

Shipwrecked Porcelain in the Red Sea

Cheryl Ward

CHINAWARE 300 to 350 chests. Tis impossible to give particular or full Instructions for providing this Article... One General Rule must always be observed, and that is, never to pack a piece of Ware that hath the figure of Humane Species, or any Animal whatsoever, and as formerly the Color'd ware prevailed, so it is more probable that it still doth, the red and gold used to be most in esteems, & three quarters of the colour'd Sortments with one quarter of blew & white was the customary package of the whole parcel.

So wrote an officer of England's famed East India Company in the fall of 1724, a letter Richard Kilburn shared with me.¹ These instructions concern the purchase of porcelain fired in South Chinese kilns to trade at Yemen's port of Mocha for an even more highly valued luxury - coffee. Richard immediately saw how closely the letter addressed to the supercargo of *Princess Amelia* in the archives of the East India Company described the cargo of a shipwreck I was excavating off Egypt's Red Sea coast.

Institute of Nautical Archaeology (INA) staff first visited the Sadana Island shipwreck in 1994 after hearing about it from several sport divers and seeing pieces of Chinese porcelain in Hurgada dive shops. The ship sank at the base of a coral reef in more than 100 feet of water, and today lies nearly empty after three seasons of excavation. Before our arrival on the site, a group of sport divers made more than 500 visits to the site and removed several thousand pieces of porcelain. We found large numbers of shattered pieces as well, both buried in sand on shore and scattered on the bottom. Photographs made by some of these divers show 900-1,000 coffee cups packed in wooden boxes with tea leaves around and between the stacks. None of these boxes, and few of the cups, survived.

The INA expeditions focussed on scientific documentation of the ship and its contents and on excavation of the portable and aesthetically appealing objects at the site. Our success at this is



Fig. 1. Archaeologists excavated more than 3,000 porcelain objects from a shipwreck near Sadana Island on Egypt's Red Sea coast. Monochrome glazed, blue-and-white peony scroll dishes, and "Chinese Imari" wares - lacking the characteristic scarlet and gold enamelling due to seawater erosion - are common. Courtesy of the Institute of Nautical Archaeology. (N. Piercy photo)

measured by the disgust of a local diver who told one of my team, "There used to be a good wreck here [at Sadana] but the Americans have ruined it". Indiscriminate disturbance of the site destroyed much of original context for surface finds and in parts of the vessel - particularly at midships. Because of the lack of control and documentation by these recreational divers, we lost the opportunity to learn even more about Red Sea trade in Chinese export porcelain.

The site's recent history of looting has not kept us from learning about it (Haldane 1996, Ward 2000). Massive ship timbers were well preserved and visible beneath vividly coloured corals, and the ship - built unlike any other ever studied - is the largest artefact at Sadana Island. Stacks of porcelain, copper cooking pots and trays, and several thousand large and small clay jars occupied only about a quarter of the site. Meticulous excavation revealed traces of a cargo of golden aromatic resin our Egyptian team members identified at once as *luban*, or frankincense, and coffee beans, probably carried by the ton. In addition to these expensive exotics, we also recovered



Fig. 2. Porcelain cups, clay goblets and jars for cooling water, and tobacco pipe bowls all date to the third quarter of the 18th century and reflect Middle Eastern preferences in design and form. Courtesy of the Institute of Nautical Archaeology. (M. Kato photo)

stacks of black-lipped pearl oyster shells, spices, packing materials, foodstuffs, and about a hundred coconuts, originally stuffed into every possible nook and cranny of the ship.

On our first visit, we found several different types of porcelain from brown glazed coffee cups to brilliant, dishes with cobalt blue peony sprays and bowls with blue splashes of glaze in large fields of white. Preliminary informal evaluation of photographs by porcelain specialists suggested that the porcelain, a type specifically designed for the Middle Eastern market, dated to 1640-70, and so our expedition prepared for a late 17th-century ship. In fact, inscribed dates on copper objects suggest a sinking date no earlier than 1764. The difference of a century is due to long-term customer satisfaction with designs produced for a particular market.

