



Pearl Cups Like the Moon

THE ABBASID RECEPTION OF CHINESE CERAMICS

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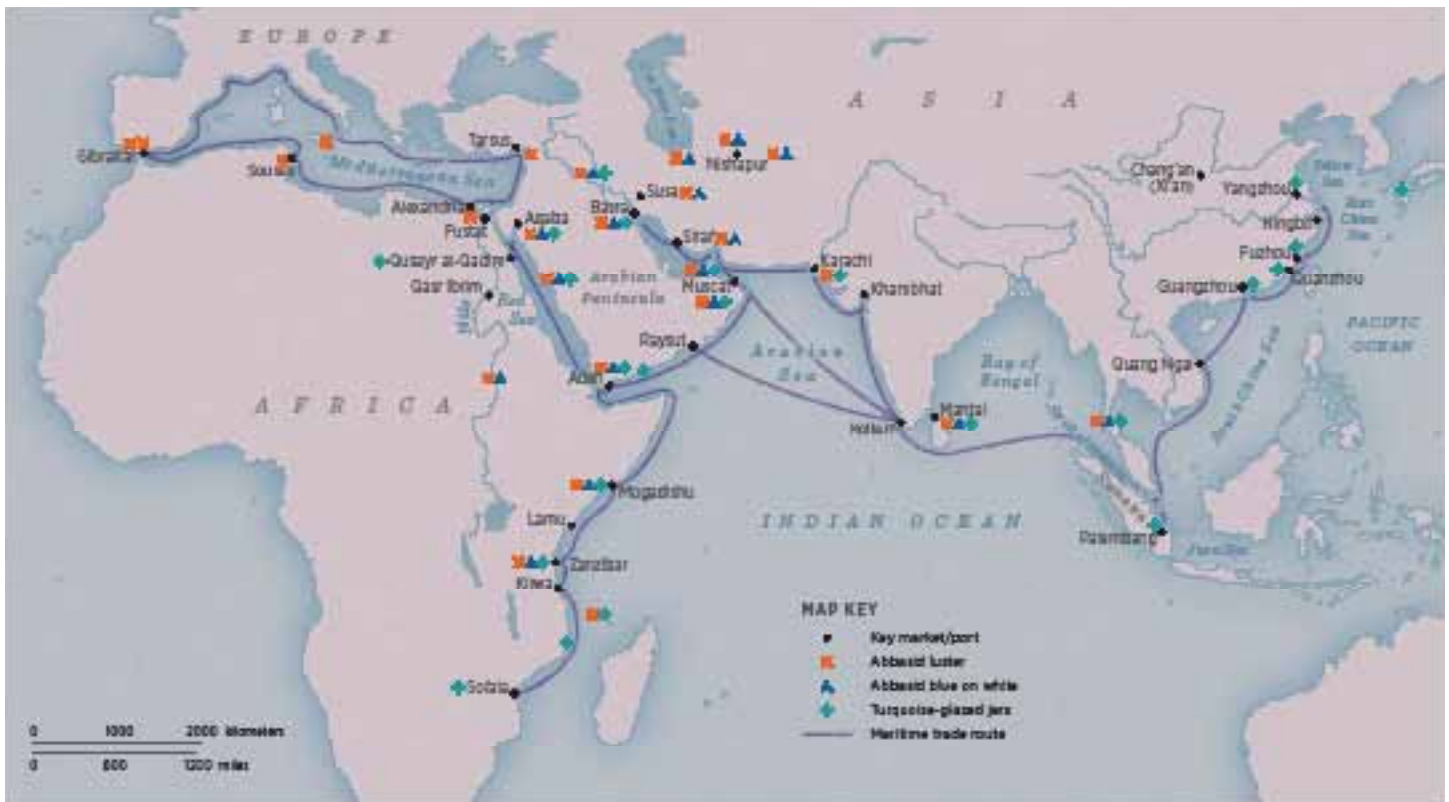
Sometime at the end of the eighth century, the Abbasid caliph Harun al-Rashid (reigned 786–809), one of the famous protagonists of *One Thousand and One Nights*, received a remarkable and surprising gift. Sent from ‘Ali ibn ‘Isa, the governor of Khurasan (in northeast Iran), it comprised “twenty pieces of imperial China-ware (*chini faghfuri* [sic]), including bowls, cups and half-cups, the like of which had never been seen at a Caliph’s court before,” along with some 2,000 other pieces not described.¹ The gift clearly included exceptional items that were probably acquired, as the text implies, via the Central Asian land route from China, which passed through northeast Iran at this time.

