



Aesthetic Exploration of Jade Artifacts from Songze Culture

-- Taking Some Excavated Jade Artifacts as Examples

Xueping Jin^{1,2,a*}, Zongting Liao^{1,2,b}, Zhengyu Zhou^{2,c}

¹School of Humanities, Tongji University, Shanghai, 200092, China

²Shanghai Engineering and Technology Research Center for Gem and Materials Technics, Shanghai, 200092, China

^{a*}jinxueping1989@126.com; ^bliaozt@tongji.edu.cn;
^c06058@tongji.edu.cn

Abstract. In the development process of Chinese jade culture, Songze Culture period is an important stage in the development of the Neolithic culture in the lower reaches of the Yangtze River around Taihu Lake. In this stage, jade artifacts were initially used as "sacred devices" for funeral, and then developed into ritual vessels for important political activities such as sacrifices, while also possessing decorative artistic functions. This historical stage is an awakening period where the spiritual connotation and aesthetic level of jade culture gradually enrich and elevate. This paper applies modern aesthetic theories, taking some Unearthed Jade Artifacts as examples, to explore the specific aesthetic characteristics of Songze Culture jade artifacts by analyzing of material beauty, color beauty, craftsmanship beauty and decorative beauty, and to explore its abstract aesthetic characteristics by studying of historical beauty and cultural beauty. The aesthetic study of Songze Culture jade artifacts will also provide new materials and results for the establishment and development of Chinese jade aesthetics.

Keywords: Songze Culture; Jade Artifacts; Aesthetic research.

1 Introduction

Songze Culture is an ancient culture in the lower reaches of the Yangtze River in China, named after the Songze site discovered in Qingpu, Shanghai ^[1]. It dates back to about 6000-5300 years ago, mainly distributed in Taihu Lake area, facing the East China Sea to the east, near Nanjing and Zhenjiang to the west, reaching the Yangtze River banks to the north, and the Qiantang River banks to the south. It is represented by the cultural relics of the Neolithic clan tombs in the middle layer of the Songze site in Qingpu, Shanghai. Songze Culture, succeeding Majiabang Culture and preceding Liangzhu Culture, is an important stage in the development of Neolithic culture in the lower reaches of the Yangtze River around Taihu Lake, belonging to the transition stage from

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matriarchal society to patriarchal society in the Neolithic period. There are many tombs in the lower reaches of the Yangtze River around Taihu Lake, and most of the funerary objects and vessel characteristics are very similar to Songze Culture, so this cultural area is called the "Songze Culture Circle." The jade artifacts unearthed in the Songze Culture Circle are called Songze jade artifacts. Among them, the Songze Culture clan tombs in Qingpu, Shanghai, are the most representative^[2], with a total of 583 artifacts unearthed, including 506 potteries, 45 stone tools, 8 bone tools, and 24 jade artifacts. The 24 jade artifacts unearthed cover different types such as huang, ring, zhen, and bracelet. Other tombs with Songze Culture characteristics, such as Shanghai Fuquan Mountain site, Jiangsu Caoxie site, Jiangsu Yingpan Mountain site, and Zhejiang Nanhebin site, have also unearthed many jade artifacts, which have similarities but also slight differences due to different times and regions. As one of the representative products of the advanced productive forces of society at that time, the aesthetic study of Songze jade artifacts will help to deeply understand the cultural characteristics, life-style, and technical level of society at that time.

2 Jade Aesthetics and The Research Development

Jade aesthetics is an important branch of art aesthetics and scientific aesthetics. It is an emerging discipline, mainly based on natural beauty, scientific beauty, historical beauty, and artistic beauty, studying the beauty and aesthetic issues related to jade and jade artifacts. When people appreciate a piece of jade, they are stimulated by the texture, color, exquisite craftsmanship, shape, decoration of the jade, and a sense of beauty is generated, which is jade aesthetics.

