

The Evolution of Bronze Tripods in the Shang Dynasty

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Abstract: This paper will introduce the evolution of bronze dings in the Shang Dynasty. The Shang Dynasty was an important period in the development of ancient Chinese bronzeware with mysterious colour, which demonstrated the charm of Bronze Age culture. As one of the representatives of China's ancient cultural heritage, the bronze tripod reached its peak in the Shang Dynasty and continued to develop and evolve over time. In this paper, the origin, evolution, characteristics and significance of the bronze tripod in the Shang Dynasty will be discussed.

Keywords: Shang Dynasty; Bronze Tripod; Shape Evolution.

1. Introduction

It can be said that the study of bronzes began in the Song Dynasty, with the rise of lithography. Therefore, the research background of bronzeware can be said to have a long history-thousands of years. The shape of dings means they can be used as both a food vessel and a ritual vessel. Dings are of high value among bronze vessels. Bronze dings are used for a long time, and there are many of them in a variety of shapes. Different periods have different shape characteristics, so there has always been high research value in bronze.

As the bronze vessels of the Shang Dynasty are the most representative and special examples of the Bronze Age in China, and the Bronze Age is unique in the history of the world, the objects of this paper mainly include the bronze ding itself and the evolution characteristics of its shape and structure in the Shang Dynasty. There will be a discussion of its individual characteristics and a discussion of the relationship between shape and structure.

This research will be conducted mainly through archaeological typology. This will allow us to study the bronze ding according to the shape of the objects and the regional distribution of horizontal and vertical classification, as well as make a comparison. On the basis of classification, we intend to select typical artifacts for detailed research as an important reference basis and then complete our research focused on bronze tripods.

Mainly, we will focus on shape-change characteristics of bronze tripods in the Shang Dynasty. At the beginning of the Shang Dynasty, the bronze ding retained the legacy of simplicity; in the middle of the Shang Dynasty, the ding appeared in a new style and had the characteristic of transition. In the late Shang Dynasty, the overall shape of the ding was gorgeous and dignified.

At the same time, this research considers a comparison of the development of bronze culture in different regions and clarifies its characteristics according to the types and styles of the objects, showing a "Chinese" civilisation.

2. The Basic Characteristics of Bronze Tripods in the Second Shang Dynasty

2.1. Origin and Development of Bronze Tripods in the Shang Dynasty

In the original sense, a ding was used as an eating vessel or cooking utensil. The earliest ding was made of clay, with the basic form of "three legs and two ears", which appeared in the Neolithic period. Bronze first appeared in the Xia Dynasty and was put into use. The earliest bronze ding unearthed in the world is the Houmu Wu Ding, located in Anyang, Henan Province. At the same time, the bronzeware of the Xia Dynasty could be used as both cooking utensils and funerary objects, allowing for the recording of the identity, achievements and status of the deceased in life-similar to ritual ware. In the Shang Dynasty, the use and status of bronzes were further developed, and the "Bronze Age" also emerged. The nobles began to use a large number of bronze vessels, and bronze tripods were often used as ritual vessels and cooking and eating utensils[1].

2.2. Basic Morphological Characteristics of Bronze Tripods in the Shang Dynasty

The bronze tripod of the Shang Dynasty had basically two shapes: a round tripod and square tripod. They did not just inherit the shape of before the Xia Dynasty; they were further modified[2]. Square tripods were mostly on four legs, while round tripods were mostly on three legs. The four edges of the square ding are connected up and down, and the three-legged structure of the round ding is due to the ancient people's consideration of stability in the application of physical mechanics. The square shape of the bronze ding in the Shang Dynasty was mostly for the consideration of practical functions. On the one hand, it met people's needs for cooking food and meat; on the other hand, it met the need to use bronze tripods in sacrificial places; it symbolised the destiny and power of heaven and highlighted the sacred majesty. The great tendency in the shape of the Shang tripod is the expression of heaven and earth becoming closer to each other. The shape of the square tripod is square, and it was mostly used for sacrifice. At the same time, it also reflects the Shang people's cognition of space concept and territory. "Fang" exists not only as a geographical space concept but also as a

sacrificial object, reflecting people's cognition of the ancient Chinese concept of "earth".

