Chapter 7– The glazed pottery: Asian and Islamic imports

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1. Introduction

This chapter aims to provide an understanding of the classification of the glazed ceramics from Kinolhas. In October 2017 and May 2018, the author undertook specialist analysis of the Chinese and southeast Asian ceramics, dated from between the fourteenth and nineteenth centuries, which were imported on a temporary export permit from the site of Kinolhas, Maldives, to the Sainsbury Research Unit for the Arts of Africa, Oceania & the Americas, University of East Anglia. This work involved the identification and classification of the Chinese and southeast Asian ceramic imports. The present author conducted this work. In addition, Professor Wang Guangyao, Deputy Director of the Institute of Archaeology of the Palace Museum in China, very kindly provided suggestions for dating and identifying the Chinese ceramic materials. The Kinolhas assemblage also contains some material originating in the Islamic world. Dr Derek Kennet, Durham University, contributed to identifying these. The assemblage is presented in Table 7.1.

According to earlier work by the present author on the combined assemblages of Chinese ceramic finds from the western Indian Ocean, over 100 archaeological sites have been identified as yielding similar Chinese ceramic finds. The western Indian Ocean has a very wide distribution of such finds, with similar types of Chinese ceramic imports systematically collected since the 1930s (cf. Mikami 1969); indeed, this author has personally collected them from over 100 sites (cf. Zhang 2016). In the Maldives, archaeological survey had been carried out by John Carswell, who first reported on the presence of Chinese ceramic imports (Carswell 1977). Recent doctoral research by Litster (2016) and Jaufar also involved a consideration of finds of Chinese ceramics in the Maldives, and the latter involved a statistical analysis of Chinese ceramic finds from the excavations in Male', Utheemu and Veyvah (Jaufar 2019), on which the present author also advised.

Table 7.1 near here

2. Methodology

In terms of methodologies, the materials in this case study were recorded using Excel, cataloguing the late Chinese ceramic finds by fabric, form, decoration and sherd count. This methodology is mainly based on British ceramic studies (Orton and Hughes 2013), however, because Chinese ceramics have their own unique features, such as fine glaze, different qualities of cobalt decoration, marks and high-fired fabrics, standard terms from Chinese ceramic archaeological traditions were also applied.

Derek Kennet (2004) produced a general classification of Chinese ceramic imports, with contributions from Regina Krahl. This classification covered Chinese ceramic imports from the thirteenth to nineteenth centuries; however, key archaeological evidence for dating and identification was generally missed. Seth Priestman followed Kennet's classification in his Master's thesis on the Williamson Collection from south Iran, and his PhD on a wider area in the western Indian Ocean (Priestman 2013) produced a full range of ceramic classifications including Chinese and Far Eastern ceramics, Islamic pottery and other locally produced pottery. Bing Zhao's classification offers an excellent understanding of Chinese ceramic materials from Sharma, Yemen, and is well linked to Chinese archaeology. However, it cannot easily be applied to other archaeological sites, as the groups defined only focus on detailed fabric descriptions and features of the sherds. She does not attempt to fit these into a coherent picture of the development of the Chinese trade in ceramics (Zhao 2006). Ran Zhang's work covered the most Chinese ceramic imports from the ninth to the sixteenth centuries in the western Indian Ocean; however, some classes present in the Kinolhas were not included in this research (Zhang 2016). The present chapter therefore aims to standardise classification of the Chinese ceramics from Kinolhas.

3. General Description of Chinese ceramic imports from Kinolhas

The Chinese ceramic imports from Kinolhas included 237 sherds, representing a fairly good proportion of the overall site assemblage, from 1.1% in Trench 631 to 14% in Trench 325 (Table 7.2). Numbers of Chinese ceramic finds were higher than those from other archaeological sites in the Indian Ocean; and in Islamic archaeological sites in the western Indian Ocean, Chinese ceramic numbers are usually very low (Kennet 2004:60; Rougeulle 1996:175-176; 2005:226; Scanlon 1971). For example, at Kush in Ras al-Khaimah, United Arab Emirates (UAE), the proportion of Chinese ceramics ranged between 0.31% and 2.39% (Kennet 2004:98), and in Siraf, South Iran and Shanga, Kenya, the proportion was below 1% (Horton et al. 1996; Rougeulle 1991:542).

