) which can be found in the classical work "shuowen" as 𠂔. While in "the Bamboo Booklets of Qin Dynasty in Fangmatan of Tianshui" as "𠂔" and in "the Bamboo Booklets of Qin Dynasty in Shuihu" as 𠂔. It can be compared with the character "牛骨" (ox bond in English) "Xianqi" was used as one's second name at the beginning, then it was used as the first name in Jin state of the Spring and Autumn Period. "Tong zhi si zu lve san" recorded that a person whose first name is "xian" is the descendant of the Xian Fu, a senior official of the Jin state and his offspring would be a minister generation by generation. "Zuo Zhuan" was recorded that there are people who named "Xian Zhen", "Xian Ke", "Xian You", "Xian Du" and so on in Jin state. Jin state is the birthplace of the names began with "Xian", therefore it is reasonable that names with "Xian" as the beginning appear in the account book written with ink and brush in Han state.


3. "SI" IN "THE BOOKLETS OF HAN DYNASTY"
















We can find the character "si" at the end of the most of records in account books written down in the ox bond. In a sense, the character is used at the end of accounts, meaning "complete" or "end" in English. Coincidentally, in the booklets of Han Dynasty we can find "𠂔" (the letter "J" instead) at the end of numerous recording characters. For example, we can find it in "the Newly-found bamboo booklets in Juyan" EPT51.61:

Take Dong Feizi gets less than 333 liters of grains.

The servant Zhang nu gets 322 liters of grains, take by Feizi. J.

The servant Zhuang Zhong gets 322 liters of grains, take by Feizi. J.




The pattern of the character is , which is also found in “the Newly- found bamboo booklets in Juyan” EPT51.60, EPT51.235A and etc.; Inscribed money wooden tablets and registry booklets of Zheng Libing are to be count in “The First and Second Editions of the Bamboo Booklets of Han Dynasty in Juyan.” A 823, A 828, etc., and the 10th Grave of “the Bamboo Booklets of Han Dynsty in the Phoenix Mountain of Jiangling”, etc.. The “J” is explained as “卩” in the Newly-found Bamboo Booklets in Juyan, “the Integrations of the Chinese Bamboo Booklets” and “the Explanation of the Newly-found Bamboo Booklets in Juyan”, etc.. And Mr Lu Xixing regards it as “si” in “the Grass Writing Edition of the Bamboo Booklets of Han Dynasty” (Lu, 1989, p.283), and we believe his opinion is more or less correct.

First of all, from the angle of glyph evolution, the character “巳”(si) was written as follows,  or  as oracle bone inscriptions,  or  as bronze inscriptions during West Zhou Dynasty,  as bronze inscriptions during the Warring States Period, ,  or  in the booklets of Chu Dynasty, and  or  as bovine bone inscriptions. Thus it can be found that the conservative and hasty inscriptions,  and  appeared as the character “巳(巳)” evolved from oracle bone inscriptions to bronze inscriptions of Warring States Period. The “J” in the bamboo booklets of Han Dynasty should developed from the hasty way of the Warring States Period character “巳(巳)”. In addition, the  (Yuelu Bamboo Booklets of Qin Dynasty) and  (The First and Second Editions of the Bamboo Booklets of Han Dynasty in Juyan) should adopt the conservative inscription. In summary, the glyph evolution from oracle to the bamboo booklets of Han Dynasty of the character “巳(巳)” can be described as follows, 

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




Secondly, from the angle of meaning, *the* “巳” *Department of Shuowen* said that “巳” means “already” and represents April in the Twelve Earthly Branches. And in April the weather gets warmer and less colder, days get longer, everything in nature comes to bloom and form a mix of colors just like the skins of snakes, so it also represents snake in shape. Duan Yucai said that “巳” means the end of something in *the Book of Laws* (Duan, 1981, p.1304). It can be regarded as a habit of the ancients’ accounting to write a “巳” as the completed mark at the end of record. However, if it is interpreted as “卩”, it has no certain meaning and can be only treated as some kind of mark.

Lastly, from the angle of text examples, the character appears at the end of the records such as issuing rations, calculating money and goods, land rent tax statistics, and calculating loans in the bamboo booklets of Han



Dynasty, which is close to the function of the bone ink book in recording the account. The last character of the bone account is “巳(巳)”, thus it can be inferred that the character in the bamboo booklets of Han Dynasty should also be it. From the combination from the mentioned three angels, the character “巳” interpreted as “巳(巳)” is reliable. Moreover, the unearthed bone ink book definitely proves that Mr. Lu’s opinion is undoubtedly correct. But there is one more thing needed to be explained, the character “卩” in the words of Qin Dynasty is very close to the hasty writing of “巳(巳)” of the other six country of Warring States Period, for example, the “卩” part of characters like  (Liye Bamboo Booklets of Qin Dynasty),  (Shuihudi Bamboo Booklets of Qin Dynasty) and  (Shuihudi Bamboo Booklets of Qin Dynasty). The writing of the character “巳(巳) in the bamboo booklets of Han Dynasty which is similar to the “卩” may be influenced by the mentioned reasons.