The largest bronze ding unearthed so far is the Wu Ding, the later mother of the Shang Dynasty, which is 133 centimetres high and 110 centimetres long. It is large and heavy, giving people a sense of majesty and reverence. The overall decorative style of Shang dings tends to be mysterious and gorgeous. Especially in the late Shang Dynasty, the appearance of Kui and animal face patterns portray well the decorative style of the Shang bronze ding.

3. The Shape Evolution of Bronze Tripods in the Three Shang Dynasty

3.1. The Shape Characteristics of the Early Shang Dynasty

In the early Shang Dynasty, there were both round and square tripod shapes, and the overall shape also retained the simple and rough style of the pottery era. The round tripod was the first to appear. Like the square tripod, it had double-standing ears. Round tripods had thin walls and were mostly conical or flat, while square tripods were mostly columnar. The shape of the round tripod is characterised by a "four-point arrangement". The difference of the four-legged square ding is that due to the influence of the Shang Dynasty's "round heaven and earth" and "five squares" ideology, the square ding became a ritual vessel of symbolic significance with its dignified and heavy image. To compare, the round ding is more practical, but in terms of a ritual system, the square ding can better express the meaning of "rites".

3.2. The Shape Characteristics of the Mid-Shang Dynasty Ding

So far, fewer dings have been found from the mid-Shang Dynasty, but it is certain that the ding of this period had a transitional shape pattern. During this period, a new style of ding appeared—a "five-point arrangement of ear and foot". This new style is more dignified and beautiful, reflecting the development of people's aesthetic awareness of bronzes in the middle of the Shang Dynasty. This style gradually evolved into the fixed style of the later ding[3]. Compared with the beginning of the Shang Dynasty, the walls of the round ding became thicker, and the conical feet gradually changed into hoof shapes. The flat feet became better shaped like fish, birds and other animals. During this period, the square ding and the round ding still had double-standing ears, but the political significance of the square ding as a ritual instrument was more obvious. Moreover, the number of excavations was greater than for round dings, and the belly was changed from deep to shallow.

3.3. The Shape Characteristics of the Late Shang Dynasty Ding

The overall style of ding-shaped vessels in the late Shang Dynasty was dignified, cumbersome and gorgeous. Due to the continuous improvement of social productivity, bronze tripods flourished in the late Shang Dynasty. Taking the round ding at this time as an example, "the convex point of the outer arc of the abdomen curve is generally low, the center of gravity is sinking, and the circle contains the square and is firm and powerful, which reflects the characteristics of The Times of 'respecting God'[4]. The political significance of bronze tripods reached its peak at this time, and there was a

stricter pursuit of the shape and decoration of bronzes as people strived for excellence. The bronze masks and sacred trees unearthed in Sanxingdui well-reflect the magnificent styling features of the bronzes in this period.

4. The Regional Style Difference of Bronze Tripods in the Fourth Shang Dynasty

4.1. The Characteristics of Yin Dynasty Tripods in Anyang, Central China

The large number of bronzes unearthed in the ruins of Yin are typical historical and cultural crystals formed during the prosperity of the Shang Dynasty. Located in Anyang, the history of the bronzewares unearthed in the Yin Ruins was recorded in the Song Dynasty and can be traced back to a long time ago. Its growth period spans from the early to the middle of the Shang Dynasty. The shape of the bronzes in this period was mainly based on the material and characteristics of the bronzes, and the second creation was made on the basis of the shape of the pottery, rather than simply imitating the pottery. The decoration of this period was mainly the animal face pattern of the so-called "Taotie pattern" structure, which highlighted its own mysterious, gorgeous, primitive and bizarre art style mainly featuring human-like animal faces. However, on the whole, the mainstream of bronze sculpture patterns was still a simple and rustic style. The bronzes of this period began to be widely used throughout the country, gradually improving their own shape and form, and maturing in polishing, laying the foundation for the complex and magnificent shape characteristics in the future. In later periods, the type of bronze ware became more perfect, and the decorative decoration was in various positions.

Bronzes of the late Shang Dynasty have been found across thousands of miles; even in regions that are far apart, bronzes with a uniform style have been unearthed, which indicates that bronze casting began to spread throughout China at that time[5].