The various class categories of Chinese ceramic imports are listed in Table 7.3. There were 157 pieces of SE Asian celadon which can be dated to the fifteenth century. The chronological research and classification is mainly based on the work previously undertaken by Roxanna Brown (Brown

2009).

Tables 7.2 and 7.3 near here

4. Classification of Chinese ceramic finds

A total of 237 Chinese ceramic sherds were retrieved from the seven archaeological units excavated at Kinolhas. This section aims to produce an outlined classification of these sherds, which can be divided into seven different classes:

(1) CBW1 (Chinese blue and white porcelain of fourteenth century date)

Only one sherd can be identified as belonging to Class CBW1, and it came from unit 449 (Figure 7.1). CWB1 wares were high quality ceramics, normally large in size (Feng 2009). This class has been regarded as the official type of high luxury objects, some of which were produced for the Fuliang Porcelain Bureau, in the area now known as Jingdezhen in China, for the Yuan dynasty central court in the middle of the fourteenth century (Liu 1981). Some were produced not only for the Chinese/Mongol rulers, but also circulated for more common use in trading markets (Chen 2012). One typical example comes from the inscriptions on the so-called David Vases (housed in the British Museum), which date to 1351 AD and suggest that they are offering objects rather than for official use. In general, there is no doubt that these wares were produced for central court and high-class individuals (Chen 2012; Li 1994).

Figure 7.1. Sherd 423 (CBW1)

Body, glaze and pigment

Class CBW1 had a heavy and thick porcelain body, which was normally mould-formed and well-polished. It normally had a transparent and thin glaze in a very light bluish green. Between the body and glaze, cobalt blue could be found, which was painted onto the body and was dark blue or blackish blue. This imported cobalt ore had a high percentage of inclusions of iron and manganese oxides (Kerr and Wood 2004:676-682). Small metal black points could be seen on the blue patterns when the sherds were examined in bright sunlight, mainly because of the high percentage of iron

giving a metal-black appearance to the pigment. These black points often occurred on the cross-point of painting strokes or areas filled with cobalt pigment (Lv 2004; Sun 1966).

Dating

It can be confirmed that these classes were fired during the fourteenth century (Feng 2009; Medley 1989; Pope 1952), based on their decoration and forming quality. In Chinese ceramic studies, this type can be called the 'Zhizheng Type (至正型)' blue and white porcelains. The name 'Zhizheng' comes from the inscriptions on a pair of blue and white vases in the Percival David Foundation, which shows their manufacture date of (至正十一年: the eleventh year of the Zhizheng Reign, 1351AD) (Harrison-Hall and Krahl 2009:52-53). Similarly decorated blue and white wares are therefore called Zhizheng type blue and white porcelain, and also the 'Fourteenth-Century Group'.

(2) LQC1 (Longquan celadon of fourteenth century date)

A total of 52 pieces of LQC1were discovered. These can be dated to approximately the middle of the Yuan dynasty (the middle of the fourteenth century). During this period celadon wares became larger and thicker, and were of a slightly lower quality. This lower quality is represented by the poorly-polished, unglazed footring and thinner glaze (Figure 7.2).

Figure 7.2. Longquan celadon, LQC1

Body and glaze

The key feature of class LQC1 is a thicker body with thinner glaze, which has a heavy, relatively loose and light greyish white body. The glaze shows some variation in colour, for example light bluish green, bean green, olive green, greyish green and yellow. The thickness of the glaze is no thicker than 1mm. Crackles are very common and, where exposed at the base or footring, the body is orange yellow or red.

Dating

Class LQC1 can be dated to the middle of the Yuan dynasty based on the dating evidence summarised below (Table 7.4), which concerns similar objects recovered from tombs.