The distinction given to the select group of *chini faghfuri* has been interpreted as distinguishing finer wares from common export wares or porcelain from stoneware.² The term *faghfuri* referred initially to the emperor of China and by association came to be used as the generic name for Chinese ceramics. However, it does not necessarily denote “porcelain” and probably referred to a type of Tang stoneware made in northern China, within easy access of the Silk Road.³ Possible candidates for inclusion in the gift are the fine ceramic wares made at the Xing and Ding kilns, featuring hard, white bodies covered with a transparent glaze (figs. 56–57).⁴

It is obvious, when faced with the limited range of pottery available in Iraq in the eighth century, why Harun al-Rashid and his court would have been so impressed with the governor’s Chinese offerings. The pottery repertoire of the first two centuries of Islam was characterized by an absence of mass-produced, extensively traded fine wares, owing to the temporary destruction of the commercial system in the Mediterranean and the Levant. In the eastern part of the Islamic empire, in Iraq and Iran, the local pottery industry evolved from the ancient Mesopotamian ceramic tradition in which plain pottery predominated, occasionally with monochrome glazes and applied surface decoration. Vessel shapes consisted mainly of small bowls, tall jars, and flat plates. Glazes, when present, were of an alkaline composition (with soda or lime added as a flux or fusing material), usually thick and uneven, and tinted turquoise with the addition of copper.

Two important developments occurred in the eighth century, namely, the production of a new type of turquoise-glazed storage jar with elaborate appliqué decoration (fig. 21), along with a variety of fine, relief-molded tablewares. These were decorated to imitate prestigious metal vessels and were often covered with a dark green glaze to which lead had been added as a flux.⁵ But even the finest of these wares rarely, if ever, achieved a level of sophistication worthy of a caliph’s table.

Set against this background, Chinese ceramics offered a startling and dramatic contrast and had a profound influence on Abbasid taste. Increased demand for these imports inspired Iraqi



PAGE 74

Fig. 59 Blue-and-white dish with painted floral lozenge motif. Cat. 279.

ABOVE

Fig. 60 Principal sites where Abbasid ceramics have been found.

potters to experiment with new techniques, shapes, and designs to produce imitations for a wider market. Their innovative tablewares, which combined the esteemed qualities of Chinese pottery with Islamic color and decoration, achieved widespread commercial success and were highly sought after by the affluent mercantile classes across the vast Abbasid Empire (see map).

It is tempting to posit a central role for Harun al-Rashid and his direct royal command behind these remarkable developments. The main impetus, however, was almost certainly international maritime trade and the ensuing arrival via the overseas route of much larger numbers of Chinese wares, which came to be known outside court circles. The Belitung shipwreck is a crucial element in this story, as it offers tangible evidence of the scope of the long-distance ceramic trade at this time and reveals how Islamic merchants spurred innovation in Iraq's ceramic industry.

Chinese Influence

From the archaeological record, it seems that Iraqi potters responded swiftly to the arrival of Chinese white wares in the Gulf. Experimentation to produce a local equivalent began in the early years of the ninth century.⁶ As the Iraqi potters sought to replicate the imported Chinese ceramics' texture, shape, and color, they developed unique methods that reveal their skill and imagination. The task of imitating the coveted shiny white surface and hard compact body of Chinese wares represented a formidable challenge for the Iraqis. Neither the essential raw material (white kaolin clay) nor the kiln technology for replicating Chinese high-fired white porcelain or stoneware was locally available. The finest clay of Iraq was low-firing and yellowish in color, as if "molded from an egg yolk (*muh bayd*)."⁷

CLOCKWISE FROM RIGHT

Fig. 61 Earthenware jar painted in monochrome luster on opaque white glaze, Iraq, Basra, 10th century. Freer Gallery of Art.



