

FUNCTION ANALYSIS OF THE SIX-TUBE BOTTLE FROM THE HUSI KILN IN SONG DYNASTY CHINA

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Abstract: The Husi kiln is an important discovery in the history of Hubei ceramic archaeology, and its porcelain has extremely high archaeological, cultural and economic values. The lack of research on the ceramic culture of Husi Kiln has brought difficulties to the revitalization of cultural heritage, and even the academic community cannot determine the function of the six-tube Bottle as a representative work. From the perspective of design and ethnoarchaeology, this article discusses the functions of the six-tube bottle of the Husi kiln. After sorting out the evolution and development history of the six-tube bottle, combined with the background, economic culture, politics, and ideas of the Song Dynasty, the article discusses the functions of the six-tube bottle, which may include funeral objects, vases, incense burners, and candle holders. It is believed that the six-tube bottle of the Song Dynasty from the Husi kiln is likely to be a funeral object or a vase, and it is unlikely to be an incense burner or a candle holder.

Keywords: Husi Kiln, Function Analysis, Multi-tube Bottle, Six-Tube Bottle, Song Dynasty

1. INTRODUCTION

Since the 1970s, a large number of porcelains have been unearthed through archaeological excavations at the Husi Kiln Sites in Jiangxia District, Wuhan. The products excavated are diverse, predominantly comprising daily-use ceramics, with bluish-white glazed ceramics being the primary type. Remarkably, among all the porcelains excavated across the Husi Kiln complex, only two bluish-white glazed six-tube bottles were found.(Liu, 2019) In the 2023 Wuhan Museum Husi Kiln Special Exhibition, the six-tube bottle was labeled as "Six-Tube Incense Burner".(Xu, 2023) The author will raise objections to this labeling through this article. The origin of multi-tube bottles can be traced back to the Eastern Han period, evolving over time from their function as funerary objects to serving other purposes.(Dong, 2009) Based on Bourdieu's theory of cultural capital, the six-tube bottle, as an important cultural artifact, not only possesses various functions and values but also holds symbolic and cultural significance. It showcases the cultural capital of its participants and, through social interactions and cultural consumption, reproduces cultural customs and social norms.(Swartz, 1997) This article aims to explore the function of the Husi Kiln's six-tube bottle by integrating the evolution of multi-tube bottles, the economic and cultural context of the Song Dynasty, and comparisons with similar multi-tube bottles produced by contemporaneous kilns. This analysis seeks to uncover the cultural connotations embodied in these artifacts, thereby showcasing the aesthetic and artistic value of the Husi Kiln's porcelains.

2. LITERATURE REVIEW

The Husi Kiln is located in Jiangxia District, Wuhan City, Hubei Province, China, and flourished more than 1000 years ago during the Northern Song Dynasty and was discontinued in the early Ming Dynasty.(Qi, 2007) The excavation of the Husi Kiln site fills a gap of over a thousand years in the ceramic history of the Hubei region, possessing immense historical significance and research value. The rise of the Husi Kiln coincided with the pinnacle of bluish-white porcelain firing techniques. The representative works from this kiln, specifically the Liangzi Lake series of bluish-white porcelain, exhibit their unique artistic charm. These porcelains not only embody superior firing skills but also embody rich cultural connotations, thus holding great value for cultural preservation and research potential. After the rescue excavation, a large number of bluish-white porcelain and kiln utensils were unearthed, and only two six-tube bottles were unearthed (Figure 1), which bears a high research significance, meriting an exploration into its design elements such as structure and function. Academic research on the Husi Kiln can be divided into two main types. The first type includes review articles that provide an overview of the Husi Kiln. For instance, Qi