Just as Chinese porcelain factories created special shapes and designs for European or American markets, so they catered to Middle Eastern customers. Cultural injunctions against the representation of human and animal figures meant that most porcelain sold in Islamic markets featured floral or geometric designs. The largest collection of Chinese export porcelain for the Middle Eastern market is curated by the Topkapi Sarayi Museum in Istanbul, where a number of pieces are virtually identical to those from the Sadana Island shipwreck (Krahl and Ayers 1986).

The Porcelains

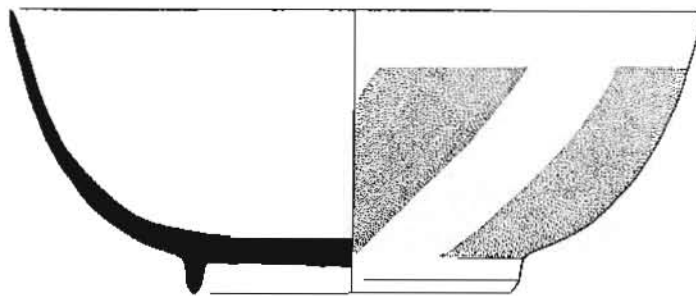
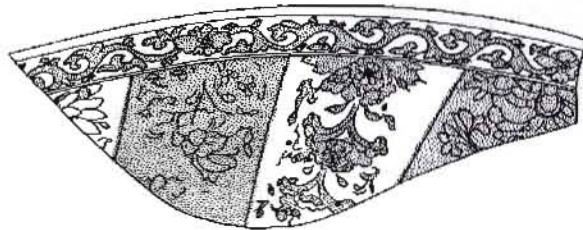
Like the *Princess Amelia's* cargo, the Sadana porcelain is mixed. Most of the shapes are open: bowls, dishes and platters make up the



Fig. 3. In addition to excavating artefacts, archaeologists documented the ship's construction. The 50-metre-long ship, probably operated by Egyptians, is built unlike any other yet studied. Courtesy of the Institute of Nautical Archaeology. (M. Kato photo)

majority of the collection. Individuals who had visited the site before our investigations showed me photographs of a few small, lidded jars, but we found only a single sherd from these. A quarter of the excavated porcelain is decorated solely with cobalt blue underglazing on a white background. About 270 large, blue-and-white dishes feature a floral motif on the interior and two bare branches on the exterior. These dishes are either 34.4 cm or 37.8 cm in diameter. Modern Arabic speakers often call these *bakdounis*, or 'parsley' dishes, but Western porcelain specialists refer to them as "peony scroll dishes".

Most of these dishes came from an area just forward of midships where coral-covered stacks of up to 20 dishes weighed more than 50 kg when excavated. Studying the original packing methods and order is vital to understanding how the cargo came to be on the ship. This is particularly important since earlier visitors to



Figs. 4 and 5 Bowls with a bold blue-and-white pattern originally were covered with flowers in red, green and gold. The drawing shows the design as painted by craftsmen in China, and recovered by tracing faint lines on the porcelain's surface. Courtesy of the Institute of Nautical Archaeology. (Photo A. Flanigan; Drawing N. Piercy and F. Heller)

the site had removed and broken thousands of pieces and their packing crates. Many different 'hands' can be seen in the glazed patterns. Because archaeologists and art historians often study the variations in a pattern to look for stylistic change over time, the Sadana collection will help identify variations within the type at a precisely known date.

We have even more 'coloured' (enamelled) wares than blue-and-white. Most of these are classified as Chinese Imari. The Chinese imitated a Japanese style of decoration using red, gold, and other coloured enamels on top of previously fired cobalt blue underglaze patterns. The striking and elaborate enamelled wares cost at least twice as much as pieces decorated with blue alone. We also excavated dishes, plates and platters that appeared to be white, but that we suspected once had been highly coloured. Our problem lay in discovering the original decoration schemes for the Sadana porcelain because almost all the Sadana Island porcelains had lost their brilliant enamel colours to the unrelenting effects of submersion in the sea.