The development of jade aesthetics takes jade aesthetics as the carrier, historical materialism as the historical view, and reveals the magnificent development process of Chinese jade artifacts, jade culture, and Chinese civilization through the analysis of the complex art of jade artifacts in various dynasties. Initially, Chinese jade aesthetics mainly focused on archaeological research, revealing information about the use, production technology, and aesthetic orientation of jade artifacts in ancient society through the excavation and identification of ancient jade artifacts^[3]. This period of research laid the foundation for the later development of jade aesthetics, making jade artifacts not only practical crafts but also important expressions of culture and aesthetics. With the maturation of jade archaeology and the advancement of technical means, new jade artifact materials have injected new vitality into the development of Chinese jade aesthetics. Jade aesthetics has gradually transcended the category of archaeology alone, integrating into a broader range of art theories, historical materialism, and cultural studies^[4], making the aesthetic analysis of jade artifacts more systematic and in-depth.

The development of jade aesthetics has gone through a process of evolution from archaeological research to multidisciplinary integration, covering not only the form, decoration, and material of jade artifacts in the art aspect but also delving into the historical and cultural connotations they contain. This has transformed jade artifacts from mere artworks into witnesses and carriers of civilization development, providing a

unique and valuable perspective for a deep understanding of the history and aesthetic concepts of Chinese civilization.

3 Specific Aesthetic Characteristics of Songze Culture Jade Artifacts

As tools, decorations, and artworks, Songze Culture jade artifacts reflect the aesthetic taste of the Songze period. The production of jade artifacts during Songze period mainly used local materials; their shapes were simple and their styles were plain, mainly presenting simple shapes; the production technology was primitive, without complex processes. Although the characteristics are simple and unadorned, Songze jade artifacts contain profound connotations and become an important material expression of understanding the social face at that time.

3.1 Material Beauty of Songze Culture Jade Artifacts

The famous archaeologist Xia Nai pointed out: "Only artifacts made of Hetian jade (true jade) and jadeite can be called jade artifacts" [5]. Since the use of jadeite in China mainly began in the late Ming and early Qing dynasties, according to Xia Nai's view, the jade artifacts in prehistoric China were mainly those made of tremolite, "true jade." Starting from Songze Culture, the materials used for making jade artifacts began to be tremolite and actinolite. Wen Guang et al. (2000) analyzed and tested six jade artifacts sent by the Shanghai Municipal Cultural Relics Management Committee from Songze site in Qingpu, and the results showed that except for one piece of talc jade, all five were tremolite jade [6]. In addition, previous studies on 10 jade artifacts unearthed from Caoxie Mountain site in Suzhou, Jiangsu, also identified all 10 as tremolite "true jade" [7]. Existing research results show that the understanding and use of tremolite jade ("true jade") in the lower reaches of the Yangtze River around Taihu Lake roughly began in Songze Culture period.

Some jade artifacts found in Songze Culture sites, such as jade huang, jade bi, jade bracelets, etc., are all made of tremolite. The main component of tremolite jade is the tremolite mineral $\text{Ca}_2(\text{Mg,Fe})_5\text{Si}_8\text{O}_{22}(\text{OH})_2$, where magnesium and iron can replace each other within a certain range. It has a unique chain-like structure, which is composed of silicate tetrahedral chains connected by magnesium, iron, and other metal ions. This structure endows tremolite jade with good toughness and higher hardness, and the surface shows a strong oily luster. After fine grinding, it shows the natural luster and warm texture of tremolite jade. Taking the jade loop (Figure 1) unearthed from the Fuquan Mountain site in Qingpu District as an example, the diameter is 4.5 cm, the hole diameter is 1.95 cm, and it is a flat round loop. The round hole is drilled through with a single-direction drill, made of tremolite, with a gray-green jade quality, and shows an oily feeling after grinding. The ancestors of the Songze Culture period had consciously and consciously used high-quality tremolite "true jade," which was a new leap in the history of jade artifacts and jade culture. At the same time, this period also laid the jade culture standard for the selection of jade materials for Liangzhu

Culture jade artifacts in the lower reaches of the Yangtze River around Taihu Lake, greatly promoting the process of Chinese prehistoric jade culture reaching its peak.



