

# **The diffusion of the material culture in the early period of the trade globalization: A preliminary study on silver coins and shipwreck porcelains found in East Asia of the 16th and 17th centuries**

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## **Abstract**

*In the 16th-17th centuries, world trade patterns greatly changed. East and West entered a period of an enormous amount of sailing since the 1500s. In the East, the traditional Asian maritime trade network - which mainly relied on maritime merchants of Southeast China, was gradually restored. After the discovery of the Americas in 1492 by the Spanish kingdom of Castille, and the establishment of the Eastward passage to India by the kingdom of Portugal in the late 1400s, both Spain and Portugal arrived in Asia-Pacific in the 1500s and interacted with Eastern Asia local cultures. This set up the early globalization process. The silk and porcelains from China, spices from Southeast Asia, textiles from India, and coins from Mexico and Japan, were all important materials and media in the global trade of this period. Dozens of shipwrecks dated to this period have been identified as both East Asian maritime vessels (including Chinese junks) and European exploration and trading vessels in Southern China, Vietnam, the Philippines, Indonesia and Malaysia. Chinese porcelains were the main cargoes in all of them. We also find a growing number of silver coins at the archaeological sites and shipwrecks of this time period. These interesting maritime archaeological materials show early pan-Pacific trading navigation between eastern Asia and the Western world. They help reveal the early international maritime trading history between eastern Asia and the West, early European colonization in eastern Asia, and resulting issues of expanding globalization.*

**Key words:** Shipwrecks, East Asia, Kraak porcelain, Zhangzhou wares, Early globalization

## **Introduction**

In the early 1500s both the Portuguese and Spanish of the Iberian kingdoms reached Southeast Asia and burst into the traditional trade network of Asia. They interacted with local cultures in East Asia and established the early global system through long-distance trading. Dozens of shipwrecks dated to this period have been identified in East Asian seas as both East Asian maritime vessels (e.g., Chinese junks) and European exploration and trading vessels. We also find a growing number of silver coins at the

archaeological sites and shipwrecks of the same time. They help to reveal the early international maritime trading history between East Asia and the West.

### **The Discovery of the Shipwrecks in East Asia**

Shipwrecks of this era have been investigated in southern China, Vietnam, the Philippines, Indonesia and Malaysia. Chinese blue-and-white porcelains were the main cargoes. After a preliminary analysis, we can put these shipwrecks into several groups according to the time sequence. From the end of the 15th century to the early 16th century, just before the advent of Europeans, the pattern of trade in East Asia had changed. The Lena Shoal wreck (Goddio et al., 2000) discovered off the Philippines, and the Brunei wreck (L'Hour, 2001), are the representative remains of this period. The porcelains from these wrecks are provincial wares of Jingdezhen, most of them belonging to the reign of Hongzhi (1488-1505). They often have decorations of lotuses, other floral designs and classic scrolls on them. The bowls and dishes are large, and many of the shapes, such as pen boxes, covered boxes and the angular ewers, hint at the Moslem market. Many of these vessels have been found in the Middle East and even in East Africa. Wares of

this type have also been found all over Southeast Asia (Carswell, 2000). The next group of shipwrecks include Niushijiao shipwreck (Fujian) (Li, 2012), Panshiyu shipwreck (Xisha Archipelago) (Zhao, 2012), San Isidro shipwreck (Luzon, Philippines) (Dizon and Orillaneda, 2002), Xuande shipwreck and Singtai shipwreck (Malaysia) (Brown, 2009). They include Chinese junks, vessels of Southeast Asia and also

Portuguese ships. The main cargoes are provincial blue and white wares from Jingdezhen. But the dense patterning in sub-Yuan style which hints to the Islamic market begins to diverge. We can also find the early productions of Zhangzhou wares. Similar wares to those from the San Isidro Wreck also have been found in Southeast Asia, such as in the Philippines (Kamer, 1963) and Indonesia (Umarah, 1999). The chronology of these shipwrecks is around 1520s-1550s.



