Chinese Ceramic Exchange in the Maldives: Maritime Trade and Usage in the Indian Ocean Trade from 900 to 1900[1]

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Abstract

As one of the major nodes in the maritime route between ancient China and the Islamic world, the Maldives have drawn the interest of numerous archaeologists and historians due to their strategic importance in the commerce of the Indian Ocean. Archaeological surveys and excavations have found Chinese ceramics dated from the Tang through Qing dynasties in the Maldives since the 1970s. This paper first introduces the Maldives sites and uses aoristic analysis to examine changing trends in the trade of Chinese ceramics imported from the Buddhist Period to the Islamic Period. Second, it discusses the changing roles that the Maldives played in long-distance maritime trade of the Indian Ocean during 900-1900 AD.

Keywords: Indian Ocean Trade, Chinese Ceramics, the Maldives, Long-distance Trade, Statistical Analysis

Introduction

The Maldives archipelago, located in the centre of the Indian Ocean at the southern tip of India and Sri Lanka, is one of the most dispersed countries in the world, consisting of over 1200 islands. This island nation played an important role in sea trade as it occupies a strategic intersection between east and west. The Chinese ceramics trade began to grow on a large scale in the middle of the 8th century (Zhang 2013, Lin and Zhang 2018, Qin 2013, Whitehouse and Williamson 1973, Guttierrez *et al.* 2021). Hundreds of archaeological sites have been identified

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in littoral areas of the Indian Ocean with a great quantity of Chinese ceramic finds (Zhang 2016). In the Maldives, Chinese ceramics are recovered from almost all of the larger archaeological excavations, but previous research does not thoroughly and systematically discuss these wares as imports from the Far East. In 1976, John Carswell became the first to describe an association of Chinese ceramics in the Maldives with a widespread trading pattern, including between China with the western Indian Ocean (Carswell 1977). In recent years, new research on archaeological surveys and excavations in the Maldives reported continually increasing discoveries of Chinese ceramics (Figure 1 and Table 1).

To explore the trading patterns of the Maldives and their relationships with the long-distance trade from China, this chapter classifies their known and reported Chinese ceramic finds. The work is not exhaustive but comprises a general study and statistical analysis based on current archaeological understanding and reliable assessments of the role of the Maldives in maritime trade with China and its relationship with the Indian Ocean trade, AD 900–1900.

Economic and Diplomatic Relationships between Maldives and China in historical records from Tang to Qing Dynasties

Currently, the earliest knowledge of the Maldives in Chinese historical records comes from documents dating to the Tang and Song Dynasties[2] that relate to the travellers and diplomatic contacts (Mohamed 2005: 7), although this could be a misinterpretation of the descriptions of the Malabar in South India in the Tang and Song Chinese books (Pelliot 1904: 395, Li 2009: 54-58). The first reliable reference is attributed to Wang Dayuan (汪大渊), an early 14th century Chinese traveller. In *Daoyi Zhilue* (A Brief Account of Island Barbarians, 岛夷志略), he

[2] For example, historical records of the Maldives in Song can be found from Cefu Yuangui (冊府元龜), which is the largest *leishu* (encyclopedia) compiled during the Song Dynasty. Volume 970 of this book recorded: "The third year and the eighth month (658 A.D.), the king Fa Tuo Ba Di of the kingdom of Qian Si Fo, the king Shi Li Ti Po of the kingdom of She Li Jun, the king Shi Po Luo Di Duo of the kingdom of Mo La, sent ambassadors to pay tribute (to the Emperor of China).These Kingdoms are extremely far away, and recognize for the first time their relation of dependence to China. At this time, after being at sea for many months, they arrived in Jiaozhou. Here they gave tribute of their country's products". Mohamed (2005: 7) believes that this record is the evidence of the earliest official contacts between the Maldives and China in Tang dynasty, but he did not provide any further convincing interpretations and evidence to support his argument.

describes the Maldives (in Chinese, *Bei Liu* 北溜) as a small but important fishing port city with rapid tidal currents. The literal meaning of *Liu* in Chinese is *rapid current*, so *Bei Liu* may, therefore, refer to *the north area of the rapid current* (Wang 1981: 265). The book also reveals the key commodities including coir or coconut ropes (椰子索), cowries (贝八子), dried fish (鱼干 Kalu-lili-mas), and large cotton kerchiefs (大手巾布). Sea traders for instance, transporting shipload of cowries to India were known to exchange it for a shipload of rice or more (Ptak 1987: 677-678, Wang 1981: 264-265).

In comparison to the early 14th century historical descriptions (Ming AD 1368–1644), Ming Chinese records showed sharp increase in terms of diplomatic contacts with the Maldives resulting from the voyages of Zheng He (郑和), a Chinese Muslim maritime commander (Sen 2016, Kuhn 2021, Sen 2006). Zheng He's fleet comprised of about 27,000 men and 64 treasure ships (宝船) and was supported by 160 smaller boats. The treasure ships were decorated with vibrant colours and the hulls painted with giant seabirds, aiming to express their wealth and power to the locals (Finlay 2008: 336-337). The fundamental ideology behind the expeditions was to expand the Ming tribute system overseas, established to form alliances rather than include them in the Ming territory. In this way, the Ming court would gain exotic goods from these nations as part of the tributes (Sen 2016, Kuhn 2021).

Seven expeditions were made from AD 1405–1433 (Dreyer and Stearns 2005). Zheng He's fleets officially paid business visits to the Maldives between AD 1413 and 1422 (Dreyer and Stearns 2005). Consequently, the Male' government sent tribute to China in AD 1416, 1421, and 1423 (Ptak 1987: 680-681). The Ming government's knowledge of the Maldives is well documented; records mention Haddumati, Mulaku, Male, Fadiffolu, Kelai, Minicoy, Kalpeni, Sacrifice Rock, and Androth. They also include the maritime routes between the Maldives, India, Sri Lanka, and East Africa (Ptak 1987: 689-690).

The kingship of the Maldives in Chinese historical accounts is first recorded by Ma Huan, who travelled with Zheng He's voyages in 1413 (Chao 2012, Dreyer and Stearns 2005: 6-7). The book describes the king, officials, and people of the Maldives (in Chinese, *Liu Shan Guo* 溜山国) as all Muslim. Some live an elegant lifestyle, and others are naked in caves or nested in the trees. Merchants travelled and traded locally produced ambergris and frankincense and other commodities including gold, silver, fine-coloured silks, coloured satin, porcelain, rice, and other grain (Fei 1954: 70-71). Descriptions of the Maldives were written into a poem (Fei 1954: 71, translated by Ptak 1987: 684):

The "Liu Mountains" are numerous and divided [into groups];
The "Weak Waters" connect them.
Rice and grain were never cultivated [there];
[The natives,] living in caves, are primitive.
Although the compass may guide one's way [in going there],
Trading junks fear violent storms.
[The natives] string together leaves, covering front and back,
[But otherwise] go naked throughout their days.
Although it is said, [the islands] are beyond the ocean,
It is difficult to pass through the rocky gates [which bar the entrance to them].
Having widely travelled and seen a lot, I composed these verses,
Attentively presenting them to the throne.

In the History of Ming (*ming shi*, *明史*), only one Maldivian king is mentioned: I-su-fu (亦速福, likely Sultan Yusuf II), who dispatched a delegation to Ming China in 1416, and tributes were irregular in the following decades (Zhang 1974). This information cannot be verified by Maldivian chronicles (Ptak 1987: 681), however, they do show that a well-established official contract between the Maldives and China may have existed.