Fig. 1. Jade loop unearthed from Fuquan Mountain site in Qingpu, source of picture: Qingpu Museum website

3.2 Color Beauty of Songze Culture Jade Artifacts

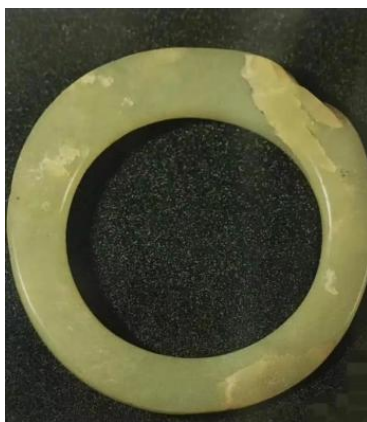


Fig. 2. Unearthed in 1977 from the No. 5 tomb in Zhanglingshan, Wu County, Jiangsu Province, source of picture: China Ancient Jade website

The color beauty of Songze Culture jade artifacts mainly shows at two aspects: one is the natural color of the jade itself, and the other is the color changes shown through artificial grinding and polishing. Tremolite jade usually shows different degrees of green, white, gray, black, and other colors, with a delicate texture and a luster ranging from glassy to oily. The jade artifacts of Songze Culture are mostly greenish, which gives people a feeling of tranquility and harmony. Taking the jade bracelet (Figure 2) as an example, unearthed from the No. 5 tomb in Zhanglingshan, Wu County, Jiangsu Province in 1977, the whole is white fruit green, and the jade quality is delicate and crystal clear.

In addition, the color changes produced by the artificial grinding and polishing process of Songze jade artifacts further enhance and enrich the aesthetic feeling of jade

artifacts. The ancestors of the Songze period, through fine grinding, made the surface of jade artifacts show different gloss and color levels. This technique not only retains the natural beauty of jade but also endows jade artifacts with more artistry and aesthetic value. The jade huang (Figure 3) unearthed from the Caoxie Mountain site in Wu County, Jiangsu Province in 1982, shows deep green and milky white natural colors, with a warm texture and soft luster. The jade huang is a flat semi-circular shape, with slightly raised ends. From different angles of light, the green and white on the surface of the jade huang will show a rich sense of hierarchy and profound visual effects, making the jade artifacts more vivid and enduring to watch.

Through these examples, we can see how Songze Culture jade artifacts create a unique color beauty through the combination of the natural color of jade and artificial grinding technology. This sensitive use of color and the combination of exquisite craftsmanship not only show the mature manual skills of the ancestors of Songze Culture period but also reflect the process of the society's pursuit of beauty and the maturation of aesthetic concepts at that time.



Fig. 3. Unearthed in 1982 from the Caoxie Mountain site in Wu County, Jiangsu Province, source of picture: China Ancient Jade website

3.3 Craftsmanship and Decorative Beauty of Songze Culture Jade Artifacts

In jade aesthetics, material beauty is the foundation, and the high unity with the created craftsmanship is the realm. Practice has proved that most jade materials can only become artistic treasures through the ingenious conception and many times consideration of craftsmen, and various jade materials can maximize their aesthetic value and artistic value while maintaining their natural beauty. In most cases, in the process of jade processing and production, people's pursuit of beauty is concentrated on formal beauty. Through creative design and processing of jade materials, the precious jade materials and superb craftsmanship are organically combined, thereby producing strong interest and appreciation. That is to say, jade processing is to make art images according to the laws of formal beauty^[8-9].

The early jade craftsmanship of the Songze Culture basically continued the late Majiabang Culture jade style, and the types of artifacts were relatively single, mainly huang, jue, and tube-shaped artifacts, and non-decorative artifacts such as jade axes occasionally appeared. The vertical tube-shaped jue in the jade ring has disappeared, and the flat ring-shaped huang has appeared in addition to the regular circle, and there

are also square, hook-shaped, and other variants. In the late Songze Culture, the number of unearthed jade artifacts increased significantly, and the types of artifacts included not only the early huang, jue, axe, and tube-shaped artifacts but also new varieties such as rings, bracelets, bi, pendants, and spherical crown-shaped tunnel-hole beads. The huang, which was very popular in the early period, has sharply decreased in the number of unearthed artifacts and gradually faded from view.



