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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

Ketel, C.L.

Citation

Ketel, C. L. (2021, September 30). *Dutch demand for porcelain: The maritime distribution of Chinese ceramics and the Dutch East India Company (VOC), first half of the 17th century*. Retrieved from <https://hdl.handle.net/1887/3214229>

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Note: To cite this publication please use the final published version (if applicable).

CHAPTER 1. Introduction.

In 1613, the *Witte Leeuw* (*White Lion*), one of the ships of a return fleet of the Dutch East India Company (VOC) that had departed from Bantam on the island of Java, made a stopover in the bay of Jamestown, on the island of St. Helena, to take in fresh water and food. An unexpected encounter with a group of Portuguese ships resulted in the battle during which the *Witte Leeuw* was hit and the gunpowder on board blew up the whole ship.

In 1977, the Belgian diver Robert Sténuît, director of the G.R.A.S.P. salvage company, discovered the shipwreck.¹ During the salvage, Sténuît did not find the diamonds listed on the cargo manifest but instead discovered a massive amount of Chinese blue and white export porcelain. Only 290 intact pieces were recovered; the rest were shards, weighing more than 300 kilos. Bas Kist, curator of the Dutch History department at the Rijksmuseum in Amsterdam at that time, was interested in the broken finds and a project was started to sort out and classify the shards. The result was the 1982 publication of the catalogue, *The Ceramic Load of the Witte Leeuw*, of which I was the editor.² This work was the first publication on a maritime salvage of a VOC vessel on its homeward-bound voyage that contained such a large amount of Chinese porcelain.

Hereafter, I continued to be intrigued by maritime and terrestrial archaeology and I have given numerous papers on the subjects of the VOC and the trade in Chinese porcelain. My focus was first mainly on Kraak porcelain, as this was the dominant type retrieved from the *Witte Leeuw*. This led to further research on the broader subject of what types of Chinese ceramics were produced and transported to overseas regions during the centuries of maritime trade, for which items from shipwrecks are an essential source.

The importance of shipwrecks that contained Chinese export ceramics was directly mirrored in the sudden interest from collectors and museums in several auctions that took place in the 1980s. In 1983, a Singapore-based salvage company that had been searching for wrecks in that area discovered the wreck of a Chinese junk near Java, Indonesia. Some 25,000 pieces of unbroken porcelain were retrieved and several

¹ *Groupe de Recherche Archéologique Sous-Marine Post Médievale.*

² C.L.van der Pijl-Ketel (ed.), *The Ceramic Load of the 'Witte Leeuw' (1613)*, Amsterdam, 1982.

sales at Christie's in Amsterdam brought in around 3 million US dollars.³ This became known as the 'Hatcher cargo', named after the owner of the salvage company, Michael Hatcher. The auction of porcelain salvaged from the Dutch VOC ship, *Geldermalsen*, that sank in 1752 in the Riau Archipelago, south of Singapore, was even more spectacular. In 1986, this cargo, which became known as the 'Nanking cargo' in collectors' circles, included around 239,000 items of which about 170,000 were still intact, and yielded 25 million US dollars.⁴ These shipwreck finds instigated some to publish on types of Chinese ceramics that had been produced for export overseas and of which little was known or written about. In this sense, the salvage of shipwreck finds must be rated positively.

There is, however, another side. In the case of the *Geldermalsen*, it was noted that 'Representatives of the archaeological community have pointed to examples of commercial recovery operations such as that of the *Geldermalsen* as illustrative of the manner in which valuable archaeological and historical information is lost whilst the economic value of the wreck is maximized'.⁵ Another critic remarked: 'Although the wreck contained excellent associations, with the porcelains still in their original crates, no effort was made to record these associations or to preserve any part of the wreck site'.⁶ Moreover, the possibility that the wreck laid within Indonesian territorial waters resulted in a lawsuit by the Indonesian government against Christie's.⁷

³ *Fine and Important Late Ming and Transitional Porcelain, Recently Recovered from an Asian Vessel in the South China Sea. The Property of Captain Michael Hatcher*, Auction Catalogue Christie's Amsterdam, 14 March 1984; *Fine and Important Late Ming and Transitional Porcelain. The Second and Final part of the Hatcher Collection, recently recovered from an Asian vessel in the South China Sea*, Auction Catalogue Christie's Amsterdam, 12 & 13 June 1984; *Fine and Important Late Ming and Transitional Porcelain. The private collection of Captain Michael M. Hatcher, selected from the contents of an Asiatic vessel, which went down in the South China Sea circa 1640*, Auction Catalogue Christie's Amsterdam, 14 February 1985.

⁴ The salvage company involved was again that of Michael Hatcher. *The Nanking Cargo. Chinese Export Porcelain and Gold*, Auction Catalogue Christie's Amsterdam, 28 April - 2 May 1986.

⁵ Craig Forrest. 'Has the Application of Salvage Law to Underwater Cultural Heritage Become a Thing of the Past?' *Journal of Maritime Law and Commerce*, vol. 34, no. 2, 2003, p. 324.

⁶ Richard Gould, *Archaeology and the Social History of Ships*, Cambridge, 2011, p. 342.

⁷ Agus Sudaryadi, 'The Belitung Wreck Site After Commercial Salvage in 1998', *Proceedings of the Asia-Pacific Regional conference on Underwater Heritage protections*, 2011: <http://www.themua.org/collections/> (visited January, 2020), p. 5: 'From the salvaging of *Geldermalsen*'s cargo, Indonesia got neither financial nor non-financial award. The result of the auction was not done clearly, meanwhile the process of lifting, packing, conservation, and auction did not involve Indonesian archaeologists at all. Thus, there was no data, documentation nor improvement of underwater archaeologists' knowledge in Indonesia. One of the more horrendous consequences of the event is that an Indonesian archaeologist is considered dead, his body thus far not found, who was active in the investigation of locating the *Geldermalsen*'. In 1999, the cargo of over 350,000 pieces from the *Tek Sing* dated 1822 also salvaged by Hatcher's company, was sold in Stuttgart in 2000 resulting in 7.2 million German marks. The Indonesian government received only 2000 ceramic pieces and 2 million DM.