Table 7.4 near here

(3) LQC2 (Longquan celadon of fifteenth / sixteenth century date)

The total number of LQC2 is just 16 pieces, but they were discovered in all seven units in Kinolhas. LQC2 included both high and low qualities of Longquan celadon, some of which may be connected to the imperial-type celadon ware. Both can be dated to the early to middle Ming dynasty (the late-fourteenth century to the mid-fifteenth century). Fine quality celadon includes imperial celadon products, and it has been shown archaeologically that these were produced at the Dayao Fengdongyan kiln site in Zhejiang Province of China and they can be dated precisely to the Yongle period (1403-1424 AD) of the Chinese Ming dynasty. This class is only recovered in very small quantities in western Indian Ocean sites, due to the fact that it is imperial or imperial-type celadon; it is reported from Hormuz Island, Iran (Lin and Zhang 2015), Ras al-Khaimah of the UAE (GGBWY et al. 2020) and the Gedi ruins of Kenya (Liu et al. 2012).

Figure 7.3. Longquan celadon, LQC2

Body and glaze

The higher quality sherds have a very thick glaze (1mm to 2mm) in bean green or light green. The colour of the glaze firing technique has been very well controlled. The lower quality sherds have a glass-like, thinner glaze in different shades of green. The body is loose compared to the higher quality Longquan sherds, and black inclusions can be seen by the naked eye.

Dating

LQC2 can be dated to the early to middle Ming dynasty (from the late-fourteenth to the mid-fifteenth centuries AD) based on tomb site excavations in China. Four tomb sites with similar objects to LQC2 have been found in present-day Nanjing City in Jiangsu Province, which was the capital during the early period of the Ming dynasty (the Ming capital moved to Beijing after 1412 AD), and which have been separately dated to AD 1387 (NJSBWG 2005), AD 1395 (NJSBWG 2005), AD 1407 (Li 1962) and AD 1418 (Li 1962). Other examples are provided by the Ge Shi Tomb (戈氏墓) in Shangdong Province of northern China, which can be dated to AD 1441 based on the inscription 'Zheng Tong Liu Nian (正统六年, the sixth year of the Zhengtong Reign)', and which yielded two vases, and the Wei Yuan Tomb (魏源墓) in Jiangxi Province of southern China, which dates to AD 1444 based on the inscription 'Zheng Tong Jiu Nian (正统九年, the ninth year of the Zhengtong Reign)', and which produced a group of celadon plates and vases similar to this class (Zhu 1998:272-284).

(4) Imperial white porcelain

A single sherd was discovered at Kinolhas, from Unit 544, with a very fine quality porcelain body that is hard, smooth, white and pure (Figure 7.4.). It is covered with an evenly applied transparent glaze with a very slight greyish white shade. A very thin and finely incised pattern is decorated on the body, and this decoration is only visible when held up to the light. This is a unique discovery. Similar archaeological finds are only evidenced from the Julfar site of Ras al-Khaimah, excavated by a Japanese team in the early 1990s, and from south Iran during a survey conducted by Andrew Williamson in 1970s (these datasets are currently under study by the present author and will be published in future).

Figure 7.4. Imperial ware

Vessels of similar quality and complete can be found in museum collections and archaeological excavations of the Jingdezhen site in China. A stem cup with a fine and incised decoration is held in the collections of the British Museum. This incised decoration is called anhua (暗花) in Chinese, meaning the secret decoration, because it is only visible when held up to the light. The transparent glaze is called tianbai (甜白), meaning sweet-white because the glaze looks like a thin layer of icing sugar. This stem cup is marked with incised writing, and this seal-script characters read Yongle nian zhi (永乐年制) [Made in the Yongle reign] (AD 1402-1424). Similar objects with this mark were excavated in 1984 from the Yongle stratum of the imperial kiln site where a deposit of the disqualified and destructed tianbai porcelain sherds was discovered (Figure 7.5). This deposit demonstrates that the production and examination of the imperial ceramic products was very strict.

No similar disqualified porcelain sherd burial deposits were discovered at any common kiln sites in Jingdezhen (BJDXKGWBXY et al. 2009:13-15), but some were discovered inside the Forbidden City (imperial residence of Ming and Qing dynasties) in Beijing (Ji 2016).

(Figures 7.5 and 7.6 near here)

Figure 7.5. Section of the excavation at Zhushan imperial kiln site of Jingdezhen

Figure 7.6. Imperial white porcelain ewer in the Percival David Collection and sketch (by Ran Zhang) of the incised anhua decoration which it features.

