

Yue Ware and Mi-se Porcelain: A Study on Artistic Features and Overseas Trade Circulation

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Abstract

This paper examines the artistic characteristics and overseas circulation of Yue ware and its finest variant, Mi-se (secret color) porcelain, from the Tang to the Northern Song dynasties. Based on archaeological discoveries, including the famous hoard from Famen Temple and shipwreck cargoes such as the Cirebon wreck, the study compares the two wares in terms of vessel forms, glaze colors, and decorative techniques. It is argued that while Yue ware encompasses a broad range of daily utensils with diverse shapes, imitation animal and plant motifs, and rich ornamentation (incising, stamping, appliqué, and openwork), Mi se porcelain represents a selective, high-quality production characterized by full body glaze, refined modeling, and a distinctive bluish green “thousand peak green” hue. The development of Mi se is divided into five chronological phases, revealing a trajectory from early experimental firing to peak craftsmanship and eventual decline. Furthermore, the paper analyzes the scale, routes, and institutional background of Yue ware exports, highlighting its increasing dominance in maritime trade from the 9th to 10th centuries. The evidence from shipwrecks and overseas sites demonstrates that Yue ware, especially Mi se, was not only a tribute item for the imperial court but also a major commodity in international commerce, with state supervised kilns producing both official and export wares. This dual role sheds new light on the economic and cultural interactions along the early maritime Silk Road.

Keywords

Yue ware, Mi se porcelain, artistic features, glaze technology, overseas trade, maritime Silk Road, Famen Temple, Cirebon shipwreck.

1. Introduction

Yue ware, produced in the kiln complexes of northern Zhejiang (principally Shangyu, Yuyao, Cixi, and Ningbo), represents one of the most important traditions of Chinese celadon. From the Six Dynasties through the Northern Song, it enjoyed widespread popularity both domestically and abroad. Among its most celebrated products is Mi-se (“secret-color”) porcelain, a term historically associated with the finest tribute celadons. The discovery of fourteen pieces of Mi-se ware in the Famen Temple underground palace (874 CE) and the massive cargo of the Cirebon shipwreck (mid-10th century) have greatly enriched our understanding of this prestigious ceramic group.

This paper aims to provide a comprehensive comparison between ordinary Yue ware and Mi-se porcelain, focusing on three artistic dimensions – shape, glaze, and decoration – and to trace their evolution over time. It further investigates the scale, routes, and nature of overseas trade, drawing on archaeological data from East Asia, Southeast Asia, West Asia, and East Africa. By integrating typological analysis with maritime archaeology, this study seeks to clarify the technological and economic factors that made Yue ware a leading export product and to reassess the production system behind Mi-se porcelain.

2. Artistic Features of Vessel Forms

2.1. Vessel Types of Yue Ware

Yue ware encompasses an exceptionally wide range of forms, including everyday tableware (bowls, plates, cups, saucers, ewers, jars), cooking and storage vessels, tea and wine utensils, household items (lamps, spittoons, huzi chamber pots, censers, powder boxes), stationery (water-droppers, paperweights, inkstones, brush holders), and funerary objects (models of farm tools, livestock, architecture, and daily life). Bowls alone appear in open-mouthed, closed-mouthed, and foliate-rim varieties.

2.2. Zoomorphic and Imitative Designs

A notable feature of Yue ware is its imitation of living forms. Human figurines – both Han and foreign (“Hu”) – were used as tomb attendants, continuing a tradition that replaced human sacrifice after the Qin-Han transition. Hu figurines, often shown performing acrobatics, dancing, or playing music, reflect cultural exchanges along the Silk Road. For instance, the Xiaoshan Museum possesses a male Hu figurine in kneeling posture with sword and shield, and a female Hu figurine holding a child and a fan, both with prominent noses and deep-set eyes. Such figures are rare as individual pieces but frequently appear on dui-su jars.

Plant-inspired shapes are equally prominent. The lotus, symbolizing purity and closely tied to Buddhism, appears in many vessels – for example, the Tang- dynasty celadon teacup with a lotus-shaped bowl and a lotus-leaf saucer preserved in the Ningbo Museum. Melon-shaped and floral forms, such as the tri-lobed box, also convey auspicious meanings.

Animal forms are abundant and often rendered with a combination of realism and exaggeration. The tiger appears on huzi (chamber pots) with the handle shaped as a tiger, or with incised tiger heads and wings on the body. A Northern Song pillow from Shangkunlun village shows a double-headed tiger motif combined with a marine-animal scroll, demonstrating playful and refined artistry. Birds, dragons, and mythical beasts also appear, showcasing the potters’ technical skill and aesthetic sensibility.