These are only a few examples of the unethical side of salvaging items from shipwrecks. A responsible and more academic way is when government control and funding is involved. For example, at the time of the auctions in the 1980s, China had just started developing its own maritime archaeology to salvage shipwrecks and conserve the objects discovered. Naturally the Chinese state was interested in obtaining items from Western shipwrecks, given that the ceramics had been produced in China and are considered to be part of its cultural heritage. As a Chinese maritime archaeologist noted: 'The Chinese were powerless to have the items returned to them or to prevent the sale going ahead, so in desperation they sent two officials to The Netherlands to bid for some of the items. Their US\$ 30,000 budget did not even allow them to meet a single starting price of any of the 160,000 pieces on sale'.⁸ This prompted the Chinese government to set up its own maritime heritage research department in 1987.⁹ Once awareness of its own cultural heritage had been kindled, China enacted its *Regulation on Protection and Administration of Underwater Cultural Relics*, which provides a legal framework for the protection and management of historic shipwrecks. 'Under this Regulation, China asserts jurisdiction over historic shipwrecks not only in her internal waters and territorial sea but also in other sea areas under China's jurisdiction. Furthermore, China reclaims the ownership of historic shipwrecks originating from China found within these waters'.¹⁰

An important inspiration for this dissertation is the doctoral thesis published by Roxanna Brown in 1988. She emphasized the importance of shipwreck finds as an essential addition to dating ceramics. 'Shipwreck data is revolutionising the identification and dating of Chinese as well as Southeast Asian wares. Shipwrecks introduce important archaeological assemblages into a world that once relied heavily on stylistic analysis and this has sometimes caused some discomfort'.¹¹ Nevertheless, Brown rightly warned that without clear evidence of a ship's identity, one cannot be certain of its exact sinking date: 'Recovered cargoes are never intact, since the sites are disturbed by fishing activities and divers long before professional observation and

⁸ *Fragrant Harbour*, no. 255, pp. 40-41; from: http://www.stuartheaver.com/Nan_Hai.pdf (visited January 2020).

⁹ Liu Ben An, 'Three Recently Discovered Shipwrecks in China'. *Conference Papers on Sunken Treasures. Underwater Archaeology in China*. Los Angeles, 1995.

¹⁰ Hongye Zhao, 'Recent Developments in the Legal Protection of Historic Shipwrecks in China.' *Ocean Development & International Law*, 1992, vol. 23, no. 4, pp. 305-333; from: <http://www.tandfonline.com/> (visited January 2020).

¹¹ R. Brown, *The Ceramics of South-East Asia, their Dating and Identification*, Kuala Lumpur, 1988, p.21.

excavation take place.' Furthermore, 'Only few sites yield indisputable evidence; some may have been discovered to a certain degree already, or the salvaged items may not all have originated from the actual ship; there is always a certain degree of "pollution"'.¹² Indeed, there are areas such as reefs, a bay for sheltering, or a hazardous coastline which may have multiple wrecks so that debris from several shipwrecks can become mixed up.¹³ Thus, other items can be swept by currents into a dated shipwreck site, thereby creating confusion as to the dating.

Nevertheless, in academic research on the maritime distribution of Chinese ceramics, finds from shipwrecks are an essential addition to archival documents and historical facts.¹⁴ They help to analyse trade routes, the types and the dating of ceramics that were transported from place to place.¹⁵ It is regrettable that some unethically salvaged shipwrecks need to be included in this research, but there is simply a lack of government-supported ones to use as references.

Aim and structure of the dissertation.

For this study, I have drawn on three distinct areas of research: maritime trade and archaeology, Chinese export ware, and the history of the Dutch East India Company (VOC). During the epoch when the VOC started operations in Asia from 1602, and Chinese porcelain gradually came in demand, a specific type of Chinese export ware was produced which later became known as Kraak porcelain. As this was the main type shipped by the VOC to the Dutch Republic in the first half of the 17th century, it led me to analyse this particular type of porcelain in detail. What is the origin of the term Kraak,

¹² Ibid.

¹³ Sebastian Ostkamp made a critical note on the shipwreck finds of the *Witte Leeuw*. He states that some ceramics included in the catalogue were not contemporary with the wreck but have been used by other authors to date them. See: S. Ostkamp, 'The Dutch 17th Century Trade from an Archaeological Perspective', in *Chinese and Japanese Porcelain for the Golden Age*, J. van Campen and T. Eliëns (eds.), Amsterdam, 2014, pp. 53-87, p. 58. However, when compiling the catalogue of the *Witte Leeuw*, these later ceramics have clearly been given a separate chapter as being 18th century. Van der Pijl-Ketel, (ed.) 1982 (op. cit.), p. 250.

¹⁴ For example, the so-called 'Wanli' shipwreck cannot be dated to the Wanli period (1573-1619) as the salvaged ceramics include items from a later date (the Chongzhen reign, 1628-1644). S. Sjostrand and Sharipah Lok Lok bt. Syed Idrus, *The Wanli Shipwreck and its Ceramic Cargo*, Manila, 2007.

¹⁵ An excellent overview of shipwrecks and their finds can to be found in: Chunming Wu (ed.), *Early Navigation in the Asia-Pacific Region, A Maritime Archaeological Perspective*. Singapore, 2016. Recent scientific methods used on shipwreck ceramics are documented in Danita de Waal, 'Raman Investigation of Ceramics from 16th and 17th Century Portuguese Shipwrecks', *Journal of Raman Spectroscopy*, vol.35, 2004, pp. 8- 9; from: <https://onlinelibrary.wiley.com/doi/abs/10.1002/jrs.1210>. (visited January, 2020).

which shapes can be categorized as Kraak porcelain and how can these be securely dated? I also researched VOC orders and cargo lists to analyse the quantities of porcelain transported by the VOC to the Dutch Republic, within Asia, and to Persia during this epoch to determine when amounts were high or low. The outcome is that a considerable variation is to be seen; it seems that there was no regular outflow of Chinese porcelain during those years.

My research is divided into three main parts. The first part, Chapter 2, provides an historical background of the types of Chinese ceramics transported overseas during the Tang dynasty (618-907), the Song dynasty (907-1279), the Yuan dynasty (1279-1368) and the Ming dynasty (1368-1644) up to the end of the 16th century. I refer to ceramics salvaged from dated shipwrecks of each period to illustrate what was transported and show which adaptations, be it to shapes or decorations, were made to items produced for overseas markets in the course of these centuries.

