OMAN
A MARITIME HISTORY

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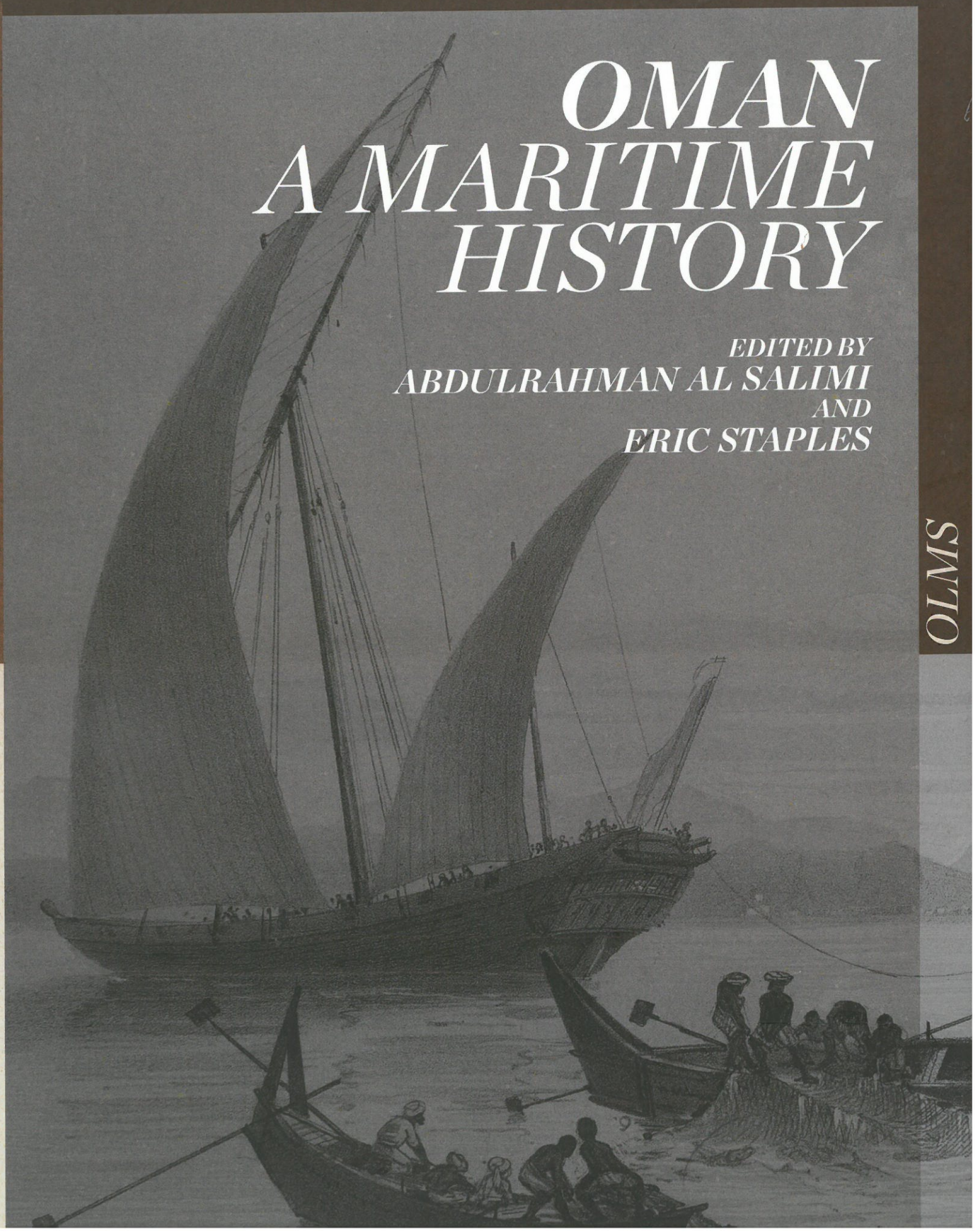

Hinterland Trade and Maritime Networks in Oman From the Iron Age to Late Antiquity (1000 BCE–630 CE)

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... After sailing by the mouth of the gulf... you come to another port of trade of Persis called Omana. Customarily the merchants of Barygaza deal with it, sending out big vessels to both of Persis's ports of trade (Apologos and Omana) .... Omana also takes in frankincense from Kane and sends out to Arabia its local sewn boats .... Both ports of trade export to Barygaza and Arabia pearls in quantity ....[1]

These few lines of the anonymous Greek author of the *Periplus Maris Erythraei* sum up his observation of Arabian Gulf trade in the first century CE as a region whose primary maritime interactions involved trade with the western Indian port of Barygaza (modern-day Baroach). (Unless otherwise indicated, all dates in this chapter are Common Era [CE].) This view was also based on the assumption that the author never sailed to this part of the Indian Ocean, but left the harbors of the Arabian Gulf largely ignored, and that his knowledge comes from secondhand and hearsay. Scholars such as Jean-François Salles have suggested the notion that, at the time of the *Periplus*, Roman merchants operating from Egypt did not sail onwards into the Arabian Gulf. Upon completion of their transactions at Qana' (Bi'r 'Ali, Yemen), most Roman ships specializing in Arabian trade returned to the Empire. It is reported that the merchants of Roman Egypt must have been indifferent to the trade of the Arabian Gulf, "for the author of the *Periplus* carries his readers right past the mouth of the Gulf."[2] The Greeks were already acquainted with the monsoon winds, as demonstrated by the journey of Eudoxus of Cyzicus, a sailor who pointed out the monsoonal route to northwest India at the end of the second century BCE.[3] However, ships would not risk sailing to the places beyond the port of Aden in southern Arabia, and for this reason the city used to accept cargoes from both Egypt and India.[4]

The looseness of these geographical descriptions is also warranted by the lack of relevance of the author of the *Periplus* in these sectors because they held no commercial value for Roman interests, and "of all the regions involved in Indo-Roman trade, the Gulf was the most separate, both geographically and politically, with only two ports mentioned: Apologos, at the head of the Gulf near modern Basra, and Omana, on the Arabian side."[5] Notwithstanding this important literary reference, the work that has been carried out in the region of Oman since the 1970s has established a cultural and chronological framework for the millennium preceding Islam.[6] Using archaeological and epigraphic material and dominant regional cultural assemblages (Hellenistic, Parthian, Roman, and Sasanian) excavated from the three major sites of Mleiha and Dibba (both in the emirate of Sharjah, UAE) and Ed-Dur (emirate of Umm al-Qaiwain, UAE), this chapter seeks to present a local culture that was actively involved in both overland and international maritime trade.

South Arabia, on the other hand, occupies an important place in the *Periplus*. Although more recent studies have deemed the identification of the *Periplus'* Moscha Limen as Sumhuram to be uncertain,[7] the archaeological soundings at this port site indicate an occupation dating back to the third century BCE[8] and the only harbor under the king of Hadramawt known to us from the classic age along the Dhofar coast of Oman. The temporary decline of Sumhuram between the late first century BCE and early first century CE left the kingdom of Hadramawt in need of another port from which to expand its maritime commerce, and this led to the foundation of Qana' (Yemen). The rebuilding of Sumhuram in the mid first century CE, mentioned in the *Periplus*, meant that both Hadrami ports prospered during this period.[9]

A Sasanid presence in southeastern Arabia and Oman is attested by literary, epigraphic, and oral historical sources, where the area of Mazun, the pre-Islamic name for Oman, is possibly listed as a province of the late

Sasanian Empire.[10] For a long time, almost no Sasanian-period sites (third to seventh century) were known in Oman, but in recent years, an increasing number of sites have been identified, owing to the knowledge of Sasanian-period coarse pottery, coins, seals, and figurines.[11] Kennet's evaluation of this archaeological material raised the argument that there was much less evidence of the Sasanian period, particularly in the areas of modern-day Kuwait, Qatar, and eastern Saudi Arabia. In the case of Oman, however, it could be contended that the current lack of archaeological knowledge and the seasonality of coastal and trading sites could likely impact the indication for a Sasanian presence and interest in Oman.[12]

Much of our understanding of these trade networks in Oman before Islam is linked to the various political and socioeconomic transformations of the first millennium BCE that saw the rise of the Ancient South Arabian (ASA) kingdoms, with their capitals all located along the most frequented camel route, the incense road.[13] A part of this chapter will explore the various scholastic views and other material evidence, which indicates that the political structure of the ASA kingdoms was similar to that of the Near East, with incense trade controlled and administered by the state and sea trade delegated to tribes that lived on the coast.[14] We will also follow the geographic shift of south Arabian settlements from the desert fringes to the coast, with the burgeoning of maritime trade and the creation of new forms of political economy. In the same era, the impact of camel domestication and the pivotal role of *falaj* irrigation (namely, water distribution via underground tunnels) on the location and organization of settlements in southeastern Arabia dating between 1000 and 600 BCE, in what is commonly referred to as the "Iron Age," led to these sites gaining access to hitherto inaccessible and previously unsettled areas.

Before we begin this chapter, it is essential to mention briefly the geographical terms used in it, which include both ancient names and modern political boundaries. In some cases, the use of geographic terms is flexible, to fit within the context of study. The term "southeastern Arabia" has been used here to include present-day United Arab Emirates (UAE) and its seven emirates, as well as parts of Oman, including the Batinah coast and Al-Dakhiliyah. "Eastern Arabia" encompasses modern-day Bahrain, Qatar, Kuwait, and Saudi Arabia. "South Arabia" as a general term refers to several currently recognized regions, chiefly the Republic of Yemen, yet it has historically also included the region of Dhofar presently in Oman. "Dhofar" is the historical region in southern Oman, extending from Ras al-Sharbatat on the coast of the Arabian Sea southwestward to the Oman-Yemen border and which includes, for the purpose of this study, mainly the site of Sumhuram with brief references to other port sites, including Shihr. Further west is "Hadramawt," the ancient south Arabian kingdom that occupied what are now southern and southeastern Yemen, including, in this study, the port of Qana'.

We will now begin this chapter with the important role of the various Iron Age settlements as caravanserai or trading centers in the maintenance of intraregional trade and the facilitation of imported luxury items.

Regional and Cross-gulf Trade in Iron Age II–III (Southeastern and Eastern Arabia) (1100–300 BCE)

The foreign relations of the Iron Age cultures of southeastern and eastern Arabia have been the subject of much interest and research since Humphries' 1973 study and comparison of material from Wadi Bahla and Sohar in Oman, with the ceramics and other artefacts from Tepe Yahya, Godin Tepe, Baba Jan, and the Achaemenid village at Susa. According to this study, the major Iron Age occupations at sites south of Bahlatown (BB-4)—located northwest of Bisyah (BB-15) and on the Batinah coast just south of Sohar (SH-11)—indicate an era of continuous Omani development from the eighth/seventh centuries BCE to the end of the millennium. These ceramic parallels suggested that the coast of Oman was in frequent communication with southeastern Iran.[15] However, Humphries' attribution that "... the strong ceramic parallels fit almost too neatly with the known history of recurrent Persian invasions of Oman ..."[16] has been contested by scholars, who contrast this perspective with evidence produced from excavations within southeastern Arabia at Rumaylah, Hili 2, Bida Bint Saud, Muwaylah, al-Thuqaibah, Shimal, Tell Abraq, and Sharm,[17] among other sites (Figure 1). The evidence from these sites suggests foreign relations as motivated by indigenous cultural traditions, while environmental and subsistence factors of the era led to extensive settlements in southeastern Arabia from c. 1000 to 600 BCE.[18]

The extensive regional and international trade and craft specialization in the late third millennium BCE, or the Umm an-Nar period, in southeastern Arabia experienced economic decline and a decrease in settlements around 1600 BCE and well into the Iron Age I period (1300–1000 BCE). The lack of impetus has been attributed to Mesopotamia's declining demand for copper, environmental change, and overexploitation of fragile agricultural landscapes. In response to the distinctive challenges presented by an arid environment, two important processes of adaptation and social and eco-

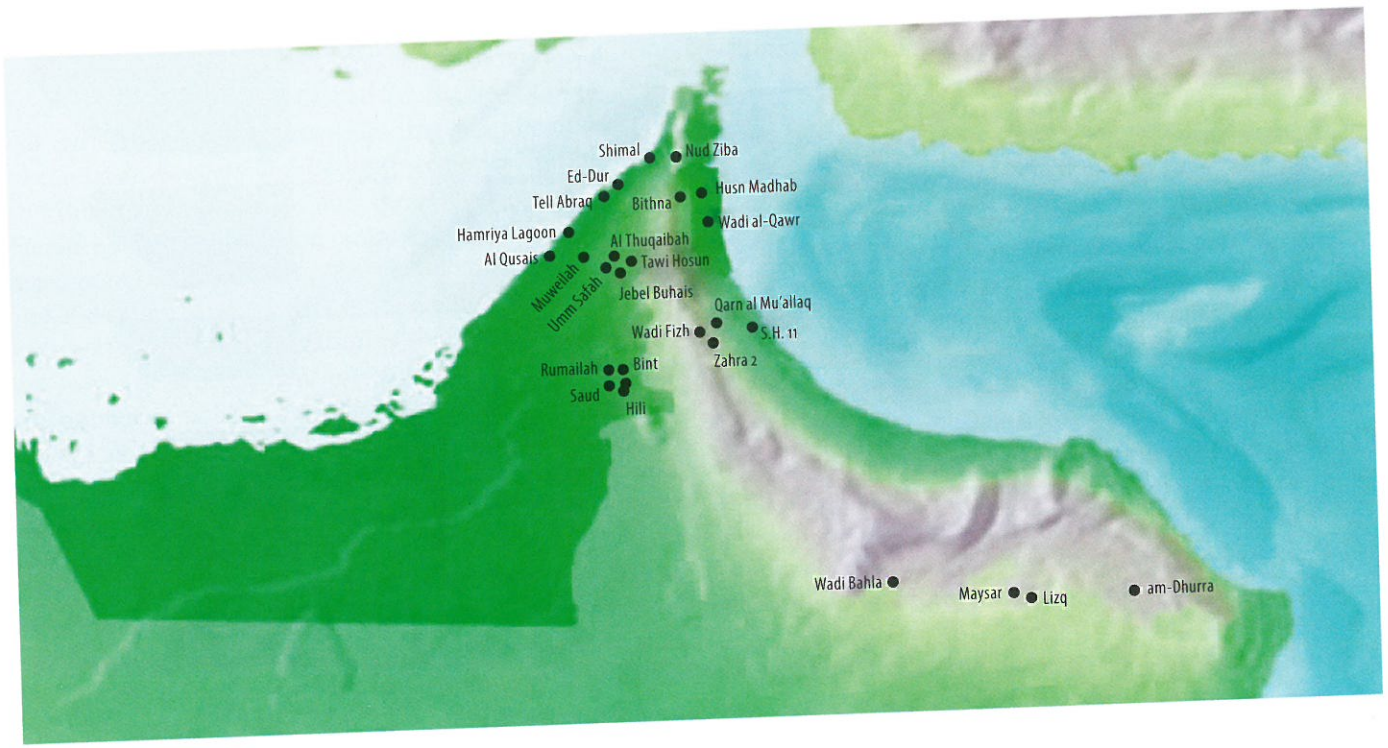


Figure 1: Location of main Iron Age II sites. Image courtesy of Peter Magee, Bryn Mawr Archaeological Excavations in the UAE.

nomic change were indigenously developed in the Iron Age II period (c. 1100–600 BCE): the domestication of the camel (*Camelus dromedarius*) and the introduction of falaj irrigation.[19]

The impact of camel domestication on Iron Age settlements in southeastern Arabia meant that for the first time in the region's prehistory, all major environmental zones were occupied. These included coastal villages, like Tell Abraq, which practiced fishing and agriculture; oasis villages near the foot of the mountains, such as Rumaylah or Hili 2; mountain settlements alongside *wadis*, like Wadi al-Qawr and Husn Awhala, which had access to livestock, agriculture, and the sea; and desert environments, such as Muwaylah.[20] Domesticated camels allowed goods to be moved across the desert regions of southeastern Arabia, thus reconstituting trade systems and the position of settlements. The occupation of previously inaccessible areas led certain settlements, like Muwaylah, to control camel-borne trade to and from the coast and between coastal systems (Figure 2).