2.3. Vessel Types of Mi-se Porcelain

Mi-se porcelain, while rooted in the Yue tradition, exhibits a more restricted and refined repertoire. Based on height, the forms can be graded into three groups: (1) plates, saucers, cups, and dishes; (2) boxes, bowls, jars, and yu (small basins); (3) ewers, bottles, and ying (large jars). The classic assemblage from Famen Temple (dated 874) includes seven bowls, four plates, two dishes, and one bottle, all of which display carefully designed profiles and full-glaze finishing.

Bowls – Seven pieces, categorized into three types:

Type I (2 pieces): five-lobed葵口 (mallow-mouth), flared rim, deep curved belly, high narrow ring foot; grey, dense body, with characteristic firing scars on the inner base.

Type II (3 pieces): everted rim, shallow slanted belly, flat bottom with slightly concave base; a ring of oblique支烧 (spur) marks on the base.

Type III (2 pieces): open mouth, slanting belly, narrow ring foot; yellow glaze with gold-and-silver pingtuo (flat inlay) bird-and-flower decorations and silver rims.

Plates – Four pieces in three types:

Type I (five-lobed mallow mouth, shallow belly, low rounded foot; green glaze, spur marks on the base).

Type II (five-lobed flared rim, curved belly, rounded foot).

Type III (smallest, diameter 20.1 cm, similar profile).

Dishes – Two identical pieces: five-lobed lotus-mouth, slightly flared rim, shallow belly, flat bottom with concave base; diameter 25.3 cm (the largest in diameter but shallowest). They are classified as die (dishes) in the inventory.

Bottle – One piece: small straight mouth, long slender neck, globular shoulder with eight-lobed melon-shaped belly, broad low ring foot; three raised ribs connecting the neck and shoulder; the lower part decorated with inverted lotus-petal motifs. Height 21.5 cm.

2.4. Comparison of Yue and Mi-se Shapes

Yue ware offers a vast array of practical and decorative forms, whereas Mi-se porcelain is more selective, with a focus on regular, elegant silhouettes inspired by contemporary gold and silver vessels. Many Mi-se pieces adopt foliate rims, lobed bodies, and refined foot rings, indicating a higher standard of finishing and a clear stylistic borrowing from metalwork. The eight-lobed bottle from Famen Temple, for example, directly echoes the faceted shapes of Tang silverware.

3. Artistic Features of Glaze Colors

3.1. Glaze Types of Yue Ware

The glaze of Yue ware ranges from celadon (qing) to yellowish, brownish, and olive tones, depending on the iron content and the kiln atmosphere. In a reducing atmosphere, ferric ions are converted to ferrous ions, producing the characteristic green hues. Glazes are typically smooth but may exhibit fine crackles, adding an antique charm. Yellow glazes result from incomplete reduction (presence of Fe^{3+}), while brown glazes indicate higher impurity content.

3.2. Glaze Characteristics of Mi-se Porcelain – The Famen Temple Examples

The twelve green-glazed Mi-se pieces from Famen Temple are renowned for their “thousand-peak green” (qianfeng cuise) colour – a translucent, jade-like tone that varies from bright emerald to slightly greyish yellow-green. The best examples display a fresh, sparkling brilliance, superior to ordinary Yue ware in both clarity and glassiness. The glaze is applied evenly over the entire body (full glaze), with only minor scraping at the points where spurs were used. This full-body coverage, together with a careful formulation of the glaze recipe, distinguishes Mi-se from the usually partial-glaze ordinary wares.

Excavations at the Housiao (Hou-si-ao) kiln site have revealed a remarkable specimen where a Mi-se vessel was fired together with an ordinary Yue bowl in the same sagger under identical conditions. The resulting difference in glaze quality confirms that the two used different raw material formulations.

3.3. Direct Glaze Comparison



Surface 1 Dark colored porcelain

When compared side by side, Mi-se porcelain exhibits a more uniform, translucent, and highly vitrified surface, with a colour tending towards sky-blue or emerald, whereas ordinary Yue ware often shows irregular yellowish tones and thinner, less even glaze layers. This visual and technological gap underscores the revolutionary advances in glaze preparation and firing control achieved at the Mi-se kilns.

4. Artistic Features of Decoration

4.1. Decorative Techniques of Yue Ware

Yue ware employs a rich repertoire of decorative methods:

Stamping (impression) – inherited from early pottery, using roller or tube stamps to create geometric patterns (checkerboard, lozenge, linked beads) and, later, floral motifs. In the Five Dynasties, whole floral stamps appear on powder boxes.

Incising and carving – fine lines carved with knives to depict water ripples, animal figures, or lotus scrolls. From the mid-Tang, under-glaze incised floral designs became popular, often showing lotus and peony motifs. The influence of gold and silverware is evident in the compositional use of “blank space” and “cartouche” panels.