With the arrival of the Portuguese and the Spanish merchants in Asia at the beginning of the 16th century, an additional overseas market for Chinese ceramics came into being. The royal courts of Lisbon and Madrid were keen to acquire Chinese porcelain.¹⁶ Here the question arises whether items were specifically produced or adapted to suit these new foreign customers. Ceramics from early Portuguese shipwrecks, such as the *São João* (1552) and the *São Bento* (1554), are illustrative of porcelain the Portuguese purchased in that period. These were for the most part bowls and some flatware, all regular Chinese wares. Numerous references to orders for porcelain by the Portuguese exist, but as far as I know, none include specific Western shapes. Nonetheless, square-shaped porcelain flasks copied from a European glass or faience model exist, and other items have heraldic or religious inscriptions.¹⁷

A noticeable change can be seen towards the end of the 16th century by way of the Spanish *San Diego* shipwreck that sank in 1600. Amongst the salvaged objects are

¹⁶ M.A. Pinto de Matos, 'The Portuguese Trade', *Oriental Art*, vol. XLV, no. 1, 1999, pp. 22-30; M.A. Pinto de Matos, 'Chinese Porcelain in Portuguese Written Sources', *Oriental Art*, vol. 48, 2002/3, and *The R.A. Collection of Chinese Ceramics. A Collector's Vision*, London, 2011. 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 Van Campen and Eliëns (eds.), 2014 (op. cit.), pp. 17-35. T. Canepa, *Silk, Porcelain and Lacquer. China and Japan and their Trade with Western Europe and the New World 1500-1644*. London, 2016. She describes how porcelain was acquired through 'diplomatic gifts', 'Royal orders', and there are lists of porcelain items used for banquets. See also: T. Canepa, *Jingdezhen to the World: The Lurie Collection of Chinese Export Porcelain from the Late Ming Dynasty*. London, 2019 (this publication appeared after research for this thesis had been completed).

¹⁷ Pinto de Matos 1999 (op.cit.), p. 26, fig. 7; Canepa 2014 (op. cit.), p. 23, fig. 6.

items decorated with a typical panel pattern that until then had not been found in shipwrecks. In later years, this type became known as Kraak porcelain, the topic of the second part, chapters three and four, of this dissertation.

In Chapter 3, I first approach the subject of Kraak porcelain from an art-historical perspective. Definitions of this specific type of export porcelain diverge widely. To arrive at a concise determination of this term, I have analysed the various definitions of the term Kraak, how it is used, and how it fits into the overall classification of Chinese porcelain as export ware. The aim here is to give this particular type of porcelain a clearer definition, as has been done with other export wares. For example, terms such as 'transitional ware', *famille verte*, *famille noire* and *famille rose* are all Western labels, used for Chinese export wares.

I use archaeological finds from Jingdezhen to illustrate that items for the domestic market were produced and fired in the same kilns as Kraak-type porcelain, using the same types of raw material. The difference can be determined by the shapes, which are for the most part foreign to the Chinese, and the characteristic panel pattern. I illustrate the main shapes, using the typology made for the items retrieved from the *Witte Leeuw*, as they represent the majority of Kraak-type items.

Furthermore, when reading Dutch terms on orders and cargo lists, it is not clear which shapes these actually are. For example, which shapes would have been meant by *groote schotelen*, *groote en middelmatige boterschotelen*, *cameels koppen*, *clapmutsen*, all part of Kraak-type ware. There are also terms related to Western shapes such as *olie- en azijn kannetjes*, *pimpelkens*, *tuytepottekens*, *mosterdpotten*, *brandewijnstopkens*. However, these had not been produced before models were regularly sent to Formosa to be copied from around 1634. Until these were produced, other items were purchased that could fulfil the same usage.

I continue in Chapter four with a reinterpretation of the ways in which Kraak-panelled porcelain has usually been dated. After examining three existing dating methods based on flatware found at shipwreck sites, I conclude that a dated wreck could contain items with different border patterns; therefore, one specific panel pattern cannot be given a precise dating.

Turning to the historical perspective, the last part of my research (Chapters 5 and 6) focuses on how the distribution of Chinese porcelain by Dutch commercial enterprises evolved from the end of the 16th century to around 1655, including the

quantities and types involved. I divide the distribution of Chinese porcelain by the Dutch into several periods, each of which can be analysed separately. The first phase covers the years 1595-1602, the period during which individual private companies (*voorcompagnieën*) dispatched ships to Asia in search of pepper and spices and returned with minor quantities of porcelain. The second covers the first twenty years of the officially established VOC in Asia, from around 1602 until 1624, when porcelain started to become a sought-after commodity in the Dutch Republic, although the period is characterized by relatively few orders for Chinese porcelain.

In 1624, the VOC established a trading post on Formosa (present-day Taiwan), which remained in operation until 1662, the subject of the last chapter. I show that between 1624 and 1634, quantities of porcelain shipped to the Dutch Republic were still meager. From around 1634, when trade terms with the Chinese authorities had more or less been settled, orders from the directors increased and included specific instructions as to shapes and designs, often accompanied by samples to be copied.

The conclusion of this historical part is twofold: the first half of the 17th century was not, as often assumed, a period during which Chinese porcelain continually arrived in the Dutch Republic in large quantities. Based on VOC documents, I conclude that both coarse and fine porcelain were delivered from the Chinese ports to Formosa during a relatively short period. This was then distributed to various regions within Asia and to the Dutch Republic. Therefore, it was only between 1635 and 1645, that substantial quantities of porcelain were shipped to the Dutch Republic. This corresponds with the relatively small amounts of Chinese porcelain items shown in some Dutch inventories, dating between 1625-1650.¹⁸

Second, from around 1634, when specific Western models were sent to Asia to be copied, they were not directly produced as such. When comparing the 'Wanli shipwreck' dated to ca. 1630-1635, to the 'Hatcher cargo' (ca. 1643-45), we can see that finds from this shipwreck contained more items that can be considered as having been copied from Western shapes. Still, all types of flatware continued to be produced with Kraak-panel patterns until the termination of porcelain supplies around 1650.