A similarly decorated and tianbai glazed ewer can also be found in the collections of Percival David in the British Museum (Figure 7.6) (Harrison-Hall 2001:98-99). In general, the shapes featured in the imperial white porcelain collection (tianbai type) mainly consist of stem cups, ewers, bowls, vases, jars, saucers and candle-sticks. For some pieces of imperial tianbai type porcelain, the incised pattern is not necessarily decorated on the imperial objects (Feng 2009:481-482).

(5) CBW2 (blue and white porcelain of fifteenth to seventeenth century date)

A total of 152 pieces of Ming dynasty blue and white porcelain were found from all seven units in Kinolhas. This is a group of blue and white porcelain made in the Jingdezhen kilns, which can be called CBW2 and dated to the Ming Dynasty (approximately the late-fifteenth to the seventeenth century), and can be divided into three sub-groups: early Ming (11 pieces), middle Ming (104) and late Ming groups (37 pieces).

- Early Ming dated blue and white porcelain (CBW2-1: 11 sherds) (Figure 7.7)

Body, glaze and cobalt

Similarly to CBW1, Yuan blue and white ceramics, this group has a heavy and thick porcelain body which is dense and hard. These sherds area little thinner and their fabric is purer than those Yuan blue and white examples, and they are covered by a transparent and thin glaze in very light bluish

green (Feng 2009:461).

Figure 7.7. Early Ming dated blue and white porcelain (CBW2-1)

The cobalt blue has been painted between the body and the glaze, and is dark blue or blackish blue. Small metal black points can also be seen in the blue patterns when examining sherds in bright sunlight, and again this is due to the cobalt ore containing a high percentage of iron, which gives a metal-black appearance to the pigment.

Dating

Similar fabric ceramics can be found in imperial blue and white plate with Wucai-enamelled painting and decorative Tibetan letters, which can be dated to the Xuande period (AD 1426-1435) based on the cobalt blue reign mark 'Da Ming Xuan De Nian Zhi (大明宣德年制, Made in the Xuande Reign of the Great Ming Dynasty)' and the legible Tibetan alphabet decoration which was common in the early Ming period (TJIOCA and TFPSM 1992:141-143). In the western Indian Ocean, a similar type of blue and white porcelain was also found in Julfar in the UAE, and dating by Pirazzoli-T'Serstevens (2003:3-10) suggests it comes from the early fifteenth century. A similar date is accepted for finds from Fustat in Egypt dated by Tadanori Yuba (2014:10-11). A recent example came from the excavation in a-Mataf at Julfar, also in the UAE (GGBWY et al. 2020).

 Middle Ming dated blue and white porcelain (CBW2-2: 104 sherds) (Figure 7.8):

Body, glaze and cobalt

The body and glaze of this group is dense and pure. The body is much thinner than that of the material in class CBW1 and the glaze is normally slightly bluish white or similar in colour to an egg white. From the end of the sixteenth century, Chinese native cobalt ore had been successfully and extensively mined (Kerr and Wood 2004:684-685); it was named 'Po Tang Qing' (陂塘青) or 'Ping Deng Qing' (平等青) and results in a much lighter blue colour with a bit of grey to blue and white porcelain. In the middle and late Ming dynasty, this cobalt ore was gradually replaced by another

blue called ‘Shi Zi Qing’ (石子青), which gave an even more greyish blue.

Figure 7.8. Middle Ming dated blue and white porcelain (CBW2-2)

Dating

According to a tomb dated to the 25th year of the Jiajing reign (AD 1546), objects similar to CBW2 may have originally occurred in a tomb dated to the 6th year of the Jiajing period (嘉靖六年: AD 1527) (Yang 1983:90). However, according to research on shipwrecks and excavations in the Indian Ocean (McElney 1979; Van Der Pijl-Ketel 1982:50) this date can be extended to the period from between the 1550s to 1570s.

 Late Ming dated blue and white porcelain (CBW2-3: 37 sherds) (Figure 7.9)

Description of features

This group was produced in the late Ming dynasty, which can be dated to the period from the 1570s to the 1620s AD. The most representative type in this group is called Kraak porcelain, and comes from the blue and white porcelain wares that were found in cargo of the Portuguese merchant ship called “Kraken (carracks)” in Dutch. This ship was captured in the seventeenth century by sailors from Holland and Zeeland (Van Der Pijl-Ketel 1982:46). Kraak porcelain is a convenient name for a type which is distinctive but curiously difficult to describe with any precision (Medley 1989:226).