*Fig.1 Jingdezhen Porcelain from Nan'ao No.1 Shipwreck. (Guangdong)*

The third group of shipwrecks include Nan'ao No. 1 Shipwreck (Guangdong) (Sun, 2012), Bei Jiao No.3 Shipwreck (Xisha Archipelago) (The Center for Underwater Archaeology of National Museum of China, 2006) and Wreck 2 of the Royal Captain Shoal (Philippines) (Goddio, 1998). Blue and white porcelains were also the main cargoes of this group of wrecks. They included the thinly potted wares made of hard, white porcelain with exquisitely drawn traditional Chinese motifs of happy propitious implications, which were produced from the late Jiajing period through the early Wanli period (Fig. 1). The style of the porcelains had already changed greatly. Certain types were already being created for the export market in Europe. A very popular kind of plate had a central naturalistic motif with decorated rim, usually flat, with an undecorated cavetto. Another noteworthy phenomenon of this time was the abundant emergence of Zhangzhou ware (Figs. 2-3). They were the main cargoes of Nan'ao No.1 Shipwreck and Wreck 2 of the Royal Captain Shoal. They are mainly the productions of Er Long kilns of Zhangzhou (Fujian Museum, 1997). This type of ware was also excavated from sites of Philippines and Indonesia. A few similar wares were



*Figs. 2-3 Zhanzhou wares from Nan'ao No.1 Shipwreck. (Guangdong)*

found in the Manila galleon of San Felipe (1576) (Von Der Porten, 2008). The typical

Kraak panels were very scarce and only a few were designated early Kraak or proto-Kraak. The chronology of this group is around the 1560s to the 1580s.

The fourth group include the vessel San Diego (Philippines, 1600) (Ongpin Valdes and Diem, 1993), the BinhThuan Shipwreck (Vietnam, 1608) (Flecker, 2004) and the Wanli Shipwreck ( $\pm 1625$ ) (Sjostrand and Syed Idrus, 2007). The San Diego vessel was a Manila galleon that sank off the coast of Nasugbu in the province of Batangas. One of the major items she carried on board was fine China, Kraak ware (Fig. 4), and also large quantities of blue



*Fig. 4 Kraak Porcelain from the vessel San Diego. (Philippines, 1600)*



*Fig. 5 Kraak Porcelain from the Wanli Shipwreck. (Malaysia)*

and white porcelain and Zhangzhou ware, which was exported particularly to Southeast Asia. The majority of the entire remaining cargo of the BinhThuan shipwreck, which had a Chinese shipbuilding features, consisted of blue and white and over glazed enamel-decorated Zhangzhou ceramics. The excavation of The Wanli Shipwreck in Malaysia's territorial waters revealed the largest quantity of Chinese Kraak porcelain which included a major cargo of some 37,000 pieces (Fig. 5). Kraak porcelain became extremely popular in the European markets. From these data we can see that the distinctive and paneled type of Kraak porcelain emerged abundantly in 1600 or so and swiftly became very popular in the first part of the 17th century. Zhangzhou wares were also produced and exported abundantly this time and much of them imitated the paneled decoration of Kraak porcelain of Jingdezhen. The date of this group should be the 1590s to the 1620s.

## **The Destruction of the Traditional Trading System in Asia and the Early Global Trading System**

In the late 15th and early 16th centuries, just before the advent of the Portuguese, the trade network dominated by the Islam in the Southern Seas had been set up. With the Islamic culture spreading widely in Southeast Asia, some important Islamic regimes were established successively, such as Malacca, Saltanah Sulu, Borneo, etc. The old China was also included in the trade system. With the decline of Chinese official maritime trade, the private merchant forces began to rise. The site of Penny's Bay (Hong Kong) (Lam, 1989-1992) was an import private trade port of that time. As the representative of the Islamic culture, the fine porcelains of Jingdezhen in the middle Ming Dynasty were widely found in the sites and shipwrecks spread from East Africa to Southeast Asia. With the coming of the Portuguese and Spanish who pillaged and controlled the important trade of Southeast Asia at that time, the traditional trade system in the South Seas was completely broken. Macao and Manila (Philippines) became the important trade centers of this period. 1) In the beginning of 16th, the Portuguese conquered and took the port Goa in India and Malacca in Southeast Asia to establish presence for trade affairs. They gradually entered into the trade network in Asia. For a long time before 1557 they also took contraband trade with Chinese private maritime merchants in the islands near to the coast of southeast China, in the ports of Fujian, Guangdong and Zhejiang (Teixeira, 2000). Chinese scholars discovered the site of Shangchuan Island, Guangdong (Huang and Huang, 2010). Quite massive quantities of 16th century export ceramics were found, including some specially ordered wares for Portuguese. This verified that Shangchuan Island played an extraordinarily important role in the early Sino-Portuguese trade history during the 16th century, while the Xuande Wreck is thought to be the direct evidence of the Portuguese smuggling activities in the seas of East Asia before they settled in Macao in 1557. From the middle 16th century to the early 17th century Portuguese almost monopolized the trade routes of the Far East. After they settled in Macao in 1557 and Nagasaki in Japan in 1571, the Portuguese began their long distance and massive global trade. They took Macao as the base to carry on a triangle trade in the East Asian seas, in which China was the center. Macao rose in prosperity as it became the most important and largest