Luckily, our artist Netja Piercy knew that even though enamel colours rarely remain on porcelain exposed to seawater over long periods of time, patience and raking light can work wonders. It is

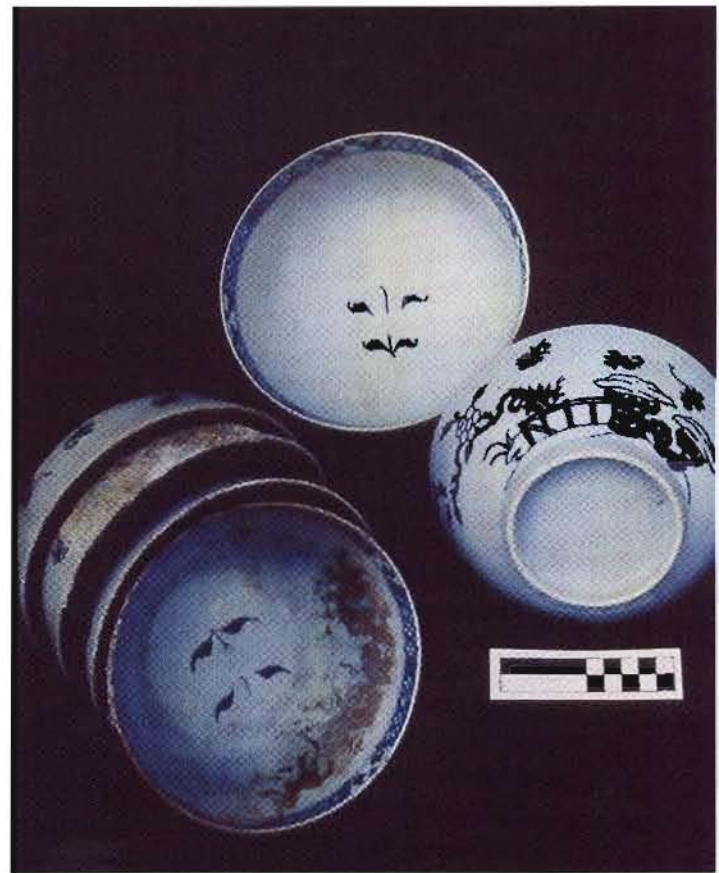


Fig. 6. Chinese Imari bowls, stacked together for more than 230 years, featured peonies and chrysanthemums when first painted. Courtesy of the Institute of Nautical Archaeology. (Photo D. Haldane)

possible to trace the original location of coloured enamels on the porcelains because the enamel lasts long enough to protect the fired white surface from the effects of salt water. Intricate ghosting on several pieces again links the Sadana Island collection to examples from the vast Topkapi treasures.

Some of our loveliest porcelains are bowls and a lid featuring day lilies and chrysanthemums in a framework of underglaze blue leaves, flowering grasses and lozenges identical in decoration but slightly larger than Topkapi examples. Large bowls with grape-leaf shaped medallions and spiraling blue panels originally glowing with emerald green, scarlet and gold also are common to both collections. A few traces of glaze remain on some sherds, but most require extensive investigation to recover their design.

More than 70 smaller bowls and about 150 coffee cups also glowed with colour. The most brilliant may have been some shallow dishes and plates of three sizes, dull white when they were excavated. Excruciating work by Netja Piercy revealed a delicate scrolling shell and floral border around a nosegay of spring flowers that originally may have been hot pink, green and yellow.

The last large group of porcelain objects is monochrome glazed. In the Sadana collection, these are small cups without handles for drinking coffee. In addition to the many examples of enamelled wares, some cups gleam darkly with an intense cobalt blue once highlighted by intricate gilt flowers and geometric patterns. Rich brown glazed examples, some of which have a white quatrefoil medallion filled by an underglaze blue plum-family blossom, and cups glazed in pale green complete the catalog.

In addition to these, several very fine bowl fragments and unique examples of other wares were excavated. These currently are under conservation treatment, and have not yet been analysed.