The presence of imported Mesopotamian, Iranian, and Bahraini pottery suggests that Muwaylah played an important role in interregional trade at this time.[21] Muwaylah is approximately one day's travel to the settlement of Tell Abraq, whose position as an important settlement in coastal trade had declined significantly since the late third millennium BCE, although it was still a rich source of coastal food and an access point to trade further north. Although the coast was an important food source, the main supplier of ceramics, steatite, copper, flint, and grinding stones was the inland oasis and mountains, with the closest known settlement at al-Thuqaiba, forty-five kilometers and two days' travel by camel caravan from Muwaylah.[22]

Figure 2: Camel figurine from Building I at Muwaylah. Image courtesy of Peter Magee, Bryn Mawr Archaeological Excavations in the UAE.

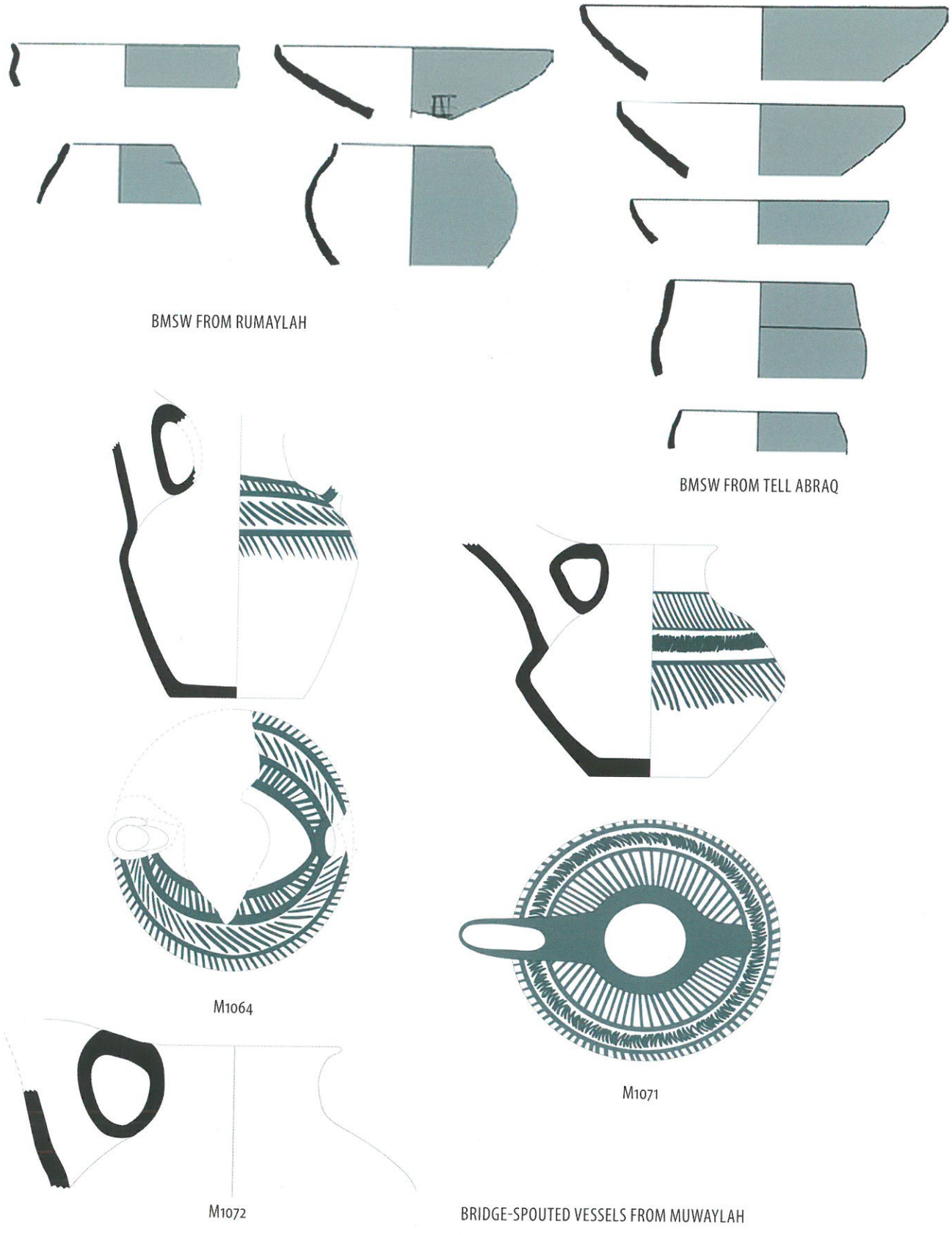


Figure 3: BMSW from Rumailah and Tell Abraq and bridge-spout vessels from Muwaylah. Image courtesy of Peter Magee, Bryn Mawr Archaeological Excavations in the UAE.

The introduction of falaj (pl., *aflaj*) irrigation during Iron Age II may have resulted in the renewal of agricultural life and sedentarism, leading to interactions between oasis dwellers and Bedouin societies and between the inhabitants of Oman and the Assyrian and Achaemenid empires.[23] Evidence of Iron Age–period aflaj has been noted at Muwaylah, the al-Madam plain, Hili 15, and Bida Bint Saud, as well as at Maysar, Sohar, and Nizwa in Oman.[24] Falaj irrigation is the key to understanding Iron Age II settlement intensification, which permitted numerous polities to emerge along the flanks and in the wadis of the al-Hajar mountain range, and led to an increase in the intraregional trade of raw materials and finished elite goods that served to legitimize the emerging inland polities.[25]

The distinct material culture of the Iron Age II and III periods highlights the foreign inspiration for some of the Iron Age ceramic types, with foreign parallels that provide the most evidence on the chronology of the Iron Age III period (c. 600–300 BCE). Burnished Maroon Slipped Ware (BMSW) recovered from Rumaylah II and Tell Abraq Phase 3 in contexts dating between c. 600 and 400/300 BCE has examples known throughout Iran, western Afghanistan, and Bahrain. Secondly, bridge-spouted vessels (painted and unpainted), well paralleled in west Iranian contexts in both form and decoration, present evidence for foreign inspiration in Iron Age II, with a post-1100 BCE date for this cultural horizon (Figure 3).[26]

These vessels have also been located in Oman at Nud Ziba, Lizq, Maysar, and Ras al-Hadd. At Muwaylah, nearly all the bridge-spouted vessels were found in a room that also contained twenty iron artefacts, with western Iran as a likely source, and at least one imported Neo-Assyrian storage jar.[27] Assyrian contacts are further suggested by a soft-stone pendant from Tell Abraq, which shows a figure reminiscent of the Neo-Assyrian and Neo-Babylonian demoness *lamashtu*, an evil spirit who spread disease, indicating that their owners wore these pendants to protect themselves from sickness.[28] Examples of Fine Painted Ware (FPW) from Muwaylah and Bida Bint Saud strongly suggest that these sites were receiving this ware from a single production center located in eastern Iran. This evidence, along with Mesopotamian pottery and alabaster vessels from Muwaylah, implies that the settlement obtained ceramics from several foreign production centers and was an entry point for shipborne goods that would have been funnelled inland.[29]

The second category of foreign influence is seen particularly in the local architecture of the Iron Age in southeast Arabia. The recovery of columned buildings at Rumaylah, Bida Bint Saud, and particularly Building II from Muwaylah has several points of similarity with columned halls found at Hasanlu in the Solduz Valley in northeastern Iran and at Tepe Nush-Jan.[30] The similarity is in the architectural form, as well as the distinctive artefacts found in the buildings: bridge-spouted vessels used for pouring liquids; a shallow cup on a stem foot referred to as a "brasero," functioning as a drinking chalice; the incense burner with animal figurine; and the bronze ladles, which in the Early Neo-Assyrian period are associated with banqueting.[31] This evidence meant that the elites chose to legitimize and project their authority through non-local architecture and in the control and restriction of economic resources. The sustainability of the settlements in the Iron Age was thereby based on the ability to maintain interregional trade and interactions, as no singular site or environmental zone in the Iron Age contained all the necessary resources to maintain social and economic stability.[32]

So far, the evidence points to a one-directional aspect of this trade, and the question remains as to what was exported from southeastern and eastern Arabia in Iron Age II–III in exchange for these ceramics. An increase in the use of incense in southeast Arabia for ritual purposes meant that these settlements would have provided a channel for the transport of aromatics from Yemen into Iran. This is indicated by the recovery in Building II at Muwaylah of a locally produced incense burner with a figurine of *bos indicus* at the top that emphasizes the important role that incense played in both south and southeast Arabian societies.[33] Similarly, steatite vessels produced in southeast Arabia have been found at Tepe Yahya and Haft Tepe in Iran and at Uruk and Tell Fakhariyah in Iraq.[34]

This regional interaction between the Iron Age settlements of southeast Arabia also extended to the Ancient South Arabian (ASA) kingdoms, with evidence of contact with Yemen, the main frankincense producing center in Arabia in antiquity.[35] Unique evidence for this overland contact is a fragment of a storage jar with three South Arabian letters inscribed just below the rim found in the fourth season of excavation at Muwaylah. The pot itself was made locally, possibly at the site, and the inscription suggests that a serious cultural interaction with Yemen began 300 to 400 years earlier than previously thought and that some of Muwaylah's inhabitants understood the South Arabian script. This script in itself was common in the Sabaean kingdom in the first millennium BCE.[36]

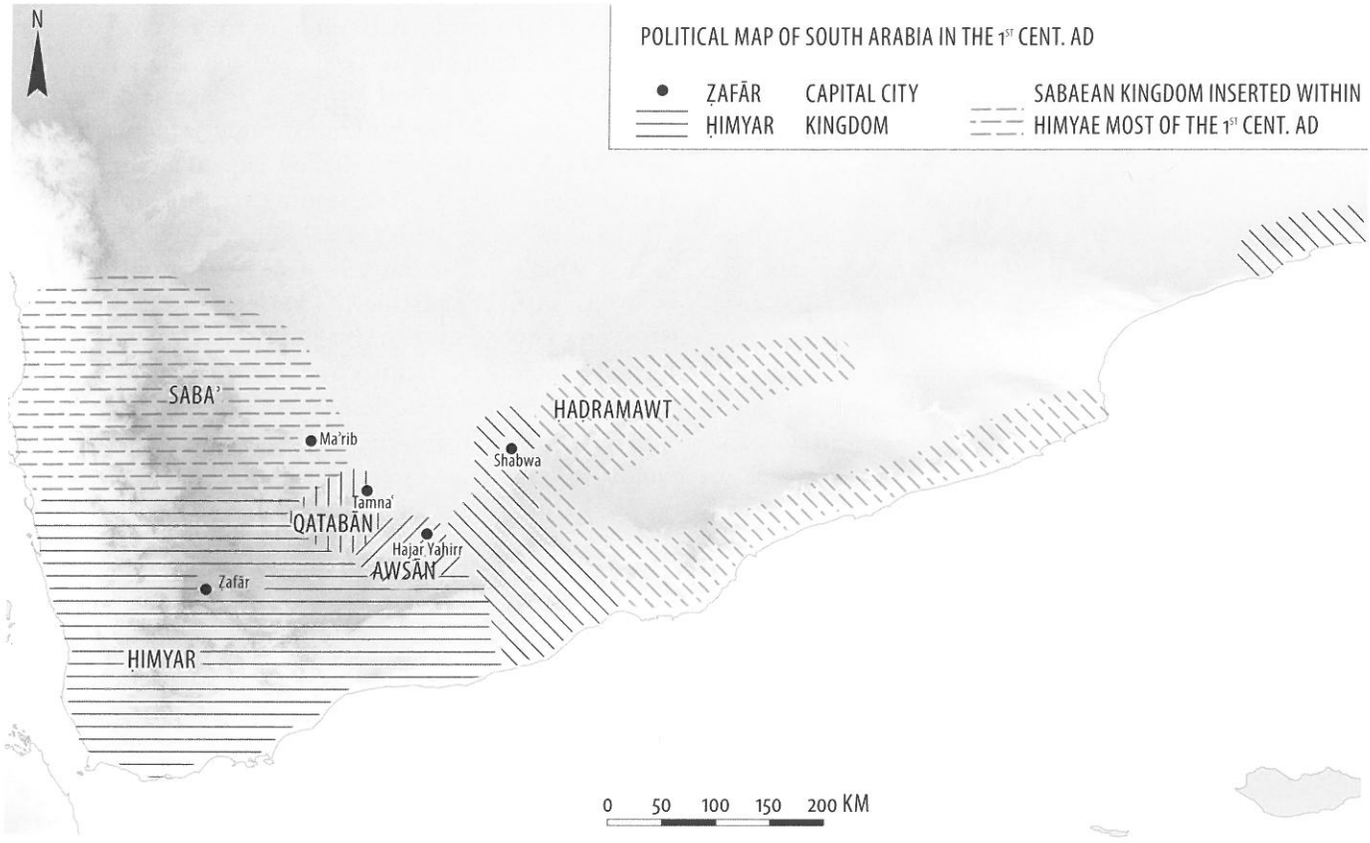


Figure 4: South Arabian kingdoms in the first century CE. Image courtesy of J. Schiettecatte.

