Fig. 1. The Banbore area, after *Pakistan Archaeology*, no. 1, 1964.
BANBHORE, AN IMPORTANT RIVER PORT ON THE CERAMIC AND GLASS ROUTES

A Transit Area for Art Styles from the West to Thailand and Burma circa 1st c. B.C. - 13th c. A.D.

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Banbhore is the present name for an early port of importance on a branch of the Indus River, in the Sind region of Pakistan (Fig. 1). It is forty kilometres east of Karachi. Excavations there have revealed the remains of a considerable settlement divided into two parts: the fortified citadel area of the mound itself measuring about 2,000 by 1,000 feet, and the lower unwalled city round the water at the foot of the mound, extending far outside and including an industrial area and also an ancient graveyard (Pl. 1). Some scholars have identified Banbhore with Debal, the famous Hindu port which fell to the young Arab general, Mohammad bin Quasim, in the early 8th c. A.D. In its heyday it must have served as a trading center for both the interior of the country and foreign merchants. The city now is situated on the north bank of Gharo Creek, which once formed the westernmost branch of the Indus. The great river changed its course in 1250 A.D., bringing about the port's demise.

Excavations conducted at Banbhore since 1954 have revealed the remains of three distinct periods: Scytho-Parthian, Hindu-Buddhist and Islamic, datable from the 1st century B.C. to the 13th century A.D. At a depth from 25 to 30 feet from the surface, archaeologists from the Department of Archaeology, Pakistan, discovered artifacts dated by them to their Scytho-Parthian Period, circa the 1st century B.C. to the 2nd century A.D. The artifacts consist of finely polished and burnished pottery with bright red and dark brown surfaces (Pl. 2) (The Department of Archaeology, Pakistan, 1964, pp. 50 and 53).

Of special significance to Burma and Thailand is the appearance among the artifacts of very delicate pedestal vessels (kuzas), each having a spout with a pointed pouch-like bulge at its base and a long neck surmounted by a flanged knob above which is a vertically perforated nipple (Pl. 3). The nipple of each specimen is short, while the top of the flange may be flat or somewhat convex. The body is V-shaped with high shoulders, echoing that of the basin found in the same phase of
excavation (see Plate 2). Similar high-necked vessels were unearthed in 1912 by Sir John Marshall in the 1st century B.C. levels at Taxila (ibid.).

Dr. Phasook Indrawooh (Indrawooh p. 50) ascribes the origin of the vessels to the Mediterranean world. She says the vessel type was introduced to India as a flagon for wine by Roman traders who settled down on the coast of India during the period 200 B.C. to 100 A.D. The shape became popular, especially among the Buddhist community, where the vessel was used in ceremonies, hence it has been dubbed a "sprinkler." Many sherds of this type of ware have been found at Buddhist cave sites to the east of Banbhore; for example, Kanheri, Karle and Ajanta. Hilary Adamson and Isobel Shaw (Adamson and Shaw pp. 305-6) concur with the identification of a Mediterranean origin but prefer a Greek attribution. A Greek origin is inferred by Y.D. Sharma (Sharma pp. 126-8) in comments about such wares found at Rupar in Northwestern India, somewhat southeast of Taxila. He writes that "a vast variety of sophisticated types emerges in the early centuries of the Christian era. Some of these bear the imprint of Greek context, notably the footed goblet."

Another "foreign" type, he writes, appears to be the long-necked, narrow-mouthed "sprinkler." Two "sprinkler" fragments were reportedly found at Rupar. Both are neck and flanged-knob elements. On both, the flanges appear to have a flat surface. One knob still retains a perforated nipple on top. The nipple is short as at Banbhore (Fig. 2).

![Pottery, Archaeological Museum, Banbhore, dated 1st c. B.C. to 2nd c. A.D.](image1)

!["Sprinkler" fragment, Rupar (after Sharma), dated to the early Christian era.](image2)
At Hastinapura in North Central India, to the southeast of Rupar, fragments of “sprinkler” vessels have been excavated as well. Three have either flat or slightly convex flange knobs surmounted by short nipples while the fourth has a much thicker flange knob than the others and no nipple extant (Fig. 3). They were found in Period IV of the excavation in which artifacts have been dated from the early second century B.C. to the end of the third century A.D. (Lal pp. 23 and 64).

