

# *Research on Jade Cong Unearthed in Prehistoric Chinese Archaeology*

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**Abstract:** Jade Cong is the most typical archaeological artifact in ancient Chinese culture. By studying the prehistoric archaeological Jade Cong, we can further understand the Chinese Liangzhu culture. The Jade Cong of Liangzhu Culture originated from Taihu Lake Basin and Yangtze River Basin, among which jade plays an important role. From the perspective of technological level, the jades unearthed from Liangzhu Culture and Hengshan Culture are mostly made by the method of whole body polishing. The shape is polished and polished by various techniques such as round carving, through carving, drilling and line carving. Jade Cong experienced: from round to square, the evolution of the nasal line heightened. This paper mainly summarizes the development and evolution process of prehistoric Jade Cong unearthed in Chinese archaeology from four aspects: the concept of Jade Cong, the archaeological discovery of Jade Cong, the evolution of shape and structure, and the production process of Jade Cong.

## **1. Introduction**

Jade Cong is a sacrificial object in ancient Chinese traditional culture. Because of its important position in ancient etiquette, it is also known as the 'crown of jade'. Jade Cong is a kind of jade with a unique shape. It is semi-circular in shape, curved outward at both ends, and convex in the middle. It is a necessary thing in ancient sacrifice.

The jade Cong usually consists of two parts, the upper part is curved, and the lower part is semi-circular. The arc design of the upper half symbolizes the sky, the semicircle of the lower half symbolizes the ground, and the chest bulge symbolizes the person. The shape of jade Cong is very creative, unique in shape, very beautiful, and shows the profound connotation of ancient culture (Angus Forsyth, & Ed. Roger Keverne, 1991: 88)<sup>[1]</sup>.

Jade Cong has very important cultural value. It is an indispensable item in ancient sacrificial rites. In ancient Chinese culture, jade is regarded as a mascot, symbolizing the mysterious vitality and beautiful future. The Jade Cong is no exception. It is a supreme artifact in ancient Chinese sacrifice, with a strong sacred and symbolic significance.

The production process of jade Cong is also very exquisite. It is necessary to select high-quality jade materials, and then through multiple processes, polished by skilled jade workers. In the process of making, the requirements of jade texture, color and gold and silver foil are fully considered to ensure the good quality of the jade.

## 2. Archaeological discoveries

According to the current Chinese archaeological excavation briefing materials, the prehistoric Jade Cong archaeological excavations unearthed the most Liangzhu culture area. The Jade Cong of Liangzhu Culture originated from the Neolithic Jade in Taihu Lake Basin. Jade plays an important role in the prehistoric material culture of the Yangtze River Basin. The typical artifacts unearthed in one piece are: Jade Axe, Jade Ring and Jade Huang. This chapter mainly summarizes the archaeological discoveries of prehistoric Jade Cong, the unearthed location of Jade Cong, and other burial objects in the tomb.

### 2.1 Excavation of jade Cong in Liangzhu Culture

In 1936, archaeologists from the Xi hu Museum excavated the archaeological site of Liangzhu Culture for the first time. During the 87 years, more than 200 sites of Liangzhu Culture were found in China. Among them, there are more than 60 places where jades were unearthed, and jades occupy an important position in the unearthed objects of Liangzhu cultural relics. There are a large number of prehistoric jades of Liangzhu Culture unearthed in Jiangsu, Shanghai and Zhejiang.

From 1949 to 1970, a small amount of Liangzhu culture jade Cong was unearthed. Due to the limited professional conditions of archaeology at that time, it was mistaken by archaeologists as a Shang dynasty (1559 BC - about 1046 BC) artifact (Li Ping, Liao Zongting, & Zhou Zhengyu, 2022: 133).<sup>[2]</sup>

The excavation of the Caoxieshan Site in Wuxian County in 1973 and the three jades unearthed from the tombs of M198 and M199 laid the foundation for the study of the jades of Liangzhu Culture in China. Zhejiang Province is one of the main provinces where jade Cong of Liangzhu Culture was unearthed in China. More than 60 pieces of jade were unearthed, of which Yaojiashan archaeological site occupies the largest number.