The cobalt blue painting on this group of porcelain is distinguished by the cobalt ore that is a purplish blue. The painting methods are normally outlined with thin strokes and then filled with different shades of blue. The most distinguished characteristic of this group is that they may have the panel patterns.

Figure 7.9. Late Ming dated blue and white porcelain (CBW2-3)

Dating

McElney (1979) suggests that Kraak blue and white porcelain initially started between1550 and 1570, based on his research on shipwrecks and excavations in the Indian Ocean. However, at this stage, no panel-patterned porcelain has been found (McElney 1979; Van Der Pijl-Ketel 1982:50).

Finds similar to this group were recovered from the cargo of Drake's Bay Shipwreck (AD 1595), which yielded a group of blue and white porcelain without panel patterns with trustworthy marks of the Jiajing reign (1522-1566 AD).

Van der Pijl-Ketel discussed the porcelain found in the Witte Leeuw Shipwreck (dated to AD 1613) and demonstrated that the panel patterns first occurred around AD 1595 and was popular until at least AD 1613 (McElney 1979:50; Van Der Pijl-Ketel 1982).

(6) CWP (Chinese White Porcelain)

Fourteen pieces of Chinese white porcelain (CWP) were found, 11 of them from Unit 544 (Figure 7.10). CWP refers to the fine white porcelain body covered with a clear white or light blue tinted glaze. Vessels include a wide mix of cups, bowls and dishes which mostly share the same vessel forms within the class of enamel (see below). A mark of a Chinese character fu (福) with a square outline can be found at the outside of base. Some pieces have an unglazed ring at the interior of the base.

Figure 7.10. CWP (Chinese White Porcelain)

Dating

The sherds in the White porcelain group are difficult to date as they were mostly undecorated, and their shapes could not be reconstructed. Without form and shape, the fabrics of body and glaze provide very limited information for dating and identification. Moreover, white porcelain production in China has a very long tradition. Similar examples came from the Maojiawan excavation at Beijing, which yielded a large amount of white porcelain manufactured in the Jingdezhen kilns and dated to

the middle Ming dynasty (BJSWWYJS 2007:126-155).

(7) JDZCEL (Jiangxi celadon)

Definition and dating

Only one piece of Jingdezhen made celadon was found, coming from Unit 321 (Figure 7.11). Traditionally, it is believed that imitations of Longquan wares produced in Jiangxi Province in the Jingdezhen kilns, and production here dates to the middle Ming dynasty (Yu 1995:272-273). The imperial kilns from the Ming dynasty at Jingdezhen City yielded many sherds which feature the celadon glaze, although these are regarded as bean green celadon (a term for monochrome green wares during the Ming dynasty) rather than celadon. However, some of the sherds resemble Longquan imitations (Liu et al. 1982; Xue 1965; Yang 1981; Yu 1973; 2011:475-476).

Figure 7.11. JDZCEL (Jiangxi celadon)

During the Ming dynasty, Jingdezhen imitations of Longqquan celadon wares in Jiangxi Province were called bean green celadon, and was sometimes marked with cobalt blue. Wares were glazed with both celadon and white; the wares were glazed with green but the base had a white glaze (Yu 2011:478-480).

Body and glaze

Jingdezhen celadon has a fine stoneware body in greyish white, but it is greyer than Longquan celadon. The glaze is thick with small crackles and is greyish green, and is therefore distinguishable from the bean green or olive-green glaze of Longquan celadon.

5. Other types of glazed ceramic finds

Islamic ware

The assemblage from Kinolhas yielded 32 sherds which can be attributed to an origin in the Islamic world. They were examined by Derek Kennet of Durham University.

- MG Paint (Kennet 2004:51-53; Priestman 2013:620-622)

This group consists of bowls with manganese painted decoration under a clear or green-yellow tinted glaze on a thick pale-yellow body. These have been defined at Kush as being closely related to MG Paint 2. A total of 3 sherds (2 of which refit) were recovered from the assemblage and they have been identified as dating between the fifteenth and eighteenth centuries. They may be identified with a production in south Iran.

