

# Chinese Echoes

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This paper presents a single artefact, a base sherd from a storage jar. The pot is dark grey stoneware with a thick, light grey-green celadon glaze. The inside is slip-covered with a thin layer of beige-brown clay and has distinct turning marks. The original theory was that this might be Chinese Dusun Ware, a type of storage jars which were widely exported from East Asia to the Middle East during the 8<sup>th</sup>–10<sup>th</sup> Centuries CE. Such an artefact would have been sensational to find as far north as Oslo, Norway, although the sturdy pots were widely reused and have been known to travel to North-Western Europe. To check its provenance, ICP analyses were carried out – and thus a completely different story could be written, one of Western Europeans copying the much sought-after East Asian pottery in the Late Medieval and Renaissance periods. So how did this convincing Chinese copy arrive in Oslo, who could have brought it, and when did it arrive on these shores? Importantly, what can a Chinese copy tell us about relations and connections between Europe and China? We were intrigued, and wonder how many other examples of this may be found in the Nordic countries?

## Introduction and find context

The artefact that is the focus of this paper is a pottery sherd that was found in an area previously occupied by Oslo's medieval harbour (Derrick et al., 2023). The harbour was located along the western shoreline of the town, which ran from the bishop's manor in the north, to the king's manor in the south (Figure 1). Fluctuations in sea-level caused by a

combination of isostatic uplift and a fall in groundwater levels meant that the sea gradually regressed westward, and ships had to unload their cargo further out in deeper water. To accommodate these shifts, a series of wharfs were constructed connecting the quay to the shoreline.

The sherd of pottery was discovered during an initial cleaning of medieval deposits found at the end



Figure 1. This map dates to 1700 CE and is the earliest map which shows Oslo's shoreline. The pottery sherd and corresponding harbour constructions lay on dry land at this point but would originally have been part of a pier which stretched out into the sea. This map also shows a pier at the end of Bispeallmenningen which illustrates how sea regression continued westwards into the eighteenth century. Map: Kristiania amt nr 7 øst: Carte von Agershuus und der Stadt Christiania (øst). Statens Kartverk. Map by Mick Derrick/NIKU.

of a wharf, which projected out from the western end of Bispeallmenningen, the road leading down from the bishop's manor to the shoreline. These deposits lay on top of a wooden harbour construction dating to the mid-15th century CE, and immediately under a new phase of building

activity dating to the mid-16th century. Context alone suggests that the sherd is likely to have been deposited sometime immediately prior to the construction of the new building, perhaps around the mid-16th-century. This date is supported by the other pottery sherds found in

the layer. In total 21 pottery sherds were recovered, four of which were dated to the period 1150–1350, one to 1350–1550, while the remaining pottery was dated to the period 1400–1600. The latest date from this assemblage (1400–1600) corresponds well with the stratigraphic information, suggesting that a mid-16th century deposition date is likely.

The harbour would have been the first point of contact for many people arriving in the town from other parts of the world. This, however, is not reflected in the find assemblages from previous excavations which generally comprise pottery from the local area or nearby northern European countries (Kristiansen, 2017). So how did this convincing Chinese copy arrive in Oslo, who could have brought it, and when did it arrive on these shores? Importantly, what can a Chinese copy tell us about relations and connections between Europe and China? To answer these questions, we will discuss the results of scientific analysis together with the archaeological context.

### Material

The artefact presented in this paper is a base sherd of a dark grey stoneware storage jar with a thickly applied light grey-green celadon glaze, as described above unearthed in deposits dating to between 1450 and 1550 which formed part of Oslo's medieval harbour. The base diameter is 10 cm, and about 55% of the base

is preserved. The base thickness is 10 mm. The wall thickness varies from 7 to 15 mm (the latter at the base) and the maximum vessel height preserved was approximately 10 cm (Figure 2c). It is clearly produced on a fast-turning wheel, with throwing marks present on the light beige-brown slip on the inside (Figure 2a). The fabric is reduced fired dark grey stoneware. The celadon glaze is a reduction fired glaze with feldspar and high amounts of sodium and potassium, giving a high gloss. Iron oxide gives the sherd its distinct colour (Figure 2b) which is meant to resemble the colour nuances of jade (Valenstein, 1998, pp. 101–102; Wen, 2018, pp. 209–219). This type of glaze was used on porcelain and stoneware to get colours ranging from light blue over all shades of green to almost brown, depending on the amount of iron oxide included (Medley, 1989, p. 150). Interestingly, it is still in use by modern potters.

Photos and descriptions of the sherd, including base diameter and wall thickness were sent to Chinese colleagues who specialise in Chinese and Islamic Middle Eastern ceramics. Based on the base size, sherd thickness, and glaze, they supported the belief that the sherd most likely belonged to a Dusun ware-type storage jar, dating to the Chinese Tang dynasty, mainly 8<sup>th</sup>–10<sup>th</sup> centuries CE. A possible parallel to our find may be seen in (Wen, 2018: 214, Figure 6.6) and is included in Figure 2 (Figure 2 d).