Ancient South Arabia and Politics of Trade in the First Millennium BCE

The management and growth of agricultural settlements based on specialized irrigation systems in the first millennium BCE led to the integration of political, economic, and social structures in inland south Arabia. These settled people now turned to trade to further enrich their economy, supported by well-maintained and secure roads, oases, and shelters along the route. Until the domestication of the camel, donkeys had long been used as pack animals for the transportation of goods from one settlement to the next. The technological achievement of camel domestication in the first millennium, as has been attested in southeastern Arabia, allowed the inhabitants of south Arabia to participate in a large-scale organized trade of commercial quantities of goods over long distances and between settlements that had previously been separated by deserts.[37] The geography of south Arabia made it possible to control the trade. Desert areas, wells, mountain passes, and fortresses narrowed the choice of routes so that the aromatics had to pass through a chain of kingdoms and cities on their way to the Mediterranean.[38] In this desert region of pre-Islamic Yemen, known as the Sayhad in the Middle Ages and as Ramlat al-Sabatayn in modern times, there were four main kingdoms in the territory of south Arabia, known by the Greeks and Romans as *Eudaimôn Arabia* or *Arabia Felix*: the kingdom of Hadramawt, with its capital at Shabwa; the kingdom of Saba', with its capital at Marib; the kingdom of Qataban, whose capital was Timnaʿ; and the kingdom of Maʿin, whose capital was Qarnaw (Figure 4).

A network of trade routes had been established between these kingdoms for many centuries, carrying foods such as salt and wheat, wine, weapons, dates, and animal skins from one fortified settlement to the next. These paths were the basis of the frankincense trade routes between the kingdoms of south Arabia. Although Pliny talked about the "high road" leading north, there was never simply one great "Frankincense Route," as is popularly imagined, but rather a complete system of paths, with subsidiary tracks leading from the main roads to various stopping-off points for merchants.[39]

The Sabaeans were the first great merchants in ASA, which is probably the reason why they were the only people in south Arabia to be mentioned in indirect sources in the early first millennium BCE. Sabaeans produced frankincense and myrrh, much demanded in the Medi-

terranean world. They also controlled trade through their territory, deriving income from tolls levied on passing caravan traffic, and through their capital at Marib held sway over large portions of southwestern Arabia until the early centuries CE.[40] The evidence of a bronze plaque to the Sabaean god Almaqah dated to the sixth century BCE provides information on Saba's external trading relationship. It states that a Sabaean was dispatched to Cyprus by sea, indicating the first appearance of Greeks in ASA inscriptions.[41] The Sabaeans almost exclusively ran trade up till the late sixth century BCE. The establishment of the Persian Empire and the beginning of trade with Egypt were to the advantage of the Minaeans, who were active in the overland caravan trade in the Arabian Peninsula by about 400 BCE. By contrast, though, the kingdom of Saba' succeeded in their participation in the development of sea trade in the second century BCE, with the decision to forge alliances with the future Himyarite kingdom, the tribes of the upland plateau, and to manage trade from the Red Sea ports.[42]

From the fourth to third century BCE onwards, coastal towns make their appearance in the Hadramawt. Archaeological evidence from the port site of Sumhuram in the Dhofar region of present-day Oman suggests that maritime trade began in the third century BCE instead of the first century CE.[43] The importance of Hadramawt located along the main maritime routes of the western Indian Ocean, and furthermore as an incense-producing center, is elaborated from the point of view of only two famous pre-Islamic harbors and their trading activities: Sumhuram in Oman and Qana' in Yemen. A study conducted between 1996 and 2000 on the southern Yemeni coast between Mukalla and the Omani border led to the discovery of several other large harbor sites—namely, Shihr East, Musayna'ah, Kidmat Yarub, Sharwayn, and Khalfut—indicating that human occupation and trading activities on the coast of the Kingdom of Hadramawt were not limited to the well-known ports of Qana' and Sumhuram. These five harbor cities were occupied as early as the beginning of the first millennium BCE and were busy centers in the Indian Ocean trade networks, connected to the cities of Oman, as indicated by the evidence of imported Iron Age ceramics collected at most of the sites,[44] suggesting that sea trade routes and maritime exchange began during the Ptolemaic/Hellenistic times, if not earlier.

Achaemenid, Hellenistic, and Parthian Interests in the Arabian Gulf

Events recorded in external sources are often used to reconstruct the political and economic history of Oman prior to the Sasanian era. There are substantive references to identify Old Persian *Maka* with Royal Achaemenid Elamite *Makkash*, Akkadian *Makkan*, and Sumerian *Magan*, all referring to the names for Oman.[45] By the seventh century BCE, the Achaemenid royal inscriptions recognize at least one "kingdom," Qadê/Qadû, and that the Assyrian king Assurbanipal accepted a tribute from Pade, king of Qadê, who dwelt in the town of Iskie (Arabic *Izki*), considered in Omani local tradition to be the oldest town in Oman.[46] In the reign of Darius, southeastern Arabia, referred to as Maka, came under Achaemenid control, and its inhabitants, the Mycians, fought alongside Xerxes at Doriscus in 480 BCE. The appearance of Mycians has also been depicted on the base of Darius' statue from Susa, and on one of the grave reliefs from Persepolis, wearing a short sword slung over one shoulder, akin to those used in the Iron Age in Oman. The Persepolis fortification texts record the disbursement of beer and flour rations for people going to or coming from Makkash, and in one case, the flour was supplied to sixty-two men and their servants, all of whom were described as "Arabians." This is another strong indication that the destination—that is, Maka/Makkash—lay on the Arabian side of the Gulf.[47]

During the Achaemenid and Seleucid periods, the Arabian Gulf served as a sailing destination for merchants trading between India and the West. These merchants would then cross the deserts of Oman by caravans, such as the ones handled by the middlemen from Gerrha, or reach the Levantine coast via the Euphrates and a northern trans-Syrian land route, where the Gerrhaeans were present as well.[48] Thaj oasis has been identified with ancient Gerrha, although it is possible that another "Gerrha-on-Sea" was located on the coast. More recently, though, it was proposed that al-Hofuf was a better candidate for Gerrha.[49] These Arab kingdoms of Hasa, such as Thaj and al-Hofuf (in present-day eastern Saudi Arabia), known as Hagar in antiquity, acted as middlemen in the caravan and seaborne trade. In spite of close contact with the neighboring great powers from the Neo-Assyrian kings down to the Seleucid king Antiochus III, they tried always to maintain their independence and interests.[50] During this time, goods from western production centers reached southeastern Arabia mainly through these centers in northern and northeastern Arabia, characterized by a trans-Arabian caravan business, as no harbor existed yet on the long desert coast

between Qatar and the strait of Hormuz. The evidence from southeastern Arabia indicates that the earliest coins present at Mleiha are some silver Athenian owl imitations, three of which are from south Arabia and three from southeast Arabia, maybe even minted at Mleiha. These earliest "East" Arabian issues from the Arabian Gulf circulated in the fourth/third century BCE until the second century BCE. Evidence was also available at Mleiha of imitation Alexander- and Seleucid-inspired Arabian coins, almost all types that equally occur in northeastern Arabia, leading to the conclusion that both regions used the same currency for commercial transactions from the third to the first century BCE. Southeast Arabia, most likely Mleiha, started to issue its own currency in the form of the Abiel coins (inscription in Aramaic) with eagle or horse protomes, some of which were also accepted in northeastern Arabia. This was a means for southeastern Arabia to express its autonomy, as well as political and economic power.[51] The third to second century BCE, which represents the PIR.A period at Mleiha, also yielded sherds of Greek black glazed pottery and eighteen stamps belonging to Rhodian wine amphorae (from Rhodos, Greece) found in funerary contexts. Given the quality and practicality of the Rhodian amphorae, it was a common practice to reuse and refill the vessels with wine or water to transport over long distances, indicated by the presence of south Arabian graffito on a fragment.[52] During this "Hellenistic" era in the Arabian Gulf, a cultural evolution took place at Mleiha. The settlement turned from a hamlet in the Iron Age to an oasis town, monumental tombs replaced graves built up with boulders, iron metallurgy replaced bronze techniques, and a system of writing emerged. However, the location of Mleiha sixty kilometers inland from the coast, as well as changes that were occurring in remote areas like Samad in Oman, seems to make these isolated examples of this "cultural evolution." An explanation for this change is more likely to be internal factors like the improvement of irrigation techniques during the Iron Age, as well as the presence of natural resources (softstone, copper, and iron ore), rather than just influence and stimulus from the political and economic power of that time.[53]

In the second half of the second century BCE, the Seleucid authority over Babylonia and the Gulf was ousted by the Parthians, who took over the maritime areas at the northern end of the Gulf. A new owner, the Characenian kingdom with its Parthian suzerains, emerged and maintained control over the east-oriented emporium known as Spasinou Charax (Shatt al-Arab).[54] Large quantities of Parthian pottery at Ed-Dur on the Gulf coast of the United Arab Emirates (emirate of Umm al-Qaiwain) suggest that contact with southern Mesopotamia and/or Khuzistan was frequent in the first centuries BCE to CE. Ceramics and artefacts found in the Gulf region, particularly at Ed-Dur, have ties with Babylonia and Susiana, Mesene, Elymais, and Karmania during the Parthian period. Contact with the kingdom of Characene, and particularly the area in the southernmost part of Iraq known as Messene or Maisan, is discussed in the view that in the late second century BCE Hyspaosines has been called the "king of the neighboring Arabs."[55]

By the second half of the first century BCE, southeastern Arabia replaced the northeast Arabian middlemen and possibly organized its own seaborne trade, when the coastal site of Ed-Dur (Umm al-Qaiwain, UAE) came to be reoccupied. The kingdom of Characene, which wanted to bypass northeastern Arabia and extend its influence and trade further east, could have stimulated this idea. It is not known if the residents of Ed-Dur actively participated themselves with their own ships, but it is likely that most western goods arrived at Ed-Dur by seaborne trade by ships sailing from Characene/Mesene in southern Mesopotamia.[56] The Characene connection to Arabia is well documented under Meredat (131–151 CE), king of Spasinou Charax. A single issue of coinage (c. 28 examples) has a legend that directly relates to Meredat's involvement with Arabia. On the reverse legend are the letters OMAN and the title BACIΛEYΣ, which was suggested by the French numismatist De Longpérier to be the first half of the epithet *basileus Omanophilos* or the "king beloved of the Omani."[57] However, De Longpérier was reluctant to link "Omani," cited in Pliny's *Natural History*, with the country of Oman. Alfred von Gurschmid, on the other hand, took Pliny's indication as evidence of the northern migration of the Azd Oman, whose spread to eastern Arabia and southern Iraq is verified in later Arabic sources.[58] The presence of the Azd Oman in northern Arabia is also provided by a southern Arabian inscription of the third century, which mentions the return of an embassy sent by Šammar Yuhariʿš, king of Saba' and Du-Raydan, to Seleucia and Ctesiphon, where the text tells us that the caravan went first to Malikum, son of Kaʿbum, king of the Asd. According to the evidence reviewed, the Omani, who were perhaps ancestors of the Azd Oman tribe later found in northeastern Arabia and southern Iraq, were by the first century CE present in lower Iraq.[59] Other evidence suggesting the presence of an Omani element in the region in the first century CE was the mention of *Sinus Mesanites*, or "Gulf of Mesene," in Ptolemy's *Geography* (c. 150 CE). Below this, the first toponym is *Coromanispolis* on the Arabian side of the Gulf, taken by S. B. Miles to be the prefix "Cor," equivalent to the Arabic "Khor," and therefore that "Coromanis" stands for "Khor Omani," "the creek of the Omani."[60]

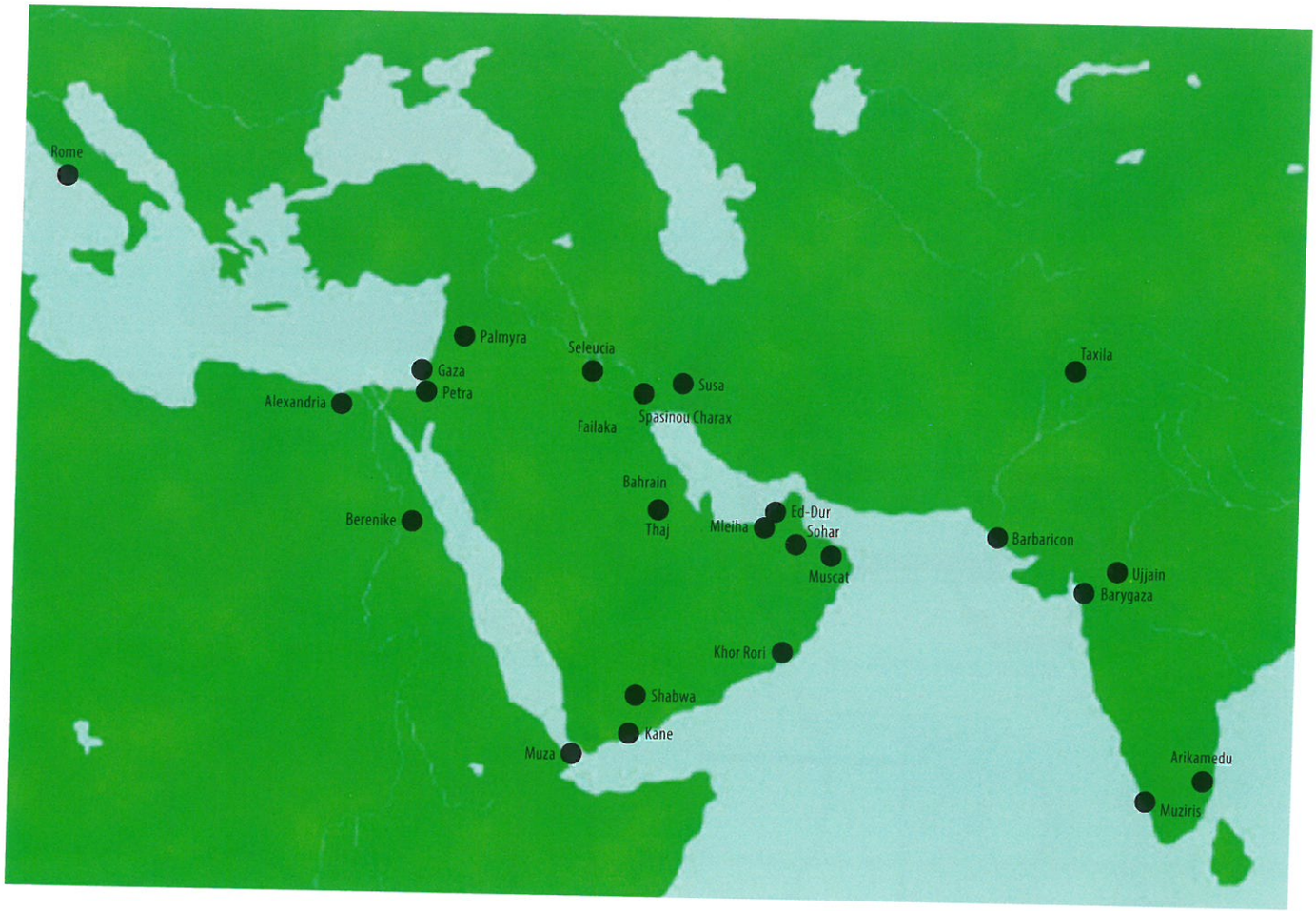


Figure 5: Map of the Near East in the first century BCE-CE. Image courtesy of Ernie Haerinck/Peter Hellyer.

