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MARITIME TRADE I. PRE-ISLAMIC PERIOD

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i. PRE-ISLAMIC PERIOD

In comparison with Mesopotamia, which provides an abundance of cuneiform sources as well as physical evidence in the form of imports bearing on the question of pre-Islamic maritime trade, Persia has far less incontrovertible proof that maritime trade was an important factor in her ancient economy. Whereas the cities of southern Mesopotamia and the Indus Valley had obvious outlets to the Persian Gulf and the Arabian Sea, those of the Persian interior, in most cases, did not. Yet, it is important to stress that Susa lies on the Karḵa (Elamite Ulā, Akk. Ulaya) river which, as the accounts of Alexander's departure from Susa in 324 BCE and of Nearchus' arrival from the Indus attest, was navigable in antiquity (and even in the 19th century) up to the Karun (Kārun), from which point onward access to the Persian Gulf was unproblematic (Potts, 1999a; Bosworth, 1988). The same general conditions apply, therefore, to sites like Chogha Zambil (Čoḡā Zanbil) (albeit using the Diz river in the first instance). Sites in the Shushtar (Šuštar) region had ready access to the head of the Gulf by following the Karun, while further east, in the Behbahān or Rām Hormoz regions, the Marun river provided an outlet. Once we move into the highlands of Fārs, it becomes easier to reach the Persian Gulf at Bushehr (Bušehr, ancient Liyan), by going overland down through a series of passes

which eventually lead to the coast. This approach would have been equally relevant for prehistoric sites in the Marv Dašt plain (e.g. Tell-e Bakun), for Elamite sites (e.g. Tell-e Mālyān, ancient Anshan (Anšān) and for Achaemenid and later sites (e.g. Persepolis, Estakhr (Eṣṭaḵr), and eventually Shiraz). As records from the Islamic period show, routes also linked e.g. Shiraz with Sirāf; the interior of southern Fars (Fārs) with Lenga; Sirjān with present-day Bandar ʿAbbās (a name which it acquired only in the early 17th century CE; before that, it was known as Shahru (Šahru); Jiroft with Hormoz via Mināb, etc. (Aubin, 1969; Yajima and Kamioka 1988), but the relevance of these coast-hinterland routes for the pre-Islamic era is unclear. Nevertheless, a study of archaeological evidence found at sites in land-locked parts of Persia and literary sources confirms that trade with the Persian Gulf region was vigorous enough to effect the import of numerous types of materials.

A number of pre-Sargonic (mid-3rd millennium BCE) commercial texts from Tello (ancient Girsu) in southern Mesopotamia mention barley, flour, livestock, textiles, sandals, and other commodities being sent to Elam (Lambert, 1953, 62-65) without, however, specifying whether the goods traveled by land or sea. In one Telloh text (RTC 21; dated to Urukagina 5), however, a má-Elam or “Elamite ship/ship from Elam” is mentioned (Lambert, 1953, 115; Heimpel, 1987, 71-72). Although a designation of this sort is open to several interpretations: is it a reference to a type of ship called “Elamite” which nevertheless might have been built in Mesopotamia (cf. Brussels sprouts grown and eaten outside of Belgium) or to an actual ship from Elam? The fact that ships from Dilmun, Magan and Meluhha are all attested in cuneiform sources suggests that ships from Elam may well have traveled to cities like Girsu by entering the Persian Gulf and sailing up the Shatt al-Arab (Šaṭṭ al-ʿArab) as well. What such Elamite ships may have looked like we cannot say. Scholars have long appreciated that the maritime regions associated in cuneiform texts with Babylonia, such as Dilmun (eastern Arabia/Bahrain), Magan (Oman peninsula), and Meluhha (Indus Valley), had their own styles of sea craft (e.g. Pinches, 1886-87; cf. Potts, 1995).