Archaeological work with Chinese ceramic imports in the Maldives

Chinese ceramic imports and finds from archaeological sites in the Maldives can be divided into two categories: surveys and excavations. Twelve projects reported the discovery of a total of 1049 pieces of glazed ceramic imports and 958 sherds identified as Chinese ceramics. Their locations and key information are outlined below and shown in Figure 1 and Table 1.

1) Landu survey:

The Landu Survey of the Southern Miladhunmadulu Atoll in the Maldives was conducted by B. P. Bopardikar in 1986 (Bopardikar 1992). A trial trench was dug for a Buddhist stupa with coral-built structures toward the northeast. Two Chinese ceramics were unearthed from the site, with only one piece of imported pottery finds that could be confirmed as late Song or early Yuan Longquan celadon (see Chinese ceramic classification below for more details and Bopardikar (1992:176-177).

2) Male' survey

In the 1970s, John Carswell conducted the first survey of imported Chinese and Islamic ceramics in the Maldives and investigated maritime trading patterns in the Indian Ocean. His survey can be divided into four groups of materials, which include a great number of Chinese sherds found through surveys and smaller test excavations, now housed in the Ashmolean Museum, Oxford (Carswell 1977).

3) Dhadimagi Havitha, Fuvahmulah Atoll excavations

In 1948, Adam Nasir Maniku (include reference) led an excavation of the site on Fuvahmulah Island and dated it approximately to the 12th century, (Pre-Islamic to Early-Islamic Period). The project yielded one stupa with a number of relic caskets fashioned of roughly hewn coral stone (Forbes 1987: 283, Litster 2016: 132-135). This site has been further excavated in the 1980s.[3]

4) Kuruhinna Tharaagadu, Faafu Atoll excavation

Egil Mikkelsen led excavated at the Kuruhinna Tharaagadu between 1996 and 1998. The site is outside the limit of the village on Kaashidhoo, in a coconut, papaya, and banana plantation. This excavation covered 1880 square metres and yielded 64 separate features of Buddhist chaitya ruins (Mikkelsen 2000). Carbon-14 analysis dated the site to the 4th-13th century.

5) Kinolhas, Raa Atoll excavation

Anne Haour excavated the Kinolhas in 2017. This fieldwork yielded over 4300 sherds from different types of pottery and glazed wares (Zhang 2022a). From this site 237 sherds are divided into eight classes, consisting of 14 pieces of Ming dynasty Jingdezhen-made white porcelain wares, one piece of Yuan blue and white porcelain ware, one piece of lower-quality Ming Longquan-type celadon, 11 pieces of early Ming blue and white porcelain wares, 141 pieces of middle Ming blue and white porcelain wares, 52 pieces of Yuan or early Ming Longquan celadon wares, 16 pieces of early Ming Longquan celadon wares, and one piece of Imperial porcelain.

[3] In 1984 the work on the west side of the area yieldes 423 sherds. Only one piece of possible Song dynasty Yue-type celadon ware was recovered from the excavation in 1984.

6) Nilandhoo Foamathi, Faafu Atoll excavation

In 1984, a Buddhist chaitya and mosque structural site was excavated in Nilandhoo Foamathi. According to C^{14} analysis, this site dates from the 3rd-15th century AD. The excavation yielded 1180 sherds of various pottery (Litster 2016: 105-120, 137-155).

7) Male', Utheemu and Veyvah excavation project 2016

In 2016, multiple surveys and excavations were conducted by Shiura Jaufar, which incorporated sites on the islands of Male' (MAL), Utheemu (UTH) and Veyvah (VEY) (Jaufar 2019b: 68-94). The MAL site has the most productive excavation trench units and that units E4, E14, N5, N9, and N12 have a much greater number of ceramic findings than the other units, including those on the islands of Utheemu and Veyvah (Jaufar 2019b: 68-94). One piece of Chinese ceramic import came from the surface collection and is not associated with the excavation. The only recovered piece of Chinese ceramics is a sherd of Dehua-made blue and white porcelain ware.

Classification of Chinese Ceramic Findings and Methodology

All 958 Chinese ceramic imports are classified into 23 different types. Their manufacturing kiln locations are shown in Figure 1. Table 2 shows the principal information for the classification of these 23 different types of Chinese ceramic imports from the Maldives.

In order to investigate the trading and usage patterns of Chinese ceramic finds in the Maldives from a statistical perspective, aoristic analysis is used, which is regularly employed for evidence-based analysis (Ratcliffe 2000) and is applied to archaeological studies (Johnson 2004, Crema *et al.* 2010). As the classification above indicates (Table 2), information regarding Chinese ceramic imports is well-identified and dated, and therefore these classes have reliable start and end dates that are respectively longer or shorter in their ranges. Rather than arbitrarily choosing a single point of time within a date range, an aoristic analysis evenly distributes the probability of the records across each interval of the time span.

Accordingly, aoristic analysis reveals the circulation probability of the ceramic imports in trade, which would be evenly distributed for each interval (100 years in this analysis) between the start and end of dating. By adding the results of the 958 accurately identified Chinese ceramic finds, the distribution was approached with a statistical outcome of the proportional and relative probability of the time spanning of Chinese ceramic trading trends during AD 900-

1900 (Table 3). Figure 2 shows the trends and spatial distribution of sherd numbers of Chinese ceramic finds from different archaeological sites in the Maldives. Similarly, class numbers of Chinese ceramic imports in the Maldives are also shown in Table 4 and Figure 3.

Research outcomes

The earliest occurrence of Chinese ceramics was discovered in the Maldives at the Kuruhinna Tharaagandu site, where a Yue celadon sherd from the Northern Song dynasty (AD 960-1127) was discovered. Figure 2 shows the fact that merely points to the actual exchange of Chinese ceramic imports at the site in the 10th century rather than a low possibility of the importation of Chinese ceramics. The dating uncertainty is due to the dating range of this Yue celadon from Kuruhinna Tharaagandu is ranged from the late 10^{th} century to the early 11^{th} and 12^{th} centuries (Table 2). Since AD 1000, Fuvahmulah Island has been the second potential location for Chinese ceramic finds, however, the proportions and chances are still quite slim, and its identification is not certain.

Before AD 1300, the total presence of Chinese ceramics from the Maldives was very low, with a total number of 13 sherds, making up no more than 1.5% of total Chinese ceramic imports, however, a clear and dramatic change can be seen from the beginning to the middle of the 14th century AD when Chinese ceramic imports experienced significant growth (Table 3). The number of sherds increased to 23.57%, which was the peak of all Chinese ceramic trading within the 1000 years during AD 900-1900. Apart from Nilandhoo, the other sites yielded Chinese ceramics, and Kinolhas, Kuruhinna Tharaagandu, and Male' produced the largest discoveries of Chinese ceramic imports.

After this great peak in Chinese ceramic trade, a gradual decline occurred in the Maldives during AD 1400-1800, specifically during the Ming and Qing dynasties in China. In the 18^{th} century, the number of Chinese ceramics reached its lowest level post-AD 1300. In Figure 2, the sites of Kinolhas (orange), Kuruhinna Tharaagandu (grey), and Male' (brown) show different trends in Chinese ceramic trading. First, these sites experienced a peak in Chinese ceramic imports during AD 1300-1500, but such imports in Male' declined during AD 1500-1700, while the finds from Kinolhas have a clear increase at the same time. From AD 1700, the Maldives experienced a clear decline of Chinese ceramic imports and only Male's showed clear growth from AD 1800.

