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Dutch demand for porcelain: The maritime distribution of Chinese ceramics and the Dutch East India Company (VOC), first half of the 17th century

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CHAPTER 2. The distribution of Chinese ceramics to overseas markets up to the end of the 16th century.

Introduction.

In this chapter, I discuss what types of ceramic items were shipped overseas during the Tang dynasty (618-907), the Song dynasty (960-1279), and the Yuan dynasty (1279-1368). The issue I address here is whether ceramics produced for the domestic market were adapted as to shapes and/or designs to suit foreign markets during these epochs. As the Portuguese and the Spanish arrived in Asia at the beginning of the 16th century, it would then not be surprising that they ordered specific shapes and dimensions, but to my knowledge no such documents have been discovered.¹ Nevertheless, it is well known that Iberian merchants presented motifs such as armorials, inscriptions related to nobility or the Church to the Chinese to be copied on porcelain items.²

In general, the ceramics produced in kilns in China were mainly intended to be sold and used domestically, but even before the Tang dynasty (618-907), ceramics had been transported abroad overland, using the Silk Road routes.³ Chinese ceramics have been found at numerous sites along these routes. For example, during the 1980s, the Inner Mongolian Institute of Archaeology researched the Mongolian city of Kharakoto in the Gobi Desert.⁴ Between 2000 and 2004, a German-Mongolian archaeological team

¹ T. Canepa, 'The Iberian Royal Courts of Lisbon and Madrid and their Role in Spreading a Taste for Chinese Porcelain in 16th-century Europe', in *Chinese and Japanese Porcelain for the Dutch Golden Age*. J. van Campen and T. Eliëns (eds.), Zwolle, 2014, pp. 17-35; T. Canepa, 'Silk, Porcelain and Lacquer. China and Japan and their Trade with Western Europe and the New World 1500-1644. A Survey of Documentary and Material Evidence', PhD. thesis, Leiden University, 2015, p.73: 'We do not know whether the Portuguese specified a preference of colour and/or decoration, or which European motifs or inscriptions were to be used (alone or in combination with others) in a particular piece'. M.A. Pinto de Matos, 'Chinese Porcelain in Portuguese Written Sources', *Oriental Art*, vol. 48, 2002/3, 2011, and *The R.A. Collection of Chinese Ceramics. A Collector's Vision*, London, 2016; C. Krahe, *Chinese Porcelain in Habsburg Spain*, Centro de Estudios Europa Hispánica, Madrid, 2016.

² Canepa 2015 (op.cit.), pp. 257-280.

³ The 'Silk road' actually consisted of several routes; there were two main ones, the northern route from Yellow river basin going northwards towards the Mongolian plateau through southern Siberia until central Asia where it split into two routes towards Persia. The second route passed through the provinces Gansu, Shaanxi through the 'Hexi corridor', to the Yumen pass to Loulan and the Lop Nur, then splitting to follow routes north and south of the Taklamakan desert to reach Samarkand/Bukhara. Another 'split' was a route towards Afghanistan and India. At the start of the 7th century, the city of Chang'an (already the capital during the previous dynasties) became a metropolis where traders from western regions came with their commodities. See: J. Hill, *Through the Jade Gate to Rome: A Study of the Silk Routes during the Later Han Dynasty, 1st to 2nd Centuries CE*, Charleston, South Carolina, 2009.

⁴ This caravan city was under Mongolian domination from 1226 until 1380 and was probably used as a garrison city. See: J. Carswell, *Blue and White Chinese Porcelain Around the World*, London, 2000, p. 70, notes 44-45. At the start of the 20th century, there were numerous archaeological expeditions. Sven Hedin (1865-1952) made three expeditions crossing the Taklamakan and Lop deserts between 1894 and 1908. From England, Aurel Stein made several expeditions in 1900, 1906-1908, 1913-1916 and 1930. In 1905,

excavated the area of Kharakorum, the capital of the Mongol empire in the 13th century and fragments of various types of Chinese ceramics were retrieved.⁵

Other research projects along the Silk Road have revealed new information on Chinese ceramics.⁶ For example, Almalik (Huocheng) in the western province of Xinjiang was the capital of the Chagaday khanate where Chinese archaeologists have found pieces of 14th-century porcelain as well as Persian inlaid metalwork.⁷ Chinese porcelain has also been found in Samarkand and in Azerbaijan; tiles with Chinese designs have been found in the hunting lodge of Il-Khan Abaqa (1265-1281).⁸

Over the last century various international archaeological teams have researched the site of Fustat (south of Cairo), revealing several dated strata with Chinese ceramics.⁹ From 1998-2001, a joint venture between Egypt and Japan resulted in a thorough report of this site (2500m²).¹⁰ These excavations have yielded over half a million Chinese shards, but none earlier than the 9th century. This supports the theory that the export of ceramics from China to this region started during the Tang dynasty.¹¹ Identical pieces have been found at Yangzhou in Jiangsu province, the Chinese port of export in

he came into contact with the warden monk of the Dunhuang grottos, Wang Yuan Lu, and was able to buy hundreds of manuscripts, which had been hidden by Buddhist monks, dating from as far back as 400 AD. In 1908 Kharakoto (middle Gobi Desert) was discovered by Count Kozlov. Another Western archaeologist who had the opportunity to 'acquire' valuable trophies from central Asia was the Frenchman Paul Pelliot (1878-1945). Albert von Le Coq (1860-1930) removed numerous murals from another group of caves, at Bezeklik, succeeding Albert Grünwedel (1856-1935) who undertook expeditions in 1902-1903 and 1905-1907 to Turfan. The ceramic fragments found from these expeditions are now kept in museums (the Hermitage in St. Petersburg, Harvard University, and in Stockholm). The pieces belong to Chinese domestic wares (Jun, Cizhou, Northern Song wares).

⁵ *Dschingis Khan und Seine Erben. Das Weltreich der Mongolen*. Exhibition Catalogue, Bonn, 2005, pp.187-195.

⁶ A. T. Kessler, *Song Blue and White Porcelain on the Silk Road*, Leiden, 2012. Part 1 deals with Kharakoto, pp. 22-28 and pp. 42-50. For other finds, see: D. C. Waugh, 'The Silk Roads in History', *Expedition*, vol. 52, no. 3, The Penn Museum, 2010; The Silk Road Foundation, <http://www.silkroadfoundation.org/> (visited January, 2020); Han Jianye, 'The Painted Pottery Road and Early Sino-Western Cultural Exchanges', *Anabasis-Studia Classica et Orientalia*, no. 3, 2012, pp. 25-42. Another example of a recent research project is:

<https://www.nottingham.ac.uk/humanities/departments/classics-and-archaeology/research/research-projects/current-projects/silk-road.aspx> (visited January, 2020).

⁷ Carswell 2000 (op. cit.), p. 74.

⁸ Samarkand Museum/Ulugh Beg observatory. See J. Carswell, 'China and the Middle East', *Oriental Art*, vol. XLV, no.1, 1999, pp. 2-15.

⁹ Established in 641 as a military encampment, this area rose to a trade centre until 1168 when it was invaded by crusaders. It then recovered until the black plague destroyed the city in the 14th century.

¹⁰ T. Yuba, and T. Mikami, 'China and Egypt: Fustat', *Transactions of the Oriental Ceramic Society (TOCS)*, 1980-81, vol. 45, London, 1982, pp. 67-89.

¹¹ *Ibid.*, p. 68: 'From the Tang dynasty there is Sancai, Yue and Changsha wares; from the Song dynasty, there are celadons from Yue and Longquan kilns, white wares from Jingdezhen kilns; from the Yuan and early Ming dynasties are white and blue and white pieces. Longquan celadon types of everyday wares were most imported type of ware during the Yuan dynasty'.

that period.¹² Sharmah (Hadramawt in Yemen) was discovered in 1996 by French archaeological teams. According to Bing Zhao, this port was one of the main harbours of the Indian Ocean used by merchants from the Persian Gulf, until it was abandoned in the middle of the 12th century.¹³ Excavations have revealed 47,425 pieces of ceramics, of which 3.6% are of Chinese origin.

Later on, Sri Lanka (former Ceylon) became another important destination for export ceramics.¹⁴ Green-glazed shards found at Nilaveli in the northeast were thought to come from an unknown shipwreck from around 1100 AD; they are identical to those from the *Sinan* wreck found off the Korean coast.¹⁵ Another excavated site is that of the rose garden of the palace of Kotla Firuzshah at Delhi built in 1354, and destroyed by the Turkic-Mongolian conqueror Timur Lenk in 1398. The excavation revealed shards belonging to about 72 items of Chinese porcelain.¹⁶

Even on the eastern coast of Africa shards of Chinese ceramics were discovered dating from the 14th to 16th centuries. They were used to decorate façades of mosques and pillars of Islamic tomb sites.¹⁷ According to James Kirkman, 'Pieces of Chinese porcelain were found in tombs and the great Pillar of Malindi, dating from the first quarter of the 15th century to the end. These included celadon, but only few *qingbai* and thirteen blue and white bowls'.¹⁸ Henceforth Chinese ceramics came more and more in

¹² 'The Yangzhou City report on the archaeological excavation 1987-1988'; abstract in English on: http://www.kaogu.net.cn/en/Publication/New_books/2013/1025/30088.html. (visited January, 2020).

¹³ Bing Zhao and Pierre Lombard, 'La Céramique Chinoise Importée avant 1500 à Qal'at al-Bahrein: Fouilles Françaises 1989-2002', *Taoci*, vol. 4, pp. 105-116; Bing Zhao, 'Sharmah (South Coast of Arabia) and its Commercial Connexion in the Southeast Asia (10th-12th centuries)'. Paper given at the symposium on Chinese Export Trade Ceramics in Southeast Asia. Singapore, 2007, (unpublished).

¹⁴ Carswell 2000 (op. cit.), p.169 and pp. 174-175.

¹⁵ Ibid., pp.108-109; J. Carswell, 'Two Unexplored Wrecks of the 14th-Century in the Red Sea and Sri Lanka', *Taoci*, vol. 2, December 2001, pp. 51-53.

¹⁶ E. E. Smart, 'Fourteenth Century Chinese Porcelain from the Tughlaq Palace in Delhi', *TOCS*, vol. 41, 1975-1977, pp. 199-230. Some even had rivets indicating that they were mended, possibly that the Islamic sultan ordered them to be destroyed because of the human figures on them (p. 200). 'Mughal paintings show dishes of blue and white being used for eating'. She refers to an illustration from a Barbarnama manuscript, dated to the Mughal era, ca. 1590, British Library, Or. 3714, folio 253r.

¹⁷ Bing Zhao, 'Chinese-Style Ceramics in East Africa from the 9th to 16th Century: A Case of Changing Value and Symbols in the Multi-Partner Global Trade', *Afriques*, no. 6, 2015; from: <https://journals.openedition.org/afriques/1836> (visited January, 2020); M.A. Pinto de Matos, 'Chinese Porcelain in Portuguese Written Sources', *Oriental Art*, vol. 48, 2002/3; N. Chittick, 'East Africa and the Orient: Ports and Trade Before the Arrival of the Portuguese', *Historical Relations Across the Indian Ocean*, pp. 13-23, Gent, 1980.

¹⁸ J. Kirkman, 'The Great Pillars of Malindi and Mambrui', *Oriental Art*, vol. VI, no. 2, 1975, pp. 55-67, p.55. By the same author, *The Arab City of Gedi*, Oxford, 1954; *Fort Jesus: A Portuguese Fortress on the East African Coast*, Oxford, 1974.

demand in overseas regions; numerous local kilns in Southeast Asian regions are known to have produced imitations.¹⁹

The definitions of ‘export ceramics’.

Terms such as ‘export ware’ and ‘exported ware’ are used in art history to describe ceramic items produced in China for overseas destinations to distinguish them from those made for the domestic market.²⁰ As I focus on types of Chinese ceramics that were exported, I discuss the difference between items ‘to be exported’, ‘produced for export’ and items produced for the Chinese domestic market.²¹ As Liu Xinyuan remarks,

I believe that there is both a broad sense and a narrow sense to the term “export” porcelain. In a broad sense, export porcelain refers to the porcelain produced in China and actually meant for the Chinese market but which was sold overseas: the porcelain excavated in Egypt was this type of porcelain made in the Tang and

¹⁹ G. Wade, ‘An Early Age of Commerce in Southeast Asia, 900–1300 CE’, *Journal of Southeast Asian Studies*, vol. 40, no. 2, 2009, pp. 221–265, p. 261: ‘To feed the increased demand for Chinese ceramics in Southeast Asia, more and more kilns were opened or further developed in the provinces along the Chinese coast. In addition, the influence of Chinese ceramic design and technology was felt through many of the societies of Southeast Asia during the period. The ceramic industries of Āi Viêt, Angkor and Java were all essentially changed through either copying the Chinese ceramic forms, importing Chinese labour to produce local copies, or both. The Cambodian ceramics of the tenth century onwards are so similar to those of Guang-dong that researchers agree that there must have been intimate links between the respective producers. In the area of what is today Thailand, the kilns of Si-Satchanalai developed and began to produce export wares over this period. In Java, by the eleventh century, not only were shapes of professionally made pottery beginning to imitate those of the imported Chinese ceramics, but Javanese potters seem to have moved away from traditional paddle-and-anvil technique and adopted the potting wheel.’

²⁰ For example, early publications include: A. Brankston, *Early Ming Wares of Chingtechen*, Peking, 1938 (reprinted 1970); W. Burton, *Porcelain, a Sketch of its Nature, Art and Manufacture*, London, 1906; R.L. Hobson, *Chinese Pottery and Porcelain. An Account of the Potter's Art in China from Primitive Times to the Present Day*, London, 1915; R.L. Hobson, *The Art of the Chinese Potter from the Han Dynasty to the End of the Ming*, New York, 1923; R.L. Hobson, *The Wares of the Ming Dynasty*, London, 1923 (reprinted 1962/1969); W. B. Honey, *The Ceramic Art of China, and Other Countries of the Far East*, New York, 1944; R.S. Jenyns, *Ming Pottery and Porcelain*, London, 1953; R.S. Jenyns, *Later Chinese Porcelain*, London, 1965; R.S. Jenyns, ‘The Wares of the Transitional Period Between the Ming and the Ch’ing 1620-1683’, *Archives of the Chinese Art Society of America*, vol. 9, 1955, pp. 20-42. H. Garner, *Oriental Blue and White*, London, 1954, (reprinted in 1977); D. Lion-Goldschmidt, *Chinese Blue and White Porcelain*, Paris, 1957; D. Lion-Goldschmidt, *Ming Porcelain*, New York, 1978; R. Kerr, L.E. Mengoni and M. Wilson, *Chinese Export Ceramics*, London, 2011.

²¹ A. Gerritsen and S. McDowall, ‘Global China: Material Culture and Connections in World History’, *Journal of World History*, vol. 23, no. 1, March, 2012, pp. 3-8, p. 6: ‘By discarding the separation between the two types of production and studying porcelain production and use as a complex whole, historians will allow the connections between the domestic economy in China and global economic flows, as well as the integration more generally of the Chinese empire into the culture of the early modern world, to become visible’.

Song dynasty period. In a narrow sense export porcelain means the porcelain produced by the Chinese specifically for the foreign market.²²

In this sense, items commonly used by the Chinese were shipped overseas alongside those that were adapted in shape or dimension to suit a foreign market, the main subject in this chapter.

The term 'domestic ware' is used to describe ceramic items produced only for the Chinese market, generally named '*minyao*'. Synonyms in art history are 'provincial ware', 'people's ware', 'common ware', or 'folk ware', produced in 'public kilns', 'private kilns', 'provincial kilns', contrary to the ceramics produced for the Imperial court. Stacey Pierson explains:

Official porcelain was made at Jingdezhen from the very first Ming reign period, that of the Hongwu emperor (1368-98), during which time commissions were sent from the court on a regular basis to kilns and workshops set aside for what is traditionally classified in Chinese using a binary system such as "imperial" (*guan*)/ "non-imperial" (*minyao*: "folkware" or "commercial"), "domestic" (*guonei*)/ "export" (*guowai*), demonstrating that production is defined by consumer type in literature.²³

In China, ceramic vessels are generally divided into two main types: those made for daily use and wares for decorative or aesthetic purposes.²⁴ Items for daily use can be sub-divided again into three main categories.²⁵ The first is for daily utilitarian purposes such as tableware: small dishes, bowls of various sizes, cups of various sizes for tea or wine, pouring vessels: all types of flasks and teapots, and containers such as jars with lids.²⁶ The second category comprises items for household use such as drum stools,

²² Liu Xinyuan, 'Imperial Export Porcelain from Late Yuan to Early Ming', *Oriental Art*, vol. XLV, no.1, 1999, pp. 98-100; p. 98.

²³ S. Pierson, *From Object to Concept. Global Consumption and the Transformation of Ming porcelain*, Hong Kong University Press, 2013, p. 8: 'Certainly those porcelains made at what are often misleadingly called 'the imperial kilns (*yuqichang*) were, in the early 15th century, given a trademark which designated (in theory at least) separate production and raw materials'.

²⁴ Items purely for decorative or aesthetic purposes were mostly produced for the upper classes, literati and the Imperial court. Ceramics for construction and architectural decoration (bricks, roof tiles and roof ornaments) are a specific subject, as well as funerary objects, and will not be discussed here.

²⁵ For details on shapes produced during the Ming Dynasty: W. Bushell, *Description of Chinese Pottery and Porcelain being a Translation of the Tao Shuo*, Oxford, 1910, pp. 155-168: 'Book VI: Descriptions of specimens'. Under the heading 'Porcelain of the Reign of Wan-li 1573-1619' all shapes are described including on p. 156: saucer-shaped plates (*tieh*), round dishes (*pan*), bowls (*wan*); p. 157: cups (*chung* or *chan*) and p. 158, cups (*ou*); p. 159: wine cups (*pei*).