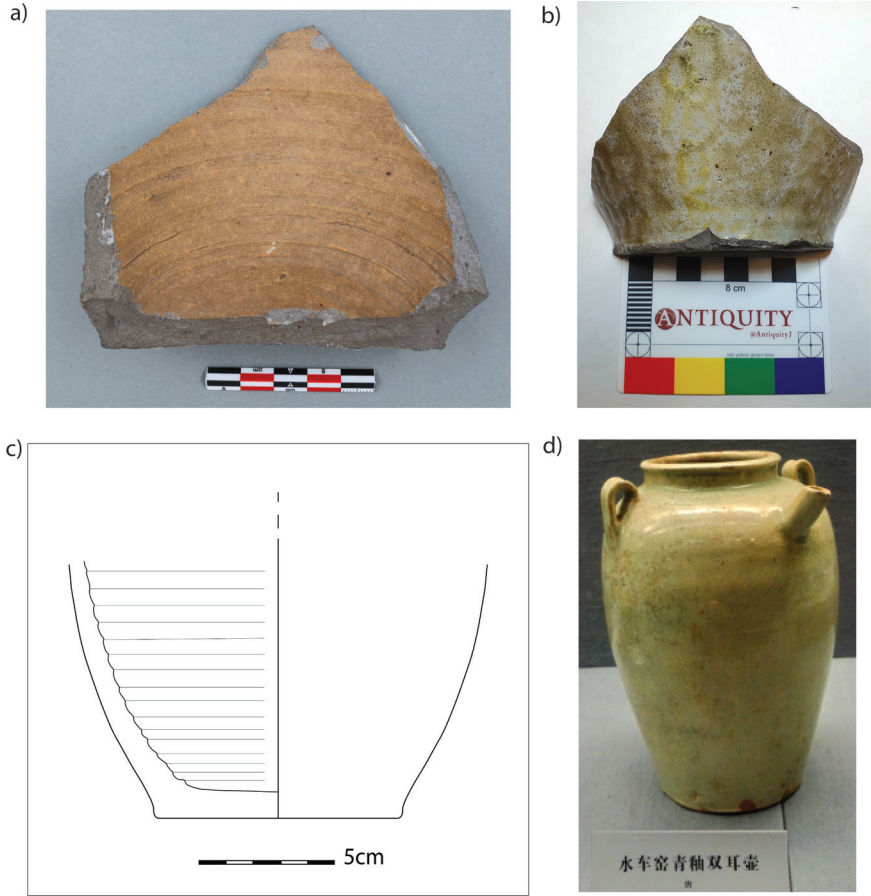
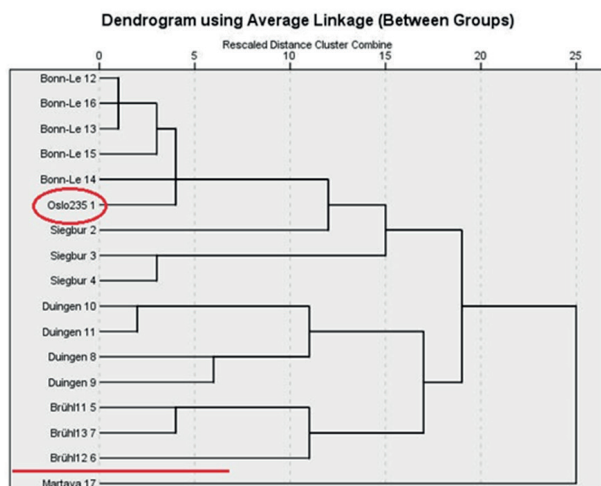


Figure 2: a) Inside of stoneware storage jar with clear turning marks and light beige-brown slip. Photo by Solveig Thorkildsen/NIKU; b) Stoneware storage jar with light grey-green celadon glaze. Photo by Vibeke Vandrup Martens/NIKU; c) Reconstruction drawing of stoneware storage jar base, C62334/44. Drawing by Vibeke Vandrup Martens/NIKU; d) example of complete Dusun ware storage jar, base diameter c. 10cm, from Wen 2018: 214, Fig. 6.6. Collage by Mick Derrick, NIKU.

Storage jars of this type were used to transport perishable goods such as oil and wine and were widely distributed across the Indian Ocean but have mainly been found in the Persian Gulf area, (Wen, 2018: 230–241). Because of their robustness, many of these pots were recycled and reused on long haul trips. A few

found their way to Northern Europe, most likely through the Samanid-North Europe trade networks in the 9<sup>th</sup> and 10<sup>th</sup> centuries (Kovalev, 2002: 197–201; Wen, 2018: 214–216) This preliminary typologizing and dating was certainly delightful though somewhat baffling, as the find context of the sherd was at least



*Figure 3. Dendrogram of Oslo stoneware compared to a Southeast Asian Martavan sherd, and to German stonewares from the Rhine area (from Brorsson 2024).*

five centuries later than the common dating of Dusun ware. Although it is not impossible for special, high-status ceramic items to be treasured and preserved for generations, it seems improbable that a very early sherd like this should turn up in such a late context (as described above, most likely mid-16<sup>th</sup> century CE). If it were identified as Dusun ware however, then this would be a sensational artefact to find so far north.

