**Palmyrene Merchants and the Red Sea Trade**

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International and inter-regional trade has long been recognised as a major facet of Palmyrene economic life, which has led many to designate Palmyra a “caravan city”.[[1]](#footnote-1) The city’s location by the Tadmor Oasis near the edge of the Syria Desert left it quite well-placed to act as a conduit between Mesopotamian-Persian Gulf trade networks and the markets of the Eastern Mediterranean.[[2]](#footnote-2) This commercial activity is evidenced by a rich array of material finds, such as pearls, agate/carnelian beads and silks (particularly from tombs), as well as by a few dozen inscriptions that refer to the successful arrival of camel caravans.[[3]](#footnote-3) These inscriptions, in particular, underlie the importance of connections with sites in central (Babylon, Seleucia, and Vologesias) and southern Mesopotamia (Spasinou Charax and Forat), where imports from India, southern Arabia and beyond could be acquired.[[4]](#footnote-4) A few of these inscriptions even indicate that some Palmyrene merchants sailed directly to regions like “Skythia” (northwest Indian subcontinent).[[5]](#footnote-5)

Given the importance of the traditional Mesopotamian-Persian Gulf trade networks, it may perhaps be surprising to find that some Palmyrene merchants eschewed these traditional routes in favour of the Egyptian-Red Sea branch of the Indian Ocean trade. The aim of this paper is to explore why this might have been the case. In order to do this, the discussion is split up into three main sections. The first considers the available evidence for Palmyrene participation in the Egyptian-Red Sea trade routes and whether it is possible to identify any major phases for this activity. The second section considers whether it is possible to connect the evidence for Palmyrene presence at a few sites in southern Arabia and on the island of Socotra with activity via either the Egyptian-Red Sea or Mesopotamian-Persian Gulf trade routes. The third section analyses the potential “push” and “pull” factors which may have encouraged participation in the Egyptian-Red Sea trade.

The plausibility of the following suppositions is considered: that Roman-Parthian/Sassanian conflict may have made the Mesopotamian-Persian Gulf route more difficult to use; that Palmyrene military presence in the Egyptian Eastern Desert in the latter second and early third century CE may have encouraged some merchants to move to the region; and whether the Egyptian-Red Sea branch offered greater opportunities for profits. Given the limited quantity and nature of the evidence no attempt is made here to prove any of these suppositions beyond doubt. Rather, the intention is to outline the limits of the evidence and assess the extent to which we can support particular claims.

**1. Palmyrene merchants in Egypt**

The most important evidence attesting the presence of Palmyrene merchants and shippers in Egypt consists of two inscriptions, one connected to Koptos (modern Qift), and the other to Tentyris (modern Denderah).[[6]](#footnote-6) The former inscription comprises a laudation of Zabdalas, son of Salmanos, by fellow members of the community of Red Sea merchants from Hadriane Palmyra. This was done to celebrate the fact that Zabdalas had spent his own funds on the construction of προπύλαια (a gateway), three στοαί (porticos), and θυρώματα (chambers) from his own funds.[[7]](#footnote-7) The inscription is normally dated to the mid-late second century CE, the reference to ‘Hadriane Palmyra’ giving it a *terminus post quem* of 129 CE (the potential significance of the dating of this inscription is discussed in section 3).[[8]](#footnote-8) Reference to the collective celebration of Zabdalas by his fellow Palmyrene merchants, and to communally owned property, has reasonably been interpreted as evidence for a cultic/community association – perhaps something akin to a *collegium*.[[9]](#footnote-9)

The second major inscription that seems to attest to Palmyrene participation in the Egyptian-Red Sea branch of the Indian Ocean trade was found at Tentyris, about 5 kilometres from ancient Kainopolis (modern Qena).[[10]](#footnote-10) The fragmentary bits of text that survive are in Greek, but it is still possible to make out Palmyrene script on the left-hand side, indicating that it was originally a bilingual dedication. It records a Iulius Aurelius, who either had the *cognomen* or patronymic Makkai/Makkaios. He seems to have died at the site, being buried with a modest tablet to honour him. Mention is also made of merchants (ἔμπο[ροι]) and possibly of a caravan (συ[νοδίαν]), though the latter reconstruction is hardly conclusive.[[11]](#footnote-11) The inscription is usually dated to between 160 and 212 CE (again the significance of this dating will be considered in section 3).[[12]](#footnote-12)

Seland has observed that Tentyris was near to the terminus of the road that led from Abu Shaʾar on the northern Red Sea coast to the Nile. He notes that the port may have offered a convenient crossing point for a short sail over to the port of Leuke Kome (on the northern Arabian coast of the Red Sea), and from their an overland crossing on the *Via Nova Traiana* would allow them to reach Syria.[[13]](#footnote-13) It is not beyond the realms of possibility that this group of Palmyrene (merchants) was travelling to Abu Shaʾar. Indeed, a small station at Abu Shaʾar el-Qibli (approximately 4.5-5 kilometres west of the larger Tetrarchic fort) seems to be connected to the Kainopolis-Abu Shaʾar route from at least the second century CE, allowing for the potential of some kind of northern Red Sea-Nile commercial activity.[[14]](#footnote-14) However, a few issues should be noted. Much of the traffic on the roads leading from Kainopolis seem to relate to quarrying activity at Mons Claudianus and Mons Porphyrites (especially in the second century CE), while the evidence for would-be commercial activity is largely inferred. Secondly, Tentyris is on the west bank of the Nile, unlike Kainopolis, which would seem to make it a less convenient starting point for crossings into the Eastern Desert. Thirdly, if this group was travelling from Tentyris to Palmyra, this trip should not be understood as part of regular direct commercial activity, since this seems less economically viable (Seland does not imply this was the case).[[15]](#footnote-15) Evers has suggested that the Tentyris inscription may attest to ‘Palmyrene caravan ventures in the Eastern Desert’, suggesting that they were ‘carrying specifically Palmyrene products into Egypt’.[[16]](#footnote-16) It is not clear, however, what specifically Palmyrene products would be worth bringing to Egypt via such a route.[[17]](#footnote-17)

The most logical reason for a Palmyrene presence at this site is that suggested by both Seland and Schörle.[[18]](#footnote-18) They note that Tentyris was an important stopping point for traffic heading south, where it might be necessary to wait for better wind conditions to allow vessels to sail against the current (i.e. upstream).[[19]](#footnote-19) Schörle suggests that a Palmyrene presence at this site could be seen to parallel the Mesopotamian practice of having diaspora set up at key centres on the Euphrates to help facilitate the wider commercial interests of the community.[[20]](#footnote-20) However, the inscription may not even attest to a more permanent Palmyrene merchant presence at Tentyris, but could just simply indicate a group of Palmyrene merchants that happened to be travelling between Alexandria and Koptos (possibly after paying the *tetarte*, selling their goods, and acquiring new ones for export), and due to reasons entirely lost to us, Iulius Aurelius passed away on the journey. The fact that this inscription was written on a modest tablet, rather than a more substantive commemorative funerary monument, may lend weight to this interpretation.[[21]](#footnote-21) This is speculative, of course, but no more so than any of the other theories proposed.

The Koptos and Tentyris inscriptions are not the only evidence for Palmyrene connection to the Egyptian-Red Sea trade networks. The port of Berenike (located on Foul Bay, several kilometres south of Ras Banas) which, alongside Myos Hormos (modern Quseir al-Qadim), was one of the primary commercial sites on the Egyptian Red Sea coast, has revealed evidence for Palmyrene presence. Palmyrene Aramaic is one of the numerous types of scripts found at the site (alongside Greek, Demotic, Egyptian hieroglyphs, Hebrew, Latin, Hadramawti, Tamil-Brahmi, Prakrit, and Sanskrit).[[22]](#footnote-22) Moreover, a cultic structure, referred to by the excavators as the Shrine of the Palmyrenes, was established around the late Antonine or Severan period (on top of earlier Ptolemaic/early-Roman strata of no religious significance).[[23]](#footnote-23) The shrine was evidently used by Palmyrene soldiers as evinced by two inscriptions (discussed in more detail in section 3), although its use by merchants as well seems highly probable.