¹⁸ P. de Ruiter, 'Chinees Porselein in Nederlandse Schilderkunst van de 17^e eeuw', Master's thesis, 2012-2013; S. Drossaer and T.H. Lunsingh Scheurleer, *Inventarissen van de Inboedels in de verblijven van de Oranjes en daarmede gelijk te stellen stukken 1567-1795*, The Hague, 1974.

I also show that the VOC did not only transport Chinese ceramics back to the Dutch Republic, but also to other regions within Asia and the Middle East. This gave the VOC an exceptional place in the history of the export of Chinese porcelain.

Explanation of sources used.

Main sources.

There are many institutions with databases and well-documented information on shipwrecks.¹⁹ The International Council on Monuments and Sites (ICOMOS) is focused on organising meetings and training courses in the management and preservation of underwater cultural heritage, which adds to the overall knowledge of maritime archaeology.²⁰ Symposia and conferences have provided new insights and information.²¹ It is just as important to study archaeological land excavations.²² In the past thirty to forty years many archaeologists have been able to undertake excavations in East and Southeast Asia. The result of these researches show what was actually produced at kiln sites and what was excavated in overseas regions. Reports on shipwrecks with ceramics then enable us to trace the routes taken to deliver them.

¹⁹ The database of Southeast Asian Maritime and Underwater Cultural Heritage (SEAMUCH) is a component of the Southeast Asian Collaborative Program on Underwater Archaeology. See for more information:

<http://www.seameo-spafa.org/archaeology/>

<http://www.aima-underwater.org.au>

<http://www.nauticalarchaeologyjp.com> (in Japanese);

<https://mua.apps.uri.edu/MUA.htm> (museum of underwater archaeology)

<http://www.seaa-web.org> (visited January, 2020)

²⁰ <https://www.icomos.org/en/focus#> (visited January, 2020).

²¹ Asia Pacific Conference on Underwater Cultural Heritage: <http://www.apconf.org/about/> (visited January, 2020); *International Conference: Chinese Export Ceramics and the Maritime Trade, 12-15th Centuries*. Hong Kong City University, 2005; *Symposium on Chinese Export Trade Ceramics in Southeast Asia*. 12-14 March, 2007, Singapore, *Exchange of Material Culture over the Seas: Contacts between Europe, East and Southeast Asia in the 16th to 18th Centuries*. Conference held at the Academia Sinica, Taipei, October 31st to November 2nd. (some papers are published in *Field Archaeology of Taiwan*, vol. 13 (1/2), 2010); *Asia-Pacific Regional Conference on Underwater Cultural Heritage*. November 8-12, 2011, Manila, Philippines; *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; *Third Symposium on the Chinese Export Porcelain of the Ming and Qing Dynasties*, Shanghai, December 13-21, 2014; *Maritime Silk Road –China’s Historic Sites; Dongxiyao Kiln Ruins*, March 17-20, 2017

²² Already in 1952 research was carried out at the Yangmeiting and Shihuwan kiln sites on the outskirts of Jingdezhen, where remains of bowls and dishes from the Tang dynasty were discovered. See: Liu Xinyuan (ed.) *Ceramic Finds from Jingdezhen Kilns*, Catalogue by Fung Ping Shan Museum and the University of Hong Kong, 1992, p. 33.

For the historical account I rely on documents kept in the National Archives at The Hague.²³ They supply information on the VOC trade, the regions where the Dutch were posted and their handling activities at these places, collectively known as the *octrooigebied* (the area covered by the charter of the Company).²⁴ Information on each journey taken by a ship with details as to tonnage, dates, crewmembers, value of the return cargo and the events that took place during a journey has been published.²⁵ The period of the individual private companies (*voorcompagnieën* 1595 -1602), can be found in the documents of the *Compagnieën op Oost-Indië*, with entrance number: NL-HaNA, 1.04.01, inv. nr. xxx. For the VOC (*Verenigde Oostindische Compagnie*) there is an entrance number NL-HaNA 1.04.02, and an inventory number. This may be shortened for footnotes as: NL-HaNA (VOC) 1.04.02 inv. nr. xxx. Other archives consulted include, *Aanwinsten Eerste Afdeling* (NL-HaNA: 1.11.01.01), *Admiraliteitscolleges* (NL-HaNA: 1.01.46), *Johan van Oldenbarnevelt* (NL-HaNA: 3.01.14), and *Staten-Generaal* (NL-HaNA: 1.01.02).

Several document collections regarding the VOC have been used as references for the present study. The publication by Isaac Commelin (1598-1676) includes thirty travel accounts regarding events of the early period of the voyages to the East.²⁶ Herman T. Colenbrander (1871-1945) compiled seven volumes that contain the letters and events that took place during the governorship of Governor-General Coen (1587-1629) at Batavia.²⁷

In 1621, the directors of the Dutch East India Company in the Netherlands wrote to the governor-general and councillors of the Indies in Batavia that a daily register should be kept of the events and activities that took place there as well as at other VOC

²³ Others are kept at the *Arsip Nasional*, Republic of Indonesia; the *Westkaapse Argiefbewaarplek* in Cape Town, South Africa; the National Archives of Sri Lanka in Colombo, the Tamil Nadu Archives in India and the British Library, Oriental and India Office collections.

²⁴ J.C.M. Pennings, *History of the Arrangements of the VOC Archives*, from website: http://www.tanap.net/content/voc/history/history_managevoc.htm (visited January, 2020); M.A.P. Meilink-Roelofs, R. Raben and H. Spijkerman, *De Archieven van de Verenigde Oostindische Compagnie (1602-1795)*. Netherlands Algemeen Rijksarchief. Eerste Afdeling, 1992; see website: http://www.gahetna.nl/sites/default/files/afbeeldingen/toegangen/NL-HaNA_1.04.02_introduction-VOC.pdf (visited January, 2020).

²⁵ F.S. Gaastra and J. R. de Bruijn, 'The Dutch East India Company's Shipping, 1602-1795, in a Comparative Perspective', pp. 177-208, in J.R. de Bruijn and F.S. Gaastra (eds.), *Ships, Sailors and Spices. East India Companies and Their Shipping in the 16th, 17th and 18th Centuries*. Amsterdam, 1993. There is also a website in English: <http://resources.huygens.knaw.nl/das> (visited January, 2020).

