

Study on the Collection and Regional Characteristics of Shang Bronze Wares Unearthed in Northern Anhui

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ABSTRACT

The Shang Dynasty was the heyday of Chinese bronze art. During the Shang Dynasty, bronze wares were not only used as a tool of production and life, but also the ritual ware in the temple, which played an important role in social material culture. In this paper, bronzes unearthed during the Yin and Shang Dynasties in northern Anhui province are sorted and studied by means of literature research, and classified and collated according to the principles of typology. This paper finally comes to the conclusion that, as one of the important archaeological materials reflecting the social and economic living conditions of the Shang Dynasty, bronze wares play an important role in the study of the economic development and living standards of the people in the Shang Dynasty in northern Anhui.

Keywords: Shang Dynasty, Anhui area, bronze ware

I. INTRODUCTION

After years of archaeological excavations in northern Anhui, a large number of bronze wares of Shang Dynasty have been unearthed. This paper divides Anhui area into three regions: northern Anhui, Jianghuai and southern Anhui. The quantity and type of typical ware and bronze ware unearthed in northern Anhui were sorted out and compared with those unearthed in Jianghuai and southern Anhui. The comparison is helpful to understand the distribution, regional differences and connections of bronze ware in each region of Anhui during the Shang Dynasty, and to explore the cultural exchange among different regions and its influence, as well as the social development of the Dynasty, which is of great academic research value.

II. STATISTICS OF BRONZE FOUND IN NORTHERN ANHUI

Thanks to its favorable strategic location, the northern Anhui played an important role in the rise and fall of the Shang Dynasty. In recent years, a certain number of bronzes from the Shang Dynasty were found in northern Anhui. In this paper, firstly, these bronzes were sorted out, studied and counted, which provided data support for the subsequent comparative analysis with Jianghuai and southern Anhui. A total of 40 bronze wares were unearthed from the Shang Dynasty in northern Anhui, including 2 food-vessels, 23 wine vessels, 10 weapons, 2 chariot and harness ornaments, and 3 other wares. The bronzes unearthed in various regions are listed below:

In May 1982, 8 bronze wares were unearthed in Yingshang County, Anhui Province, including 1 bronze tripod, 1 bronze jue-cup, 1 bronze pot, 1 bronze statue, 1 bow-shaped article, 1 bronze dagger-axe, 1 bronze arrow, and 1 bronze cup [1]. In June 1967, five bronze wares were unearthed in Funan County, Anhui Province, including 1 bronze wine vessel with ornamentation of dragons and tigers, 1 bronze statue with ogre-mask motif, 1 pair of bronze jia (drinking vessel), 1 pair of bronze gu (drinking vessel), and 1 pair of bronze jue-cup [2]. In November 1971, 7 pieces of utensils were collected in Yingshang County, Anhui Province, including 3 pieces of bronze jue-cup, 1 piece of bronze gu (drinking vessel), 1 piece of bell, and 1 piece of bronze wei. In 1972, 7 bronzes were unearthed from Wanggang site, Yingshang County, Anhui Province, including 2 bronze jue-cups, 1 bronze zhi, 1 spear, 1 sword, 1 chisel, 1 axe. In 1980, Wanggang villagers in Yingshang County, Anhui Province found 6 bronze wares, including 5 spears and 1 halberd [3]. In the 1970s, the Huainan Museum collected a group of bronzes, including 1 jia with surface patterns of beast, 1 jue-cup with surface patterns of beast, 1 gu with surface patterns of beast, 1 li with surface patterns of beast, and 2 bronze animal head jue-cup with string patterns [4]. In 1965, one copper jue-cup was found at the Bengbu Waste Copper Acquisition Station.