Some of the ostraka found at Berenike may also open up the possibility of Palmyrene presence in the first century CE. However, these texts do not necessarily provide clear-cut proof of Palmyrene commercial activity in the Red Sea at this time. The name Hierabole (Ἱεραβολή), probably a feminine variant of the masculine Hierabolos, and seemingly connected to the Palmyrene deity Hierobol/Yarḥibōl, appears on one of mid-first century CE ostraka from Berenike. It is unclear from the text if the individual is a merchant or someone engaged in another profession.[[24]](#footnote-24) The mid-first century Berenike ostraka also reveal a number of other broadly Semitic names (though some of these are in doubt), but it in most cases any obvious Palmyrene connection, as opposed to some other Syrian-Levantine ancestry, is not easily distinguishable.[[25]](#footnote-25) Four of the Berenike ostraka dating to around the third quarter of the first century CE appear to contain one or more Semitic scripts, of which Palmyrene cursive script is a possibility;[[26]](#footnote-26) one ostrakon faintly shows the names ʾAbgar and Abū Magdi or Malki.[[27]](#footnote-27)

At Myos Hormos a fragment of a Palmyrene amphora has been found, on which appears an ink dipinto of Palmyrene Aramaic cursive script. It is unclear whether the text indicates an owner’s graffito, or its origin, weight, or content.[[28]](#footnote-28) The amphora shows parallels with second-third century vessels found at Palmyra but probably dates to the late first or early second century CE.[[29]](#footnote-29) Overall the evidence for potential first to early second century CE Palmyrene activity at Myos Hormos and Berenike is limited. Absence of evidence is not evidence of absence, but as it currently stands the available material seems to point to a far greater level of Palmyrene commercial activity in Egypt from the mid-second to third century CE.

What, if any, links Palmyrene merchants and shippers based at Koptos had with other prominent Palmyrenes based in Alexandria, or indeed, in Palmyra remains unknown.[[30]](#footnote-30) Seland muses on the possibility that someone like Firmus, who is reported in the *Historia Augusta* as being an ally of Zenobia and undertaking a failed rebellion in Egypt in 273 CE, might represent the sort of powerful patron and financier that Palmyrene merchant based in Egypt could have relied on. This Firmus is said to have been a native of Seleucia (probably from Syria), who had built his wealth on trade with India and had maintained good relations with the Blemmyes and the Saracens.[[31]](#footnote-31) This premise is not unreasonable, especially as we know that influential members of the Alexandrian economic and political elite (and probably also wealthy investors from Italy and elsewhere) financed Indian Ocean trade ventures.[[32]](#footnote-32) Moreover, as Seland notes in his chapter for this volume, highly successful merchants appear to have become more prominent in Palmyrene society by the second to third centuries CE. Unlike the traditional “warrior aristocracy” who were bound by familial and friendship links to nomadic groups in the Syrian Desert region, extremely wealthy merchant families may have been more willing to set themselves up in Egypt as merchants or financiers.[[33]](#footnote-33) Of course, this is reasoned speculation. Unfortunately, the fact remains that we do not know for sure whether such links existed, even if we suspect that they might have.

**2. Palmyrenes** **in southern Arabia and on Socotra**

It is not only in Egypt where we find the presence of Palmyrene merchants. Evidence from Southern Arabia and Socotra may also attest to direct or indirect participation in Indian Ocean trade networks.[[34]](#footnote-34) The evidence primarily takes the form of two inscriptions from southern Arabia and one from the island of Socotra (usually referred to in Graeco-Roman sources as Dioscorides).[[35]](#footnote-35) Dealing with the southern Arabian inscriptions first, one of these has been found in the main temple of Shabwa, capital of the kingdom of Hadramawt, likely dating to the early third century CE. It mentions an Azi, son of Abianas and a Rab (son of ?), who were Palmyrenes. They are recorded as being residents of somewhere, but only the very first part of the word survive. One reconstruction has them come from the region of Mesene (*Myšn*, that is the client kingdom of the Parthians based in southern Mesopotamia), but as Robin has noted, Egypt (*Mṣr*) may also be a possibility.[[36]](#footnote-36)

Another inscription was found at Al Uqla, 15 kilometres from Shabwa. It records a royal religious ceremony in which two Palmyrenes participated, alongside two Chaldeans and two Indians (the inscription seems to have been set up around 220 CE).[[37]](#footnote-37) One of the Palmyrenes was called Aziz, which has led Robin and Seland to suggest that he may have been the same person mentioned in the inscription from Shabwa. They also suggest, quite plausibly, that while these Palmyrenes appear to be envoys, wider trade interests most probably explain their presence.[[38]](#footnote-38)

A third major piece of epigraphic evidence to be considered is a wooden tablet with Palmyrene text from the Hoq Cave on Socotra.[[39]](#footnote-39) The text refers to an ʾAbgar who came ‘in the pain of his soul’, followed by a blessing of the god who installed him there and a request for those who read the tablet to bless him and leave it in its place.[[40]](#footnote-40) On the basis of a textual reading the dedication of the tablet can probably be dated to July, 258 CE – since it refers to the month of *tummûz* and the year 569 (most likely a reference to the era of the Seleucids, which was in widespread use by various peoples in Syria and Babylonia).[[41]](#footnote-41) Radiocarbon dating of this wooden tablet indicates that it came from a tree cut down within the period 78–239 CE, presumably indicating that the wood used was obtained from a tree cut down at least twenty years prior to the writing of the text.[[42]](#footnote-42) The purpose of ʾAbgar’s visit to Socotra, assuming he was not accidentally shipwrecked, may have been trade-related – given that this island was a well-known entrepôt in Antiquity (at least from the last few centuries of the first millennium BCE to the early-mid first millennium CE).[[43]](#footnote-43)

It is worth noting that none of the three inscriptions just discussed explicitly connect the Palmyrenes mentioned with trade; as we have seen, it is largely inferred that they were directly or indirectly concerned with such activities. It is also not definitively clear whether these inscriptions attest to Palmyrenes arriving in southern Arabia or Socotra via the Egyptian-Red Sea route or whether they had originally set out from the Persian Gulf (or in the case of southern Arabia via overland routes). Given the limitations of the evidence, most scholars have quite rightly avoided asserting one or the other view as unquestionably correct, though one interpretation might be favoured.[[44]](#footnote-44)

Both routes are perfectly plausible means by which Palmyrenes might have reached the inland sites of Shabwa and Al Uqla. The author of the *Periplus* notes that the port of Kane (very likely Qana’/Qāni, a few kilometres away from modern Bir ʿAlī) was connected to the inland metropolis of Saubatha (Shabwa).[[45]](#footnote-45) So there is certainly no specific reason that the Palmyrenes mentioned in the inscription had to come overland from the north (although this is also a possibility, see below). Indeed the port of Qanaʾ shows clear trade links with Mesopotamia, India and the Mediterranean world from the first century BCE to the seventh century CE. It is worth noting that the relative quantity of Mediterranean material at the site is greatest in the early period (first century BCE to first century CE), while the proportion of Mesopotamian and Indian material becomes more significant in the middle period (second to fifth century CE), the site's heyday, and also the timeframe within which the inscriptions were set up.[[46]](#footnote-46) But this fact on its own does not necessarily tip the scales in favour of a Mesopotamian-Persian Gulf connection. Of additional relevance, is what appears to be a sherd from a Koan amphora (c. first-third century CE) with the word *Achaia* (Ἀχαία) that has been transliterated in Palmyrene script as ʼ*Ky*.[[47]](#footnote-47) At what stage the text was written on the vessel and how it finally ended up in Qana’, however, remains insoluble.

In the case of the inscription from Al Uqla, the two ‘Chaldeans’ mentioned in the inscription could allude to individuals originating from central Mesopotamia, though some suggest that in this context Mesene (southern Mesopotamia) might make more sense. This has led Seland to propose that, by implication, the Palmyrenes mentioned in the inscription may also have come via the Persian Gulf (either by rounding the south-eastern coast of Arabia or by two stages: the Persian Gulf to northwest India and then from their to southern Arabia).[[48]](#footnote-48) He notes that the author of the *Periplus* alludes to links between the Persian Gulf and northwest India, as well as northwest India and southern Arabia.[[49]](#footnote-49)

It may be the case that the Palmyrenes mentioned in the Shabwa and Al Uqla inscriptions did not reach southern Arabia by sea at all. A recently discovered inscription from Jabal Riyām (located in what was the territory of the Sabaeans) and dating to the third century CE (sometime between 223-300 CE) mentions an envoy who travelled overland through various tribes in western, central and northern Arabia, reaching as far north as Tadmor (Palmyra) and Tanūkh (Euphrates Valley).[[50]](#footnote-50) It is not beyond the realms of possibility that the (probable) envoys mentioned in the Al Uqla and Shabwa inscriptions (of which the Aziz mentioned in both, could be the same individual) came via an overland route, although this can only be speculation.

