

**A particular port of call on the Maritime Silk Road:
the warehouse of Qalat al Bahrain
(13th century AD) by Dr. Monik KERVRAN,
University of Paris-Sorbonne**

I will speak to day about a thirteenth century AD site, located at the West end of the maritime Silk Road. It is in the Persian Gulf, near the Arabian coast, on Bahrain Island. The site is not a harbour city in which Muslim merchants of the island used to trade freely with other Muslim countries as well as Indian Ocean countries. The place is a small building where a South Persian conqueror organized a warehouse at his own profit, as he did in several other sites of the East Arabian coast.

I will first present to you the building itself as I discovered it and dug it out between 1977 and 1984. Then I will show you the finds, from which we identified the function and the history of the building. At the end, I will briefly evocate the historical context of the region, totally involved in the maritime trade with Southeast Asia in the 13th century. In this region were born Muslim commercial empires which, at the beginning of the 16th century became the prey of the European conquerors.

The concerned building is located on a very ancient site of Bahrain Island, near the Northern coast, in front of a channel naturally cut into the coral reef, linking the shore with the deep sea (since Bahrain island is surrounded by shallows and its coast impossible to reach, except through such channels). From the Bronze Age a large walled city has developed on the site. Its commercial relations with Mesopotamian metropolis as well as Indus Valley cities are well known, by ancient written sources and archaeological finds. Prosperous all over the three millennium BC up to the end of Hellenistic period, the city was suddenly destroyed and abandoned by the beginning of the Christian era. Around the 3rd century AD, a fortress was built on the sea-shore, protected by a large moat.

The reusing of this fortress at the thirteen century (which is the subject of this paper) was one of the last episodes of the history of this site. The very last one was the building of another fortress by Kings of Hurmuz in the fourteen century. It was restored by the Portuguese at the end of the 15th century. I cannot tell you more details about this five millenniums old site, except it has been involved in maritime trade nearly all along its history.

I will concentrate now on its thirteen century occupation, the time when the first fortress, built thousand years earlier, likely by the Persian Sassanid Kings, has been reused.

The fortress is located just on the sea-shore, along a coast in a backward process, due to the marine erosion. When the building was built, the coast line was farther than it is today, and parallel to it. Later on, this coastline has changed and the North East corner of the building has been eaten by the sea. The fortress is square in shape, measuring 55 m by side, with a circular tower, at each corner and a half tower in the middle of each side, except for the Western one: here is the door, with two towers of quarter circle shape the layout of the building is quite so symmetrical with a small square central courtyard surrounded by 4 groups of rooms for the garrison and officers. The building had a clear military function and we could put to the light its defense system, consisting of loopholes, fortified gate and a large moat which was very efficiently isolating the building-from island attacks.

The fortress was abandoned by the 5th century AD, as well as the site, which was kept deserted during 7 to 8 centuries: no one trace of early Islamic occupation has been observed during the excavations. Then the fortress was hastily restored. Its defensive function was kept, but some of its rooms were arranged in a particular way, obviously for another purpose than the defense: they were "date-incubators", in which the honey-date was prepared: we will come back later on this industry. I have already told you that the reusing and transformation of this Sasanian building took place in the thirteen century. This dating is given by Islamic coins discovered on the floors of the building, especially in the entrance towers. Some of them of copper, other ones of lead, all of them bearing the name of a member of the Salgharid dynasty or her dynastic symbol, the "tamgha" a sort of flower blossom. The sixth member of this family, who governed the Fars province with the title of Atabeg (Atabak), conquered Bahrain in 1234. After him, his family went on controlling the Arabian shore of the Persian Gulf at least until 1270, the last of them being a woman Abish Khatun. We did not find only Islamic coins on the floors of the fortress: a large amount of Chinese ones were also uncovered, most of them on the south tower and floor: thirty three almost complete, and many broken and unreadable.

We were able to fully identify 22 coins. Two of them belong to the Tang period (618-907 AD) and are in a poor state of preservation. It was during this period when the title of the reigning emperor began to appear on these classical, single-faced coins with their square hole in the centre.

All the other coins are ascribed to the Song emperors: eighteen to the Northern Song

(960-1127 AD) and two to their immediate successors: the Southern Song, who governed China until 1279 AD. It is interesting to note that we have found specimens belonging to all but one of the Northern Song emperors. As for Emperor She I Song, who reigned from 1068 to 1085 AD, we are in possession of as many as eight of his coins.