The distribution of prehistoric jade Cong unearthed in Jiangsu Province is relatively wide. The earliest discovery of Liangzhu culture jade Cong is the Caoxieshan site, which is also the beginning of the study of Liangzhu culture prehistoric jade Cong archaeology. More than 30 jade Congs were unearthed from the Sidun archaeological site, which is the largest number of jade Congs unearthed in all sites in Jiangsu. The jade Cong of the archaeological site is well preserved and of great research value, which provides the original material basis for the study of jade Cong in the pre-Liangzhu cultural history of China.

### 2.2 The unearthed location of jade Cong's tomb

Jade Cong has different unearthed locations in Liangzhu culture tombs. A. The unearthed jade Cong is located in the chest and abdomen of the tomb owner, such as the tomb of Fanshan M14, M180 (Wang Rong, Mai Yunyi, & Lin Liugen, 2022: 387). B. The unearthed jade Cong is located at the head of the tomb owner. C. Unearthed jade Cong is located in the arm of the tomb owner, such as (such as Pu 'na Bridge M11 tomb). D. The unearthed jade Cong is located near the tomb owner's toe. E. Surrounding the main skeleton of the tomb (such as sedum M3 tomb).<sup>[3]</sup>

It can be analyzed from the published archaeological materials of Liangzhu Culture in China that there are 8 pieces of jade Cong unearthed near the skull, 4 pieces of jade Cong unearthed at the foot of the tomb owner, 17 pieces of jade Cong unearthed at the upper limb and 13 pieces of jade Cong unearthed at the chest and abdomen. Among them, 27 pieces of jade Cong appeared around the human bones in the tombs at the sedum archaeological site. This shows that there are early and late changes in the unearthed location of jade Cong in tombs.

From the jade Cong of Liangzhu culture unearthed from the tombs of archaeological sites such

as Fanshan, Zhanglingshan, Gaochengdun, Pu 'anqiao, Huiguanshan, Shaoqingshan, Chuodun, Hengshan, Fuquanshan, Caoxieshan and Sidun in China, it can be concluded that there are 8 pieces of jade Cong in the head of the tomb owner and 4 pieces in the foot end. There are 17 jades Congs in the upper limbs of the tomb owner, and 13 in the chest and abdomen. There are 41 jades unearthed from other parts of the tomb owner.

By analyzing the **Table 1** existing archaeological data, the author concludes that the jade Cong of Liangzhu Culture tombs has the following four characteristics. A. Cemeteries generally appear on artificially stacked high earth platforms, and a few are located in natural highlands. Most of the tombs are rectangular earthen pit vertical tombs, and a few are knife-shaped earthen pit tombs or trapezoidal vertical tombs. C. Most of the tombs have wooden burial utensils, which are generally one coffin. D. The tombs of unearthed jade Cong are generally rich in funerary objects.

Table 1: Summary of jade Cong materials unearthed in Chinese archaeology from 1972 to 1998

Summary of jade Cong materials unearthed in Chinese archaeology from 1972 to 1998						
No	Date of excavation	Archaeological land	Tomb number	Quantity	Characteristics of types	Remark
1	1972-1973	Caoxieshan archaeological site	M198	3	No obvious characteristics	0
2	1972-1973	Caoxieshan archaeological site	M4	5	Beast face pattern short cylinder type	2 pieces of plain without pattern without decoration
3	1978-1982	Wujinsidun archaeological site, Jiangsu	M1, M3, M4	44	31 square cylinders	1 piece of jade bracelet
4	1993-1995	Wujinsidun archaeological site, Jiangsu	M5	2	High square cylinder	beast face pattern
5	1982-1984	Zhanglingshan archaeological site	M1, T6	3	No obvious characteristics	1 piece incomplete
6	1982	Chuodun Archaeological Site in Kunshan	M7	1	Beast surface pattern flat square cylinder	outer square inter round
7	1982-1987	Liangzhu Culture Tombs at Fuquanshan, Shanghai	T4M6	5	Short cylinder-based	2 small cylindrical jade Cong
8	1986	Liangzhu Culture Cemetery in Fanshan, Zhejiang	M4	21	outer square inters round	Central big round hole
9	1987-1998	Yaoshan archaeological site, Yuhang, Zhejiang	Southern column tombs	27	Mainly single section.	19 small jade Cong
10	1991	Yuhang Huiguanshan Liangzhu Culture Tomb	M2, M4	3	Low square cylinder	0

