White Wares of Northern China

Regina Krahl

The white wares of northern China launched the country's reputation as a center of porcelain. As hard, dense, and durable as their southern green counterparts, but more immediately appealing due to their sparkling, glossy, clean-looking material, white wares became the envy and aspiration of potters worldwide. Porcelain clays are naturally available in north China, and some rare examples of white wares—made of a pure, white clay, unglazed, but fired at temperatures just high enough to qualify as stonewares—have been discovered at sites of the late Shang dynasty (circa 1600–circa 1050 BCE) at Anyang in Henan province. As no continuous development, like that seen in southern stoneware, followed these early beginnings, however, they have to be considered isolated experiments, rather than origins of north China's stoneware production. It would take another 1,600 years or so before continuous production of stonewares began in northern China and before the first white porcelains were commercialized on a regular basis.

The white wares on the Belitung wreck comprised some 300 items, most of them tablewares, all made in northern China. These elegant yet utilitarian ceramics were unique to China and highly prized throughout Asia. The white wares recovered from this cargo, probably the most valuable ceramics on board, are varied in type and may represent a combination of wares from three or four different kilns. Produced mainly in Hebei and Henan provinces, they may not have been easy to come by for merchants based far away in southern port cities, even though the north was linked to the international port of Yangzhou via the Grand Canal. Rather than ordered directly from the workshops, the white wares might have been assembled through intermediaries at their port of departure. Kiln names, which by that time had become references for levels of excellence in China, were probably not of any consequence abroad; and how much differences in quality mattered in places where such goods were extremely rare is difficult to say.

The development of high-fired ceramics in the north took a completely different course from that in the south. Nigel Wood has demonstrated that, geologically, north and south China are very different, having once represented separate land masses that merged some 200 million years ago, with the dividing line falling about midway between the Huanghe (Yellow River) and the Yangzijiang (Yangzi River). As a result, raw materials for stoneware and porcelain in the northern part of China tend to be rich in clay minerals, while those south of the divide are generally rock-based and rich in fine quartz and mica.[1] For the first two millennia or so of China's historic period, the ceramic traditions of the two regions seem to have developed quite independently from one other. Although it is not clear what exactly caused the sudden appearance of fine stonewares in several kilns in northern China around the sixth century, when China was divided into northern and southern kingdoms, the period brought innovation in other fields, too. Not only was the north of China ruled by a non-Chinese dynasty, but many foreigners

also reached China via the Silk Road, thus contributing to a cosmopolitan spirit and open-mindedness that helped bring about change.

Since the late Northern Wei dynasty (386–534), somewhat heavily potted stonewares were made in Hebei and Henan, mostly of a somewhat dull greenish type, like in the south, but some with a pure white body and a glossy, colorless glaze with a tendency to adhere in thick, glassy drops.[2] It required further refinement and a general change in attitude toward ceramics, however, before any northern Chinese kilns gained fame. The beauty of white stonewares was probably appreciated earlier than that of green-glazed ones, and white wares may have played an important role in households prior to the Tang dynasty (618–907), both for use in life and for symbolic use in the afterlife.[3] With the decline of funerary pomp in the latter part of the eighth century, fine white wares definitely advanced from the tomb to the table.

The Xing kilns of Hebei province, south of Beijing, made their name during the Tang dynasty by creating thinly potted, snow-white ceramics with sparkling colorless glazes, at times reaching the level of true porcelain.[4] Porcelains and stonewares are closely related—so closely, in fact, that the Chinese language does not distinguish at all between the two. In the West, the term "porcelain" is reserved for ceramics that are white, translucent, and resonant and are fired at temperatures above 1,300 degrees Celsius, while stonewares can lack these characteristics and are fired above 1,200 degrees Celsius. In practice, there is no distinct dividing line between the two but a smooth transition, and the difference is not necessarily apparent to the naked eye.

Xing white wares and Yue green wares developed side-by-side and were similarly ranked as the finest wares of the north and the south, respectively. The Xing kilns reached the peak of their development around the late Tang period, when they supplied tributary wares to the court. Some pieces bear inscriptions that suggest a royal connection, such as the term *ying* ("surplus"), an abbreviation referring to one of the imperial storehouses reserved for court use.[5]

Like Yue ware, Xing was praised in contemporary literature.[6] While the green Yue wares evoked for Chinese connoisseurs the colors of jade, the white Xing wares were thought to echo the brilliance of silver. Silver shapes with sharp, angled profiles were therefore particularly popular in white. In general, however, there are many parallels in the range of shapes between northern white and southern green wares, most of which seem to have been originally conceived for Chinese consumers. The poet and tea connoisseur Lu Yu (730s–circa 804), in his famous treatise on tea, *Chajing* (The Classic of Tea), professed a personal preference for Yue ware tea bowls, yet related that some of his contemporaries opted for the white bowls from the Xing kilns, which gave a cinnabar cast to the tea.[7] A set of Xing ware miniature tea utensils was excavated in Tang county, Hebei province, not far from the kiln sites, together with a small Xing ware statue of Lu Yu as patron saint of tea lovers.[8] Yet Xing ware may have been even more popular for wine; wine bottles from Neiqiu, one of the Xing kiln centers, are repeatedly mentioned in classical texts.

