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# Study on junk-trade ceramics during 13th 16th Century AD salvaged from the Gulf of Thailand

By

#### Sayan Prishanchit

Underwater Archaeology Section, Archaeology Division, Fine Arts Department

# THAILAND

# **INTRODUCTION**

The Thai-Malay Peninsula and the Indonesian Archipelago are lands between the Indian and Pacific Ocean. A topographic combination featuring narrow strip of land with both sides exposed to the sea, an archipelago, and the Gulf of Thailand create an inland sea makes this region ideal for sailing through and stopping over. Since this area is famous for its spices, forest products, and other exotic goods, a stop-over might not be made only to obtain food and water supplies but also to purchase and sell merchandise. Since ancient times southeast Asia has been known as the gateway between east and west. Through time, the same trade routes have been traveled regardless of the type of vessel, sailing technology, or merchandise.

The Archaeological evidence along the coast of Thailand, both in the ground and underwater, indicates a busy traffic in trade within Thai territorial waters. Ships of many origins dropped anchor here : "Junks" which were used among the people from the Far East and Southeast Asia, European "Carracks", "Perahus" from Indonesia and "Dhows" which were very much part of the atmosphere. New technology and religious beliefs emerged as new cultures and traditions were introduced. Migrant settlements were established. Intermarriage between the foreigners and the local people occurred, and in time, the area of Southeast Asia became cosmopolitan.

Although sailing through the gulf and along the coast was safer and more convenient than sailing across the ocean, the sea could never be trusted and safety could never been guaranteed. Not all the voyages met with success. Vessels with their cargoes sank offshore, some of them finding their graves in the Gulf of Thailand.

The state of preservation of some evidence under water is far better than in the ground, and because ceramics enjoy a greater physical durability than other organic and inorganic materials they are a major information source in archaeological and historical studies with respect to international trade routes and the relationship between manufacturing sites and the destinations of the products. However, more and more of this worthwhile human heritage is losing its archaeological value or has lost its value to the public because its context has been destroyed or because it has been purchased by private collectors.

Since 1976 the Underwater Archaeological Project under the Division of Archaeology, the Fine Arts Department, surveyed and excavated 25 sites within the Gulf of Thailand. Ceramics from 19 of these sites have been rescued and conserved by this team. More than 10,000 pieces of ceramic material have been studied and grouped according to their origins into Thai, Chinese and Vietnamese (Annamese), all of which can be dated to between the 13<sup>th</sup> and 18<sup>th</sup> Century AD.

It is possible to speculate on the relative length of an ill-fated voyage on the basis of the size of the vessel since the longer the voyage, the larger the storage capacity required and the amount of merchandise needed to make the trip worthwhile. Ceramics found in the wrecks cannot be classified according to their shape and function alone – large jars for storing liquid and dried food, smaller jars for powdered spices or cosmetics, cooking containers, and table ware – since one should also assess the evidence according to its quantity, purpose as merchandise or utility ware. While a large quantity of "Sankalok ware" was found neatly stacked and lined up in the cargo holds or the wreck at Ko Khram (Sattahip), only a couple of "Sankalok" pieces were found at the Samui Wreck-Site, which perhaps indicates that the latter were personal utility wares.

# A. Thai Ceramics

Most of the Thai ceramics found with the wrecks were manufactured at one or other live major kiln sites, namely, the Sukhothai Kiln Sites, Ban Ko Noi and Ban Pa Yang Kiln Sites in Sisatchanulai District, Sukhothai Province; Mae Nam Noi Kiln Site, Singburi Province; Ban Bang Pan Kiln Site, Suphanburi Province.

# 1. Sukhothai ware

Sukhothai ceramics can be distinguished by their unique decorative character. Dense fish and floral decoration formed by rough brush strokes or a single fish decorations in black or brown on a buff slip but with under clear glaze which stops before reaching the bottom of the dishes and typical. Dishes are quite thick and the buff slip was intended to cover the greyish body fabric. Marks from the feet of disk supports are observable inside the dishes. Surkhothai ware was found in the Khram (Sattahip) (Howitz, 1978: 26-27) and Prase wrecks (Creen and Harper; 1983: 74-76). The Surkhothai ware in the wrecks was mostly in bowl and plate form.