An Ur III text from Tello (MVN 10, 149 II.6-9; dated to Shulgi 34) contains a reference to the transport of troops from Anshan (Englund, 1990, pp. 132-3; not sacks containing goods transshipped from a ship arriving from Anshan as suggested by Heimpel, 1987, 33). Another text from Tello records the provisions sent in the second year of Shu-Sin’s reign when his daughter was married to a prince of Anshan. Because the “controller” of the shipment bore

the title “fisherman” (sal-ʾu-ba), it has been suggested that the goods went by ship from Girsu to Anshan via Susa (Sigrist and Butz, 1986, 28; R. K. Englund (personal communication) is doubtful of the translation “fisherman” for the Sumerian term used in this text). Yet another Ur III text from Telloh qualifies six ships with thirty-six seamen making a two-month journey as “sesame ships from Susa” (Sigrist and Butz, 1986, 29), i.e. ships from Susa containing sesame. It must be remembered, however, that Susa and its hinterland at this time were part of the Ur III empire (Steinkeller, 1987, 37); thus, we are not dealing with a case of free trade between Susa and a Mesopotamian city-state. Nevertheless, a mace head from Susa with a dedication to Shulgi from Urniginmu, identified as a “maritime merchant,” makes it clear that specialists in sea trade were indeed resident at Susa in the Ur III period (Amiet, 1986a, 146). This individual’s name, however, strongly suggests he was a Mesopotamian, not an Elamite.

It is generally assumed that most trade between the Indus Valley (ancient Meluhha?) and western neighbors proceeded up the Persian Gulf rather than overland. Although there is no incontrovertible proof that this was indeed the case, the distribution of Indus-type artifacts on the Oman peninsula, on Bahrain and in southern Mesopotamia makes it plausible that a series of maritime stages linked the Indus Valley and the Gulf region. If this is accepted, then the presence of etched carnelian beads, a Harappan-style cubical stone weight, and a Harappan-style cylinder seal at Susa (Amiet, 1986a, Figs. 92-94) may be evidence of maritime trade between Susa and the Indus Valley in the late 3rd millennium BCE. On the other hand, given that similar finds, particularly etched carnelian beads, are attested at landlocked sites including Tepe Hissar (Tappe Heṣār), Shah Tepe (Šāh-Tappe), Kalleh Nisar (Kalla Nisār), Jalalabad (Jalālābād), Marlik (Mārlik) and Tepe Yahya (Tappe Yaḥyā) (Possehl, 1996, 153-54), other mechanisms, including overland traffic by peddlers or caravans, may account for their presence at Susa.

The involvement of Harappan middlemen may have effected the distribution of other commodities in Persia not normally associated with sea borne trade, including tin and lapis-lazuli, from sources in Afghanistan (cf. Pigott et al, 2003, 164-65; Weeks, 2003, p. 186). In each case commodities could have been transported from the Indus Valley by sea and then entered the Elamite economic system via the riverine route from the head of the Gulf to Susa or the overland route from Liyan, near modern Bushehr (Potts, 2003), northwards to Anshan. Certainly the function of Liyan as a coastal port

involved in cross-Gulf trade would seem clear after the discovery there, during excavations in 1913, of soft-stone vessels of a distinctly Omani type, comparable examples of which are known from Susa and Tepe Yahya, as well. Alternatively, tin and lapis lazuli from Afghanistan could have been shipped on Meluhhan vessels to the Oman peninsula and then sold onwards to customers in Elam. In this case the small numbers of Persian imports in the Oman peninsula, such as two complete Kaftari beakers from Tell Abraq, with close parallels at Tell-e Mālyān and Liyan (Potts, 2003), might be regarded as by-products of the more important trade in tin (Weeks, 2003, 184).

Whether Susa was also being supplied with copper from the mountains of Oman during the middle and late 3rd millennium BCE is unclear. Although it has been claimed that metal objects from the "vase à la cachette," an Early Dynastic hoard discovered at Susa, were made of copper imported from Oman (Berthoud et al., 1980), this assertion has been called into question by other scholars (Seeliger et al., 1985, 643) and a Persian origin for the copper used to make these finds cannot be excluded (Hauptmann et al., 1988, 34; cf. Pigott, 1999, 80).

Other evidence from Susa demonstrates the existence of commercial ties in the early 2nd millennium BCE with Dilmun (modern Bahrain), most probably via the maritime route from the mouth of the Karun across the Gulf to the main site of Qalat al-Bahrain (Qalʿat al-Baḥrayn). One of the most important entrepƉts in the Gulf region during the late 3rd and early 2nd millennium, Dilmun was noted for transshipping commodities which originated further east, such as copper from Magan (Oman) and wood from "foreign lands," most probably including Meluhha (Indus Valley). An early-2nd-millennium contract from Susa records a loan to an individual named Ekiba who was about to depart on a business trip (Lambert 1976). The fact that the tablet was impressed with a typical Dilmun seal strongly suggests that the transaction involved a purchase of goods to be made in Dilmun, or that Ekiba himself was a Dilmunite, and this interpretation is bolstered by the discovery at Susa of four Dilmun stamp seals; six copies of Dilmun seals made in locally-produced bitumen compound (Amiet, 1986b, Figs. 92-5; Connan and Deschesne 1996); and a clay sealing bearing the impression of a Dilmun stamp seal, most probably from a package sealed in Dilmun before shipment to Susa (Potts, 1999b, p. 179). A further early-2nd-millennium cuneiform text from Susa that dates to the reign of the *sukkalmah* Kutir-Nahhunte I records the arrival of 17.5 *minas* of silver said to have been "brought by the Dilmunite" (de Meyer