The Xing kilns are named after an area called Xingzhou in southern Hebei, and kiln sites have today been found in Neiqiu and Lincheng counties. They were not the only ones making fine white stonewares in the Tang; very similar wares were also made by the Ding kilns of Quyang, somewhat farther north in the same province (fig. 149).[9] The Ding kilns seem to have started in the Tang dynasty by imitating Xing ware but developed fast. By the Five Dynasties period (907–60) they had become more important than the Xing kilns and by the Song dynasty (960–1279) had eclipsed the latter entirely to become the sole white-ware producers of repute in northern China. This development may have been facilitated by the Ding potters' replacement of wood as a firing material with coal, a less scarce commodity in the north. The switch caused their glaze color to acquire the ivory tone that is today considered characteristic of Ding, due to an oxidizing firing atmosphere. In the Tang, however, when Xing and Ding kilns both still fired with wood, their glazes often had a similar bluish tinge.

The relationship between Xing and Ding white wares has been studied by many researchers, and the same, or almost identical, objects have been attributed to both kiln groups.[10] In the Tang,

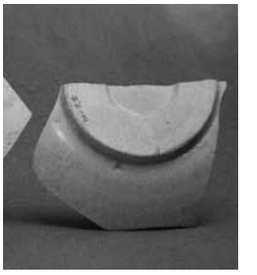

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Fig. 148 Cup from the Xing kilns. Cat. 261.

ABOVE

Fig. 149 Xing ware (top) and Ding ware (bottom) bowl fragments.

their ceramics can indeed be so similar as to be difficult to distinguish. Literary references unfailingly suggest Ding ware to be very close but inferior to Xing in quality and craftsmanship. The archaeological exploration of both kiln groups has so far provided only limited comparative material, however. The Xing kilns of present-day Neiqiu and Lincheng counties and the Ding kilns of Quyang are in fact only about 100 miles apart. The chemical composition of the three kiln groups is therefore not very different, and some specialists speak only of Hebei white wares in reference to the entire group.[11] The fact that these white wares have become known by different names at all is mainly due to historical circumstances as in the Tang they came under different administrative regions, Neiqiu belonging to Xingzhou and Quyang to Dingzhou. The term "Xing," on the other hand, in reality ought to refer to the Neiqiu kilns only, since in the Tang dynasty, Lincheng did not form part of Xingzhou but was situated across the cantonal border in Zhaozhou.[12] Yet the two centers are so close that Lincheng wares are today universally classified as Xing ware.

At the time the ship was loaded, the world's finest ceramic ware was white Xing ware. Some of the white wares found on the Belitung wreck are of the highest quality extant from this period and are hard to match anywhere else. It should thus be possible to attribute these wares with some confidence to the Xing kilns on account of their quality alone. Some indeed can be matched with fragments excavated from the Xing kiln sites, but these are unfortunately rare. The pure, white body material has a remarkably fine and smooth texture; the application of a slip—diluted white clay—as found on other white wares was unnecessary. Although the body does not look strongly vitrified, being neither glassy nor translucent but instead rather chalky and matte, the pieces were clearly high-fired and produce a clear sound when struck. The vessels are characterized by thin potting and a diligent use of the knife for subsequent trimming. Shapes are therefore delicate and precise, with exacting profiles and neat footrings with sharply cut edges. The surface is evenly covered with the thinnest layer of clear glaze, often with an attractive bluish tinge due to the use of wood as fuel and to firing in a reducing kiln atmosphere; more rarely it is tinged with yellow due to accidental oxidization. Generally the glaze shows no crazing (accidental crackling) but does often feature minute bubbles. Because it is so thin, it degrades easily. Decoration is absent; even the incised horizontal lines seen on some of the cups may be unintentional.