III. CLASSIFICATION OF BRONZES UNEARTHED IN NORTHERN ANHUI

A. Sacrificial vessel

1) Food-vessels

a) *Bronze tripod*: According to *Shuo Wen Jie Zi* by Xu Shen, Ding, san zu, liang er, he wu wei zhi bao qi ye. Xiang xi mu yi chui. (Tripod has three upright legs and two lifting ears, which are used to blend various flavorings. Its character looks like cutting up wood for cooking.) Tripod has both practical and sacrifices functions, and played an extremely important role in the social life of Shang Dynasty. There is only one bronze tripod in northern Anhui, which was collected in Yingshang County, Anhui in May 1982. The bronze tripod has deep belly, straight ears, cylindrical feet, and a "丁" shaped mark on its bottom, which may be the trace of the nail during casting. It is 25 cm in height, 4 cm in ear height and 20 cm in caliber. The type to which it belongs cannot be determined.

b) *Bronze li*: Li is used in the same way as the tripod, and is also a cooker. Therefore, the description of li in *Shuo Wen Jie Zi* is as follows: li is a kind of tripod. Only one li with surface patterns of beast was unearthed in northern Anhui, with a wide flared mouth and a straight nape. There is a girdle on the neck with four swirl patterns on the top, shallow bag-legged with three short tapered feet underneath. Three pocked feet decorated with animal surface grain, horn-like shape like ox horn, two orders in the shape of milk. The three bag-shaped legs are decorated with surface patterns of beast which look like cow with horns and eyes like protruding dots. The middle nose bridge is slightly convex, forming a symmetrical animal face pattern. It has a caliber of 14, a foot height of 5, an overall height of 16.5 cm, and weighs 867 grams.

2) Wine vessels

a) *Bronze jue-cup*: Jue-cup, characterized by deep belly, drain for pouring wine in the front (liu) and sharp tail in the back (wei), and two pillars between liu and the rim to remind drinkers to drink appropriately, is first discovered in Erlitou culture, and the earliest known wine vessel. The 12 bronze jue-cup of the Shang Dynasty unearthed in northern Anhui are introduced as follows.

Bronze jue-cup collected in May 1982, Yingshang County, Anhui, has a height of 21 cm, a belly depth of 10 cm, a pillar height of 3 cm, and a foot height of 8 cm. It also has a drain for pouring wine in the front (liu) and a sharp tail in the back (wei). There are two mushroom-shaped pillars between liu and the rim. It has deep belly, rounded base, tapered feet, and two string patterns on its belly. Bronze jue-cup collected in June 1967 in Funan County, Anhui Province, is 28 cm in height, 10

cm in caliber, 11.5 cm in belly depth, and 13 cm in leg height. The bronze jue-cup unearthed from the Bogang River in Jiashan County, Anhui in 1953 is 26.5 cm in height, 11.3 cm in belly depth, and 9 cm in leg height. It has a flat belly, a flat bottom, a long liu and a short wei. Its feet are three-fusiform, like antelope horns, with little curvature. The belly is divided into two sections, with both decorated with surface patterns of beast (ogre-mask motif). At the top and bottom of the surface, there is a row of small circular patterns on each side.

In June 1967, a pair of bronze jue-cup was unearthed in Funan County, Anhui Province, decorated with ogre-mask motif, 28 cm in height, 10 cm in caliber, 11.5 cm in belly depth, and 13 cm in leg height.

In November 1971, the "You" jue-cup collected in Yingshang County, Anhui, had a narrow liu, two pillars beside the liu, a sharp tail, an ovate belly, and triangular pyramidal feet. The top of the pillar is decorated with circle whorl ornamentation, and the belly is decorated with ogre-mask motif with cloud and thunders as shading pattern, a flat bow, and an ox head. There is "酉" inscription on the lower belly. The pillar is 3.5 cm high and the overall height is 20.5 cm. The shape and decoration of "Yueji" jue-cup are basically the same as that of "You" jue-cup. However, the former is clearer and rougher in ornamentation, and 19.5 cm in height. There is one jue-cup more. It is somewhat damaged, the belly is decorated with ogre-mask motif, with circular patterns for the upper and lower borders.