²⁶ Guanyu Wang, 'The Interactions Between Chinese Export Ceramics and Their Foreign "Markets": The Stories in Late Ming Dynasty', paper presented in the Postgraduate Student Forum 2011, Chinese University of Hong Kong: 'This kind of artifact is mainly tableware, tea and wine vessels; therefore, they

screens, candlesticks and items for the family altar, which include incense burners, statues, and vases.²⁷ The last group includes functional shapes or items for the 'scholar's table'.²⁸ These are brush pots, brush rests, water droppers and ink slabs.²⁹

Small or medium-sized dishes are part of the domestic tableware for serving food or pickles. For example, the emperor needed a large amount of tableware, as his meals comprised numerous dishes.³⁰ Eva Ströber explains that in the Ming dynasty a meal was made up of, 'eight main dishes, four side dishes, two or three hot soups, hotpots and the staples of steamed buns, rice and cakes'.³¹ Large dishes would have been used for bringing these courses from the kitchen, but everything was eaten from small bowls and saucers.³² (Figure 2.0) 'There was probably not much difference between the shapes and sizes in which the food was served at the imperial table and the "normal" tableware of a well-to-do-family, or even in the shapes of tableware in which Chinese food is served today'.³³

are often plain in shape and easy to use, and the surface are usually depicted with lots of patterns (sometimes with texts), including Religious Design with Taoist and Buddhist symbols such as the Eight Diagrams and Sanskrit, the implied meaning of auspicious Happiness 福 character, longevity 寿, *Wanfutongyou* 万福同攸, and *Fuguijiqifugui* 富贵佳器 (SIC), etc. In addition, there all kinds of characters, plants, horses, fish, butterfly...the decorative patterns which were popular in public'. From: <http://www.cuhk.edu.hk/ant/PostgraduateForum2011/Arch/WANGGuanyu.pdf> (visited January, 2020).

²⁷ Ibid., 'Workshops catering for the Court also produced specific sacrificial pieces'.

²⁸ Ibid., 'The word *Wenfang* 文房 was first used in the Northern and Southern Dynasties (420-589) and in the Tang Dynasty it became the indicator of the place for scholars to study and do routine activities'.

²⁹ Ibid. She explains that the fashion amongst the upper classes during the Ming dynasty was to be a literatus, meaning an educated person, schooled in Confucianism and who focused on spending his time to culture and arts, for instance painting; p.4: 'this increased the demand for such items as well as flower cases, dragon jars and statues whereas the "common" items as porcelain pillow, drum stool, and candlesticks decreased'.

³⁰ Ibid.

³¹ E. Ströber, *Ming. Porcelain for a Globalised Trade*, Stuttgart, 2012, pp. 68-69.

³² R. Finlay, *The Pilgrim Art. Cultures of Porcelain in World History*, Los Angeles/London, 2010, p. 267: 'early Ming emperors began to use vessels with matching designs and colour, with twenty-seven pieces in each service, on their banquet tables. The Jiajing emperor (reigned 1522-66) ordered Jingdezhen to produce 1,340 dinner sets decorated with dragons, including 26,350 bowls and 50,500 plates'. He refers to: Bushell 1910 (op. cit.) and D.F. Lunsingh Scheurleer, *Chinese Export Porcelain*, London, 1974; L.A. Cort and J. Stuart, *Joined Colors: Decoration and Meaning in Chinese Porcelain: Ceramics from Collectors in the Min Chiu Society, Hong Kong*, Washington D.C., 1993; J. Stuart, 'Imperial Porcelain and Court Values', *Orientations*, vol. 24, no. 8, 1993, pp. 24-30.

³³ Ströber 2012 (op. cit.), p. 69.



Figure 2.0. Detail of 'Night Revels of Han Xizai', showing a pipa player and her audience. Handscroll, ink and colours on silk. Original by Gu Hongzhong (10th century), 12th century remake from the Song dynasty. Collection of the Palace Museum Beijing.³⁴

The other definition of 'export ware' refers to items that were not familiar in China. For example, the flatware that was transported to overseas regions was, for the most part, different in size and shape from those used domestically in China. I therefore agree with Liu Xinyuan that two interpretations of the term 'export ware' are possible.

Ceramic shipments during the Tang dynasty (618-907).

During the Tang dynasty, large quantities of Chinese domestic tableware like bowls and pouring vessels were transported to overseas regions, especially Southeast Asia. Well-equipped kilns in various regions in China catered to domestic as well as overseas demand. By comparing salvaged finds from shipwrecks to those excavated at the original sites of production, it is possible to establish what was actually shipped overseas during this period.

The *Belitung* wreck was salvaged in 1998 in Indonesian waters near the island of Belitung.³⁵ The ship was identified as an Arab type trading vessel.³⁶ The immense

³⁴ From: Wikimedia Commons.

³⁵ J. K. Wilson and M. Flecker, 'Dating the Belitung Shipwreck', in R. Krahl, J. Guy, J. K. Wilson and J. Raby (eds.), *Shipwrecked. Tang Treasures and the Monsoon Winds*, Smithsonian Institution, Washington, 2010, pp. 35-40. The cargo was sold for 32 million USD to a private entity in Singapore. The 'fund share' given by the treasure-hunters to Indonesia was only 5 Million USD. In 2011 a symposium was held to discuss this salvage; the Society for American Archaeology, the Council of American Maritime Museums and the

number of ceramics from this wreck, around 60,000 pieces, represents the major types of early 9th-century ceramic production in China.³⁷ The two main types of ceramics salvaged from this shipwreck, known as Yue and Changsha wares, were produced in large quantities during the Tang dynasty. The durable ware known as Yue ware was the first green-glazed type of stoneware produced in China; by 2009 archaeologists had discovered 179 kiln sites.³⁸ These are situated around the Shanglin Lake and four other lakes near the mouth of the Yangzi River.³⁹

Changsha ceramics are of greyish coarse stoneware, covered with a white/off-white layer of slip (a mixture of clay and water) before the decoration was painted.⁴⁰ Janice Stargardt links the archaeological finds of this specific type of ware to the *Belitung* shipwreck: 'the Changsha ceramics on board the *Belitung* reveal processes of standardization and mass-production within the kiln group: basic shallow bowls were produced in batches numbering many thousands and covered with identical slips and

International Committee for Underwater Cultural Heritage, were against the exhibition to be held at the Sackler Institute claiming that the excavation was only for commercial gain and conducted so quickly that there was a loss of information. See: P. Coleman, 'Unesco and the Belitung Shipwreck: The Need for a Permissive Definition of "Commercial Exploitation"', *George Washington International Law Review*, 2013, vol. 45, no. 4, 2013, p. 847. Another symposium was held at New York University in March 2017 to discuss the ethics of salvaging shipwrecks.

³⁶ M. Flecker, 'A Ninth-Century AD Arab or Indian Shipwreck in Indonesia: First Evidence for Direct Trade with China', *World Archaeology*, vol. 32, no. 3, 2001, pp. 335-354; M. Flecker, 'A Ninth-Century Arab Shipwreck in Indonesia. The First Archaeological Evidence of Direct Trade with China', in Krahel et al. (eds.) 2010 (op. cit.), pp. 100-119; p.101; 'As it happened, the site contained crucial information about trade between the major empires of the period, Abbasid Iraq and Tang China—making this one of the most important archaeological revelations of the twentieth century. Not only was the Belitung shipwreck the oldest Arab vessel discovered in Asian waters, but it also contained the largest group of Tang dynasty artefacts ever found. The archaeological recovery of both ship and cargo has allowed for a radical reappraisal of the Maritime Silk Route to China, answering questions on the nature of Asian sea trade with far greater certainty than was possible before'.

³⁷ Liu Yang, 'Tang Dynasty Changsha Ceramics', in Krahel et al. (eds.) 2010 (op. cit.), pp.145-159; J. Guy, 'Late Tang Ceramics and Asia's International Trade. Treasures from the Belitung Shipwreck', Krahel et al. (eds.) 2010 (op. cit.), pp. 19-27; J. Guy, *Oriental Trade Ceramics in South-East Asia, Ninth to Sixteenth Centuries: with a Catalogue of Chinese, Vietnamese and Thai Wares in Australian Collections*, Oxford, 1986.

³⁸ Stoneware is different to porcelain in that it is made of coarser types of clay, often with impurities; it is usually thicker as an item and fired at a high temperature (1200 Centigrade). This makes the object more durable and therefore popular as a ceramic sort to transport.

³⁹ Yue ware is considered by some scholars in China the earliest type of true porcelain as it was fired at the temperature of 1300 degrees. From: <http://whc.unesco.org/en/tentativelists/5806/%20Ancient%20Porcelain%20Kiln%20Site%20in%20China> (visited January, 2020).

⁴⁰ Liu Yang 2010 (op. cit.), p. 145: 'Evidence from archaeological excavations throughout China and abroad proves that Changsha wares for the most part were made for export; kilns mushroomed in the Changsha vicinity largely in response to the demands of foreign markets'; p.147: 'Chinese archaeologists have distinguished about seventy different product forms. They can be divided into ten core groups, including ewers and vases (2,514 pieces); bowls and saucer dishes (1,596 pieces); jars (939 pieces); basins and washers (580 pieces); boxes (474 pieces); lamps (188 pieces); tools such as milling stones and milling blocks (81 pieces); objects for the scholar's desk (63 pieces); pillows (48 pieces); and others'.

brown painted rims'.⁴¹ She estimates that around 12,000-to 15,000 dishes could have been fired in one of the largest kilns at one time.⁴² These suited Middle Eastern customers: 'A range of motifs designed to appeal to specific markets – Arabic calligraphy, plants, and birds – were later fluidly painted on the interior of the bowls in the same brown paint before final glazing and firing'.⁴³ (Figure 2.1) This is an early example how Chinese domestic wares were adapted to appeal to foreign customers.



Figure 2.1. Changsha bowls from the *Belitung* shipwreck.⁴⁴

Furthermore, Stargardt states: 'To be in a position to supply and satisfy all their export markets, the Changsha and Yue kilns were clearly able to function on a mass

⁴¹ J. Stargardt, 'Indian Ocean Trade in the Ninth and Tenth Centuries: Demand, Distance, and Profit', *South East Asian Studies*, vol. 30, no.1, 2014, pp. 35-55; p. 41: 'Their presence on board this ship resulted from the popularity of their new forms of production and the market activities of concentric and intersecting circles of numerous merchants – Chinese and foreign – surrounding Yangzhou'.

⁴² Ibid., p. 40: 'While the Changsha kilns in Hunan Province supplied the bulk of the c. 70,000 Chinese ceramics on board the *Belitung*, I estimate that the Yue wares on board also numbered c. 2000, in addition to the smaller but very high quality and value wares of similar shapes from North Chinese kilns'.

⁴³ Ibid., p. 41: 'Tang Chinese ceramics changed the food culture of the Abbasid court and wider society, causing them to adopt the use of ceramic dishes, bowls, and ewers alongside their famous metal wares'. 'The enthusiasm of the Abbasid court for Chinese fine ceramics is well documented from the time of Caliph Harun al-Rashid onwards'. She refers in note 39 to: R. Kauz (ed.), 'Patterns of Exchange in the Decorative Arts between China and South-West Asia', *Aspects of the Maritime Silk Road: From the Persian Gulf to the East China Sea*, Wiesbaden, 2010, p. 107; J. Hallett, 'Pearl Cups Like the Moon: The Abbasid Reception of Chinese Ceramics', Krahel et al. (eds.) 2010, (op. cit.), pp. 75–81; M. Crick, *Chinese Ceramics for Southeast Asia. The Collection of Ambassador and Mrs. Charles Muller*, Geneva, 2010, p. 21.

⁴⁴ Image taken from: Liu Yang, in Krahel et al. (eds.) 2010 (op. cit.), p. 144. See also *Sunken Treasures. Discoveries in Shipwrecks from the Maritime Silk Road 800-1900*. K. Gaillard and E. van den Berg (eds.), catalogue for the exhibition in the Keramiekmuseum Princessehof, Leeuwarden, 7 September 2019 – 28 June 2020.

scale, to maintain reliable standards, and to increase or decrease their levels of production in response to changes in demand during the ninth century'.⁴⁵

The *Intan* and *Cirebon* wrecks were ships of Southeast Asian origin transporting a mixed cargo of ceramics for various markets on the Indonesian islands.⁴⁶ The *Intan* wreck, dated to the 10th century, may have been an Indonesian inter-insular cargo ship sailing from Palembang to central or eastern Java.⁴⁷ The salvage resulted in 8,000 ceramics, among them pieces of Yue ware such as green-ware bowls, covered boxes with finely incised decorations, and lobed ewers; but also stoneware jars from Guangdong province, as well as flasks and *kendi* type pouring vessels.⁴⁸ These items provide more evidence that adaptations were made to suit foreign tastes: by applying certain designs and producing non-domestic Chinese shapes such as covered boxes, *kendi* and ewers.⁴⁹

Around 260,000 artefacts of which 205,000 ceramics were salvaged from the *Cirebon* wreck, found one hundred nautical miles off the coast of Java in 2005 and also dated to the end of the 10th century.⁵⁰ Most items are *Yue* type bowls, plates and ewers for daily use, but there are also some pieces of white *Ding* type porcelain.⁵¹ (Figure 2.2)

⁴⁵ Stargardt 2014 (op. cit.), p. 42; Liu Yang, in Krahel et al. (eds.) 2010 (op. cit.).

⁴⁶ Stargardt 2014 (op. cit.), p. 49: 'Their cargoes reveal some continuities with the Belitung cargo in the presence of mass-produced Chinese ceramics, some of them of high quality and from several kiln sources – but all southern and mostly the Yue and Fan Chang kilns. For instance, neither the *Intan* nor the *Cirebon* wrecks contained any Changsha ceramics. In the ninety years that separated the *Intan* from the Belitung, that strikingly prolific source of ceramics on the Belitung had ceased to export'.

⁴⁷ M. Flecker, 'Treasures from the Java Sea, the 10th-century *Intan* Shipwreck', *Heritage Asia Magazine*, vol. 2, no. 2, December 2004 – February 2005, pp. 25-29; Flecker 2010 (op.cit.), pp. 335-354; M. Flecker, 'The Archaeological Excavation of the 10th Century *Intan* Wreck', PhD. dissertation, National University of Singapore, 2001.

⁴⁸ A *kendi* is a pouring vessel, usually with a rounded body, a straight neck with an opening and a spout. It was mostly in use in Southeast Asian regions as a religious ritual vessel. In the course of the Ming dynasty, various shapes, including animal-shapes were produced. D. Rooney, *Kendi in the Cultural Context of Southeast Asia, a Commentary*, from: http://rooneyarchive.net/articles/kendi/kendi_album/kendi.htm (visited January, 2020); J. Sweetman and N. Guerin, *The Spouted Ewer and its Relatives in the Far East*. Catalogue of an exhibition of the Barlow Gallery, University of Sussex, 1983; Khoo Joo Ee, *Kendi: Pouring Vessels in the University of Malaya Collection (The Asia Collection)*, Oxford, 1991. Stoneware jars were used as containers for food and water because of their durability. See Li Baoping and Li Jianan, 'Chinese Storage Jars in China and Beyond', pp. 73-87 in *Chigusa and the Art of Tea*, J. Lusaka (ed.), Washington, 2014.

⁴⁹ A. Schottenhammer, 'China's Gate to the Indian Ocean – Iranian and Arab Long-distance Traders', *Harvard Journal of Asiatic Studies*, vol. 76, no.1, 2016, pp. 135-179. Appendix 2 provides a list of the goods traded: 'From the 806-biographical record that Li Ao 李翱 (774–ca. 836 or 841) wrote about Xu Shen 徐申 (738–806), the recently deceased provincial governor of Lingnan, we learn about trade goods and vessels that came to China during the late eighth and early ninth centuries: Each year foreigners from every country come here to trade. Rare pearls, tortoise shells, exotic fragrances, and rhinoceros' horns, everything flows [to China] on oceangoing vessels'.

⁵⁰ 'Five Dynasty Treasures: Chinese Ceramics found in the Indonesian Cirebon Shipwreck', lecture given by Lim Yah Chiew (Synopsis and commentary by Natalie Ong), Southeast Asian Ceramic Society,



Figure 2.2. Ceramics from the *Cirebon* wreck. Photo by *Cosmix Archaeological Underwater Research & Recovery*, Musée Royal de Mariemont.

We see from these shipwreck finds and the fragments found at the production sites in China that during the Tang dynasty the ceramics transported overseas were a mixture of utilitarian wares intended for the domestic market and items that differed from these in decoration (*Belitung* wreck) and shapes (*Cirebon* and *Intan* wrecks).

Shipments of ceramics during the Song dynasty (960-1279).

According to several scholars, it was in the period of the Southern Song dynasty that foreign trade rapidly developed. Kessler refers to André Wink: 'China's maritime commerce flourished largely in private hands but by the early 12th century government income from taxes on foreign trade amounted to 20% of the total. And the revenue of the Song in the 11th century was already two to three times as large as that of the Tang in the 8th century. The development of Chinese maritime trade now led to the first Chinese commercial settlements in Southeast Asia'.⁵²

This can be seen by way of the numerous shipwrecks discovered and salvaged by Chinese maritime archaeologists.⁵³ The *Nanhai No. 1*, first salvaged in 1987, was found in the western part of the Pearl River delta, southern China, and was lifted practically

Singapore, 2010. From: <http://www.seaceramic.org.sg/wp-content/uploads/2016/06/A-talk-by-Lim-Yah-Chiew.pdf> (visited January, 2020).

⁵¹ H. Liebner, 'The Siren of Cirebon, a Tenth-Century Trading Vessel Lost in the Java Sea'. Ph.D. dissertation, University of Leeds, 2014. From: <http://etheses.whiterose.ac.uk/6912/> (visited January, 2020). *Ding* ware is a thin porcelain covered with a white-tinted glaze and mostly produced in kilns of northern Hebei province from the start of the Song dynasty.

⁵² Kessler 2012 (op.cit.), p.424, note 494: A. Wink, *Al-Hind: The Making of the Indo Islamic World*, vol. I, Delhi, 1990.

⁵³ For more information on the underwater cultural heritage in China (SACH), see: <http://english.cach.org.cn/col/col1574/> (visited January, 2020).

intact in 2011. About 60,000 ceramics were discovered which have been traced to kilns of Jingdezhen, Dehua, Cizhou and Longquan. It is an example of a ceramic shipment containing a mixture of domestic wares from various Chinese kilns destined for an (unknown) overseas destination during the Song dynasty.⁵⁴ (Figure 2.3)



Figure 2.3. Ceramics salvaged from the shipwreck of the *Nanhai No. 1* at the Guangdong Maritime Silk Road Museum. Photo from website.⁵⁵

The *Baijiao No. 1* shipwreck dated to the 12th century was found near Dinghai, Lianjiang county, Fujian province. It contained 2,678 artefacts including black-glazed and green-glazed wares from kilns in Fujian.⁵⁶ (Figure 2.4) According to Sarah Kenderdine, most of the 475 ceramic items were black-glazed bowls and 12-20% was green-glazed ware: ‘Song merchants traded in porcelain vessels on a much larger scale than the merchants of the Tang or Five dynasties. Stone monuments were erected near a number of Song porcelain kilns and inscriptions recorded the activities of merchants

⁵⁴ The pieces and remains of the ship are kept at the Guangdong Maritime Silk Road museum, see: http://www.xinhuanet.com/english/2020-05/17/c_139064396.htm (visited January, 2020).