Otherwise, P_2 in Table 2 shows that over 60% of all Chinese ceramic finds were discovered in Male', the capital of the Maldives. The second largest group comes from Kinolhas at 24.7%,

and Kuruhinna Tharaagandu has about 10% of the total Chinese ceramic imports. Other sites have no more than 4% of Chinese ceramic finds in the Maldives. This trend might be attributed to more archaeological work taking place in Male'. Chinese ceramic finds are mainly concentrated there and may produce a potential bias of statistical analysis based on sherd numbers when interpreting Chinese ceramics trends in the Maldives.

In order to overcome this potential bias, the class numbers of Chinese ceramic imports in the Maldives are also introduced with the aoristic analysis (Figure 3). Similar to the quantities, the period before AD 1300 has a low level of Chinese ceramic class diversity, with the maximum of Chinese ceramic class numbers being one or two. From AD 1300 onward, Chinese ceramic diversity was much greater. Most sites in the Maldives experienced this diversity in Chinese ceramic imports from the 14th-15th century AD, but these numbers clearly declined in the 16th century. This is reasonable because, at that time, the Chinese ceramic trade in the western Indian Ocean was dominated by Chinese blue and white porcelain wares, and the other types of Chinese ceramic classes were not yet included. From AD 1600, however, the class diversity of Chinese ceramics was rather low in most of the Maldives sites except Male', which had experienced an increase in Chinese ceramic class diversity.

Discussion

According to Table 1, the proportion of Chinese ceramic findings among the known pottery materials in the Maldivian sites ranges from 0.1% to 15.4%. In total, this proportion could reach from 7.9 to 8.7%, although this last percentage is inaccurate because the total number of pottery finds from many sites is unknown. The higher percentage of Chinese ceramic imports may suggest that the Maldives, in particular at the sites of Kinolhas and Male's excavations in 2016, have a much higher proportion than most sites with Chinese ceramic imports. These finds at Islamic archaeological sites in the Western Indian Ocean are usually low (Scanlon 1971, Rougeulle 1996: 175-176, Rougeulle 2005: 226, Kennet 2004: 60). At some famous trading sites in the Western Indian Ocean (for example, at Kush in Ras al-Khaimah, UAE), the proportion of Chinese ceramic imports ranges between 0.31 and 2.39% of the total pottery finds (Kennet 2004: 98), and in Siraf, South Iran and Shange, Kenya, this proportion is normally below 1% (Horton 1996, Rougeulle 1991: 542). The sites in the Maldives with higher proportions (at or above 2%) or with a large number of Chinese ceramic imports (at or above 100 sherds) are therefore critical for this discussion, which aims to explore long-distance maritime trade between China and the Maldives via the Indian Ocean.

Figures 4 and 5 present two data-visualised maps to show the development of trading patterns of Chinese ceramics in the Maldives, and they may therefore divide the trading trends of Chinese ceramic imports into three phases:

1) Phase 1 (AD 900-1300): Introduction of Chinese ceramics trade to the Maldives (Maps A and B in Figures 4 and 5)

During the four hundred years during AD 900-1300, the number of Chinese ceramics unearthed in the Maldives was low and the class diversity was poor. From AD 900, it was discovered that the number of sites with Chinese ceramic imports had slowly grown from one to several up until AD 1300. This trend may suggest that Chinese ceramic imports and usage in the Maldives spread slowly. Nevertheless, this interpretation is currently untenable given the current data set due to the uncertain identification of some Chinese ceramic finds from this period.

Chinese ceramic imports with higher value in trade, such as Yue celadon wares, have also been found. This type of celadon can be regarded as a kind of luxury item. For example, in the only shipwreck that produced discoveries of Chinese ceramics in the 9th century, several dozen Yue celadon wares were present among over 50,000 pieces of Chinese ceramic in the cargo. Its low proportion suggests that Yue celadon wares were rare and might have had high value in the trade, perhaps even as valuable as bronze or gold metalworks (Krahl *et al.* 2010). Similar examples have been found in Western Europe as well, and they are unearthed only from the palaces or gardens of elite classes. In the Western Indian Ocean during the same period, Yue celadon wares were also considered luxury items (Guttierrez *et al.* 2021). Although the discovery of such artefacts became more common in the 11th and 12th centuries, such as the Intan (Flecker 2002) and Cirebon (Liebner 2007) shipwrecks, at which a large quantity of Yue kiln celadon was found, the nature of Yue celadon wares as luxury ceramics was not changed. It could therefore suggest that, as luxury ceramics, Yue celadon wares found in the Maldives belonged to the elite class. Indeed, the sites where early Chinese ceramics were discovered during AD 900-1300 are related to the contexts of Buddhist sites in the Maldives, such as Fuvahmulah and Kuruhinna Tharaagandu.

In India and Sri Lanka during the same period, the number of sites with Chinese ceramics and the quantities and class diversities of Chinese ceramic imports were found in greater abundance than those of the Maldives. Perhaps this suggests that the Arab merchants leading long-distance maritime trade with China starting from about AD 800 in the Indian Ocean had not entered the Maldives. According to historical research, AD 1153 was the earliest

period in which Islam was introduced into the Maldives (Gibb 1929: 98-100, Forbes 1981, Maloney 2013). This does not suggest that the Maldives were fully Islamised at that time. At least from the perspective of China's ceramic trade, the Maldives did not participate in long-distance trade between China and the Indian Ocean before the middle of the 13th century.

2) Phase 2 (AD 1300-1700): Prosperity of Chinese ceramics trade in the Maldives (Maps C & D in Figures 4 and 5)

A clear feature of the Chinese ceramic distributional pattern in the Maldives during AD 1300-1700 was a large and sudden increase in the quantity and class diversity of Chinese ceramic imports. Apart from transportation wares and Zhangzhou porcelain made in the Fujian Province of south China, the other wares were of fine quality and constitute more than 80% of all Chinese ceramic finds.

The Chinese ceramic finds from eight different sites generally date from the Yuan to Ming dynasties of China (14th-17th centuries). Ming-dated ceramic sherds are the largest proportion and are mainly the blue and white porcelain wares and white porcelain wares made in Jingdezhen in Jiangxi Province of south China. There are three types of Yuan dynasty-dated ceramics (14th century): Qingbai porcelain wares produced in Fujian, South China; blue and white porcelain sherds produced in Jingdezhen, Jiangxi Province; and fine celadon sherds from Longquan County, Zhejiang Province. Among them, Longquan celadon was the most prominent ceramic commodity in the Maldives, which matches the trading pattern of Chinese ceramics in the western Indian Ocean at that time (Zhang 2022b). During this period, Male' might have played a key role in terms of maritime trade activities in the Indian Ocean. Although Kinolhas had more Chinese ceramic finds than Male' from the 16th-17th centuries (Map D in Figure 4), its class diversity is much poorer in comparison with Male's (Map D in Figure 5). The consistent and rich diversity of Chinese ceramic classes in Male' could suggest that it played a more crucial role than other sites in terms of Chinese ceramic trade in the western Indian Ocean.

During Phase 2, Chinese ceramic imports in the Maldives were large in quantity, rich in class diversity, and widespread in reach from the northern to the central Maldives. This suggests that not only were the Maldives strongly involved in the long-distance Indian Ocean trade, but Chinese ceramic imports were widely consumed in the Maldives.

Based on the excavation in 2016 (Jaufar 2019b), Chinese ceramic finds were mainly yielded from elite sites. In order to examine this information in detail, the number of Chinese

ceramic finds and total pottery sherds are listed (Jaufar 2019b: Table 25), which may encourage further discussion of Chinese ceramics usage patterns in the Maldives. Some small trenches yielded a small number of total pottery findings, and therefore the statistics from these trenches may produce a biased pattern. Here one considers only trenches with ceramic findings of over 50 sherds in total, and so the trenches numbered MAL-N5, VEY-1 and VEY-3 are excluded from this discussion.