The paisley bronze tripod of the Shang Dynasty was handed over to the Cultural Relics Administration and Inspection Committee of Anyang Zhuan City in 1961[6]. The bronze ding is 27.5 cm high, with a mouth diameter of 21.7 cm and a belly circumference of 69 cm. The tripod has double-standing ears, the three-legged tripod is higher, the mouth is slightly closed, the belly is bulging, and a circle of decorative patterns is decorated with paisley and four-petal patterns. Also, both ends are decorated with convex string patterns. The overall style is relatively simple and dignified, without losing a sense of historical significance, while the decorative lines are smooth but without losing a sense of power, which is typical of the third period of the Yin ruins culture.

A bronze tripod with a Shang beast face pattern was unearthed in Sanjiazhuang cellar cave[7]. With a height of 43.1 centimetres, a mouth diameter of 30 centimetres, a longer belly circumference of 96 centimetres and a belly depth of 20 centimetres, this bronze ding is grand and more dignified than the previous one. It has the same closed mouth as the previous one, but the tripod is slightly folded outward along the downward side. It also has double-standing ears, a bulging belly, a bottom, and hollow column feet. However, it was different in that it had three gates running through it from top to bottom, evenly distributed. There are repair marks on

the lower part of the foot. The whole ding is well-preserved and the body is complete, but the rust is more serious. There are rust holes in the bottom cloth and repair marks on the foot, which provides key evidence for the study of manufacturing technology in the late Shang Dynasty. Thus, the research value is not small.

At the same time, there are also representative bronzes of the Ju nationality, which is located in the Changqing area of Jinan. At that time, the Ju branch was scattered in today's Shandong. The Judeng Tripod from Ludi was handed down from the ages. It was a pod-shaped tripod with upright ears and pillars and a large animal's face pattern on its abdomen. It was very characteristic of the late Shang Dynasty and fully matched with the Yanyu tripod unearthed in the Yin Ruins cemetery.

4.2. Characteristics of Bronze Tripods in Ganjiang Valley of Jiangxi Province

The bronze culture of Ganjiang Valley in Jiangxi Province developed its own characteristics on the basis of retaining the characteristics of the pottery in the Central Plains. It focused on being stable and generous without losing the mysterious colour. This paper takes the bronzeware of Xingan County with local characteristics as an example—it is not only similar to the shape of the ware in the early Shang Dynasty but is also influenced by the regional culture of Xingan County. "In terms of shape and decorative style, the belly of the two pull-shaped tripod unearthed in Oceania of Xingan County is basically the same as that of Yin and Shang dynasties in Central China. The difference is that there is no circular foot, but three semi-circular column feet are added, and two semi-circular ears stand on the mouth edge. The new type was created by combining round-shouldered ampules from the Central Plains with bronze ding "[8]. There were about four types of tripods unearthed in Xingan County, namely a round tripod, a square tripod, a flat-footed tripod, and a pot shape, with a total of 31 artifacts, which were all based on the bronze shapes of the Central Plains and underwent certain modifications. Thus, there was a new shape with local characteristics; the overall shape inherited the characteristics of the Central Plains and was dignified, elegant, stable and generous. Also, its function also changed accordingly—from a wine vessel to a cooking vessel. The tripods were divided into two kinds: round tripods and square tripod. Regarding the unique shape of the bronze square ding, it not only represents the integration of the local culture of the Central Plains, but also has local mysterious characteristics.

The non-Ruding beast-face pattern tiger-ear square bronze ding, unearthed in Xingan County, is the largest bronze ding among the 30 pieces. Its huge size also means that it was very difficult to cast. It is a rectangular tripod with square lips, a deep belly and angled edges. The reason why it is difficult to manufacture is that the casting of this bronze vessel requires a total of 26 fans and cores. During the casting process, because the size is too large, only the casting method can be used. On the whole, the height of this bronze ding is 97.0 cm; the piece is very spectacular and majestic, with high artistic value. The overall shape is bold and beautiful. The semi-circular ears stand on both sides of the mouth of the ding, with a three-dimensional tiger lying on each ear. The abdomen of the tripod is decorated with a thin and narrow band pattern, which is different from the broad line decoration style in the Central Plains. The centre of the tripod is also mainly decorated with animal face patterns, and the outer decoration

