# A Brief Analysis of the Jade Artifacts Unearthed from the Zaolin Gang Cemetery in Jingzhou

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Abstract: The jade artifacts buried with the deceased in the Zaolingang Cemetery exhibit advanced jade craftsmanship during the later Shijiahe Culture period. Based on the unearthed burial jade artifacts, it is evident that craftsmen of the time selected jade materials according to different shapes and, depending on their significance, crafted them into religious and ceremonial accessories as well as numerous tool-like jade artifacts using techniques such as round carving, relief carving, and openwork carving. Analysis of the types of burial jade artifacts from the Zaolingang Cemetery suggests that the jade craftsmen in this region were likely organized and led by individuals of considerable authority. This core group of craftsmen constituted a small community with a social status slightly higher than that of the common people. Additionally, these individuals were permitted to use some jade artifacts and jade materials as burial items upon their death.

#### 1. Introduction

The Zaolingang Cemetery site is located approximately 4 kilometers northeast of Mashan Town in Jingzhou, Hubei Province. It is situated on elevated terrain, forming a high ridge about 1 kilometer wide and 5 kilometers long. This ridge connects with the Chuandian Ridge and the Jishan Hill region in the northeast, part of the lower hilly area of the southern branch of the Jing Mountains. Zaolingang represents the southwestern edge of this low hilly zone.

The Zaolingang site has undergone two excavations. The first excavation began in mid-December 1990 and concluded in early February 1991, lasting 48 days. A total of 99 small Chu tombs from the Eastern Zhou period were excavated. The second excavation, conducted by the Jingzhou Museum in the spring of 1992, uncovered not only a dense concentration of small Eastern Zhou Chu tombs but also a group of urn burial tombs from the Shijiahe Culture period, distributed in a specific pattern in the central excavation area. <sup>[1]</sup> These urn burial tombs were primarily located in the eastern part of the central excavation area, densely packed and without overlapping. According to the distribution map of the Zaolingang urn burial tombs, most urn burial tombs are concentrated in the central southern part, with a few in the northwestern part. The excavation report suggests that the urn burial tombs were arranged in straight lines with uniform spacing.

The jade artifacts from the Shijiahe Culture are products of a certain historical stage in the development of Neolithic culture in the middle reaches of the Yangtze River. The Neolithic cultural sequence in the middle reaches of the Yangtze River mainly includes the Chengbeixi Culture (Pengtoushan Culture and Zaoshi Culture in Hunan), the Daxi Culture, the Qujialing Culture, and the Shijiahe Culture. According to traditional periodization, the Shijiahe Culture is divided into early and late phases. With further excavation and research on Shijiahe cultural sites, scholars have recognized significant changes in the archaeological culture between the early and late phases, necessitating different names. <sup>[2]</sup> Therefore, the late phase of the Shijiahe Culture is referred to as the "Late Shijiahe Culture" or "Xiaojiawuji Culture." <sup>[4]</sup>Through a typological analysis of the pottery unearthed from the Zhaolingang site, the excavation report determined that the site belongs to the late phase of the Shijiahe Culture, referred to in this paper as the Late Shijiahe Culture.

# 2. Discovery and Excavation of Shijiahe Culture Urn Burials at the Zaolingang Cemetery

A total of 46 urn burials from the Shijiahe Culture were discovered and excavated at the Zaolingang Cemetery. These burials are densely packed with no overlapping, indicating a contemporaneous and complete group of urn burials. Among these, 43 burials contained burial items, all of which were jade or stone artifacts. Only three burials (JZWM20, 21, and 27) had no burial items. The remaining burials had between 1 and 14 identifiable jade artifacts each, totaling 156 pieces. Unlike other sites from the Late Shijiahe Culture such as Luojiabaoling<sup>[5]</sup> and Tanjialing,<sup>[6]</sup> the jade artifacts from the Zaolingang site are more dispersed rather than concentrated in specific urns. There is also a notable quantity of tool-like jade artifacts, along with many fragmented jade pieces, blanks, and jade blocks.