Coming now to the inscription from the Hoq Cave on Socotra, it has been noted that the purpose of ʾAbgar’s voyage (if not accidental shipwreck) to the island remains unknown. Whether he came via the Egyptian-Red Sea or Mesopotamian-Persian Gulf trade networks is also an open question. The author of the *Periplus* indicates that Dioscorides (Socotra) had trade links with the southern Arabian coast, northwest India (principally Barygaza), and with the ports of Limyrike (south-western coast of India).[[51]](#footnote-51) Links with western and north-western India are certainly attested by 192 Brahmi epigraphs (and one Kharosthi epigraph) from the Hoq Cave, which date mainly between the second to fourth centuries CE. Strauch has noted that the styles of writings seem to mostly point to people of a Gujarati or Western Kshatrapa origin.[[52]](#footnote-52)

Those arguing for a Persian Gulf connection might note that the southwest monsoon (broadly May/June to late-August/early September) caused navigational problems around Socotra due to the heavy winds and currents, making it an unattractive destination for those from the Red Sea heading eastwards.[[53]](#footnote-53) However, it should be noted that the mountainous nature of the northern coast means that certain areas can be quite sheltered from the southwest monsoon winds.[[54]](#footnote-54) Indeed, it would be a mistake to rule out the possibilty that ʾAbgar arrived via the Egyptian-Red Sea route. As can be inferred from the *Periplus*, it is possible that ʾAbgar could have set out from one of the southern Arabian ports (having arrived there via the Red Sea) in the winter months. Moreover, his arrival on Socotra (accidentally or intentionally) could connect to a return journey from southwest India to the Red Sea (as noted, the author of the *Periplus* refers to trade links between Limyrike and the island).[[55]](#footnote-55) I note both possibilities, not to argue that either was necessarily the case, only that they cannot be ruled out. Indeed, a few Greek authors (such as the author of the *Periplus* and Cosmas), refer to Greek-speaking peoples coming from Egypt (temporarily) residing on Socotra.[[56]](#footnote-56) This Greek connection to the island seems to stretch from the Hellenistic down to the Late Antique period, meaning we should be cautious about ruling out arrival on the island via the Egyptian-Red Sea route.[[57]](#footnote-57)

The notion that the Abgar inscription might allude to regular links between Palmyrene merchants setting out from Palmyra, via Mesopotamia, the Persian Gulf, northwest India and then arriving at Socotra also has its problems. As Seland has noted in his reconstruction of the most likely schedules followed by Palmyrene merchants setting out for northwest India, they probably departed Palmyra around July or August, heading for the central Mesopotamian bank of the Euphrates, and from there used rafts to reach the mouth of the river, then setting out around September would sail via the Persian Gulf, Gulf of Oman, and northern Arabian Sea to reach northwest India, arriving around late September. They could then make a return journey from between mid-October until March (probably most arrived back in Palmyra during the Spring).[[58]](#footnote-58) Our hypothetical Palmyrene merchant who wishes to go to Socotra, however, will use the northwest monsoon to set off for Socotra. A study of some seventeenth- and eighteenth-century inscriptions from Socotra reveal that it took on average around 50 days for Gujarati merchants to reach the island – probably arriving in December–January. The normal period of the return journey seems to be May–June (early in the Southwest monsoon season).[[59]](#footnote-59) Clearly then our Palmyrene would need to wait in northwest India until mid-October to November, before undertaking the return journey to southern Mesopotamia. Our Palmyrene would only make it back to Palmyra after the conclusion of two trading seasons. In economic terms this seems redundant, especially since ports like Barygaza had strong trade links with many regions in India, Central Asia, and elsewhere, allowing for a rich variety of goods to be acquired.[[60]](#footnote-60) There is no obvious economic imperative for a Palmyra – northwest India – Socotra – northwest India – Palmyra circuit undertaken by an individual merchant.

Ultimately, whether these inscriptions allude to the Red Sea, the Persian Gulf or overland routes, it is reasonable to accept that some Palmyrene merchants did travel via the Red Sea to reach ports in East Africa, and probably also the Gulf of Aden, if not also the (south)western coast of India. This is made emphatically clear from the Koptos inscription which mentions a community of Red Sea shipowners from Hadriane Palmyra (...Ἁδριανῶν Παλμυρηνῶν ναυκλήρων Ἐρυθραικῶν...).[[61]](#footnote-61)

**3. Palmyrene participation in the** **Egyptian-Red Sea trade: explanatory factors**

Patchy though the evidence is, the Koptos and Tentyris inscriptions, in particular, reveal the existence of a Palmyrene merchant and shipping community in Egypt that took part in the Red Sea branch of the Indian Ocean trade. On the basis of the dating of these two inscriptions, this activity is most apparent from the mid-second century into the third century CE. The inscriptions from the Hoq Cave, Shabwa and Al Uqla also appear to (in)directly attest to wider Palmyrene activity in the western Indian Ocean in the third century CE; although whether this evidence can be directly tied to the Egyptian-Red Sea route remains open for debate. Evidence for first to early second century CE Palmyrene commercial activity in Egypt appears rather weak. This consists of one mid-first century ostrakon from Berenike which records the name Hierabole, of likely Palmyrene origin (most of the other Semitic names mentioned in the collection of ostraka cannot be tied more precisely to a Palmyrene background), as well as four ostraka which may contain Palmyrene cursive script. Besides this, we also have a Palmyrene amphora (late first to early second century CE) discovered at Myos Hormos which has cursive script on it. None of this evidence, however, provides the kind of explicit attestation of commercial activity that is given by the Koptos inscription.

The available evidence would seem to suggest that a sufficiently sizable Palmyrene community had become established in Egypt around the mid-late second century – sizable enough to have a communal association in Koptos with property, which was almost certainly used for celebrating specific cultic rituals and festivals connected to their ancestral gods; this association probably also helped arbitrate business/community disputes. This begs the question: what factors may have contributed to the creation of this Palmyrene merchant diaspora?

*Roman-Parthian/Sassanian conflict?*

One theory that has been advocated is the notion that conflict between the Roman and Parthian (and later Sasanian) empires, made life more difficult for Palmyrenes wishing to use the traditional Mesopotamian-Persian Gulf route.[[62]](#footnote-62) We know of at least half-a-dozen major conflicts between the 160s to early 240s CE. This includes a “Parthian War of Lucius Veres” that involved conflict over Armenia and Upper Mesopotamia (161–166 CE); an invasion of Mesopotamia by Septimius Severus that included the sack of Ctesiphon (197 CE) and the establishment of a Roman province in northern Mesopotamia (195–197/98 CE); a “Parthian War of Caracalla”, with military operations largely in northern Mesopotamia, including the battle of Nisibis, followed by a stalemate and the payment of reparations by the Romans (216–218 CE); and clashes under Alexander Severus and Gordian III.[[63]](#footnote-63)

On the face of it, this seems to parallel, in a quite striking way, the appearance of a Palmyrene merchant community in Egypt from the mid-late second to third century CE, and also the 30 odd inscriptions from Palmyra which attest to activity in Mesopotamia, the Persian Gulf, and northwest India. Most of these date between 130–161 CE (at least 16, but possibly another four that roughly date to this period).[[64]](#footnote-64) Whereas there is a dearth for the following three decades, followed by three inscriptions dating to the Severan era (Spasinou Charax is no longer mentioned from this period, although a journey to Vologesias is recorded in the early third century CE), and then an absence of inscriptions from the period 211 to 247 CE.[[65]](#footnote-65) As Sartre rightly notes, it would be a mistake to assume that the absence of inscriptions for certain periods meant cessation in trade, but it is not hard to believe that sporadic conflicts and their aftermaths made these ventures riskier – loan rates as high as 30 or 32 percent seems to attest to this.[[66]](#footnote-66)

It does not have to be assumed that the Parthian (or later Sassanian) state tried to directly hinder Palmyrene commercial activity in times of open conflict. But it is possible that these conflicts impinged in some way on the various nomadic groups in the northern Arabian Peninsula, Syrian Desert and the region west of the Euphrates (the area which is referred to as Tanūkh in the aforementioned Sabaean inscription). This is only speculation since our rather poor literary sources do not relay much information about these groups in the third century CE. However, we do know from later historical periods that some of these groups (such as the Ghassanids and Lakhmids) were backed by the Byzantines and Sassanians, who often used them as proxies in their conflicts.[[67]](#footnote-67) It has been convincingly argued that the urban elite and the merchants of Palmyra had close relationships with some of the nomadic peoples of the steppe, which would allow them to mobilise large numbers of animals for journeys between their city and the Euphrates (some of the nomads acting as guards, guides and animal handlers).[[68]](#footnote-68) However, such dynamics are complex, and it appears that in some instances certain nomadic groups or sub-groups acted in a predatory manner towards these trade caravans (as inscriptional evidence attests).[[69]](#footnote-69) Again it can only be conjecture, but it is worth at least pondering whether shifting dynamics brought about by wider regional conflicts impacted on Palmyrene caravan ventures.