These first-grade white wares on board include large handleless cups and cup stands to match—probably for wine, even though the cups seem rather large for the strong grain-based alcoholic beverages drunk in China—and conical and rounded bowls intended for tea, showing the characteristic *bi*-disc foot (fig. 150). Bowl and cup fragments related to pieces on the wreck have been found at the Xing kiln sites; rounded bowls with a *bi*-disc footring are known from the early to the mid-Tang period, while conical bowls were made for nearly the entirety of the Tang (fig. 152).[13] Some bowls are four-lobed (fig. 151) like the cup stands, but the lobes were not created by indenting, as was the case at other kilns. Instead, tiny notches were cut into the lip and corresponding raised ribs created through the application of slip that was crisply shaped into a sharp ridge with a knife, while the undersides remain plain. In one case, the simple marking of the rim lobe through a line of slip is elaborated into a decorative triple line fanning out from the rim. A similar four-lobed cup stand was excavated in Luoyang from the reputed site of the house of the Tang poet and renowned drinker Bo Juyi (772–846). Needless to say, this discovery does not tell us anything about how the stand was utilized there, but it does confirm that such vessels were in use in Chinese households.[14] Other cup stands of this type were recovered from a mid-Tang tomb at Xingtai, close to the kiln sites,[15] and at Lincheng, also near the kilns.[16]

Other white wares, also finely made of white clay without slip and most likely of Hebei rather than Henan origin, are more difficult to attribute, since their glazes are much more degraded. Whether this reveals that a lesser source material was used or simply reflects later exposure to harsher conditions under seawater is hard to say. Handled cups and ewers fall into this category,

OPPOSITE

Fig. 150 The pure white wares produced at the Xing kilns were prized for their thinness and durability. Cups and stands were used in China for wine, which was drunk hot. Cats. 261–264.

Fig. 151 Four-lobed bowl with *bi*-disc foot and radiating ribs. Cat. 266.

Fig. 152 Conical bowl with *bi*-disc foot. Cat. 267.

These "Samarra-type" bowls get their name from the Iraqi city where many examples were found. Their broad, flat foot in the form of a *bi*-disc is characteristic of the early to mid-Tang period.

ABOVE

Fig. 153 Ewer with handle joining the rim. Cat. 270.

Fig. 154 Ewer with handle joining the neck. Cat. 271.

but the examples recovered are not all of the same type and may represent a combination of Xing and Ding wares. Cups with ring handles, which are shaped after Central Asian silver vessels, represent the only obviously foreign shape among the white wares. Several of them have been excavated from Tang tombs, but their function in a Chinese context remains unclear.[17] While some are of a slightly inferior material, with a degraded glaze, and show a regular footring, one type is of distinctly finer and whiter clay, has retained its glaze well, and has a foot in the shape of a *bi* disc. The two ewers on board (figs. 153–154) are of a shape typically employed for pouring hot water onto powdered tea and made by several kilns at that time with slight variations. They vary not only in overall proportion but also in the way their handles are formed and attached and their foot or base is shaped. A related ewer was recovered from one of the Xing kiln sites[18]; another, inscribed "ewer of the tea-house of the Laodao Family," was found in a tomb dating to 829[19]; and a ewer with an incised *ying* character and an ink inscription on the base including a date equivalent to 859 was excavated from the site of Qinglongsi (Green Dragon Temple), an important Tang Buddhist temple in Xi'an.[20] Other ewers have been excavated in Beijing and Henan, respectively.[21]

Neither Xing nor Ding white wares seem to have been made in great quantities in the Tang. The extreme desirability and unique quality of these wares inspired copies, both in China and abroad. In the Near East, they were most beautifully imitated but with a soft, permeable material that did not provide the same utilitarian qualities. In China, outside Hebei, Tang white stonewares were manufactured also in Henan, Shanxi, Shaanxi, and Anhui provinces.[22] The most important distinction between these and the Xing and Ding wares may be that their transparent glazes generally do not cover a pure white body. Instead, a pure white slip hides a coarser and somewhat darker body that is not without impurities.

The potters of the Gongxian kilns in Henan had begun to make white stonewares already in the Northern Wei period (386–534), but by the early Tang the region had become one of China's foremost suppliers of colorful funerary pottery. For this they often covered their somewhat coarse and impure off-white earthenware clays with a layer of white slip to improve the bright glaze colors. When funerary pottery was no longer in demand, they turned to making stonewares for daily life. Rather than aiming for the finest grade, made of pure white clay, the potters opted for a cheaper version, using less pure material covered with a white slip. The switch from Gongxian's specialization in low-fired burial ceramics to high-fired utilitarian wares may have occurred in the latter part of the eighth century.

