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The Indian ships at Moscha and the Indo-Arabian trading circuit

EIVIND HELDAAS SELAND

Summary

Periplus Maris Erythraei, the first-century AD merchant's guide written in Greek, mentions ships sailing from India calling at Moscha Limên, which is generally identified as Sumhuram/Khor Rori in modern Oman. These ships are said to have spent the winter at Moscha "because of the late season" (Periplus 32), and modern commentators have considered them to be Indian ships on their way home after trading voyages to Arabia. While this is probably true, it might not be the whole truth. There should be no need to spend two sailing seasons for a return trip from India to Arabia, and different passages in the Periplus and other classical literature, combined with later Arab and European experiences with Indian Ocean navigation, build a case for these ships being ready to set out on the last leg of a wider Indian Ocean circuit. This sheds new light on the maritime contacts of the Arabian Peninsula in antiquity and on the economy of the port of Moscha/Khor Rori.

Keywords: Indian Ocean, navigation, Khor Rori, monsoon trade, Periplus of the Erythraean Sea, Arabia

In its description of the Arabian coast, the first-century Roman merchant's guide *Periplus Maris Erythraei* describes the port of Moscha Limên. The port has generally been identified with the site of Khor Rori in the Dhofar region of modern Oman. (1) Khor Rori was discovered by Theodore Bent in 1895. The site was first excavated by the American Foundation for the Study of Man in the early 1950s and since the 1990s has been the focus of investigations by the Italian Mission to Oman directed by Professor A. Avanzini.

In the Periplus (sec. 32), Moscha is described as a "designated harbour (hórmos apodedeigménos) for loading the Sachalite frankincense", "Sachalitês" being the name of the region. Still, the settlement does not figure among the major ports of call in the commerce between southern Arabia and the Mediterranean, unlike Muza on the Red Sea coast or Kanê near modern Bir Ali, and neither is it described as a stopping place on the route from Egypt to India, as are Okêlis at the straits of Bab el-Mandeb and Eudaimôn Arabia (modern Aden). Instead we learn that Moscha was frequented by "some vessels ... customarily sent to it from Kanê; in addition those sailing by (parapléonta) from Limyrikê or Barygaza that passed the winter (paracheimásanta) because of the season being late (opsinois kairois)". These ships "take on a return cargo (antiphortizousin)" of local frankincense in exchange for cloth, grain, and oil.

Limyrikê was the Greek name for the Malabar Coast and Barygaza was an important market near modern Broach in Gujarat. The Periplus, however, only reports that the ships sailed by from these places, and there is no textual reason to conclude that they were Indian, Arabian, or Roman. The question has received only limited attention in the past, but that does not mean that it is unimportant. While modern labels of nationality and ethnicity may be of little help when describing the origins and cultural identities of the people involved in a cosmopolitan Indian Ocean trade, sea-going ships were complex and involved expensive technology, and they had to be built, equipped, financed, owned, and operated from somewhere. An investigation into the origin of the ships at Moscha can help us determine the role of that enigmatic port in a wider context than the frankincense trade to which it is normally connected.

Commentators and translators have assumed that these ships were either Arabian or Roman ships returning home from India (Schoff 1995: 35; Warmington 1995: 342, n. 2; Wheeler 1955: 144; Albright 1982: 9) or Indian ships that were delayed on the last leg of their homeward journey. Lionel Casson, in favour of the last view, seems to have a valid point when he writes that "there was no reason for returning Arab craft to stop and winter at Moscha; winter was precisely the time when they did return from India, not only to Arabia, but to anywhere west of it" (Casson

1989: 172–173).

Casson's argument is based on the well-known fact that any sailing on the Indian Ocean is determined by the monsoon system. The monsoons provide stable and strong winds from the south-west in the summer and from the north-east in the winter. This offers the opportunity for passage from all ports of the Arabian Sea and back again in the course of a year. The periods of changing and weak winds between the monsoons, sailing against the wind and along the coasts offer some alternatives, but the main sailing seasons are determined by the monsoons. This applied to ancient shipping regardless of ships being Indian, Arabian, or Roman just as much as it did to later Arab and European navigation in the Indian Ocean. Combining the information in the Periplus with later Arab and European experiences of Indian Ocean navigation enables us to shed light on how the Indian ships ended up in Moscha and what they were doing here. This opens a window on areas of the ancient monsoon trade wider than simply trade between the Roman Empire, India, and Arabia, and diversifies our impression of the economy of Moscha/Khor Rori.