⁵⁵ Ibid.

⁵⁶ Its destination is unknown. Chunming Wu (ed.), *Early Navigation in the Asia-Pacific Region: A Maritime Archaeological Perspective*, Singapore, 2016; J. Green (ed.), *Maritime Archaeology in the People's Republic of China, Special Publication No.1. Department of Maritime Archaeology*, Western Australian Museum, no. 237, 1997.

engaged in transporting the ceramics to distant regions for sale'.⁵⁷ She also mentions that 'workshops stamped their porcelain vessels with exclusive inscriptions'.⁵⁸



Figure 2.4. Black-glazed bowls salvaged from the *Baijiao No. 1* shipwreck. Photo by Jon Carpenter.⁵⁹

The 'History of Song' (*Songshi*) lists import and export goods, including porcelain.⁶⁰ Another historical publication documents that the 'Malay peninsula, Java, Champa, Borneo, and some Philippine islands' were potential markets; Java and Palembang seem to have been the most prosperous destinations.⁶¹ Another account relates: 'The ocean-going junks are several hundred (Chinese) feet in length and breadth. The traders divide the space by lot and store their goods therein. Each person gets several feet of space. He stores his goods below and sleeps on top of them at night... A great part of the cargo consists of pottery, the small pieces are packed in the larger, till

⁵⁷ S. Kenderdine, "'Bai Jiao I", The Excavation of a Song Dynasty Shipwreck in the Dinghai area, Fujian province', *The International Journal of Nautical Archeology*, no. 24, 1995, pp. 247-266, p. 257, figs. 13 and 14.

⁵⁸ *Ibid.*, p. 254-255 and p. 261.

⁵⁹ Image taken from: Department of Maritime Archaeology, Western Australian Maritime Museum A compendium of projects, programmes and publications 1971-2003, p. 12: <http://museum.wa.gov.au/sites/default/files/Compendium.pdf> (visited January, 2020).

⁶⁰ It is one of the 24 histories of China; 'The compilation was undertaken by a professional team of the Historiography Institute (guoshiguan 國史館). In 1343 Emperor Shun 元順帝 (r.1333 – 1368) of the Yuan dynasty decreed the compilation of the three dynastic histories of the Song, Liao (Liaoshi 遼史) and Jin (Jinshi 金史) dynasties'. From: <http://www.chinaknowledge.de/Literature/Historiography/songshi.html> (visited January, 2020). According to F. Hirth and Rockhill and W.w. Rockhill, 'The Annals of the Sung dynasty supply a list of the principal articles of this trade, imports and exports, in or about 999. They were gold, silver, Chinese cash, coined money, lead, piece-goods of all colours, porcelain-ware, cotton fabrics, incense and scented woods, rhinoceros horns, ivory, coral, amber, steel (pin-tHe) , shells of turtles, tortoise-shell, cornelians....' *Chau Ju-kua [Chao Rugua 趙汝适], His Work on the Chinese and Arab Trade in the Twelfth and Thirteenth Centuries, Entitled Chu-fan-chi*. Translated from the Chinese and annotated by F. Hirth and W. Rockhill, St. Petersburg, 1911, p. 19.

⁶¹ Tien Tse Chang, *Sino-Portuguese Trade from 1514-1644. A Synthesis of Portuguese and Chinese Sources*. Leiden, 1969 (1934), pp. 21-23.

there is no space left'.⁶² These descriptions give an insight into the way ceramics were shipped during this epoch as is visible in a number of shipwrecks. In the *Nanhai No. 1* shipwreck mentioned above, the stacks of ceramics can be seen as well as the way these were placed in compartments of which the wood has disintegrated.⁶³

The *Huaguangjiao No. 1* shipwreck was found off the coast of the Xisha islands, also known as the Paracel Islands, southeast of Hainan province.⁶⁴ More than 10,000 items were found during the salvage in 2007, including many pieces of fine *qingbai* ware from Jingdezhen and brown-glazed bowls and ewers from various kilns in Fujian and Guangdong provinces, all dated to the Song dynasty.⁶⁵ This is an example of a mixture of ceramics from different production areas that were collected for shipment overseas. (Figures 2.5 and 2.6)



Figure 2.5. *Qingbai* bowls and pouring vessels from the *Huaguangjiao No. 1* shipwreck.



Figure 2.6. A *qingbai* vase from the *Huaguangjiao No. 1* shipwreck.⁶⁶

⁶² Hirth and Rockhill 1911(op.cit.), p. 31; J. Miksic, *Southeast Asian Ceramics: New Light on Old Pottery*, Paris, 2009, p. 74.

⁶³ See images on: <http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/about-the-heritage/underwater-museums/the-guangdong-maritime-silk-road-museum-nanhai-no-1-museum/> (visited January, 2020).

⁶⁴ See websites: <https://en.unesco.org/silkroad/silk-road-themes/underwater-heritage/huaguangjiao-no1-shipwreck>;

http://www.china.org.cn/china/2011-04/02/content_22284163.htm (both visited January, 2020); Li Jian'an, 'Chinese Trade Ceramics from the 13th to 17th centuries: Marine Archaeological Discoveries in China', *The University of Hong Kong Museum Journal* no. 3, 2011, pp. 77-83; China's Underwater Excavations of the 16th-17th Century Chinese Export Porcelain, *Proceedings of the International Symposium: Chinese Export Ceramics in the 16th and 17th Centuries and the Spread of Material Civilisation*, Chinese Civilisation Centre, City University of Hong Kong, Hong Kong 2012, pp. 77-91.

⁶⁵ In documentation related to the Yuan dynasty, the islands were called *Wanglishitang*: ten thousand miles of stone pond. This area is a large reef area and Chinese maritime archaeologists mentioned that there are large amounts of shards strewn all over these reefs which indicate that this must have been a major shipping route. Personal communication from Li Jian'an, director of the Maritime Archaeology department, Fuzhou. *Qingbai*, literally 'greenish or bluish white', is a type of porcelain ware covered with a light greenish to bluish-white glaze.

⁶⁶ Photo from china.org.cn.

Numerous shipwrecks salvaged from the Indonesian archipelago contained ceramics. A Chinese junk discovered in 1990-1991 at Breaker Reef, southwest of Palawan, is dated to the late 11th- early 12th century.⁶⁷ It contained brown and light green-glazed ware with painted designs in *Cizhou* style.⁶⁸ The finds included, ‘around 40 ochre-green-glazed bowls; 146 *Qingbai* bowls; 300 green-glazed saucers with coarse incised sketches; 6 octagonal stem cups; 45 ewers, a few covered boxes and small moulded bottles of 9 centimetres height used for burial rituals in the Philippines; small “sauce pots” with a height of 6.4 centimetres; stoneware *kendi*; some rare Cizhou coloured wares; small jars of 6.5 height and shards of an ewer and vase found at Sarawak’.⁶⁹ (Figure 2.7)



Figure 2.7. Salvaged wares from the Breaker Reef area exhibited at the Ayala Museum in Makati City. Photo by N. de Guzman.⁷⁰

Identical wares were found at various archaeological sites in Indonesia.⁷¹ The earliest dated pieces are from Kota Batu in Brunei where large amounts of Chinese

⁶⁷ M.F. Dupoizat, ‘The Ceramic Cargo of a Song-Dynasty Junk Found in the Philippines and its Significance in the China-Southeast Asia Trade’ in R. Scott and J. Guy (eds.), *South East Asia and China: Art, Interaction and Commerce*, Percival David Colloquies no. 17, London, 1995, pp. 225-252.

⁶⁸ The main ceramic production output during the Northern Song dynasty (960 -1127) came from kilns in the north of China. The wares are known as *Ru*, *Guan*, *Ge*, *Jun*, and *Cizhou*. R. Kerr and I. Thomas, *Song Dynasty Ceramics*, London, 2004; N. Wood, *Chinese Glazes- their Origins, Chemistry and Recreation*, London, 1999, pp. 81-88 on *Guan* ware; pp. 125-129 on *Ru* ware; pp. 129-134 on *Cizhou* ware.

⁶⁹ Dupoizat 1995 (op. cit.), p. 225.

⁷⁰ Image taken from: <https://www.bworldonline.com/ceramics-exhibit-snapshot-china-philippine-maritime-trade/> (visited January, 2020).

⁷¹ E. McKinnon, ‘Chinese Ceramics Recovered as Surface Finds at Cot Me and Ujung Batee Kapal, Kecamatan Mesjid Besar, Kabupaten Aceh Besar’, *Proceedings of the Symposium on Chinese Export Trade Ceramics in Southeast Asia*, 12-14 March 2007, Singapore. This contains information on finds at Desa Lamreh (Northwest tip of Sumatra), at Banda Ache (Kureng Raya) of stoneware from the Song to early Ming dynasty, celadons from the Song dynasty, Yuan *qingbai* and blue and white wares.

shards dated between the 7th to 13th centuries were discovered in the Sarawak Delta.⁷² Dupoizat explains that some 'primitive' populations in Borneo even regarded Chinese bowls as having spiritual power and used them for burials. For example, the graves of the Melanau population of Sarawak on the northwest coast of Borneo contained numerous Chinese bowls, some of which are engraved with *da ji* (good luck).⁷³ In another region, antique green-glazed vessels also had a significant meaning. According to William Burton:

At this day, the Dayak of Borneo regards as his most sacred treasure vessels of old Chinese Celadon porcelain which have been handed down with the utmost reverence from generation to generation; because, according to a native superstition, they are made of the remnants of the same clay from which the Almighty first created the sun and then the moon; so that the most miraculous virtues are attributed to them in the power of curing diseases, while no evil spirit will approach the house in which they are kept.⁷⁴

The preference for large dishes by certain overseas communities became apparent in the Song dynasty. In 1178, Zhou Qufei reported that 'People of the Persian country in the maritime southwest ... eat cakes, meat, and rice [by laying them out on and] filling porcelains. They eat it with their two hands and chew on it'.⁷⁵ This remark indicates that merchants from the Middle East, active in South East Asia, were apparently already using such dishes in this period. He also refers to Cui Yan who noted: 'The large plates with diameters from about 45 to 57 centimeters were manufactured precisely to accommodate Moslem feasts in which people gather seated together and eat with their hands'.⁷⁶

⁷² Wan Kong Ann, 'Examining the Connection between Ancient China and Borneo through Santubon Archaeological Sites', *Sino-Platonic Papers*, no. 236, April 2013; <http://www.sino-platonic.org>; <http://www.nationalmuseum.gov.ph/nationalmuseumbeta/Museums%20and%20Branches/fivecenturies.html> (both visited January, 2020).

⁷³ These are identical to 19 pieces from the Breaker Reef shipwreck; Dupoizat 1995, (op. cit.), p. 222: 'Certain shapes/types were favoured by various ethnic groups in Borneo or Philippines. However, it is very important to note two different and separate attitudes to these imported ceramics in Southeast Asia., dependant on the particular culture involved. On the one hand, there are those who made extensive use of trade ceramics for ritual and burial. On the other hand, there are those who made general use of these ceramics, as well as during festivals'.

⁷⁴ W. Burton, *Porcelain, a Sketch of its Nature, Art and Manufacture*, London, 1906, p. 63; Wan Kong Ann 2013 (op. cit.).

⁷⁵ Kessler 2012 (op. cit.), p. 467, note 556, where he refers to: Zhou Qufei, *Lingwai Daida*, vol. 3118, book 3, pp. 28-29.

⁷⁶ Ibid.

Ceramic production and shipments during the Yuan dynasty (1279-1368).

It appears that the Mongolian rulers of the Yuan dynasty were not as interested in luxurious porcelains as the previous Song dynasty rulers and kept to their modest customs.⁷⁷ Nevertheless, the Yuan dynasty rulers saw the importance of revenues from overseas trade. According to Brian Fahy, 'By the 14th Century, the maritime ceramic trade was booming, and the Mongol rulers initiated public works projects to promote economic development. Roads were constructed and the Grand Canal was extended to facilitate transport of goods'.⁷⁸ The government set up offices at the ports of Quanzhou and Ningbo to supervise overseas trade, to increase tax collections; loans were granted to commercial shipbuilders and the government would extract 70% of the profits from the trading cargo.⁷⁹

The major technical innovation that occurred during the Yuan dynasty was the application of a pigment that fires to a blue colour. This new type of decoration was made possible by the use of a substance made from a mineral containing cobalt oxide from Persia, called 'Islamic blue' (*Huihui qing*).⁸⁰ There is discussion amongst art-historians as to whether items with underglaze blue decoration were only produced for

⁷⁷ R. Krahl and J. Ayers, *Chinese Ceramics in the Topkapi Saray Museum Istanbul*, vols. I-III, London, 1986, p. 238. 'The inception of the Yuan dynasty put Mongols and other foreigners at the top of the class structure, completely dispersing the Song elite. Because these new elites simply took their official roles and not their "places" in society, many municipal frameworks stayed the same.'

⁷⁸ The Grand Canal is the longest man-made canal in the world, connecting Beijing to Hangzhou measuring over 1700 km long. Fahy 2010 (op.cit.), p. 32; Ching-Fei Shih, 'Experiments and Innovation: Jingdezhen Blue-and-White Porcelain of the Yuan Dynasty', PhD. dissertation, University of Oxford, 2001, p. 169.

⁷⁹ Ibid.

⁸⁰ R. Kerr, J. Needham and N. Wood (eds.), *Science and Civilization in China: Vol. 5, Chemistry and Chemical Technology, Part 12, Ceramic Technology*, Cambridge, 2004, p. 663; Du Feng and Su BaoRu, 'Further Study of Sources of the Imported Cobalt-blue Pigment Used on Jingdezhen Porcelain from Late 13th to Early 15th Centuries', *Science in China Series E: Technological Sciences*, 2008, vol. 51, no. 3, pp. 249-259, p. 249: "'Su Ma Li Qing" (Samarra-blue) and "Su Bo Ni Qing" (Sumatra-blue) are definitely different cobalt ores originated in different places, because of their very similar transliterations in Chinese, the confusion has appeared in ancient books for more than 400 years, which considered "Su Ma Li Qing" and "Su Bo Ni Qing" as the same cobalt-blue pigment. In this article the mistake was corrected, the possible producing places and the approximate eras of the two pigments imported to China and used at Jingdezhen were also suggested.'; Fahy 2010 (op. cit.), p. 10, suggests: 'There are two major points of view that authorities tend to take in the technological stimulus of Chinese blue-and-white; whether the primary influences in blue-and-white porcelain production are from internal (within China) or external (from the Middle East) factors. There are those who believe that blue-and-white production was based solely on the impact of foreign agents upon Chinese ceramic centres. They cite the influence of the Mongol Khanate government that was in power at the time and its press for a ceramic that mimicked Middle Eastern tastes. The use of a foreign source of cobalt to create these wares and use of what is believed to be foreign designs on blue and white ceramics supports this opinion. Critics of this stance tend to believe that the impetus for blue-and-white production during the Yuan Dynasty is due to local demand and artistic influences. Academics use models of earlier ceramic methods and glazing styles to support a theory that China had been using similar techniques on previous ceramics and changes in colour scheme reflect a local flavour'.

overseas markets.⁸¹ James Watt maintains that 'recent archaeological finds in China have refuted this assumption. Large hoards of porcelain, including blue-and-white have been found all over the country, from the southern provinces to Inner Mongolia'.⁸² According to Beamish, 'the same kilns produced items for both a domestic and an export market and that the same designs were adapted to different shapes that would not necessarily have been acceptable in both markets'.⁸³ In the exhibition held at the Shanghai museum in 2012, excavated items from the Luomaqiao kiln area in Jingdezhen were on display, and supported this theory.⁸⁴ Liu Xinyuan maintains 'Large plates excavated from the original Yuan imperial kiln sites are clearly not for the Chinese, they were more suited for the Islamic taste. The quality is however identical to those intended for the Imperial court'.⁸⁵

There are also differences between porcelain shapes made for the Middle Eastern collections and those made for Southeast Asian regions. For example, ceramic remains excavated in the Philippines and Indonesia include small jars, dishes, and bowls that differ in dimension and shape from those shipped to the Middle East. According to Laurie Barnes, 'Archaeological finds in another part of Indonesia, Sumatra, show a demand for specific utilitarian wares, such as vessels for serving rice or containers for use in ritual ceremonies. The people of this area were particularly fond of various sizes of green glazed jars and bowls with appliqué fish'.⁸⁶

⁸¹ Peng Minghan and Yin Qinlan, 'Yuan and Ming Provincial Blue and White from Jingdezhen' in P. Lam (ed.), *Yuan and Ming Blue and White from Jiangxi*, Hong Kong, 2002, p. 25.

⁸² J. C.Y. Watt, *The World of Khubilai Khan: Chinese Art in the Yuan Dynasty*, Metropolitan Museum of Art, New York, 2010, pp. 284-285. He refers to note 13 on p. 299: 'For a listing of the main hoards up to 1999, cf. Chen Kelun in Wang Qingzheng (ed.) 2000, vol. 11, pp. 305-311. Both Watt and Chen believe the porcelains in such hoards date to the Yuan dynasty'.

⁸³ J. Beamish, 'The Significance of Yuan Blue and White Exported to South East Asia', *South East Asia & China: Art, Interaction & Commerce*, London, 1995, pp. 225-251, p. 243.

⁸⁴ Chen Xiejun (ed.), *Splendors in Smalt: Art of Yuan Blue-and-white Porcelain*. Shanghai Museum exhibition, 2012; Li Baoping, 'Latest Excavations of Yuan Blue-and-White and Other Ceramics from Jingdezhen and Related Issues', *OCS Newsletter*, no. 22, October 2014, pp. 6-10. He refers to the excavations of Luomaqiao kilnsite: Jiang Jianxin, Weng Yanjun, Jiang Xiaomin and Wu Shurong, 'Archaeological Excavation on the Luomaqiao Kiln-site in Jingdezhen, Jiangxi,' in *State Administration of Cultural Heritage, Major Archaeological Discoveries in China in 2013* (in Chinese), Beijing, Cultural Relics Press, 2014, pp. 157-161; Crick states that the Luomaqiao kilns made smaller items with simple designs for the Southeast Asian market and the Hutian workshops larger pieces. Crick 2010 (op. cit.), p. 219

⁸⁵ Liu Xinyuan 1999 (op. cit.), p. 98; Kessler 2012 (op. cit.), refers to: Cui Yan, 'Lun Wailai Wenhua dui Yuandai Qinghua Ciqi Zhuangshi Wenyang de Yingxiang' in Huang Yunpeng (ed.), *Yuan Qinghua Yanjiu: Jingdezhen Yuan Qinghua Guoji Xueshu Yantaohui Lunwenji*, Shanghai 2006, p. 249: 'The large plates with diameters from 45-57 cms. were manufactured precisely to accommodate Moslem feasts in which people gather seated together and eat with their hands'.