Jingang's "Overview of the Ancient Husi Kiln in Jiangxia" details the discovery, distribution, product types, characteristics, and firing techniques of the Husi Kiln, and discusses its significance.(Qi, 2007) Liu Zhiyun's book, "Archaeological Discoveries and Research on the Husi Kiln Site in Jiangxia, Wuhan," covers almost all archaeological reports on the Husi Kiln.(Liu, 2019) The second type focuses on the artistic features of Qingbai porcelain. Scholars have examined Qingbai porcelain from the Husi Kiln site to explore its aesthetic forms during the Song dynasty.(Qi, 2010) In "Aesthetic Forms of Jiangxia Husi Kiln Qingbai Porcelain," Duan Yan suggests that the six-tube bottle from the Husi Kiln is a combination of a flower vase and an incense burner.(Duan, 2021) The Wuhan Museum's special exhibition labels it as a "six-tube ceramic incense burner," though this claim is viewed with caution due to insufficient evidence.

Regarding multi-tube bottles, research mainly focuses on the Eastern Han to Western Jin periods, with less attention to their development after the Western Jin. multi-tube bottles originated in the Eastern Han and evolved from funerary objects to other functions. Dong Jianli's "Preliminary Discussion on Five-Spouted Jars" outlines their characteristics and development, linking them to the Five Elements theory.(Dong, 2019) Cheng Xiaozhong argues that the spouts were for souls to enter and exit. In "On the Reasons for the Functional Transformation of multi-tube bottles from funerary objects to Flower Vases," scholars discuss this transformation during the Song dynasty, considering religion, floral arrangement, and design.(Jiang, 2021) Current research on multi-tube bottles is limited, with consensus on their funerary function but fragmented views on their daily use, indicating a need for further study.



Figure 1. Six-tube bottle unearthed from Husi Kiln of Song Dynasty (Wuhan Museum)



Figure 2. Replica of six-tube bottle (Made by Author)

3. METHODOLOGY

This article primarily employs the literature review method, examining relevant literature to understand the knowledge about multi-tube bottles, trace their development, and clarify the current state of research. This approach is combined with theories related to the political, economic, and cultural context of the Song Dynasty to provide insights and references for this study.

Additionally, the interdisciplinary research method is utilized, integrating theories, methods, and findings from history, ethnoarchaeology, and design studies to conduct a comprehensive study of six-tube bottles from the Hushi Kiln.(Ye, 2021) A key focus of this article is the application of ethnoarchaeological methods, a methodological discipline combining ethnology and archaeology, is employed here using a comparative phenomenological approach. By examining the economic, cultural background, and customs of the Song Dynasty, this article analyzes the evolution of multi-tube bottles, focusing on the relationship between human behavior and the social environment. The function of the six-tube bottle is assessed from the perspective of the cognition and behavior of Song Dynasty people.

4. THE EVOLUTION AND DEVELOPMENT OF SIX-TUBE BOTTLES

The six-tube bottle belongs to the category of multi-tube bottles, which originated in the Eastern Han Dynasty and has undergone continuous evolution from the Three Kingdoms to Qing dynasty, becoming one of the uniquely characteristic varieties of ancient Chinese porcelains.(Dong, 2009) Since the Han Dynasty, the practice of elaborate burials became prevalent, rooted in the belief that the soul persists and resides in another realm after death. The origin of multi-tube bottles is intertwined with the burial customs. Among the burial objects were provisions and funerary objects, including a type known as the Five-Spouted Jar (Figure 3). Characterized by a central vessel appended with four smaller ones around its belly, these jars fulfilled the practical purpose of storing grain within the tomb. The "five" in the Five-Spouted Jar corresponds to the Five Elements (wood, fire, earth, metal, and water) in ancient Chinese philosophy. The theory of the Five Elements is an essential part of traditional Chinese culture, influencing the understanding of the universe, nature, and life. The Five-Spouted Jar filled with grain symbolizes the deceased balancing the Five Elements in the afterlife, maintaining harmony and tranquility, while also achieving the balance of yin and yang, ensuring peace and happiness.