Evidence of “sprinkler”-type vessels has been found at archaeological sites in India’s Deccan Plateau and the east coast; for example, excavations at Brahmapuri on the western edge of the Deccan Plateau yielded fragments of the vessel type in its strata dated to the Satavahana Period, i.e. circa 106 to 130 A.D. At Yeleswaram, not far from Nagarjunakonda in the southeastern sector of the Indian subcontinent, “sprinkler” sherds were excavated and dated to the first and second centuries A.D. (U Myint Aung p. 49).

Evidence for the spread of vessels of the kuza design to the Burma-Thailand region has been found at archaeological sites in both countries. Four “sprinkler” necks were excavated at Winka, north of Thaton, on the Tenasserim Coast of present-day Burma. All four necks have flat flange knobs. Two have fairly intact nipples. Like those at Banbhore and other sites on the Indian subcontinent mentioned above, they are short and vertically perforated (Fig. 4). Three of the necks reportedly are of a very fine fabric and have a red slip. The fourth is “finished” in brown clay and has no slip. In the same excavation

Fig. 3. “Sprinkler” fragments, Hastinapura (after Lal), dated 2nd c. B.C. to 3rd c. A.D.

Fig. 4. “Sprinkler” fragments, Winka (after U Myint Aung), circa 2nd c. A.D.

Pl. 4. One of the two spouts with pointed pouch-like bulges, Beikthano, 1st c. B.C. to 2nd c. A.D. (U Aung Thaw).

Pl. 5. Moulded kuza with design in high relief, Archaeological Museum, Banbhore, dated 3rd-4th c. A.D.
Pl. 6. Roman-style lamp and other artifacts, Archaeological Museum, Banbhore, dated 2nd-7th c. A.D.

Pl. 7. Roman-style lamp, Pagan Museum, circa 6th c. A.D.

Pl. 8. One of the large Sassanian-type green alkaline-glazed water jars, Archaeological Museum, Banbhore, dated 8th c. A.D.

Pl. 9. Fragment of a large Sassanian turquoise-green vessel with applied decoration, Archaeological Museum, Banbhore, dated 8th c. A.D.
Pl. 10. Tourquoise sherds. Top and bottom left, Sassanian sherds from Banbhore; top center and top and bottom right, sherds from Pagan; bottom center, two Sassanian sherds from Laem Pho, 8th-9th c. A.D.

Pl. 11. Abbasid period lead, tin and lustre-glazed fragments, Archaeological Museum, Banbhore.

Pl. 12. Green monochrome jar, Chinese, Archaeological Museum, Banbhore, 9th-10th c. A.D., with the Chinese character 亻 (variant of 亻) on its side.

Pl. 13. Seljuk-type plate with splashed glazes over a sgraffito design, Archaeological Museum, Banbhore, late 12th-early 13th c.

Pl. 15. Yellowish Phayao bowl with sgraffito decoration around the center, 12th c. A.D.

Pl. 16. Sisatchanalai plate with sgraffito decoration around the center, 13th c. A.D.

Pl. 17. Sisatchanalai plate with sgraffito decoration on the well (Hein and Barbetti, p. 14, pl. 7), 13th c. A.D.

Pl. 18. Green monochrome plate with sgraffito decoration on the well and center, from lower Burma, late 13th c. A.D.
two spouts with a pointed bulge at the base were found, plus other fragments. One of the spouts is of finely levigated red clay and the other of brown clay (ibid. pp. 48-9, 53). How the influence of Mediterranean vessels or possibly Mediterranean vessels themselves came to the area is unknown. Probably the type came via eastern India. Noting the 1st to 2nd century A.D. date given the "sprinkler" fragments in Yeleswaram and the firm Satavahana (beginning of the 2nd century A.D.) date at Brahmapuri, those found at Winka would seem not to be earlier than the 2nd century A.D.

In Beikthano in Central Burma one "sprinkler" type knob with a short vertically perforated nipple was excavated at site KKG-2. The flange, which is convex at the top, and the size of the nipple indicate a date similar to the Banbhore kuzas (Fig. 5). Others from the site are later, suggesting a long-term use of the type of vessel. Two spouts with pointed pouch-like bulges were found at the same site and again appear to be of an early period (U Aung Thaw, p. 133, Fig. 66, No. 45 and p. 198, Pl. XLIV, b) (Pl. 4).