Fig. 4. Unearthed in 1976 from the No. 92 tomb in the Songze site in Qingpu, source of picture: China Ancient Jade website

Taking the jade bi (Figure 4) as an example, unearthed from the No. 92 tomb in the Songze site in Qingpu in 1976. The design of the jade bi cleverly imitates the shape of a chicken heart, which is flat and symmetrical, with one end oval and the other end pointed, showing a natural and vivid form. This design is not only beautiful but also reflects the observation and imitation of natural forms by Songze Culture. There is a round hole in the center of the chicken-heart-shaped jade bi, which is completed by single-sided drilling technology. Single-sided drilling technology requires craftsmen to have extremely high patience and precise control to ensure the regularity of the hole and the integrity of the jade artifact. This fine processing technology shows that the craftsmanship of the Songze Culture craftsmen has reached a certain level. The surface of the artifact has been carefully polished, smooth and delicate. This smooth surface not only enhances the aesthetic appeal of the jade artifact but also makes the jade artifact show a softer luster under light, enhancing its aesthetic value.

4 Abstract Aesthetic Characteristics of Songze Culture Jade Artifacts

4.1 Historical Beauty of Songze Culture Jade Artifacts

The process of Chinese history and cultural development is essentially a process of encountering beauty, and it is also a process of pursuing beauty, discovering beauty, utilizing beauty, and creating beauty. Through the discovery and study of unearthed artifacts (mainly jade artifacts, pottery, and bronze ware), China has shown the world a magnificent ancient history and civilization. Jade artifacts run through the ancient history of China, first seen in the middle Neolithic Xinglongwa culture and Shunshanji

culture, and Lingjiatan site tombs found traces of professional production of jade artifacts^[10]. The tomb culture shown by Songze Culture site is an important part of the late Neolithic period in China, revealing the social organization, religious beliefs, social differentiation, and the preliminary formation of civilization at that time. For example, a large tomb M90 of Songze period excavated in Dongshan Village, Zhangjiagang, Jiangsu Province. This tomb, because of its rich funerary objects and high-level tomb burial specifications, was called "Songze King" by archaeologist Yan Wenming, and it is the tomb with the most funerary objects and the highest level found so far in Songze Culture. Through a photo taken during the excavation (Figure 5), it can be seen that only the skull of the tomb owner remains, and the jade artifacts used as accessories, such as huang, bracelet, jue, tube, and other 19 jade artifacts, are arranged in combination, vaguely identifiable to be placed on the tomb owner's body according to a certain wearing method. Although the body has long rotted, it can be imagined that he may have worn two large jade huang on his head and a string of jade tubes, with jade huang hanging around his neck, jade huang and earrings on his ears, and jade bracelets on his wrists. According to the level of social productive forces at the time, unless it is a tribal leader-like noble figure, it is impossible to have such a grand array. In addition, a large number of quartz sand grains were found around the jaw and neck of the tomb owner. Quartz sand is also called "jade sand," which is a tool for grinding various jade materials. A stone cone with a high iron content and a scarred edge was also unearthed on the right side of the head, and a whetstone for grinding was placed beside it. Archaeologists speculate that this is a set of jade carving tools, indicating that the "Songze King" has the right to govern jade, which is a symbol of wealth and status.