- Persia (Kennet 2004:53-54; Priestman 2013:632-635) (Figure 7.12.)

This group consists of sherds of blue speckled-reddish earthenware body covered inside and over the rim with a mottled glaze ranging in colour from dark green to light grey but most commonly dark blue. Kennet (2004: 54) compares this type with that termed 'Standard Monochrome' by Chittick (1974) and 'Blue monochrome' by Horton (1996) at Kilwa and Shanga on the East African coast. Seth Priestman termed this type of pottery Speckled Glaze Ware, and they may be identified as products from south Iran (Priestman 2013:633). A total of 17 sherds from this group were recovered from the assemblage and have been identified as dating between the fourteenth and sixteenth centuries and are very worn.

Figure 7.12. PERSIA: Persian blue-speckled sherds

- YBTIN (Kennet 2004: 39 and Colour Plate 1) (Figure 7.13)

Nine sherds, all of which from Trench 631, Context 16 and most of which refit, were of very finely levigated and fired white clay, with a grey glaze on both inner and outer surface, and were identified at possibly YBTIN (Plain Opaque White Glaze) per Kennet (2004: 39). The forms are always thin-walled bowls with flaring rims. It appears datable to the ninth/tenth centuries (Kennet 2004: 39). Seth Priestman termed this type of ceramics to Monochrome White Opaque-glazed Ware, and they may be identified as products from south Iraq (Priestman 2013:558-559).

Figure 7.13. YBTIN: Plain opaque white glaze sherds

The four remaining sherds identified as possibly Islamic cannot be classified more closely.

Unidentified

25 sherds were noted as possibly having been manufactured in Southeast Asia as well as unknown origins, but it is not possible to provide further details due to a lack of comparative data.

One category among this group includes 3 sherds with a red/orangey body, covered in a nontransparent turquoise green glaze. These could possibly originate from Southeast Asia and likely date to the sixteenth century and are definitely not Chinese or Islamic.

For the other sherds in this group, a definitive comment cannot be made on them due to the lack of comparable data. The rest of them are either too indistinct, too small or too eroded.

6. Concluding remarks

In conclusion, three potentially interesting aspects emerge for further studies. Firstly, a comparison of the general trading pattern of Chinese ceramics in the western Indian Ocean and of Kinolhas is shown by Table 7.5 and Figure 7.14: the site data (N1 & P1 on Table 7.5) indicate the geographical distribution of each class in the western Indian Ocean, and a high proportion means a wider distribution. The sherd data (N2 & P2 on Table 7.5) suggests the popularity of these classes in the trade, where a high proportion indicates a greater popularity. Most classes of the Chinese ceramic finds from Kinolhas on the Maldives (N3 & P3 on Table 7.5) match the pattern based on the other littoral Islamic sites in the western Indian Ocean (Figure 7.14). In terms of the classes, CBW1, LQC1 and CBW2-2 were widely distributed in the western Indian Ocean (cf. Zhang 2016).

From Figure 7.14, it can clearly be seen that CBW1, LQC1, IMPERIAL, LQC2, CBW2-1, JDZ CEL and CWP from the Maldives all match the Chinese ceramic trading patterns in the western Indian Ocean. However, class CBW2-2 is clearly showing a different situation, in comparison with the similar findings from the western Indian Ocean: 1) at Kinolhas, CBW2-2 has a much higher proportion than average in the western Indian Ocean. This may suggest that the trade between China and the Maldives dated between the sixteenth and seventeenth centuries experienced a boom period in comparison with the earlier and later periods. 2) Some Iraqi and Irani manufactured ceramics were consistently imported to Kinolhas from the fourteenth to the eighteenth centuries. This may suggest that Kinolhas was involved in the Indian Ocean trade during this period. However, Chinese ceramics were absent from the seventeenth century onwards, and may show that Chinese ceramic imports declined from the seventeenth century. This is very different from observations in the Persian Gulf, which showed a sharp increase in late Chinese ceramics.

Table 7.5 near here

Figure 7.14 near here

Second, although only one single sherd in the Imperial class was recovered within the assemblage from Kinolhas, it is highly likely it can be linked to the visits of Zheng He's fleets from China which established a high level of communication and trade between early Ming China and the Maldives, especially as it is well known that the imperial porcelain was not allowed to be used by the common markets outside of the imperial court.