"Sprinkler" vessel fragments have been reported in Central Thailand at Inburi in Singburi Province and Chansen in Nakhon Sawan Province, and in Southeastern Thailand at Chaiya in Surat Thani Province. A fragment, the top portion of a "sprinkler" from Ban Ku Muang, Inburi, bears a shape close

Pl. 19. Bowls and fragment with fish at the centre, Banbhore, third phase.

Fig. 5. "Sprinkler" fragment, Beikthano (after U Aung Thaw), 1st c. B.C. to 2nd c. A.D.
Pl. 20. Persian glass, Archaeological Museum, Banbhore, dated 8th-13th c. A.D.

Pl. 21. Bottle, brown monochrome glaze over amber slip, from Southern Burma, circa 9th-13th c. A.D.

Pl. 22. Bottle, yellow-brown glaze over amber slip, from Southern Burma, circa 11th c. A.D.
to those from the Indian subcontinent dated to the early Christian era and probably is not later than 2nd c. A.D. (Indrawooth, p. 50 and Fig. 10.9) (Fig. 6). Other "sprinkler" fragments reported are later stylistically; for example, a "sprinkler" knob from Chansen has a rather long nipple. It is from Phase III-IV of the excavation (Bronson 1976, p. 555; Phase III has been dated 200/250-450/500 A.D. and Phase IV 450/500-600/650 A.D. (Bronson 1979, p. 317). The "sprinkler" knob from Inburi, Singburi Province (Indrawooth, Pl. 28), has a very long extended nipple and has been dated to the Dvaravati Period (7th to 11th centuries A.D.).

Related to the above "sprinkler"-type vessel but from a slightly later period in Banbhore excavations is a moulded kuza with a design in high relief and a spout with a pointed bulge at the bottom and a phallic-shaped nozzle (Pl. 5). The kuza is described by the excavators as Sassanian, 3rd-4th century A.D. The type of moulding on the kuza suggests a close relationship to Roman Arretine wares. No kuza of the type has been reported in Thailand or Burma but spouts with phallic-shaped nozzles have been excavated at Chansen and Dong Khon (Chainat Province) in Central Thailand (Bhumadhon 1987, p. 35, Fig. 7) (Fig. 7).

Yet another Mediterranean-influenced artifact discovered is a terracotta Roman-style lamp. It has been placed at the Banbhore Museum in a grouping of artifacts found in the Buddhist-Hindu period of the excavation dated 2nd-7th c. A.D. (Pl. 6). A nozzled lamp of this type was excavated at Ban Tha Khao, Lopburi Province, Central Thailand, in 1983, and has been dated to the 6th century A.D. (Brown p. 7). A similar one was found in Pagan, Burma, and is on display at the Pagan Museum (Pl. 7).

When in the 8th century A.D. the Muslim expedition of Muhammad ben Quasim shattered the power of the local Hindu rulers, the country was overrun within three years and Muslim rule of the area was firmly established. The earliest phase, circa 8th-9th c., has been assigned to the Umayyad period. The new rulers brought with them turquoise, turquoise-green and green alkaline glazed wares of Sassanian origin. On exhibit at the Banbhore Museum are large circa 8th century water jars (Pl. 8). Also on display is a fragment of a turquoise-green vessel with applied decoration (Pl. 9). Sherds of such type Sassanian wares with white paste have been found at various sites in Thailand: Koh Kho Khao (Phang-nga Province) on the west coast of Thailand; Laem Pho on the east coast; and at Dong La Khan (Nakhon Nayok Province), U Thong (Suphanburi Province), and Lopburi (Lopburi Province) in Central Thailand (Di Crocco 1987, p. 13). Sherds with turquoise and turquoise-green glazes have been discovered in many sectors of Pagan and appear on the basis of their paste (orange-red with white intrusions which is typical of local wares) and kiln finds to have been made in the area (Di Crocco and Schulz p. 9) (Pl. 10). Their presence, however, bears witness to a connection with the Middle East. Many of the sherds are fragments of jars or basins with heavily thickened mouth rims (Pl. 9).

The second phase of Muslim rule corresponds with the Abbasid period covering the 8th to 11th centuries A.D. The locally produced glazed pottery resembles Persian materials of the time, especially specimens from Nishapur. The wares include slip-painted wares, splashed and mottled lead-glazed wares, and delicately painted tin-glazed and luster-glazed wares (Khan, p. 31) (Pl. 11). It is possible that some of the Middle Eastern type glazed sherds of the period found in Thailand may have been made in Banbhore.