#### 2. Sisatchanalai ware

Sisatchanalai ware is known as "Sankalok Ware". Its production areas are along the Yom River Bank near the ancient Sisatchanalai City, from villages presently known as Ban Pa Yang and Ban Ko Noi. The production period was during the 11<sup>th</sup> to the 16<sup>th</sup> century AD. (Prishanchit, 1988). Sisatchanalai enjoyed its own ceramic (above 1200 C) and achieved a stoneware stage; the body was thick and the fabric very fine. The Sisatchanalai craftsmen used tubular supports which left a circlular mark on the bottom of the dishes.

The ceramics can be divided into four categories: -

- 1. Chaliang ware with a dark greyish body and olive glaze
- 2. Brown glaze over dark body, opaque-white glaze over white body
- 3. Turquoise blue to yellowish green celadon over incised decoration-this category is the highest quality ever produced at the kiln site.
- 4. Black or brown design under clear glaze.

#### 3. Ceramics from Mae Nam Noi Kiln site, Central Thailand

This kiln site is the largest among all those in central part of Thailand. It flourished during the Ayudhaya Period  $(14^{th} - 17^{th}$  Century AD), the kilns lining the west bank of – Mae Nam Noi (branch of Chao Phraya River) in Choeng Klad Sub-district, Bang Rachan DIsctrict, Singburi Province. This kiln site was discovered and excavated during the year 1988-1989 under the Research Section, Division of Archaeology (Prishanchit, Mae Nam Noi Kiln, 1988).

Most of its products were brown glaze storage jars of various sizes (Mataban jar) with four lags (Prishanchit, 1988). These storage jars were found at wreck sites in many parts of the world as in almost all the wrecks in the Gulf of Thailand namely, Khram, Pattaya, Si Chang I, II, II, Samui, Don Hai, Samae Sarn and Bangkachai. Other products from this kiln site included ovoid bottles with two lugs, pear-shaped with flared mouth for storing spirits, water jugs, mortars and large bowls.

# 4. Ceramics from Ban Bang Kiln Site

This site is on the bank of Suphanburi River at Ban Bang Pun and Ban Po Phraya, Pihar Daeng Sub-District, Muang District, Suphanburi Province. The productive period was during the 13<sup>th</sup> to 17<sup>th</sup> century AD. Most of its productions were large and heavy-duty storage "Mataban" jars, flared-mouth jars, and globular pots. These containers were not glazed but decorated with unique stamped designs such as sema-leaves, lotus petals, human figures, horse and/or elephants in rectangular frames, rice designs and other incised designs. Only two types of Ban Bang Pun products were found at the wreck sites in the Gulf of Thailand, namely a large heavy-duty water jar and a trumpet mouth shaped jar.

# 5. Miscellaneous utility wares from indeterminate origins

These utility wares include bowls, pots, wood stoves, lids and kendi, which exhibit a very common style. They have been found on the wrecks in the Gulf of Thailand and were also found associated with terrestrial archaeological sites all over central Thailand. Most of these were high-fired earthenware which could be achieved in any controlled open firing. The pots are made of high tempered clay which, because it is highly porous, allows a high liquid absorbance and also allows the pot to sustain heat during cooking.

Based on the distribution of the wares and on the reason stated above, it appears that the ware could have been produced locally anywhere in central Thailand and the specific manufacturing sites cannot be definitely determined.

Pots for many purposes were found at all the wrecks. Most of them were hand-made and finished by slow turning at appear body and rim. The globular bottoms of the pots were – strengthened with the use of paddle and anvil which left marks of mattress or cord design patterns. The stamped decorations are common and usually placed at the shoulder round.

# B. Vietnamese ceramics

Vietnames or Annamese ware experienced its peak of production between the 14<sup>th</sup> and 17<sup>th</sup> century AD. Vietnamese pieces have been found from Japan and Southeast Asia to as far as the Middle East.

Professor Tran Quoc Voung, the head of the Archaeology and History Department at Hanoi University reported a number of dragon kilns and frog kilns at the site in Nam-Sach District near Hanoi. Kaolonite and feldspar were probably taken from the Red River delta area. Evidence of Vietnamese ceramics and other artifacts indicate that the port at Van Don Bay were in business from the 6<sup>th</sup> century AD. (S. S. C. S., 1982:23).