²⁶ I. Commelin, *Begin ende Voortgangh van de Nederlandse Geoctroyeerde Oost-Indische Compagnie* (1646), (Facsimile Publication), (12 volumes), Amsterdam, 1969.

²⁷ H.T. Colenbrander (ed.), *Jan Pietersz. Coen, Bescheiden Omtrent zijn Bedrijf in Indië*, (7 volumes), The Hague, 1919-1934.

trade posts in Asia. These daily journals (*dagregisters*) provide all kinds of information such as the supplies of merchandise, the arrival and departure of ships and their cargoes. The two main ones used for this research are the journals that were kept at Batavia and Formosa.²⁸

I have also referred to the annual reports of the Governor-General and other officials in Asia that were sent to the directors of the VOC in the Dutch Republic, edited by Willem Ph. Coolhaas (1899-1981).²⁹ Publications with information on the VOC also include the series of the Linschoten-Vereeniging (Linschoten Society) published by Nijhoff, The Hague.³⁰

Secondary sources.

As to secondary sources, I have used historical publications on the maritime trade during the Tang, Song, Yuan and early Ming dynasties, as well as literature on the types of ceramics produced in Chinese kilns during these dynasties. Liu Yang and Janice Stargardt both give overviews of the main types of ceramics that were produced during the Tang dynasty and shipped abroad.³¹ A.T. Kessler and Angela Schottenhammer have documented the types produced for the Islamic communities during the Song dynasty.³² The most recent publication that encompasses the history of the production of ceramics throughout China, including Jingdezhen is by Anne Gerritsen.³³ There are many publications on the origin of blue and white decoration and the overseas clientele during the Yuan dynasty. I have mainly used literature to illustrate which types and

²⁸ H.T. Colenbrander (ed.), *Dagh-registers Gehouden int Casteel Batavia vant passerende daer ter ter plaetse als over geheel Nederlands-India, anno 1631-1644*, The Hague, 1877-1902. J. L. Blussé, M.E. van Opstall, W.E. Milde and Ts'ao Yung-Ho (eds.), *De Dagregisters van het Kasteel Zeelandia, Taiwan 1629-1662*, vols. I-IV, Rijks Geschiedkundige Publicatiën, The Hague, 1986-2000.

http://resources.huysgens.knaw.nl/voc taiwan/index_html_en (visited January, 2020); (All four volumes have been translated into Chinese by Professor Chiang Shu-sheng).

²⁹ W.Ph. Coolhaas and J. van Goor (eds.), *Generale Missiven van Gouverneurs-Generaal en Raden aan Heren XVII der Verenigde Oostindische Compagnie*, 9 volumes, Rijks Geschiedkundige Publicatiën, The Hague, 1960-1988.

³⁰ This society, named after Jan Huyghen van Linschoten, publishes all types of historical material concerning the events of the Dutch in Asia during the period of the VOC. The famous *Itinerario* that Van Linschoten compiled in 1596 was published as the first issue of this society.

³¹ Liu Yang, 'Tang Dynasty Changsha Ceramics' in *Shipwrecked. Tang Treasures and the Monsoon Winds*, R. Krahl, J. Guy, J. Keith Wilson and J. Raby (eds.), Washington, 2010; 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.

³² A.T. Kessler, *Song Blue and White Porcelain on the Silk Road*, Leiden, 2012; 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.

³³ A. Gerritsen, *The City of Blue and White. Chinese Porcelain and the Early Modern World*. Cambridge, 2020.

sizes were transported to overseas markets. For example, Jean Beamish deals with the blue and white decorated items destined for Southeast Asian markets.³⁴ Brian Fahy discusses whether blue and white decorated porcelain was made for foreign customers first and as a result was also appreciated by the Chinese elite, or whether it was the other way around.³⁵

The monumental volumes documenting the Chinese porcelain in the Topkapi Palace Museum in Istanbul are essential on the subject of what was produced for the Middle East.³⁶ Earlier publications on the collection of the Ardebil Shrine in Iran, written by John Pope and Takatoshi Misugi, have also been consulted.³⁷ Monique Crick and John Guy provide information on porcelain wares traded within Southeast Asia.³⁸ I found new and interesting insights about the porcelain items for the Portuguese market in the study of Maria F. Lochschmidt.³⁹

There are numerous publications on the subject of ceramic finds from shipwrecks and I will name only a few here. Finds from the *Belitung wreck* dated to the Tang dynasty are discussed in *Shipwrecked. Tang Treasures and the Monsoon Winds* with many known contributors covering a range of subjects on this period.⁴⁰ Roxanna Brown analysed salvaged finds from wrecks found in the Southeast Asian waters and the issues of the Ming gap and Ming ban.⁴¹ Numerous underwater archaeologists such as Frank Goddio and Mensun Bound published reports on salvaged shipwrecks and data on their ceramic loads.⁴² Others are Michel L'Hour, Michael Flecker and John Miksic.⁴³

³⁴ J. Beamish, 'The Significance of Yuan Blue and White Exported to South East Asia', *South East Asia & China: Art, Interaction & Commerce*, London, 1995.

³⁵ B. Fahy, 'Let the Porcelain Talk. The Social Life of Blue and White Porcelain in Asia During the Yuan (1279-1368 CE) and Early Ming Dynasties'. PhD. thesis, University of Oxford, 2010.

³⁶ R. Krahl and J. Ayers, *Chinese Ceramics in the Topkapi Saray Museum Istanbul*, vols. I-III, London, 1986.

³⁷ J. A. Pope, *Chinese Porcelains from the Ardebil Shrine*, Washington, 1956; T. Misugi, *Chinese Porcelain Collections in the Near East: Topkapi and Ardebil*, Hong Kong, 1981. It is regrettable that a detailed and coloured publication of the porcelain items of the Ardebil Shrine in Iran has never been made.

³⁸ M. Crick, *Chinese Ceramics for Southeast Asia. The Collection of Ambassador and Mrs. Charles Muller*, Geneva, 2010; J. Guy: *Oriental Trade Ceramics in South-East Asia, Ninth to Sixteenth Centuries*. Oxford, 1986.

³⁹ 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', PhD. thesis, University of Vienna, 2008.

⁴⁰ R. Krahl, J. Guy, J. Keith Wilson and J. Raby (eds.), *Shipwrecked. Tang Treasures and the Monsoon Winds*, Washington, 2010.