Fig. 62 Earthenware bowl with a white glaze, Iraq (probably Basra), 700–900. Victoria and Albert Museum.



Fig. 63 Stone paste bowl with clear glaze, North China, 9th century. Freer Gallery of Art.



Instead of struggling with these obstacles, Iraqi potters focused on achieving the visual effect of the Chinese original. They figured out how to create elegant vessel shapes and invented an opaque white glaze capable of completely disguising the yellowish clay—an ingenious substitute for Chinese pottery’s integral whiteness. The new Iraqi glaze recipe, which combined lead (as a flux) and tin (as an opacifying agent), was the antecedent of the medieval and modern European “tin glaze.”

Aiming to produce perfect imitations of Chinese imports, the potters copied every visible detail. The vast majority of the Abbasid wares are open bowls of Chinese form (figs. 62–63). However, the Xing or Ding wares that may have comprised Harun’s gift in the eighth century were not necessarily the prototypes, as indicated by the absence of rolled or everted lips on the Islamic bowls. The most influential wares appear to have been the white stonewares produced at the Gongxian kilns in northern China, which arrived by way of the overseas route and were found on the Belitung shipwreck (see pp. 200–7). Their characteristic features—a hemispherical body with a flaring rim and low footring—are duplicated in the earliest Iraqi opaque white-glazed wares, which also precisely emulate the imports’ dimensions.⁸ The Gongxian wares were less refined than the premium white ceramics, including genuine porcelainous wares, aboard the Belitung ship, and hence may have been more accessible to the Iraqi potters.

Once covered with a pure white glaze, the smooth interior surface of the Iraqi bowls invited new decorative possibilities. Bold colors and designs soon enhanced the Chinese aesthetic of simple and elegant forms. The potters’ first choice was an intense cobalt blue pigment, which offered a dramatic contrast to the white-glazed background; this was the first experiment with the now-familiar concept of “blue-on-white,” undertaken sometime in the first quarter of the ninth century.⁹ Proud of their creations and wishing to identify their origins, the Iraqi potters signed some of their pieces, possibly with the additional aim of securing further orders or commissions. Arabic inscriptions of the form *‘amal...* (“work of...”) instantly revealed that, although the bowls appeared to be Chinese, they were actually made locally, by artisans with such names as Muhammad, Ahmad, and Omar.

Many design elements of the early, cobalt blue-painted wares reflect the natural landscape of southern Iraq and the rich flora and fauna of its extensive wet marshes, fertile meadows, and date palm groves. The scale of overseas demand for dates had huge economic implications for the region, and the tree, with its fronds and fruit, appears frequently in the potters' paintings. Baskets of fresh dates as well as such products as date syrup, honey, and wine were exported across the Indian Ocean as far east as China.¹⁰ Turquoise-glazed storage jars were used to transport these commodities; fragments have been found on Chinese coastal sites, and three complete examples are preserved in the burial tomb of a Fujian princess who died in the year 930 (fig. 21).¹¹

Date syrup was highly praised in Chinese pharmacopoeia and Buddhist texts as having special healing properties, possibly owing to its high sugar content. This appreciation is reflected in Chinese ceramic production as well: Date palms appear as part of the relief decoration on Changsha jars found on the Belitung shipwreck (fig. 49).¹² A white-glazed storage jar made in Iraq (now in the British Museum) is also decorated with leaves or dates that could indicate its original contents. The green splashes on its surface, however, reflect the influence of imported Chinese wares also associated with production at Gongxian (see pp. 60–65, 160–83), while its shape resembles the storage jars with hinged lids and loop handles produced at the Changsha kilns and retrieved from the Belitung ship.