(...)

As for the two Southern Song coins, they are large issues in a poor state of preservation; this is probably due to the use of a low-grade copper. They belong to the emperor Ning Zong and date from the end of the 12th century.

(...)

DESCRIPTION OF THE CHINESE COINS

All 23 are copper coins except the last on this list (78.1269/1) which is made of lead (5).

TANG DYNASTY

78.1269/d: Emperor GAOZU (618- 626 a.d.); current script: *kai yuan tong bao* (year 621); 27 mm, 2,20 g.; found in square section B 47.

77.1123/1: Emperor SUZONG (756- 763 a.d.); current script: *qian yuan zhong bao* (758- 760); 26 mm, 2,8 g.; square section B 47.

NORTHERN SONG DYNASTY

77.1160/1: Emperor TAIZONG (960- 998); cursive script: *zhi dao yuan bao* (995- 997 era); 32.2 mm, 3.70 g.: square section C 47.

78.1277/8: Emperor ZHENZONG (998- 1022): current script: *qiang fu tong bao* (1008-1016 era); 25.1 mm, 52 g.: square section B 46.

78.1277/4: Emperor RENSONG (1023-1063) current script: *jing you yuan bao* (1034-1038); 26.1 mm, 2.37 g.; square section B 46.

77.1063/1: As above: similar inscription in current script: 24 mm, 2.5 g.: square section J 54.

78.1269/3: As above: seal script: *jia yu tong bao* (1056-1068 era): 26 mm, 2.31 g.; square section B 46.

77.1111/2: Emperor YINGZONG (1064- 1068), seal script: ; *hi ping yuan bao* (1064-1067 era): 25 mm; 3.6 g; square section B 46.

77.1117/3: As above: similar inscription in current script: 26 mm; 3,8 g; square section B 47.

78.1277/9: As above: similar inscription in seal script: 24,4 mm, 3.3 g; square section B 46.

77.1117/2: Emperor SHENZONG (1068-1085): current script: *zi ning zhong bao* (1068-1077 era): 33 mm; 4,98 g; square section B 47.

78.1254.1: As above: similar inscription in current script: 32,2 mm; 3,7 g.; square sections AB 48.

78.1269/5: As above: current script: *zi ning yuan bao* (1068-1077 era): 21mm; 2,99 g; square section B 46).

78.1276/2: As above: similar inscription in current script; 25,2 mm, 3,4 g; square section C 46.

77.1111/1: As above: current script: *yuan (feng) tong bao* (1078-1085 era); 30 mm, 7,5 g; square section B 46.

78.1269/2: As above; similar inscription in cursive script; 32 mm, 4,67 g; square section B 46.

78.1269/6: As above; similar inscription in seal script; 24,4 mm, 3,58 g; square section B 46.

78.1277/10: As above; similar inscription in cursive script; 25,5 mm, 3,57 g; square section B 46.

78.1277/6 b: Emperor ZHEZONG (1086- 1125): seal script: *shaosheng yuan bao* (1094-1098 era); 25 mm .• 3,15 g.; square section B 46.

78.1276/1: Emperor HUIZONG (1101 - 1125); seal script: *sheng song yuan bao* (1101 - 1102); 26,3 mm; 2.08 g.: square section B 46.

SOUTHERN SONG DYNASTY

78.1259/1: Emperor NINGZONG: incomplete inscription in current script dating from the *jing yuan* (1195-1200) 33 6 mm; 5,6 g; square section B 46.

LEAD COIN ATTRIBUTED TO THE SONG DYNASTY (?)

78.1269/1: one undecyphered letter: 20 mm, 9.03g; square section B 46.

Along with these coins, a rather large amount of ceramic has been found, partly from a local origin, partly from Iran, and also a great number from South East Asia. Unlike the Chinese coins which could be used during several centuries, all the Chinese ceramic found at Qalat al-Bahrain belong to the period when they were bought in China and brought to Bahrain in the thirteen century that means the end of South Song dynasty period. At that time, celadon represents the greatest part of Chinese exportations.

All the pieces of celadon found at Qal'at al-Bahrain originate from the kilns of the Longquan region in the: south of the province of Zhejiang (south-eastern China). Their production covered the period of the southern Song (1127-1279) and continued until 16th Century.