The notion that the chronological pattern suggested by the surviving inscriptions can be used to suggest levels of Palmyrene commercial prosperity has, however, been challenged. It has been proposed that the inscriptions may actually attest to difficulties that were overcome with the help of benefactors (which may be better understood as an act of support by warrior elites, rather than a form of traditional Graeco-Roman civic euergetism), and that caravan trips that ended in disaster or were uneventful would simply not have been recorded on stone inscriptions.[[70]](#footnote-70) Such cautious treatment of the inscriptional evidence is certainly warranted, and as noted above, simply assuming that the absence of inscriptions meant a cessation in trade is unwise. That said, it is equally worth not discounting the potential impact that Roman-Parthian/Sassanian conflict may have had on the wider region.

*Palmyrene soldiers in the Eastern Desert*

Another factor which may have influenced the establishment of a Palmyrene merchant community in Egypt is the concurrent presence of Palmyrene soldiers stationed in the Eastern Desert region.[[71]](#footnote-71) The evidence is primarily epigraphic and includes a dedication to the Emperor Caracalla set up in Berenike by an auxiliary soldier Marcus Aurelius Mokimos (September 8, 215 CE). This port site has also revealed a dedication to the Palmyrene god Yarḥibōl paralleling one found at Koptos, both probably dating around the late second to early third centuries CE (c. 180–212 CE) – the latter alluding to a unit of Palmyrene archers (*Hadriani Palmyreni Antoniniani sagittarii*).[[72]](#footnote-72) In the case of the Berenike dedication, the bilingual Greek and Palmyrene inscription seems to originally have formed the base of a statue of the god Yarḥibōl/Hierobol. The text also informs us that it was set up when Aemilius Celer was Roman governor of the region and commander of the *Ala Herculiana*, and when Valerius Germanon was *chiliarch* (military tribute/commander of a thousand men). The individual who made the statue is also named as Berichei (very likely a Palmyrene name).[[73]](#footnote-73)

Besides these inscriptions, the fortlet of Didymoi also reveals the presence of Palmyrene military units in the region. This fortlet was one in a sequence along the main Koptos-Berenike route (ὁδὸς Βερενίκης). The evidence consists of an inscription and a few ostraka suggesting that soldiers were either stationed at this site or at least stopped briefly during a crossing between Koptos and Berenike.[[74]](#footnote-74) This partially preserved sandstone inscription seems to have been originally oval in form and was found in a small chapel area inside the fortlet. The text is in Greek and refers to a few individuals who are Palmyrene soldiers– specifically Asth..., and (B)arlaas (possibly son of [Bara]thēs), and by implication also Asklas and Maximus. The text dates roughly between 176/177 and 219 CE.[[75]](#footnote-75) Another piece of evidence consists of a small, fragmentary text which is a list of soldiers belonging to a Palmyrene unit ([Παλ]μυρηνοί) – dating approximately to the end of the second, beginning of the third century CE. Cuvigny notes that only two of the names appear to have a Semitic origin (five appear to be Egyptian).[[76]](#footnote-76) An ostrakon found at Didymoi (third century CE), refers to a Bassos, a Palmyrene horseman, who went up to Aphrodite (Wadi Menih el-Heir, another fortlet on the Koptos-Berenike route) with Classicus.[[77]](#footnote-77) In addition to this, two containers found at the fort have *tituli* in Palmyrene cursive script (dating around the early to mid-third century CE) – though whether these should be connected to soldiers is unknown.[[78]](#footnote-78)

These inscriptions and ostraka show that Palmyrene military units were stationed at Koptos and Berenike (as well as possibly at some of the Eastern Desert fortlets like Didymoi) around the late second and early third century CE.[[79]](#footnote-79) The contemporaneous appearance of a Palmyrene merchant community in the same period makes it tempting to suggest that individuals or groups with familial or friendship connections to these soldiers decided to accompany/followed them to Egypt, though, admittedly, this is speculation. It has even been suggested that some of these soldiers actually invested (as part of larger consortia) in Red Sea commercial ventures.[[80]](#footnote-80) One theory holds that the soldier Marcus Aurelius Mokimos was able to afford his dedicatory inscription as a result of investment in the trade.[[81]](#footnote-81) Soldiers erecting inscriptions and statues is not an unusual phenomenon in the wider Roman Empire, so it need not be assumed that Mokimos had to pay for his dedication from the proceeds of trade. That said, the premise that some Palmyrene soldiers directly or indirectly profited from their compatriot's involvement in the trade is perfectly plausible.

Just as support and security were provided by (para-)military units in the Syrian Desert, it is quite likely that Palmyrene merchants in Egypt drew upon their shared linguistic and cultural heritage to obtain the support of Palmyrene soldiers stationed in the Eastern Desert region. Indeed, as was the case in the Syrian Desert where nomads could sometimes pose a threat to commercial caravans, so too was the Eastern Desert a potentially dangerous region, especially in the late first and second centuries CE.[[82]](#footnote-82) It has actually been proposed, that one of the reasons that Palmyrene soldiers were stationed at Koptos and Berenike at this time was that they were experts at desert warfare.[[83]](#footnote-83) Ultimately, it cannot be proved beyond doubt that the establishment of Palmyrene military units at Koptos and Berenike encouraged a number of Palmyrenes to relocate their commercial activity to the Egyptian-Red Sea route, but it is certainly a far from implausible theory.

*The comparative profitability of the Egyptian-Red Sea route?*

The third major theory to be considered is the notion that the Egyptian-Red Sea branch of the Indian Ocean trade offered comparatively greater profit margins than the Mesopotamian-Persian Gulf route. Gawlikowski has argued that many of the goods that came via Palmyra were mostly sold in the markets of Emesa, Damascus and perhaps Apamea. He argues that a much greater bulk of goods entered into the Mediterranean world via Alexandria in Egypt and Antioch in Syria (i.e. the major centres of northern Syria were being supplied via Zeugma).[[84]](#footnote-84) This view is, in part, based on the limited carrying capacity of the camels that would return to Palmyra in the Spring.[[85]](#footnote-85) Seland has estimated that the overland journey between Palmyra and the northern Persian Gulf equates to about 1,400 kilometres.[[86]](#footnote-86) By contrast, the journey between the Red Sea ports and Koptos, through the Eastern Desert, is shorter. On the route from Berenike to Koptos, the main sources (Pliny’s *Natural History*, the Antonine Itineraryand the Peutinger Table) give a distance of 257–258 Roman miles (roughly 380 kilometres) – a journey which Pliny reports would take 12 days.[[87]](#footnote-87) The six- to seven-day journey (the estimate given by Strabo) from Myos Hormos to Koptos would be around 170 kilometres.[[88]](#footnote-88) The river-borne journey from Koptos to Alexandria on the Nile would in actuality be about 850 kilometres (as the crow flies, the distance between Alexandria and Koptos [Qift] is in fact about 640 kilometres), the various bends in the Nile elongating the journey.[[89]](#footnote-89) Leaving the riverine transport along the Nile aside, the relative overland journey time is almost four to one when comparing the route to Palmyra with the crossing from Berenike to Koptos, and around eight to one for the Myos Hormos to Koptos comparison.[[90]](#footnote-90)