Parallels also can be found between the crescent shapes that embellish the rims of both Islamic bowls and Changsha ceramics. Some of the celadon vessels from the ship are similarly decorated but with iron-brown designs (pp. 54–57, 144). The Islamic crescents were painted directly on the surface, while the Chinese motifs were created by dipping the rim into the liquid glaze. This would seem to imply it was originally a Chinese concept. However, it also occurs around a beautiful Islamic cobalt blue glass dish, which was found at the Famensi temple site in northern China and deposited there before the year 874.¹³ This object, obviously held in high esteem by the Chinese, has a floral motif in the center with a precise parallel in a Basran blue-on-white dish. This indicates not only the close relationship between Islamic glass and ceramics at this time but also the potential of both media to have exerted influence on Chinese ceramic production. Whether the notion of painting swirling, floral-inspired designs on the interior of the hemispherical ceramic bowls was a Chinese or Iraqi invention has yet to be properly resolved, but many of these Changsha wares found on the Belitung ship appear to have been designed to appeal to Islamic taste for elaborate decoration.

Following the commercial success of their cobalt blue designs, sometime in the mid-ninth century Iraqi potters began to experiment with pigments borrowed from the Islamic glass industry, described later as the “colors of two-firings.”¹⁴ They painted mixtures of copper and silver onto previously glazed and fired pieces, and then fixed the design with a second firing to produce an iridescent metallic sheen (fig. 61). The luster technique was admirably suited to copying the prestigious arts of Islamic painted glass and precious metal ware and raised the status of Iraqi pottery to that of “decorative art.” Glass and metal vessels served as tableware for the Iraqi elite, which undoubtedly inspired this redirection in the industry's experiments. Chinese influence, however, continued to play an important role; in addition to hemispherical bowls and storage jars (figs. 62–63), Iraqi vessels from this time include small, lobed dishes similar to Chinese green-glazed stoneware vessels from the Belitung shipwreck (figs. 115–16).

The glittering effects of luster achieved wide appeal. Royalty commissioned luster tiles for their palaces and mosques, while tablewares in various styles met the demands of a wide clientele and have been found in excavations from Portugal to Thailand. By any standards, these were dramatic accomplishments for medieval craft innovation. Not only had the Iraqi potters created ceramics that were technically superior to any previously made in the region but, in less than forty years, they also had transformed their common clay vessels into vehicles for complex painted decoration and made them available to the citizens of a vast Islamic empire.

Potters and Merchants

Behind this blossoming of technological and artistic innovation was a new and sophisticated industry. Potters seldom had the means to invest in the materials and time necessary for experimentation. The swift development and success of the Iraqi pottery industry, therefore, was long associated with imperial patronage and the collaborative efforts of “ingenious craftsmen” brought to Baghdad (and the palace city of Samarra) by the Abbasid rulers.¹⁵ However, recent scientific analysis of the clay used to make the ceramics has confirmed that production was based in the port town of Basra, precisely the same place where the first Chinese ceramics were off-loaded from Near Eastern trading ships, such as the one found near Belitung.¹⁶

Located on the edge of the southern Iraqi desert and the banks of the Shatt al-Arab, Basra was uniquely positioned to serve as a “port of the sea, an emporium of the land, and a place of manufacture.”¹⁷ All of the major land, sea, and river routes of Iraq converge at its gates. While the natural geology of the delta provided excellent clay, all of the other ingredients for ceramic production had to be imported.¹⁸ The lead and tin needed for the opaque white glaze were probably from the Arabian Peninsula and Southeast Asia, respectively. For the painted decoration, the cobalt blue, along with the copper and silver for the luster pigments, would have come from Arabia or Iran where mining sites are documented. The overland and overseas trade routes used to import these goods were also essential to Basra’s development as an important center of precious-gem cutting, rock-crystal carving, pearl processing, glass manufacturing, gilding of mirrors, and preparation of pigments. Cross-fertilization between these crafts must in part explain the potters’ capacity for innovation at so many levels and in so many different directions.