In 1972, two bronze jue-cups were unearthed from Wanggang, Yingshang County, Anhui. One has a sharp tail, slightly sloping feet under the belly, and grooves on the left and right. The belly is trimmed with ogre-mask motif. It's 18 cm in height. The other is more complete, including a liu and wei, two pillars beside liu, a long oval-shaped belly, triangular feet, and a flat bow with the inscription "月己" in the belly. The bow is decorated with a cow's head pattern, and the belly is decorated with ogre-mask motif with delicate cloud pattern as shading pattern. It's 21 cm in height.

In the 1970s, Huainan Museum collected a piece of jue-cup with surface patterns of beast. It has thin mouth edge, a short liu and sharp wei, two short mushroom-shaped pillars at the intersection of liu and belly, and is decorated with swirl patterns. It has an oval belly, bow flat chisel, outward round base, three tapered feet, with belly decorated by Kui-dragon design and thunder pattern as the bottom. The leg is 7.6 cm high and the overall height is 18.5 cm. There are also two pieces of bronze animal head jue-cup with string patterns, one of which is of high overall height, wide liu, sharp wei. There are two mushroom-shaped pillars intersecting liu and belly, whose top is decorated with knob-shaped bulge. The pillar is quadrilateral and high. It has an oval belly with lower part slightly bulging, outward round

base, triangular pyramidal feet, and T-shaped profile. It also enjoys bow flat chisel with animal head above. The two carved round eyes look like the horn of an ox. The width of the liu is 4.6 cm, the pillar height is 4.4 cm, the leg height is 10.9 cm, the overall height is 21.4 cm, and the weight is 900 grams. The other has a wide mouth, sharp tail, bow flat chisel, with animal head on the upper end and raised ears; outward round base, straight belly, triangular pyramidal feet, and two umbrella-shaped pillars decorated with swirl patterns. Its belly is decorated with convex string patterns. The pillar height is 4.5 cm, the overall height is 21.2 cm, and the weight is 856.5 grams.

The bronze jue-cup found at Bengbu Waste Copper Acquisition Station in 1965 had a narrow liu and broken wei, two nail-shaped pillars at where the liu and trim. The belly was divided into two sections. The upper part was small, while the bottom part was flat. The belly has a bow flat chisel, and the distance from liu to wei is 14.4 cm, the leg height is 6.2 cm, the overall height is 17.2 cm, and the weight is 0.3 kg. [5]

b) Bronze statue: The bronze statue is characterized by wide flared mouth, thick and bulging belly, high-circle feet, and wide body. It was used as a wine vessel. Among the central plains and Guanzhong areas in Shang Dynasty, it was paired with bronze pot or Fangyi vessel as funerary sacrificial vessel. The 3 bronze statues of the Shang Dynasty unearthed in northern Anhui were introduced as follows.

In May 1982, bronze statues unearthed from Yingshang County, Anhui Province has wide flared mouth, plain surface, and thin texture. It is 21 cm high and has a broken mouth with a base diameter of 13 cm.

Two bronze statues were unearthed in Funan County, Anhui in June 1967. One is bronze wine vessel with ornamentation of dragons and tigers, with three dragons in the shoulders making a meandering shape. The dragon's head and horns protrude into three pagodas. The three tiger heads protruding from the belly of looks horrific. It is about 20 kg, 50.5 cm high, 45 cm in caliber, 122 cm in belly circumference, 41.5 cm in belly depth, and 24 cm in leg caliber. The other is bronze statue with ogre-mask motif, with three beast heads on the shoulders and large ogre-mask motif on the body. It weighs about 15 kg, has a height of 47 cm, a diameter of 39 cm, a belly circumference of 19.5 cm, a belly depth of 38.5 cm, and a caliber of 24 cm.

c) Bronze gu (drinking vessel): Bronze gu is characterized by long cylindrical body, a large flared mouth, and a sloped high-circle foot. The bronze gu was often excavated at the same time as bronze jue-cup in tombs, especially during the Shang Dynasty when the two were often excavated together in pairs and equal quantities. Therefore, the function of the two is

similar, and gu also belongs to wine vessel. The 3 pieces of bronze gu from the Shang Dynasty unearthed in northern Anhui were introduced as follows.