Parthian influence may have also spread to the region, for the *Periplus* (§36) references Omana as "another market town of Persia" and in particularly close contact with the Mesenian port of Apologos. References to Goaesus as the "king of Omana in the Incense Land" indicates that Omana was known to the kingdom of Characene at the beginning of the first century CE.[61] The Ed-Dur coins, by far the largest group yet discovered in the Gulf from the reigns of Attembelos III, IV, and VI, provide further evidence of ties between southeastern Arabia and Charax in the first century CE.[62] The identification of the port of Omana has often led to the consideration of Ed-Dur as a likely candidate,[63] although the sizeable quantities of Mesopotamian glazed pottery and Roman glass at Dibba al-Hisn classify Dibba as an alternative site for Omana.[64] However the debate on Omana's identification is resolved, it remains that the two most extensively excavated sites on the Arabian side of the Gulf—Ed-Dur and its more inland neighbor, Mleiha—have revealed a diversity of imports, suggesting seaborne and overland trade from the pre-Hellenistic to the Roman period.

Shifting Patterns of Sea and Overland Trade in Southeastern Arabia (First Century BCE–Third Century CE)

The three settlements of southeastern Arabia—Mleiha in the interior and Ed-Dur and Dibba along the coast—present a consistent inland/coastal pattern involved in the trans-Arabian trade and eventually in the sea trade through the Arabian Gulf. From the northeast Arabian inland sites (Thaj/Hofuf) to the sites on the hinterland and coasts of the southeast located on the routes that linked them to each other (Figure 5), these communities shared common cultural traits, including coinage, socio-economic practices, and imported luxury goods. Mleiha may have been connected to a second coastal site on the Gulf of Oman, probably Dibba (the first being Ed-Dur). Mleiha's dealings with trade ships may have been during seasonal gatherings at Ed-Dur and at Dibba port. The history of these three settlements was marked by a series of alternating and parallel trade patterns involving both overland and maritime networks.[65]

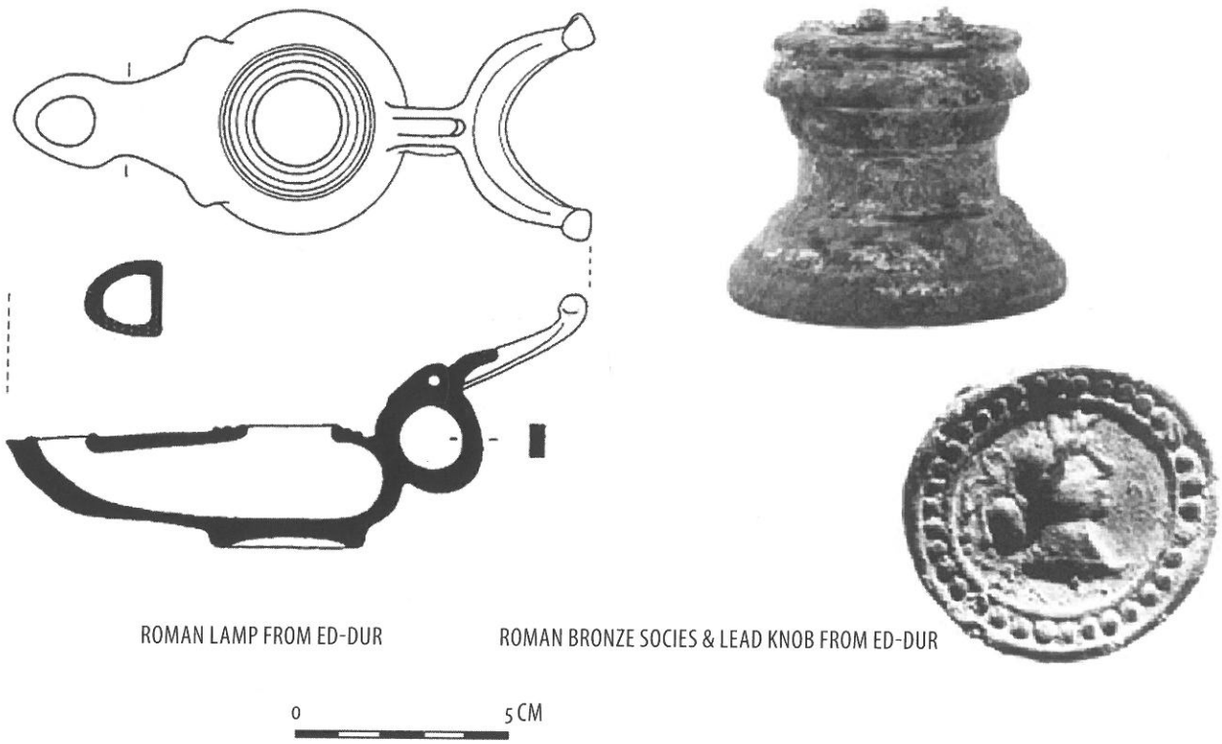


Figure 6: Roman metal objects from Ed-Dur. Image courtesy of Ernie Haerinck.

The diversity of imports from Ed-Dur and Dibba on the coast and inland at Mleiha reflects a variety of sources. In the last decades of the first century BCE, Ed-Dur and later Dibba were the only coastal sites between northeast Arabia and the Musandam peninsula. The sites mainly flourished in the first century through the mid second century CE. This was at the height of the Roman trade in the Indian Ocean and involved the Roman interests in obtaining exotic goods from the East. The Arabian Gulf became the corridor of intensified maritime trade.[66] Roman objects are well represented in the excavations of Ed-Dur, which presented evidence of Roman coins of Augustus and Tiberius and to a lesser extent Roman bronze objects in the form of two socles and a lamp (Figure 6).[67]

Roman pottery, particularly Roman fine wares, are reported from the domestic deposits at Ed-Dur. Rutten's study of these wares revealed two main groups of Roman fine wares at Ed-Dur. The first group comprised Eastern Sigillata A from Syria and Palestine, predominant during the Seleucid and Early Roman periods, and the second with Eastern Sigillata B and C and green lead-glazed ware from Asia Minor, which were widely circulated during the first century CE. These Roman fine wares comprised a small percentage of the complete pottery assemblage, and its occurrence, primarily in a domestic context, meant that these were items of trade, rather than for Roman residents settled on the Arabian coasts.[68] Roman glass, on the other hand, was substantial at Ed-Dur and Dibba, with examples of molded and blown-glass vessels. The Danish and Belgian excavations at Ed-Dur reported a total of 227 glass vessels, the majority of which were Roman and a small percentage Parthian. Most of these glass vessels reached the site between about 25 BCE and 75 CE (Figure 7).[69]

The distribution and trade of the Roman fine wares and glass from Ed-Dur are highlighted by two main routes through which ships could reach the West. One route ran through the Red Sea (to the south Arabian ports) towards India, and another route by ship that went down the Gulf and then relied on overland camel caravans to proceed up to the eastern Mediterranean. Ed-Dur lay on this second route.[70] Trade goods of course do not necessarily travel a straight course or take the shortest route, and scholars proposed several different redistribution centers as purveyors of the imports to Ed-Dur. Salles' study on the *Periplus* and its references to Arabia suggested that western goods found in the archaeological sites of the Gulf had been carried along the

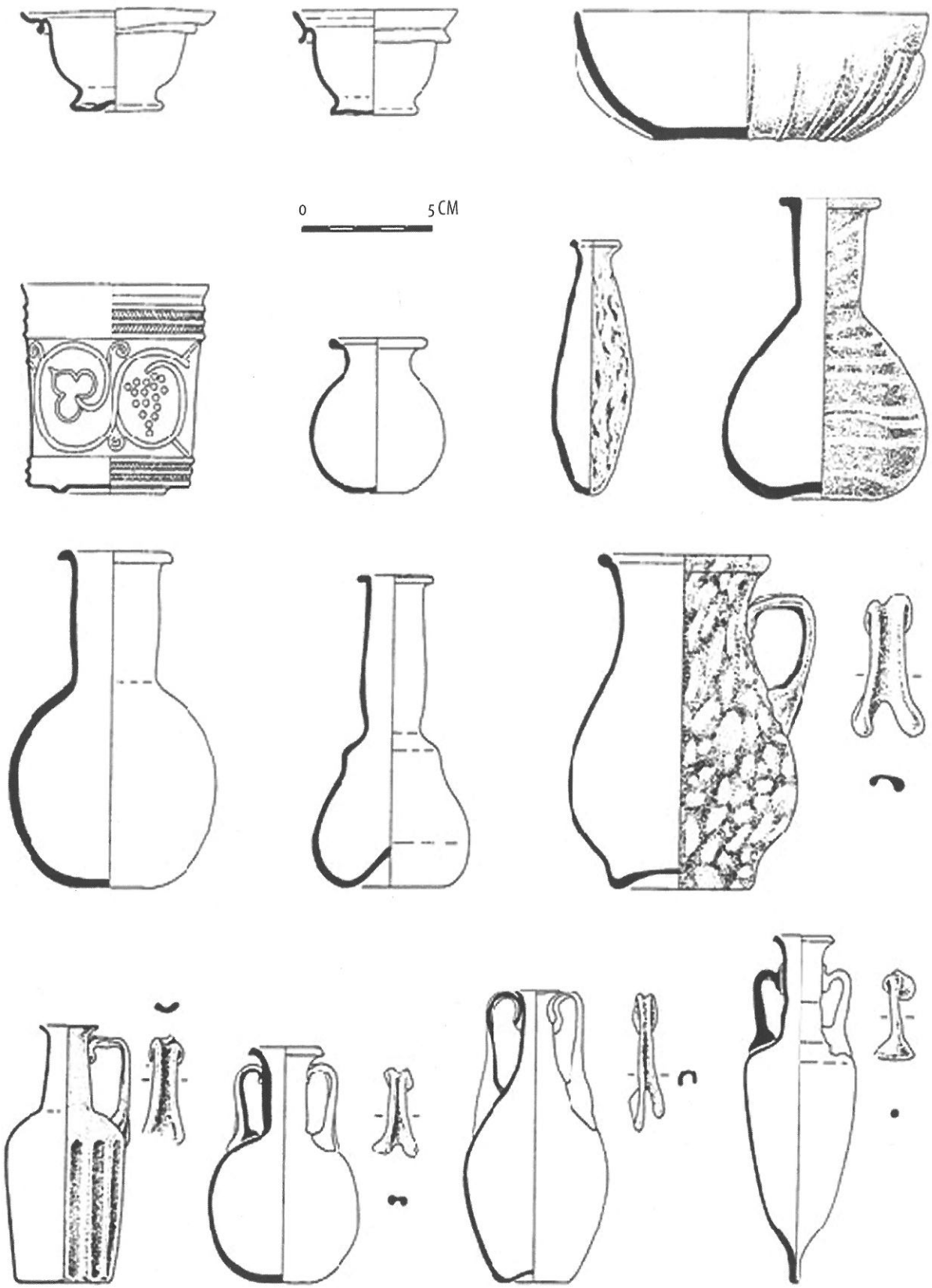


Figure 7: Roman glass vessels from Ed-Dur. Image courtesy of Ernie Haerinck.

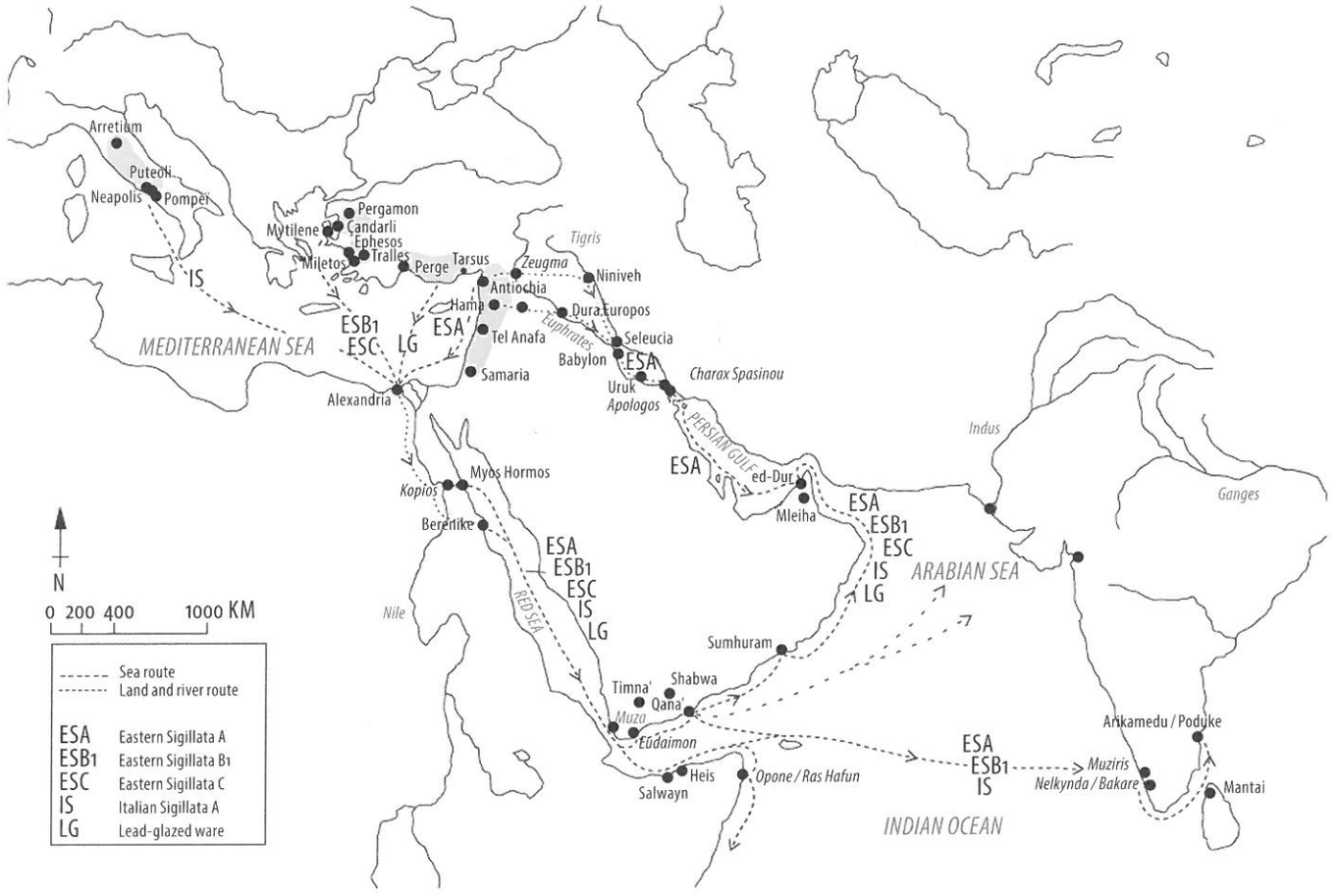


Figure 8: Route showing transport of Roman fine wares from Italy to India via the peninsula. Rutten 2007, Image courtesy of Ernie Haerinck.

