

Study on the Origin and Development of Song and Tang Dynasty Huangshan Songkou Kiln

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Abstract: Songkou Kiln is located in Shexian County, Anhui Province, and is a folk kiln in the southern part of Anhui Province. In 1985, the Shexian County Cultural Bureau and Museum discovered during a cultural relics survey that it produced celadon with diverse shapes. Based on its shape characteristics and decorative patterns, the production period was determined to be from the middle and late Tang Dynasty to the early Southern Song Dynasty. Regarding the origin and development of the Songkou Kiln, there is no detailed official explanation. This paper, based on the specimens unearthed in recent years, combined with the literature materials compiled by experts and scholars in recent years, and through on-site visits to the kiln site, compares the Songkou Kiln with surrounding kilns, and briefly discusses the origin and development of the Songkou Kiln in the Tang and Song Dynasties.

Keywords: Songkou Kiln, Style Characteristics, Origin and Development, Other Kilns.

1. Overview of the Kiln Site and Investigation Situation

The Songkou Kiln is located about 150 meters southeast of Songkou Village, Guilin Township, Shexian County, Huangshan City, Anhui Province, approximately 10 kilometers northeast of the county seat of Shexian. The kiln site is located at the confluence of two rivers. Due to its proximity to the river, the transportation of porcelain is convenient, and the transportation of wood fuel is also convenient. The kiln site slopes from north to south, and the total length of the kiln body is about 20 to 24 meters. [1] The kiln was built against the mountain. According to the archaeological investigation, all belong to the Songkou Kiln. These different kiln sites may cover an area of several thousand square meters. According to local legend, there were originally hundreds of kilns in Songkou, all opened and operated by the Cheng family. Later, due to epidemics and wars, they gradually declined. Currently, the investigation of the Songkou Kiln has only found porcelain shards from the Southern Song Dynasty, and no related physical specimens from after the Southern Song Dynasty have been found. Therefore, it is now speculated that the Songkou Kiln began to decline from the Southern Song Dynasty.

The Songkou Kiln in Shexian County is a key cultural relic protection unit of Huangshan City. Currently, the author and the supervisor have found through on-site visits that most of the Songkou Kiln sites are located along the river. The local area is rich in kaolin, porcelain stone, and glaze materials, which allowed the Songkou Kiln to have a long production period, from the middle and late Tang Dynasty to the early Southern Song Dynasty. During the investigation, it was found that the products of the Songkou Kiln were diverse, including daily utensils such as bowls, plates, pots, and jars, as well as tea drinking utensils for scholars such as saucers and bowls.



Figure 1. Songkou Kiln Site

2. Research on the Origin and Development of Songkou Kiln Porcelain

The research on the Songkou Kiln is still in its infancy and development stage, and there is still a long way to go. Before restoring the overall appearance of the Songkou Kiln, the author believes that it is very necessary to determine the origin and development of the Songkou Kiln.

The Songkou Kiln has a deep technological connection with the celadon of the Xuanzhou Kiln in the Tang Dynasty and the products of the Yue Kiln from the Five Dynasties to the Song Dynasty due to geographical and other reasons. The glaze color and glaze phase are very similar. Even the Songkou Kiln may have some connections with regional kilns.

2.1. From Yue Kiln to Songkou Kiln

Songkou Kiln and Yue Kiln share a high degree of similarity. This paper will explore the connections between the two from the aspects of the artifacts themselves, firing techniques, and personnel mobility.