From the middle of the Eastern Han Dynasty onward, the form of the Five-Spouted Jars began to increase in height, with their bellies adorned by added depictions of

human figures, animals, and architectural motifs.(Shen, 2016) These jars gradually transformed into Spirit Jars and Piling up Sculpture Jars, on which buildings became principal adornments with birds and mythical creatures like dragons and tigers perched atop, symbolically guiding spirits to heaven (Figure 4).

In the Tang Dynasty, in the Wu and Yue areas, numerous multi-horned bottles and pour-spouted bottles were unearthed, which functionally served as substitutes for Spirit Jars for storing grain. In the local Wu and Yue dialect, "guo"(角 horn) sounded similar to "gu"(谷 grain), implying these were funerary objects containing grains. The multi-horned jar, as suggested by its name, featured a stepped, pyramid-like body with multiple tiers adorned with horned protrusions, a design evolution from the earlier decorated Piling up Sculpture Jar (Figure 5). (Zhang, 2023)



Figure 3. Five-Spouted Jar from East Han Dynasty



Figure 4. A Celadon Piling up Sculpture Jar from Western Jin Dynasty



Figure 5. A Celadon Multi-Horned bottle from Tang Dynasty Yue Kiln

During the Northern Song Dynasty, society and the economy flourished, and aesthetic thought advanced significantly. Due to the threat from northern nomadic tribes, many artisans migrated south. The southern regions, including the Hushi area, were rich in forestry resources and porcelain clay, with access to the Yangtze River for transportation. This facilitated the development of kilns like the Hushi Kiln.

The Hushi Kiln produced large quantities of ceramics, meeting local and external demands. During this period, the ceramics industry thrived, and the techniques for firing multi-tube bottles improved significantly. Kilns such as Hushi, Longquan, Yue, Fanchang, and Hutian actively produced multi-tube bottles, contributing to the craft's prosperity and development (Figure 6).

Burial customs, mirroring societal norms, reflect changes in folk funeral practices and the evolving demands for burial objects. This context led to a diversified range of forms for multi-tube bottles to accommodate different burial customs, including those with four, five, six, seven, or even up to fifteen tubes(Wang, 2000). Entering the later period

of the Southern Song Dynasty, production of multi-tube bottles gradually ceased, supplanted by loong-tiger bottles (Figure 7), which became the new choice for funerary offerings. Concurrently, the function of multi-tube bottles has also undergone changes.



Figure 6. six-tube bottle of Hutian kiln in the Northern Song Dynasty



Figure 7. Loong-tiger bottle of Longquan Kiln in the Northern Song Dynasty

5. THE FUNCTION OF SIX-TUBE BOTTLE OF HUSI KILN

5.1 *The Funeral Function As a Funerary Objects*

In the minds of ancients, death was not an endpoint, but rather the beginning of passage to another world where the soul, eternal and indestructible, continued. Rooted in such primal beliefs and ideas, funerals became major societal events with funeral customs evolving alongside society, developing varied functions and meanings. The contents of burial object symbolized the deceased's former life and status(Jiang, 2019). The development of Five-Spouted Jar led to the evolution of Soul Bottle, which served as burial items and embodied certain religious beliefs. They originated from Five-Spouted Jar.(He, 1991) By the Song Dynasty, multi-tube bottles were frequently discovered alongside pour-spouted flasks and handled pots, with multi-tube bottles filled with grains and pour-spouted pots with wine, reflecting the belief in the undying soul's need for sustenance. (Xu, 2021)

During the Northern Song Dynasty, kilns such as Yue Kiln, Longquan Kiln, Fanchang Kiln, and Hutian Kiln were all engaged in the production of multi-tube bottles. Notably, the six-tube bottles produced by Hutian Kiln and Fanchang Kiln bear similarities to the six-tube bottle unearthed at the Husi Kiln. The five-tube bottles made by Longquan Kiln in the Song Dynasty also served as funerary utensils for storing grain. The Longquan Celadon Porcelain Museum houses a five-tube bottle from the Shenzong period of the Northern Song Dynasty, inscribed on its inner lid: "A woman named Wuniang, owns this grain barn; the palace of heaven welcomes her, the earth beneath welcomes her; Blessing Descendants with Longevity and Prosperity." The above examples can

support the role of multi-tube bottles including six-tube bottle from Hushi kiln as burial objects in Song Dynasty.