A pair of bronze gu unearthed in June 1967 in Funan County, Anhui, decorated with ogre-caliber and 11 cm in leg caliber.

In November 1971, a bronze gu was collected in Yingshang County, Anhui. The mouth was damaged, the neck was swollen, the belly had ridges, and the feet were circled. There were two rectangular perforations in the upper part of the foot, and four symmetry protruding dots patterns under the perforation. The remnants of the gu are 22 cm high.

In the 1970s, the gu with surface patterns of beast collected by the Huainan Museum was tall with a beam neck, thin waist, significant contraction in the middle, prominent lower belly, and a bulging belly. It's decorated with two symmetrical surface patterns of beast. The caliber is 15.3 cm, the bottom diameter is 8 cm, the overall height is 22.7 cm, and the weight is 772 grams.

d) Bronze jia (drinking vessel): The shape of the bronze jia is similar with that of jue-cup, with three legs and one urn. It is open and there are many pillars in the mouth. Different from jue-cup, there is no liu and wei in jia, and the latter is larger in shape. The 3 bronze jia from the Shang Dynasty unearthed in northern Anhui were introduced as follows.

A pair of bronze jia was unearthed in June 1967 in Funan County, Anhui Province. The belly is decorated with ogre-mask motif. The height is 46 cm, the caliber is 22 cm, the belly depth is 19.5 cm, the ear height is 12 cm, and the leg height is 16 cm.

In the 1970s, a jia with surface patterns of beast collected by the Huainan Museum had a caliber of 17.3 cm, a leg height of 12.3 cm, an overall height of 36.1 cm, and a weight of 2650 grams. It has a wide flared mouth, a girdle neck, and its neck is clearly segmented from the belly, the belly is bulging, and the bottom is slightly convex. The belly bears three triangular feet. The feet are tall and wide, slightly outward. Two larger cap-shaped pillars are erected on the mouth edge, and the topper pillar are decorated with swirl patterns. There is bow flat chisel attached to neck. The belly and neck are decorated with three groups of surface patterns of beast, which are symmetrical up and down.

e) Bronze pot: The bronze pot is a kind of wine container. It had a narrow mouth, a large stomach, and a handle on both sides of its neck, a cover, a button on the cover, and a round foot on the bottom. There is only one bronze pot of the Shang Dynasty unearthed in the northern Anhui, which is introduced as follows.

A tiliang pot unearthed in Yingshang County, Anhui in May 1982, with a sword neck, a belly depth of 12 cm, a circle foot of 2 cm, a belly length of 17 cm, and a length of 14 cm. The mouth is 11 cm in length, 9 cm in traverse length, and 22.5 cm in height.

f) *Bronze zhi*: Yi Li stated that "the host uses zhi to treat the guests." Zheng Xuan notes that "treat refers to urge others to drink." It can be seen that zhi is a wine vessel. The only one bronze chi of the Shang Dynasty unearthed in the northern Anhui area is introduced as follows.

In 1972, a bronze zhi was unearthed from Wanggang, Yingshang County, Anhui, with a damaged mouth, about 16 cm high.

B. Weapon

1) *Bronze spear*: The spear is an important and common bronze weapon. It is also called cibing as it has a leading edge is used for sprinting. Six bronze spears from the Shang Dynasty unearthed in the northern Anhui region are described below.

The spear unearthed in Wanggang, Yingshang County, Anhui in 1972 was damaged, with the sharp front and wide back, a ridge in the middle and wings beside the ridge. It has an oval beam, and is 19 cm in height.

The five bronze spears discovered in 1980 by Wanggang villagers in Yingshang County, Anhui, were basically the same in shape and were damaged to varying degrees. The spear is sharp at the front and broad at the back, like a willow leaf. The spear has a ridge, and the lower part of the ridge is raised and scattered, and there is a rotten wood beneath. The spear is about 23 cm long.