Brown-painted decoration – using iron-oxide pigments (from high-iron clays) to paint cloud-and-ruyi patterns or simple dots. This technique, which began in the late Tang and flourished in the Five Dynasties, added a vivid contrast to the green background.

Openwork (reticulation) – used mainly on censers, with triangular, circular, or interlaced plant-pattern perforations. A fine example is a Northern Song incense burner in the Huangyan Museum, featuring spiral vine-leaf openwork.

4.2. Decorative Motifs

Common motifs include lotus, peony, chrysanthemum, and vine scrolls, as well as animal designs (fish, dragon, phoenix, and birds). Some pieces display figural scenes, and a few bear inscriptions such as “官” (official). The decorative vocabulary is expansive, often imbued with auspicious symbolism.



Chart 2 Decorative patterns of celadon from Yue Kiln



Chart 3 Gold and silver gilded flat bird bowl unearthed from the underground palace of Famen Temple

4.3. Decoration of Mi-se Porcelain

Mi-se ware is predominantly plain, relying on its lustrous glaze and elegant form for aesthetic effect. Only limited incised lines (e.g., simple string lines) appear on a few pieces. However, two of the Famen Temple bowls are decorated with silver-rimmed edges and gold-and-silver pingtuo bird-and-flower patterns on the exterior, while the interior glaze is yellowish. This shows that Mi-se occasionally borrowed decorative techniques from precious metalwork to achieve a luxurious appearance, but the primary emphasis remained on the glaze itself.

5. Development Stages of Yue and Mi-se Ware

5.1. Five Periods of Mi-se Porcelain

Period I (around 806–820 CE) – Early experiments: representative finds from the tomb of the wife of Prince Beihai (815) and from a Tang tomb in Shengxian (819). Vessels include ewers with simple forms, un-faceted spouts, and undecorated bodies; some pieces show incised patterns on the interior. Glazes are green, yellowish-green, or greyish-green. Techniques are still relatively coarse.

Period II (847–874 CE) – Mature phase:

Dazhong reign (847–859): Excavations at the Heyi Road site in Ningbo (852 layer) reveal lotus-shaped tea bowls with lotus-leaf saucers, melon-ribbed ewers, and crab-apple-shaped cups. The craftsmanship is precise and graceful, with most glazes yellowish-green.

Xiantong reign (860–874): The Famen Temple hoard represents the peak. This period sees the introduction of silver-rimmed bowls and fine incised decoration, with the number of fully incised ewers increasing fivefold over previous phases.

Period III (898–952 CE) – Five Dynasties:

First stage (898–904): Tombs of the Qian family produce brown-painted vessels with cloud and mist motifs, and pieces bearing the “官” mark. Glazes are emerald or greenish.

Second stage (936–952): Tombs of King Qian Yuanguan and his consort Wu Hanyue yield relief-carved dragon bottles, incised ewers, square nested boxes, and finials with gold-leaf appliqué. Foot rings are separately made and then attached, reflecting superior forming techniques.

Period IV (976–1003 CE) – Early Northern Song: Representative from the Liao Han-yi couple tomb (995) and the Yuan-de Empress tomb (1000). Decoration includes finely incised scenes of seated figures drinking, paired butterflies, parrots, and dragon-cloud motifs. Glazes are emerald green and pale bluish-green.

Period V (after 1003–1068) – Decline: Tribute quantities decrease sharply; remaining wares are coarse domestic products, and no Mi-se fragments are found in contemporary sites.

5.2. Developmental Phases of Yue Ware

Six Dynasties: Complex forms and abundant incised/appliqué decoration; Buddhist motifs (lotus) appear due to maritime cultural exchange.

Tang dynasty: National prestige; improved proportions and fluent lines; introduction of brown-painted decoration.

Five Dynasties: Emergence of Mi-se as a distinct high-grade category, with more standardized production and finer raw materials.

Song dynasty: Shapes become slender and elongated; lotus-petal incising on the lower body becomes the dominant pattern.

6. Circulation and Overseas Trade

6.1. Export Destinations of Yue and Mi-se Ware

East Asia (Japan and Korean Peninsula):

In Japan, over 93 sites in Kyoto and 92 in Kyushu have yielded Yue ware sherds, with the Hakata (Fukuoka) site producing the largest quantity, particularly from the late 9th century. These finds indicate that the port of Mingzhou (Ningbo) was a major hub for trade with Japan.

In the Korean Peninsula, early Chinese porcelain finds are predominantly Yue wares, including chicken-headed ewers and sheep-shaped vessels from the Eastern Jin and Southern Dynasties. The transport route likely went from coastal Zhejiang to the Shandong peninsula and then via the “Dengzhou-Gaoli-Bohai” sea route.