The piece most frequently encountered is a conical bowl, the outside of which is decorated with a molded lotus petal motif: next come dishes, and an incense-burner. The body varies in colour from greyish white to grey; the glaze, often crackled, varies from green to blue green and dark olive green. Though in most cases it is difficult to date these objects precisely, two periods are easily distinguishable: the first (12th) includes 70% of the material; the second, represented almost exclusively by dishes, runs from the 14th to the 16th century and constitutes about 30% of the material.

The pieces are (Fig. 14)

1081 (19-20): two sherds; 1051 (41): 3 sherds.

All these fit together to form a bowl of conical shape with moulded lotus petal design on the outside (H. 7cm.8, D. mouth ca. 20cm , D. foot 4cm.7). The body, rather slender, is of greyish-white porcelain. The glaze is relatively thick, crackled, of jade green. The glaze covers the bowl entirely except for the foot frim; there is a brown fringe where the glaze comes to an end at the foot. Convex base with a conical accumulation of glaze in the centre. 12th-14th Century, probably made in the kilns of Dayao, near Longquan.

1286 (1): fragment of a small conical cup

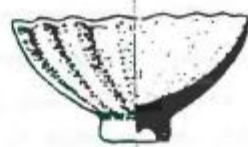
H. 4 cm 8, D. mouth circa 10 cm. Small, deep cup with fluted sides and foliate rim, standing on a small but rather high foot enclosing a glazed convex base conical in the centre. Very light grey porcelain covered with a celadon blue-green glaze of an uneven thickness. Tiny bubbles within the uncrackled glaze. The: cup is covered entirely with the glaze except for the foot rim: there is a reddish-brown fringe where the glaze stops.

Similar pieces have been found in the Philippines (d. Chinesische 1977: no. 9-10) and at Fostat (cf. Gyllensvard 1975: p. 106 and Plate 19 (1-6).

13th Century probably made in the kilns of Qikou near Longquan. This cup was found at the later level dated by the Salgharid coins minted between 1231 and 1261.

1371: sherd from the base of a small incense-burner

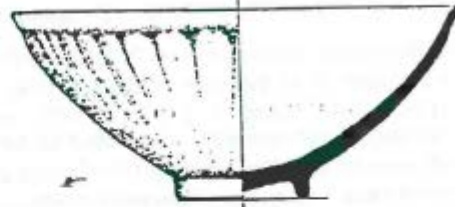
D. Max. 7 cm H. 2 cm 6. D. of the base 4 cm 2. Incense-burner with straight sides and three short, clumsy feet. The circular base is as high as the feet. The body, rather thick, is of grey porcelain. The glaze is fairly thick, very shiny, brownish-olive in colour. Tiny bubbles within the glaze which stops just above the base having a red fringe. The base is unglazed 13th or first half of 14th Century. The level where this sherd was found seems to be the same: as the level of 1286 (1) and gives a 13th Century date.



1286



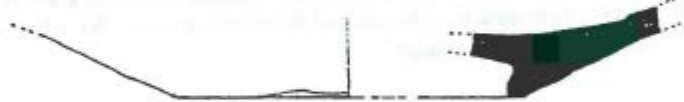
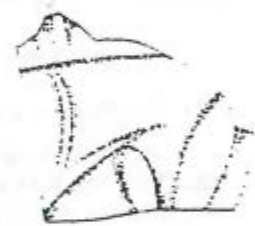
1371



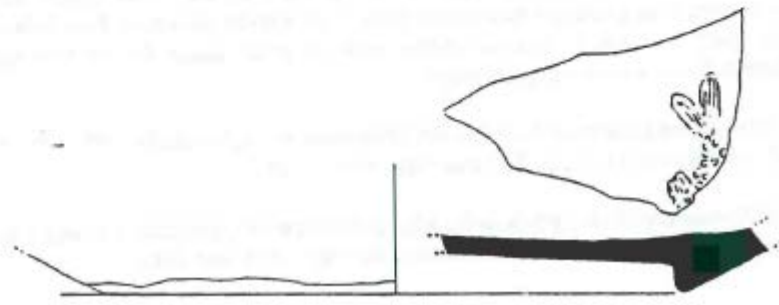
1051.41 1081.19



1082.1



1000.10



1249.1



This kind of incense-burner is well represented among the sherds from Dayao kilns (cf. Palmgren 1963: p. T45 and T 123 and Plate 14. no. 13) and was exported to the Philippines (cf. Chinesische 1977: no. 88) and to Korea (cf. Special Exhibition 1977: no. 80-86).