Firstly, in terms of the artifacts themselves, the products of Songkou Kiln include celadon, yellow-green glaze, and brownish-red glaze porcelain. According to the collected specimens, during the Tang Dynasty, yellow-green glaze and brownish-red glaze porcelain accounted for 80% of the total output. From the Five Dynasties to the Northern Song Dynasty, celadon porcelain made up 70% to 80% of the total output. The glaze of celadon porcelain is fine and covers the

entire body, including the bottom. The glaze of yellow-green and brownish-red glazed porcelain is coarser, and the bond between the glaze and the body is not tight. The brownish-red glazed porcelain is mostly daily-use items, with the glaze covering about two-thirds of the body, and the bottom is exposed, showing a reddish-brown color and spiral marks. The bond between the glaze and the body is not tight, and it is prone to glaze peeling. Most of the products of Songkou Kiln are single-colored, but there are also some with brownish-red dots on the celadon glaze. The phenomenon of brownish-red dots on celadon glaze first appeared in Yue Kiln during the Three Kingdoms period. From the late Tang Dynasty to the Five Dynasties, the glaze of Yue Kiln was overall celadon in texture, with a tight bond between the glaze and the body, and the entire body was covered with glaze. The glaze of Yue Kiln and the celadon porcelain of Songkou Kiln are almost the same. It can be seen that the celadon porcelain of Songkou Kiln was greatly influenced by Yue Kiln. During the Tang Dynasty, as Songkou Kiln was in its early stage, the glaze color was mostly brownish-red and yellow-green. From the Five Dynasties to the Northern Song Dynasty, with the development of the kiln industry and the peak of Yue Kiln during the same period, Songkou Kiln learned from Yue Kiln and continuously improved the quality of its glaze, resulting in a greenish-celadon glaze effect.

The porcelain of Songkou Kiln can be divided into fine porcelain and thick-bodied coarse porcelain. During the Northern Song Dynasty, Songkou Kiln mainly produced fine porcelain. The porcelain clay was finely washed, and the body was firm and fine, with a grayish-white color and a deep brown or black exposed bottom. During the Five Dynasties to the Northern Song Dynasty, the body of Yue Kiln was also fine. Through comparison, it was found that the exposed part of the body of Songkou Kiln was darker than that of Yue Kiln, but the difference in the porcelain clay was slight. The reason for this is that although Songkou Kiln and Yue Kiln are located in different provinces, they are at the same latitude and both belong to the southeast hilly area, so the porcelain clay of the two is relatively similar. The body of Songkou Kiln is darker because the iron content of the local porcelain clay is higher than that of Yue Kiln.



Figure 2. Northern Song Dynasty Songkou Kiln Celadon Double-Handled Jar

In terms of shape, Yue Kiln often produced imitations of gold and silver wares. From the shape of the products,

Songkou Kiln mainly produced bowls, plates, cups, jars, and pots, as well as saucer stands, lamp stands, and rimmed cups. Among the products of Songkou Kiln, there are both fine and coarse ones. Some of the fine porcelain also imitated the shapes of gold and silver wares, such as sunflower-shaped bowls, teapots, and flower-shaped washbasins. As Yue Kiln was located in the coastal area of Zhejiang Province, Ningbo and Shaoxing were port cities with developed foreign trade and frequent cultural exchanges with the West. Therefore, it can be seen that some of the shapes of Yue Kiln were influenced by Western gold and silver wares, while the shapes of Songkou Kiln were directly influenced by Yue Kiln.

In terms of firing techniques, Songkou Kiln basically used naked stacking firing with large spurs in the Tang Dynasty. From the Five Dynasties to the Northern Song Dynasty, the shape of the spurs became smaller, and the number of spurs was mostly 4 to 13. In the Northern Song Dynasty, there were also methods such as stacking with support beads and stacking with spacers. Stacking with spacers involved single-piece upside-down firing in a saggar, which improved the quality and yield of individual pieces. The saggars were divided into funnel-shaped saggars and cylindrical saggars, with the former mainly used for flat items such as bowls, plates, and dishes, and the latter mainly used for upright items such as jars and pots. [2] Yue Kiln used small-spur supporting firing and saggar firing from the Tang Dynasty to the Northern Song Dynasty without interruption. Therefore, it can be seen that the spread of firing techniques has a certain lag. During the Tang Dynasty, Songkou Kiln failed to promptly absorb the advanced techniques of Yue Kiln. It was not until the Five Dynasties and the Northern Song Dynasty that Songkou Kiln began to abandon the relatively backward method of naked stacking and burning, and started to learn the techniques of Yue Kiln such as supporting with beads and stacking with rings, as well as the use of kiln boxes [3].