of the tripod is obviously dense. The four legs are hollow. The casting difficulty is also high and the style is magnificent, which shows that this bronzeware is precious and exquisite. Although the ding looks large and heavy, the bronze tripod has a thin wall, and the shape of the sheep's head on the foot is exquisitely carved. The atmosphere reveals the ingenuity of the craftsman, fully displaying the regional characteristics of the Ganjiang River Basin. This bronze object combines the casting process of split casting and smooth casting technology perfectly, showing incisiveness and vividity[9].

4.3. Characteristics of the Bronze Tripod System in the Anhui region

In the Shang Dynasty, the bronze carving sites in Anhui were widely distributed. Although they were influenced by the Central Plains, their leaf edges and moire patterns were quite local. In 2006, a flat-foot tripod was unearthed in Nanfan Village, Saikou Town, Wangjiang County. The tripod is in the shape of a three-elephant dragon with a shallow abdomen, double-standing ears and long, flat feet at the bottom. The structure is relatively stable, the body is decorated with animal face pattern, and there are six short leaf edges, which is very similar to the bronze tripod of the Yin ruins in the Central Plains. In 1985, a moire tripod was unearthed in Langxi County. It has a deep abdomen, a rounded bottom, a pair of rope ears, a circle of moire around the body, three legs, and three leaf edges, which are the four features of the ear and foot, reflecting the characteristics of Anhui and southern Anhui.

5. Symbolic Significance of Bronze Tripods in the Five Shang Dynasty

5.1. Political Significance

The well-known tripod system was also a symbol of the tripod itself as a political tool and an instrument to divide social classes. In the "Shang Shu Luogao", the Duke of Zhou said: "The king, called Yin Li". The tripod system in the Western Zhou Dynasty was closely related to the accumulation of politics and culture in the early Shang Dynasty. The existence of the ding itself is a materialised symbol of the right of the Son of Heaven, and it is the basis of the legitimacy of the regime. In the Shang Dynasty, the system of using tripods already existed. At the beginning of the Western Zhou Dynasty, as the dynasty had just been established, there was no artisan system of its own, so a large number of craftsmen from the Yin and Shang periods were introduced. This resulted in the strong atmosphere of bronze culture in the Yin and Shang period and also created the characteristics of using tripods in the Western Zhou. On the basis of the Shang Dynasty, the system was further improved, and the quantity and specifications were strictly enforced. As a symbol of the status of the upper class, the kings of all dynasties fought for this. Owning a ding seemed to mean power. The ownership of a ding also represented power status and the ownership of resources, which had a huge influence in society and meant a very high social status.

5.2. Social Significance

Now, dings are no longer a symbol of power politics and status; they have become a valuable historical relic of the nation, a cultural symbol of history. Today, the ding is not only used as an artifact; it is also a symbol of Chinese civilisation. It shines brightly and plays its own historical and cultural

value in all aspects of social life. Through the bronze ding of the Shang Dynasty, we can glimpse the figure of the former Shang dynasty, which was mysterious, bloody and full of primitive mysterious forces, allowing us to think about the relationship between heaven and man, and between man and things, in the Shang Dynasty. Dings still play an important role in the life of modern people and the guidance of society. Whenever we walk into a museum and see a bronze ding displayed in the exhibition case, we should observe every detail on its body, its shape pattern, its copper rust inscriptions, its stitching marks, and even its wear, as they all tell the story of its history.

6. Conclusion

Bronze tripods in the Shang Dynasty were made to resemble the world and a square. Nowadays, they have become a symbol of culture—not only as a memorial of history and society but also as a balance between materialisation and humanisation. The mysterious and brilliant bronze civilisation of the Shang Dynasty fascinates modern people and inspires contemporary archaeologists and scientists. The exploration of bronze tripods in terms of their shape and structure in the Shang Dynasty is not complete, and there are still many unsolved mysteries waiting to be uncovered. In the study of bronze tripods, bronzeware, and even ancient artifacts of the Shang Dynasty, we need to constantly overcome barriers and seek the truth.

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