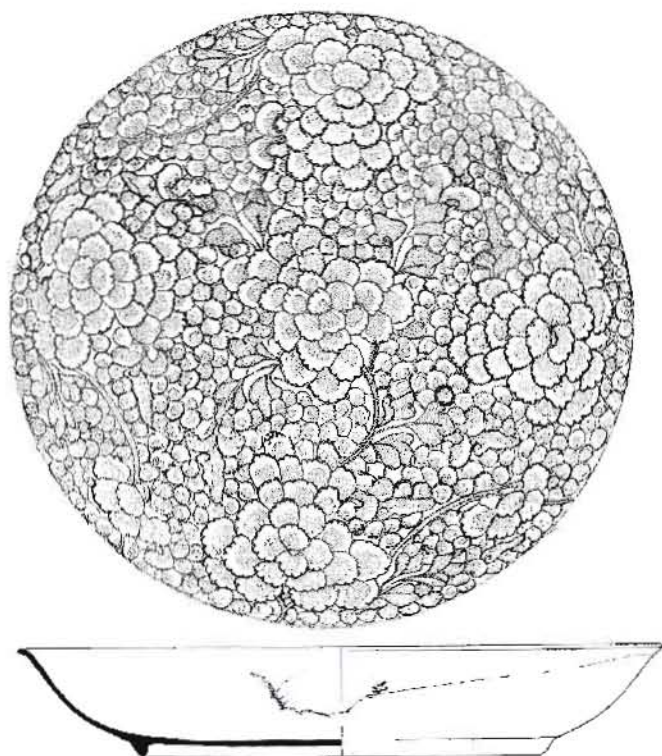


Fig. 7. Drawing of peony scroll bowl (see Fig. 1). Drawing by N. Piercy.

Dating

Traditional studies of Middle Eastern porcelain have been hampered by a lack of well-excavated, stratified sites from this relatively late date. One of the most pressing questions to address is the date of the Sadana Island porcelain. The site is isolated, and

there is no mixing of materials with earlier or later deposits. As noted above, first impressions pointed to a date in the middle 1600s. But as we looked more closely, we found that most specialists dated pieces we found in context, cemented together and to the bottom of the ship, more than a hundred years apart.

Finds from the shipwreck offer new evidence for dating the porcelain. An inscription on copper pot 6-48 includes the AH date 1169, equivalent to 1755/6 AD, and a second inscription was scratched onto a serving dish in 1764 AD. This is nearly a century later than scholars had expected some of the pieces were made. What these dates ultimately suggest is that demand for particular styles in the Middle Eastern market remained steady over far longer periods than suspected.

Porcelain was an expensive, fast-moving article of trade. Although we seem to be dealing with middle-market operators who assembled their cargo from various sources (not directly from China), it is unlikely that the porcelain itself was made over such a long period and traded only after 1750. Because porcelain wares within this period rarely bear reign marks that could provide a precise date, we expect the Sadana Island ship's cargo eventually will help resolve new and existing questions about Qing Dynasty chronology.

As more and more of the Sadana porcelain is cleaned, dried, and documented in the Alexandria (Egypt) Laboratory for the Conservation of Submerged Antiquities, we learn more and more about its past and its place within society. After being brought more than halfway round the globe from the kilns of China to sink beneath the waves over 230 years ago, the Sadana Island porcelain now illuminates our understanding of custom, tradition, and desire in the lands washed by the Red Sea and beyond.

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NOTES

1. India Office Library, London, Despatch Books, F/3/102, 30 Sept 1724, p. 303. Beryl Joyce and Richard Kilburn provided me with much appreciated historical background of the China trade, and their preliminary analysis of Sadana Island shipwreck porcelains has been an invaluable guide to understanding the collection. The Sadana Island Ship was excavated by the gracious permission and assistance of Egypt's Supreme Council of Antiquities, with further assistance from the Institute of Nautical Archaeology, the American Research Center in Egypt, the National Geographic Society's Committee for Research and Exploration, the Amoco Foundation, and many corporate and private sponsors, including volunteers who excavated with us.