1151: sherd from a dish with fluted sides, girded by horizontal band

H. 4cm. (I) L. 5cm. Light grey porcelain covered with a crackled blue-green glaze. The glaze, full of minute bubbles, extends over the rim of the base, leaving a circular band of unglazed paste at the base. 13th- 14th Century. Probably made in the kilns of Dayao (cf. Palmgren 1963: p. 105, no. TI03). This shape is very well represented among the Chinese celadon ware exported to south East Asia.

1189: sherd of the rim of a dish

L. max 8cm 2, W. max. 4cm; the diameter at lip seems to have been about 20cm. Light grey porcelain covered by a rather thin, uncrackled yellowish-green glaze. Tiny bubbles within the glaze; grooved inside walls, 13th-14th century.

1249 (1): five sherds fitting together to form the bottom, of a dish

L. max. 12cm.2, W. max. 9cm. The diameter of the foot seems to have been about 22cm. The thick body is of light grey porcelain covered with a crackled bluish celadon glaze. The glaze covers the sherd entirely except for the foot-rim where the paste is burnt reddish-rust. The low foot continues the outline of the walls of the dish but is straight on the inside, on the bottom of the dish above the foot. A small molded fish. 14th century.

1000 (10): sherd from the bottom of a dish

L. max. 8cm.8, W. max. 7cm.7, H. 2cm.3, H. foot 1cm.2. The interior diameter of the foot seems to have been about 12cm. The thick body is of very light grey porcelain covered with a crackled green glaze. The glaze covers the sherd entirely except for foot-rim; there is a reddish-brown fringe where the glaze stops. The bottom of the dish is decorated with petals and leaves (?) cut beneath the glaze. The undercut foot forms an acute angle with the base. 14th-mid-16th century, probably Dayao kilns.

1082 (1): three sherds from the bottom of a dish

Largest sherd: L. max. 10cm, W. max 6cm, H. foot 1cm.3, D. foot 5cm.7, D. base 4cm.2.

Light grey porcelain with a thin, uneven crackled bluish-green glaze. Fairly high, undercut, glazed foot-rim. Partly unglazed base. The bottom of the dish is decorated with a lotus flower cut under the glaze. 14th-16th century.

2. Blue and White Ware

Nearly all the blue and white porcelain found at Qal'at al-Bahrain belongs to the Chinese production of the 16th Century.

The pieces are:

1037 (1): Two sherds from the side of a bottle

Large sherd: H. 7cm.5, W. max., 8cm.5

Thin white porcelain body decorated on the outside with a lotus scroll with spiky leaves painted in cobalt blue under the glaze. The glaze is crackled, bluish, slightly wavy in places and full of small bubbles. The designs are painted without outline: the blue is strong with brownish-black stains. 14th century.

A similar treatment of the lotus flower can be seen on several contemporary dishes: see Smart 1975-76: Plates 76b, 77a-b, 78a; Pope 1970: Plate 3; Fujioka 1970: fig. 13.

1037 (3): sherd from the scalloped rim of a cup

L. max. 4cm.4, H. 1cm 4.

Thin and brittle white porcelain painted blue under the glaze. Designs of sketchy scrolls on the interior and of a knotted ribbon with floating ends on the exterior. "Kraakporselein", second half of the 16th century. Two bowls of similar external design appear in the painting "Banquet Piece" (1611) by Nicholas Gillis (private collection, England) See exhibition "The Art of 17th century Holland", National Gallery, London, 1976 (No. 44).

1069: seven sherds from a dish.