From the perspective of personnel mobility and technological dissemination, Songkou Kiln is located in Shexian County in the southeast of Anhui Province, adjacent to Zhejiang. Yue Kiln is located in Ningbo and Shaoxing of Zhejiang Province, with its main kiln sites in Shanglin Lake, Cixi. [4] The distance between the two kilns is about 200 kilometers, and they are connected by rivers. Songkou Kiln is situated at the confluence of Yangzhi River and Shuangsong River. Yangzhi River, as a tributary of Xin'an River, flows into Qiantang River. Qiantang River flows through Yue Kiln production areas such as Shaoxing, Ningbo, and Shangyu, and eventually empties into the East China Sea. Ancient kilns were generally located near rivers, which provided convenient transportation through ports, water resources for raw material processing, and easy access to wood fuel for collection and transportation. Moreover, in ancient times, the movement of people in the Jiangnan region was mainly by water. The artisans of Songkou Kiln could directly travel to Yue Kiln to learn through the Xin'an River route, and it was also convenient for the artisans of Yue Kiln to pass on their skills to Songkou Kiln.

Through the analysis of the artifacts and firing techniques of the two kilns, it can be seen that from the Five Dynasties to the Song Dynasty, Songkou Kiln actively learned and absorbed the firing techniques of Yue Kiln, producing a batch of celadon wares of comparable quality to those of Yue Kiln. As a result, many people referred to Songkou Kiln as "Anhui Yue Kiln".



Figure 3. Yue Kiln Holding Vase of the Song Dynasty

2.2. From Xuanchou Kiln to Songkou Kiln

Xuanchou Kiln, as a group of kilns in the southern part of Anhui Province, includes many kiln sites such as Fanchang, Dongmendu, and Xiaozhuyuan. The artisans of Xuanchou Kiln included both those who moved south to escape wars from the north and local potters in southern Anhui. Therefore, the overall style of Xuanchou Kiln's wares combines the roughness of northern porcelain with the delicacy and smallness of southern porcelain. In the Tang Dynasty, the rough style of Xuanchou Kiln was also reflected in Songkou Kiln. Therefore, the author compares the two and conducts a discussion to find the connection between them.

The early kiln sites of Xuanchou Kiln were the Qinxi Kiln in Jing County and the Dongmendu Kiln in Wuhu during the Tang Dynasty. Their porcelain was mainly yellowish-green and brownish-yellow glazes, with relatively thin glaze layers, and the glaze and body did not bond tightly. The glaze covered about two-thirds of the body, and the glaze surface had deep cracks. Most of the glaze surfaces had soil stains, and the rims of the wares often had glaze loss. Some wares had bulging glaze on the abdomen. These features were highly similar to those of Tang Dynasty Songkou Kiln. Due to the use of local glaze materials in both kilns, the thin glaze led to severe cracking and soil staining. Xuanchou Kiln produced celadon with brownish-yellow underglaze, and the brownish-yellow could be used for painting floral patterns, while Songkou Kiln only had brownish-yellow dots.

In terms of body quality, Xuanchou Kiln and Songkou Kiln were relatively close, and the porcelain clay was almost the same. In the late Tang Dynasty, the porcelain clay of both kilns was relatively coarsely washed, and there were impurities in the porcelain body. The body was grayish-white, and the foot rims had obvious scraping marks and turning marks.

In terms of shapes, both Xuanchou Kiln and Songkou Kiln in the Tang Dynasty produced mostly daily-use wares such as bowls, plates, vases, double-handled bottles, and jars. The rims of bowls and plates were rarely ring-shaped, and were mostly flat-bottomed and scraped. [5] There were also a few ritual and musical instruments, such as the Tang Dynasty waist drum unearthed from Xuanchou Kiln and the drumstick unearthed from Songkou Kiln. It can be seen that the shapes produced by the two kilns were relatively diverse. However, by comparing the shapes of the wares unearthed from the two kilns in the late Tang Dynasty, it was found that Xuanchou Kiln produced a wider variety of shapes than Songkou Kiln, such as the long-spouted carved flower vase, celadon covered jar, and melon-shaped jar produced by Xuanchou Kiln. In