non-Roman segment, or "Apologos-Barygaza," of the Indian Ocean trading route, since the *Periplus* scarcely mentions the Arabian Gulf. The goods first reached the northwest Indian ports of Barygaza and Barbarikon, and from here they were redistributed to the Gulf, facilitated by Arab merchants and sailors.[71] Haerinck also favored the south Mesopotamia (Charax) to India route along the Arabian Gulf on the basis of large quantities of Characene pottery and artefacts at Ed-Dur.[72] According to this route, the goods were first exported by way of the trans-Arabian caravan from the Roman world to Syria, down the Euphrates to Charax, and then shipped to Oman.[73] By contrast, Rutten in her study on the Roman fine wares of Ed-Dur has advocated the essential role of the south Arabian ports of Sumhuram and Qana' in the spread of Roman vessels (and glass) towards Ed-Dur and the Gulf. She suggested an indirect exchange of small numbers of amphorae and fine ware vessels between these ports and Ed-Dur, along local sea routes following the southern coast of the Arabian peninsula and in the direction of the Gulf, wherein small amounts of pottery vessels were supplied along with more bulky trade items (Figure 8).

The absence of Roman fine wares or the general lack of it from sites in northwest India meant that it was less likely to be a major redistribution center.[74] Opinions may differ on the preferred use of trade routes at the time of the occupation of Ed-Dur and Dibba, but it is generally agreed that Roman-Egyptian ships carrying goods to south Arabia and India did not enter the Arabian Gulf.[75] The idea, however that the Red Sea at the time of the *Periplus* became the main trade route to India is an oversimplification, and it is, therefore, acceptable that Roman trade with the Indian Ocean passed by way of two major axes—namely, the Red Sea–Nile and the Arabian Gulf–Syrian desert—both of which were in operation at the same time and for a prolonged period.[76]

The middle of the second century CE shows a return to caravan trade in eastern Arabia. By this time, if not earlier, Ed-Dur had lost most of its importance, and the site might have perhaps reorganized itself around a small fort that revealed a need for refuge, perhaps connected

MLEIHA, BUILDING H

MLEIHA, FORT IN AREA CW

Figure 9: The fortified buildings at Mleiha (Areas CW and H) PIR.D period, c. mid-second-mid-third century CE. Image courtesy of French Archaeological Expedition in Sharjah.

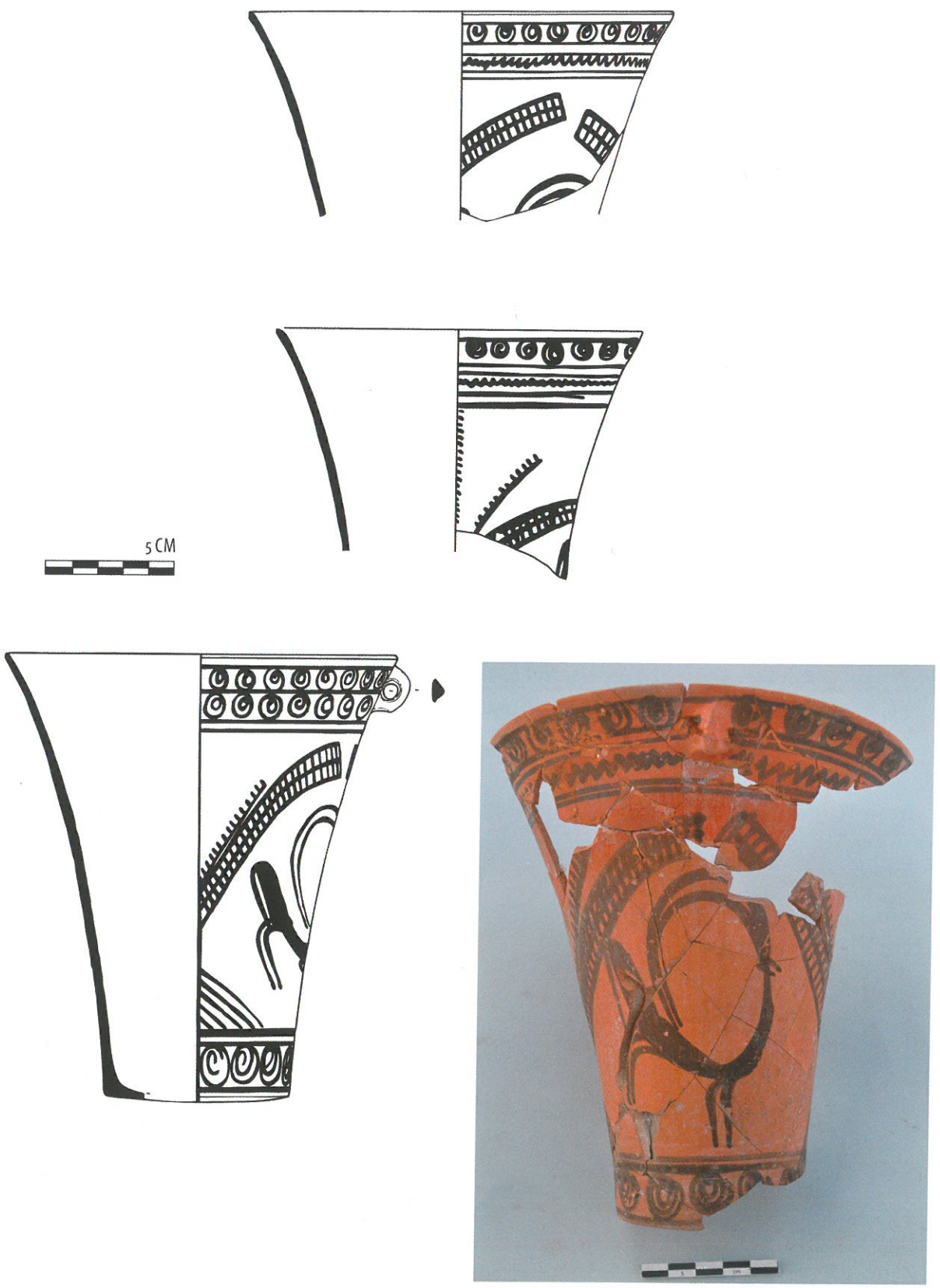


Figure 10: Mleiha. Fine Orange Painted Ware, PIR.D period, mid second-mid third century CE. Image courtesy of V. Bernard, S. Eliès, and J. Cuny, French Archaeological Expedition in Sharjah.

Figure 11: Port site of Sumhuram (Khor Rori). Image courtesy of Italian Mission to Oman.

with a period of insecurity in the late PIR.C period.[77] By the PIR.D (mid second to mid third century), the settlement of Mleiha was concentrated between two large fortified residences (Figure 9).[78]

Long-distance trade is confirmed at Mleiha, and the material found in the fort presents this evidence in the final occupation phase of the site. Imports are particularly abundant, with more than 83% of the registered forms coming from long-distance caravan trade. Among the imported pottery, glazed ceramics with decorations dating to the first to second century CE were sourced from Characene; Fine Orange Painted Ware with patterns of spirals, plants, oryx, and gazelle came from Iran (Figure 10); and there were several fragments of Egyptian amphorae ("bi-tronconic amphorae") and Sicilian amphorae dated first to third century CE. Indian vessels, particularly cooking pots and lamps, came to represent a large part of the pottery assemblage, which represented 8% of the corpus in the fort.[79]

Sumhuram: A Port City in the Dhofar

The port of Sumhuram (Khor Rori, Oman) was a vital point in the caravan trade of South Arabia and the only archaeologically known site in present-day Oman established when the incense trade began to shift from overland to seaborne routes.[80] The walled ancient city of Sumhuram is located on the coast of Dhofar in Oman (Figure 11), its ancient south Arabian name identified by Beeston as linguistically resembling a personal name associated with Hadrami royalty.[81]

Previously, the site was explored and excavated for three seasons in the 1950s and 1960s by an expedition from the American Foundation for the Study of Man (AFSM), which dated the history of Sumhuram from the first to the third century CE.[82] These dates proposed for Sumhuram seemed to be linked to the increase in maritime trade between the Mediterranean and India in Roman times. Since 1997, the Italian Mission to Oman (IMTO) has excavated the site and presented a whole new chronology and interpretation of the city, with evidence of its foundation levels dating back to the third

century BCE. The early establishment of this port city was possibly to facilitate Hadrami trade with the Gulf and Oman,[83] proving that the city's foundation is to be backdated by at least four centuries earlier than the heyday of Roman trade.

The choice of the place for the foundation of Khor Rori, the ancient Sumhuram, was determined by numerous factors, the most important of which was its proximity to the highest-quality incense, the *Boswellia sacra*, produced just behind the city in the Najd's arid plateau.[84] Other factors that influenced the choice of the settlement are related to the characteristics of the surrounding territory: Wadi Darbat and the curious position of its estuary, which made this site into a remarkable natural harbor. Ships and boats could find shelter in the wide lagoon formed by the estuary of the *wadi* at the point where it flows into the Arabian Sea.[85] The merchants who arrived around the third century BCE must have realized that this particular *khor*, on account of its morphology, was an ideal natural port.[86] From June to September, Dhofar also experiences the southwest monsoon (*khareef*), which causes particularly favorable climatic and ecological conditions in this part of southern Oman. The coastal plain has numerous springs of drinkable water and high-quality building material. The city itself was built on the top of a limestone outcrop with a general downward slope from east to west.[87] This was an ideal defensive barrier against attacks, since its eastern, southern, and western flanks were protected by the presence of an extremely steep natural inclination of the ground.[88] Nonetheless, a massive system of fortification was put in place in Sumhuram, with thick walls and with defense towers along the wall guarding the single entrance of a monumental gate, ensuring that the inhabitants and their possessions were well guarded.[89] On the other hand, the port city of Qana', long considered to be a centralized trading post, has no city wall. It is clear then that Sumhuram was certainly no small trading or military outpost but a city with temples, palaces, residential areas, and strong walls of defense, as indicated from the results of several seasons of excavations. It is argued, therefore, that monumental architecture such as this would not be a necessity if Sumhuram were merely a satellite of Qana'.[90] The demise of this city is harder to place, and a date in the fifth or sixth century CE is suggested following the end of Hadrami autonomy, although imported pottery at the site had petered out by the late fourth/early fifth century.[91]

Sedov and Benvenuti studied the imported ceramics from the site,[92] following the AFSM activities in Dhofar and the publication of twenty-one sherds of "vital interest" by Yule and Kervran.[93] The information on Roman pottery, including Dressel 2–4 types and East Mediterranean imports, that was recorded previously led to an erroneous assumption that the site was founded around the middle of the first century CE.[94] The south Asian pottery found in the most ancient layers at the site of Sumhuram pointed to a relationship between the port site and India from about the third to second century BCE until the abandonment of the site. Fragments of true Roulletted ware (RW) and of the handmade "paddle impressed" ware of definite Indian or south Asian origin found in the strata when the city was first inhabited confirm the early dating of Sumhuram and its participation in the international trade of the "pre-Periplus" era (Figure 12).[95]

The oldest strata of the city also included some vessels from Kos and Rhodes earlier than the first century CE, which supports the revised dating of the site and its early involvement in international trade.[96] The presence of north African amphorae, black-and-grey ware ("Gulf jar"), steatite vessels, torpedo jars, and green glazed ware has parallels with the material found in the lower and middle periods at Qana'.[97] Evidence of a Tamil-Brahmi ostracon was found in the residential area of Sumhuram in the first century CE context inscribed with "nantaikiran," signifying a personal name with "[n] antai" as an honorific suffix to the name of an elderly person. This inscribed broken piece of the pot probably carried the personal name of an important trader who commanded high regard in the community.[98] Similarly, the presence of large quantities of Indian cooking vessels at Qana' in the middle period indicate that there were foreign residents living in the south Arabian ports and that some were Indians.[99] Oman experienced a cross-cultural exchange of goods, ideas, and populations resulting from maritime trade and seaborne connections.