⁴¹ R. Brown, *The Ceramics of South-East Asia, their Dating and their Identification*, Kuala Lumpur, 1988; *The Ming Gap and Shipwreck Ceramics in Southeast Asia*, Bangkok, 2009; R. Brown and S. Sjostrand. *Maritime Archaeology and Shipwreck Ceramics in Malaysia*. Bangkok, 2002.

⁴² F. Goddio, F. 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;

The sources used for chapter three include several etymological dictionaries. I have consulted these to compare the various definitions of the term Kraak. In addition, specialised naval and shipbuilding treatises have been consulted.⁴⁴

The publication of S.W.A. Drossaer and Th. H. Lunsingh Scheurleer shows that inventories of Dutch regents did not use the term 'Kraak porselein' to depict a certain type of Chinese porcelain.⁴⁵ Eva Ströber shows that the word 'Krack' was used for a group of Chinese porcelain wares in the inventory of the collection of August the Strong of Saxony, but these were not even of the blue and white decorated type.⁴⁶

Hessel Miedema described items with a panel motif in the collection of Museum Het Prinsessehof and was the first to list characteristics of these wares to distinguish them from other Chinese export wares.⁴⁷ This was expanded on in the catalogue of *The Ceramic Load of the 'Witte Leeuw' (1613)*.⁴⁸ Further publications on this subject include an extensive study on the subject of Kraak porcelain, published in 1989 by Maura Rinaldi.⁴⁹ In 2002, a symposium was held in Leeuwarden together with an exhibition on Kraak porcelain, with many contributors.⁵⁰ A commercial publication by Jorge Welsh gives another overview of this type of ware.⁵¹

Christiaan Jörg, former curator of the Groninger Museum, has published numerous articles and books on the subject of Chinese export porcelain to the Netherlands, especially on the second half of the 17th century and later.⁵² Several

Mensun Bound, 'Aspects of the Hoi An wreck: Dishes, bottles, statuettes and chronology'. *Taoci*, (Revue Annuelle de la Société Française d'étude de la Céramique Orientale), 2001, pp. 95-104.

⁴³ M. L'Hour, *The Sunken Treasure of Brunei Darussalem*. Paris, 2001; M. Flecker, 'The Thirteenth-Century Java Sea Wreck: A Chinese Cargo in an Indonesian ship'. *The Mariners Mirror*, vol. 89, November 2003, pp. 388-404.; M. Flecker, 'The Jade Dragon Wreck: Sabah, East Malaysia', *The Mariner's Mirror*, vol. 98, no. 1, 2012, pp. 9-29; M. Flecker, 'Maritime Archeology in Southeast Asia', in *Southeast Asian Ceramics, New Light on Old Pottery*, John Miksic (ed.), Singapore, 2010.

⁴⁴ G. J. Marcus, *The Conquest of the North Atlantic*, Woodbridge, 1981; R. Mortan Nance, 'Wicker Vessels', *The Mariner's Mirror*, July 1922, pp. 199-205.

⁴⁵ S. Drossaer and T.H. Lunsingh Scheurleer, *Inventarissen van de Inboedels in de verblijven van de Oranjes en daarmede gelijk te stellen stukken 1567-1795*, The Hague, 1974.

⁴⁶ E. Ströber, 'Representation and Taste in Baroque Court Culture: The Porcelain Collection of Augustus the Strong', *Vormen uit Vuur*, 191/192, no. 2/3, 2005, pp. 48-58.

⁴⁷ H. Miedema, *Kraakporselein en Overgangsgoed*, Gemeentelijk Museum Het Prinsessehof, Leeuwarden, 1964.

⁴⁸ Van der Pijl-Ketel (ed.) (op. cit.), 1982.

⁴⁹ M. Rinaldi, *Kraak Porcelain, a Moment in the History of Trade*, London, 1989.

⁵⁰ 'Kraak, begeerlijk porselein uit China', *Vormen uit Vuur* 180/181, no. 1/2, 2003, (special issue).

⁵¹ L. Vinhais and J. Welsh (eds.), *Kraak Porcelain – the Rise of Global Trade in the late 16th and 17th Centuries*. London and Lisbon, 2008.

⁵² C.J.A. Jörg, *Porcelain and the Dutch China Trade*, The Hague 1982; C.J.A. Jörg, *Oosters Porselein, Delfts Aardewerk: Wisselwerkingen*, Groningen 1983; C.J.A. Jörg, 'Kraakporselein', in *Antiek*, no. 25, 1990, pp. 53-64; C.J.A. Jörg, 'Chinese porcelain for the Dutch in the Seventeenth Century: Trading Networks and the Private Enterprises', *The Porcelains of Jingdezhen. Colloquies on Art & Archaeology in Asia*, no. 16, 1992, pp.

articles on the subject of Chinese porcelain exported to the Netherlands can be found in a publication on the subject of the Dutch Golden Age, dated 2014.⁵³

Michael Dillon writes on the infrastructure of the actual production process at Jingdezhen; another author providing detailed information on this subject, is Christine Moll-Murata.⁵⁴ Li Baoping and Cao Jianwen have published on the finds of Kraak ware in Jingdezhen; these include dishes found in Chinese tombs.⁵⁵

The dating of Kraak type porcelain that I discuss in chapter four is primarily based on the publications of three authors: Brian McElney, Maura Rinaldi and Edward Von der Porten.⁵⁶ I present items from dated shipwrecks as well as some terrestrial sites to support my argument that this specific decoration was produced only from 1595-98.⁵⁷

Chapters five and six, the last part of my research, focus on the distribution of Chinese ceramics by the VOC during the first half of the 17th century. I refer to several

183-205; C.J.A. Jörg, 'Chinese Porcelain for the Dutch Market', *Oriental Art*. vol. XIV, no. 1, 1999, pp. 30-38; C.J.A. Jörg, 'Interasiatic Dutch Porcelain Trade', *Ibid.*, pp. 71-80; C.J.A. Jörg and J. van Campen, *Chinese Ceramics in the Collection of the Rijksmuseum, Amsterdam: the Ming and Qing Dynasty*, London 1997.