### 2.3 The connection with archaeological artifacts

In the large tombs discovered in the Liangzhu culture of China, the burial objects are mainly jades, as well as valuable objects such as jade walls, jade Cong, and jade axe. It can be seen that there is a certain combination relationship between jade Cong, jade axe, jade Jue and jade Huang.

That is to say, these four artifacts are typical artifacts in prehistoric jade. For example, there are about 635 pieces of jade unearthed from 11 tombs in Yaoshan archaeological site.

Its shapes include: Cong, Yue, trident, Huang, round card, bracelet, hook, bead string and so on. Another part of the tombs unearthed: jade Cong, jade axe, but no jade wall. Many archaeologists found jade Huang, jade Yue and jade Cong in tombs, and the absence of jade wall is also a normal archaeological typology phenomenon (Colin Renfrew, & Bin Liu, 2018: 364).<sup>[4]</sup>

### 3. The shape evolution of jade Cong

Jade Cong is a kind of thick tube shape jade with outer square and inner circle. It is a cube with a large circle connected up and down. There are ring-shaped bulges at both ends of the hole, as well as high and low types. The decorated Cong is carved on the four walls of the jade. The jade Cong is a typical variety of Liangzhu culture jade, and jade Cong and jade axe were unearthed in large tombs. Qijia culture also has jade Cong, other cultures are rare. The academic understanding of Liangzhu Culture originated from the excavation of Caoxieshan Site in Wuxian County, Jiangsu Province in 1973. Subsequently, many archaeological sites in Suzhou, Zhejiang and other places in China were excavated, and a large number of Liangzhu cultural jades were unearthed.

#### 3.1 Long cylinder and short cylinder

There are 72 pieces of jade Cong unearthed in the archaeological excavation of the Liangzhu culture, of which 49 pieces are clearly unearthed. According to their shape and structure, they can be divided into two types: ' short cylinder jade Cong with high width ratio and long cylinder jade Cong with high width ratio, which are divided into type A Cong and type B Cong respectively. There are 23 A-type Cong, of which 13 are clearly unearthed, and 5 are divided according to the specific shape and decoration. There are 49 pieces of type B Cong, of which 35 are clearly unearthed. Because it divides the B type Cong shape and decoration difference is bigger.

#### 3.2 The jade Cong shape of Liangzhu Culture

The largest number of jade Cong is unearthed in the Liangzhu Culture archaeological jade, most of which are burial objects. The jade Cong is generally a cube, and there are large round holes in the middle. The appearance is divided into sections, and each section is decorated with human face or animal face. According to the shape of jade Cong, the jade Cong of Liangzhu Culture can be divided into four types: high-type jade Cong, short-wide jade Cong, thin-walled jade Cong and small Cong. This paper mainly discusses the high and short wide jade Cong.

A. High type jade Cong. Height generally more than 20 cm, the highest nearly 50 cm. The upper end is slightly wider than the lower end, and the pattern is concise. Most of them are two broad-band patterns on the forehead. There is a straight line engraved on the thin shade line. The nose and mouth are small convex squares, which are engraved on the small square composed of horizontal and vertical short shade lines. The eye is a very shallow small ring, engraved with two small eye corners. There are also some carved animal patterns on the jade, as shown in Figure 1.