According to Figure 6, in the Male' excavation, Chinese ceramic finds represented a high proportion (over 13% on average) of the total ceramic finds (Figure 6). This percentage is much higher than those of Chinese ceramics at most of the other archaeological excavation sites in the Western Indian Ocean. This statistic suggests that Chinese ceramics in Male' were used in large quantities in these sites, and might also be associated with the elite classes since the Male' site is within a palatial area. The sites on Utheemu are also considered elite, although Chinese ceramic finds have a much lower proportion (around 2%). This may indicate that Chinese ceramic imports were used in this area, but to a limited degree compared to the average in the western Indian Ocean. In Veyvah, the discovery of Chinese ceramics is very limited (at Unit 5, for example, the proportion is lower than 1%), suggesting that usage at this common settlement was very low. These different proportional levels of Chinese ceramic finds at various places in the Maldives may suggest disparities in purchasing power between different levels of society. In this phase, Chinese ceramic imports were mainly used by the elite class.

Another key feature of Phase 2 is that the number of Chinese ceramic import finds decreased during AD 1500-1700. To some extent, this reflects the so-called Ming Gap, which refers to a period of little to no Chinese participation in the Indian Ocean trade during the early Ming dynasty (the early 15th century AD). Tom Harrisson was the first to propose this idea in 1958 when he observed an absence of Ming ceramics from the site of Sarawak, East Malaysia but great numbers of sherds at the site that he believed dated to the Song and Yuan period (Harrisson 1958). Roxanne Brown examined pottery deposits of 15 shipwrecks from the East Indian Ocean, and she concluded that the proportion of Chinese ceramics around South-Eastern Asia decreased from 50% to 5% in the early 15th century (Brown 2009). The declining pattern of Chinese ceramic imports in the Maldives started from AD 1500 (Figure 2), which seems a few decades later than the suggested era of this Ming Gap (early 15th century AD), and this may indicate that the Maldives had a different trading role in the 15th century long-distance maritime activities from China to the western Indian Ocean. The finest

quality white porcelain sherd from Kinolas, identified as an Imperial ceramic find dated to the early Ming dynasty, may be considered an archaeological hint for connections of the official visits of Zheng He's voyages from Ming China to the Maldives. This is mainly because the trade of Imperial ceramics outside the central court of China was very restricted, and only Zheng He's official visitors, who represented the Ming court, would be able to access these fine ceramics (cf. Lin and Zhang 2015).

3) Phase 3 (1700-1900 AD): Chinese ceramics as common commodities in trade in the Maldives (Map E in Figures 4 and 5)

In comparison with Phase 2, this period saw an increase in the number of Chinese ceramic imports, and class diversity increased as well. The clear feature of this period, however, is the distribution of Chinese ceramic finds in the Maldives concentrated in Male'. The quality of Chinese ceramic imports was very low, such as the Dehua-made blue and white porcelain wares and the Kitchen Qing wares, which constitute nearly 60% of Chinese ceramic finds from this period. From AD 1700-1900, Chinese ceramic imports were not widely used in the Maldives and the quality of Chinese ceramic imports became much lower. This shift toward lower-quality Chinese ceramic imports points to a change in how Chinese ceramics are used in the Maldives and in long-distance maritime trade. The over-supply of low-quality Chinese ceramic imports might indicate a change in the trade from luxury or semi-luxury goods in the previous two stages to common goods in this phase. The concentrated distribution of Chinese ceramic imports in Male' suggests that their consumption in the Maldives has decreased.

Conclusion

As suggested by Lister (2016: 232–235), the Maldives were involved in the early long-distance trade in the Indian Ocean from the period of Islamisation onward. The increasing interactions between the Maldives and South Asia have been clearly identified by archaeological evidence based on ceramic assemblages, cowry shell money deposits, and faunal materials. This interaction was stimulated and enhanced by the Islamic Period in the Maldives. This chapter, based on Chinese ceramic finds from the Maldives, echoes Lister's conclusion and initially discusses the possible trends of long-distance trade between China, the Indian Ocean, and the Maldives from the 9th-19th century.

In maritime trade on the Indian Ocean, Chinese ceramic imports from the Maldives were involved in different trading patterns from the regional trade of the Pre-Islamic Period to the long-distance trade of the Islamic Period. This process may have been shaped by the Islamisation of the Maldives, because in the Pre-Islamic Period, although Chinese ceramics can be found at important Buddhist sites, they are very few in quantity and scarce in their classes. The discovery of high-quality porcelain (such as Yue celadon) during this period may be helpful in explaining how Chinese ceramics played the role of luxury goods in Maldivian society. The number of Chinese ceramics in the Maldives gradually increased and reached its peak in the 14th century, which could result from the expansion of Arab merchants' trading territories but also the growth of the cosmopolitan nature of the western Indian Ocean societies during this period (Abu-Lughod 1989).

From the 14th century at least, Chinese ceramics are distributed not only in the capital of Male' but also widely in many sites in the Maldives: big or small, elite or not. Besides the basic social use of Chinese ceramics, they still played the dominant role of luxury item, and many of them were used at the elite sites in the Maldives. A decline in Chinese ceramic exchange in the Maldives is also observed since the 15th century. These trends are similar to the changing patterns of the Chinese ceramics trade in the Western Indian Ocean. Since the end of the 17th century, the distribution of Chinese ceramics in the Maldives was only concentrated in Male', and the quality of porcelain was poor. This seems consistent with the discovery of Chinese ceramics in the Indian Ocean area and the changes in their trade patterns.

Through the unearthed Chinese ceramics of the Maldives, this chapter demonstrates that the pattern of Chinese imports in these islands in many ways echoes patterns in the wider Indian Ocean region, which not only suggests how the Maldives may have engaged in long-distance trade over the Indian Ocean but also shows the changes that were closely related to this trade and exchange between China and the Indian Ocean.

Figures:

Tables:

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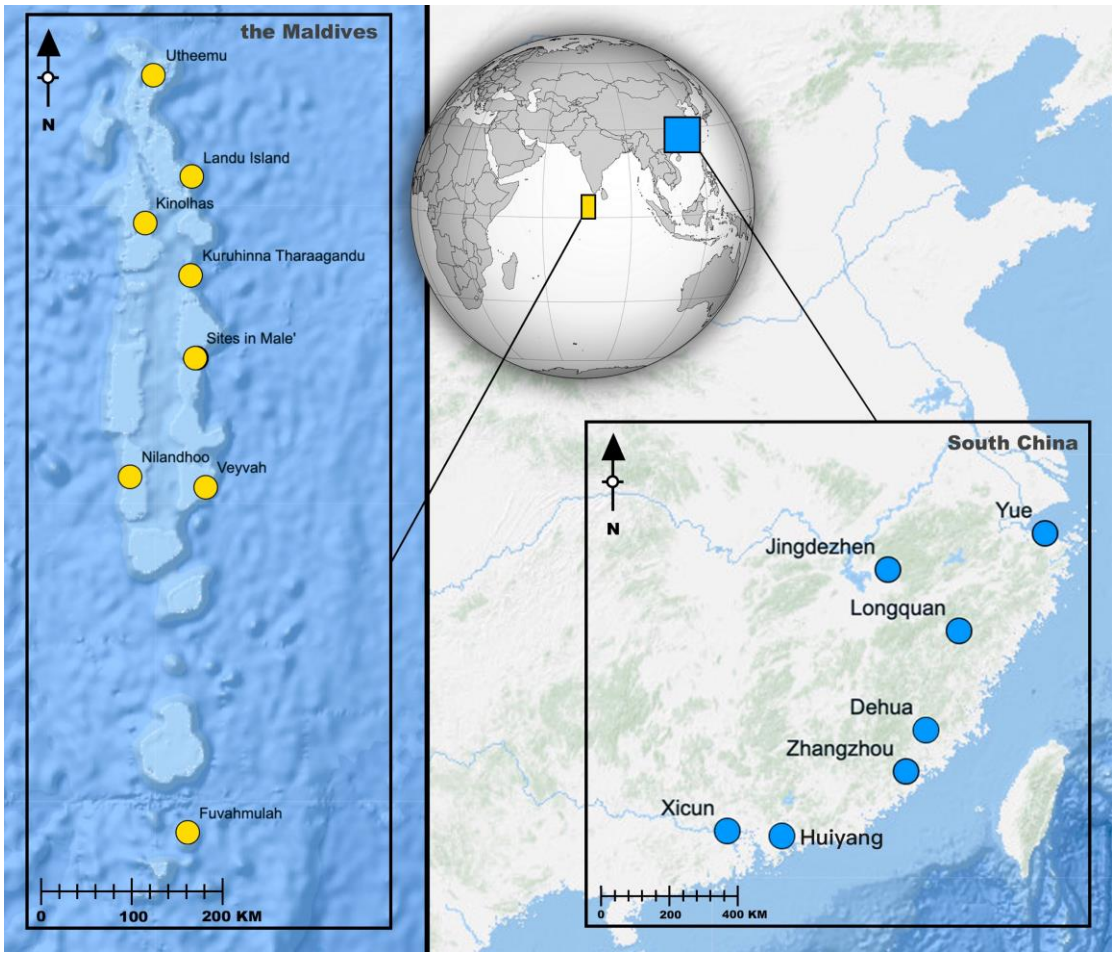