Although a large number of Annamese ware were found, because of the political difficulties in Vietnam the specific manufacturing sites of these products still cannot be determined. Vietnamese ceramics exhibit unique characteristics of glazing and firing technique. Most of the pieces stacked up during firing have the mark of a ring of glaze which was wiped off the inner base purposes of firing. There are four or five spots on the inner base where the feet of the support rested during firing. On the exterior the glaze stops before reaching the base. Vietnamese ware recovered by the excavation and survey at wreck sites in the Gulf of Thailand, especially from the Khram, Rang Kwian and Si Chang iii Wreck Site, can be classified into three categories: monochrome glazed in brownish black, green and amber colour; blue and white ceramic with the blue colour painted on the buff-colored body followed by a clear glaze which stops before reaching the base, and cracks leaving dark red to chocolate colours on the bare base; and unglazed stoneware jars.

# C. Chinese ceramics

Along the coast and among the islands of Southeast Asia, at the ancient occupation sites, burial sites, ports and as well as wreck sites, Chinese ceramics from many manufacturing origins and production periods (from Tang Period ( $7^{th} - 10^{th}$  century AD) to Qing period ( $20^{th}$  century AD), were found associated with other archaeological artifacts and features (Chandawit, 1987). The inhabitants of Southeast Asia not only bought and used Chinese ceramics but also acted as middlemen and traded them.

At many ancient ports along the Thai-Malay Peninsula coast such as Laem Po, in Surat Thani Province, the Province of Nakhorn Si Thammarat, Pattani, Phang Nga Province and Malaca, large numbers of Chinese ceramic of import quality have been found. From ten excavated wreck sites in the Gulf of Thailand, e.g. Chinese ceramics were found in varying amounts at Ko Kradat (Howitz, 1979), Pattaya (Green and Harper, 1983), Rang Kwian, Ko Rin and Samui wreck site (F. A. D.., 1988) and also found at the Si chang I, II, III (Green and others, 1987). The popular varieties along the trade routes are green glaze celadon and blue and white ceramics. Most of the celadon ware was products of the Longuan Kiln Site, in Zhejiang Province during the Yuan Dynasty (14<sup>th</sup>-15<sup>th</sup> century AD). This celadon is mostly in the form of bowls, plates and jarlets. On the other hand, blue and white porcelain pieces were major items of the Chinese export market during the 14<sup>th</sup> and 19<sup>th</sup> centuries AD. During the Yuan Dynasty blue and white porcelain pieces were only exported as far as to Arabian countries, but in later centuries the market grew and different qualities and designs of this blue and white mass-produced porcelain were trade to other parts of the world. The production sites of these ceramics are Dehua Kilns, in Fujians and Jindhezhen kiln Complex, in Southern China.

The best quality is the Kraak Porcelain produced during the Wan Li Reign (1573-1619). Moulded porcelain of ordinary and polygonal shapes with fine designs inspired by Taosim were mass-produced. The Carnea type of ship which was sailed by the Portuguese and Dutch gave its name to this blue and white ware when it was also found in the Dutch East India Company's Witte Leeuw wreck which sank in 1622 near St. Helena Island, in the Atlantic Ocean.

The second quality of blue and white is the ceramic traded in the Swallow area which was also produced during the Wan Li Reign. Some of these ceramics, which are mostly bowls and plates, were overfired so the cobalt blue paint burnt through the clear glaze. The products were not neatly finished, the running glaze at the bass collected sand parties during firing.

Although evidence of blue and white ceramic on the coast sites of the Thai-Malay Peninsula suggests that the products came from Yuan, Ming and Ying Dynasties.

#### D. Ceramics of Unknown Origin

A large amount of earthenware Kendi were salvaged from the Si Chang I, (Green and others, 1983:49) the Khram shipwreck (Pensak C. Howitz, 1976:25) and Ko Rin site. The kendi mentioned are fluted vessels with bulbous mammiform or luffa fruit-like spout and flat base. Ridge disc-like collar and tubular-trumpet-shape neck. Back and gray earthenware body unglazed. The origin of manufacturing is still questioned, but the similar fluted Kendi from the south China kilns was illustrated in the Oriental Ceramic Society of Hong Kong, 1979: 145 No. 159. The large amount of them discovered at the shipside in the gulf of Thailand clearly indicates as cargo loading in the ship.

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