Discussing about the Changes of the Clerical Script from the Perspective of Character Carved in Cattle Bone

Clerical script of Later generations evolved from the qin character causing certain unavoidable changes. However the question whether there were any changes or relationships between the characters of six states and qin’s was still the debating focus among the academic circle. Mr Donlan said in “the history of Chinese philology”²: “the characters of the six states becomes increasingly rash featuring the emergence of Clerical script” (Tang, 2005, p.131). Mr Zhao Pingan ever said: “A common destiny of the characters in six states is clerical script,.....but this perspective is unpersuasive” (Zhao, 2008, pp.7-8). According to Mr Qiu xigui ,clerical script itself might be influenced by Oriental countries (Qiu, 2013, p.78)

The unearthed characters carved in cattle bone belong to the warring states period which is exactly the transitional phase of the characters in eastern zhou dynasty evolved to the characters in qin and han dynasties, and these unearthed characters also provide cherished material for the study on the relationships between characters in six states and clerical script. Some of the characters on the cattle bone give hint to certain phenomena of briefness and even similarities with clerical script. For example, “束”is written as , compared with  written in the form of inscriptions on the ancient bronze objects , characters carved in cattle bone is accustomed to link the middle part “口”with the underpart “八” which break the structure of inscriptions. Another example is “巳”, written as , which is equal to  in Chu bamboo script, characters carved in cattle bone straighten the radicals on the left and then extend to the right direction which is the direct origin of ; Besides, another character

² *the History of Chinese Philology* was published in1949.

on the cattle bone is “池”, written as  (池), the left radical “水” written as “氵” rather than , these method of writing is identical with clerical script.



Simplification is one of the important laws penetrating the history of the development of Chinese characters. The nature of the character in Qin dynasty transferred to the clerical script is to simplify the form of the seal character, the methods including: to change a curve to straight, to dissolve the seal character, to extend or shorten the radicals and to connect them etc.. Through special form of scripts on cattle bone, we can be sure that the characters in jin dynasty are also be simplified. (such as the word 束 written in the form of ligatures; the word 巳, changed from curve to straightness, part of the word 池 is cut off), and characters in jin dynasty had ever exerted certain influence to the formation of clerical script. however, the main questions rooted in whether the phenomena of simplification of characters in Jin dynasty, in six states and in Qin dynasty can be viewed as “tendency towards clerical script”.

Mr Gui-yuan wang said, “from the perspective of the history of Chinese characters, the curve changed to be straight in the late warring states and all the changes occurred in different characters possess certain similarities, so applying the phrase “tendency towards clerical script” to represent the change is reasonable. if this phrase can only be used to refer to the change of characters in Qin dynasty, then how people name the changes in the same phrase in six states. If we use another phrase to represent it, we are like naming the same phenomena with different words” (Wang, 2011). His opinion is appropriate, we hold the view that the phrase “tendency towards clerical script” has two kinds of meaning, the narrow sense of this phrase is just the changes of characters in Qin dynasty from seal character to clerical script. while the generalized sense of it refers to the changed characters in six states besides Qin dynasty.

So here, concerning to the conception of “clerical script” and “tendency towards clerical script” we may make the following statement: the latter one evolved from characters in Qin dynasty and in six states. “Clerical script” is derived from “tendency towards clerical script”, and is based on the development of characters in Qin dynasty, however, the characters in six states also exert great influence on the generation process of “clerical script”.

SUMMARY

Writing boasts specific value, comparing to script of oracle bone, bronze and seal. It reflects character’s appearance at that time. Casting characters are variations of writing characters in specific materials. Writing characters and casting characters in terms of shape have different features, along with different speed. And shape of writing characters is always more curt, and brief. For

example, “则” of Chu xi bronze script is: ; and “则” of bamboo slip and silk is: . We can see that characters of bamboo slip and silk destroy bronze character component structure. In terms of Jin Xi characters, Houma allied paper, Wenxian allied paper and writing of ox bone show curtness, briefness and causality comparing to cast characters of Jin country.

Seal character (this is a broad sense) is very neat and standard, suitable for some solemn and formal occasion. However its structure is quite complex and cannot be easy to write, which cannot be satisfied for the actual need. Therefore, it is unavoidable that ink writing the characters start to omit seal character’s strokes and structure, and present appearance of curtness. Curt shape adapts to Chinese character’s simplified law, satisfies writing’s actual need. It has been acknowledged by people gradually. With accumulation to some degree, it causes writing’s actual need—change of clerical script. Mr. Chang Yaohua points, characters of Sanjin allied paper are a pioneer of change of clerical script. It destroys the out form of oracle bone script and bronze script—strokes and inner structure, and breeds an essential writing revolution (Chang, 2008, pp.597-605).

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