Figure 1: Site mentioned in this chapter (Yellow dots show the sites in the Maldives with Chinese ceramic imports. Blue dots show the kiln sites where these ceramic imports were manufactured in China (the kiln names can be found in Table 2).

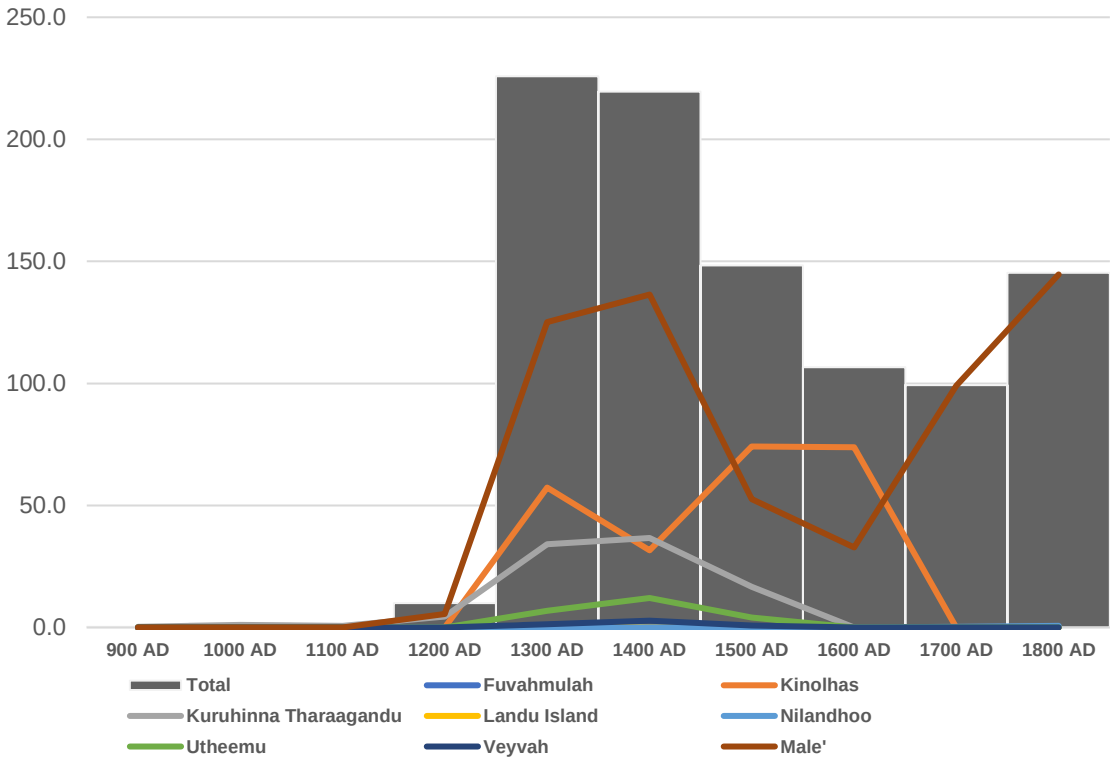

Figure 2: Trading trends of Chinese ceramic import numbers in the Maldives, 900-1900 AD (based on Table 3).

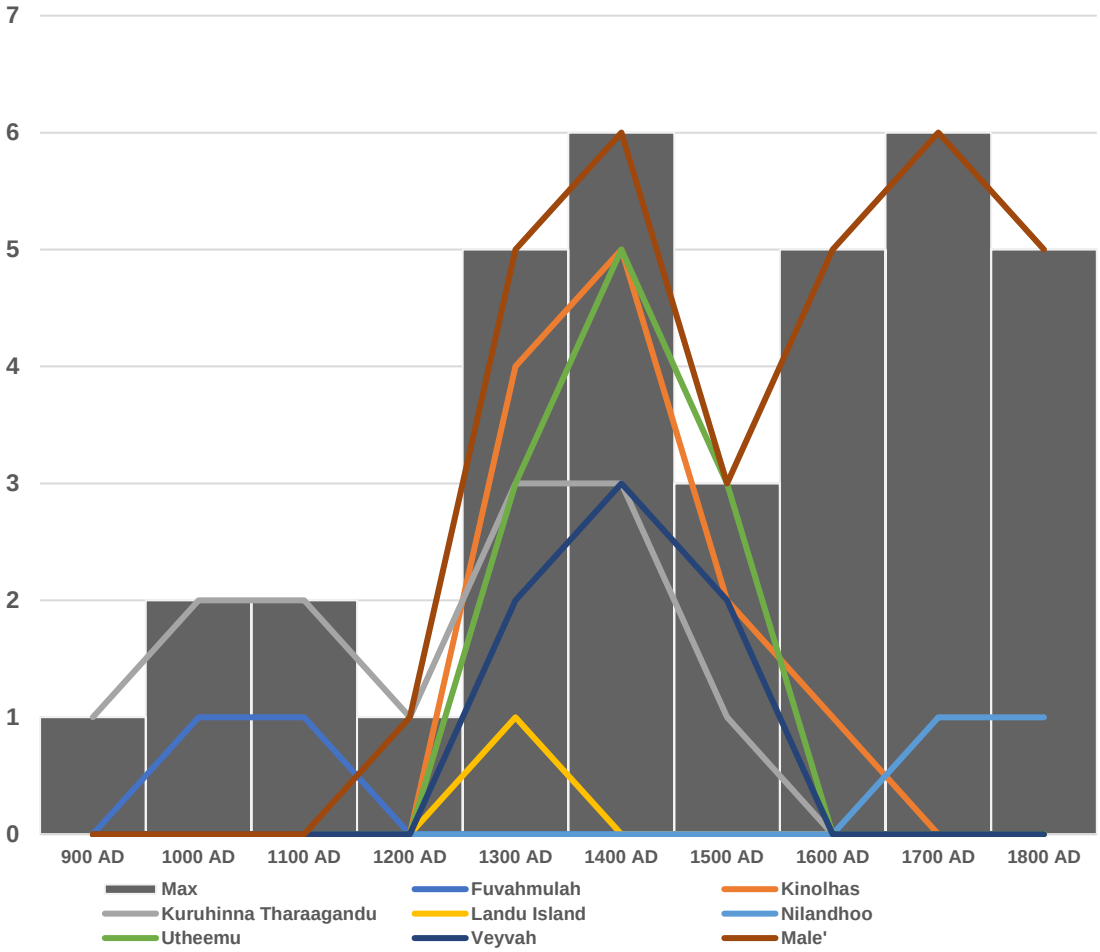

Figure 3: Changing trends of classes based on Chinese ceramic finds in the Maldives, 900-1900 AD (based on Table 4).