addition to common daily-use wares, Xuanchou Kiln also unearthed jars with the character "guan" (official) on them. This indicates that Xuanchou Kiln provided porcelain to the imperial court in the late Tang Dynasty. It can be seen that Xuanchou Kiln had a significant influence at that time, and its variety of shapes was extensive. Songkou Kiln, as a local folk kiln, actively learned the shape styles of Xuanchou Kiln. Eventually, in the late Tang Dynasty, the shapes of Xuanchou Kiln could be seen in Songkou Kiln.



Figure 4. Tang Dynasty Xuanchou Kiln Jar

In terms of firing techniques, both the Xuanchou Kiln and Songkou Kiln in the Tang Dynasty used dragon kilns. Due to the mountainous terrain in southern Anhui, the kiln sites were built along the mountains, taking advantage of the slope to increase the firing power and enhance the production volume. In the late Tang Dynasty, the kiln furniture of both kilns was relatively simple, with stacked naked firing. The inner part of the vessels was supported by four large spurs for firing, and the stacked vessels were placed on the spurs and fired in the open flame. The firing techniques of the two kilns were almost the same.

At the end of the Tang Dynasty, the Xuanchou Kiln was in the process of transforming from an official kiln to a private one. [6] As a private kiln in southern Anhui, the Songkou Kiln actively learned the firing techniques of the Xuanchou Kiln. The two places were only about 100 kilometers apart, with both water and land transportation available. Water transportation-wise, the Songkou Kiln was located in Songkou Village, where the Shuangsong River and Yangzhi River converge, and both rivers originate from Xuancheng City. For land transportation, the Juguoling Pass was an ancient road connecting Shexian Prefecture and Xuancheng Prefecture, serving as a bridge and hub for the mutual learning and exchange between the Xuanchou Kiln and the Songkou Kiln. The convenience of water and land transportation led to frequent exchanges between the two places. As an official kiln from the late Tang Dynasty to the early Five Dynasties, the Xuanchou Kiln naturally became a model for the surrounding kilns to learn from.

3. Conclusion

The Songkou Kiln in Shexian County, Anhui Province, from the Tang Dynasty to the Northern Song Dynasty, although not as renowned as the five famous kilns or the eight major kiln systems of the Song Dynasty, played an indispensable role in enriching and perfecting the porcelain industry system at that time. It absorbed and learned the porcelain-making techniques of the Xuanchou Kiln in the Tang Dynasty and those of the Yue Kiln in the Song Dynasty. During the peak of the porcelain industry in the Song Dynasty, it developed its own characteristics and radiated and

promoted the formation and development of surrounding kilns, becoming a brilliant flower in the porcelain industry of Anhui Province.

References

- [1] Gao Yilong, Jia Qingyuan. Investigation of Songkou Kiln in Shexian County, Anhui Province [J]. *Archaeology*, 1988, (12): 1142-1143.
- [2] Hong Bing. Research Report on Songkou Kiln in Shexian Prefecture during Tang and Song Dynasties [J]. *Ceramic Science and Art*, 2023, 57(03): 105-107.
- [3] Tu Zongyi. Research on the Firing Techniques of Yue Kiln Celadon [J]. *Ceramic Science and Art*, 2024, 58(07): 90-91.
- [4] Sheng Haiyao. Yue Kiln Celadon: The Secret Color of a Thousand Years - An Exploration of the Firing Techniques of Yue Kiln Celadon [J]. *Ceramic Science and Art*, 2024, 58(07): 100-101.
- [5] Wang Dandan, Liu Dong. A Preliminary Study on Xuanzhou Kiln Porcelain [J]. *Cultural Relics of Spring and Autumn*, 2019, (03): 48-53.
- [6] Li Guangning, Dong Jiaji. Some Thoughts on the Archaeology of Porcelain in Southern Anhui [J]. *Southeast Culture*, 1991, (02): 208-212.