⁵³ Van Campen and Eliëns (eds.), 2014 (op. cit.): Canepa, (op. cit.) pp. 17-37; C. Viallé, 'Camel cups, Parrot Cups and other Chinese Kraak Porcelain Items in Dutch Trade Records, 1598-1623', pp. 37-53; Ostkamp, (op. cit.), pp. 53-79.

⁵⁴ M. Dillon, 'A History of the Porcelain Industry in Jingdezhen', PhD. thesis, University of Leeds, 1976; C. Moll-Murata, 'Guilds and Apprenticeship in China and Europe: The Ceramic Industries of Jingdezhen and Delft', Paper presented to the *S.R. Epstein Memorial Conference: 'Technology and Human Capital Formation in the East and West'*, June 18-21, 2008; from:

[https://www.researchgate.net/profile/Christine_Moll-](https://www.researchgate.net/profile/Christine_Moll-Murata/publication/237443235_Guilds_and_Apprenticeship_in_China_and_Europe_The_Ceramics_Industries_of_Jingdezhen_and_Delft_Paper_presented_to_the_SR_Epstein_Memorial_Conference_Technology_and_Human_Capital_Formation_in_the_East_a/links/54e359420cf2d90c1d9c6397/)

[Murata/publication/237443235_Guilds_and_Apprenticeship_in_China_and_Europe_The_Ceramics_Industries_of_Jingdezhen_and_Delft_Paper_presented_to_the_SR_Epstein_Memorial_Conference_Technology_and_Human_Capital_Formation_in_the_East_a/links/54e359420cf2d90c1d9c6397/](https://www.researchgate.net/profile/Christine_Moll-Murata/publication/237443235_Guilds_and_Apprenticeship_in_China_and_Europe_The_Ceramics_Industries_of_Jingdezhen_and_Delft_Paper_presented_to_the_SR_Epstein_Memorial_Conference_Technology_and_Human_Capital_Formation_in_the_East_a/links/54e359420cf2d90c1d9c6397/) (visited January, 2020).

⁵⁵ Baoping Li, *Kraak Porcelain from Tombs and Kiln Sites in China: Discoveries and Associated Issues*, Paper presented at the conference Cultures of Ceramics in Global History, University of Warwick, April, 2010; Cao Jianwen and Luo Yifei, 'Kraak Porcelain Discovered at Some Kiln Sites in Jingdezhen City in Recent Years', *Oriental Art*, vol. 1, no. 4, 2006, pp. 16-24.

⁵⁶ B. McElney, *South East Asian and Chinese Trade Pottery*, Catalogue of the Exhibition held in Hong Kong by the Oriental Ceramic Society of Hong Kong, 1979; B. McElney, *Chinese Ceramics & The Maritime Trade Pre-1700*, Bath, 2006; M. Rinaldi, 'Dating Kraak Porcelain', *Vormen uit Vuur*, 180/181, no. 1/2, 2003, pp. 30-41; E.P. Von der Porten, *Drake and Cermeño in California: Sixteenth-Century Chinese Ceramics*, Drake Navigators Guild, Point Reyes, California, 1973; C. Shangraw and E.P. Von der Porten, *The Drake and Cermeño Expeditions' Chinese Porcelains at Drakes Bay, California, 1579 and 1595*, Santa Rosa, California, 1981. E.P. Von der Porten, 'Manila Galleon Porcelains on the American Coast', *Taoci*, no.2, December 2001, pp. 57-63, and a recent monograph, *Early Wanli Porcelains from the 1578 Manila Galleon San Juanillo*, 2017 (the author kindly provided me a copy of the yet unpublished manuscript).

⁵⁷ The shipwreck finds include: V. Esterhuizen and E. Axelson, 'Relics from the São Gonçalo at Plettenberg Bay', *Antiques in South Africa*, vol. 8, 1980, pp. 37-40; M. L'Hour, (ed.), *Le Mauritius. La mémoire engloutie*, Paris, 1989; D. Carré, J.P. Desroches and F. Goddio, *Le San Diego : Un Trésor Sous la Mer*, Catalogue, Paris, 1994; J.P. Desroches, 'Oriental Ceramics and Porcelains', *Nossa Senhora dos Mártires, the Last Voyage*. Catalogue of the Exhibition in the Pavilhão de Portugal, Expo 1998; M. L'Hour (ed.) 1989, (op. cit.).

documents concerning the capture of the Portuguese *Santa Catarina* in 1604, based primarily on publications by Robert Fruin and Levinus Hulsius.⁵⁸

Dutch historians who have written on the subject of Chinese porcelain as part of the commodities traded by the VOC are limited. Johannes de Hullu was head of the VOC archives from 1902 to 1924 and maintained that porcelain was mostly used as ballast and not an important trade commodity.⁵⁹ The archivist Hendrik Enno van Gelder (1876-1960) provided information on the quantities and types of porcelain transported by the VOC.⁶⁰ He also explained that porcelain was not an essential part of the whole trade of the VOC because large profits were made on the spices and pepper.⁶¹

Heert Terpstra (1884-1964), who had a position at the Royal Institute of the Tropics, specialised in several trade posts of the VOC, mainly the regions of Asia called the western quarters (*westerkwartieren*).⁶² He also wrote on Patani on the east coast of Malaysia, as it was important because of its position as a geographical market junction.⁶³ It was in fact the first place where the Dutch bought porcelain from Chinese merchants.

Thijs Volker provided detailed information on the porcelain trade between 1602 and 1685, based on the VOC documents.⁶⁴ Maria Meilink-Roelofs published various books and articles on the subject of the VOC trade.⁶⁵ Charles Boxer states that porcelain

⁵⁸ L. Hulsius *Achte Schiffart: Kurtz Beschreibung was sich mit den Holländern und Seeländern in den Ost Indien, die nechst verlauffene vier oder fünf Jahre, als Anno 1599. 1600. 1601. 1602. und 1603 hat zugetragen, Zusammen gezogen durch Levinum Hulsium*, Frankfurt, 1605; R. Fruin, *Een onuitgegeven werk van Hugo de Groot*. (An unpublished work of Hugo Grotius), Leiden, 1868; 'Robert Fruin's Verspreide geschriften met aantekeningen toevoegsels en verbeteringen uit des schrijvers nalatenschap', vol. 3, *Historische opstellen*, The Hague, 1901.