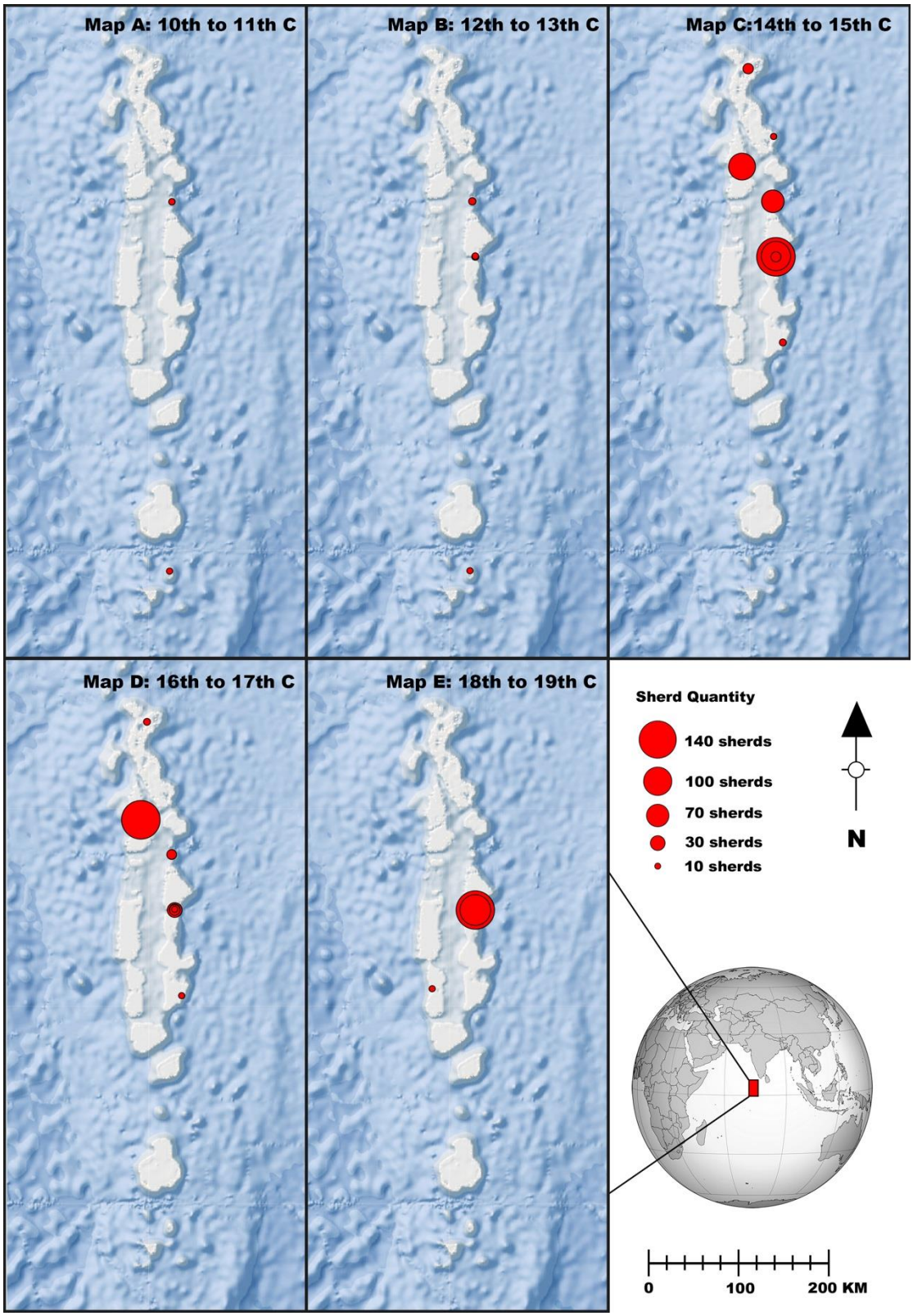

Figure 4: Distribution of Chinese ceramic imports (sherd numbers) in the Maldives, 1000-1900 AD (based on Table 3).

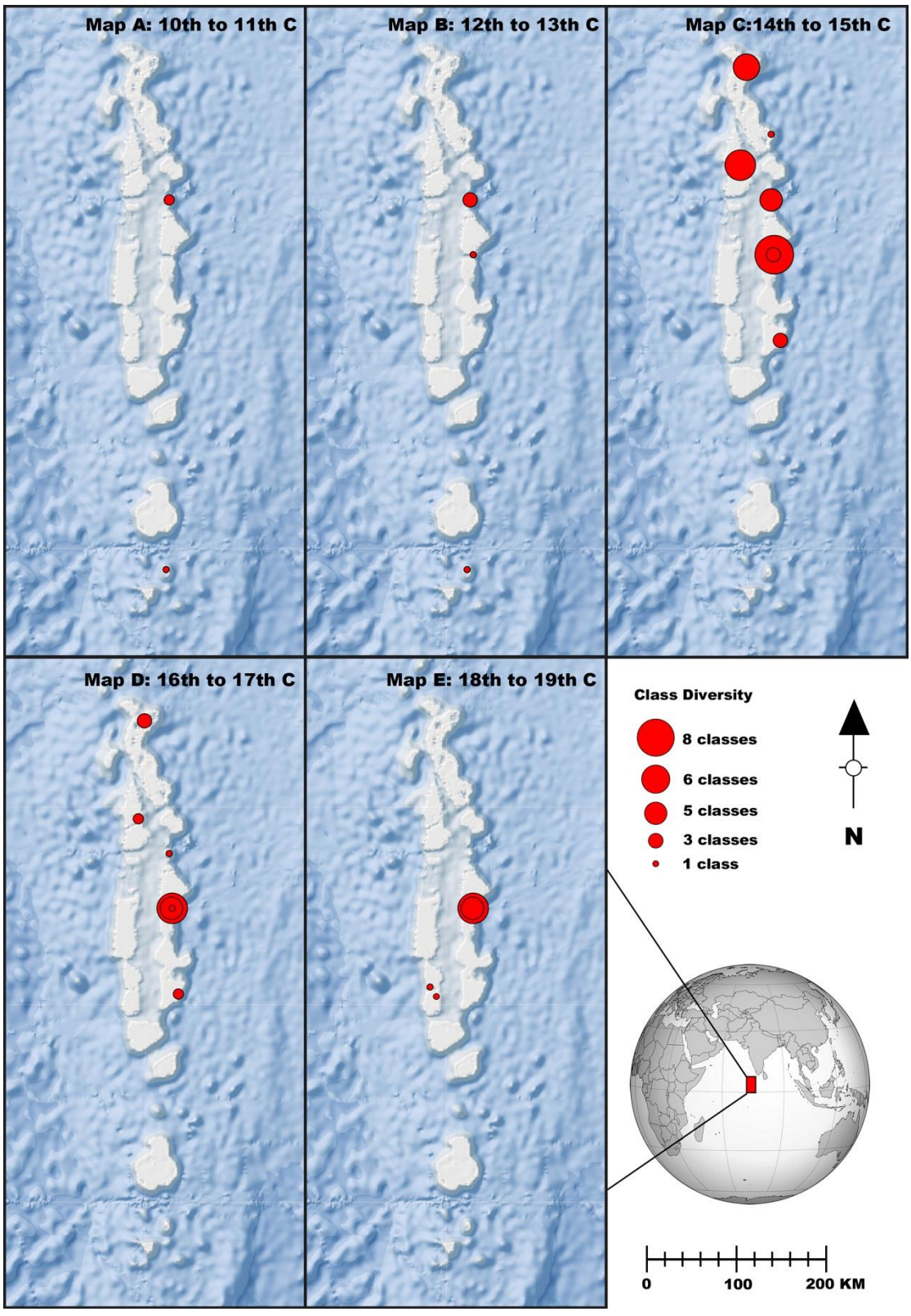

Figure 5: Distribution of Chinese ceramic imports (class numbers) in the Maldives, 1000-1900 AD (based on Table 4).