To establish whether the provenance could really be Chinese, a small bit of the vessel was sent for ICP (intra coupled plasma) analysis at the Office for Ceramic Studies (Brorsson 2013). The laboratory unfortunately had no Dusun ware sherds for direct comparison, but did have one other East Asian stoneware type, and plenty of stoneware samples from elsewhere.

The results of the ICP analysis (Brorsson 2024) presented as a dendrogram (Figure 3), show that it is highly unlikely that this sherd is Chinese. It has almost nothing in common with the Southeast Asian Martavan Ware. It also bears very little resemblance to Southern Scandinavian ceramics and other finds from Oslo. Instead, it has strong chemical resemblance to German stoneware products, particularly from the Bonn and Brühl areas along the Rhine, making it highly likely that the provenance is German (Brorsson, 2024). Initial disappointment quickly turned to curiosity and gave this paper a completely different angle, focusing instead on the widespread 16<sup>th</sup>–19<sup>th</sup> centuries European love for Chinese ceramics, to the extent of copying these as closely as possible both in shape and colours (Gutiérrez et al., 2021).



## Discussion

So how did this convincing Chinese stoneware copy arrive in Oslo, who could have brought it, and what can a Chinese copy tell us about relations and connections between Europe and China?

As mentioned, the sherd was found in deposits connected to Oslo medieval harbour which lay along the western shoreline of the medieval town which ran from the bishop's residence in the north to the king's manor in the south. During the 16<sup>th</sup> century direct maritime trade routes were opened between the Indian Ocean and the Mediterranean. This led to an influx of Chinese ceramics entering Europe at this time (Gutiérrez et al., 2021: 1213). These ceramics appear to have been very popular, difficult to obtain, and therefore probably very expensive. It is no wonder then that copies of these desirable items were produced, perhaps for the *nouveau riche* merchants or other slightly well-off members of the population.

It would be interesting to find out how widespread this trade in 'fake' Chinese pottery really was, particularly within Europe. We welcome any input on the subject from colleagues as it might be intriguing to look further into these practices – and maybe even find real Chinese imports in the process. We are also actively searching for Far East and Middle Eastern ware types which we could submit to the ICP laboratory for future comparison work.

The stoneware sherd found in Oslo harbour whilst not being Chinese provides us with an endearing example of the North European Late Medieval and Renaissance fascination with the stunning ceramics coming out of the Far East.

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## References

- Brorsson, T. 2024. ICP-analys av stengods från Oslo, C62334/44. *Kontoret för Keramiska Studier, Rapport 247, 2024.*
- Brorsson, T. 2013. A new method to determine the provenance of pottery. ICP analyses of pottery from Viking age settlements in Northern Europe. In: *Kulturwandel im Spannungsfeld von Tradition und Innovation*, eds. Kleingärtner, S., U. Müller, J. Scheschkewitz, 59–65. Wachholtz Verlag Neumünster.
- Derrick, M., Oldham, M., Engen, T., Bergeland, T., & Meyer, R. 2023. Arkeologiske undersøkelser i forbindelse med realisering av reguleringsplan for Bispegata med Oslo Torg. *NIKU report 121/2022.*
- Gutiérrez, A., Gerrard, C., Zhang, R., & W., G. 2021. The earliest Chinese ceramics in Europe? *Antiquity*, Volume 95, Issue 383, October 2021, 1213–1230.
- Kovalev, R. K. 2002. Dirham Mint Output of Samanid Samarqand and its Connection to the Beginnings of Trade with Northern Europe (10th century). *Histoire & Mesure XVII -3/4 2002*, 196–216. <https://doi.org/10.4000/histoiremesure.892>.
- Kristiansen, M. 2017. Deg 43 Arkeologiske undersøkelser i Dronning Eufemias gate, seksjon 43. *NIKU Report nr. 117/2015.*
- Medley, M. 1989. *The Chinese Potter: A Practical History of Chinese Ceramics*, 3rd edition 1989, Phaidon.
- Simpson, M. J. R., Nilsen, J. E. Ø., Ravndal, O. R., Breili, K., Sande, H., Kierulf, H. P., Steffen, E., Jansen, E., Carson, M., & Vestøl, O. 2015. Sea Level Change for Norway Past and Present Observations and projections to 2100. *NCCS report no. 1/2015.*
- Valenstein, S. G. 1998. *A handbook of Chinese ceramics*, Metropolitan Museum of Art, New York. ISBN 9780870995149 (fully online).
- Wen, W. 2018. *Chinese Ceramics in the Islamic World from the 8th to 10th Centuries CE*. PhD Thesis, Merton College, University of Oxford. <https://ora.ox.ac.uk/objects/uuid:6f7bab35-0698-4db3-85c2-cc92908ee01a>.

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