⁵⁹ J. de Hullu, 'De Porcelainhandel Der Oost-Indische Compagnie en Cornelis Pronk als haar teekenaar', *Oud Holland*, vol. 33, no. 1 (1915), pp. 50-62. J. de Hullu 'Over den Chineeschen handel der O. I. C. in de eerste dertig jaar van de 18^e eeuw', *Bijdragen tot de Taal, Land en Volkenkunde*, vol. 73, 1917, pp. 32-151.

⁶⁰ H.E. van Gelder, 'Gegevens omtrent den porseleinhandel der Oost-Indische Compagnie', *Economisch Historisch Jaarboek*, no. 10 (1924), pp. 165-193. (He made use of data collected by De Hullu.)

⁶¹ *Ibid.*, p. 168: 'Tenslotte zal men den porseleinhandel in het algemeene beeld van den handel der O.I.C. niet een heel groote plaats behoeven in te ruimen. Als men de cijfers der cargosoeen leest, dan zijn het niet die der porcelainen welke de groote winsten beloofden: de kruidnagelen, de peper, de muskaatnoten, later de thee, zijn van veel meer gewicht. Maar de geliefde porceleinkasten onzer overgrootmoeders hebben van de minder belangrijke handelswaar een grooten voorraad bewaard en wij zijn daardoor nieuwsgieriger naar de herkomst daarvan dan naar het lot van de balen peper en muskaat!'

⁶² H. Terpstra, *De Opkomst der Westerkwartieren van de Oost-Indische Compagnie (Suratte, Arabië, Perzië)*, The Hague, 1918, p. 142 and p. 144.; H. Terpstra, 'De Nederlanders in Voor-Indië bij de stichting van het fort Geldria te Paliacatte', *De Indische Gids*, vol. XXXVII, 1915, pp. 331-360.

⁶³ H. Terpstra, *De Factorij der Oostindische Compagnie te Patani*, The Hague 1938.

⁶⁴ T. Volker, *Porcelain and the Dutch East India Company as Recorded in the Dag-Registers of Batavia Castle, those of Hirado and Deshima and other Contemporary Papers, 1602-1682*. Leiden, 1954.

⁶⁵ M.A.P. Meilink-Roelofs, *Asian Trade and European influence in the Indonesian Archipelago*

was shipped in large quantities to Europe and that between 1602 and 1657 this amounted to 'more than three million pieces'.⁶⁶

Leonard Blussé has written a number of publications on the overall trading relations between the Dutch and the Chinese during the period of the VOC.⁶⁷ I have consulted numerous other publications on the VOC in general although they do not deal with the trade in porcelain. For example, Femme Gaastra has published many books and articles on the VOC, its structure, and enterprises.⁶⁸ Wim Wennekes focuses on several commodities, which brought profits to the VOC, such as pepper, cotton and silk.⁶⁹ Robert Parthesius has explained the complicated transportation system of the VOC in Asia including the inter-Asian shipping activities.⁷⁰ This is especially important to understand, as the ceramic cargoes carried by VOC ships were not all destined for the Dutch Republic. Cees Brouwer published on the supplies of porcelain to the port of Mocha in present day Yemen, a VOC post that was established in 1634.⁷¹ Tristan Mostert and Jan van Campen provide an historical overview of Dutch relations with China.⁷²

Between 1500 and about 1630, The Hague, 1962; *The VOC in Azië*, Bussum, 1976 by the same author gives information on the various trade posts.

⁶⁶ C.R. Boxer, *The Dutch Seaborne Empire, 1600-1800*. London, 1965, pp. 174-175.

⁶⁷ L. Blussé, 'Chinese Trade to Batavia During the Days of the VOC', *Archipel*, vol. 18 (1979), pp. 195-213; L. Blussé and J. de Moor, *Nederlanders Overzee*, Franeker, 1983; L. Blussé, *Strange Company. Chinese Settlers, Mestizo Women and the Dutch in VOC Batavia*. Verhandelingen van het Koninklijk Instituut voor Taal-, Land- en Volkenkunde, vol. 122, Dordrecht 1986; L. Blussé, 'No Boats to China. The Dutch East India Company and the Changing Pattern of the China Sea Trade, 1635-1690', *Modern Asian Studies*, vol. 30, no. 1, February 1996, pp. 51-76; E. van Veen and L. Blussé (eds.), *Rivalry and Conflict. European Traders and Asian Trading Networks in the 16th and 17th Centuries*, Leiden, 2005; L. Blussé, *Visible Cities. Canton, Nagasaki, and Batavia and the Coming of the Americans. The Edwin O. Reischauer Lectures*, Cambridge, 2008; L. Blussé, 'The Batavian Connection: the Chinese Junks and their Merchants', in Van Campen and Eliëns (eds.) 2014, (op. cit.), pp. 97-109.

⁶⁸ F.S. Gaastra, *De Geschiedenis van de VOC*, Haarlem 1982; 2nd edition Zutphen 1991; 3rd edition Zutphen 2002; *The Dutch East India Company: Expansion and Decline*, Zutphen. 2003; F.S. Gaastra and J.R. Bruijn, (eds.) 1993, (op.cit.).

⁶⁹ W. Wennekes, *Gouden Handel, de eerste Nederlanders overzee, en wat zij daar haalden*, Amsterdam, 2008.

⁷⁰ R. Parthesius. *Dutch Ships in Tropical Waters: The Development of the Dutch East India Company (VOC) Shipping Network in Asia (1595-1660)*, Amsterdam, 2010.

⁷¹ C.G. Brouwer, 'The Porcelain Trade to al-Mukha during the Early Seventeenth-Century according to Dutch Accounts', *Vormen uit Vuur*, 175, no. 2, 2001. (special issue); See also C.G. Brouwer, 'Al-Mukhā: The Trans-Oceanic Trade of a Yemeni Staple Town as Mapped by Merchants of the VOC, 1614-1640. Coffee, Spices & Textiles', Amsterdam 2006. *Dutch-Yemeni Encounters: Activities of the United East India Company (VOC) in South Arabian Waters since 1614*, Amsterdam 1998.

⁷² T. Mostert and J. van Campen, *Zijden Draad. China en Nederland sinds 1600*. Also in English: *Silk Thread. China and the Netherlands from 1600*, Amsterdam 2015.