

A large jar from Thailand – 14th to 16th century AD



When you think of the practical uses for pottery, you probably think of tableware, utensils for the kitchen and maybe food storage in the home. However, those of you who have seen pictures of barnacle-encrusted amphorae raised from Roman shipwrecks on the sea bed will know that for centuries pottery jars were used as shipping containers, transporting oil, wine and some dry goods around the Mediterranean.

Around the 9th century AD, just as amphorae in the Mediterranean were starting to be replaced by wooden barrels, potters in southern China started making large jars with a ring of lugs on the shoulder, as containers for transporting goods around the South China Sea, the Persian Gulf and the Red Sea. The lugs were almost certainly provided to enable a cover over the mouth of the jar to be tied on securely – one of these jars found in a shipwreck dating from that time still had the remains of cord passing through the lugs. These jars were more robust than the earthenware amphorae of the Mediterranean because they were made of stoneware. By the 9th century the potters of southern China had been making stoneware for centuries, whereas Europe had not yet developed stoneware.

Chinese maritime trade increased dramatically in the Tang dynasty (618 – 906 AD), even reaching as far as the east coast of Africa. As trade around the South China and Java seas grew, conveniently situated ports (referred to as entrepôts) in south east Asia became centres for the storage and transshipping of goods. When the large Chinese container jars arrived in these ports their design was imitated by local potteries and, by the 14th century, similar jars were being made in the region of

present-day Myanmar and Thailand. One of these entrepots was in the small Martaban kingdom in present-day Myanmar, and the jars being shipped from there quickly became known as Martaban jars. Over time, any jars of this design were called Martaban jars (I have seen references to 'Chinese Martaban jars' and even 'Indian Martaban jars'), but in fact probably more of this type of jar were shipped from the neighbouring kingdom of Ayutthaya, in present-day Thailand.

The jar (35 cm tall) in the picture at the head of this note was made in the kingdom of Ayutthaya. These jars are very robust and were clearly often reused by the recipients of the goods they contained, with remains of them turning up at locations as distant as the Cape of Good Hope and Japan. In fact the classification of the different styles of these jars, and a timeline for the variation in these forms, was first developed by archaeologists excavating the historic Japanese port of Sakai. Some examples of these jars have been found still in use in Japan today, for domestic storage and for indigo dying, four hundred years after they were made, which rather puts to shame our current throwaway culture.

A big advance in understanding the development of these jars (and Asian pottery generally) came in the 1970s and the following decades, with the new field of shipwreck archaeology, made possible by advances in diving technology. Over a hundred ancient shipwrecks were discovered in the seas of Southeast Asia over the following forty years. While they did tend to attract the type of adventurer who was more interested in finding ancient artefacts to sell, several were the subject of serious archaeological studies. The great advantage of finding pottery in a shipwreck is that it represents a snapshot in time and it can often be dated quite precisely (for example by examining the tree rings in the ship's timbers). One authority has written that the type of jar shown above was 'almost laughably ubiquitous in shipwrecks from the 15th century to the 17th century'. The picture below (from an article by Michael Flecker) shows some of these jars in a wreck off the island of Beilitung in Indonesia, dating from early in the 15th century.



It used to be thought that all such jars were made at the main pottery centre in Ayutthaya at the time, called Si Satchanalai. However, in 1985 Thai archaeologists started investigating remains at a different location, on the banks of the River Noi, closer to the main port of Ayutthaya. It is now believed that over a period from the 15th century to the 18th century more than 200 large pottery kilns were used in this area, called Maenam Noi (also referred to as Bang Rachan). Most of these have been built over now, but the remains of five kilns were preserved because they were in the grounds of a monastery. Excavation of these kilns uncovered the largest ancient kilns ever found in Thailand (wood-fired cross-draft kilns, 16 metres long and 5½ metres wide) and extensive remains of container jars like mine. The excavations have been preserved as a tourist attraction (see photo below).



Excavated kilns at Maenam Noi

Combining the evidence from shipwrecks and from the excavations in Japan it is possible to see that the design of these jars changed significantly in the middle of the 16th century, as the vulnerable protruding neck was eliminated and the lugs were strengthened. This means that my jar dates from the earlier period. It has been established that the style of my jar was actually made at both Si Satchanalai, in the 14th and 15th centuries, and Maenam Noi, in the 15th and 16th centuries. Possibly in the 15th century the Si Satchanalai kilns stopped making these jars because they could not compete with the larger Maenam Noi kilns, located closer to the port where the jars were used. Looking at pictures in books and in online museum collections my jar looks very similar to those which it is said are from Maenam Noi. However, I have read that the glaze on Maenam Noi pottery is a dark yellowish-brown, whereas the jars from Si Satchanalai tend to be greenish-brown. Holding a bright light to my jar shows a definite greenish tinge, so maybe it is from Si Satchanalai. I will probably never know for sure.

You can see from the photo at the top of this note that the bottom quarter of the jar is unglazed. Above that it appears to have first had a series of pours of a thin wash of some sort of glaze while the jar was inverted. Then it looks as if a thick layer of matt dark brown glaze was swabbed over the rim and shoulder of the jar, while it was the right way up, allowing the glaze to run down the side of the jar. This type of matt dark brown iron glaze has a long history in Southeast Asia, and it was extensively used by the earlier Khmer empire (see my previous note on the Khmer lime pot). My jar is not glazed inside and at first it seemed to me that the glaze on the outside was merely decorative. Then it occurred to me that a good coat of a sound glaze can improve wear resistance, and this glaze is on what are probably some of the highest wear regions of the jar, the lugs, the neck and the shoulder, so maybe it is functional as well.

A series of fine grooves is just visible under the glaze, encircling the jar at the position of the lugs (visible in the photo at the head of this note). Presumably these were to make it easier to apply the lugs in the right positions.

Previous investigators have reported that these jars were made by coiling clay onto a flat base and then throwing with ribs inside and outside. This is certainly consistent with the appearance of my jar, which has horizontal features like the joins between coils, too irregular to be throwing rings.



Big coiled jars can be consolidated and shaped either using large ribs and a wheel or by using a paddle and anvil. Although it isn't strictly relevant to this jar, if you are interested in watching a film of Chinese potters making large coiled jars using a traditional paddle and anvil technique I recommend the film Tao Yao by Jackson Li. It is available on YouTube at -

[Tao Yao \(Pottery and Dragon Kiln Village\) 《陶窑》 - YouTube](#)

Kevin Akhurst
February 2023