Seland accepts Gawlikowski basic point that profits for the Red Sea route may have been higher than the traditional route to Palmyra, but unlike Gawlikowski he argues that it was still sufficiently profitable to export goods acquired via Palmyra to Rome. He also notes that this route allowed goods to be brought to the Mediterranean markets in the Spring, at the start of the sailing season, whereas many eastern goods would arrive in Alexandria in the Summer period.[[91]](#footnote-91) While our price data for the cost of various goods in the markets of the Indian Ocean and what they might be sold for in the Roman world is very patchy, Seland’s premise appears reasonable. Pliny mentions that goods from India could be acquired and then sold back in the Roman Empire for one-hundred times their original cost (the specific context of this statement is a discussion of the Egyptian-Red Sea route to India).[[92]](#footnote-92) Similarly, the *Hou Hanshu* claims that there was a ten to one profit ratio for trade links between Da Qin (Roman Empire), Parthia and northwest India.[[93]](#footnote-93) Both statements are rather generalised, the profit margins will likely have fluctuated depending upon the type of goods being purchased. There is also probably a degree of hyperbolic exaggeration in these claims, although the basic assertions need not be doubted. Thus it is not hard to imagine that items like pearls, semiprecious stones and silks, all (in)directly attested at Palmyra, could have been profitably brought to the major markets of the Eastern Mediterranean for consumption at these sites, and for redistribution further west.

It is also worth bearing in mind that other factors, beyond transport times and costs, will have impacted on the prices for different commodities. Variations in levels of production or availability of certain commodities in East Africa, southern Arabia, or India (perhaps due to climatic conditions or socio-political turmoil), high losses at sea, piracy and banditry, and the level of stockpiles in the warehouses of cities like Rome, will all have impinged on the market value of commodities in ways we are not in a position to fully appreciate.[[94]](#footnote-94) The main point is that both the Egyptian-Red Sea and the Mesopotamian-Persian Gulf (via Palmyra, Zeugma or other sites) routes were major conduits for the import of eastern commodities. That the profit margins may have been higher for the Egyptian-Red Sea route is a distinct possibility. That this may have encouraged some Palmyrenes to participate in the Egyptian-Red Sea route is also a possibility, though our evidence does not allow us to assert this definitively. It could also be, as Schörle suggests, that once Palmyrene trade networks in the Mesopotamian-Persian Gulf region had become well-established, it was became easier to take the skills and finance that had been developed, and laterally expand (horizontal integration) into the Egyptian-Red Sea sphere.[[95]](#footnote-95)

**4. Conclusion**

It is not the intention of this paper to assert that any one of the factors just discussed can single-handedly explain the presence of Palmyrene merchants in Egypt and their choice to participate in the Egyptian-Red Sea branch of the Indian Ocean trade. Indeed, none of these factors is mutually exclusive, nor do they offer an exhaustive explanation of potential motives. The personal circumstances and motivations that influenced individual Palmyrenes are beyond recovery – it is only possible to speculatively consider, at an abstract level, the types of issues that may have affected people. The purpose of this paper has instead been to consider the nature of the available evidence (limited as it is), as well as considering the extent to which this evidence allows us to interpret any patterns or correlations that might be informative in assessing the various theories proposed.

From the review just undertaken, a few things stand out. The most explicit evidence we have for Palmyrene involvement in the Egyptian-Red Sea branch of the Indian Ocean trade connects to the mid-second to early third century CE. This seems to correlate quite closely with evidence for the presence of Palmyrene soldiers based at Koptos, Berenike, and maybe also in the fortlets of the Eastern Desert. We do not know what kind of familial or friendship connections may have existed between these merchants, shipowners and soldiers, and whether any mutually beneficial arrangements were established. But that such connections could have existed seems highly plausible. It is quite easy to imagine that some merchants accompanied or followed in the footsteps of Palmyrene soldiers who were brought to Egypt.

There also appears to be a correlation between the comparative dearth of late second and early-mid third century inscriptions from Palmyra which attest to participation in the traditional Mesopotamian-Persian Gulf route, the various incidents of Roman-Parthian/Sassanian conflict between the 160s to early 240s CE, and the appearance of a Palmyrene community in Egypt at this time. The suggestion that these incidents of conflict may have encouraged some merchants to participate in the Egyptian-Red Sea trade route is, however, controversial. It has also been quite reasonably pointed out the inscriptional evidence should not be used as an absolute indicator of fluctuating levels of Palmyrene commercial activity along the Mesopotamian-Persian Gulf route. That said, it is worth at least considering the possibility that Roman-Parthian/Sassanian conflict may have caused problems in the wider region, including in relation to the various nomadic tribes of the Syrian Desert and Arabian Peninsula, that created (not insurmountable) challenges for Palmyrene merchant caravans.

Finally, it has been noted that the profit margins may have been higher for the Egyptian-Red Sea route (although both routes were clearly profitable). Whether this encouraged some Palmyrenes to shift their activities to Egypt remains open to question, though it is a possibility. Ultimately the limited nature of our evidence leaves us to engage in well-founded conjecture.