⁸⁶ L. Barnes, 'Yuan Dynasty Ceramics' in Li Zhiyan, V.L. Bower, and He Li (eds.) *Chinese Ceramics: From the Paleolithic Period through the Qing*, New Haven, 2010. pp. 330-385, p. 336: 'Until quite recently, it was a

Shipwrecks dated to the Yuan dynasty provide additional data on ceramics exported overseas during this period. For example, in 1996, about 12,000 intact pieces were recovered from a wreck site in the Java Sea dated to the 13th century.⁸⁷ 'It has been estimated that the ceramic cargo of the Java sea wreck comprised at least 100,000 individual pieces from Fujian kilns, such as those at Anxi, Nanan and Putian'.⁸⁸ The salvaged items include, besides green-glazed bowls and dishes, covered boxes and jars.⁸⁹ (Figure 2.9)



Figure 2.9. Researcher Wenpeng Xu examines Chinese ceramics from the Field Museum's Java Sea Shipwreck collection. Photo: Lisa Niziolek, Field Museum Chicago (2018).

Another discovery, in 2010, were the remains of a wreck off the coast of Sabah, East Malaysia, dated to around 1300. Besides various types of jars, lead-glazed *kendi*, a shape that was especially favoured in Southeast Asia, it contained numerous green-glazed wares, small items like jarlets and dishes decorated with a dragon or twin-fish

custom in Indonesia, specifically on the island of Sulawesi, to include *Longquan* wares in burials'. See also Crick 2010 (op. cit.).

⁸⁷ Recent research undertaken by the Field Museum in Chicago established a much earlier date of sinking, of around 100 years. See: L. Niziolek, 'Portable X-ray Fluorescence Analysis of Ceramic Covered Boxes from the 12th/13th-century Java Sea Shipwreck: A Preliminary Investigation' *Journal of Archaeological Science*, vol. 103, 2019, pp. 57-71; L. Niziolek, G. Feinman, J. Kimura, A. Respass, and Lu Zhang, 'Revisiting the Date of the Java Sea Shipwreck from Indonesia', *Journal of Archaeological Science: Reports*, October, 2018. From: <https://www.sciencedirect.com/science/article/pii/S2352409X18300208> (visited January, 2020).

⁸⁸ M. Flecker, 'The Thirteenth-Century Java Sea Wreck: A Chinese Cargo in an Indonesian Ship', *The Mariner's Mirror*, vol. 89, November 2003, pp. 388-404. By the same author: 'The 13th Century Java Sea Wreck: Bulk Iron and Ceramics from China', proceedings of the Fujian Ceramics Conference, Singapore, 1999.

⁸⁹ See: <https://www.fieldmuseum.org/blog/what-were-still-uncovering-800-year-old-shipwreck> (visited January, 2020).

design ‘en relief’.⁹⁰ According to Flecker, ‘The better-quality pieces have a plain interior while the majority have an unglazed ring in the centre to allow for direct stacking inside the kiln. Dishes with appliqué twin- fish in the centre, a design that perhaps best typifies *Longquan* ceramics, were also relatively common’.⁹¹ (Figure 2.10) A few large dishes were also found. (Figure 2.11) These finds typify the taste for green-glazed dishes within Southeast Asia.



Figure 2.10. A small *Longquan* type of dish with appliqué twin-fish decoration.⁹²



Figure 2.11. A large dish with a moulded panel design.⁹³

Further examples of export ceramics from this period have been salvaged from ships wrecked near the reefs that marked the passage to the west of Palawan Island, Philippines.⁹⁴ One of these is a Chinese junk named the *Investigator Shoal*; it sank near a group of islands of Kalayaan and contained brown and green-glazed ceramics, mostly Chinese utilitarian wares such as cups, bowls, saucers and plates, but only a few rare ewers.⁹⁵

In 1976, a shipwreck was discovered in the waters near the South Korean coastline at Sinan county, Jeolla province. From 1976 to 1984, research and salvage was carried out and, exceptionally, wooden tags show the names of customers who ordered the items. The Tofukuji temple in Kyoto, Japan ordered many objects. The ship departed from the Chinese port of Ningbo in 1323 and was bound for Hakata, Fukuoka province

⁹⁰ M. Flecker, ‘The Jade Dragon Wreck: Sabah, East Malaysia’, *The Mariner’s Mirror*, vol. 98, no. 1, 2012, pp. 9-29; see also Wan Kong Ann 2013 (op. cit.).

⁹¹ Flecker (op.cit.), p. 19.

⁹² Ibid., p. 19, fig. 11.

⁹³ Ibid., p. 20, fig. 13.

⁹⁴ R. Scott and J. Guy (eds.), *South East Asia and China. Art, Interaction and Commerce*, Sir Percival David colloquies on Art and Archaeology in Asia, no. 17, London, 1995; E. Dizon, ‘Underwater and Maritime Archaeology in the Philippines’, *Philippine Quarterly of Culture and Society*, no. 31, 2003, pp. 1-15.

⁹⁵ Crick 2010 (op. cit.), pp. 32-34. Exceptional shapes for export include: bottles, ewers with phoenix heads, stem cups; see p. 29 for a map with production sites.

in Japan.⁹⁶ Around 22,000 ceramic pieces were salvaged of which around 16,000 are green-glazed items made in the Longquan kilns. The cargo consisted mainly of bowls and dishes with incised flower designs. Dark-glazed bowls produced in the Jian kilns in Fujian province were already much in demand in Japan for drinking tea and would have been a standard item for this market. Vases, incense burners, figurines, flower pots and a large quantity of ewers, and cup stands, typical pieces used at temples, indicate that the cargo included a special delivery for temples.⁹⁷ (Figure 2.12)



Figure 2.12. A variety of items from the *Sinan wreck* dated 1323 displayed at the National Museum of Korea. Photos: Wi Tack-whan, National Museum of Korea.⁹⁸

Looking over the pre-Ming epoch as a whole, I conclude that during the Tang dynasty, there was a noticeable increase in production, and adaptations such as a type of decoration that appealed to foreign customers were added to domestic type *Yue* and *Changsha* bowls. Furthermore, some non-Chinese innovations of shapes like *kendi* and ewers with bird heads were produced. From the Song dynasty on, the Longquan kilns increased the variety of green-glazed wares; smaller items catered mostly to Southeast Asian markets; Islamic clientele favoured the larger dishes. Other wares in demand and shipped overseas were domestic bowls from the Cizhou kilns and dark-glazed bowls

⁹⁶ Lee Myong Ok, 'Discoveries from the Sinan Shipwreck', *The Silk Road*, no. 14, 2016, pp. 223-225; 'Discoveries from the Sinan Shipwreck: Special Exhibition on the 40th Anniversary of the Excavation', 26 July to 4 September 2016, National Museum of Korea, Seoul, 2016, from: <http://www.korea.net/NewsFocus/History/view?articleId=138942#> (visited January, 2020). See also *Sunken Treasures*, Gaillard and Van den Berg (eds.) 2019 (op.cit.).

⁹⁷ Barbara Seyock, 'Archaeological Complexes from Muromachi Period Japan as a Key Perception of International Maritime Trade in East Asia', in A. Schottenhammer (ed.), *The East Asian Mediterranean: Maritime Crossroads of Culture, Commerce and Human Migration*, Wiesbaden, 2008, pp. 179-20. see also: Lee Myong Ok (op. cit.), p. 223.

⁹⁸ From: <http://www.korea.net/NewsFocus/History/view?articleId=138942> (visited January, 2020).

from the Jian kilns favoured in Japan. Shipwrecks dated to the Tang and Song dynasties have revealed a mixture of Chinese domestic type of wares with a small addition of foreign items.

The Yuan dynasty can be characterized as the period during which underglaze blue decoration on porcelain became popular in China, the Middle East and Southeast Asia. Non-Chinese shapes as ewers and pen-boxes were an addition to suit Islamic customers and, as before, smaller items such as covered boxes and small jars mostly served Southeast Asian regions. The demand for flatware of larger dimensions increased as these primarily met the requirements of Islamic customers. Green-glazed items prevail the Middle Eastern collections in this period; the Topkapi Palace collection with 406 pieces of Longquan kiln ware.⁹⁹ More than half of the 58 celadons in the Ardebil Shrine collection are large dishes, eight with diameters from 60-63 cm.¹⁰⁰

We see here a division between 'export ceramics' and 'ceramics that were exported', a distinction made earlier. The 'export' or rather 'foreign' (*guowai*) wares are mainly shapes unfamiliar to the Chinese and were produced specifically for transportation to overseas regions. Fragments from shipwrecks have established that, during these epochs, ceramics exported from China were a mixture of Chinese domestic items, mostly bowls, combined with 'foreign' shapes. (Appendix Chapter 2, Table 1.)

The first period of the Ming dynasty (1368- ca.1522).

The discussion of the types of Chinese ceramics transported overseas during this period is complicated by the fact that several edicts were issued by the early Ming emperors that prohibited overseas trade. There is often confusion between the terms 'the Ming trade ban' and 'the Ming gap'. The first Ming emperor, Hongwu (1368-1390), issued an edict, the *Haijin* (ban on sea trade) in 1371 to prevent piracy, especially by the Japanese, and the smuggling of goods.¹⁰¹ This ban also intended to control the power of the

⁹⁹ The Longquan kilns are renowned for the production of celadon ware. The Topkapi museum has 15th century celadon dishes all with a foliated rim and bracket lobed sides. See also Regina Krahl: 'China ships and Porcelain Rooms: Collecting Chinese Ceramics in the Middle East', p.42 in *Vormen uit Vuur*, no.191/192; 2005-2/3.

¹⁰⁰ Pope 1956 (op.cit.) pp. 153-158 and p.159.

¹⁰¹ In fact, there were several edicts that issued trade bans during the Ming dynasty; a further decree took place in 1447; a decree dated to 1500 prohibited the use of Chinese junks with more than two masts; the Jiajing Emperor reiterated the ban on trade with foreigners and a further decree of 1525 required all ships with multi-masts to be destroyed. See B. McElney, *Chinese Ceramics and the Maritime Trade, Pre-1700*, Bath, 2006, p. 10.

eunuchs who supervised overseas trade at that time.¹⁰² The Chinese were forbidden to leave the country, the import and export of goods were prohibited and ships were purposely destroyed.¹⁰³

The term 'Ming Gap' was given to the subsequent lack of export ceramics caused by the Ming ban.¹⁰⁴ Roxanna Brown devoted her research to the shipments of ceramics during the Ming gap for which she made extensive use of shipwreck finds in Southeast Asia.¹⁰⁵ Brown's research focused on how Vietnamese and Thai ceramics replaced or filled up the overseas export of Chinese wares during the Ming ban on foreign trade: 'The primary goal has been to offer, after decades of speculation, hard data on whether or not there were shortages of Chinese ceramics in general during the reigns of the early Ming dynasty and whether or not there was a total absence of Chinese blue and white export ceramics in Southeast Asia during the 15th century'.¹⁰⁶

Brown based her research on the finds of fourteen shipwrecks in Southeast Asian waters, which showed that only around 50-100 pieces of blue and white porcelain items had been transported during the period 1368-1488. She also concluded that there were, in fact, different periods of shortages of Chinese ceramic export ware. The first period was between around 1368, the first year of Hongwu reign, to around 1424, the last year of emperor Yongle (1403-1424), when there was a drop to 30-40% of Chinese ceramics of the total amount of the cargo. The second shortage occurred from the end of the reign of Yongle (1424) to the end of Chenghua (1465-1487), when there were

¹⁰² S. Pierson, *From Object to Concept. Global Consumption and the Transformation of Ming Porcelain*. Hong Kong, p. 22. She explains how tributes to the Chinese emperor took place. All foreign trade was to be conducted by official tribute missions which were handled by representatives of the Ming Empire and its 'vassal' states. The emperor in return also sent items. For example, in 1383, 57,000 pieces of porcelain were sent to regions in South East Asia; Ströber 2012 (op. cit.), p. 26: 'In 1383 from Siam 200 ivory items sent to the emperor who in return sent 1900 ceramic pieces'.

¹⁰³ Li Kangying and A. Schottenhammer, *The Ming Maritime Trade Policy in Transition, 1368 to 1567*. Wiesbaden, 2010. Introduction, p. 3: 'The *haijin* was not only a policy of the Hongwu administration but was instituted as part of the *Ancestral Injunctions*... to be upheld by all following administrations'. See also Gang Deng, *Maritime Sector, Institutions, and Sea Power of Premodern China*. Westport, Conn., 1999.

¹⁰⁴ The term was first used by Tom Harrisson to refer to an absence of early Ming blue-and-white wares at Sarawak River delta sites in Borneo. T. Harrisson (ed.), *The Peoples of Sarawak*, Sarawak Museum, Kuching, 1959; Wan Kong Ann 2013 (op.cit.).

¹⁰⁵ R. Brown, *The Ming Gap and Shipwreck Ceramics in Southeast Asia*, The Siam Society, Bangkok. 2009, pp. 24-27, p. 51: 'For, prior to the Hongzhi reign (1488-1505), Ming blue- and-white is practically absent from both land and maritime sites. Elsewhere, I have adopted the term 'Ming gap' to refer to this near absence of blue-and-white, which extends from 1352 (when Chinese archaeologists say war caused the closure of the Jingdezhen kilns) to the Hongzhi reign'. See also: R. Brown and S. Sjostrand, *Maritime Archaeology and Shipwreck Ceramics in Malaysia*, published on the occasion of the exhibition Malaysian Maritime Archaeology by the Department of Museums & Antiquities in collaboration with Nanhai Marine Archaeology, Kuala Lumpur, 2002.

¹⁰⁶ Brown 2009 (op. cit.), p. 74.

hardly any Chinese ceramics (5% or less of the cargo). A further series of imperial edicts affected export: in 1438, no blue and white decoration was allowed to be used on non-imperial wares, and in 1447, neither blue and white nor the colours yellow, purple, red or green were to be applied to porcelain without imperial permission.¹⁰⁷

Brown shows that shipwrecks within Southeast Asia from this era contained a mixture of Chinese, Thai and Vietnamese export ceramics to make up for the regular shipments of Chinese ceramics.¹⁰⁸ For example, the *Turiang* wreck site dated to 1370 contained Thai, Vietnamese and Chinese ceramics.¹⁰⁹ (Figures 2.13 and 2.14) It was apparently a Chinese vessel heading for Borneo and/or Sulawesi. The wreck is dated to around 1370-1400, and is one of the earliest shipwrecks yet discovered with Thai export ceramics.¹¹⁰



Figure 2.13. A green-glazed dish from the *Turiang* shipwreck, National Museum Kuala Lumpur. Photo by author.



Figure 2.14. Various items salvaged from the *Turiang* shipwreck. National Museum, Kuala Lumpur. Photo by author.

The *Nanyang* wreck dated to 1380 was found in 1995 off the Malaysian coast; its cargo is estimated to have been 10-15,000 pieces, most of which were green-glazed wares produced in the Sawankhalok kilns in Thailand. Some 20 dishes are from the

¹⁰⁷ McElney 2006 (op.cit.), p. 10; Tai Yew Seng, 'The Ming Gap and the Revival of Commercial Production of Blue and White Porcelain in China'. *Bulletin of the Indo-Pacific Prehistory Association*, vol. 31, 2011, pp. 85-92.

¹⁰⁸ As the demand continued, smaller kilns from other areas in China produced quantities of everyday ware which could easily be secretly shipped from ports of Fujian. M. Flecker, 'Maritime Archeology in Southeast Asia' in Miksic (ed.) 2010 (op. cit.), pp. 34-48.

¹⁰⁹ Brown 2009 (op. cit.), pp. 40-41.

¹¹⁰ R. Brown and S. Sjostrand, *Turiang: A Fourteenth Century Shipwreck in Southeast Asian Waters*, vol. 2. Pacific Asia Museum, Kuala Lumpur 2000; S. Sjostrand and C. Barnes, 'The "Turiang": a Fourteenth-Century Chinese Shipwreck upsetting Southeast Asian Ceramic History', *Journal of the Malaysian Branch of the Royal Asiatic Society*, vol.74, no.1, 2001, pp. 71-109; Brown and Sjostrand 2002 (op. cit.).

Sukhothai kilns and a few storage jars came from south China.¹¹¹ A similar wreck was discovered in 1996 and named the *Longquan* wreck and dated to around 1400. 'The ceramics are estimated to have numbered 100,000 pieces, fifteen times the volume present on the *Turiang*'. The cargo included 40% green-glazed items from Sisatchanalai and 20% black wares from Sukhothai kilns. Some 40% of the cargo consisted of Chinese green-glazed plates and bowls and monochrome white bowls.¹¹² (Figure 2.15)



Figure 2.15. A Chinese green-glazed plate and other items from the *Longquan* wreck (ca.1400). National Museum, Kuala Lumpur. Photo by author.

According to Qin Dashu, early Ming *Longquan* ware was used for trade and exquisite pieces were used as tribute ware for foreign countries.¹¹³

This is recorded in the *Collected Statutes of the Great Ming* under the entry of "Ministry of Works". Therefore, Longquan official wares were ordered by the Ministry of Works, used on official occasions and presented as gifts to other countries. The popular large dishes and bowls of the Yongle reign (1403-1424) might have been made in Longquan kilns specifically for the voyages of Zheng He so that they could be presented as gifts to the rulers of the countries he visited. [...] Discoveries of imperial wares provide strong evidence that Zheng He visited

¹¹¹ Sukhothai ceramic ware is covered with a creamy white slip and decorated in black with an opaque or greenish glaze. Sawankhalok products tend to be more finely made than the Sukhothai ones. These products are incised and often include animal shapes. Brown 2009 (op. cit.) pp. 41-42: 'The Nanyang wreck (c.1380) was found 10 nautical miles from the nearest Malaysian island. The cargo is well organized, in cargo compartments separated by transverse bulkheads. This site has not yet been excavated, but four hundred ceramic pieces were recovered for study purposes'. See also Brown and Sjostrand 2002 (op. cit.)