2) *Bronze dagger-axe*: Among the bronze weapons, bronze dagger-axe was the earliest. It first appeared in the Erlitou cultural and continued to the Warring States Period and the Qin Dynasty. Although the shape changed, several basic parts were still roughly the same. There is only one bronze dagger-axe of the Shang Dynasty unearthed in northern Anhui, which is described as follows.

In May 1982, a bronze dagger-axe was unearthed in Yingshang County, Anhui Province. Its ridge was slightly higher and extended to the front, with two holes on the back side. It has heavy body, fine casting, and kui-dragon design. It has a length of 19 cm and a width of 7 cm.

3) *Bronze arrow*: Arrows are blades mounted at the front of the arrowhead and fired far from the bow. The only one bronze arrow of the Shang Dynasty unearthed in the northern Anhui region is described below.

In May 1982, a bronze arrow with a rounded iron ridge was unearthed from Yingshang County, Anhui. The left and right edges of the blade converge forward to form a sharp tip, and form a barb backward, with a conical chain. It's 3.5 cm long.

4) *Bronze sword*: The swords of the Shang Dynasty fall into three camps in size: large, medium and small. Large swords are usually more than 30 cm in length, and they are weapons used to slash on the battlefield. Medium swords are between 20-30 cm in length and are usually used as tools. Swords over 24 cm in length can also be used as weapons. Small swords are generally between 10-20 cm and are used as cutting tools in daily life. There is only one bronze sword of the Shang Dynasty unearthed in northern Anhui, which is introduced as follows.

In 1972, a bronze sword was unearthed from Wanggang, Yingshang County, Anhui. It's 23.7 cm long. The blade is damaged and the back is straight.

5) *Bronze halberd*: The halberd is a weapon that combines the functions of the dagger-axe and spear. It can either stab forward or strike crosswise and hook. The only one bronze halberd from the Shang Dynasty unearthed in the northern Anhui region is described below.

In 1980, a villager of Wanggang, Yingshang County, Anhui, found a bronze halberd when he took soil. It was damaged. It is triangular, with holes in it and vague ornamentation around the holes. The inside is rectangular, there are two piercings on the side of the column where the rim and the inner meet, and they are damaged. The damaged halberd is 16 cm long.

C. Chariot and harness ornaments

1) *Bow-shaped article*: The bow-shaped article is a chariot and harness ornament introduced into the Central Plains from the Eurasian steppe. Its main function is to help the rider armed both hands to control the horse. The only one bow-shaped article of the Shang Dynasty unearthed in northern Anhui Province is described as follows.

Bow-shaped article unearthed in Yingshang County, Anhui in May 1982 is 28 cm in length and 7.5 cm in height. It has a round bell head, a protruding round seat in the middle, and a symmetrical bird pattern on the arch.

2) *Bronze wei*: Wei is the axle head. Bronze wei refers to the cylindrical part on the outside of the hub that is connected to the two ends of the axle. The only one bronze wei of the Shang Dynasty unearthed in northern Anhui is described as follows.

In November 1971, Yingshang County, Anhui Province collected a rectangular bronze wei with small

square holes on the front. It's decorated with kui-dragon design with cloud and thunder patterns as shading. It is 10.4 cm long and 2.5 cm wide.

D. Other bronze wares

1) Tools

a) Bronze chisel: Chisel is a tool for digging grooves and holes in wood. There was only one bronze *wei* unearthed from the Shang Dynasty on the northern Anhui area in 1972 in Wanggang, Yingshang County, Anhui. The whole is wedge-shaped and rectangular. It's 12.2 cm long.

b) Bronze axe: The bronze *axe* was one of the commonly used tools in Guanzhong and Central Plains during the Shang and Zhou dynasties. There was only one bronze *axe* of the Shang Dynasty unearthed in the northern Anhui area, that is, the one unearthed in Wanggang, Yingshang County, Anhui Province in 1972.