The Role of Omani Maritime Networks in the Aromatics Trade of South Arabia (c. Third Century BCE–Third Century CE)

South Arabia, the Arabia Felix of the Romans and Eudaimôn Arabia of the Greeks, had already been involved in trade with the Mediterranean before the time of the *Periplus*. Ever since a market for perfumes and incense had begun to exist in the Near East and Egypt from at least the first millennium BCE, the caravan kingdoms, discussed previously, were established in south Arabia.[100] Frankincense (*Boswellia*) and myrrh (*Commiphora*) were the two main trade items that the south Arabians carried to the cities of the north. As Singer states, "Along with the supplies of these aromatics, south Arabian merchants purchased exotic highly-prized goods that arrived in trading ships from India, Sri Lanka, and Southeast

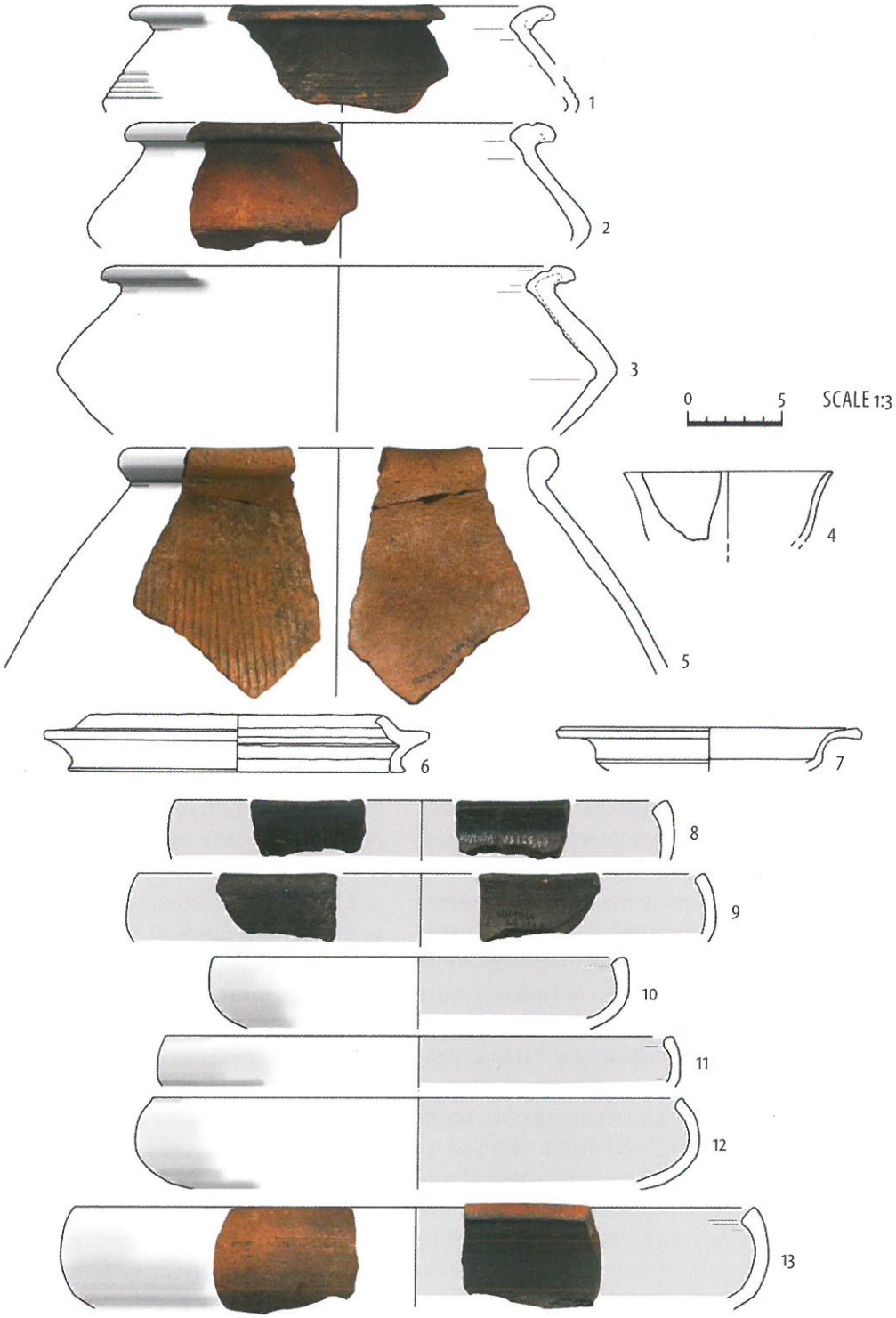


Figure 12: Pottery of South Asian origin from earliest occupational layer at Sumhuram. Image courtesy of Pavan and Schenk, 2012, figure 1.

Asia and loaded them onto their camels to sell them in the distant markets of the Mediterranean, passing them off as their own produce."[101] Literary references to the Arabian trade routes indicate that the Arabs began exploiting the Red Sea as a communication-commercial thoroughfare long before the Romans arrived in the area. In Egypt, the Nabataeans and Palmyrenes, as well as the south Arabians, actively participated in caravan traffic for several centuries, bringing great quantities of valuable aromatics north into the Greek Mediterranean and the Parthian realm.[102] From the third century BCE onwards, the Hadramis settled on the Omani shore at Khor Rori, and the southern coastal town of Sumhuram was founded in the Dhofar region. The Hadrami king built further settlements at Shihr-East and a fortification at Naqb al-Hajar—a stopping place between the shore and Shabwa, capital of the Hadramawt kingdom—as a means to control the new commercial routes that developed with an increase in coastal shipping practices.[103]

The Romans from the beginning of the second century BCE began to use frankincense and myrrh in increasing quantities, "and the four hundred year period from the second century BCE to the second century CE can be regarded as the zenith of aromatics trade."[104] With the incorporation of Egypt in the Roman Empire in 30 BCE, the Arabian trade in aromatics was drawn into the monsoon system and diminished the importance of the old caravan routes. This was remarked upon by the Greek geographer Strabo, who wrote that "... as many as one hundred and twenty vessels were sailing from Myos Hormos to India, whereas formerly under the Ptolemies, only a few (around twenty) ventured to undertake the voyage and to carry on traffic in Indian merchandise."[105] It is usually thought that the result of this discovery meant that the south Arabians lost their monopoly in the trade with India. On the contrary, Sedov proposed that direct sailing from the Egyptian Red Sea ports to India was rare and usually involved the south Arabian states, and an increased flow of Mediterranean goods into south Arabia.[106] Sea routes were often thought to be better suited for cultural exchange than overland ones, as port traffic is monodirectional.[107] This transition from overland to maritime trade also shifted the balance of political and economic power of the south Arabian states from the predesert area to the region of the high plateau facing the coast.[108]

By the time of the *Periplus* in the mid first century CE, direct trade between Roman Egypt and India had developed and intensified. Control over coastal areas allowed the south Arabian states to take advantage of this long-distance maritime trade based on the monsoon winds. These winds blew steadily from the southwest in the summer and from the northeast in the winter, thus facilitating swift and relatively safe passage from all coasts of the western Indian Ocean and back again in the course of less than a year.[109] Roman vessels sailing to southern Arabia therefore set their course down the middle of the Red Sea and used all available sail to speed past the pirate coasts, and the first trading port they encountered was Muza in the Homerite kingdom, crowded with Arabian ships, which sailed as far as northwest India. From here, the voyage along the southern Yemen coast took Roman ships past the former city of Aden, which by the time of the *Periplus* was little more than a village settlement offering passing ships supplies of fresh water.[110] Roman merchant ships sailing beyond Aden headed for the edge of the Hadramawt kingdom and the trade port of Qana'. This Homerite kingdom controlled crops of myrrh, but the Hadramawt tribes of the Dhofar region governed the best frankincense-producing territories of Arabia. Frankincense trees grew abundantly along the limestone ridge beyond the mountains in the Dhofar, which lay 400 miles to the southeast of Shabwa. In this core frankincense-producing area, the Hadramites established the well-guarded port city of Sumhuram with its remarkable natural harbor. From Sumhuram, the frankincense was sold to passing ships of the Greeks and Egyptians who moored here on their way back from India.[111] Indian (and Roman) ships sometimes spent the winter at Sumhuram rather than Qana' due to the lateness of the season.[112] The harbor at Sumhuram could accommodate foreign shipping, and the Hadrami king allowed Indian and Roman vessels to remain at the port until it was safe to resume their voyages. These merchants came to an agreement with the royal agents at Moscha and exchanged some of their Indian cargo for the incoming frankincense harvests, with *Periplus* (§32) reporting: "Ships sailing from Barygaza or the Malabar Coast can pass the winter at Moscha if the season is late. They reach arrangement with the royal agents and take on a cargo of sachalite frankincense in return for cotton cloth, grain, and oil."[113]

It is probable that other trade routes existed that have not been recorded. This is seen from the relations that Sumhuram had, for example, with the sites of the Gulf (Mleiha and Ed-Dur) and which are substantiated by the prestigious ceramic tableware, large storage vessels, and also coins and artefacts found there.[114] Besides several stone vessels, a few pellets of myrrh or frankincense, a number of coins minted in Qana' and/or Shabwa, we can now add a few Hadrami pottery recipients to the list of south Arabian objects recovered at Ed-Dur.[115] The excavations of the south Arabian ports, on the other hand, have yielded vessels of southern Mesopotamian glazed ware

and southeast Arabian black-and-grey ware, most probably imported through Ed-Dur or Mleiha. These wares and other Mesopotamian and Iranian Early Namord ware have also been found at the Hadrami capital of Shabwa, several east African coastal sites, and the Roman-Egyptian ports on the Red Sea.[116] The wider diffusion of this Gulf material very probably occurred indirectly via Sumhuram and Qana'. Previously, Avanzini proposed that we must rethink the contacts with the Gulf regions in the Seleucid period, where in Mleiha many of these items similar to Hadrami were found.[117] It is postulated that from its foundation in the third/second century BCE, Sumhuram would appear to have had relations with the Arabian Gulf as it had with India.[118]

These 600 years between the end of the Iron Age and 200 CE were a period of flourishing prosperity across much of eastern and southern Arabia. However, things began to change in the third century CE, and by the fifth century it seems most of the prosperous port and caravan cities mentioned earlier had declined considerably or been abandoned. This phase also marked the rise of Sasanian influence and control across Oman soon after Ardashir's rise to power in the early third century.[119] The nature and significance of Sasanian involvement in Oman is a topic that is often contended. The following sections of this chapter will examine the various evidence (archaeological and historical), scholastic perspectives, and interpretations of Sasanian relations with the Arabian Gulf and south Arabia.

Oman in the Sasanian Period (Third Century–Seventh Century)

The historical record of Sasanian political and maritime activities in Oman, the area known in pre-Islamic and Nestorian sources as Mazun, comes from the medieval/Islamic historians Tabari, Tha'alibi, al-Dinawari, and Hamza of Isfahan. These sources all agree that Sasanian control began with the first Sasanian ruler, Ardashir (224/226–242). Hamza recorded the names of eleven cities reputedly founded or refounded by Ardashir, of which no fewer than eight were ports on the Gulf or the rivers of Khuzistan and Mesopotamia.[120] The anonymous *Nihayat al-Irab fi Ahbar al-Furs wal-'Arab* (c. 1000–1050) says that "Ardashir marched with his troops and soldiers to the country of what lies between Oman and al-Bahrain and al-Yamamah and Hagar ... and they fought a violent fight and there was killed on both sides a great number." This anonymous text also refers to one 'Amr b. Waqid al-Himyari, the king of Oman, who was killed as a result of this campaign. The Islamic historian al-Dinawari, speaking of the same campaign, reports that Ardashir invaded Oman, Bahrain, and al-Yamamah, but does not mention the name of the Omani king.[121]

From the reign of Ardashir's son, Shapur I (242–270), Sasanian power and influence over this region fluctuated considerably, and the area was a satrapy of the Lakhmid Arab dynasty based at Hira.[122] The Sasanians lost this control on at least one occasion during the reign of Shapur II (310–379) when Arabs from Bahrain and Hajar swarmed across the Gulf and attacked the coasts of Sawad, Khuzistan, and Fars. Shapur II retaliated in his first campaign directed against Oman, devastating the Arabian coast right up to Medina in the interior. Despite this violent campaign, the Gulf prospered in the fourth century, with the Roman historian Ammianus Marcellinus (c. 330–339) reporting, "There are numerous towns and villages on every coast and frequent sailings of ships."[123] Kennet, however, argues that a sustained decline in economic activity and population levels is thought to have begun during the second century, demonstrated by the decreasing size of larger settlements (Mleiha and Ed-Dur) and a decline in the number of burials, rural settlements, coins, and artefacts.[124] He states, however, that this decline of settlements and the impression of wider economic decline is no evidence of a related collapse in mercantile activity, when there is a related increase in the proportion of imported ceramics at Mleiha and the Sasanian levels at Kush.[125]

Whitehouse has suggested that security and trade were the two factors that persuaded the Sasanians to embark on an expansive policy in the Gulf.[126] The control of maritime commerce, competition with Byzantium, and the need to defend the frontier of Mesopotamia were driving factors. Nevertheless, it is attributed that the archaeological evidence for the Sasanian period in eastern and southeastern Arabia is limited and indicates a dramatic decline in settlement and urbanization following the Hellenistic/Parthian "boom." This decline is attributed to diminishing economic contact with the Mediterranean and climatic factors, and more so to Sasanian commercial interests that indicate this region was of relatively minor importance.[127] Evidence of a regional "decline" is generally accepted, and this overturns the theory of a flowering population in southeastern Arabia in the Sasanian period,[128] although scholars have cautioned against interpreting Oman in view of conditions in the United Arab Emirates.[129]

The Sasanian Period in Southeastern Arabia: Boom or Bust?

The geographical parameters of southeastern Arabia during the Sasanid period will follow the historical usage from the ninth century of the area referred to as "'Uman" located to the northern part of the modern Sultanate of Oman and the Musandam peninsula north of Abu Dhabi.[130] As mentioned earlier, by the third century, if not earlier, occupation at the sites of both Mleiha and Ed-Dur had begun to decline and the once-extensive occupation had contracted to restricted areas surrounding large elite fortified residences. The establishment of fortifications at these sites could indicate a possible sense of insecurity during the last occupation phases of these sites, although, as Northedge has argued, the forts were residences of tribal elites and their construction relates to the arrival of Arabic-speaking tribes in Oman.[131]

From the viewpoint of archaeological evidence, for a long time the only Sasanian-period site known from this area was Jazirat al-Ghanam, located at the northern tip of Oman, in an insular position but related to maritime traffic off Ras Musandam. This site, explored only on the surface has been well dated to the Sasanian period.[132] That Jazirat al-Ghanam is placed in a phase that postdates the abandonment of Mleiha and Ed-Dur is characterized by the presence of large, collared jars with incised decoration typical of the Sasanian period that had no parallels at these sites. Its pottery assemblage closely related to the pre-Islamic levels at Kush determined the occupation of Jazirat al-Ghanam in the second half of the fourth century.[133] Kush is a small archaeological tell in the Shimal area on the coastal plain of Ras al-Khaimah in the United Arab Emirates that contained a continuous sequence of occupation from the fifth century to the thirteenth century. As the excavators noted, the six seasons of excavation between 1995 and 2001 "... were specifically intended to resolve, amongst other things, some of the problems relating to the archaeology of the Sasanian and early Islamic periods, notably the chronology, economy, environment and material culture."[134] Evidence for a fourth/fifth century Sasanian occupation was also recorded at Area 3 in Khatt (Ras al-Khaimah).[135] The Sasanian ceramic assemblage at Kush could be dated to two periods: Period I (fourth/fifth or fifth/sixth century) and Period II (seventh/eighth century).[136] The nature of Period I occupation reveals a relatively large concentration of arrowheads, suggesting a military presence, but the scarcity and low-denomination coinage argues against the presence of professional soldiers. The evidence of imported pottery suggests a degree of mercantile activity at the site. Period II at Kush belongs to the Late Sasanian period, where the construction of a defense building could indicate a period of regional insecurity. A dramatically changing coastal environment formed a backdrop for these transformations at Kush, and, in general, the fourth to seventh century at Kush marked a period of instability in the nature of settlement, trade, and cultural links.[137]