Precisely who these inventive individuals were, however, is a puzzling question. The historical and technological evidence appears to point to a community of potters with links both to the educated elite and to merchants involved in overseas trade. Their signatures on the blue-on-white bowls imply that they were literate, and at least one of them may have been a descendant of an eighth-century poet.¹⁹ Their ceramics certainly caught the eye of the contemporary bard al-Azdi, who praised the wares as resembling the “surface of a white pearl (*durra bayda*) [and] shaped in roundel form like the contour of the moon (*makhruta min darat al-qamar*).”²⁰ The Basran potters also knew a surprising amount about Chinese methods of shaping ceramics in the early ninth century. Although Iraqi clay was softer and more pliable, technical analyses of the Basran copies reveal they were made in precisely the same way as the Chinese models, illustrating the intensity of contact between Basra and China at this time.

In China, the aplasticity (stiffness) of local clays gave rise to diverse shaping techniques, including molds, templates, and cutting tools.²¹ The standard method used in Chinese workshops involved throwing a bowl to the approximate dimensions of its final size and then inverting it over a convex mold to give the interior surface uniform shape and texture. The mold also served to support the wet vessel so that its exterior could be trimmed to the desired thinness. Features of exactly the same sequence of production can be identified in a Basran bowl using special imaging techniques (xeroradiography): namely, diagonal particle orientation indicative of throwing on a potter’s wheel, evidence of molding on the interior, and horizontal trimming lines on the exterior.²² Clearly, Basran potters had somehow managed to learn Chinese techniques.

Considering the entrepreneurial environment in Basra, as well as the spirit of the time, it is plausible that enterprising merchants involved in the transoceanic trade introduced Chinese manufacturing practices to Iraq. They could have brought Chinese potters to the port town or simply described to the Basran potters what they had observed in Chinese workshops. We know from historical sources that Basran merchants were actively involved in long-distance trade, and a considerable number of them were established in ports along the Chinese coast—including Guangzhou, the point of embarkation of the Belitung ship.²³

Indeed, some of these men could have been aboard the Belitung ship or have had prior contact with its captain, which would explain a surprising link with Basra revealed in the ship’s



contents. Among its rich cargo are three extraordinary ceramic dishes, painted in cobalt blue (figs. 59, 65, 159) and decorated with multilobed leaves that closely resemble the palm fronds found on Basran bowls (figs. 15–16). In all three vessels the scheme is quite similar, with a central rosette circumscribed by a lozenge encircled by rotating fronds and trefoils marking the cardinal points. In a variation of the theme, the center of one of the dishes is occupied by two overlapping lozenges (fig. 65). This composition is highly reminiscent of the more abstract designs seen on the Basran wares, in which the fronds and trefoils are interpreted as palmettes (fig. 64).

Shards of related Chinese blue-and-white wares have been found in the Arab residential district of the port of Yangzhou, implying that they were intended for foreign consumption and not for the local Chinese market.²⁴ Curiously, both the body and glaze of these wares are similar to wares from Gongxian.²⁵ This kiln, therefore, must have manufactured both plain white and blue-decorated wares for export. The latter was almost certainly encouraged by the great demand for blue-decorated ceramics in the Abbasid Empire. Although no Basran wares have been identified as yet in China, the presence of a group of Islamic cobalt blue glass plates at Famensi, with incised decoration exhibiting strong stylistic parallels with the Iraqi cobalt blue and luster-painted ceramics, emphasizes the fluidity of long-distance trade at this time. Ceramics from Iraq painted with fronds also could have made their way to China as part of this trade and served as the direct inspiration for the blue-painted wares at Gongxian, especially as their production appears to have been discrete and of short duration.²⁶ Although cobalt blue had been used previously in Tang *sancai* wares in the eighth century, there is no evidence of their export to the Near East. Cobalt blue painting appears to be an independent initiative of the Basran potters, which later spurred the development of ninth-century Gongxian blue-and-white.²⁷

Such sharing of ideas and techniques points to the involvement of intermediaries, most likely enterprising Near Eastern merchants, who not only commissioned new types of wares but also informed Chinese and Iraqi potters of the work of their foreign colleagues. This mercantile interest in ceramics also might explain how the capital investment necessary for innovation was locally available in Basra, how Chinese fabrication methods were transferred to Iraq, and how the Basran wares decorated in luster and cobalt blue came to be so widely distributed (see map on p. 76).