Fig. 5. M90 Tomb Excavation Site, photo from Zhangjiagang Museum

The tomb culture of Songze period shows that society has begun to show obvious differentiation. The types and quantities of funerary objects are often related to the social status of the tomb owner. In large tombs found in places such as Dongshan Village, the differentiation between wealthy powerful clans and commoner clans is particularly obvious. The tombs of wealthy powerful clans usually have a rich array of daily pottery, jade decorations, and large stone axes symbolizing military power and royal power, while the tombs of commoner clans are simple. This differentiation reflects the internal hierarchy and power structure of society. In some tombs of higher social status, many jade tools were found, such as jade axes and jade axes. These artifacts themselves do not have edges, and the material is not useful, so it can be

inferred that these jade artifacts mainly play a symbolic role, representing the status and position of the tomb owner. Songze Culture period has begun to form a complete tomb group, and there is a strict hierarchy, which is a symbol of human beings beginning to give birth to an unequal society. An unequal society means the aggregation of power, and the next step in the aggregation of power is the prototype of cities and states.

4.2 Cultural Beauty of Songze Culture Jade Artifacts

In Songze era, the use of jade artifacts has formed its own system. In terms of ritual systems, tomb owners who are buried with stone axes and other production tools are usually men, while tomb owners who are buried with jade huang around their necks are women. In terms of decorative aspects, the use of jade is no longer limited to the head and ears, but gradually extends to other parts of the body, such as the chest and wrist, appearing in the form of jade huang and jade bracelets and other full-body decorations. This diversified decoration system has been further developed and optimized during Songze period.



Fig. 6. Unearthed in 1974 from the No. 64 tomb of Songze site in Qingpu, Shanghai, source of picture: China Ancient Jade website

In addition, the fish-bird-shaped jade huang (figure 6) unearthed from the No. 64 tomb of the Songze site in Qingpu County, Shanghai, in 1974, is not only a precious art discovery but also a revelation of the social background and historical significance of Songze Culture period. The jade huang is lake green, with gray-white spots on the surface. One end is fish-shaped, and the other end is bird-shaped, with a special shape. The entire artifact surface has been smoothly ground, with a hole on each end, completed by single-sided drilling, then slightly trimmed on one side, and still retains obvious wear marks due to hanging.

It can be boldly speculated that people in Songze Culture period had begun a stable agricultural life and also engaged in fishing and hunting activities. The design of the fish-bird jade huang reflects the dependence and importance of fish and birds in the lives of Songze people at that time. Fish is one of the food sources of the Songze people, and birds may be related to the totem worship at that time. A large number of fish

bones were also found in Songze site, which can prove that fish are one of the food sources of the Songze people. In addition, there is also a saying that fish and birds are symbolic symbols deliberately entrusted by Chinese ancestors. Birds are symbols of masculinity, and fish are symbols of fertility. With birds and fish coexisting, it implies the combination of men and women, praying for prosperity of offspring^[11]. The appearance of fish-bird huang reflects the important position of fish and birds in the activities of Songze people.

The above findings show that the jade culture of the Songze period is not only a material culture but also a reflection of social structure and spiritual beliefs. The use and circulation of jade not only reflect the complexity and hierarchical differentiation of society at that time but also reveal the ancestors' understanding and pursuit of beauty, power, and religion. Through the study of these jade artifacts, we can gain a deeper insight into the social culture and spiritual life of Songze period.

5 Conclusion

The evolution of Chinese history and culture is a continuous encounter with aesthetics. Beauty is not only admired and realized as an aesthetic standard but also serves as a cultural force that promotes social progress and national identity. Trapped by the constraints of literature and written history, the academic community has long had unclear and controversial understandings of ancient Chinese history and cultural history. The archaeological discoveries in China in the past hundred years have provided opportunities to solve this major scientific problem. Through the discovery and study of unearthed artifacts, China has shown the world a magnificent ancient history and civilization. Based on the understanding of natural jade materials and original creativity, the ancestors created a variety of jade artifacts. These jade artifacts not only give people sensory beauty but also convey the cultural information and spiritual pursuits of society at that time. They are important physical evidence for studying the social structure and civilization development of ancient times. Songze culture, represented by jade artifacts, features a complete handicraft industry settlement structure, reflecting the advanced level of the jade industry during Songze period and laying the foundation for the developed jade industry of Liangzhu culture. From the jade artifacts of Songze Culture, we can also deeply feel the profound and long-standing Chinese civilization, providing a solid foundation for today's cultural confidence and cultural innovation.

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