L. 16cm, W. 13cm.5. The diameter of the foot seems to have been about 20-25cm.

White porcelain covered entirely with a bluish glaze except for the foot-rim. The foot rather high is undercut with a slight slant on the inside. The base shows radial marks and concentric marks under the glaze. Accretions of kiln sand on the foot-rim. The designs are painted in deep violet blue. The central pane shows landscape or garden scene with deer standing by a river, rocks and bamboo in the foreground. The whole design is surrounded by two concentric

rings painted in blue. The cavetto of the dish is plain. The thick outlines of the designs are filled with washes of blue which have often run over the edges. On the outside, a band of sketchy scrolls around the foot. On the base is visible the end of the inscription "...nian zhi" ("made in the year..."):

This dish, despite the thickness of the body and the presence of a reign mark, has nearly all the characteristics of Kraaksporselein, including the imperfections of the glaze. Second half of the 16th Century.

We are tempted to attribute this dish to the end of Jiajing's reign (1522-1566), perhaps to the years 1550-1566. Our estimate is based upon the study of the piece itself and on comparison with other dishes of the same family.

The most similar dish is no. 29148 from the Ardebil collections which bears the Jiajing mark (cf. Pope 1956: Plate 91).

Another very similar dish in the Pusat Museum, Jakarta (no. 2402. cf. Ridho: no. 255) bears a Yuande mark. This mark recurs frequently during the Jiajing reign, but it also appears during the Wanli period (1573-1620).

This type of decoration (landscape with deer) more crowded (with decorated cavettons) and slightly modified, continues on Kraaksporselein pieces at least until the end of the 16th century.

3. Glazed Stoneware and White Porcelain

1037 (2): sherd from the bottom of a dish.

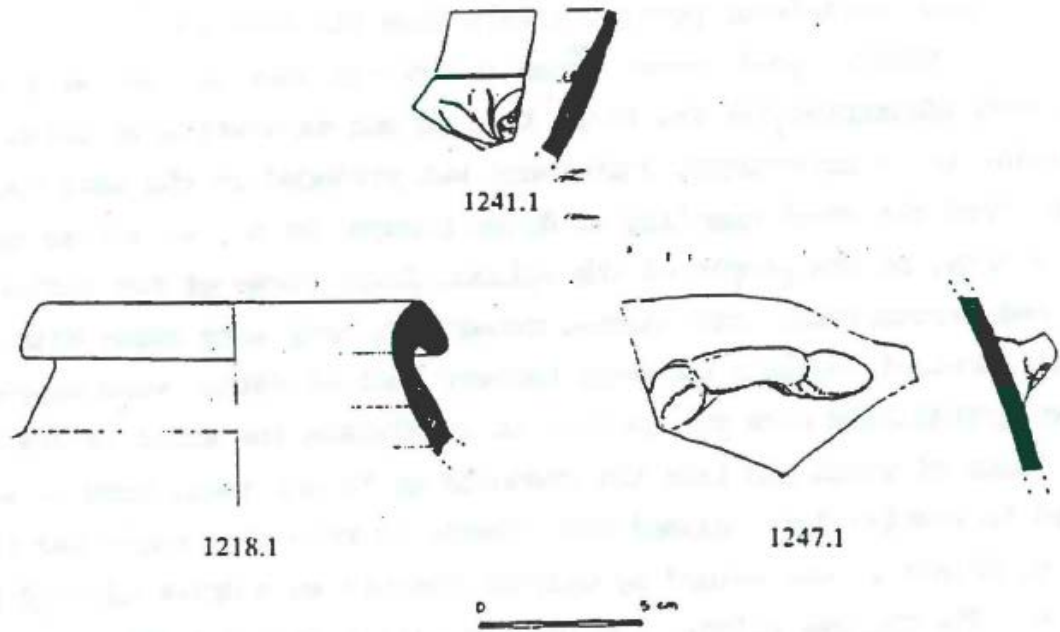
L. max. 10cm.3, W. max. 9cm.2, H. foot 8 mm. The diameter of the foot seems to have been about 14cm.

Thick, beige-grey stoneware body covered with a thin, glossy, crackled glaze of a transparent green hue. The glaze stops before the foot. The foot-rim, the inside of the foot and the base are unglazed. Flat foot-rim. In the centre of the bottom, two concentric circles. 14th century.

1218 (1) : sherd from the neck of a jar or of a bottle

(...)

Out-turned lip. Grey stoneware. Dull chocolate glaze on the rim, glossy dark-brown glaze on the neck and the shoulder. On the inside, a single coating of glaze of a light chocolate hue. 15th century (?).