Ancient sources provide a straightforward set of rules for using the monsoons. The Periplus recommends leaving Egyptian ports in July for all destinations in the Indian Ocean (sec. 14, 39, 49, 56). As with later Arab and British practice (see below) they would probably not start their Indian Ocean crossing until August. In this way they would avoid the worst storms of the south-west monsoon in June and July, when in later periods, ports were closed both in India and Arabia (Thornton 1703: 30; Tibbetts 1981: 226, 227-228, 230). Pliny (6.106) reports that ships set out on the return voyage from India between the start of December and mid-January. By doing this they would arrive at the mouth of the Red Sea in time to catch favourable southerlies there in January and February (NIMA 2001: January-February). The report that the ships at Moscha had sailed out from Indian ports, combined with the statement that the ships "wintered" (paracheimásanta) at Moscha, would thus exclude the possibility that the ships were from Roman Egypt and makes it very unlikely that they were from Arabia, this supports Casson's conclusion (1989: 173). Albright (1982: 9) rightly points out that "winter" is hardly the same in Dhofar as it is in the Mediterranean and suggests that paracheimásanta should be read simply as "lay over there". While this is certainly conceivable, the sailing schedule described above gives us no reason not to take the text at face value. In conclusion: if ships wintered in Dhofar, they were probably from India and that means

that they were on their way home when they called at Moscha.

Why did these ships have to spend the winter in Dhofar? Later texts from the Indian Ocean give some hints. For the voyage from India to the west, Ibn Majid's famous navigational handbook from the late fifteenth century recommends sailing from India (Gujarat and Konkan) to all western destinations from 18th October onwards or day 330 of the navigational year based on the Persian calendar (Tibbetts 1981: 361-362). Ships going from Malabar waited until March (100th-130th day) due to heavy rain (1981: 230-231). This would bring Indian ships to Arabia, Socotra, Somalia, and the Red Sea any time during the winter. For their return voyage Ibn Majid recommends using the start of the south-west monsoon, called by him "the end of the sailing season" until 11th May (Tibbetts 1981: 225) because the full strength of the south-west monsoon closed the ports on the Malabar and Konkan coasts (1981: 226). During this period Ibn Majid advises any sensible man to stay ashore (1981: 227–228). Another window opened for the passage from Arabia to India from the 280th-300th day of the navigational year (29th August–18th September) (1981: 226), using the end of the south-west monsoon, representing "the beginning of the sailing season" to Ibn Majid (1981: 226). After this it was difficult to sail from Arabia (and the western coasts of the Arabian Sea) to India until April-May of the next year. In short this means that Indian ships, e.g. from Malabar, waiting until January (Pliny) or February-March (Ibn Majid) would have had a hard time catching the "end of the sailing season" opportunity to return to India before 11th May, and would have had to use the "beginning of the sailing season" in August-September. This is why the late or unlucky sailor might have had to winter in Arabia.

Ibn Majid gives little information on the August–September passage from Arabia to India, but his report can be corroborated by the experiences of European navigators of the seventeenth and nineteenth centuries.

Carsten Niebuhr took passage on a British ship from Mokha to Bombay in 1763. His ship left on 23rd August, entered the Arabian Sea through Bab el-Mandeb on 25th August and arrived in Bombay on 11th September, sailing by way of Cape Guardafui, which he passed around 30th August. On 23rd August, Niebuhr's ship was the last of all the Indian and English ships leaving that year, and Niebuhr's captain, J. Martin, would have left earlier if he could, because the winds were changing (Niebuhr 1774: 447–452).

John Thornton was a former captain and navigator of

the East India Company. In 1703 he published the third volume of his *English Pilot*, dealing with the routes to Indian Ocean destinations. Thornton includes his own experiences in his accounts of the Indian Ocean routes, and gives us several interesting pieces of information with regard to the passage between Arabia and India.

Thornton recommends using the end of the south-west monsoon, just as the ship Niebuhr travelled on did, and he writes that the monsoon lasts until the start of September (1703: 31). He also recounts his own experience from the end of August 1690, when he was on a ship bound for Muscat, but lost his passage and had to winter in Dhofar before going from there to India (1703: 31). Adding eleven days — as England was still on the Julian calendar at this time — this brings us to approximately the time when Carsten Niebuhr was already arriving in Bombay in the last ship of the 1763 season. The warnings issued by Ibn Majid (Tibbetts 1981: 227), Thornton (1703: 31), and Niebuhr (1774: 447–448) about missing the passage to India indicate that this was no infrequent occurrence.

Thornton had to spend the winter in Dhofar, and he did that for a reason. Ibn Majid states that if you were held up on your way to India and were able to wait out the north-east monsoon at al-Shihr or Fartak you would only have to wait for four months, but if you wintered in Yemen, and by that he includes both a number of Red Sea ports and Aden, you would have to wait for a full year (Tibbetts 1981: 227). So the further east you were able to winter, the better off you were. This must have been a strong motivation to winter in the Dhofar region. In 1703 Thornton reports that, "About 8 or 10 leagues to the eastwards of Dofar lies Maribatt, where many ships have gone when they have lost their passage" (sic). This brings us very close to Khor Rori, which is situated between modern Maribat and modern Salalah, and which must have been an excellent, sheltered harbour, if the inlet, which is now blocked by a sandbar, was more accessible in the ancient period than it is today.