5.2 As a Function Of Vase Furnishings

Since the 5th century AD, the Chinese began to keep flowers in water-filled containers. In Buddhism, presenting fresh flowers before Buddha was referred to as "offering flowers," with "vase offering" being one method.(Huang, 2017) The "History of Southern Dynasty" mentions, "Those who offered lotus flowers to the Buddha, the monks used bronze pots filled with water to soak the stems, ensuring the flowers wouldn't wilt." This is the earliest historical record of "vase offerings" in Chinese Buddhism.(Jiang&Zhang, 2021).

In TaoGu's "Qingyi Lu (Record of Exotic Happenings)" from the Five Dynasties period, mentioned an innovative copper flower-arranging vessel called the Zhanjing Pan (Scene-Arranging Plate). As depicted by Huang Yongchuan in his book "History of Chinese Flower Arrangement" based on the description of Zhanjing Pan, "Zhan" (占) implies standing upright, while "Jing" (景) refers to scenery. Thus, the Zhanjing Pan was an arranger that enabled flowers to stand upright, forming exquisite landscapes (Figure 8). This invention marked a significant advancement in the art of flower arrangement and was later adapted onto vases.

By the Song Dynasty, ceramic versions resembling the Zhanjing Pan emerged as flower holders (Figure 9), with similar artifacts unearthed from different Kilns. Many vases integrating the design and function of the Zhanjing Pan appeared, such as the five-tube vase from the Northern Song. In addition to the five-tube flower arrangement, there are also six holes, nineteen holes, and even thirty-one holes (Figure 10), all of which are the evolution forms of Zhanjing Pan. The five-tube bottles of the Southern Song Dynasty in Longquan Kiln were discovered in the cellar of Jinyu Village, suggests it was likely not used for funerary object. Furthermore, intact multi-tube vases preserved in the National Palace Museum in Taipei and recovered from the XinAn Shipwreck indicate their probable use as decorative items in residences.



Figure 8. Zhanjing Pan (Painted by Huang Yongchuan)

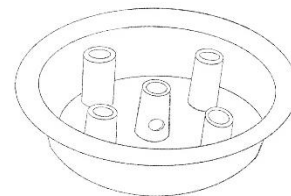


Figure 9. Longquan kiln green glaze five-tube flower insert(Painted by Author)



Figure 10. Thirty-one hole porcelain flower ware of Northern Song Dynasty
(Painted by Author)

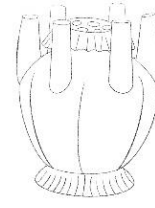


Figure 11. Husi kiln six-tube bottle
(Painted by Author)

During the Northern Song Dynasty, there were no fixed vase shapes, any vessel suitable for holding flowers could serve as a flower container. The multi-tube vase was an adaptation inspired by the Zhanjing Pan. Hence, the exquisitely crafted form, appropriate height, and long tubes attached to the body of the six-tube vase from Husi Kiln all conform to the criteria for a flower vase. Although this six-tube vase from Husi Kiln is a defective piece, measurements reveal a belly diameter of 11.8cm, a base diameter of 6.3cm, and a height of 12.5cm. If fired intact, its height would have been approximately 20cm (Figure 11). This type of six-tube vase not only features a ring of tubular structures above the belly for inserting flowers but also has holes in the lid that facilitate flower arrangement, further confirming its function as a flower vase.