Most of the burial items were found in a broken state, with few intact pieces. These fragments or shards were mostly scattered at the bottom of the burial containers. According to the excavation report, there are 133 identifiable complete or recognizable jade artifacts, 23 jade blanks, and 4 pieces of raw jade material. Additionally, there are numerous unidentifiable fragments and shards, suggesting at least 37 different individual pieces. Among the identified artifacts are 1 human head figurine, 3 tiger head figurines, 6 cicadas, 1 eagle hairpin head, 1 sparrow, 4 hairpins, 2 pendants, 3 beads, 2 terminal ornaments, 5 plaques, 2 tubes, 1 grain-shaped item, 1 ring, 2 (broken) cong, 8 arc-shaped ornaments, 1 bi disk, 39 adzes, 18 chisels, 15 drills, 3 knives, and 1 axe.

#### 2.1. Characteristics and Functions

Based on the analysis of jade artifacts unearthed from the Zaolingang Cemetery and their context within the Late Shijiahe Culture, scholars typically categorize these artifacts into ritual jade, decorative jade, tool jade, and jade blanks. The jade artifacts from Zaolingang Cemetery are often found fragmented, with few complete pieces. This fragmentation may result from disturbances caused by plowing or intentional breaking during burial. The following discussion focuses on some of the complete jade artifacts.

Jade Human Head WM4:1,only one piece,yellow-green in color, with a concave front and a smooth back. The face is realistic, wearing a boat-shaped crown with downward-curving protrusions on both sides. It has earrings with perforations and a long neck. There is a hole from the top to the bottom of the forehead. This piece is like W18:1 from Liuhe in design, but WM4:1 features a hole running from the top to the bottom of the forehead. Most scholars believe that such jade human heads served as adornments. Considering the long neck and perforation, they could be tied or sewn onto other objects, not merely used for hanging. <sup>[7]</sup>Mr. Yang Jianfang suggests that these figures represent deities or ancestors commonly worshiped by the Shijiahe Culture inhabitants and their descendants, similar in nature to the divine figures on Liangzhu Culture jade artifacts. Compared to other sites,

[9]WM4:1 is more realistic and simplistic, leading some scholars to classify it as a subordinate type of jade figure, signifying lower status within the religious hierarchy of the Late Shijiahe Culture.<sup>[8]</sup>

Jade Tigers WM1:1 and WM37:1, two pieces, WM1:1 is made of turquoise, gray-green in color, with spiral ears, a broad nose, and round eyes. The mouth is hollow, with a fang visible at the right corner. WM37:1 is rectangular, and flat, with spiral ears, a broad nose, round eyes, and a perforation on each side. Both pieces are similar in style to W4:2 from Liuhe and W9:49 from Tanjialing. The low-relief design effectively utilizes space, creating a harmonious and natural visual effect. Compared to the high-crowned jade tiger from Tanjialing, which symbolizes divine power, these jade tigers likely reflect a reverence for nature and serve as religiously significant decorative items.<sup>[10]</sup>

Cicadas WM1:3, WM8:6, WM31:1, WM31:4, WM37:3, WM37:2,six pieces in total, with WM31:4 being severely damaged. They are generally 2-3 cm in length, flat, with a polished back, oval eyes, and incised lines on the neck and back. Compared to cicadas from other sites like Xiaojiawuji and Tanjialing, these are relatively simple in design. Based on perforation positions, they are classified into three types. The majority have head and tail perforations: WM8:6, WM37:2, WM1:3. WM37:3 has a perforation on both sides of the neck. [11]WM31:1 has no perforation. Different perforations suggest different methods of wearing, with head and tail perforations indicating use as part of bead strings or sewn onto clothing, while neck perforations suggest use as hanging ornaments. Like tigers, cicadas also have religious significance.