commodity distributing center of Asia. Recently, a large quantity of Chinese export porcelains was excavated in Macao. Most of them are Kraak porcelain shards, including dishes and bowls with round and oval mouths, with reserved panels and protruding rims. A small number of red and green shards of bowls and boxes dating from the Zhengde and Jiajing periods which are similar to those of the samples found in Shangchuan Island. They showed the important position of Macao in the cultural exchange between East and West (Liu, 2010). There is also a large quantity of archaeological evidence along the Indian Ocean route from Goa to Europe (Sila Tripati et al., 2011; Liu et al., 2011; Castro, 2005).

In 1571 Spain founded Manila City to establish rule in the Philippines and partake in Asian trade. They quickly established the trade with Chinese private merchants of Southeast China and the Manila Galleon trade route was soon prosperous. It functioned as a long distance and large-scale sea trade route connecting the Asian world with the American Continent until the early 19th century. Many Asian goods such as silks and porcelains were exported by the Spanish galleons and on the other hand, many New World goods, including Mexican silver, were brought to the Asian world. Except those from the shipwrecks of San Felipe and San Diego, the same style of blue-and-white porcelain productions from the Jingdezhen and Zhangzhou kilns were also found in the shell mounds of Indian Village sites at Drakes Bay, California (Shangraw and Von der Porten, 1981). Recently, more and more Chinese ceramics of this time were excavated from the archaeological sites of Mexico, Peru and other Latin American countries (Kuwayama, 2002). Those Chinese ceramics imported into Latin America included high quality productions from Jingdezhen. A large part of them were also pieces from Southern Chinese kilns, especially Zhangzhou ware. Chinese vessels returned from Manila always took back silver. This was clearly written in Chinese historical documents (Zhang, 2000). The profitable trade to Manila was almost dominated by the maritime merchants of South Fujian. Innumerable Mexican silver cargoes were brought into China, especially to the south of Fujian and east of Guangdong. They were once used as currency in people's daily life in those places.

A total of four hundred and twenty eight silver coins were recovered from the San Diego. Those that were cleaned were recognized as coins of Philip II (1556-1598), minted in

Lima and Philip III (1598-1621), minted in Mexico City. Most of them are irregularly shaped. People think this irregularity can mostly be attributed to the last stage of their manufacture wherein the excess weight of the coins was clipped off by the assayer to maintain their standard value. This early kind of silver coin is also found abundantly in the sites of South Fujian, such as Quanzhou, Zhangzhou, Xiamen, etc. Most of them were excavated from cellars, and also a few from tombs (Quanzhou Heritage Management Committee, Quanzhou Maritime Museum, 1975; Chen and Shi, 1981; Fang, 2011; Zhang, 1988). Most of these coins are also irregularly shaped (Fig. 6), probably because they are the early type minted from the late 16th century to the first part of 17th century. We can see the design of the Cruze Florenzada on the cross and Great shield of the House of Hapsburg, Spanish coat of arms. According to the study of British numismatic experts, most of them were minted in Mexico City, and others minted in Potosi and Segovia, Spain. From these discoveries, we can often see that many of the silver coins were cut into pieces; we can also see the using traces. This verifies the historical record that they were once used as the circulation in people's daily life. In 16th-17th centuries, with the arrival of Europeans and the large-scale intermediary trade practices they brought, East Asia was entangled into the global trade network. Chinese silk and porcelains, Southeast Asian spices, Indian textile, silver coin of Mexico and Japan, and other materials were the important goods and mediums of the global trade at that time. During this progress the style of the fine porcelains from Jingdezhen, as luxury goods, changed greatly. They used to be representative of material manufactured for the Islamic culture, but then changed to be products created for the export market of Europe, such as Kraak ware. On the other hand, the evidence from shipwrecks and other sites, for instance the lower quality products of Zhangzhou, shows they were produced mainly for the Asian market. This change implied the establishment of a new Asian trade system dominated by the Europeans.