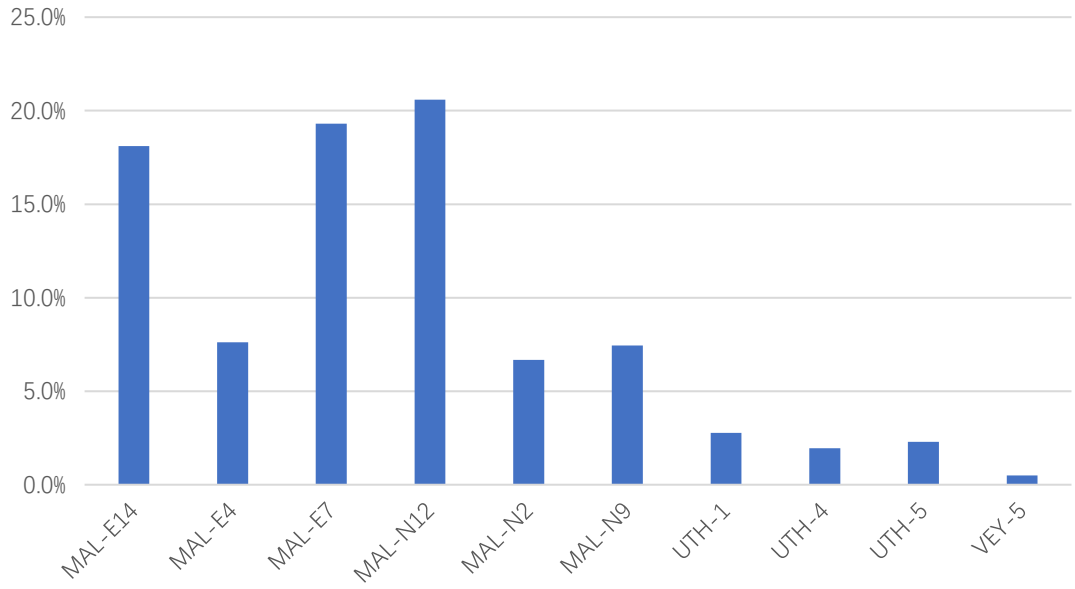

Figure 6: Chinese ceramic percentage among all-ceramic findings from the Maldives Excavation 2016. (MAL= Male', UTH= Utheemu & YEY= Veyvah, based on Table 5).

Table 1: Key Information of Surveys and Excavations with Chinese Ceramic Finds in the Maldives.

Name	Project Type	Area	All Pottery Number	Chinese Ceramics	%
Landu Island	Survey	Southern Miladhunmadulu Atoll	Some	1	N/A
Demolished Sultan's Palace, Male	Survey	Male', Faafu Atoll	Some	1	N/A
Excavation in Sultan's Garden, Male	Survey	Male', Faafu Atoll	Some	8	N/A
Survey of Habibi Mosque, Male	Survey	Male', Faafu Atoll	Many	144	N/A
Male Survey	Survey	Male', Faafu Atoll Fuvahmulah	Many	321	N/A
Dhadimagi Havitha	Excavation	Atoll	423	1	0.2%
Kuruhinna Tharaagandu	Excavation	Faafu Atoll	About 3000	94	About 3%
Kinolhas Excavation	Excavation	Raa Atoll	4321	237	5.5%
Nilandhoo Foamathi	Excavation	Faafu Atoll	1180	1	0.1%
Male' Excavation 2016	Excavation	Male', Faafu Atoll	794	122	15.4%
Utheemu Excavation 2016	Excavation	Haa Alifu Atoll	1103	23	2.1%
Veyvah Excavation 2016	Excavation	Meemu Atoll	235	5	2.1%
		Total	**About 11000-12000**	**958**	**About 7.9% -8.7%**

Table 2: Classification of Chinese ceramic imports in the Maldives.

In this table, **Class Name** refers to the names of each class type with their possible dating by Chinese ceramics. For example, blue and white porcelain-Yuan means Chinese blue and white porcelain wares produced in the Yuan Dynasty (AD 1274–1368). **Code** refers to unique class codes for class indication in this chapter. **Fabrics** have two types including stoneware and porcelain wares: stoneware refers to hard-bodied ceramics lying between earthenware and porcelain that are normally fired between 1,050 and 1,200℃; Porcelain is used to refer to a ceramic body which is hard, dense, pure white and translucent, which is made by mixing kaolin clay with porcelain stone and is fired at a temperature of around 1,350℃ (Pierson 1996, Rice 1987: 104, Kerr and Wood 2004: 9). **Body** and **Glaze** refer to the key features, including thickness, hardness and colour, of fabrics of bodies and glazes in different classes. **Kiln Name** and **Kiln Locations**. **Dating** includes the **Chinese Dynasty** and dating ranges, indicating the manufacturing dating of each class based on tombs and datable evidence from China (cf. Zhang, 2016).