Eagle-head Hairpin WM1:2, only one piece, 5 cm in length and 1.15 cm in maximum diameter. It is short and conical, with an eagle head at the top, oval eyes, and round nostrils. The neck and tail are decorated with feather patterns, and the end is conical with a perforation in the middle. Compared to 012 from Xiaojiawuji (8.1 cm long, 1-1.15 cm diameter), WM1:2 does not seem functional as a hairpin. The conical end does not smoothly transition to the upper part, suggesting it could be part of a composite object. <sup>[12]</sup>Guo Jingyun believes it might not function as a hairpin but could be an object of ancestral worship, symbolizing high ancestral reverence. Some scholars argue that practical hairpins and ancestral worship objects are not mutually exclusive, suggesting that this piece serves both decorative and religious purposes. <sup>[13]</sup>

Other Adornments, most hairpins, pendants, beads, tubes, terminal ornaments, and plaques have perforations for decorative use. Items like cong and bi disks also have ceremonial significance. Together with human heads, jade tigers, and cicadas, they form a group of religiously significant decorative jade artifacts, reflecting the characteristics of Late Shijiahe Culture.

Tools, adzes, chisels, drills, and knives are classified as tool jade, primarily found at Zaolingang, with a few examples from Xiaojiawuji. These tools are small, finely crafted, usually 1-5 cm in size, often perforated, and show no signs of use, indicating they were not practical tools but burial items symbolizing the status of the deceased, reflecting aspects of daily life in the Late Shijiahe Culture.<sup>[14]</sup>

## 2.2. Jade Craftsmanship

The materials used for the jade and stone artifacts are diverse, predominantly jade, including agate, crystal, turquoise, amazonite, steatite, and quartz. Specifically, Xiu jade was used for items like human heads, beads, and arc-shaped ornaments; Nanyang jade for adzes and chisels; agate for arc-shaped ornaments and adzes; turquoise for tigers and pendants; crystal for cicadas; and quartz for adzes and chisels. At the Zaolingang site, only the jade human head WM4:1 exhibited the high-quality tremolite jade characteristic, while most other jade artifacts were made from a reddish-brown jade material. This indicates that the quality of the jade used can help determine the status and importance of different types of jade artifacts.<sup>[1]</sup>

The production process of these jade and stone artifacts involved several steps, including material selection, grinding, cutting, drilling, carving, and polishing. Scholars have explored the jade crafting

techniques of the Late Shijiahe Culture, which include relief carving, openwork carving, and incised line carving. <sup>[1]</sup>These techniques were often combined on a single piece, enhancing the overall effect and compensating for the limitations of using a single method. For instance, the jade human heads and eagle-shaped hairpins are examples of round sculptures, where shallow incised lines on flat surfaces depict eagle feather patterns, which sometimes transition to raised string patterns on some round eagle hairpins. These artifacts reflect the Late Shijiahe jade craftsmen's adeptness at blending various techniques, adapting early jade crafting methods to suit the needs of different shapes, and innovating upon them.

The observable jade crafting techniques of the Late Shijiahe Culture include blank making, shaping, hard material slicing, soft material line cutting, tube drilling, tool drilling, ground reduction, openwork carving, relief carving, round carving, grinding, and polishing. These techniques were present in earlier jade processing methods but were creatively integrated and innovatively applied in the jade artifacts of the Late Shijiahe Culture.<sup>[15]</sup>

#### 3. Burial Items and Urn Burials

Jade and stone artifacts, as the sole burial items, reflect the burial customs to a certain extent. In the prehistoric period, adult urn burials were mainly distributed in the middle reaches of the Yellow River and the Yangtze River, with only sporadic occurrences in other regions. In the Guanzhong area and the Yellow River basin, such as the Jiangzhai [16]site in Lintong, [17] the Qiugongcheng site in Lushan, Henan, and the Hongshan Temple site in Ruzhou, adult urn burials did not contain a large number of jade and stone artifacts. [18]However, some sites from the Late Shijiahe Culture featured adult urn burials with numerous jade artifacts.