Also reported as present at Banbhore in the excavations of the period were Chinese wares, including finely painted stoneware of the Tang period and a few celadons (ibid.). On exhibit at the Archaeological Museum, Banbhore, is a large green monochrome jar; on its sloping shoulder the Chinese character 木 (variant of 本) has been incised (Pl. 12). A frag-
ment of a similar jar is also on display. This type of jar has been dated by Sumarah Adhyatman and Abu Ridho to the 9th-10th c. A.D. (Adhyatman and Ridho p. 89) and identified as a "Guangdong type."

Banbhore wares of the 11th-13th centuries bear influence from Seljuk Persia. The period is distinguished by the introduction of glazed sgraffito wares which almost totally replaced other types of pottery. Among them are many large plates decorated with bright green glaze or glazes of green, yellow, aubergine and cream splashed over sgraffito decoration (pl. 13). Designs often are incised within bands around the center, on the well, and on the rim. Among the designs used on the well is one consisting of a series of vertical striations which encircle the well and give the appearance of having been rouletted (pl. 14). The center often has a design of its own. The sgraffito designs on ceramics were influenced by those engraved on large bronze plates and trays in 12th c. Seljuk Persia (Rice 1979 pp. 74-75). It is interesting that sgraffito wares using Seljuk designs are presently made in Pakistan (Yoshida Pl. 33). Wares influenced by Seljuk sgraffito designs have been found in Northern Thailand and have been attributed to Sankamphaeng and Phayao kilns. Many have a broad base and high sides, probably influenced by Guangdong wares from the 11th to 12th c., but have sgraffito decorations in the center and on the well which appear to be variants of those on Seljuk wares. A bowl of this type, probably from Phayao, has a simple sgraffito design at the center consisting of a zigzag line within two circles. The interior is covered with a yellowish glaze and the exterior is brown (pl. 15). Green monochrome wares produced at the Sisatchanalai kilns also have sgraffito designs bearing an affinity to those from Seljuk Persia and Banbhore (Hein and Barbetti, p. 14, Pls. 9 and 7). The shape of the specimens in Plates 16 and 17 is somewhat later than that of the bowl attributed to Phayao and therefore they may be dated to the 13th c. Ceramic wares arriving in Thailand from Southern Burma also bear sgraffito designs; among these is a green monochrome plate with vertical striations on the well and an incised lotus design at the center; this too when compared with Banbhore wares may be dated to the late 13th c.

Among the Seljuk period wares at Banbhore are small bowls, conical, with sides turning in at the top (pl. 19). Bowls of this type have been excavated at Sisatchanalai and constitute further evidence linking ceramic styles in Thailand with those of the Middle East.

Excavations have revealed that glass from the Middle East was imported at Banbhore. Especially significant are two bottles with long necks, one brown/black and the other green (pl. 20). They are displayed at the Archaeological Museum, Banbhore, within a grouping dated 8th-13th c. A.D. Shinji Fukai (Fukai pp. 34-35), however, dates a Persian glass bottle in his collection which is like the green one to the 3rd-7th c. A.D. Thus the glass bottles of that type at Banbhore should date to at least the 8th c. A.D. That bottle type seems to have greatly influenced potters in Thailand and Burma over several centuries. Bottles of globular form from Northeastern Thailand using related forms have been dated as early as the 11th century. Recently wares in the tradition of the glass bottle at Banbhore have reached Bangkok from Burma. On the basis of its similarity to the first millennium glass bottles at Banbhore and a comparison of its glaze with other ceramics from Burma, a bottle with a dark brown monochrome glaze over an amber slip may be dated circa 9th-13th c. A.D. Another, with a yellow-brown glaze over an amber slip, is similar to versions of Banbhore bottles found in Buriram Province, Northeastern Thailand, and may be dated circa the 11th c. A.D.

Conclusion

Banbhore served as a link between the Mediterranean, Middle East, India, Southeast Asia and China. A comparison of artifacts excavated at Banbhore with ceramic and glass objects from Thailand and Burma indicates that Mediterranean ceramic and Middle Eastern ceramic and glass designs imported via transit points such as Banbhore had an impact on local design in Southeast Asia. Study of Banbhore artifacts suggests that while her trade was primarily with the countries to the west, she also was an early recipient of goods from China.

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SELECTED BIBLIOGRAPHY