No	Class Name	Code	Fabrics	Body	Glaze	Kiln Name	Kiln Location	Chinese Dynasty	Dating
1	Northern Song dated Yue celadon wares	YUE	Stoneware	Grey, dense and sometimes rough	Thin, dark green and transparent	Yue	Zhejiang	Song	960–1127 AD
2	Xicun underglazed painted stonewares	XICUN	Stoneware	Yellowish grey, rough and dense	Transparent, thin and slightly yellowish	Xicun	Guangdong	Song	1000–1200 AD
3	Yuan dynasty Dehua made Qingbai porcelain wares	QB-DH	Porcelain	White or greyish white, hard and dense	Bluish or greyish white translucent and thin	Dehua	Fujian	Song, Yuan	1250–1350 AD
4	Yuan or Ming dynasty dated transportation jar	MTB	Stoneware	Greyish yellow, rough but dense	Brownish black and thin	South Chinese local kilns	Fujian, Guangdong	Yuan, Ming	1300–1600 AD
5	Yuan blue and white porcelain wares	CBW–1	Porcelain	Thick, white or greyish white, hard and dense	Transparent, thin and slightly bluish	Jingdezhen	Jiangxi	Yuan	1330–1368 AD
6	Yuan or early Ming dated Longquan celadon wares	LQC–1	Stoneware	Thick, greyish white, hard and dense	Thick, jade-like, green and milky	Longquan	Zhejiang	Yuan, Ming	1330–1400 AD
7	Imperial Porcelain	IMP	Stoneware	Thick, greyish white, hard and dense	Thick, jade-like, green and milky	Jingdezhen	Jiangxi	Ming	1368–1430 AD
8	Early Ming blue and white porcelain wares	CBW–2	Porcelain	Thick, white or greyish white, hard and dense	Transparent, thin and slightly bluish	Jingdezhen	Jiangxi	Ming	1368–1460 AD
9	Early Ming Longquan celadon wares	LQC–2	Stoneware	Thick, greyish white, hard and dense	Olive or yellowish green and milky	Longquan	Zhejiang	Ming	1400–1444 AD
10	Lower quality and Ming dated celadon wares	LQC–T1	Stoneware	Thick, greyish white and dense	Olive or yellowish green and relatively thin	South Chinese local kilns	Jiangxi, Guangdong	Ming	1400–1500 AD
11	Ming dynasty Jingdezhen made white porcelain	CWW–JDZ	Porcelain	White, hard and dense	Transparent and thin	Jingdezhen	Jiangxi	Ming	1400–1600 AD
12	Ming dynasty enamel porcelain wares	ENAM–1	Porcelain	White, hard, thin and dense	Transparent and thin	Jingdezhen	Jiangxi	Ming	1430–1644 AD
13	Middle Ming blue and white porcelain wares	CBW–3	Porcelain	White, hard, thin and dense	Transparent and thin	Jingdezhen	Jiangxi	Ming	1460–1560 AD
14	Ming dynasty Dehua made white porcelain	CWW–DH	Porcelain	White and dense	Transparent and thin	Dehua	Fujian	Ming	1500–1600 AD
15	Late Ming blue and white porcelain wares	CBW–4	Porcelain	Thin, white, hard and dense	Transparent and thin	Jingdezhen	Jiangxi	Ming	1560–1644 AD
16	Zhangzhou blue and white porcelain wares	ZHANGZHOU	Porcelain	White or greyish white, hard and dense	Transparent and thin	Zhangzhou	Fujian	Ming	1560–1644 AD
17	Early Qing blue and white porcelain wares	CBW–5	Porcelain	White, hard, thin and dense	Transparent and thin	Jingdezhen	Jiangxi	Qing	1644–1817 AD
18	Early Qing enamal porcelain wares	ENAM–2	Porcelain	White, hard, thin and dense	Transparent and thin	Jingdezhen	Jiangxi	Qing	1644–1900 AD
19	Batavia type brown glazed porcelain wares	BATA	Porcelain	White, hard, thin and dense	Brown glaze	Jingdezhen	Jiangxi	Qing	1660–1750 AD
20	Blue glazed porcelain wares	BLUE	Porcelain	White, hard, thin and dense	Coblat blue glaze	Jingdezhen	Jiangxi	Qing	1660–1750 AD
21	Dehua made blue and white porcelain wares	CBW–DH	Porcelain	White and dense	Transparent and thin	Dehua	Fujian	Qing	1750–1900 AD
22	Lower quality Kitchen Qing blue and white porcelain wares	KC	Porcelain	Slight brownish or yellowish grey, rough and hard	Slight bluish or brownish transparent and thin	South Chinese local kilns	Fujian, Guangdong	Qing	1750–1900 AD
23	Late Qing blue and white porcelain wares	CBW–6	Porcelain	White hard, and dense	Transparent and thin	Jingdezhen	Jiangxi	Qing	1817–1900 AD

Table 3: Aoristic statistics for sherd numbers of Chinese ceramic finds from different archaeological sites in the Maldives (dated from the 10th to 19th centuries).

This table presents summary statistics for the archaeological sites in the Maldives that produce Chinese ceramic sherds dated from the 9th to the 19th centuries, including 958 sherds from 12 sites. On the bottom, T_1 represents the total number of Chinese ceramics that dated to different centuries from 900 to 1900 AD. P_1 refers to the percentages of the proportion of Chinese ceramic finds from each century. On the right, T_2 represents the total number of Chinese ceramic sherds yielded from each site. P_2 represent the percentages of T_2.

Name	900 AD	1000 AD	1100 AD	1200 AD	1300 AD	1400 AD	1500 AD	1600 AD	1700 AD	1800 AD	T_2	P_2
Fuvahmulah	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	**0.1%**
Kinolhas	0.0	0.0	0.0	0.0	57.3	31.7	74.1	73.9	0.0	0.0	237	**24.7%**
Kuruhinna Tharaagandu	0.2	1.1	0.7	4.5	34.2	36.7	16.7	0.0	0.0	0.0	94	**9.8%**
Landu Island	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1	**0.1%**
Nilandhoo	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7	1	**0.1%**
Utheemu	0.0	0.0	0.0	0.0	6.8	12.1	4.1	0.0	0.0	0.0	23	**2.4%**
Veyvah	0.0	0.0	0.0	0.0	1.4	2.8	0.8	0.0	0.0	0.0	5	**0.5%**
Male'	0.0	0.0	0.0	5.5	125.1	136.3	52.6	32.8	99.0	144.6	596	**62.2%**
T_1	**0.2**	**1.6**	**1.2**	**10.0**	**225.8**	**219.5**	**148.4**	**106.6**	**99.3**	**145.3**	**958**	**100%**
P_1	**0.03%**	**0.17%**	**0.12%**	**1.04%**	**23.57%**	**22.91%**	**15.49%**	**11.13%**	**10.37%**	**15.17%**	**100%**	

Table 4: Aoristic statistics for class numbers of Chinese ceramic finds from different archaeological sites in the Maldives (dated from the 10th to 19th centuries).

This table presents summary statistics for the archaeological sites in the Maldives that produce Chinese ceramic classes dated from the 9th to the 19th centuries. On the bottom, **Max** represents the maximum number of Chinese ceramic classes that dated to different centuries from 900 to 1900 AD.

Name	900 AD	1000 AD	1100 AD	1200 AD	1300 AD	1400 AD	1500 AD	1600 AD	1700 AD	1800 AD
Fuvahmulah	0	1	1	0	0	0	0	0	0	0
Kinolhas	0	0	0	0	4	5	2	1	0	0
Kuruhinna Tharaagandu	1	2	2	1	3	3	1	0	0	0
Landu Island	0	0	0	0	1	0	0	0	0	0
Nilandhoo	0	0	0	0	0	0	0	0	1	1
Utheemu	0	0	0	0	3	5	3	0	0	0
Veyvah	0	0	0	0	2	3	2	0	0	0
Male'	0	0	0	1	5	6	3	5	6	5
Max	1	2	2	1	5	6	3	5	6	5

Table 5: Summary statistics for sherd numbers and percentages of Chinese ceramic classes among all assemblages of potteries from the Maldives Excavation 2016.

This table presents a summary of statistics for the Chinese ceramic finds from the Maldives excavation in the season 2016. "Site Code" means different trench numbers from these excavations in 2016 **(MAL= Male', UTH= Utheemu & YEY= Veyvah)**, "Chinese" stands for 150 sherds of well-identified Chinese ceramic imports from 13 digging units, "N" means the total number pottery and glazed wares from these unites, and Percentages refers to the proportion of Chinese ceramic finds among all potteries (based on Jaufar 2019a: Table 30).

No.	Site Code	Chinese	N	%
1	UTH-4	13	667	1.9%
2	MAL-N12	69	335	20.6%
3	UTH-5	6	261	2.3%
4	VEY-5	1	200	0.5%
5	UTH-1	4	144	2.8%
6	MAL-E14	23	127	18.1%
7	MAL-N9	7	94	7.4%
8	MAL-E4	7	92	7.6%
9	MAL-N2	4	60	6.7%
10	MAL-E7	11	57	19.3%
11	MAL-N5	1	29	3.4%
12	VEY-1	1	22	4.5%
13	VEY-3	3	13	23.1%