1. See for example, {Rostovtzeff, 1932 #602;Millar, 1998 #8714;Gawlikowski, 2016 #7717@25}. {Seland, 2016 #7887@3}, notes that the designation of Palmyra as a caravan city remains largely unchallenged. [↑](#footnote-ref-1)
2. For a description of the Syrian Desert region see {Seland, 2015 #8696@46}. He notes that the characterisation of the region as a desert is somewhat misleading, since it is more of a dry-steppe with a fair amount of winter rains that could sustain some vegetation. [↑](#footnote-ref-2)
3. For discussion of the material and artistic evidence attesting to the range of imported products see {Seyrig, 1950 #7276@2;Seland, 2013 #8695@66. 71;Żuchowska, 2013 #7929@383–384; Gawlikowski, 2016 #7717@22. 35–36}. {Seland, 2013 #8695@71}, also suggests that Palmyrene merchants who sailed to northwest India likely brought back the types of products that the author of the *Periplus* mentions could be acquired in that region. [↑](#footnote-ref-3)
4. These connections to sites in central and southern Mesopotamia seem to primarily relate to the Persian Gulf branch of the Indian Ocean trade. {Millar, 1993 #93@330}, argues that there is little evidence for involvement with the overland “Silk Road(s)” trade (see also {Gawlikowski, 2016 #7717@23. 29;Andrade, 2018 #8633@200–201}); although on this possibility see {Seland, 2013 #8695@69–70}. For a discussion of Palmyrene communities at sites in Babylonia, southern Mesopotamia, and also further into the Persian Gulf (Bahrain) see, {Gawlikowski, 1996 #8669@142–143;Sartre, 2005 #547@269;Seland, 2013 #8695@69–70;Żuchowska, 2013 #7929@381–382;Schörle, 2017 #8069@149;Brokaert, 2017 #8061@7}. [↑](#footnote-ref-4)
5. *PAT* 1403; *PAT* 2763. For these inscriptions see {Schwartz, 1960 #8691@31;Seland, 2013 #8695@70;Sommer, 2015 #7723@173–174;Andrade, 2018 #8633@4–5}. For a boat on a funerary relief of Iulius Aurelius Marona (no. 150) dated to 236 CE see {Sartre, 2005 #547@269;Sidebotham, 2011 #8700@203;Seland, 2013 #8695@70;Schörle, 2017 #8069@150}. {Delplace, 2003 #8663@158–159. 166–167} has argued that the reconstructed word Choumana, which appears in the form ([Χ]ου[μ]ανων) on the Greek version of a bilingual inscription of Marcus Ulpius Yarḥai (*inv*. X, 87 (Palmyrene Aramaic), 88 (Greek) = *PAT* 0306, should be understood as an allusion to the land of the Kushans, although this interpretation is not universally shared: for example, {Seland, 2016 #7887@39 n. 251}, prefers its identification with a site in Mesopotamia. [↑](#footnote-ref-5)
6. For an overview of the evidence see Table 1. See Map 1 for the sites mentioned. [↑](#footnote-ref-6)
7. *I. Portes* 103 = *AE* 1912, 55 no. 171; {Young, 2001 #591@80–81;Schörle, 2017 #8069@151–152}. [↑](#footnote-ref-7)
8. *PAT* 0305 = *IGLS* 17.1.245; see also *PAT* 0259. {Sidebotham, 1986 #4018@95–96;Andrade, 2013 #7629@177}. [↑](#footnote-ref-8)
9. See {Sidebotham, 1986 #4018@95;Smith II, 2013 #5343@161;Seland, 2016 #7887@41–42;Grout, 2016 #8674@259–260;Evers, 2017 #8666@129}. For a possible comparison with these kinds of communal activities among the Palmyrene community at Vologesias, see an inscription dating to 108 CE – *Inv*. 9.15 = *CIS* 2.3917; {Terpstra, 2016 #7720@43}. The associated find of 12 stelai had in the past been assumed to connect with this Palmyrene community association, because it was supposed that the figures were in typical Palmyrene frontal pose and (alongside frescoes on the walls and two altars) is usually cited in support of this view. For example, {Schwartz, 1960 #8691@30}, interpreted some of the stelai as representing Palmyrene archers (see also {Smith II, 2013 #5343@161–162}. However, the interpretation of this art as Palmyrene has been disputed. For example, {Young, 2001 #591@81} notes that a number of scholars have argued that the stelai are all of Egyptian workmanship. [↑](#footnote-ref-9)
10. *PAT* 0256 = *I. Portes* 39 = *CIS* 2.3910. [↑](#footnote-ref-10)
11. For discussion of the inscription see {Schörle, 2017 #8069@152;Seland, 2016 #7887@42}. [↑](#footnote-ref-11)
12. For dating see {Sidebotham, 1986 #4018@96;Young, 2001 #591@81}. See {Smith II, 2013 #5343@162}, who notes that ‘[s]ince most Palmyrene inscriptions that bear the same imperial nomina date to the early third century A.D., we may assume that this ones does as well.’ [↑](#footnote-ref-12)
13. {Seland, 2016 #7887@42–43}. [↑](#footnote-ref-13)
14. On Abu Shaʾar and this route see {Sidebotham, 1991 #8705@571–622;Sidebotham, 2008 #8703@53–60}. [↑](#footnote-ref-14)
15. That is to say, goods imported into Egypt via the Red Sea ports would be taken to Alexandria for taxation and then potential redistribution elsewhere in Egypt or in the wider Mediterranean world. Likewise, goods brought to Palmyra (which were not consumed in the city) would be transported to other sites in the eastern Mediterranean. There is no reason to think that goods already imported (and taxed at 25%) in Egypt or Syria, would then be transported via a lengthy overland, sea, and overland (again) route between Tentyris to Palmyra given the added costs involved – this would be a journey well-exceeding 1,000 kilometres. Such a journey would also entail exiting and re-entering Roman external customs posts. [↑](#footnote-ref-15)
16. {Evers, 2017 #8666@130}. For a critique of the notion that ‘such an extraordinarily circuitous route was ever in use’, see {Young, 2001 #591@81}. [↑](#footnote-ref-16)
17. {Żuchowska, 2013 #7929@384}, suggests that on the traditional Mesopotamian-Persian Gulf route, Palmyrene merchants may have exported purple murex dyes, and raw and worked glass available from the Eastern Mediterranean. It seems likely, however, that such products could more cheaply be brought to Egypt via Alexandria. [↑](#footnote-ref-17)
18. {Seland, 2016 #7887@57;Schörle, 2017 #8069@152}. [↑](#footnote-ref-18)
19. On the issue of the Nile’s currents and summer wind patterns see {Cooper, 2014 #8650@125–142}. He notes that the intensity and duration of the northerly winds could vary and that consequently sometimes crews had to resort to using oars, punts or tow ropes to fight against the currents. With regard to Denderah, Cooper, ibid., 130, observes that the ‘mean wind speeds maintain a much smaller positive differential above the Nile’s mean current speed throughout the year.’ Essentially making sailing conditions much more difficult. [↑](#footnote-ref-19)
20. {Schörle, 2017 #8069@152}. [↑](#footnote-ref-20)
21. On the modest nature of the fragmentary tablet from Tentyris see {Seland, 2016 #7887@42}. [↑](#footnote-ref-21)
22. {Sidebotham, 2007 #8699@164}. [↑](#footnote-ref-22)
23. On this structure and finds associated with it see {Sidebotham, 2011 #8700@64–65;Sidebotham, 2014 #8701@611–613}. It should be noted that this site was not exclusively connected to the Palmyrene deity Yarḥibōl/Hierobol. Evidence relating to other divine figures like Harpokrates, and objects that may relate to practices connected with Dionysos or the mysteries of Isis, have been found. [↑](#footnote-ref-23)
24. *O. Ber.* 97; {Bagnall, 2000 #8635@27. 30. 65}. The editors suggest that the possible reference to denarii (δηνάρια) in the text may indicate a military or imperial connection. [↑](#footnote-ref-24)
25. For Berenike ostraka with Semitic names see *O. Ber*. 137 – 140a?. 183. 189?. 198?. – see {Bagnall, 2005 #8636}. A few Semitic names (Bargates, Dosarion, Mambougaios, Thaimos?, and Zaneos) appear in the ostraka from the 2009–2013 seasons, although in the case of Bargates, Dosarion and Zaneos it is thought that these are probably Nabataean, while it is uncertain if Thaimos is actually a Semitic name – see {Ast, 2016 #8634@12}. In the case of the 1996–1998 seasons, besides Hierabole, the possibly Semitic names Rhobaos and Chennas appear, but in the case of the latter two any obvious Palmyrene connection is not apparent, see {Bagnall, 2000 #8635@27}. [↑](#footnote-ref-25)
26. *O. Ber.* 254 – 257; {Bagnall, 2005 #8636@104–105}. See also {Sidebotham, 2012 #8706@38}, for an ambiguous wooden tag piece with Greek text on one side and some Semitic language on the other. [↑](#footnote-ref-26)
27. *O. Ber.* 256. [↑](#footnote-ref-27)