Glazed stoneware and white porcelain

1247 (1): sherd from the shoulder of a jar

W. max. 9cm.2, H. max. 4cm.8.

On the shoulder, a small loop handle. Fine-grained but impure buff-grey stoneware body covered with an uneven dark brown glaze. The inside of the jar is unglazed. 13th century (?)

1241 (1): sherd from the rim of a cup

H. 4cm.8, W. max. 3cm.1.

Rather thin greyish-white stoneware body; thin transparent glaze. The mouth-rim and the inner side of the rim are left unglazed. Interior decoration of carved lotus flower, the petals and pistils standing out in light relief. Ding-type ware, 13th-14th century.

1121 (1): sherd from the lower part of a small dish

W. max. 2cm.2, H. max. 1cm.8. the diameter of the foot seems to have been about 5cm.

Thin, chalky-white porcelain-like body covered with a transparent glaze which stops irregularly above the foot. The low, rounded foot and the base are left unglazed. On the outside above the foot moulded decoration with leaf (or petal) pattern. 14th century, kilns of Dehua (Fujian province). A large amount of ware of this type has been found in the Philippines (cf. Addis 1967-69: Plate 30b; Loesin 1967, Plate 69).

One can wonder what goods were loaded in Muslim ships when they sailed written sources often mention horses, of which Indian rulers were very fond of. Many horses were bred in Arabian Peninsula and from there sent to Bahrain and Oman, waiting for being shipped. Of course no trace of these exportation remains, no more trace of pearls fished at a very large scale around Bahrain islands: it was, at that time, the most famous place for pearl fishing and because the special beauty of these pearls, they were sold everywhere. A Chinese written source mentions a man, native of Bahrain, but living from a long time at Canton. When he died, this man left several barrels of pearls, likely from his country.

Another good, never quoted in written sources, as far I know, has been identified, for the first time in our excavation at Qalat al-Bahrain: it is date-honey. This honey was produced in the ware-house itself, from the great quantity of dates brought here, as income tax or tribute, by the people of the island. Seven rooms of the fortress had been transformed into “date-incubators”: they were rooms with small parallel channels on which baskets full of dates were heaped up. Heavy grindstones were put on them to accelerate the sweat of the fruits, the juice of which ran into the channels up to the tank. Then it was pureed in special jars, closed and shipped; we know this honey was exported to China: it was valued by Chinese Buddhist as a drink allowed by the Master. The Chinese pilgrim I. Tsing, traveling from 671-695, refers to his beverage.

I should come now to my conclusion. An important piece of the story of the trade between South East Asia and Islamic countries in the Persian Gulf has been betrayed by the discovery of the Bahrain warehouse. It reveals the turning point in the development of the Persian Gulf trade between the beginning of Islamic era and the rise of modern time, when Europeans appeared in Indian Ocean. I will give some clues of this process. Started at the beginning of Christian era maritime trade between Arabic countries and South West and East Asia made great strides after the rise of Islam. First, the Muslim merchants were able to freely organize the trips of their ships and when they return, to choose their port of call, provided that customs were paid to representatives of the Caliph. After the fall of the central power at Bagdad, neither to Seldjuk rulers, nor the Mongol ones were able to extend an efficient control over the Persian Gulf and Oman Sea.

Then, one emir after another started to organize commercial empire at his own profit. The condition for that was:

1) to have an armed fleet;

- 2) to possess some harbours where merchant ships were forced to call; in these places, customs and part of the cargo were sized by the emir officers;
- 3) to control the coast all around to prevent the ships to call elsewhere, escaping the custom duties.

Emirs of Qays, at the 11th century, were the first, so far we know, to make use of such a control on the maritime trade in Persian Gulf. After them, Atabaks of Fars, and then Kings of Hurmuz held this maritime empire, until they themselves submitted by newcomers in the area, the Portuguese, at the beginning of the 16th century. The Qalat al-Bahrain warehouse clearly mirrors such a policy: trading ships were forced to call at this place by a garrison able to watch ship movements, from the fortress as well as from a tower on the coral reef, at the entrance of the channel, a mile off the fortress.

The emir's officers were collecting customs and keeping a part of the cargoes: it is why so many Chinese artefacts have been found in this building. The place itself has been chosen a little bit far from the city of Bahrain and very well fortified: by the wall with towers and also by a large moat isolating the fortress as in an island. Salgharid garrison and precious goods were therefore very secure against all sorts of attack.