So Dhofar was an attractive place to wait out the north-east monsoon in the late seventeenth century, in the late fifteenth century, and to believe the *Periplus* account of Moscha, even in the first century. This should not surprise us, as the basic conditions laid down by the monsoons were the same. This tells us that Moscha was not the isolated outpost that the *Periplus* describes it as but — at least under certain circumstances — a natural port of call on the Indian Ocean circuit. If we can assume that at least some Indian ships lost their passage every year, their annual presence at Moscha must have had an

influence on the local economy.

But why would Indian ships risk losing the passage home to India, thus involving several months' involuntary stay in Dhofar when they could easily have done the Arabia to India circuit in the winter–spring, using the start of the south-west monsoon for their return as Ibn Majid recommends (Tibbetts 1981: 225–226)? I suggest that Moscha was among the last stops on a larger circuit that required more time.

The *Periplus* reports Indian shipping or trade with India, either in the writer's own time or as a thing of the past, at Socotra (sec. 31), ports in northern Somalia (sec. 14), Adulis in Eritrea (sec. 6), Muza (sec. 21), Aden (sec. 26), and finally Moscha (sec. 32). The considerable finds of Indian pottery at Berenikê opens the possibility that Indian merchants also frequented Egyptian ports (Sidebotham & Wendrich 1999: 452–453; Begley & Tomber 1999).

The Indian Ocean Directory by A.G. Findlay incorporates British navigation experience until the transition from sail to steam, but the fourth edition from 1882 is still for the most part geared towards sail technology. For the India-Aden/Red Sea passage Findlay recommends a route just north of Socotra during most of the north-east monsoon (1882: 174, map facing p. 155) and just south of Socotra in the March-April transitional period (1882: 170, 174). While English merchants found little of interest in Socotra (Thornton 1703: 7), it would be a convenient first stop on a trading circuit for ships sailing out from India, as attested both by the Periplus (sec. 31) and by Thornton (1703: 7). From there ships could continue to the Somali ports, visited both by ships sailing "principally to these ports of trade" and by those following the coast and taking on "whatever cargo comes their way", as the *Periplus* reports (sec. 14). The next leg would be up the Red Sea, which was available during the whole north-east monsoon. If the Indian ships arrived in the Red Sea in the spring, say March-April, which was the last advisable time according to Thornton (1703: 30), they would have a hard time returning through the straits to the Arabian Sea before Ibn Majid's "end of the sailing season" in May (Tibbetts 1981: 225-226). Heading for the Arabian Sea at Ibn Majid's "beginning of the sailing season" (1981: 226) in August and September, ancient navigators would run the same risk of losing their passage as Thornton and Niebuhr did in the eighteenth century. As demonstrated above, Dhofar and Moscha would then be an attractive place to spend the winter.

Seen against this general background of Indian Ocean

navigation, the case of the Indian ships at Moscha allows us to draw three conclusions about Moscha and one about the ancient Indian Ocean trade:

- Moscha/Khor Rori was integrated in an Indian Ocean–Red Sea trading circuit which provided the settlement with subsistence goods like cloth, oil, and grain (*Periplus* 32).
- Dhofar was an attractive region for the mooring of ships that had lost their passage to India. Moscha/ Khor Rori was the only major settlement in Dhofar in this period. Its harbour would provide ships with safe mooring and its walls and warehouses would give sailors necessary safety for life and property.
- Security normally comes at a price. The presence
 of wintering ships in Dhofar could provide
 additional motivation for the Ḥadramī kings to
 establish and maintain the settlement at Moscha/
 Khor Rori, although frankincense production is
 likely to have been the primary motivation.
- The old notion that only Greek and Roman ships dared to sail the passage with the southwest monsoon (Hourani 1995: 27–28; Raschke 1978: 655–657; Casson 1989: 290–291) should be discarded. If the Romans left their Egyptian

harbours in July, they would hardly enter the Indian Ocean from the Red Sea much earlier than the English did in the seventeenth and eighteenth centuries. The Indian ships wintering at Moscha in the first century were certainly using the same south-west monsoon as Roman ships and as the British ships in risk of losing their passage in the eighteenth century.

Notes

The identification was first proposed by Bent (1895: 125) and has since been supported by the archaeological missions working on the site (Albright 1982: 7; Avanzini 2002: 20); but see also von Wissmann (1977), Groom (1995: 184–186), and Costa (2002: 24–25) who object to this identification.

Sigla

NIMA Periplus National Imagery and Mapping Agency. The *Periplus Maris Erythraei* in the edition of Casson 1989.

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