At a casual glance, Gongxian wares can closely resemble Xing wares.[23] Only a closer look reveals obvious differences in material and craftsmanship. Whereas Xing wares are akin to porcelain and can indeed reach that level with firing temperatures up to 1,360 degrees Celsius, Gongxian wares are slip-covered stonewares. Gongxian white wares are much more heavily potted and less carefully finished than their Xing counterparts. The ones from the wreck are well made, although the potting is somewhat clumsy and shapes can be warped. The body material, which generally is visible at the foot, is coarse-grained, grayish to pale buff or pale beige in color, and generally contains impurities in the form of tiny dark specks, which makes the application of a slip indispensible (fig. 156). The slip is applied in thick layers, often more than once. The glaze is transparent but less clear and glassy than on Xing wares; it has a faint yellow tinge and tends to be strongly crazed. The Henan wares were fired at lower temperatures and in a less reducing atmosphere than the white wares from Hebei.[24] In combination with the slip, the glaze can, in the best cases, take on a beautiful, creamy ivory tone. Gongxian white wares apparently were even used at the Tang court, as a large quantity of shards was reputedly found at the imperial palace site Daminggong at Xi'an.[25]

The wreck contained plain white bowls, bottles, and covered jars from Gongxian. The large bowls were probably intended for food, while the bottles may have been used together with Xing ware cups and cup stands for serving wine, and the jars, with or without a spout, for storing it. The bottles have the same shape as some Yue bottles on the wreck, with side lugs for fastening a

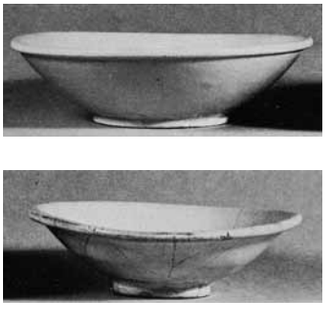

Fig. 155 Tang white stoneware bowl (top) and contemporary Mesopotamian copy (bottom).

Fig. 156 Gongxian bowl with *bi*-disc foot from the Baihe kiln site, Gongyi county; Henan Provincial Institute of Archaeological Research.

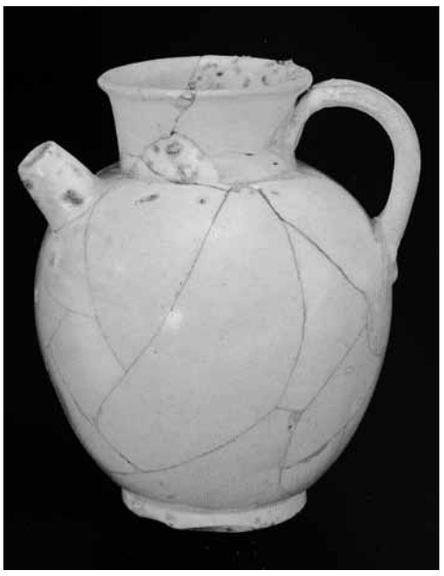

Fig. 157 Xing ware ewer recovered from the Xing kiln sites.

Fig. 158 Gongxian jar and cover, recovered from the Gongxian kiln sites.

stopper or for carrying—a shape otherwise rarely seen. Related jars also were made by the Xing kilns, but identical ones have been found at the Gongxian kiln sites.[26]

Although the appearance can be deceptive, and it may well have been possible to pass off secondary Gongxian white wares for first-rate Xing porcelains, it is noteworthy that only the Gongxian kilns thought fit to embellish their monochrome wares with color. By decorating their ceramics with intense green splashes or bright blue designs, they may have tried to escape such comparison and to create more desirable alternatives, particularly for the export market. Both Xing and Gongxian white wares have been excavated at many sites in East and West Asia, but as shapes were shared by most Tang workshops and there are no designs to help with attribution, most white shards recovered from archaeological digs outside China remain unidentified, beyond being recognized as Chinese.[27]

A very small group of slip-covered white stonewares on the Belitung wreck differs from the Gongxian examples by being superior in material but inferior in workmanship. These few pieces, which generally are not well preserved, have a relatively fine-grained, smooth body that was probably originally light buff or off-white in color but now is strongly discolored by iron. The white slip was, however, carelessly applied and stops on the outside well above the base. The general appearance is quite rough, the potting thick, and profiles are not very distinct. These pieces might have been made by a different Henan kiln center, such as the Hebiji kilns at Hebi, or in a different province.[28] They include a bowl with a *bi*-disc foot and a small cup with a flared rim.

Despite many recent publications on the subject, China's early white wares remain much less well researched than their green counterparts. Although they were China's most prestigious ceramics of the period, production figures do not seem to have been very high. Their stylistic and technical evolution during the eighth and ninth centuries has thus not yet been systematically traced. The scant reference material available fits a possible dating of the pieces to the second quarter of the ninth century but does not in itself yield information that would help to pin down more precisely the date or route of the ship's voyage.

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