Southeast Asia: Significant finds on the islands (Sumatra, Java) and in the Philippines (after the 11th century). The Srivijaya capital of Palembang was a key trading post.

West Asia: Important finds at Samarra (Iraq), where 9th-10th-century Yue bowls with foliate rims and fine incised lines occur. Sri Lanka also yielded 9th-10th-century Yue sherds.

Middle East: The Fostat (Old Cairo) site has produced about 20,000 Chinese ceramic sherds, with Yue ware predominating in the 9th-10th centuries and increasing during the Northern Song.

East Africa: At the Manda site in the Lamu Archipelago (Kenya), Yue ware appears from Phase III (ca. 850–920) and peaks in Phase IV (920–1000), continuing into the mid-Northern Song.

6.2. Scale of Overseas Trade

Overall, Chinese ceramics in 8th-10th-century overseas sites are not abundant, and Yue ware usually accounts for less than 10% of the total Chinese finds. However, in the second half of the 10th century, the scale expanded dramatically. The Cirebon shipwreck (excavated 2003-2005) contained over 490,000 artefacts, of which 75% were Chinese ceramics, and the vast majority (over 300,000 pieces) were Yue ware. The cargo included a wide variety of forms and decorative styles, providing solid evidence for the mass production of Yue wares during that period.

6.3. Changes in Export Composition

Comparing three major shipwrecks:

Belitung (Tang, ca. 830) – Yue ware accounted for only 0.2% of the cargo; the dominant exports were Changsha ware and Guangdong green ware.

Intan (mid-10th century) – Yue ware increased to 20-30%, as the port of Yangzhou declined and Mingzhou and Guangzhou rose.

Cirebon (second half of the 10th century) – Yue ware became the primary export product, reflecting its peak in overseas demand.

6.4. Institutional Framework and Production Nature

During the Five Dynasties, the coastal kingdom of Wuyue, under Qian Liu and his successors, actively promoted maritime trade. The decline of Yangzhou due to warfare increased opportunities for Wuyue's ports. The Song court established maritime trade offices (*shibo si*) in Hangzhou and Mingzhou. The Cirebon cargo demonstrates that the two-Zhejiang region was a major exporter of ceramics, likely managed by these offices. The peak of Yue production in the late 10th century was thus closely linked to export demands.

Significantly, some high-grade wares in the Cirebon cargo are identical to those found in the tomb of Empress Yuan-de (Northern Song), suggesting that the same kilns produced both tribute pieces and export goods. The Yuezhou ceramic affairs office probably oversaw both official palace commissions and commercial exports. This indicates that overseas trade had a state-supervised character, and that “imperial” wares were not necessarily marked by special designs but were simply selected from the finest products.

6.5. Domestic Circulation

Within China, Yue ware was distributed via the dense waterway network connecting the kiln areas to the Grand Canal and the port of Mingzhou. Tributary items were sent to the court through official channels, while merchants transported large quantities to commercial centers such as Yangzhou and Kaifeng. The wares also circulated through cultural networks – literati praised them in poems – and through Buddhist institutions, which used incense burners and holy water bottles for ritual purposes.

7. Conclusion

This study has demonstrated that Yue ware and Mi-se porcelain, though sharing a common technological heritage, differ significantly in their artistic attributes and production standards. Mi-se represents a deliberate refinement of the Yue tradition, achieved through superior raw

material selection, full-body glazing, meticulous modeling, and precise firing conditions. Its colour, often described as “thousand-peak green,” became the hallmark of China’s highest celadon achievement during the late Tang and Five Dynasties.

Chronologically, Mi-se porcelain underwent a clear evolution from experimental beginnings (early 9th century) to a peak of technical sophistication (mid-9th to mid-10th century), followed by a rapid decline after the early Northern Song. This trajectory mirrors the changing political and economic priorities of the central and local states.

In terms of overseas trade, the evidence from archaeological sites and shipwrecks reveals that Yue ware played a relatively modest role in the early 9th century but rose to dominance by the late 10th century, driven by the expansion of maritime commerce and the proactive policies of the Wuyue kingdom. The enormous cargo of the Cirebon wreck confirms that Yue ware was not merely a luxury tribute but a bulk export commodity, produced in large quantities under official supervision for both domestic and international markets.

Thus, the story of Yue and Mi-se porcelain illuminates the intersection of art, technology, and trade in medieval China. It highlights how regional kiln industries could adapt to global demands while maintaining the highest aesthetic standards, and it provides a concrete case for understanding the early maritime Silk Road as a conduit not only for goods but also for technical and artistic exchange.

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