Historical records show that the voyages of Zheng He (郑和) to the Indian Ocean comprised approximately 27,000 men and 64 treasure ships (宝船) all supported by 160 smaller boats. The treasure ships were decorated with vibrant colours and the hulls painted with giant seabirds, which must have been an impressive image that expressed wealth and power to the locals (Finlay 2008:336-337). The fundamental ideology behind the expeditions was to expand the Ming tribute system overseas. The tribute system was established to form alliances with other nations without including them as part of the Ming territory. In this way, the Ming court would gain exotic goods from these nations as part of the tributes.

Seven expeditions were made in the period AD 1405–1433, and Zheng He's fleets officially visited the Maldives for trade between AD 1413 and 1422. As a result, the Male Government sent gifts to

China separately in AD 1416, 1421 and 1423 (Ptak 1987:680-681). It is interesting that Kinolhas is about 80-100km away from the capital of Maldives, Male'. The sherds recovered from Kinolhas, which include some fine quality pieces from the class LQC2 and the imperial porcelain, may suggest that the visiting fleets stopped different places of Maldives – or that Chinese ceramics were traded through commercial networks internal to the Maldives.

Table 7.6 near here

Third, according to Tables 7.5 & 7.6, LQC2 and CBW2-1, dated to the early Ming dynasty (fifteenth century), show a lower frequency at Kinolhas, and this reflects the so-called Ming Gap (late 14th to early 15th centuries): there was little or no Chinese participation in the Indian Ocean trade during the early Ming Dynasty. Tom Harrisson was the first to promote this idea in 1958 when he observed an absence of early Ming ceramics from the site of Sarawak, East Malaysia (Harrisson 1958). Also, Roxanne Brown examined the pottery deposits from 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% during and after Zheng He's expedition. After AD 1573, Chinese ceramics recovered to their former dominance, which was almost 100% (Brown 2009). The small proportions of LQC2 and CBW2-1 and the large proportion of SE CEL may show that, because of the Ming Gap, Southeast Asian celadon became popular at that time, and was filling this Chinese ceramic market gap in the Indian Ocean. The entry of Islamic potteries (dated from the fourteenth to sixteenth century) may also show that there was an international diversity of ceramic imports.

The limitation in the interpretation of the Chinese ceramic materials from Kinolhas is mainly due to the small quantities recovered. In Units 321, 325, 449 and 631 in particular, sherd numbers are all lower than 50 pieces. This may produce a biased pattern when comparing them to larger trends in the western Indian Ocean. Unit 544 is more reliable due to its larger assemblage and, as mentioned above, the Imperial white porcelain from this unit shows a very positive and important clue for research into Zheng He's voyages to the Maldives and the western Indian Ocean.

By providing general data from other excavations in the Maldives and comparing them with the larger picture in the western Indian Ocean, further research can certainly provide new evidence of the ancient, long-distance trade between the Maldives, the western Indian Ocean and China.

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List of Figures and Tables

Table 7.6. Far Eastern Ceramic statistics from Kinolhas.

Figure 7.1. Chinese blue and white porcelain CBW1

Figure 7.2. Longquan celadon, LQC1

Figure 7.3. Longquan celadon, LQC2

Figure 7.4. Imperial ware

Figure 7.5. Section of the excavation at Zhushan imperial kiln site of Jingdezhen

Figure 7.6. Imperial white porcelain ewer in the Percival David Collection and sketch (by Ran Zhang) of the incised anhua decoration which it features.

Figure 7.7. Early Ming dated blue and white porcelain (CBW2-1)

Figure 7.8. Middle Ming dated blue and white porcelain (CBW2-2)

Figure 7.9. Late Ming dated blue and white porcelain (CBW2-3)

Figure 7.10. CWP (Chinese White Porcelain)

Figure 7.11. JDZCEL (Jiangxi celadon) sherd

Figure 7.12. PERSIA (Persian blue-speckled) sherds

Figure 7.13. YBTIN (Plain opaque white glaze) sherds

Figure 7.14. Comparison of Chinese ceramic trading patterns between the western Indian Ocean and Kinolhas.