

## Pottery Skeuomorphs of conch trumpets in antiquity, east and west

A Ballot paper to the Society of Antiquaries of London, 28 March 2008

I have long been fascinated by the questions of why, and how, did people go to the trouble of making exact copies of natural shells in pottery. That the Mochica people did so in the early centuries AD of pre-Columbian Peru is well known. The British Museum has an excellent example from the Master Craftsman Period, and their X-ray photograph of it shows that it follows exactly the internal shape of a natural shell. The University of Pennsylvania Museum in Philadelphia were kind enough to supply me with copies of X-rays of their shells. All these I published in 1981 in a special musical issue of *World Archaeology*. My own Moche conch is of lesser quality, but again X-rays which the Ashmolean Museum made for me show that internally it follows the same shape as a natural shell. Of all the Moche pottery shells that I have examined so far, only the one in Gothenburg in Sweden failed in that respect. It had simply two chambers, one the cone representing the upper whorls of the shell, and the other the main body chamber, with a hole leading from the one to the other. Luckily this could be seen by eye, for they then had no access to X-ray facilities. In the pre-Columbian Americas there are Mexican pottery shells also, but these I know only from the sparse details in the literature and museum catalogues (none that I have found with an X-ray), plus a modern copy in my own collection.

I could not, of course, blow the British Museum's shell, and I've never been to Philadelphia, but my own I can blow. It compares well in quality with this real shell which is a modern *Charonia nodifera* (Lamarck) from Barcelona. This species of shell was also used in Antiquity; around the Mediterranean. There are examples known from antiquity in Italy, Malta, in France in the Neolithic period around 6,000 BC; from Hungary in the Chalcolithic period from between 3,000 and 2,000 BC; from around 2,300 BC in Minoan Crete; from Cyprus in the Bronze Age around 1,200 BC; and from 1,100 and around 900 BC in what is now Israel, and shells of this species are still used all round the northern, western, and eastern shores of the Mediterranean as well as on the islands. I have never found any examples from Northern Africa, the southern shore of the Mediterranean, and I asked recently in SALON whether anyone else had, and so far there has been no response.

But these are natural shells, so let us turn again to pottery. I have references to examples from Greece, India, and China in both Tang and Song periods, but none that I have seen myself nor laid hands on. Very recently I have obtained this Khmer pottery conch (it was an 80th birthday present from my sister whom you have just made a Fellow). According to Dawn Rooney, with whom I have been in contact by email this week, it is likely to date to the early or mid 12th century AD and to come from north-eastern Thailand or north-western Cambodia, both of which are the central area of the Khmer culture, rather than from the outlying parts. As you can see, it is clearly based on the *Turbinella pyrum* Linnaeus, the sacred chank of India common to both Hindu and Buddhist ritual, with the addition of a tail – one should remember that all natural shells were once inhabited by a snail-like creature, whose tail I presume this represents. It is thus one of the attributes of Vishnu which helps in dating it, for Hinduism was at that period the preferred belief in the Khmer kingdom.. I have not yet been able to get this shell X-rayed, nor until that is done have I dared to take dental picks to whatever is blocking the mouthpiece, but I am fairly certain that it is a true skeuomorph of a natural shell and that it is a practicable trumpet. The Khmer seem to have used conches for all the normal purposes for conches, such as signalling and ritual, and also for music and certainly for royal processional occasions, and, exactly as in India,

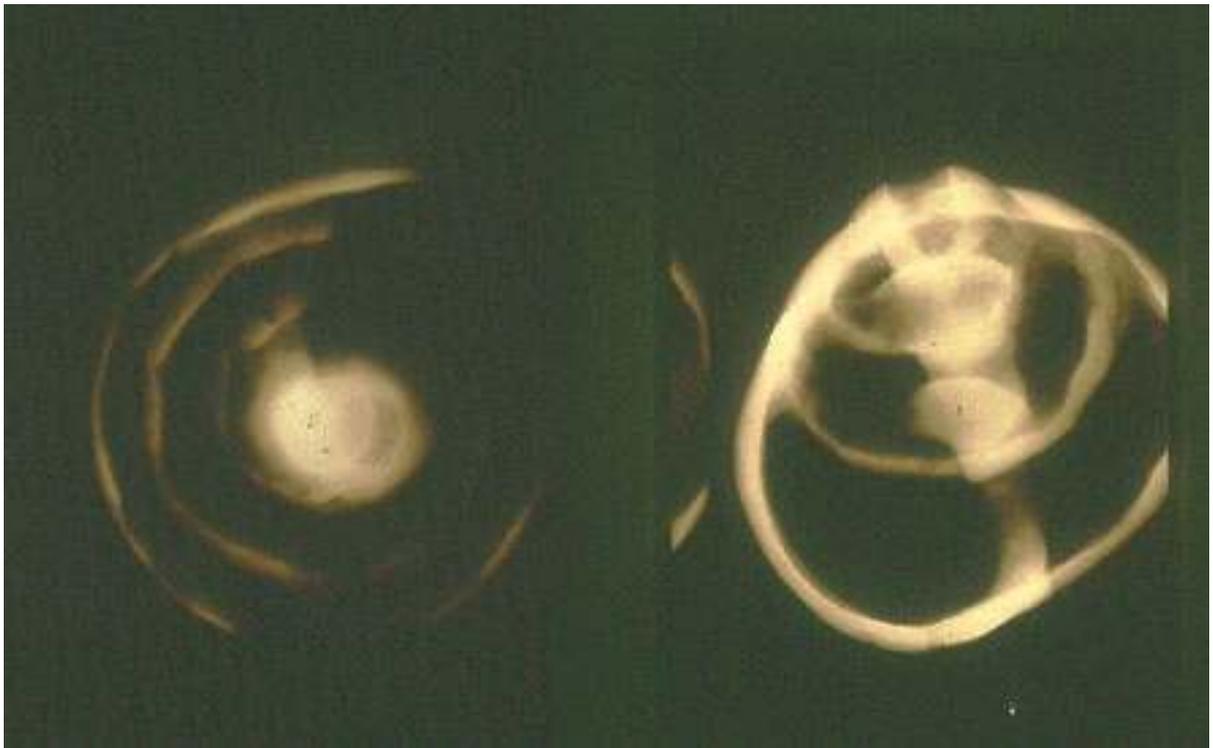
also as lustral vessels in many rituals. So why in pottery? And why were they made?

The Moche lived in the Highlands, but they imported natural shells in considerable quantity. Were these sufficiently expensive that it was easier to make pottery copies, or were there trade problems that made it sometimes impossible to obtain natural shells? Much the same applies to the Khmer. They were mainly an inland culture, some distance from the sea. One can, so far, for all this is very much work in progress, assume that some hieratic or ritual purposes were involved, and that there were some reasons for preferring the work of the skilled craftsman to the result of natural development. One assumption is that because they are 'special', they are all the more effective in ritual. However, this assignation to ritual of anything that seems different from the norm and cannot otherwise be explained, and for which we have no other known use, is a well-trodden path, and one well-recognised for its dangers. So I suspect that our best answer is the honest one: "we don't know". There is the possible explanation of 'just to show how clever we are', but I think that that is unlikely.

Now how were these shells made? How could a potter shape and seal each natural whorl of the shell without crushing the one below? Were what was to become the hollow interior of each whorl modelled in wax, over which the next whorl could be modelled and sealed, and the wax then melted out in or before the firing? Unfortunately I have met personally only one potter with the skill to make such simulacra (he made me a couple before I acquired these antique ones), and he refused to reveal his secrets!



Khmer Pottery Conch XIII 221



Moche Pottery Conch XI 122, X-ray