5.3 As a Practical Function Of Aromatherapy

China boasts a long-standing culture of incense use, which, together with tea culture and flower arrangement, constitutes three major cultural phenomena in the country. The culture of incense embodies the Chinese people's pursuit of elegance and refined taste. (Tian, 2018) In ancient times, common types of incense materials included both animal and plant-based fragrances. The Song Dynasty boasted over a hundred varieties of incense ingredients, including ambergris, frankincense, sandalwood, and clove. Among these, the literati of the Song, who pursued refined atmospheres, favored and most used fatty or oleaginous incense materials, which produced less smoke and emitted gentle aromas. (Yu, 2015)

In the Song Dynasty, censers for incense burning were categorized into various styles such as tall-footed cup censers, lotus censers, Gaoshi censers, Boshan censers, and spherical censers. In terms of design, they were further divided into biomorphic shapes, landscape-inspired plant forms, and replicas of ancient utensils. Compared to the heights of censers from the Tang Dynasty, Song Dynasty incense burners generally measured around 10 centimeters in height, indicating a trend towards miniaturization, aligning well with the Song people's pursuit of elegant and intricate lifestyles.

Regarding the six-tube bottle unearthed from the Husi Kiln, its height does not match the average height of typical Song Dynasty incense burners. Being too tall hinders the

dispersion of fragrance effectively, and its large overall volume renders it less delicate when placed on a desk or table, falling short of the refined aesthetic desired by the Song people. In terms of design and functionality, compared to the small and intricately shaped Song Dynasty incense burners, the Husi six-tube bottle appears somewhat cumbersome. Practical operation of the replica of six-tube bottle (Figure 2) reveals that, while the six tubes and the holes in the bottle's lid could serve as outlets for the incense smoke, the small lid opening and excessive height make it difficult to manually place incense ash and charcoal inside the bottle, even with the aid of tools. The need to invert the bottle for cleaning out burnt ash, due to the tubes being connected to the body, risks scattering ashes from the six tubes, complicating the cleaning process and potentially creating a chaotic scene, which is incongruous with the Song people's rational, restrained, and refined manner of handling matters.

In summary, the likelihood of the Husi Kiln's six-tube bottle being used as an incense burner is relatively low.

5.4 As a Function of Candle Holder

During the Han Dynasty, pottery oil lamps were favored by the common people. The oil lamp contains liquid fuel; therefore, the design of the lamp pan is crucial and must adopt a bowl-shaped or cylindrical style with a mouth edge and volume. Some scholars propose that the multi-tube bottles of the Song Dynasty were utilized as lamps, with the method involving filling the bottle with lamp oil and using wicks that went through the multiple tubes. However, the six-tube bottle from the Husi Kiln appears oversized for such a purpose, requiring many times the amount of oil compared to conventional lamps. By the Song Dynasty, more oil-efficient lamps had already emerged (Figure 12), measuring around 5cm in height, whereas the tubes of the six-tube bottle are positioned much higher, over a dozen centimeters from the base. If a wick were to slip down, retrieval would prove extremely difficult. Therefore, the author believes that the argument as a lamp is not valid and will not be discussed too much here. Some scholars have also proposed that the multi-tube bottle is used as a candlestick, and the six tubes of the bottle are used to place candles, which can be discussed.

After the Three Kingdoms and the Jin dynasties, due to the widened source of porcelain clay raw materials and the development of the ceramics industry, the market share of porcelain lamps gradually exceeded that of pottery lamps because of their low price. During the Qin and Han dynasties, candles were used as a lighting tool. The candle holder held candles, which were slender solid fuels and would not easily move, so there was no need for a lamp tray like oil lamps. During the Wei, Jin, Northern and Southern dynasties, there were animal-shaped candle holders and hollow tube-type candle holders, which were divided into single-tube and multi-tube candle holders. The single-