¹¹² Ibid., p. 184 and <https://www.maritimeasia.ws/turiang/chinese.html> (visited January, 2020).

¹¹³ Qin Dashu, 'Ming Ceramics Discovered in Kenya and Some Related Issues', in: *Ming China: Courts and Contacts: 1400-1450*. British Museum publications, London, 2016; Khalfan Bibi Ahmed, 'The Provenance of Chinese Ceramics Unearthed from Important Archaeological Sites of Manda and Mtwapa, Kenya'. MA thesis, Sun Yat-sen University, 2019.

the coastal areas of Kenya.¹¹⁴

Eva Ströber also notes: 'Besides being used as tableware, large celadon dishes served as diplomatic gifts not only between Middle East rulers, but were also given to European courts. A large celadon dish was given in the year 1487 from the Egyptian sultan Qa'it Baj to Lorenzo de Medici, documented by the inscription on the bottom of the dish'.¹¹⁵

In 1457, the Imperial bans were lifted and under the reign of Emperor Chenghua (1465-1487), the production of underglaze blue decorated porcelain revived.¹¹⁶ Overseas demand increased and a second stream of production developed. Krahll remarked: 'As the high-quality ware produced at Jingdezhen was kept for the growing demands of the discriminating Chinese clientele, a new production line had to be developed for exports. This much rougher ware may have been an upgraded version of ordinary household ceramics made at some Jingdezhen kilns'.¹¹⁷

Evidence comes from several shipwrecks that contained cargoes with export ware. The shipwreck named *Royal Nanhai* (dated to c. 1460) was excavated in 1995 with more than 21,000 ceramic pieces, most of which were Sawankhalok green-glazed wares. (Figure 2.16) However, some Chinese blue and white bowls were found hidden beneath the floorboards, indicating that these may have been an illegal purchase.¹¹⁸ (Figure 2.17) These shipwrecks support the concept of the Ming gap when shipping blue and white porcelain to overseas markets was prohibited. On the whole, only small quantities of Chinese ceramics left China, in this case probably illicitly.

We can see that these dishes were not large sized ones; in fact, shipwrecks found within Southeast Asia mostly contained flatware with a smaller dimension and of a more mediocre quality than those seen in the Middle Eastern collections.

¹¹⁴ Dashu 2016 (op.cit.), p.250; see also: Zhao Bing, 'La Céramique Chinoise Importée en Afrique Orientale (IXe-XVIe siècles) : Un cas de changement de valeur marchande et symbolique dans le commerce global' in: *L'Afrique Orientale et l'Océan Indien : Connexions Commerciales, Circulations et Appropriation des Objets*, 2015.

¹¹⁵ Eva Ströber also notes, 'Large Dishes from Jingdezhen and Longquan around the World'. Keramiekmuseum Princessehof, 2010 (pdf. Version).

¹¹⁶ C. Shangraw, 'Fifteenth Century Blue-and-White in the Asian Art Museum of San Francisco', *Chinese Ceramics, Selected Articles from Orientations, 1982-1998*, Hong Kong, 1999, pp. 103-114, p. 112.

¹¹⁷ Krahll and Ayers 1986 (op. cit.), p. 486.

¹¹⁸ Brown 2009 (op. cit.), p. 43: '446 plates were recovered; 3,415 were intact. They were found stacked between bulkheads, with an average of 32 pieces in each stack. There was only a small amount of brown glazed Chinese bowls and jarlets, but many black-glazed storage jars from Maenam Noi kilns of central Thailand', pp. 128-129 Plates 45 and 46; Brown and Sjostrand 2002 (op. cit.).



Figure 2.16. Green-glazed bowls from the *Nanhai* Shipwreck, ca.1460.¹¹⁹



Figure 2.17. Blue and white dish from the *Nanhai* shipwreck, ca 1460. National Museum, Kuala Lumpur. Photo by author.

Another example is the *Pandanan* wreck excavated at south Palawan in the Philippines in 1995. According to Brown, the cargo may have consisted of some 20,000 ceramic pieces of which 70% originated from central Vietnam and Thailand.¹²⁰ Also included were around 30-60 Chinese blue and white small dishes, bowls of mediocre quality, and small jars as well as some green-glazed ware, all utilitarian ware.¹²¹ (Figure 2.18) The wreck has not been dated precisely, but is believed to be from around 1470.¹²²



Figure 2.18. Blue and white decorated dishes from the *Pandanan* shipwreck ca. 1470. All are medium and small sized dishes.¹²³

¹¹⁹ Photo from lecture given by R. Brown at the Southeast Asian Ceramics Museum, Kuala Lumpur, 2007. From: https://maritimeasia.ws/topic/melaka_slides.pdf. (visited January, 2020).

¹²⁰ E.Z. Dizon, 'Anatomy of a Shipwreck: Archaeology of the 15th-century Pandanan Shipwreck', C. Loviny (ed.), *The Pearl Road: Tales of Treasure Ships in the Philippines*, Makati City, 1996, pp. 62-93.

¹²¹ Ibid., p. 62: 'The shipwreck site is located about 250 meters off the northeast coast of the island (Dizon 1996:64). Research started in 1993; there were 4,722 artefacts found in the Pandanan Wreck Site. These are divided into six categories on the basis of the kind of artefacts: earthenware, porcelain, metals, coins, glass artefacts; the stoneware were produced in kilns in Fuchien Province and Guangdong Province in southern China. The blue-and-white wares are composed of saucers, bowls, large bowls and small jarlets. White wares are two pieces of gourd-shaped pouring vessels, one of them has dots of an iron pigment. Celadon wares are composed of dishes with a floral flaring rim, bowls with lotus design, saucers and stemmed cups. The stoneware produced in Fuchien and Guangdong Provinces are brown glazed six eared jars with a dragon design'. Brown 2009 (op. cit.), p. 44, p. 47, and Plates 51, 52, 53, 54 and 55 all illustrate Chinese blue and white bowls, cups and dishes. There are also 2 ewers with iron spot design.

¹²² Brown 2009 (op. cit.), p. 47.

¹²³ Photos from: <https://en.unesco.org/silkroad/silk-road-themes/underwater-heritage/pandanan-14th-century>. (visited January, 2020)

From the Hongzhi reign period (1488-1506), underglaze blue ware was produced in larger amounts.¹²⁴ This supports Brown's theory that the start of this reign can be considered as the termination of the Ming gap.¹²⁵ 'There is general agreement among scholars that the *Lena Shoal*, *Brunei Junk* and *Santa Cruz* shipwrecks can be dated to the Hongzhi reign and that all three carried primarily Chinese blue and white'.¹²⁶

One of these, the *Brunei Junk*, was discovered offshore near Brunei in 1997; researchers date the wreck to around 1500.¹²⁷ The 13,500 recovered pieces include Thai and Vietnamese ceramics, numerous Chinese stoneware jars from Jiangxi and green-glazed celadon wares from Guangdong province. Furthermore, 4,565 blue and white decorated items, for the most part dishes of various shapes and sizes, most with a diameter of ca. 20-24 centimetres.¹²⁸ (Figure 2.19) Some 1,000 green-glazed and 200 white-glazed porcelain items were also found, some with enamel decorations.¹²⁹ Pirazzoli-t'Sersteven maintains that 'This is not the first quality porcelain made in official kilns, but an ordinary production made in private kilns (minyao) from Jiangxi province, Jingdezhen, but also maybe in several cases Linjiang kilns' 'This production was for the domestic market as well as for export'.¹³⁰

¹²⁴ Jessica Harrison-Hall, *Ming Ceramics - A Catalogue of the Late Yuan and Ming Ceramics in the British Museum*, London, 2001.

¹²⁵ Brown 2009 (op. cit.), p. 48: 'After the Hongzhi flood of Chinese ware, however, there is another period of moderate shortage after about 1520 until the Ming ban is officially rescinded in 1567'.

¹²⁶ Brown 2009 (op. cit.), p. 62.

¹²⁷ The *Brunei* wreck was discovered forty kilometers off the shore of Brunei by Elf petroleum and salvaged by the team of the company DRASSM led by Michel L'Hour. M. L'Hour (ed.), *The Sunken Treasures of Brunei Darussalam*, Paris, 2001.

¹²⁸ M. Pirazzoli-t'Sersteven, 'The Brunei Shipwreck: A Witness to the International Trade in the China Sea around 1500', *The Silk Road*, vol. 9, 2011, pp. 5-18, p. 8; Sharon Wai Yee Wong, 'A Preliminary Study on the Distribution and Consumption of Ceramics in Hong Kong during the Song-Yuan Period', *Bulletin of the Indo-Pacific Prehistory Association*, vol. 26, 2002, pp. 140-146.

¹²⁹ Pirazzoli-t'Sersteven 2011 (op. cit.), p. 8.

¹³⁰ Ibid., and note 8: 'The blue and white porcelains in the Brunei cargo are very similar to the ones found in the Daijitan tombs at Fuyu, Jilin province, wrongly attributed to the Yuan dyansty'; 'Several blue and white excavated from a paper-making mill at Gao'An in Jiangxi have their equivalent in the Brunei cargo. Chinese archaeologists attribute these to the Jingdezhen production of the Zhengde reign. See Kaogu 2010, Figs. 30/3 and 31/1'.



Figure 2.19. Two porcelain dishes from the *Brunei* shipwreck. (inv. nrs. left: Bru 1351, right: Bru 3190).¹³¹

This also concerns the *Lena Shoal* wreck, dated to 1490, and discovered in 1997 near Busuanga Island west of Palawan Island, Philippines.¹³² Besides substantial amounts of plates, bowls and stem cups, the cargo included covered pen-boxes and numerous ewers, typical Islamic type shapes.¹³³ (Figures 2.20 and 2.21)



Figure 2.20. Various porcelain items from the *Lena* shipwreck (1490).¹³⁴



Figure 2.21. Porcelain 'writing boxes' from the *Lena* shipwreck (1490).¹³⁵

¹³¹ Photo from: Ibid., p. 8, Fig. 7.

¹³² They include blue and white pieces from the kilns at Jingdezhen, a small amount of *Longquan* celadons but also some Vietnamese and Thai ceramics. F.S. Goddio, S. Pierson and M. Crick, *Sunken Treasure: Fifteenth Century Chinese Ceramics from the Lena Cargo*, London, 2000; F. Goddio et al., *Lost at Sea: The Strange Route of the Lena Shoal Junk*, London, 2002; F. Goddio, 'La Jonque de Lena et le Vaisseau Royal Captain', *Taoci*, no. 2, December, 2001, pp. 11-20; M. Crick, 'Les Céramiques Chinoises, Vietnamiennes et Thaïlandaises de la Jonque de Lena', *Taoci*, no. 2, December, 2001, pp. 71-85.

¹³³ Fahy 2010 (op. cit.), p.23: '(Fig. 36), a Duck jar (Fig. 37), ewers and globular vases (Fig. 38) made up some of the higher quality wares on the ship'.

¹³⁴ From: Goddio 2001 (op. cit.), p. 14, fig. 4. Photo by Discovery Communications Inc./UAD Underwater Archaeology and Discovery Ltd.

¹³⁵ Ibid., p. 15, fig. 7. Photo by Discovery Communications Inc./UAD Underwater Archaeology and Discovery Ltd.

Flatware from the *Lena* shipwreck show that most dishes have the same dimension of around 20 to 30 centimetres and have a deep well. (Figure 2.22) This shows that large quantities of identical sizes were produced for Southeast Asian communities.



Figure 2.22. Chinese porcelain dishes from the *Lena* shipwreck (ca. 1490). Photo by Discovery Communications Inc./UAD ¹³⁶

Another example of “Islamic’ types of ceramics are the finds from the *Santa Cruz* wreck, discovered in 2001 near the island of Luzon in the northern Philippines.¹³⁷ The 15,500 porcelain pieces are mostly Chinese utilitarian ware dated to the Hongzhi reign, but exceptional water-droppers and calligraphy utensils were also amongst them, as in the *Lena* cargo.¹³⁸ Examples are ‘pen boxes’, copies from Middle Eastern types inlaid with gold or silver, and the crescent-shaped *kendi*. (Figure 2.23)

¹³⁶ Goddio 2001 (op. cit.), p. 15, fig. 6.

¹³⁷ B. Orillaneda, ‘A View of a 15th Century Trading Vessel in the Philippines: The Sta. Cruz Shipwreck’. *Proceedings of the Symposium on Chinese Export Trade Ceramics in Southeast Asia*, 12-14 March, 2007, Singapore, pp.1-7; B. Orillaneda, *The Santa Cruz, Zambales Shipwreck Ceramics: Understanding Southeast Asian Ceramic Trade During the Late 15th Century C.E.*, University of the Philippines, Quezon City, 2008; F. Goddio, *Weisses Gold. Five Junks and their Cargos*, Exhibition Catalogue, in co-operation with J.P. Desroches and M. Crick, Göttingen, 1997.

¹³⁸ A. Kintanar, *Identifying ‘Islamic Motif’ on Chinese Blue and White Porcelain Recovered from the 15th Century Shipwrecks in the Philippines*, M.A. thesis, Archaeological Studies Program, University of the Philippines, Diliman, (no date): ‘Most numbered ceramics are celadon with 2,512, followed by 1,769 blue and white porcelains’; from:



Figure 2.23. 'Islamic' shapes salvaged from the *Santa Cruz* shipwreck, National Museum of the Philippines.¹³⁹

The items salvaged from the *Lena* and *Santa Cruz* shipwrecks show that besides plain utilitarian ware as rice bowls, finer items adapted in shapes to 'Islamic taste' were included for wealthier customers in Southeast Asian regions: '50% of *Lena* porcelains can be considered as "definitely Islamic" while the *Santa Cruz* has almost 40%'.¹⁴⁰

Turning to the two collections in the Middle East, the Topkapi Palace Museum in Istanbul and the collection of the Ardebil Shrine, currently in the Iran Bastan Museum in Tehran, have a large variety of Chinese blue and white porcelain, as well as some green-glazed items.¹⁴¹ The compilers of the three-volume catalogue of the Topkapi Palace Museum that contains all the ceramics explain how the collection was formed: 'Generally, Chinese porcelain reached the palace either as gifts and trophies, or some of it was purchased. A certain amount of ware was acquired by the reversion of the estates of deceased statesmen and members of the court, or of those who had fallen from favour'.¹⁴² Confiscating goods was another method. 'An example is the collection of Esad Pasa; disgraced, his belongings were confiscated from 3 palaces amongst which were

<http://www.themua.org/collections/files/original/df52f701c82d9d5da62c178528d7de97.pdf> (visited January, 2020); Orillaneda 2008 (op. cit.); Brown 2009 (op. cit.), plate 63 illustrates bowls and dishes with a mythical creature, a *qilin*.

¹³⁹ Photo from Kintanar (no date), p.10, figures 5a, 5b, 5c and 5d.

¹⁴⁰ Kintanar (op. cit.), p.9.

¹⁴¹ 'Although no archival documents concerning orders or direct purchases from China have been found, it is clear from price and auction records from the second half of the 16th century onwards, that Chinese porcelains began to be purchased by court dignitaries and the wealthy'.

<https://topkapisarayi.gov.tr/en/content/chinese-and-japanese-porcelains> (visited January, 2020).

¹⁴² Krahl and Ayers 1986 (op. cit.), p. 16; R. Krahl: 'China Ships and Porcelain Rooms: Collecting Chinese Ceramics in the Middle East', *Vormen uit Vuur*, 191/192, no. 2/3, 2005, pp. 38-48; p. 42. The Topkapi Palace Museum contains some 1350 green-glazed items.

3098 pieces of porcelain'.¹⁴³ The other method was through a practice known during the Ottoman Empire as '*muhallefat*', (compulsory) inheritance.¹⁴⁴ Official gifts to the Sultan included porcelain that was added to the collection; these came mostly from the Persians.¹⁴⁵ The Topkapi Palace Museum collection consists of 10,358 pieces; 446 pieces date to the Yuan dynasty of which 406 are Longquan green-glazed wares and 40 are blue-and white dishes, all with large dimensions.¹⁴⁶

The Ardebil Shrine provides further examples.¹⁴⁷ In 1611, Shah Abbas (r.1587-1629) donated the porcelain collection accumulated during his reign with gifts and sporadic purchases from previous periods to the mausoleum of Safi al-Din (1252-1334) in the city of Ardebil in northern Iran.¹⁴⁸ A special room housed all his donations, which included a large number of books. Pope referred to several accounts written by travellers who visited the Shrine.¹⁴⁹ One description was written by 'Adam Olearius, who served as secretary to the ambassadors sent by Frederick, Duke of Holstein, to the Great Duke of Moscovy and the King of Persia and arrived in Ardebil in 1637'. He describes it as: 'This Hall is called Tzenetsera (Chini-serai/Chini-khaneh) and serves for a Library'; furthermore, 'In the Neeches of the vault, there were above three or four hundred vessels, of Porcelane; some so large as that they contain'd above 40 quarts of Liquor. These are only used at entertainments which are brought from the Sepulchre to the King and other great Lords who pass that way'.¹⁵⁰ Many items were destroyed

¹⁴³ Krahl and Ayers 1986 (op. cit.), p. 16.

¹⁴⁴ Ibid., pp. 15-16 and pp. 32-35. According to the authors, this would have been the main method of 'collecting.'

¹⁴⁵ Ibid., p. 30: 'Of the foreign powers it was the Persians who most consistently presented the Sultan with porcelain during the 16 and 17th centuries'.

¹⁴⁶ Krahl and Ayers 1986 (op. cit.); Krahl 2005 (op. cit.).

¹⁴⁷ T. Misugi, *Chinese Porcelain Collections in the Near East: Topkapi and Ardebil*, Hong Kong, 1981, vols. 1-3, pp. 92-93; J. Pope, *Chinese Porcelains from the Ardebil Shrine*, Washington, 1956.

¹⁴⁸ Both Pope 1956 (op. cit.), and Misugi 1981 (op. cit.) have researched this collection. See also Pedro Carvalho, 'Porcelains for the Shah, Ardabil and the Chinese Ceramics trade in the Persian Gulf', *TOCS*, vol. 66, 2001-2002, pp. 47-56; P. Morgan, 'New Thoughts on Old Hormuz: Chinese Ceramics in the Hormuz Region in the Thirteenth and Fourteenth Centuries', *Iran*, no. 31, 1991, pp. 67-83.