28. {Tomber, 2011 #8713@7;Evers, 2017 #8666@129}. [↑](#footnote-ref-28)
29. {Tomber, 2011 #8713@7–8}. [↑](#footnote-ref-29)
30. {Schörle, 2017 #8069@152}, argues that the reference to ‘the merchants from Hadriane Palmyra’ in the Koptos inscription implies a direct link to the city. While this is a possibility, it cannot be assumed beyond doubt that this implies financial or business links to individuals in Palmyra, as opposed to a desire to express a cultural affinity with their homeland on the part of these merchants – which need not actually attest to any specific business connections. [↑](#footnote-ref-30)
31. SHA *Aurel*.32; SHA *Firmus* 2 – 6; {Seland, 2016 #7887@43;Smith II, 2013 #5343@162. 173}, notes that it is unclear if the Palmyrene merchants of Egypt were truly independent or bound by the economic interests of powerful patrons living in Palmyra. [↑](#footnote-ref-31)
32. For a discussion of this evidence see {Cobb, 2018 #8648}. [↑](#footnote-ref-32)
33. See also {Grout, 2016 #8674@261–262}, who suggests that the Egyptian community of Palmyrene merchants was established ‘*on the back*’ of successful Mesopotamian-Persian Gulf trade. [↑](#footnote-ref-33)
34. See Map 2. [↑](#footnote-ref-34)
35. {Schwartz, 1960 #8691@27–28} notes the extremely speculative claim that the *templum Augusti*,which is featured on the Peutinger Table (a medieval map based on an earlier Late Antique version, which probably had its final revision around 425 CE) next to Muziris, was built by the Palmyrenes in parallel to the temple constructed at Vologesias in Mesopotamia. Specifically it is stated: ‘[c]ertains trafiquants s'établirent aux Indes même et la Table de Peutinger mentionne à Muzyris un temple d’Auguste (au iiie siècle), que des auteurs modernes attribuent à des Palmyréniens, à l'instar de celui qu'ils ont construit à Vologésias (en Mésopotamie).’ Whether the *templum Augusti* which features on this map actually reflects the genuine existence of an imperial cult set up by a diaspora merchant community at Muziris is heavily debated. Beyond the very weak parallel drawn to Vologesias, there is, however, no reason to assume that such a cult space/temple, if it did exist, was built primarily or exclusively by Palmyrene traders. On the Peutinger Table see {Talbert, 2010 #8712;Rathmann, 2011/12 #8719;Rathmann, 2016 #8682;Rathmann, 2017 #8718}. On the question of the how the *templum Augusti* representation should be understood, see {Ray, 1994 #8683@66;Ball, 2000 #276@131;Parker, 2008 #5007@246;Fauconnier, 2012 #8667@91}. [↑](#footnote-ref-35)
36. *RES* 4691; {Robin, 2012 #8686@488–489}. [↑](#footnote-ref-36)
37. *RES* 4909; {Bron, 1986 #8641@95–98}. [↑](#footnote-ref-37)
38. {Robin, 2012 #8686@491;Seland, 2016 #7887@79–81}. [↑](#footnote-ref-38)
39. This wooden tablet measures 50 cm by 20 cm, has a single handle with a drilled hanging hole, and contains a text 11 lines long that covers about half the tablet. {Gorea, 2012 #8670@448}, suggest the text was probably written near the Hoq cave because of the use of the adverb ‘here’ (paralleling other usages). [↑](#footnote-ref-39)
40. Ibid., 451. Of potential relevance here is a Greek inscription also found in the Hoq Cave, where an individual rendered his name in Greek as Aukar (ΑΥΚΑΡ), which could be a rendering for the Palmyrene-Aramaic ʾAbgar. On this see {Strauch, 2012b #8715@205–206}. [↑](#footnote-ref-40)
41. {Gorea, 2012 #8670@452–453}. Gorea notes that *tummûz* was a more common term for the month and would have been more widely recognisable than the regional Palmyrene variant *qnyn*. [↑](#footnote-ref-41)
42. {Dridi, 2012 #8665@461–462}. [↑](#footnote-ref-42)
43. For literary references to trade activity at this site extending from the Ptolemaic to Late Antique period see, Agatharchides5,105a + b = (a) Photius, Cod. 250,103,459b = (b) Diod. Sic. 3,47,8 f.; *Periplus* 30–31; Cosmas *Christian Topography* 3,178–79. More generally for epigraphic and archaeological evidence see the papers in {Strauch, 2012a #8709}. [↑](#footnote-ref-43)
44. For example, {Seland, 2016 #7887@41} (on the possible Mesopotamian-Persian Gulf connection); {Schiettecatte, 2016 #7919@185} (probably by sea); {Evers, 2017 #8666@130. 136} (Red Sea, Persian Gulf and overland via Arabia, all possibilities); {Andrade, 2018 #8633@186. 199–200} (itinerary may reflect Red Sea route, but with Persian Gulf connections). [↑](#footnote-ref-44)
45. *Periplus* 27; Casson 1989, 161–62. [↑](#footnote-ref-45)
46. See {Sedov, 1996 #8693@16–19;Sedov, 2007 #8716@76–79. 92. 104;Sedov, 2010 #8694@374–375}. For an overview of the site see {Sedov, 2010 #8717}. On the recovery of Mediterranean material from maritime surveys near Qanaʾ see {Davidde, 2017 #8662@591–593}. [↑](#footnote-ref-46)
47. {Sedov, 1992 #8692@119–120;Sedov, 1996 #8693@15}. [↑](#footnote-ref-47)
48. {Seland, 2016 #7887@41}. On connections between the southern Arabian coast and sites on the coast of the Persian Gulf (like ed-Dur) see {Rutten, 2007 #8688}. [↑](#footnote-ref-48)
49. *Periplus* 27 – the port of Kane (likely Qana’) had trade connections with Barygaza (Bharuch, northwest India), Skythia, Omana (possibly located on northern coast of the Gulf of Oman) and the coast of Persis (south-eastern Iran), 36 – connections between Apologos (mentioned as being near Spasinou Charax) and Omana. For a commentary see {Casson, 1989 #4053}; see also {Seland, 2013 #8695}. On the evidence for potential Mesopotamian and East African trade links see {Seland, 2016 #7887@202–204}. [↑](#footnote-ref-49)
50. Inscription Riyām 2006 – 17; {Schiettecatte, 2016 #7919}. See also {Evers, 2017 #8666@136}. [↑](#footnote-ref-50)
51. *Periplus* 30–31. [↑](#footnote-ref-51)
52. See {Strauch, 2012 #8715;Strauch, 2012 #8709;Strauch, 2016 #8711}. [↑](#footnote-ref-52)
53. On these difficulties see {Strauch, 2012 #8709@380–381;Evers, 2017 #8666@136}. On this issue and how the monsoon winds affected Socotra more generally see {Jansen van Rensburg, 2016 #8677@87–107}. Jansen van Rensburg notes that the safest periods to try and land on Socotra are during the inter-monsoon seasons – March to early May being the safest time to arrive on the island, though August to early September can be difficult for small vessels. More generally arriving with the northeast monsoon has historically been perceived as safer than arriving with the southwest monsoon. [↑](#footnote-ref-53)
54. Ibid., 92–93. [↑](#footnote-ref-54)
55. For a pertinent discussion of Philostorgius’ (*Ecclesiastical History*) description of the Christian missionary Theophilus’ journey from Socotra to places like Arabia and Axum see {Andrade, 2018 #8633@76–79}.Of additional interest is the presence in the Hoq Cave of six definite, two probable, and three possible Axumite inscriptions – evidence which appears to further attest to links between the Red Sea and Socotra – see {Robin, 2012 #8685@439}. [↑](#footnote-ref-55)
56. It is noteworthy that Cosmas speaks of the Christians on Socotra speaking Greek, even though they have Persian bishops – see {Andrade, 2018 #8633@135}. On Sassanian commercial activity in the Indian Ocean see {Daryaee, 2003 #8661}. [↑](#footnote-ref-56)
57. Agatharchides5.105a + b = (a) Photius, Cod. 250.103. 459b = (b) Diod. Sic. 47.8 – 9; *Periplus* 30–31; Cosmas *Christian Topography* 3.178 f. For the evidence of Mediterranean contact with Socotra see {Bukharin, 2012 #8646;Bukharin, 2012 #8710}. [↑](#footnote-ref-57)
58. See {Seland, 2016 #7887@45–61;Seland, 2011 #6636}. [↑](#footnote-ref-58)
59. {Shelat, 2012 #8645@431}. [↑](#footnote-ref-59)
60. See *Periplus* 27,31–32. 36,40–49. [↑](#footnote-ref-60)
61. *I. Portes* 103 = *AE* 1912, 55 no. 171. [↑](#footnote-ref-61)
62. For discussion see {Schwartz, 1960 #8691@31}, 31; {Healey, 1996 #8675@35–36;Young, 2001 #591@80–86. 151–154;Cobb, 2015 #8029@368–369. 371;Gawlikowski, 2016 #7717@25–26;Schiettecatte, 2016 #7919@184;Schörle, 2017 #8069@149–150;Andrade, 2018 #8633@198–199}. [↑](#footnote-ref-62)
63. For an outline and references see Table 2. [↑](#footnote-ref-63)