B. Dwarf and wide jade Cong. The height of this jade is less than the width, and the whole is large and thick. Taking the jade Cong unearthed in anti-mountain archaeology in Zhejiang as the representative work. This type is characterized by the appearance is divided into two sections, most of the upper section of the human face decoration, the lower section of the beast face decoration. On the pattern are the gods of the human face, the performance of the human head, wearing a crown, two arms lifted on both sides of the neck. The lower part of the pattern is the first eye of the superstar frontal beast, and the two forelimbs are below the head. Therefore, the upper and lower

two human face decorations and animal face decorations on this kind of short and wide jade Cong are exactly this unique Chinese jade culture, as shown in Figure 2.



Figure 1: High type jade Cong



Figure 2: Dwarf and wide jade Cong

#### 4. Jade Cong production process

Craft factor is one of the most important factors of Chinese prehistoric jade. Before the emergence of the jade craft, the jade craft of Chinese ancestors had been circulating, that is to say, the productivity situation at that time was only suitable for using the technology and tools of stone control at that time. Later, ancient people looked for raw materials for stone tools such as granite limestone on the beach near their family residence. In the process of finding and making stone tools, the ancient people's ability to treat stones was more and more abundant, and the production process was stronger and stronger. Through the continuous accumulation of jade craft, a complete set of jade craft system appeared.

##### 4.1 Ancient jade Cong production process

The ancient jade production process includes: A. Making, made into different thickness of the blank. B. Cutting, cutting and dissecting jade materials to varying degrees. C. Indirect grinding, indirect grinding of jade. D. Grinding, grinding jade into a smooth shape. E. Drilling, including drilling bundle handle and polishing process.

A. Drilling process includes: coarse and extremely coarse holes, fine and extremely fine holes, long and extremely long holes, single-sided drilling, double-sided drilling, and elephant nostrils (Li Boqian, 2010: 10).<sup>[5]</sup>

B. Cutting process includes: sheet, sheet, ultra-thin limit cutting, shape cutting, ridge cutting.

C. Yin grain process: plane Yin line, arc Yin line, plane convex Yin line, hidden surface Yin line and plane hollow Yin line.

D. Yang grain process: double hook minus the ground Yang line, flat convex (plane minus ground) Yang grain, flat convex inner arc Yang grain, hidden image edge line round, multi-layer

convex.

## 4.2 Jade Cong Craft of Hongshan Culture

The process of prehistoric jades of Hongshan culture in China: From the perspective of process level, most of the jades of Hongshan culture are made by the method of full-body polishing, and the shapes are repaired and polished by various techniques such as round carving, through carving, drilling and line carving. The overall style of jade in this period presents a simple and bold temperament, especially the portrayal of various animal images shows a unique artistic conception, which pays attention to the symmetry of handicrafts. The development of primitive jade carving art in the period of Hongshan culture reached its peak stage.<sup>[6]</sup>

## 4.3 Liangzhu Culture Jade Cong production process

The jade Cong of Liangzhu culture reflects quite complex process traces, ranging from how to open materials to what tools are used to carve lines. The jade Cong of Liangzhu culture is from cutting to processing into a beautiful finished product. This workflow includes three major steps: cutting, drilling and carving. The production technology of jade Cong in Liangzhu culture is of great significance for us to understand the productivity development level of Liangzhu ancient country.<sup>[7]</sup>

Cutting is the first step and an important beginning of the jade production process. From the prehistoric jade unearthed from the Caoxieshan archaeological site, it can be found that Liangzhu people cut jade with mounds and used wire cutting. The invention and emergence of mounds promoted the development of prehistoric jade crafts. Archaeological excavation reports and test materials show that the methods of cutting stone materials generally include: wire cutting and slice cutting, which are also the main technical means of prehistoric jade carving.