¹⁴⁹ Pope 1956 (op. cit.), pp.11-17; one is by Anthony Jenkinson who 'brought back' the original Ardebil carpet dated 1540, now in the Victoria and Albert Museum

¹⁵⁰ Ibid., p. 13, note 19; he quotes from: *The Voyages & Travels of the Ambassadors from the Duke of Holstein, to the Great Duke of Muscovy, and the King of Persia: Begun in the Year M.DC.XXXIII and Finish'd in M.DC.XXXIX: Containing a Compleat History of Muscovy, Tartary, Persia, and Other Adjacent Countries: with Several Publick Transactions Reaching Neer the Present Times: in Seven Books: Illustrated with Diverse Accurate Mapps and Figures, 1662*: 'The niches were an architectural fashion in Iran; these were shaped according to the various forms of vessels in the wall but were not 'specially' designed for this porcelain collection because not all niches coincide with the actual Chinese pieces.'; see also: Yuka Kadoi, 'The Chini-Khane: Reception and Appreciation of Chinese Ceramics in Iran, 1300-1800', paper presented at the conference 'Cultures of Ceramics in Global History, 1300 to 1800', Warwick, April 2010.

during earthquakes and 19th-century Western visitors remarked that pieces were placed on the floor.¹⁵¹ The collection originally comprised 1,221 pieces, according to a written inventory, but now only 880 are kept in the Iran Bastan Museum. Some pieces can still be seen in the *chīnī-khāneh* room of the Ardebil Shrine (Figure 2.8). This collection presently contains items of various dimensions, including 287 dishes, 206 saucers, 170 bowls and 95 cups.¹⁵² This collection is of great importance as it has an end date of 1611; all the porcelain items have been produced before this date.¹⁵³

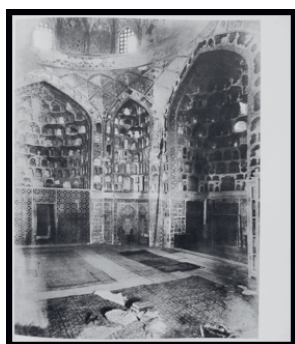


Figure 2.8a. The '*chīnī-khāneh*' room of the Ardebil Shrine. Photo by Myron Bennet Smit. (date unknown).¹⁵⁴

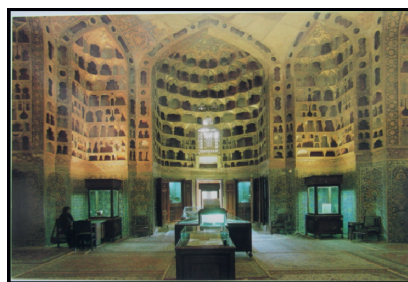


Figure 2.8b. The same room by the author in 2003.

Even though adaptations to dimension of dishes were made to suit Muslim customers, the reverse also took place. Margaret Medley has written extensively on the subject of the influence of Persian metal ware shapes and decorations on Chinese porcelain.¹⁵⁵ Another innovation besides the increase in dimension of dishes, are the

¹⁵¹ Pope 1956 (op. cit.), p. 14, refers to an account by James Frasier who visited the Shrine in 1821.

¹⁵² Ibid.

¹⁵³ For more information: *Encyclopædia Iranica*- <http://www.iranicaonline.org/articles/ardabil> (visited January 2020).

¹⁵⁴ Pope 1956 (op. cit.), plate 4.

¹⁵⁵ M. Medley, *Metalwork and Chinese Ceramics*, London, 1972, p. 13: 'The "Islamic" origin of designs which were introduced under Mongol influence gradually became adopted to the Chinese taste (brackets and foliated rim)'; M. Medley, *Yuan Porcelain and Stoneware*, London, 1974, p. 68: 'The influence of metalwork, exceptionally strong in the Mongol period, was not only that of the native tradition. Near Eastern metalwork also made a strong impact and this may be seen in the unusual bowls, small at the foot, with a generous outward carving wall turned neatly inwards at the top to a well-controlled mouth-rim. The carved and incised decoration generally found on these bowls is held very much in restraint'; M. Vickers, O. Impey, and J. Allan, *From Silver to Ceramic: The Potter's Debt to Metalwork in the Graeco-Roman, Oriental and Islamic Works*, Oxford, 1986.

foliated rims and moulded panels, a feature that is later applied to shapes produced for the Western market at the start of the 17th century.¹⁵⁶

When studying the flatware dated to early Ming dynasty, the Topkapi Palace Museum has dishes with diameters ranging from 29-36 and 45-54 centimetres, and have either a narrow flat bracket lobed rim or a plain rim. Dishes from the Ardebil Shrine range from 31 to 43 centimetres in diameter, some larger pieces with a diameter of 55-56.5 centimetres and even three exceptional ones with a diameter of 62-64 centimetres.¹⁵⁷ These are of a typical 'platter' shape, a unique shape that does not correspond to any Chinese domestic shape.¹⁵⁸ The wide base is a typical feature and the rim is usually plain without an everted edge. This is slightly similar to what we know as a 'serving platter', illustrated in Figure 2.24. The Topkapi Palace Museum has numerous dishes of this particular shape.¹⁵⁹

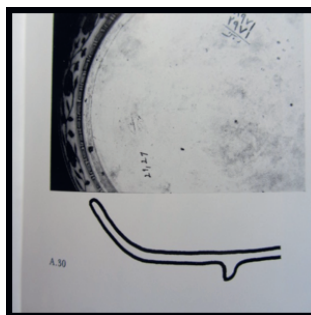


Figure 2.24. Profile and base of a large dish. Ardebil Shrine collection, inv. nr. 29.17, d. 33.8 cm.¹⁶⁰

As, to my knowledge, this shape is only found in the Middle Eastern collections, it may well have been specially ordered.¹⁶¹ For example, there is one dish from the Ardebil Shrine collection with a Chinese inscription, which, according to Pope, may

¹⁵⁶ Kamer Aga-Oglu, 'Ming Porcelain from Sites in the Philippines', *Archives of the Chinese Art Society*, Manila, 1963, p. 7, 'Certain new features in shape and decoration were evidently introduced in the fourteenth century, during the Yuan and the early years of the Ming period, just as the blue-and-white ware was coming into fashion. The new features are seen particularly in the dishes of large sizes which often have foliated rims and panelled sides and are decorated with floral sprays or bands of floral scrolls and other motifs that are carved, incised, stamped or molded in high relief'.

¹⁵⁷ Pope 1956 (op. cit.), Plates 75-76. d. 58.5. cm.: Dish with Arabic inscription and Zhengde mark inside rim.

¹⁵⁸ Ibid., see p. 87 for his views on the Persian shapes.

¹⁵⁹ Krahl and Ayers 1986 (op. cit.), pp. 510-511. The diameters range from 41-63.5 cm.

¹⁶⁰ Misugi 1981 (op. cit.), p.114.

¹⁶¹ There are 17 identical shapes with diameters ranging from 27.5 to 41 centimetres in the Ardebil Shrine, Pope 1956 (op. cit.), Plates 43 and 44.

indicate dimensions for an order for this specific shape and size.¹⁶² (Figure 2.25)

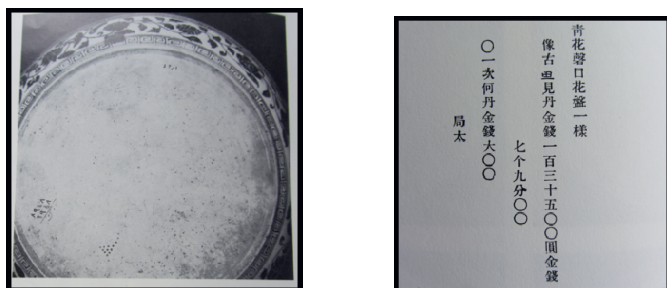


Figure 2.25. Base of a large dish with an inscription. Ardebil Shrine collection, inv. nr. 29.1, d. 41 cm.¹⁶³

Numerous dishes have a narrow foliate everted rim. The everted rim was useful for the custom of placing a lid made of gold or silver to keep the food warm, a custom still used in countries in the Middle East.¹⁶⁴ (Figures 2.26 and 2.27) This was however not a new adaptation to suit these customers, as such dishes, then green-glazed, had already been produced in the Song dynasty.



Figure 2.26. A dish with a metal cover, Topkapi Palace Museum.¹⁶⁵

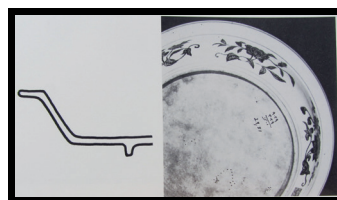


Figure 2.27. Profile and base of a dish everted rim. Ardebil Shrine collection, inv. nr. 29.31, d. 43 cm.¹⁶⁶

¹⁶² Pope 1956 (op. cit.), Plate 30: 'The first two characters, *ch'ing-hua*' are perfectly clear and may, if the inscription was actually written when the piece was made, be the earliest occurrence of this standard term for "blue-and-white" noticed thus far. And second, there seems to be reference to 135 monetary units of some sort. Whether this refers to the price of the dish cannot now be determined, but it seems like a possibility that deserves consideration'. Misugi 1981, (op. cit.), p. 114. According to Baoping Li, the first line mentions a blue and white dish with floral design, the second line seems to mention 135 monetary units; 'The third line might be 七寸九分 rather than 七个九分 ... then it should mean 7 cun and 9 fen (size of the dish); If 丹 (red) is actually 用 (use), then it might mean certain money was used to make (or to purchase) this dish'. Many thanks to Baoping Li for this information.

¹⁶³ Photo from: Pope 1956 (op. cit.), Plate 30.

¹⁶⁴ Krahl and Ayers 1986, (op. cit.). See pp. 559-561 for dishes with a narrow everted rim: inv. nr. TKS15/1964, d. 33 cm. and inv. nr. TKS15/1395, d. 51 cm.; Misugi 1981 (op. cit.), p.23: the Ardebil collection includes 27 dishes with diameters ranging from 60-63 cm., and 74 with diameters 37-41 cm. with an everted rim.

¹⁶⁵ Ibid., vol. I, p. 44, 'such covers were used to protect food as it was transported from the kitchens to banquets. These covers were found in the metalwork storage of the Topkapi Saray Museum'.

Summing up, the Ming dynasty started with several trade bans which led to a gap in the export of Chinese ceramics. Items produced in Vietnamese and Thai kilns substituted for these and were transported within Southeast Asian regions. The salvaged cargoes from the *Lena Shoal*, *Brunei Junk* and *Santa Cruz* shipwrecks suggest that, as all three ships primarily carried Chinese blue and white, the bans were lifted in the Hongzhi reign period. Numerous items from these shipwrecks are specifically 'Islamic' in shape, and indicate that these had come into production, not only to be shipped to the Middle East but were also destined for customers in Southeast Asian regions. Flatware, however, differed in dimension; while the Topkapi Palace Museum and Ardebil Shrine collections also contain exceptionally large and exquisitely decorated dishes, those retrieved from shipwrecks in Southeast Asian waters are, for the most part, smaller, deeper in shape, and more mediocre in quality. Export ware was aimed at mass-quantities for Asian regions and as well as more exclusive items for the Islamic communities.

The arrival of the Portuguese in Asia and the porcelain trade.

The Portuguese first sailed to India in 1498, 1500 and 1502. Thereafter, the Portuguese crown decided to establish permanent settlements around the Indian Ocean to acquire local products and control the sea trade. The first region in Asia the Portuguese conquered was Goa on the east coast of India in 1510.¹⁶⁷ From the main trade base of Goa, Portuguese merchants consolidated their control of the lucrative spice trade.¹⁶⁸ In

¹⁶⁶ Misugi 1981 (op. cit.), p. 115.

¹⁶⁷ M. Pearson, *Port Cities and Intruders. The Swahili Coast, India and Portugal in the Early Modern Era*, London, 1998. In 1510, Goa, Ormuz and Malacca were the first strongholds established under the command of Afonso de Albuquerque. See A. R. De Souza, *Goa Through the Ages: An Economic History*, Goa, 1990, pp. 220-221; A. J. R. Russell, *The Portuguese Empire, 1415-1808: A World on the Move*, London 1998; Shihan de Silva Jayasuriya, *The Portuguese in the East: A Cultural History of a Maritime Trading Empire*, London, 2008; R.P. Rao, *Portuguese Rule in Goa: 1510-1961*, Bombay and New York, 1963; S. Subrahmanyam, *The Portuguese Empire in Asia, 1500-1700: A Political and Economic History*, Chichester, 2010

¹⁶⁸ J. de Bruijn and F. Gaastra (eds.), *Ships, Sailors and Spices. East India Companies and their Shipping in the 16th, 17th and 18th Centuries*, Amsterdam, 1993, p. 7: 'The number of return ships to Lisbon was quite small: in the 1580's: average of 4.1; in the 1590's: 3.6. the cargos consisted mostly of spices: for example, in 1571-1580 the annual tonnage was 32,680 of which 26,860 was spices including pepper, leaving 5820 tons for other goods but this would not be only porcelain as textiles and precious metals would also have been part of this amount'; A. Gunder Frank, *ReORIENT. Global Economy in the Asian Age*, Berkeley, 1998, p. 180: 'Despite their base at Goa, Portuguese procurement was less than 10 percent of south-western pepper production. The maintenance of Portugal's '*Estado da India*' cost its taxpayers and the state more than its direct earnings from India, although its private merchants did benefit from it'.

1513, Jorge Alvares arrived at the island of Lintin in the Pearl River.¹⁶⁹ After years of disputes, relations between the Portuguese and Chinese Ming government improved when the Portuguese supported the Chinese authorities in eliminating coastal pirates. From 1549, the Portuguese were permitted to trade from the island of Shangchuan and in 1557 they were allowed to set up their trade post at Lampacau, the island that was later renamed Macao.¹⁷⁰

The Portuguese were the first Europeans to import commodities from Asia, including Chinese porcelain.¹⁷¹ Even though numerous documents exist with orders or lists of porcelain for banquets, there is little evidence of what these may actually have looked like.¹⁷² An exception is the porcelain collection of the Portuguese family Lancastre, who owned the Santos Palace in Lisbon.¹⁷³ According to D. Lion-Goldschmidt, 'The material assembled here comes from two sources: the Portuguese royal collection (Santos was a residence of the kings of Portugal from 1501 to 1578), and acquisitions made by the Lancastres during the same period, with later additions, brought there when the Lancastre family purchased the palace and its contents at the beginning of the 17th century'.¹⁷⁴

¹⁶⁹ Tien Tse Chang 1969 (op.cit.), pp. 33-34.

¹⁷⁰ In 1519, Simao de Andrade built a fort on Tamao island without the permission of the Chinese authorities. Portuguese also traded or privateered from other areas as Wuyu Island and Yue harbour at Zhangzhou, Shuangyu Island in Wenzhou, and Nan'ao Island in Guangdong. See C. Boxer, *Fidalgos in the Far East, 1550-1770. Fact and Fancy in the History of Macao*, The Hague, 1948; C. Boxer and R. Hartwell, *The Portuguese Seaborne Empire*, London, 1973; B. Diffie and W. Bailey, *Foundations of the Portuguese Empire, 1415-1580*, Minneapolis, 1977; A.R. Disney, *History of Portugal and the Portuguese Empire, Volume 2, Portugal: From Beginnings to 1807*. Cambridge, 2009.

¹⁷¹ E. van Veen and L. Blussé (eds.), *Rivalry and Conflict. European Traders and Asian Trading Networks in the 16th and 17th Centuries*, Leiden, 2005, pp. 28-29: 'During the first quarter of the sixteenth century, even before the arrival of pepper from the Moluccas in 1522-23, independent merchants (*feitor*) dominated the Antwerp market'.

¹⁷² Maria Antonia Pinto de Matos, 'Chinese Porcelain in Portuguese Written Sources', *Oriental Art*, vol. 48, no. 5, 2002-2003, pp. 36-40; T. Canepa, 'Silk, Porcelain and Lacquer. China and Japan and their Trade with the Western Europe and the New world 1500-1644. A Survey of Documentary and Material Evidence'. PhD Thesis, Leiden 2015. pp.128-130.

¹⁷³ This building is situated in an area known as '*Santos-o-Velho*' on the Tagus River that used to be a holy sanctuary in commemoration of three holy martyrs. The original 'palace' was used as a convent during the 13th to 15th centuries. It was then rented to Ferdinand Lourenco, a banker. He refurbished it into a luxurious villa and in 1501 Don Manuel I took possession of it until his death in 1521. In 1589, Don Luiz de Lancastre bought the building, which survived the earthquakes of 1578 and 1589. An inventory was made in 1709, which coincides with the pieces still to be seen in that same room today. Since 1909, the French Embassy owns the building and as it is also part residence, the room cannot be visited without official permission.

¹⁷⁴ Daisy Lion Goldschmidt, 'Les Porcelaines Chinoises du Palais de Santos', *Arts Asiatiques*, vol. XXXIX, 1984, pp. 5-72; Daisy Lion-Goldschmidt, 'Ming Porcelains in the Santos Palace Collection, Lisbon', *TOCS*, vol. 49, 1984-1985, pp. 78-93.

T. Canepa refers extensively to several fragments of early 16th-century Chinese porcelain found at archaeological sites in Portugal and Spain. None have a specific western shape; most are dishes with a flat rim and Chinese type rice bowls.¹⁷⁵ Nonetheless, numerous porcelain items were produced with Western inscriptions.¹⁷⁶ Fourteen dishes, which bear the armillary sphere and the coats-of-arms of King Manuel I (1495–1521) together with the Roman Catholic IHS monogram, are now in various Western collections, of which one is in Museum Het Prinsessehof in Leeuwarden.¹⁷⁷ As to shapes, Lochschmidt writes,

These first orders have strong similarities in shape and decoration with the wares exported to the Middle East and, in the case of dishes, also to South-East Asia. In my opinion this group of the very first orders was commissioned by Portuguese not in China itself, but probably in Melaka, the Spice Islands and other trading posts where private Chinese merchants sold the first pieces of porcelain to them and then took orders of their Portuguese customers back to Jingdezhen.¹⁷⁸

When comparing a dish in the Topkapi Palace Museum decorated with Islamic motifs to a similar shaped one with Portuguese inscriptions, we see that the shape is

¹⁷⁵ Canepa 2015 (op.cit.), Figures 3.1.1.1/ 3.1.1.11a+b/3.1.1.24/3.1.1.25; M.I. Dias et al. 'Tracing the Origin of Blue and White Chinese Porcelain ordered for the Portuguese Market during the Ming Dynasty using INAA'. *Journal of Archaeological Science* no. 40, 2013, pp. 3046-3057.