While eastern Arabian sites like Kush, Khatt, and Jazirat al-Ghanam were most certainly occupied during the Sasanian period, Kennet's careful reconsideration of other settlements and material often meant that "archaeological evidence for the Sasanian period in eastern Arabia is extremely limited and, compared to the preceding period, the Sasanian period was a time of very restricted activity over the whole region (Figure 13)."[138]

From the perspective of Oman, he argues, for example, that the entire Sohar sequence below Level V is datable to the eighth century due to the significant lack of distinctive Sasanian ceramics.[139] In contrast, J. C. Wilkinson's view of the Sasanian period as that of maximum development, linking the falaj system and growth in Indian Ocean trade to the agricultural development of the Batinah coast and the hinterland of Sohar, was opposed by Kennet on the grounds that most of the falaj construction in Oman occurred in the Iron Age and in the ninth/tenth centuries and almost certainly later, and that surveys in and around Sohar gave no evidence of a developed hinterland in the Sasanian period.[140] Kennet also recorded a dramatic decline in large settlements, burials, rural sites, and coinage from an "economic boom" in the preceding Hellenistic/Parthian periods from sites in eastern Arabia and at Sohar and the Samad culture in Oman.[141] Obvious explanations for the decline of the region were linked to the shift towards direct maritime trade between India and the Red Sea in the first century CE and the general decline of Roman trade with the East from the third century. It has been asserted that Sasanian commercial interests in eastern Arabia were not as crucial as perceived, given that historically the Sasanians made only two or three attempts to establish formal control over the region during a period of 400 years, represented by a series of isolated military garrisons having little interaction with or influence upon the population at large.[142]

Scholars like Yule caution against this interpretation of the conditions in Oman in light of archaeological evidence from the United Arab Emirates and to refrain from implicating a rate of decline relative to other areas.[143] It has been said that "Although the present state of archaeological knowledge leads us to suppose a decline (in the Sasanian period), it is difficult to accept that almost nothing was happening in a geographically diverse region like Oman."[144] Here, for example, Brian Ulrich points out

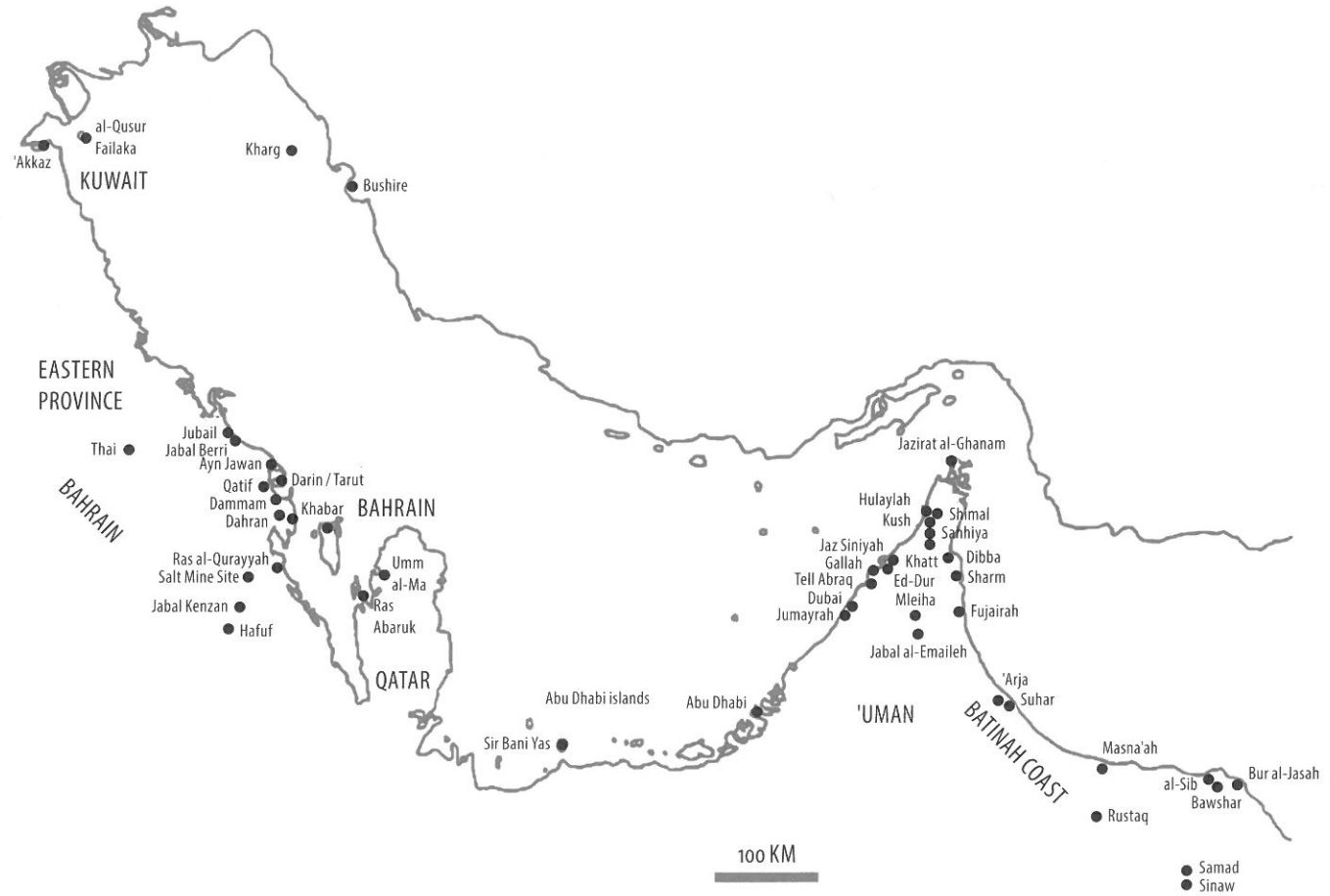


Figure 13: Arabia showing sites on the eve of Islam. Image courtesy of Derek Kennet, 2007.

that the scarcity of Sasanian evidence from Sohar could possibly relate to the lack of large-scale excavation and the destruction of occupation areas on the Batinah coast of Oman.[145] This lack of evidence could also be attributed to coastal and trading sites that were generally seasonally populated and associated instead to more substantial settlements nearby.[146] As far as the literary evidence goes, by the late Sasanian period there were five administrative divisions in eastern Arabia, including the area known as Mazun (Oman). The Sasanian relationship with Oman will form the next part of this discussion.

The Sasanian Relationship with Mazun (Oman): the Literary Evidence

For Abu Muhammad al-Hamdani, the Arab geographer in the tenth century, the area of Mazun extended from Shihr in the south to al-Qatif and al-Hasa in the north in a somewhat elongated shape, with Mazun representing everything to the east. In other words, Mazun is one of the names of Oman, and "Mazuni" came to be used as an appellative for the inhabitants of Oman.[147] This idea is echoed by Yaqut, the Arab geographer of Greek origin, who in the twelfth century states that Ardashir appointed some of the Azd of Mazun, the dominant tribe in late pre-Islamic Oman, as sailors at Shihr. Sasanian attempts to establish control through military campaigns into Oman is well documented in historical sources. A Sasanian politico-military presence in Oman is noted in the great Kaʿaba of Zoroaster inscription at Naqsh-e Rustam, where *Mzw(n)* appears as the twenty-seventh and last country in Shapur I's provinces and in the anonymous *Kashf al-Gumma*, preserved in a copy from 1728, which mentions that the Sasanians controlled Oman from their military capital Rustaq.[148]

After Shapur II's campaign in the fourth century, Mazun came under the jurisdiction of the Sasanians' principal Arab vassals, the Lakhmids. This is apparent when the Lakhmid ruler al-Mundir I was respon-

sible for installing on the throne in 420 Bahram Gur (Bahram V), who was raised as an Arab at the Lakhmid court, after the assassination of his father Yazdedgerd I. After a brief interregnum involving the Kinda tribal confederacy at Hira in 450, the Sasanian and Lakhmid control was established in eastern Arabia under Khusraw I (531–579) and al-Nuʿman b. al-Mundhir, "a man of the tribe of Lakhm," was appointed king of Oman, al-Bahrain, al-Yamamah, and the Hijaz.[149] According to the eleventh-century Omani writer al-ʿAwtabi, a treaty was formed between Khusraw and the Azd Oman, wherein a Persian sphere of influence was recognized along the central and southern Batinah coast with a Sasanian military outpost at Rustaq. The Azd, united under the Maʾawil clan referred to as "Julanda" by the Sasanians, governed the Arab tribes and levied taxes in the northern port of Dibba and the interior oasis of Tuwam, modern Buraimi, outside the strictly Persian-dominated areas. These conditions continued until the Islamization of the region in the 630s.[150]

At this point in the late sixth century, Sasanian maritime power was at its peak and the Sasanian navy controlled not only the Gulf, but also the entire coast from the Indus to the Red Sea.[151] Wilkinson's view of the Sasanian socio-political organization painted a portrait of Omani society in which the Persians lived in the villages surrounded by Arab nomads. This could mean the Batinah coastline surrounded by Arabs in the deserts and mountains.[152] The Azd were kings in the mountains, deserts, and other parts of the outskirts (*aṭrāf*).[153] By the early seventh century, although both Bahrain and Oman were still thought to be Sasanian provinces, it appears that the Sasanid power had weakened as a result of the battle of Dhu al-Qar fought between the Persian army and the Arabs in southern Iraq in c. 604 and the subsequent advent of Islam in the Arab world.[154] The Islamic conquest of Arabia, and in particular Oman, is given in the indigenous Omani sources through two variant traditions. Wakidi's testimony states that Muhammad in 630 sent an alliance to the two brothers, Jayfar and ʿAmr, sons of the deceased ruler of the Azd (al-Julanda), and "offered them power and promised safety to all who obey God and his Messenger ... and follow the way of the Muslims." Together with his brother, Jayfar embraced Islam. The second tradition by al-Baladhuri records that Muhammad sent two envoys, Abu Zayd and ʿAmr b. al-ʿAs, with a letter to the two brothers who were found in Sohar. Both brothers accepted Islam, encouraged the local Arabs to follow their example, and gave a free hand to ʿAmr b. al-ʿAs to collect *zakat* or alms-tax. The envoys, it appears, remained in Oman until Mohammad's death.[155]

Omani Seafaring in the Indian Ocean in Late Antiquity

Before the conquests of Alexander (334–323 BCE), little is known historically of the seafaring activities of the Omanis and the role of Omani sailors in the development of Indian Ocean sea trade. Alexander himself had hired Phoenician shipbuilders and sailors to navigate the Gulf when he ordered Nearchus to sail with the fleet from the mouth of the Indus, along the Makran coast, and up the Arabian Gulf. The purpose of this expedition, Arrian tells us "was not to navigate the Ocean, but to explore the coast lying on the Ocean and the inhabitants of the coast, and its anchorages, and its water supplies, and the manners and customs of the inhabitants, and what part of the coast was good for growing produce and what part was bad."[156] In fact, Strabo, citing Aristobulus, gives a detailed description of the creation of Alexander's navy: "Alexander ... intended to acquire possession of that country (Arabia), and had already prepared fleets and bases of operations, having built some of his boats in Phoenicia and Cyprus, boats constructed with bolts and could be taken to pieces ... and having built others in Babylonia, from cypress trees in the groves and the park." It was Alexander's belief that there were "harbors all over the coast (of Arabia), large enough to give anchorage to his fleet."[157]

Omani sailors played a part in a developing Indian Ocean trade with the growing prosperity of the south Arabian cultures of Maʿin and Sabaʾ. The cultivation of high-quality frankincense grown in the Dhofar region of Oman, greatly demanded in the Mediterranean world, led to the opening up of ports like Sumhuram, established near modern Taqa, subsequent to the reopening and expansion of Indian Ocean maritime routes.[158] By around 100 BCE, Ptolemy VII of Egypt began to encourage direct sailing from the Red Sea by his merchants between Egypt and India, and Sumhuram offered a safe haven for ships sailing to ports such as Barygaza near the mouth of the Indus. Ships also sailed down the Arabian Gulf to India and would have called at the port of Omana, on the Arabian shore of the southern Gulf. According to Hourani, in spite of Ptolemy's activities, though Greek merchant ships did reach south Arabia, both land and sea trade between it and Egypt was largely in the hands of the Arabs. He reinforced his view based on Agatharchides, who states: "For no nation seems to be wealthier than the Sabaeans and Gerrhaeans, who are agents for everything that falls under the name of transport from Asia and Europe."[159]

Omani sailors from Sumhuram and Omana were familiar with a sea route from Qanaʾ in the west to Bar-

ygaza in the east, and perhaps sailed into the Gulf to Gerrha and Apologos also. It is possible that they, too, participated in direct sailing across the Indian Ocean.[160] That the port Omana points to Arabia rather than Iran is suggested by the exports associated with it, as mentioned in the *Periplus*: pearls and dates with the addition of sewn boats called *madarata*, whose manner of construction is typically Arabian. These boats were built for export to south Arabia.[161] Such references were made to seaworthy ships in historical sources, such as the Muziris-papyrus, which clearly mentions a ship called the *Hermapollon*. The name, although Greek, could possibly indicate a ship that was of Arabian origin and renamed. Sources also indicate the people who owned ships in the Red Sea, the *naukleroi*. Besides building ships themselves, it is probable that trading firms on a great level bought and equipped Arabian ships.[162]

From the early Roman period, the long-range trade between East and West was in the hands of the Roman merchants, while Arabs continued to sail a more northerly route as far as Barygaza and other Indian ports.[163] On the east African coast, however, the Arabs maintained such a strict monopoly on the trade from Rhapta that the Romans erroneously believed that the original source of cinnamon was in central and east Africa.[164] References from early historical sources gave scholars the idea that Indian Ocean trade was essentially in the hands of Graeco-Roman traders, with native traders such as Arabians and Indians receiving only a small amount of attention. While scholars like Casson concluded that Graeco-Roman ships were better and more seaworthy than Arab ships, downplaying the role of indigenous traders,[165] others like Ball held the view that Roman square sails were too primitive to cope with local wind patterns and that Arab dhows were better suited for seafaring.[166] Fauconnier followed upon these conflicting options with an excellent reappraisal based on recent research on native trade networks, stating that "... it is wrong to perceive the trade networks of the Indian Ocean in terms of dominance, be it by western or by native traders, who sailed and traded at the same moment and learned from each other's ways."[167] He clarifies his statement with evidence that, in order to meet the increasing demand for timber to construct seaworthy ships, teak wood was imported from south Asia and used even by the Arabs for construction of dhows, and cedar wood was imported from present-day Lebanon.[168] While the Arab sailing schedule began in September and October, western ships did sail in the summer months after waiting in the Arabian ports until the summer storms abated.[169]