Fig. 64 Earthenware bowl painted in cobalt blue on opaque white glaze, Iraq, Basra, 9th century. Victoria and Albert Museum.

Fig. 65 Dish with overlapping lozenge motif from the Belitung wreck. Gongxian kilns, ca. 825–50, diameter 24 cm.

Spread of Innovation

The Basran potters' three great technological advances of the ninth century—the invention of an opaque white glaze, painting in cobalt blue, and the overglaze luster technique—shaped Islamic as well as Asian and European ceramic traditions for centuries. The widespread distribution of the Basran wares in the ninth century was accompanied by a dramatic change in the ceramic landscape. Glazed and painted ceramics began to be made from Spain to Central Asia, a span of more than 8,000 kilometers. While the methods of achieving a white-glazed surface moved swiftly, cobalt blue and luster remained trade secrets of the Basran potters.

To the east, at Susa in southern Iran, and at Nishapur and Samarqand in the far northeast, extensive production of wares closely related to those in Iraq arose but with painted decoration in purple and green.²⁸ A distinctive tradition of pottery painted in thick, colored clay slips against a white ground also developed in Iran, resulting in some of the most impressive ceramics ever made in the Islamic world. To the far west, in North Africa and Spain, and eventually in Italy and France, a distinctive family of white-glazed ceramics with green and brown painting emerged, gradually evolving into the Hispano-Moresque, maiolica, and faience traditions that supplied Europe's luxury ceramics until the eighteenth century.

Luster painting, by contrast, was exercised exclusively by the Basran potters until sometime in the second half of the tenth century, when the vast Abbasid Empire began to disintegrate. The production of luster-painted ceramics ceased in Iraq at this time, and the technique was never revived there again. Instead, the capital of the rival Fatimid dynasty (909–1171) at Cairo became the new center for white-glazed wares with impressive luster effects. Migrant potters from Basra probably brought these technologies to Egypt in search of new patronage and renewed prosperity. In this way, Chinese influence continued its journey westward, not only by spreading the concept of a pure white-glazed surface but also by introducing Chinese mold-based fabrication methods to Egypt.

The decline of the Fatimids two centuries later, as in the case of the Abbasids, brought about yet another dissemination of complex technologies. The luster technique began to be practiced in Syria and Iran at precisely this time, possibly by migrant craftsmen fleeing Cairo after the burning of the potters' quarters there in 1169. The technique was also transmitted west from Cairo, eventually reaching Spain, where it developed a dominant export trade throughout Europe and the Near East in the fifteenth century. Luster survived the Christian *reconquista* and spread to various centers in northern Spain and eventually to Italy.

In the Far East, the first tentative experiments with cobalt blue during the Tang period (618–907) were followed five centuries later by blue-and-white porcelain produced during the Yuan dynasty (1279–1368). This time the cobalt was imported from the Near East, and Iranian merchants resident in China probably motivated local artists to use this color. The introduction of new shapes into the Chinese ceramic repertoire, such as large, flat serving dishes, also has been attributed to the demands of Near Eastern consumers and their communal eating habits.

The Chinese combination of dazzling white porcelain and brilliant blue painting under a flawless transparent glaze proved triumphant, inspiring numerous ceramic traditions. The fashion was received with astonishing enthusiasm in the Near East, and by the middle of the fifteenth century potters from Samarqand to Cairo were copying and developing their own versions of blue-and-white porcelain.

In Europe, the arrival of Chinese porcelain during the following century would be met with a similar response and inspire such major innovations as Dutch delft and Portuguese faience, and even spread westward with the European overseas expansion to the Americas. Within thirty years of the Spanish conquest of Mexico, the tin-opacified glaze and cobalt blue not only were being used in the colonial Spanish pottery industry but had been adopted by indigenous Mexican-Indian potters as well.²⁹

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