64. It need not be assumed that the concentration of inscriptions in this period can be connected to the notion that Mesene/Characene had become a client-kingdom of the Romans after Trajan’s Parthian campaign (115–117 CE); remaining so up until 151 CE – for this view see {Bowersock, 1989 #723;Bernard, 1990 #8637;Young, 2001 #591@143–148;Żuchowska, 2013 #7929@382;Gawlikowski, 2016 #7717@2–3}. As {Gregoratti, 2011 #8672@219–224}, has noted, after the Romans withdrew (117 CE) the Parthian ruler Vologases III punished his erstwhile vassal, replacing the Hyspaosinid rulers with members of his own Arsacid family. {Gregoratti, 2019 #8673}, also notes that Palmyrene activity in central and southern Mesopotamia in this period, no doubt, suited the economic interests of the kingdom of Mesene and their Parthian overlords. [↑](#footnote-ref-64)
65. Inv. 3.29 = *CIS* 2.3949; {Gorea, 2012 #8671@464–465;Young, 2001 #591@173–175}. [↑](#footnote-ref-65)
66. {Sartre, 2005 #547@270–272. 352–353}. See also {Southern, 2008 #8708@32–33}, who notes that the inscriptions may actually indicate the opposite, with merchants requiring more support as a result of a more aggressive stance by the Parthians. [↑](#footnote-ref-66)
67. For a discussion of this see {Fisher, 2008 #8668@311–334;Bowersock, 2013 #8640@106–119;Liebeschuetz, 2015 #8678@288–322}. [↑](#footnote-ref-67)
68. {Seland, 2015 #8696@49–50}. On enclosed nomadism see {Sommer, 2016 #7716@14–15}. [↑](#footnote-ref-68)
69. *PAT* 1378; {Millar, 1993 #93@333;Sommer, 2005 #2@206–207}. {Smith II, 2013 #5343@28}, actually suggests that Roman-Parthian conflict in the Severan period increased regional insecurity, requiring the Palmyrenes to strengthen their own military capabilities. He notes that threat of banditry persisted during the third century CE, perhaps explaining the increased significance of the role of *strategos*. [↑](#footnote-ref-69)
70. See {Seland, 2016 #788738. 68. 78}. See also {Terpstra, 2016 #7720@43. 46}. On the Palmyrene elite as a military aristocracy see {Sommer, 2015 #7723;Sommer, 2016 #7716}. [↑](#footnote-ref-70)
71. For an outline of the evidence relating to Palmyrene soldiers in the Eastern Desert region see Table 3. On the recruitment of Palmyrene military units from the reigns of Trajan and Hadrian onwards see {Millar, 1993 #93@333;Smith II, 2013 #5343@165–166}. See also {Cobb, 2015 #8029@371;Andrade, 2018 #8633@121–122}. [↑](#footnote-ref-71)
72. {Schwartz, 1960 #8691@31;Speidel, 1984 #8707@221;Alston, 1995 #8630@188;Alston, 2007 #8631@4;Verhoogt, 1998 #8721@193–198;Young, 2001 #591@81;Sidebotham, 2011 #8700@63–66;Sidebotham, 2014 #8701@612–613;Sidebotham, 2017 #8702@63–64;Seland, 2016 #7887@42}. [↑](#footnote-ref-72)
73. {Sidebotham, 2011 #8700@66. 74}. [↑](#footnote-ref-73)
74. Besides the Koptos-Berenike route (ὁδὸς Βερενίκης), another major route running across the Eastern Desert went from Koptos to Myos Hormos (ὁδὸς Μυσορμιτική). For these routes and the fortlet established along them see {Brun, 2006 #8642;Brun, 2006 #8643;Reddé, 2006 #8684 ;Brun, 2011 #8644;Brun, 2011 #8722}. For a summary of Palmyrene evidence relating to Didymoi and to the region see Cuvigny 2012 {Cuvigny, 2012 #8654@14–15}. [↑](#footnote-ref-74)
75. *I. Did*. 5; {Cuvigny, 2012 #8656@47–50}. [↑](#footnote-ref-75)
76. No. 71; {Cuvigny, 2012 #8657@135–136}. [↑](#footnote-ref-76)
77. No. 39; {Cuvigny, 2012 #8660@103–104}. [↑](#footnote-ref-77)
78. Nos. 285–286; {Cuvigny, 2012 #8659@219–220}. No. 285 has the text TYM’; no. 286 has two *tituli*, one in Greek, the other in Palmyrene Aramaic cursive script – in the case of the latter it reads YD’ (first line), ML (second line). [↑](#footnote-ref-78)
79. A dipinto(dated on palaeographic grounds to about 100 CE) found at the temple of Hatshepsut in Thebes, and which refers to a *tesserarius* called Athenodorus (possibly a rendering of the Palmyrene name *Waballat*), who is recorded as serving at Koptos, has led {Speidel, 1984 #8707@222–223}, to speculate that this could allude to the presence of Palmyrene soldiers at Koptos at an earlier stage (this is, in part, on the basis of a reference to *vexillationes*). However, this is not conclusive proof for the presence of Palmyrene units as early as 100 CE. [↑](#footnote-ref-79)
80. {Seland, 2016 #7887@42}. Less explicitly, see also {Evers, 2017 #8666@30}. {Smith II, 2013 #5343@163}, suggests that Palmyrene units abroad may have at least facilitated access to new markets. See also {Grout, 2016 #8674@262}. [↑](#footnote-ref-80)
81. {McLaughlin, 2010 #8680@105–106;Sidebotham, 2011 #8700@253;Sidebotham, 2014 #8701@613}. [↑](#footnote-ref-81)
82. A number of the ostraka from the fortlets of Krokodilô (al-Muwayh), Dios (Abu Qurayya) and Didymoi (Khashm al-Minayh) reveal the potential (and likely increased) threat posed by some of the indigenous groups of the Eastern Desert of Egypt during the second-third centuries CE. On this evidence see {Cuvigny, 2005 #8651;Cuvigny, 2006 #8723;Cuvigny, 2011 #8652;Cuvigny, 2012 #8724;Cuvigny, 2014 #8658}. [↑](#footnote-ref-82)
83. {Speidel, 1984 #8707@221}. [↑](#footnote-ref-83)
84. {Gawlikowski, 2016 #7717@24–25}. *Contra* {Sidebotham, 2011 #8700;Terpstra, 2016 #7720}. [↑](#footnote-ref-84)
85. {Seland, 2015 #8696@49}, notes that even a single shipload of eastern merchandise (perhaps some 100–150 metric tonnes) corresponds to numerous 180 kilogrammes camel loads (around 550–840 camel loads). And that in the seventeenth and eighteenth centuries, the annual Aleppo to Basra and Baghdad caravans could number up to 5000 animals. [↑](#footnote-ref-85)
86. {Seland, 2011 #6636@399–400}. As Seland rightly notes, the rhythms of the Southwest and Northeast monsoon winds means that merchants plying either the Egyptian-Red Sea or the Mesopotamian-Persian Gulf routes would be restricted to one round journey a season. [↑](#footnote-ref-86)
87. See {Sidebotham, 1986 #4018@60–61}. Additionally, {Cuvigny, 2011 #8653@5–7;Bülow-Jacobsen, 2006 #8647@52}. Plin. *HN* 6,26,102. [↑](#footnote-ref-87)
88. Strabo 17,1,45. {Maxfield, 1996 #8679@11–12}, notes that Bedouin accounts and the British Army Camel Corps training manual indicate a ladened camel could comfortably travel 24 to 32 kilometres in around six to eight hours per day. This suggests that the journey times mentioned by both Strabo and Pliny are realistic, as these averages indicate a journey from Koptos to Berenike would take 12–16 days (c. 380 kilometres), and five to seven days for Myos Hormos (c. 170 kilometres). See also {Cooper, 2014 #8650@165}. [↑](#footnote-ref-88)
89. See {Rougé, 1986 #8687@47}. While describing the route taken by merchants setting out from Alexandria, Pliny (*HN* 6,26,102) claims that departing from Juliopolis (just south of Alexandria), the merchants would use the Etesian wind (north wind) to sail down the Nile to Koptos. A journey he claims took 12 days and was 309 Roman miles long (457 kilometres). This calculation would suggest an average travel time of about 38 kilometres per day: a modest speed with a favourable wind (although with opposing currents), but as we have noted the actual distance is longer than Pliny suggests, so a 12 day journey down the Nile would equate to more like 71 kilometres per day. For a more recent discussion of historic journey times on the Nile see {Cooper, 2014 #8650@155–166}. Information from accounts dating between the eleventh to nineteenth centuries suggests that a journey time between Cairo to Qus (ancient Apollonos Mikra), about 10 kilometres SSW of Qift, would be around 14.5 to 22 days (ibid., 157–159) – suggesting that Pliny’s travel time between Juliopolis and Koptos may be at the optimistic end. [↑](#footnote-ref-89)
90. On the comparison of the overland route to Palmyra with the crossing from Berenike to Koptos see {Seland, 2011 #6636}. [↑](#footnote-ref-90)
91. {Seland, 2016 #7887@53}. See also {Seland, 2011 #6636}. [↑](#footnote-ref-91)
92. Plin. *HN* 6,26,101. [↑](#footnote-ref-92)
93. *Hou Hanshu* 88,12. Specifically it is noted that ‘They trade with Anxi (Parthia) and Tianzhu (Northwestern India) by sea. The profit margin is ten to one.’ – Translation from {Hill, 2015 #8676}. [↑](#footnote-ref-93)
94. For a discussion of some of these issues see {Cobb, 2014 #8025}. [↑](#footnote-ref-94)
95. {Schörle, 2017 #8069@152–153}. [↑](#footnote-ref-95)