By around 225 CE, the Parthians gave way to the Sasanian dynasty, which began to encourage and divert sea traffic to the Gulf, and the maritime policy shifted to the ports of northern Oman. Malik b. Fahm and the Azd tribe migrated from southwest Arabia to Shihr on the Hadrami coast.[170] As mentioned earlier, the Sasanian ruler Ardashir appointed members of the Azd tribe as sailors at Shihr. From here, Malik b. Fahm moved to Qalhat and made it his first base.[171] By the reign of Shapur I, the *Kashf al-Ghumma* reports that the Sasanians ruled Oman from their military capital Rustaq, and in doing so they exerted effective control over the Gulf route and secured a base in northern Oman. The Sasanians seem to have encouraged native seafaring, and it is possible that both Omanis and Persians sailed the ships.[172]

Mediterranean-Arab vessels in the Indian Ocean

The boat designs of the Mediterranean-period Arab vessels presented similar technological features to the western Indian Ocean craft of the medieval period. Continuity was also noted in the design of primitive craft and their modern-day counterparts.[173] One of the earliest types of watercraft are inflated waterskins (*qirbāt*), which were prepared, tanned, and tied with an osier string and used until recent times by Omani fishermen on the southern Arabian coast. A craft similar to this is clearly represented on Assyrian palace reliefs from king Ashurnasirpal II (c. 883–858 BCE).[174] Raft types, such as the *madarata* recorded in the *Periplus*, are said to have been utilized by Arabian mariners. Other rafts, like the *kelek*, were made from bundles of bulrushes, with the forward end turned up to form the prow. The word has a long history with the coastal south Arabian tribes, who adopted such rafts from antiquity until recent times.[175]

Dugout canoes are important watercraft in Oman with two well-known types: the *hūri* or *hūrī hafar* in southeast Oman and the *balam*. Omanis used stone or gravel as ballast in *hūris*, as they can easily capsize. The second dugout canoe, the *balam*, is made from mango wood and has the origin of its name in the Indian nomenclature *valam* or *vallam*.[176] For evidence on shipbuilding technology and material in Late Antiquity, it is established that India supplied teak to the Arabian Gulf when Theophrastus claimed in the third century BCE that the timber (teak) of the ships of Bahrain lasted two hundred years.[177] That early Arabians knew about caulking ships by pitch and fish oil is well documented in the knowledge of pre-Islamic poets, such as al-Muthaqqib al-ʿAbdi and al-Akhtal.[178] For the rope, the Omanis valued coconut fiber or coir (*qinbār*) highly, so much so that Abu Zayd Hasan of Siraf reported that the Omanis:

... cross over to the island(s) where coconut trees grow; they carry with them carpenters' tools; and they fell trees as many as they need. When the wood dries, they cut planks and with the bark of the tree they spin a yarn, wherewith they sew the planks together to build a ship.[179]

The most common practice in construction methodology still in place today among Arabian Gulf shipwrights is the shell-first process, involving building the hull first. Greek papyri from Islamic Egypt suggest that shipbuilding among the Mediterranean Arabs followed the Graeco-Roman practice of shell technique.[180] In terms of other construction features, Byzantine historian Procopius in the sixth century describes that the native ships were constructed from planks sewn together. He also rejected the myth explaining the origin of the sewn ships in that magnetic rocks littered at the bottom of the sea would drag iron-fastened ships and their crews to the depths of the ocean.[181] This belief, however, continued among Arab Islamic scholars like al-Masʿudi, who say that "the sea water melts the iron nails, consequently they are softened and become weak"—hence, the reason why the Arab method of sewn planks was preferred. In all medieval accounts, stitching was almost the only mode of constructing ships in the Arabian Gulf.[182]

According to Agius, the ship and the sea appear in pre-Islamic and early Islamic poetry that can also give us an understanding of nautical activities at the time. Classic ships, like the *khaliyya* described by Muraqqish al-Akbar (c. 552), can be interpreted as a "ship that sails freely" or "in full sail"; the *qādis*, whose sails are compared to tents on an encampment by Mulayḥ, perhaps indicating that the sails were square; or the *būṣī*, described by Ṭarafa b. al-ʿAbd (c. 569) as a small vessel, whose rudder was the steering oar by which the boatswain controlled the direction of the boat.[183] Similar obscure classic ships include the *ghassāniyya*, referenced as a seagoing craft; the *qawrā*, in early Islamic poems dating to the beginning of the sixth century likened to a cargo ship; or the Arabian *fulk* (life boat or raft), which existed in pre-Islamic times around the fifth century and was recorded during the voyages of Sindbad the sailor in the Arabian Nights.[184]

The Archaeological Evidence of Seafaring: Late Antiquity Maritime Graffiti from Oman and Southern Arabia

Iconographic evidence of watercraft is attested from drawings of ships from the southern Arabian coast and principally the Dhofar region of Oman (Figure 14).

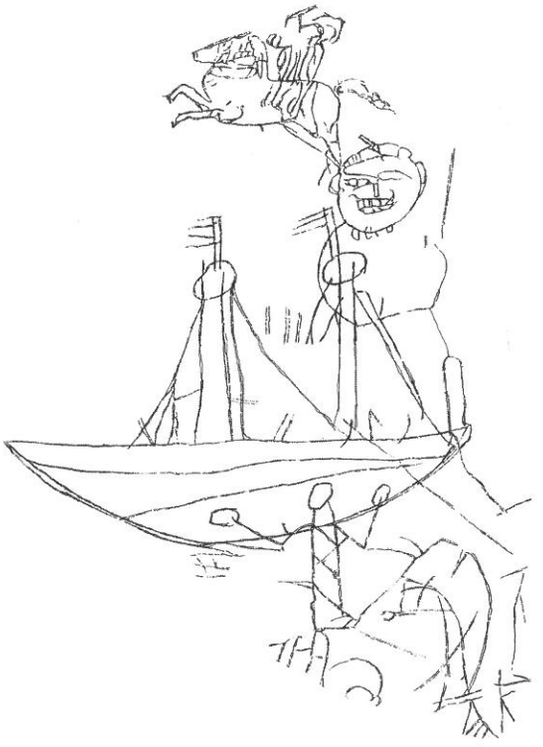
A particular example is the ship graffito at Sumhuram, which is carved into wall plaster near the gate and represents an ancient sailing vessel with two masts, engaged in what appears to be whaling (Figure 14a).[185] The depiction is similar to that of two-masted ships found stamped on coins minted by the Satavahana/Andhra dynasty of southern and western India sometime between the second/first century BCE and the second century CE. This graffito may also represent one of the vessels engaged in the India-Red Sea trade, but neither its size, methods, nor the materials used in its construction can be determined. Although Sumhuram was founded in the third century BCE, the graffito probably dates from the period during the zenith of activity at the site, namely, from the first century to the third century CE.[186]

In addition to this single representation from Sumhuram, a number of the Dhofar hill sites depict ships. Nearly all are sailing ships, several of which could be sewn boats. Their date is problematic, but they could in part date to the Early Iron Age B (IAB) period, 300 BCE to 600 CE, based on the chronology proposed by Juris Zarins (Figure 14b).[187] Beginning in 1998, through a systematic survey of nearly all the caves in Dhofar located in the mountainous areas and those overlooking the coast, ʿAli al-Shahri recorded numerous painted inscriptions including depictions of ships (Figure 14c).[188]

These were comprised of different types of watercraft, some of a design no longer seen today and others that look quite modern. All the ships are drawn in black pigment, but no inscriptions have been recorded alongside. Many seem to have a flag or pennant flying. There are single- and double-masted vessels, and a few with sails. The boats come in all sizes and a number of different types of construction. Sometimes a row of small circles is shown along the side of the ship, as what appear to be oars. The lines leading from the mast to the deck are often clearly shown.[189]

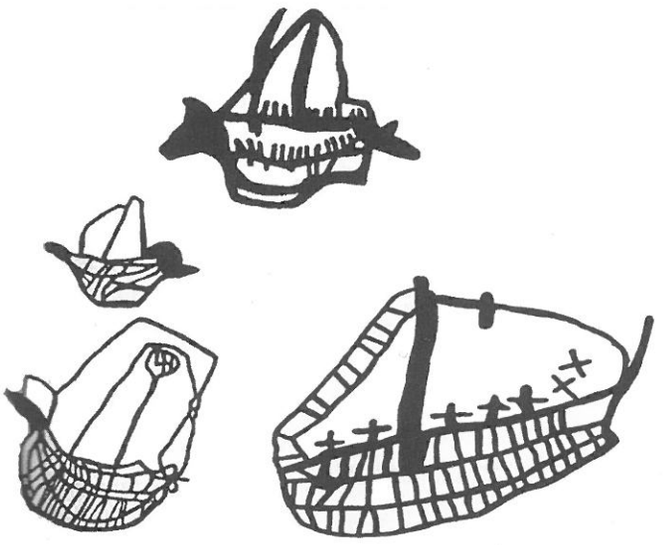
The Brahmi inscriptions from Hoq cave on the island of Socotra (Yemen) is compelling evidence pointing towards the presence of Indian sailors/traders in Arabia from the end of the second century CE to the fourth century.[190] The close relationship of the Indian visitors of the Hoq caves with the northern and western regions of India is also indicated by the depictions of boats in the immediate neighborhood of the inscriptions.[191] According to Sidebotham,[192] the Hoq-cave ship graffito on Socotra has three sails and likely dates to the third century (Figure 14d).

The association with pictures of ships from the Ajanta cave paintings of the sixth century is accepted, although more convincing evidence are the numerous ship-motifs on the coins of the Satavahana ruler Gautamiputra Yajna



A. SHIP GRAFFITO ON PLASTER FROM SUMHURAM
(after Avanzini 2007)

C. SHIPS ON ROCK ART FROM DHOFAR HILLS
(after Al Shahri 1991)



B. IRON AGE B SHIPS ON ROCK ART FROM DHOFAR
(after Zarins 2001)

D. SHIP MOTIFS IN HOQ CAVE FROM SOCOTRA
(after Strauch & Bukharin 2004)

Figure 14: Depictions of sailing vessels from Oman and Yemen in Late Antiquity.

Satakarni, who ruled in the last half of the second century over a vast area from Andhra Pradesh and Karnataka to Maharashtra and Gujarat.[193] The Hoq ship-motifs like the coins have two masts, a highly curved bow and stern, and two paddles at the back. This type of ship was typical in India and more eastern regions, and, therefore, there is a high probability that these drawings owe their origin to the Indian visitors to Arabia.[194]

Conclusions

In the context of Indian Ocean studies on trade, the notion developed that the Roman expansion into the Red Sea region in the first century BCE gave the necessary impetus to trade and commerce in the Indian Ocean. The "periphery" regions, including Oman, progressively occupied a secondary role of an entrepôt in the main commercial sphere involving the lucrative Indo-Roman trade. The main contribution of this chapter has been the collation of archaeological evidence and various scholastic views that indicate that overland trade and maritime networks developed in Oman prior to Roman involvement in the trade and continued for centuries during and after the collapse of the Roman Empire.[195] The various historical sources of Islamic-period historians and scholars speak of the maritime prowess of the Omanis and the people of Arabia from the Graeco-Roman to Sasanian and Early Islamic periods. The Arab dominance in the Indian Ocean in the Islamic period was founded partly on the navigational knowledge and skills derived by Omani seafarers from the pre-Islamic Greek and south Arabian predecessors. Although it is easy to ascribe the growth of Oman in late antiquity to these foreign relations, one must bear in mind the indigenous cultural traditions of camel domestication and *falaj* development that led to widespread settlements in hitherto unoccupied areas of the peninsula.

The later part of this chapter details the Sasanid encouragement of native seafaring and navigation, and the participation of Omanis as sailors in their own right, and an increase in mercantile activity. Yet this military intervention had little effect or influence on the population at large, as seen from archaeological evidence, particularly in eastern and southeastern Arabia. A so-called Sasanian period "decline" in Oman, however, has to be reconsidered in light of the archaeological evidence or lack thereof. Oman has been described as "a melting pot with people from all over the world and has attracted sailors and merchants from East Africa, the Red Sea, Iran, and the Indian subcontinent for centuries."[196] While several foreign groups and their sociocultural and economic practices could have been assimilated into the mainstream/dominant society, the peoples of Oman were in late antiquity, and are still to this day, able to retain their identity while imbibing cultural and social influences from other regions in the Indian Ocean world.

Notes

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5 Roberta Tomber, *Indo-Roman Trade: From Pots to Pepper* (London: Duckworth, 2008), 109. See also Casson, ed. and trans., "The Periplus Maris Erythraei" (PME 35–37), 72–73.

6 Michel Mouton and Julien Cuny, "The Oman Peninsula at the beginning of the Sasanian Period," in *Fifty Years of Emirates Archaeology: Proceedings of the Second International Conference on the Archaeology of the United Arab Emirates*, ed. Daniel T. Potts and Peter Hellyer (Abu Dhabi: Ministry of Culture, Youth, and Community Development, 2012), 174.

7 See footnote no. 27 in *A port in Arabia between Rome and the Indian Ocean (3rd C. BC–5th C. AD), Khor Rori Report 2*, ed. Alessandra Avanzini (Rome: L'Erma di Bretschneider, 2008), 617.

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9 Ibid., 16.

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19 Peter Magee, "Shifts in ceramic production and exchange in late prehistoric southeastern Arabia and the introduction of domesticated Camelus dromedaries," in *Between Sand and Sea: The Archaeology and Human Ecology of Southwestern Asia (Festschrift in Honor of Hans-Peter Uerpmann)*, ed. N. J. Conard, P. Drechsler, and A. Morales (Tübingen: Kerns Verlag, 2011); idem, "Beyond the Desert and the Sown: Settlement Intensification in Late Prehistoric Southeastern Arabia," *Bulletin of the American Society for Oriental Research* 347 (2007): 86.

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29 Magee, "The impact of southeast Arabian," 40.

30 Magee, "The indigenous context of foreign exchange," 162.

31 Peter Magee, "Columned Halls, Power and Legitimisation in the Southeast Arabian Iron Age," in *Archaeology of the United Arab Emirates: Proceedings of the First International Conference on the Archaeology of the UAE*, ed. Daniel T. Potts, Hasan Al Naboodah, and Peter Hellyer (Abu Dhabi: Trident Press, 2003), 183–86.

32 Magee, "Beyond the Desert and the Sown," 99–100.
33 See Potts, *Further excavations at Tell Abraq*, 136–37. Cited in Potts, "Before the Emirates," 49.
34 Magee, "The indigenous context of foreign exchange," 166.
35 Magee, "Investigating cross-Gulf trade," 90. For a description of the incense burner, see Magee, "The indigenous context of foreign exchange," 163.
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