2) Musical instruments: The shape of a bell is characterized by a semi-circular beam or a semi-circular knob on a flat roof, a lopsided or elliptic cross section on both sides, and a flat or concave mouth. There was only one bronze bell of the Shang Dynasty unearthed in the northern Anhui area: the one collected in Yingshang County, Anhui in November 1971. The button is damaged and cylindrical. It's 5 cm long.

IV. COMPARATIVE ANALYSIS OF BRONZES UNEARTHED IN NORTHERN ANHUI

A. Comparison with Jianghuai region

According to statistics, there are 17 bronze wares of the Shang Dynasty unearthed in the Jianghuai region, including 1 face-shaped decorative bronzes unearthed in Shucheng County, Anhui Province in January 1997[6]; 1 piece of Cangling Chenggui unearthed in Cangling City, Shou County, Anhui; 1 Cangling Chengyue; 2 Cangling swords; 1 Cangling spear; 1 Cangling Chengnao; 1 bronze *jia* unearthed from Cangling City, Shou County, Anhui in the 1980s[7]; 4 bronze wares unearthed in Jiashan County, Anhui in January, 1953, consisting of 1 bronze *jue-cup*, 1 bronze *jia*, 1 bronze *gu*, and 1 bronze *lei* [8]; and 1 bronze statue unearthed from Liu'an, Anhui in March, 1999 [9].

Compared with Jianghuai region, the proportion of bronze *li* found in northern Anhui is relatively small, and no *gui* have been found. Among the wine vessels unearthed in the Jianghuai region, *lei* and *Fangyi* vessel were not found in the northern Anhui region. The ornaments of bronze *jue-cup* from the two regions are dominated by surface patterns of beast and string patterns, but the craftsmanship in Jianghuai is more exquisite. The *yue* belonging to weapon was never found in northern Anhui. Bronze *nao* and face-shaped

decorative bronzes unearthed in the Jianghuai region were first discovered in Anhui.

B. Comparison with southern Anhui

According to statistics, the bronze wares from the Shang Dynasty unearthed in southern Anhui were as follows: 1 bronze arrow and 1 bronze sickle unearthed from the Shang Dynasty in Sunjiagang site, Hanshan County, Anhui Province in June 1975 [10]; and a cloud-pattern big bronze cymbals unearthed in Ma'anshan, Anhui in June, 2002 [11]; a group of bronzes unearthed in Tangjiashan, Fanchang in 1979, one of which is a one-piece bronze *Yan* with surface patterns of beast [12]; and one cloud-patterned tripod unearthed in Xuanlang Guangchachang site, Langxi County, in 1985[13].

The bronze wares unearthed in southern Anhui were scattered and few in number. The types of bronze wares unearthed in northern Anhui are more diverse than those in southern Anhui. There is a lack of vessel types such as *jue-cup*, *gu*, *li*, and statue in southern Anhui. However, artifacts as bronze *Yan*, bronze sickle unearthed in southern Anhui in have not yet been found in northern Anhui. As for the ornamentation, the bronze wares unearthed in southern Anhui were decorated with cloud patterns, which were not found in Jianghuai and northern Anhui, and should be the local characteristic at that time. Other bronzes were mostly decorated with surface patterns of beast, which is similar with that in northern Anhui. However, the degree of bronze ware production and exquisite decoration in northern Anhui is higher than that in southern.

V. CONCLUSION

Generally speaking, the development of Shang bronze in northern Anhui was more developed than that in Jianghuai and southern Anhui, which should be related to the fact that northern Anhui was closer to Henan, the political and economic center of the Shang Dynasty. The small number of bronzes unearthed in northern Anhui and the lack of rigor in the work of local cultural relics departments make the relevant research more difficult. It is expected that subsequent archaeological excavations will provide more material support for the study of Shang bronzes in northern Anhui.

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