Regarding the urn burials at the Zaolingang site, Guo Lixin suggested that the cemetery likely belonged to a prominent social class based on the burial items and the distribution of urn burials. <sup>[19]</sup>Wang Jin, in discussing the urn burials at Xiaojiawuji, proposed that Xiaojiawuji, Liuhe, and Zaolingang were burial sites for jade craftsmen, representing secondary urn burials of "jade people" from the commoner class of the Late Shijiahe Culture. Some scholars believe that the jade artifacts in the Zaolingang burials, mainly small tools, indicate a lower status for the cemetery and its occupants, as reflected in the use of less precious jade materials. This article explores these perspectives further. <sup>[20]</sup>

The burial rate of jade artifacts at the Zaolingang site is 93%, with only W20 and W21 lacking burial items. Based on the differences in burial items, the urn burials at Zaolingang can be categorized into four types: the first type includes religious jade artifacts such as human heads and cicadas; the second type includes ceremonial jade artifacts; the third type comprises tools and jade blanks; and the fourth type has no burial items.

Level Two BurialLevel Level One Level Three Level Four W2,W3,W5,W6,W7,W9,W1 W12,W13,W14,W17,|0,W11,W15,W16,W18,W19, Number of W1,W4,W8,W31 W20,W21,W2 W29,W30,W32,W34,W22,W23,W24,W25,W26,W **Tombs** ,W37,W41 7 W35,W38,W39,W40,|28,W33,W36,W42,W43,W44 ,W45,W46 Number of 6 12 25 3 **Burials** Proportion 13% 26% 7% 54%

Table 1: Zao Lingang Urn Burial

The first category consists of six urns, characterized by the presence of religious jade artifacts such

as human heads, cicadas, and eagles. The number of burial items ranges from 6 to 14 per urn, indicating a significant quantity of items in each. The presence of religious jade artifacts suggests that the tomb occupants were likely individuals who conducted religious activities and held the highest social status. Among these, urn W4 contains the only jade human head and a rich variety of other burial items, suggesting that the occupant might have been a leader within this group. (Table 1)

The second category includes twelve urns, which contain decorative jade artifacts such as hairpins, rings, and pendants. The number of burial items in these urns ranges from 1 to 19, with significant variation between urns. The presence of these decorative items indicates that the tomb occupants were likely craftsmen who made ceremonial jade artifacts, having a higher status than the general population but still lower than those in the first category. (Table 1)

The third category comprises 25 urns, making up 54% of the total. These urns contain tool jade artifacts such as adzes, chisels, and knives, with 1 to 10 items per urn, many of which are fragmented. This category represents the majority of the burials, indicating a higher demand for tool jade artifacts than for religious or ceremonial ones. (Table 1)

The fourth category includes only three urns, which contain no burial items. These urns are primarily located in the central southern part of the cemetery and are distributed without any discernible pattern. The occupants of these urns were likely of lower social status, such as commoners, who did not have the right to be buried with jade artifacts. (Table 1)

In summary, the Zaolingang cemetery population can be divided into four categories based on the types of burial items. Different levels of burial items reflect the varying social statuses of the tomb occupants. Those buried with large quantities of jade blanks were likely craftsmen. The distribution of burial items does not indicate a significant wealth disparity, unlike at the Xiaojiawuji site (e.g., W6). It is hypothesized that the tomb occupants, particularly those with jade human heads, might have been managed by a leader who was part of the jade crafting organization, but their overall social status was not exceptionally high.

## 4. Conclusion

The Zaolingang Cemetery contains a significant number and variety of jade artifacts. Different types of jade materials were selected based on the shape of the artifact, and various techniques such as round carving, relief carving, and openwork carving were employed to create religious and ceremonial accessories, as well as numerous tool-like jade artifacts. This reflects the advanced level of jade craftsmanship in the middle reaches of the Yangtze River during the Late Neolithic period and demonstrates the high level of jade working skills during the Late Shijiahe Culture period.

The excavation report suggests that many of the fragmented artifacts and jade blanks may have been deliberately broken during burial. It also indicates that this community of jade craftsmen was likely organized by a leader with considerable authority. This group formed a small community with a slightly higher status than the general populace, with no significant internal status differences. They were permitted to use some jade artifacts and materials as burial items upon their death.

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