tube candle holder was mostly in the shape of animals or humans, with a tubular candle insert standing on its back. The multi-tube candle holder had three or four tubes, with candle tubes on top and a base on the bottom (Figure 13). During the Sui, Tang, and Five Dynasties period, lamps were widely promoted among the common people. Porcelain lamps and candle holders became the main types of lamps used by the middle and lower classes. The use of candles increased during the Tang Dynasty. With the emergence of high tables and chairs at that time, the height of household items tended to decrease. The design of Tang Dynasty candle holders was unique, with the single-tube hollow type being the main type. This type of candle holder was usually composed of four parts: a wash-shaped plate, a lamp column, a lamp tray, and an outer high ring foot. The structure was clear, and the function was practical. The lamp tray was a shallow disc like an oil lamp, with a hollow tube in the center, specifically for inserting candles (Figure 14).



Figure 12. Pottery oil saving lamp from Song Dynasty



Figure 13. Rosette candle holder from Northern Wei Dynasty



Figure 14. Coiled dragon candle holder from Tang Dynasty

The porcelain candle holders of the Song Dynasty continued to develop based on the Tang Dynasty, mostly in the form of single-tube hollow candle holders. The porcelain candle holders of the Song Dynasty were mostly two-tiered. For example, this blue glaze porcelain candle holder is composed of a plate, a tray, and a base, with a total height of 13.5 cm, exquisite and small (Figure 15). This bluish-white glaze candle holder is also two-tiered, with a cylindrical middle part and two small shallow bowls on top and bottom. (Figure 16). There were also candle holders with handles, such as this plate-shaped single-handle candle holder, (Figure 17) which is composed of a chassis, a post with string patterns, a small lamp tray on the post, and a handle on the side of the post, forming a beautiful shape. (Qing, 2008) It can be seen that the shape of the candle holder of the Song Dynasty generally has two tiers, with the upper tier being the position for placing candles, and the open mouth facilitating the placement of candles and the collection of wax oil after burning. Overall, the height is also relatively low. In terms of volume, the volume ratio of the Hushi Kiln six-tube bottle to the tube body is not

suitable for use as a candle holder for inserting candles. The tube body is too small, and the tube mouth is too thin. Moreover, scholars and elegant people of the Song Dynasty preferred exquisite and small candle holder decorations. The tube body of the Husi Kiln six-tube bottle is too thin, and the tube body is connected to the bottle body. When a candle is placed in the tube, there is a section that cannot be burned, and it is also inconvenient to clean and remove, which easily causes waste and does not conform to the setting of a candle holder. Finally, in terms of shape, the Husi Kiln six-tube bottle does not have the characteristics and functions of a Song Dynasty candle holder, and there is no place to receive the wax oil produced after burning. Therefore, the author believes that the claim that the Husi Kiln six-tube bottle is a candle holder is invalid.



Figure 15. Porcelain candle holder from Song Dynasty



Figure 16. Bluish-white glaze printing candle holder from Song Dynasty



Figure 17. Single-handle candle holder from Song Dynasty

5.5 Summary

According to Bourdieu's theory of cultural capital, the six-tube bottle from the Song Dynasty, as an exquisite craft, represents a form of material cultural capital. Its materials, craftsmanship, and decorative style reflect the owner's wealth and social status, showcasing their taste and cultural capital. Fine porcelain items or those with specific functions, such as six-tube flower vases, illustrate social stratification. Families possessing these elegant bottles were typically part of the upper class. However, in the Song Dynasty, a highly developed socio-economic era, people from all walks of life tended to imitate the taste of literati and scholars. The six-tube bottles likely played a role in various cultural activities and ceremonies, such as religious rituals or scholarly gatherings, where it was used as a flower vase. These cultural practices, through continuous repetition and reinforcement, became internalized as social norms and cultural habits among members of society, leading to the widespread use of six-spouted jars in daily life.