¹⁷⁶ Maria Fernandez Lochschmidt groups these into four periods, see M.F. Lochschmidt, 'Chinesisches Blauweiß-Exportporzellan. Die Portugiesischen Bestellungen vom Anfang des 16. Jahrhunderts bis 1722. Eine neue Chronologie mit Beiträgen zu Form und Dekor', Ph.D. thesis, University of Vienna, 2008, p. 101 (summary in English), 'The first period covers the first quarter of the 16th century to around 1522, during which the Portuguese were prohibited to trade directly with the Chinese; the second period covers the time when the Portuguese were officially prohibited to trade with the Chinese, from 1522 to 1557, the latter year being the date the situation was finally regularized and Macau was given to the Portuguese'; p. 102: 'The third period covers the time from the establishment of the Portuguese in Macau in 1557 and the normalization of the commercial relations with China, up to 1610, when the Portuguese start losing control of the sea-routes to the Dutch'; p. 104, 'The fourth period starts around 1610 and covers the years up to 1657, when Jingdezhen ceases to export to Europe'.

¹⁷⁷ Ibid. p. 100, 'The porcelains of this early period feature basically the emblems of the state and church only, thus clearly bearing witness to the strong centralized government of Manuel I. The only Portuguese decorations to be found are the Manueline armillary sphere and his coats-of-arms, as well as a Catholic symbol, the IHS monogram. Another motif, in my opinion of Portuguese origin, however, is found only together with the preceding ones'. M. Pinto de Matos, 'The Portuguese Trade', *Oriental Art*, vol. XLV, no. 1, 1999, pp. 22-30. On p. 24, she claims: 'they cannot have been ordered by the Company of Jesus (Jesuits) as they had not yet established the faith in Asia but as Manuel I was their patron he may have ordered them'.

¹⁷⁸ Lochschmidt 2008 (op. cit.), p. 88: 'In diesem ersten Jahrzehnt waren die einzigen Auftraggeber der portugiesische Hof Manuels I zusammen mit der ihm stark verbundenen Kirche. Zu dieser Zeit – und in der zweiten, folgenden Periode – gleichen die nach Portugal exportierten Stücke noch stark der allgemeinen Exportware, die auch nach Nahost und Südostasien verschifft wurde. Sie sind in Form und Dekor chinesisch mit Ausnahme der Wappen der portugiesischen Krone, des Himmelglobus, des IHS-Monogramms und wahrscheinlich auch der bisher nicht gedeuteten Landschaftsdarstellung. Die Qualität ist zu dieser Zeit allgemein niedrig'.

identical. In other words, items that were individually ordered by the Portuguese were Chinese shapes that were decorated according to the demand of these customers.

For example, the dish in Figure 2.28 for the Middle East is decorated with flowers and Figure 2.29 has a similarly shaped dish but then with Portuguese emblems.¹⁷⁹



Figure 2.28. Large dish from the Ardebil Shrine, inv.nr. 29.33. d. 48 cm.¹⁸⁰



Figure. 2.29. Large dish with IHS monogram, armillary sphere and Portuguese royal arms. Metropolitan Museum, New York. inv. nr. 67.4. d. 52.7 cm.

Several more porcelain items with Persian or Islamic texts can be found in the Topkapi Palace and Ardebil Shrine collections.¹⁸¹ Again, the only differences are in the inscriptions, not the shapes: ‘...differing mainly in that the Arabic-script roundels are turned into Portuguese coat of arms and armillary spheres and the usual line of Arabic writing around the rim is replaced by a line in Portuguese’.¹⁸² According to Pierson, these pieces may even have been separately produced as gifts for the Sultan.¹⁸³ Further examples are in figures 2.30, 2.31 and 2.32, which have Arabic inscriptions; these can be compared to those ordered by the Portuguese with inscriptions illustrated in Figures 2.33 and 2.34.

¹⁷⁹ Krahl and Ayers 1986 (op. cit.); The description reads: ‘While the doglike lions illustrate a Chinese theme, the Portuguese coat of arms and the armillary sphere (a type of celestial globe) are often found on works made for Portugal in the early sixteenth century. The letters “I.H.S.,” a well-known Latin reference to Jesus Christ, would later be adopted by the Jesuits (Society of Jesus founded in 1534) as a symbol for their order’.

¹⁸⁰ Photo from Misugi 1981 (op. cit.).

¹⁸¹ Krahl and Ayers 1986 (op. cit.), p. 579: inv. nr. TKS15/2270, dish, d. 26 cm. with a Shi’ite prayer; inv. nr. TKS 15/2663, bowl, d. 24 cm., h. 13.5 cm.; TKS15/4386 d. 12.5; h. 6 with religious phrases and TKS15/10407, bowl with Arabic script, d. 23.5 cm.

¹⁸² Ibid., p. 536.

¹⁸³ Pierson 2013 (op. cit.), p. 40, ‘According to one source, the ambassador of the court of Selim I visited China, where he was given two porcelain bowls with Arabic inscriptions as an official gift from the Zhengde emperor (1506-21) to the Sultan’, and ‘a document dating from 1514: inventory of the booty taken by Selim I (1512-1520) in his campaign against the Safavid Shah Ismail of Persia. This lists sixty-two or sixty-four porcelains which are thought to have come from the Palace of Hesht Behesht in Tabriz’.

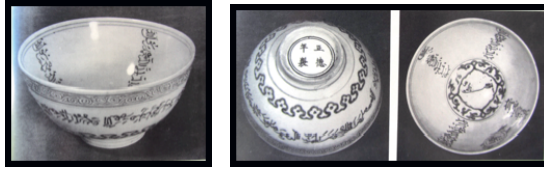


Figure 2.30. Bowl with Arabic inscriptions, Topkapi Palace museum, inv. nr. TKS 55/4386, d. 12.4 cm.¹⁸⁴



Figure 2.31. Bowl with Arabic inscriptions Topkapi Palace museum, inv. nr. TKS15/10407, d. 18.5 cm.¹⁸⁵

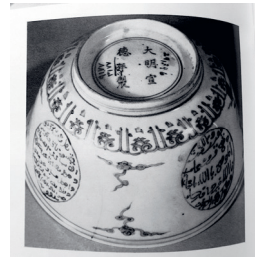


Figure 2.32. Bowl with Arabic inscriptions, Ardebil Shrine collection inv.nr. 29.346, d. 18.5 cm. Xuande mark.¹⁸⁶



Figure 2.33. Bowl with Portuguese inscriptions, Topkapi Museum collection, inv.nr. TKS15/2254 h. 11.5 cm. dated to 1541.¹⁸⁷



Figure 2.34. Bowl with the Portuguese Royal arms, d. 25.5 cm. Fundacao Meiderios E Almeida. Lisbon. Inv. nr. CER. 241.¹⁸⁸

¹⁸⁴ Krahl and Ayers 1986 (op. cit.).

¹⁸⁵ Ibid.

¹⁸⁶ Pope 1956 (op. cit.), Plate 77.

¹⁸⁷ Krahl and Ayers 1986 (op. cit.), inv. nr. TKS15/2254, p. 449 (colour plate) and p. 590. The inscription is: *Tempo de Pero de Faria de 1541* (from the times of Pedro de Faria). He was governor of Goa from 1526-1528 and Governor of Malacca from 1528 to 1529. Another bowl with the same inscription is shown in Figure 2.39.

¹⁸⁸ Pinto de Matos 1999 (op. cit.), p. 23, fig. 2. The inscription is: *ave maria gratia plena*.

Another example is a pouring vessel of a type found in the Middle Eastern collections. (Figure 2.35) There are several similar shapes dated to around 1519-1521, but then decorated with the armillary sphere and the coat of arms of Manuel I.¹⁸⁹ (Figure 2.36)

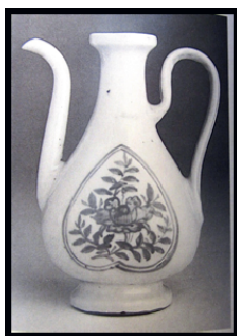


Figure 2.35. Ewer from the Topkapi Palace TKS15/2211. h. 19 cm.¹⁹⁰



Figure 2.36. Ewer dated 1520, Museum Fundacao Meiderios E Almeida Lisbon inv. nr. 252 cer. h. 26.4 cm.

A rare item with an unusual shape and a Portuguese emblem (upside down) is shown in Figure 2.37.¹⁹¹ An earthenware jar, made in Portugal with a comparable shape has been identified as a water jar.¹⁹² Such an object might well have been taken by the Portuguese to Asia to be copied and as far as I know, this piece is the only example. (Figure 2.38)

¹⁸⁹ Lochschmidt 2008 (op. cit.), p. 100; Fundacao Meideiros e Almeida, inv. nr. 247CER. Also found on Shangchuan Island, Cheng Pei-kai (ed.), *China Westward. Early Sino-Portuguese Trade of Chinese Ceramics*. Hong Kong, 2009, p. 76, plate 22 ; Krahl and Ayers 1986 (op. cit.), p. 590: inv. nr. TKS15/2211, h. 19 cm.; this ewer is identical to one with a Portuguese emblem; there are several other non-Western shapes such as the flat pilgrim shaped flasks with the coat of arms of Philip II, dated to around 1585-95 (Casa Museo Anastácio Gonçalves, Lisbon) and bottles with Portuguese inscriptions. (Museu de Caramulo); Pope 1956 (op. cit.), Plate 54 (early 15th century) and Plate 98 (late 16th century) illustrate identical ewers.

¹⁹⁰ Photo from: Krahl and Ayers 1986 (op. cit.), p. 590.

¹⁹¹ It is described by the Metropolitan Museum as: 'The form is neither Chinese nor European; rather, it is based on an Islamic metalwork vessel made for the Near Eastern market that was appropriated for the new European trade. The Chinese painters have misunderstood the Portuguese coat of arms, which appears upside down.' It is dated ca. 1520-1540.

<https://www.metmuseum.org/art/collection/search/202581>. (visited January, 2020)

¹⁹² T. M. Casimiro and S. Newstead. 'Portuguese Coarse Ware in North Atlantic Trade (Sixteenth to Eighteenth Century)', *American Ceramic Circle Journal*, 2019, pp. 59-81.



Figure 2.37 Jug with the Portuguese coat of arms.
h. 18.7 cm.
Metropolitan Museum, New York.
inv. nr. 61.196.



Figure 2.38 Red ware water jar,
possibly made in Coimbra, (1650–1690)
found in Ferryland (Newfoundland),
h. 12 cm. Avalon Colony
Museum. Photo: T. Casimiro.

Both Canepa and Lochschmidt maintain that two distinct European shapes have been created during the period 1522-1577, before the occupation of Macao. The first one, a porringer, was at that time a bowl used for eating porridge or soup in Europe; the other shape is a deep dish discussed at the end of this chapter. According to Canepa, the bowl would have been copied from identical ones made of pewter that were taken as utilitarian ware on the journeys; she refers to pewter forms found in the shipwreck *Mary Rose* (1545) and various Spanish wrecks, including one dated 1544.¹⁹³ This shape is indeed a common one in Europe, used in the Netherlands as well and known there as *papkom*, a porridge bowl. (Figures 2.39 and 2.40)



Figure 2.39. 'Papkorn', Museum Boymans
Van Beuningen, inv.nr. F.5600, d. 16.2 cm.,
16th-century.



Figure 2.40. 'Papkorn', Museum
Boymans van Beuningen, inv.nr. F.3653.
d.16 cm., ca. 1550-1600.

¹⁹³ Canepa 2015 (op. cit.), pp. 274-275; she maintains that the shape was a common one in Europe and that examples in pewter were found in various shipwrecks; p. 277, notes 887 and 888: 'the *Mary Rose* sank during a battle against the French fleet in the Solent in July 1554. The *Honer* is believed to have been a Flemish ship, it sank en route from Antwerp to Spain (Museo da mar de Galacia, 2009)'. The so-called 'Pewter wreck' sank en route from Seville to the New World; there were around 1000 pieces of pewter ware and some ceramic pieces, a few of them identical to a porringer and a deep dish. (pp. 274-275, figures 3.4.1.2.2. and 3.4.1.2.4.) In the Netherlands, this shape was indeed used throughout the 16th and 17th centuries, see J. Gawronski (ed.) *Amsterdam Ceramics*, Amsterdam, 2012, cat. nrs. 301(dated 1550-1575), cat. nrs. 443, 444, 445, 446 (German faience dated 1575-1625), and cat. nr. 485 (Haarlem faience).

However, if the idea was to copy this shape, then the Chinese potters had no knowledge of the use of the handles as they are of too small a size.¹⁹⁴ (Figure 2.41) Apparently, this shape was not a success, as there are only few of such items to be found.



Figure 2.41. Bowl with Portuguese inscription and minute handles. 'Tempo de Pero de Faria de 1541.' Base mark of Ming dynasty, d. 16.5 cm. Museu Rainha D. Leonor, Beja. inv. nr. P1ST/2.

Flatware for export markets.

Dishes of various dimensions and shapes had already been produced in China and transported to the Middle East and Southeast Asia from the 14th century onward, as can be seen from shipwreck finds described above, as well as the Middle Eastern and Indonesian collections.¹⁹⁵ Dishes ranging from 20-50 centimetres in diameter, with and without flat rims as well as the large platter-shaped ones, described above, continued to be produced for export during the first half of the 16th century.¹⁹⁶ It therefore seems unlikely that, 'It is in the Jiajing period (1522-66) that the first plates with flat rims appear, possibly in response to orders by the Portuguese who had settled in Macao in 1557'.¹⁹⁷ In my opinion, the Portuguese were able to buy items already produced for export and did not order flatware with a specific dimension or shape. Numerous

¹⁹⁴ Lochschmidt 2008 (op. cit.).

¹⁹⁵ Pope 1956 (op. cit.), p. 85: 'Flattened rims, both round and foliate are present as before, and among the latter a new style seems to have appeared in which the cavettos are moulded to match the foliations'; for example, plate 82, Ardebil shrine inv.nr. 29.279; Plate 81, inv.nr. 29.150.

¹⁹⁶ Krahll and Ayers 1986, (op. cit.), pp. 607- 626. The dishes illustrated nearly all have a flat rim with a continuous decoration; the diameters range from ca. 29-50 cm. pp. 627- 631; inv. nr. TKS15/1516, d. 50 cm., has a Jiajing mark below the outside rim. There are several examples in the Adam Malik collection that was assembled with items found in Indonesia. Adhyatman (red.) 1980 (op.cit.); Van Orsoy de Flines 1949 (op.cit.). The dishes are all medium to large in size (28.5 cm. - 60 cm.). Plate 32: a dish found in Sulawesi; Plate 36: a large dish, 60 cm. with a reign mark of Jiajing; Plate 37: a dish, 50 cm. mark of Jiajing.

¹⁹⁷ L. Pomper, J. Legg and C. B. DePratter, 'Chinese Porcelain from the Site of the Spanish Settlement of Santa Elena, 1566-1587', *Vormen uit Vuur*, 212/213, no.1, 2011, pp. 32-41, p. 38: The authors compare the plates to the cargo of the *San Felipe* that sank in 1596, of which 27% are similar to the phoenix plates of Santa Elena. Thirty bowls are registered, all of the standard Chinese types.

fragments retrieved from Western archaeological sites and shipwrecks are identical to items in the Middle Eastern collections. This means that porcelain dishes, produced for overseas customers, were already available for the European merchants who appeared on the scene in the first half of the 16th century. Besides, as shown above by way of the finds from the *Lena Shoal*, *Brunei Junk* and *Santa Cruz* shipwrecks, mass production of flatware for export had already started at the end of the 15th century.

Porcelain fragments found at the earliest known Portuguese shipwreck sites, the *São João* (1552) and the *São Bento* (1554) provide examples of what was then available for overseas merchants. Both wreck sites were found off Port Edward, Natal region on the east coast of South Africa, and contain various types of Chinese shapes including flatware.¹⁹⁸ Some fragments belong to coarse dishes and there are also fine quality bowls, one with a Xuande mark (1426-1435). (Figures 2.42, 2.43 and 2.44) There are several similar dishes in the Ardebil Shrine collection, and there are several ones in the Topkapi Palace Museum, of which one also has a Xuande reign mark.¹⁹⁹

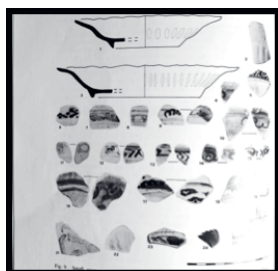


Figure 2.42. Fragments of coarse dishes from the *São Bento* (1554).²⁰⁰



Figure 2.43. Dishes with a fluted cavetto from the *São Bento* (1554).

Photo courtesy of V. Esterhuizen.

¹⁹⁸ The shards from both wrecks have been thoroughly studied and divided into four groups according to design and quality L.V. Esterhuizen, *Dekoratiwe Motiewe op Chinese Porseleinskerwe uit Portugese Skeepswrakke aan die Suid-Afrikaanse kus, 1552-1647*; 'n Kultuurhistoriese studie (Decorative motifs on Chinese porcelain shards from Portuguese shipwrecks off the South African coast, 1552-1647; a cultural-historical study.) Unpublished thesis at the University of Pretoria; by the same author: 'History Written in Porcelain Shards. The São João and São Bento, Two Twelfth-Century Portuguese Shipwrecks', *Taoci*, no. 2, December, 2001, pp. 111-116.

¹⁹⁹ Pope 1956 (op.cit.), Plate 90. Inv.nr. 29.279, d. 21 cm.

²⁰⁰ T. Maggs, 'The Great Galleon São João: Remains from a Mid-sixteenth Century Wreck on the Natal South Coast', *Annals of the Natal Museum*, vol. 26, no. 1, December 1984, pp. 173-186; p. 180, fig. 9.

An identical dish was salvaged from the Belanakan wreck site, Java, named after the location of the Belanakan waters, off the coast of Subang, West Java and discovered in 2010. More than 12,400 ceramic vessels of which 40% were in relative good condition were retrieved. Dishes, bowls and vases with blue and white designs are the main shapes.²⁰¹ (Figure 2.45) Finds from these two shipwrecks show that Chinese porcelain was available for European customers, and was not produced especially for them.