### **The rise of Chinese private maritime merchants**

Chinese ancient junk wrecks spread over the southeast coast of China and Southeast Asia. It implied the further development of Chinese maritime merchants and they were very active in maritime trade. With the opening of the Moon Port, Chinese maritime merchants could trade abroad legally. With the arrival of the Europeans, they took large-

scale intermediary trade with Malacca, Macao, Japan, Manila, and were involved into the global trade network. They were active along Chinese waters from north of Japan to the south into Southeast Asian, playing an important role in the early global trade of the Westerners. They gradually became strong enough and changed into private armed groups. Guns and cannons are usually discovered in Chinese shipwrecks of this time, showing the conflict between private merchant groups and the government of the Ming Empire. It also shows the relationship of cooperation and competition between the Chinese merchants and the Westerners in 16th-17th centuries. At that time, the main way of trade the western colonists took was to establish bases at those ports where Chinese merchants often go and then transport the goods they shipped to the world elsewhere for profit. So both Portugal and Spain had taken active measures to attract Chinese merchants to trade. The early smuggling activities of Portugal along the coast of southeast China were carried out with the private merchants of Southeast China. During this process, Portuguese and private merchants of Southeast China, especially those of Fujian, associated more and more closely. They gradually took the place of Ryukyu and Malacca, to become the major trading powers in Asia (Ptak, 2003). After the Portuguese settled in Macao in 1557, more and more merchants from Fujian and Guangdong came and were enmeshed in the global trade.

After the Spanish set up colonial rule in the Philippines, the Philippines had few goods to trade. Their supply mainly relied on Chinese businessmen. So the Spanish soon established commercial relationship with Chinese merchants, actively encouraging Chinese merchants to trade in Manila, and the number of Chinese ships sailing to Philippines grew every year. The expanding trade in Manila based on the traditional Chinese and Philippines' commercial trade, became the real foundation of the Spanish Galleon trade. With the prosperity of overseas trade and ports along the coast of China, a series of handicraft and planting industries emerged and developed rapidly. The silk of Zhejiang, porcelains of Jingdezhen and Fujian, and even sugar and fruits were all produced and exported abundantly. Just as scholars have said, we should look at the late Ming Dynasty with the vision of globalization. At that time, China was involved in the process of economic globalization. Many European and American countries far away have been involved into the long-distance trade with China. With Chinese commodities,



mainly silk and porcelain, sold throughout the world, 1/3 or 1/4 of the world silver output swarmed into China as the means of payment.

### **Conclusions**

With the coming of the Westerners, the traditional trading system in Asia was destroyed, while the Europeans trade in Asia relied greatly on the cooperation with Chinese maritime merchants. It provided a broader overseas market for China along with the production and exportation of a series of handicraft industries in South China, such as silk and porcelain. So this progress also represents the rise of Chinese maritime merchants, especially those of South Fujian. In the Asian trade system dominated by Europeans, Chinese porcelain was an important good sold in Europe and in the interior of Asia. The change in decorative style and in the number of exports reflected how Europeans gradually deepened into Asian trade.

### **Acknowledgements**

First of all, I am gratefully acknowledge the generous assistance and valuable information provided by Professor Chun-Ming Wu who was once my supervisor and now my colleague of Xiamen University. I would also like to extend my sincere gratitude to those underwater archaeologists especially those of China. My research on this paper based on the sources gained by their laborious task and many information and photos were provided by them. At last, special thanks go to Professor María Cruz Berrocal who kindly invited and helped me a lot for this conference.

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