## 4.4 Jade Cong drilling process

The drilling process is the second step after the cutting of the jade cong of Liangzhu culture. The technical requirements of the drilling craftsmen are high. Because the single-sided and double-sided and thick and thin drilling of the jade at the upper production level at that time requires the craftsmen to have a strong technical level. There are three methods of drilling technology in the production process of Liangzhu Culture Jade Cong: A. Solid drill, using 'woodworking drill' reciprocating drive jade drill bit perforation. B. Pipe drill is also a drilling technology recognized by many scholars. The width of the jade wall and the jade cong on the hole wall at that time was 0.5-1 mm. Such delicate drilling may have been used as a metal pipe drill. Some scholars also believe that the process of adding sand water to bamboo and bone drilling tools for pipe drilling. C. Drilling method, made of black flint made of small stone drill directly cut. Most archaeologists agree and think: Liangzhu Culture jade drilling used the original tools, bamboo, bone, flint, jade. The method of double-sided drilling is adopted.<sup>[8]</sup>

## 5. Conclusion

In a word, jade Cong, as an indispensable part of ancient Chinese culture, represents the highest realm of ancient etiquette and culture, and is an inseparable and important part of ancient Chinese culture. Its unique shape and profound symbolic significance have left us with valuable cultural heritage, which is worth cherishing and inheriting.

A. Form evolution: The form evolution of jade Cong can be divided into three stages. The first



stage is the ' single ring ' Cong, that is, there is a circular ring at both ends of the Cong, and a rectangular Cong in the middle. The second stage is the ' double ring ' Cong, that is, there are two rings at both ends of the Cong, and the middle is the disc-shaped Cong. The third stage is the ' geometric pattern ' Cong, that is, various geometric patterns are added to the ring of the Cong.

B. Features: Jade Cong is characterized by simple shape, smooth lines and rich patterns. From the first stage to the third stage, the shape of jade Cong gradually tended to be abstract, and more complex geometric patterns appeared in the decoration. In addition, jade Cong has a very high status in Liangzhu culture. It is a necessary ritual instrument in sacrificial occasions and one of the symbolic items used to worship gods.

Generally speaking, the shape evolution and characteristics of jade Cong in Liangzhu culture reflect people's aesthetic concepts and religious beliefs at that time, and it is also an important chapter in the history of Chinese jade development.

## Conflict

On behalf of researchers. We swear that all information contain in this journal is not conflict of interest with any party and does not benefit for any party, in case of any breach, we will be solely responsible.

## References

- [1] Angus Forsyth, in *Jade*. Ed. Roger Keverne, (1991). "Neolithic Chinese Jades", New York: Van Nostrand Reinhold, 16:88–109.
- [2] Wang Rong, Mai Yunyi, Lin Liugen. (2022). *Burnt jade sacrifices in the Chinese Neolithic: The Liangzhu cemetery at Sidun* [J]. *Antiquity*, 96:387–390.
- [3] Li Ping, Liao Zongting, Zhou Zhengyu., (2022). *The residual geological information in Liangzhu jades: Implications for their provenance* [J]. *Proceedings of the Geologists' Association*, 3:133–136.
- [4] Colin Renfrew, Bin Liu, (2018) *The emergence of complex society in China: the case of Liangzhu* [J]. *Antiquity*, 92: 364–365.
- [5] Li Boqian. (2010). *Two Modes of the Development of Chinese Ancient Civilization: on Observing of the Funeral Jades Unearthed from Large Graves of Hongshan Culture, Liangzhu Culture, and Yangshao Culture* [J]. *Chinese Archaeology*, 1:10–13.
- [6] Li Zhiwei, (2022). *Identity construction and cultural identity* [D]. *Shandong University*, 10: 26–35.
- [7] Xu Zihan, (2019). *The discovery process and research process of Liangzhu jade cong* [D]. *Jilin University*, 3: 18–22.
- [8] Zhang Ping, (2011). *Preliminary Discussion on Prehistoric Jade Semiotics System* [J]. *Journal of Southwest Minzu University (Humanities and Social Sciences Edition)*, 5: 219-225.