Figure 2.44. Fragments of fine dishes from the *São Bento* (1554).²⁰²



Figure 2.45 A similar dish from the Belanakan shipwreck site.²⁰³

Proof from another early shipwreck, discovered off the coast of Mozambique, is also available. The exact identity of the wreck could not be established at first but in 2007 it was identified as the *Espadarte*, which sank in 1558.²⁰⁴ Around 1,500 pieces of porcelain were retrieved, mostly bowls and few dishes and saucers. (Appendix 2, Table 2). They include a few pieces with the six-character reign mark of the Jiajing period (*Da Ming Jiajing nian hao*), and one with the Xuande reign mark. A few smaller dishes of

²⁰¹ <https://fr.unesco.org/silkroad/node/9006> (visited January, 2021)

²⁰² Photo courtesy of V. Esterhuizen.

²⁰³ <http://koh-antique.com/belanakan/belanakan%20wreck.htm>

²⁰⁴ Also known as the 'Fort San Sebastian' wreck: A. Mirabal, *Interim Report of the Marine Archaeological Survey Performed in Ilha de Moçambique from May to July 2001*, from: http://publications.aww.pt/downloads/moz_2001_en_survey_report; M. Mirabel, 'The rescue recovery of the Espadarte shipwreck of 1558 at Ilha de Moçambique', *ARQUEONAUTAS*, 2010. M. Bound, 'Exploring the San Sebastian Wreck off Mozambique', *The Explorers Journal*, Summer, 2004, 'Almost seven years after the discovery of the wreck, the uninterrupted archival research carried out by Arqueonautas and its team of specialists finally succeeded. In March of 2007, two documents landed on the conference table of the office of Arqueonautas in Estoril, Portugal. One document from 1554 read as follows: "The nao Espadarte, which went to India in 1554, while on return to Portugal broke its mast at the Cape [of Good Hope] and was forced to go back to Mozambique, where it was stranded at the point of Nossa Senhora do Baluarte at a depth of 5 fathoms [9m]"

13.5-15 centimetres in diameter are exceptional in shape and decoration but none are typical Western in shape.²⁰⁵ (Figure 2.46)



Figure 2.46. Left a petal-moulded dish: d. 15 cm. Right; an incised dish with a crab design: d. 13.5-15 cm. from the *Espadarte* shipwreck (1558).²⁰⁶



Figure 2.47. Saucer with a crab, waves and sun. Topkapi Palace Museum, inv.nr. TKS15/4378, d.13.5 cm.

Some ten dishes have a white cavetto and a flattened rim, decorated with ribbons and symbols and a circular central design. They have a diameter ranging from 15-20 centimetres.²⁰⁷ (Figure 2.48)



Figure 2.48. Dishes from the *Espadarte* shipwreck (1558). Christie's catalogue, nr. 627 (right), d. 20 cm.; cat. nr. 628 (left), d. 20.5 cm.; cat nr. 629 (middle), d. 15 cm.²⁰⁸

Even though they were retrieved from a Portuguese ship, this particular shape need not have been specially produced for Western customers. The Topkapi Palace collection has numerous dishes, with a flat decorated rim, a white cavetto, each with a different central design, and of various dimensions. (Figures 2.49) The Santos Palace in

²⁰⁵ *The Fort Sebastian Wreck, a 16th-Century Portuguese Porcelain Wreck off the Island of Mozambique*, Christie's Sale Catalogue, Amsterdam, May 2004, nrs. 614 and 616.

²⁰⁶ Ibid. A small shard with a lobed cavetto and small flower identical to this dish was found at Lagos, Algarve in Portugal, Canepa 2015 (op. cit.), p. 134, fig. 3.1.1.10.

²⁰⁷ Christie's Amsterdam 2004 (op. cit.), cat. nrs. 627, 628 and 629.

²⁰⁸ Photo from Ibid.

Lisbon has a dish with an identical design of a circular central design and a rim decorated with symbols.²⁰⁹



Figure 2.49. Dish from the Topkapi Palace.
inv.nr. TKS15/3571. d.19 cm.²¹⁰



Figure 2.50. Dish with everted rim.
Santos Palace, inv.nr. 226, d.19 cm.

Another shape, a deep dish with a rim was also found in the *Espadarte* wreck. (Figure 2.51) There are, again, several identical ones in the Topkapi Palace Museum, another indication that such a shape was not specifically produced for the European markets.²¹¹ (Figure 2.52) It is remarkably similar to a *clapmuts*, a type that was produced during the first half of the 17th century mostly for the Dutch market. It may well be that this shape, then ordered by the VOC, and was copied from one of an earlier date.



Figure 2.51 Deep dishes salvaged from
the shipwreck *Espadarte* (1554),
inv. nrs. 603-605.²¹²



Figure 2.52. A deep dish decorated with
deer, d. 27.5. h.9.5 cm., Topkapi Palace,
inv. nr. TKS15/1797.²¹³

²⁰⁹ All images from the Santos Palace: © RMN-Grand Palais / Thierry Ollivier. I thank Claire Delery of Musée Guimet in Paris for the photos of the Santos Palace collection.

²¹⁰ Krahl and Ayers 1986 (op.cit.), p. 622.

²¹¹ A similar shape was found amongst ceramics from the Bin Thuan shipwreck dated to 1608; *The Bin Thuan Shipwreck*, Christie's Sale Catalogue, Melbourne, March 1-3, 2004.

²¹² Photo from Christie's Sale Catalogue, Amsterdam, 2004 (op. cit.).

²¹³ Photo from: Krahl and Ayers 1986 (op.cit.).

As the preference of Western customers during this period was clearly dishes of around 20 centimetres diameter, with a flat rim, this size was mostly found at Western shipwreck and terrestrial sites. They are of various qualities, mostly coarse domestic ware, but fragments of fine ware, even with a reign mark, are also included. Examples were excavated at Santa Elena (now South Carolina) and St. Augustine in Florida, the earliest known Spanish settlements in North America (1565-78).²¹⁴ Most fragments are parts of dishes with a diameter of 18-20 centimetres, decorated with typical Chinese motifs as phoenix, flying geese, or ducks in a pond. Other items include standard-size rice bowls.²¹⁵ (Figures 2.53 and 2.54)

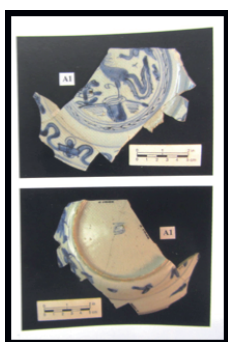


Figure 2.53. Fragments of a dish from Elena settlement. d. ca. 18 cm.²¹⁶



Figure 2.54. Fragments of a dish the Santa Elena settlement. d. ca. 18 cm.²¹⁷

A recent publication provides detailed information on the porcelain fragments discovered in the sand dunes in the Baja California, Mexico area.²¹⁸ A Spanish ship, the *San Juanillo*, was a Manila galleon of 300 tons, en route from Manila to Acapulco.²¹⁹ It is uncertain exactly when the ship was wrecked, but according to E. von der Porten the

²¹⁴ Pomper, Legg and DePratter 2011 (op. cit.), pp. 32-41. There are 747 shards that belong to ca. 76 items: plates with phoenix design in the centre, and bowls of all sizes, all Chinese domestic rice bowl types.

²¹⁵ Ibid., p. 33; L. Shulsky, 'Chinese Porcelain in Spanish Colonial Sites in the Southern Part of North America and the Caribbean', pp. 83-98, *TOCS*, vol. 63, 1998-1999, p. 91: 'The earliest Chinese porcelain on the Manila galleon trade that arrived in Acapulco was in 1573'. Illustration on p. 93, fig. 8 and fig. 9. See also C. Krahe, *Chinese Porcelain in Habsburg Spain*, Madrid, 2016; p.13, figures 131-133 show identical dishes excavated in Madrid.

²¹⁶ Pomper, Legg and DePratter 2011 (op. cit.), p. 34, fig. 2.

²¹⁷ Ibid., p. 34, fig. 3.

²¹⁸ *Porcelains from the Manila Galleon in Baja California, Mexico*. Catalogue. R. Junco (ed.), Instituto Nacional de Antropología e Historia, Mexico City, 2018.

²¹⁹ T. Bennett, *Treasure Ships of the Philippines: Where to Find Manila Ships and Japanese shipwrecks with Gold Cargo*. (e-book version published by that author in 2016).

date would be 1578.²²⁰ Around 1,811 fragments were collected and studied. Most belong to bowls: rice bowls, soup bowls, teacups and wine cups with blue and white decorations. There are remains of two bowls, which are very thin and exceptional in design.²²¹ Several items have a blue and white decoration with enamels and some show only the remains of an enamel decoration.²²² (Appendix 2, Table 3) Most dishes have with a blank cavetto and a phoenix as the central decoration identical to the Santa Elena ones mentioned above. (Figure 2.55) Finds from this shipwreck show that, besides the standard phoenix-type dishes, various other types of porcelain were purchased by the Spanish at the end of the 16th century. They also provide evidence that shapes with a Kraak-panel decoration had, as yet, not been produced.

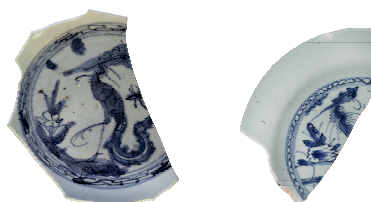


Figure 2.55. Parts of dishes with phoenix decoration from the 1578 Manila Galleon *San Juanillo*.²²³

An identical dish can be traced to the Topkapi Palace Museum (Figure 2.56) and the Santos Palace collection (Figure 2.57). This again indicates that such dishes were produced for and transported to various overseas regions.



Figure 2.56 Dish with a phoenix; the rim decorated with symbols and scrolls. Topkapi Palace inv.nr. TKS15/2531, d. 21.5 cm.



Figure 2.57. Dish with a phoenix; the rim decorated with symbols. Santos Palace inv. nr. 102, d.19cm.

²²⁰ E. Von der Porten, *Early Wanli Porcelains from the 1578 Manila Galleon San Juanillo*, San Francisco, 2017. Images of the *San Juanillo* porcelain are copied from Junco (ed.) 2018 (op.cit.).

²²¹ Ibid., p. 4, figs. IV-1 and IV-2.

²²² Ibid., Appendix I, pp. 187-193 and Appendix II, p. 195.

²²³ Ibid., p.143, figure XV-1; p.147, fig. XV-2.

The *San Pedro* wreck site (1595), has a similar dish. (Figure 2.58)



Figure 2.58. Dish with a phoenix; scrolls and symbols decorate the rim.

Inv.nr. 79.155.014. *San Pedro* wreck. d. ca.20 cm.²²⁴

Another type of flatware that has been found at several wreck sites, and which are remarkably similar to ones from the Topkapi Palace collection and the Santos Palace, are saucers and dishes decorated with waterfowl in a pond or lake, as central decorative motif. The everted rim is decorated with plants. One was found at the *San Juanillo* wreck site (Figure 2.59), and is identical to those in the Topkapi Palace Museum (Figure 2.60), and the Santos Palace in Lisbon (Figure 2.61).



Figure 2.59. Part of a dish with geese and ducks in a pond from the *San Juanillo* wreck site (1578).²²⁵



Figure 2.60. Dish from the Topkapi Palace, TKS15/2628, d. 16.5 cm.



Figure 2.61. Dish from the Santos Palace. inv. nr. 142, d. 20 cm.

²²⁴ All images of fragments from the *San Pedro* (1595) are courtesy of the National Museum of Bermuda.

²²⁵ Junco (ed.) 2018 (op.cit.), p.153, figure XVII-3.

Quite a different dish was amongst the fragments of the *San Juanillo* wreck. It is decorated with an exceptional type of cartouche on the rim and has a central design of a Chinese purse, a design quite unfamiliar to Europeans. (Figure 2.62) Numerous fragments of such dishes were retrieved from the Guanyinge kiln site in Jingdezhen, an indication that this finer type was produced together with other wares of good quality.²²⁶ (Figure 2.63)



Figure 2.62. Fragment of a dish from *San Juanillo* shipwreck. (1578).²²⁷



Figure 2.63. Fragments of dishes with a similar design excavated at Jingdezhen. Photo by author.

There are numerous dishes in the Topkapi Palace Museum with various border decorations resembling the above-mentioned ones.²²⁸ The Santos Palace has one identical dish, an indication that this was also purchased by Western merchants. (Figure 2.64)



Figure 2.64 Dish with a *ruyi* design and cartouches on the rim. Santos Palace inv.nr. 78, d.19.2 cm.

²²⁶ The Guanyinge kiln site is situated in the Zhushan district of Jingdezhen and discovered in 2001. Fragments reveal that good quality items had been produced in this area for both the domestic as well as for export.

²²⁷ Von der Porten 2017 (op.cit.), p. 136, figure XV-1.

²²⁸ Krahl and Ayers 1986 (op.cit.), inv.nr. TKS 15/267, d. 20.5 cm

More examples of dishes with a flat rim and a diameter of 18-20 centimetres come from another Spanish ship, the *San Pedro*, mentioned above. It was wrecked in 1596 on the north of the main island of the Bermuda Islands, and discovered in 1951. It was part of the *Nueva España Flota* on a voyage from Cartagena to Cadiz.²²⁹ Most porcelain fragments are parts of Chinese domestic type bowls.²³⁰ (Appendix 2, Table 4) Several fragments of dishes have a central design of flowers or a pond. (Figure 2.65) Here again they show that dishes with a flat rim had possibly become standard ones produced for export in general by the end of the 16th century.



Figure 2.65. Fragments of a dish. Inv.nr. 79.155.014. *San Pedro* wreck.

Both the Topkapi Palace Museum and the Ardebil shrine collection house a large number of this type of dish, with a flat rim and central decorations of ponds with ducks, geese and landscapes. Most are of good quality and dated to the second half of the 16th century.²³¹ (Figures 2.66 and 2.67)



Figure 2.66. Dish with geese in a landscape; white cavetto and the rim is decorated with landscape designs. Topkapi Palace, inv. nr. TKS15/7730, d.35 cm

²²⁹ I thank Elena Strong for information and images sent, courtesy of the National Museum of Bermuda. National Museum of Bermuda Artifact List: Accession 81:304.

²³⁰ Several fragments from the National Museum of Bermuda show domestic shaped bowls: inv. nrs. 70:155.005; 70:155.004; 70:155.07; 70:155.011, 70:155.012; 70:155.013 and 70:155.015; two fragments have nearly intact bases: inv. nr. 79:155.003.

²³¹ Krahl and Ayers 1986 (op.cit.), inv.nrs: TKS 15/1735; TKS 15/1930; TKS 15/2474, TKS 15/2226.



Figure 2.67. Dish decorated with birds and waterfowl in a landscape.
Ardebil Shrine collection, inv.nr. 29.242, d.43.5 cm.

Both Middle Eastern collections have numerous dishes of this type, but then with a central design of deer in a landscape; some pieces are marked Jiajing (1522-1566).²³² This theme was frequently used on this type of export dish, and continued to be applied to some Kraak-panelled items at a later date. Most of the pieces shown here date to the second half of the 16th century and have three to five deer; the dishes produced later are decorated with only two to three deer.²³³ (Figures 2.68 – 2.72)



Figure 2.68. Dish with plain cavetto; Jiajing mark on base. Ardebil Shrine inv.nr.29.148, d. 35 cm.²³⁴

²³² Pope 1956 (op.cit.). Plate 81 and Plate 82 both have Jia jing marks; plate 90: one with blank cavetto and one with flowering branches. See also Krahl and Ayers 1986 (op.cit.): p.598: 'In the Jiajing period the official reign mark is used indiscriminately for all sorts of porcelain.' See also: Pope, plates 91: inv.nr.29.148 has a design with 5 deer; inv.nr. 29.147 has a vertical waterfall in the middle and the 3 dishes on plate 92 have deer and one a river landscape.

²³³ Krahl (op.cit.) p.694

²³⁴ Pope 1956 (op.cit.) Plate 91.



Figure 2.69. Dish with four deer; the rim is decorated with lions and vines. Ardebil Shrine, inv.nr. 29.231, d.30.5 cm.



Figure 2.70. Dish with five deer; the Rim is decorated with plants. Topkapi Palace, inv.nr.TKS15/1827, d. 27 cm.



Figure 2.70 Topkapi Palace Museum
Inv.nr. TKS15/2226, d. 27 cm.



Figure 2.71. Topkapi Palace
Museum inv.nr. TKS15/7763, d. 29 cm.

The Santos Palace collection has several identical dishes. This again indicates that good quality dishes had also been transported by the Portuguese to Lisbon.



Figure 2.73. Dish with two deer in a landscape; the rim has lions and vines. Santos Palace collection inv.nr. 57 d.30 cm.²³⁵

²³⁵ Identical to 6 dishes in the Ardebil shrine collection.



Figure 2.74. Dish with 5 deer in a landscape; the rim is decorated with symbols and scroll. deep basin, base mark: *fugui jiaqi* Santos Palace inv.nr. 73. d.34.5.



Figure 2.75. Dish with two deer, inv. nr. 230, d. 20 cm. Santos Palace inv.nr. 230 d.20 cm.

Summing up, Chinese porcelain items purchased by Iberian merchants during the first half of the 16th century were not produced exclusively to cater to European taste. The relatively few items that had been ordered with a Western inscription are, for the most part, not European in shape. Flatware of various shapes and dimensions had been produced for export long before the arrival of Portuguese and Spanish merchants in Asia. It was then unnecessary for them to order the smaller and medium size dishes as these were already available. Numerous examples have been excavated from Western archaeological sites and shipwrecks. These provide an overall view of what the Iberian merchants could purchase and transport at the end of the 16th century.

I note here that several decorative subjects as deer in landscape, and waterfowl in a pond are remarkably identical to those used for Kraak-type items produced in large quantities between 1610 to around 1645. The Jingdezhen potters had already applied these to individual items produced for the Middle East before mass-production for Western clients started. It was then convenient to use the same designs on the larger amounts produced for export. The innovation of a panel pattern then also came to be

used, one convenient for decorating larger quantities, as demand for this particular type of 'foreign ware' increased.

The transition from dishes decorated with the above-mentioned themes, but with only a white cavetto, to same-sized ones with the additional panels pattern can clearly be seen from the *San Diego* shipwreck (1600). It presents a cargo containing both dishes with and without a typical panel pattern for the cavetto and rim, but with deer and waterfowl as the principal central decorations. (Figure 2.76) This is the first concrete evidence of the use of the panel pattern on items for export and became known as Kraak porcelain, the topic of the next two chapters.



Figure 2.76. A group of dishes all of the same dimension of around 20 cm., with different patterns on the rims, some without a panel-design. National Museum Manila, photo by author.