6. CONCLUSION

The discovery of the Husi Kiln site is of great significance for studying the development of the ceramics industry in Hubei, as well as for researching the economy, population, and culture of Jiangxia during the Song Dynasty. This article examines the functions of the six-tube bottle, exploring hypotheses regarding its use as a funerary object, a vase for flower arrangements, an incense burner, or a candlestick. Through these investigations, the study clarifies the specific historical uses of these artifacts, enriching our understanding of ancient Chinese craftsmanship. This research allows for a deeper understanding of the multifunctionality and cultural significance of the six-tube bottle, revealing the diversity of material culture and social practices during the Song Dynasty. It provides a more comprehensive view of ancient Chinese lifestyles and ceremonial customs. This investigation goes beyond exploring the functions of the six-tube bottle, it delves into the process of ceramic industry and cultural development in Jiangxia during the Song Dynasty. Furthermore, it is hoped that this research will inspire more scholars to explore Husi Kiln ceramics, promote archaeological efforts to gather more evidence, and enhance societal awareness of the Husi Kiln and its cultural significance, thereby fostering the protection and preservation of cultural heritage.

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REFERENCES

- Dong, J. L. (2009). Preliminary discussion on five-tube bottles. *Southeast Culture*, (3), 93-98.
- Duan, Y., Liu, Z. Z., & Wang, J. (2021). A study on the aesthetic form of Qingbai porcelain from Jiangxia Husi Kiln. *Hubei Academy of Fine Arts Journal*, (1), 106–110.
- He, Y. (1991). A preliminary exploration of early Buddhist art in Southern China. *Southeast Culture*, (6), 27-37.
- Huang, Y. (2017). *History of Chinese flower arrangement*. Hangzhou: Xiling Seal Engraving Society Press.
- Jiang, W. (2019). *Research on Song Dynasty multi-tube bottles porcelain* (Doctoral dissertation, Jingdezhen Ceramic University).
- Jiang, H. X., & Zhang, X. Q. (2021). On the reasons for the function transformation of multi-tube bottles from Ming objects to flower arrangers. *Ceramic Research*, 36(4), 30-33.

- Liu, Z. Y. (2019). *Archaeological discovery and research of the Husi Kiln in Jiangxia, Wuhan*. Wuhan Publishing House.
- Qi, J. G. (2007). A review of the ancient porcelain kilns at Husi, Jiangxia. *Jiangnan Archaeology*, (2), 65–71, 99, 101.
- Qi, Z. L. (2010). *A study on the aesthetic form of Qingbai porcelain from the Song Dynasty Husi Kiln* (Master's thesis). Hubei Institute of Fine Arts.
- Qing, L. (2008). *Appreciation of fine Chinese folk ceramic earth lanterns*. Beijing: Jinghua Publishing House.
- Shen, Z. (2016). An analysis of the five-tube bottles of Longquan kiln in the Northern Song Dynasty. *Cultural Relics Identification and Appreciation*, (6), 46-49.
- Swartz, D. (1997). *Culture and power: The sociology of Pierre Bourdieu*. University of Chicago Press.
- Tian, Z. Y. (2018). *A study on typical incense utensils in ancient China before the 14th century* (Doctoral dissertation, China Academy of Fine Arts).
- Wang, G. (2000). The evolution and cultural connotation of multi-tube bottles in Longquan Kiln. *Zhejiang Arts and Crafts*, (Z1), 36-37.
- Xu, J. (2021). *Chinese funeral history*. Wuhan: Wuhan University Press.
- Xu, Z. B., & Lei, X. J. (2023). *Husi Kiln: A legacy of Qingbai porcelain*. Wuhan Publishing House.
- Ye, J. B. (2021). Analysis of the current situation and research methods of the Qingbai porcelain system in Liangzi Lake: A case study of the Husi Kiln site complex. *China Ceramics*, (1), 81–85.
- Yu, J. (2015). *Research on literati's interest and the design of incense burners in the Song Dynasty* (Doctoral dissertation, Jiangnan University).
- Zhang, L. (2023). *Design and research on five-tube bottles of Longquan Kiln in the Song Dynasty* (Doctoral dissertation, Jingdezhen Ceramic University).