1966, p. 117). These references are interesting in light of the presence of diagnostic Dilmunite pottery (red-ridged ware) amongst the shards recovered at Tul-e Peytul (ancient Liyan) by M. Pézard in 1913 (Pézard 1914, Pl. 8). Moreover, in the Sumerian myth *Enki and Ninhursag*, Elam is listed as one of eight countries that traded with Dilmun (Kramer, 1977,59).

A number of shell-finds from archaeological sites in Iran attest to the movement of raw shells and/or finished shell objects from the Persian Gulf or Arabian Sea. A tomb excavated by de Mecquenem on the Acropole at Susa, of probable early-3rd-millennium date, has yielded a group (perhaps the remains of a bracelet or necklace) of seven rings made from *Conus* sp. (Tosi and Biscione, 1981, p. 51, Fig. 12). A 5.7 cm long, 3.6 cm high, flat mother-of-pearl (*Pinctada margaritifera*) inlay carved to resemble a Przewalski's horse (Idem, p. 49, Fig. 9) from the early Susa excavations of J. de Morgan has been dated to the late 3rd millennium BCE on stylistic grounds. A shell bangle of uncertain date from Susa, originally identified as *Fasciolaria trapezium* (Idem, p. 51, Fig. 13) is more likely to have been made of *Turbinella pyrum*, a species common in the Indus Valley (Gensheimer 1984, p. 71). Another object of uncertain date from Susa is a necklace made of *Dentalium octogonum* and *Dentalium variabile* shells (Tosi and Biscione, 1981, 51, Fig. 14). Other necklaces, found in graves of unknown date, were composites of *Conus ebraeus*, *Oliva bulbosa*, *Pinctada margaritifera,* and *Engina mendicaria* shells (Tosi and Biscione, 1981, 52-53, Figs. 15-16). A lamp of *Cypraea tigris*, also of uncertain date, is also known from Susa (Tosi and Biscione, 1981, 54, Fig. 17).

On the central Persian Plateau, an early Iron Age grave (ca. 1350-1000 BCE) in cemetery A at Tepe Sialk (Tappe Sialk) has yielded a button of an unidentified, large gastropod (Tosi and Biscione, 1981, 55, Fig. 19) while tomb 94 in cemetery B at Sialk produced a necklace conmposed of *Engina mendicaria*, *Dentalia octogonum,* and several unidentified shells (Tosi and Biscione, 1981, Fig. 20).

At Tepe Yahya in southeastern Persia a nearly complete, un-worked shell of the pearl oyster (*Pinctada margaritifera*) was found in a 3rd-millennium context (Tosi and Biscione, 1981, Fig. 21) while the same species was used to fashion a 3rd-millennium, cruciform stamp seal (Tosi and Biscione, 1981, 56, Fig. 22), carved and perforated plaques (Tosi and Biscione, 1981, 57, Figs. 25-26) and pendants or large beads (Idem, pp. 58-59, Figs. 26-27). *Xancus pyrum* was used at Tepe Yahya to carve both a cruciform and a square, compartmented stamp seal (Tosi and Biscione, 1981, 56-57, Figs. 23-24). Beads

of *Conus quercinus*, *Conus ebraeus,* and *Polynices mamilla*, all dating to the 4th and 3rd millennia, were also recorded (Tosi and Biscione, 1981, 63, Figs. 37-40). Beads made from the latter species are also known from Tepe Hissar (Tosi and Biscione, 1981, 64, Fig. 42).

In Persian Sistān, 3rd millennium contexts at Shahr-e Sokhta (Šahr-e Sukta) have yielded rings of *Conus pusillus*, *Engina mendicaria,* and *Conus* sp.; worked fragments of *Xancus pyrum*, *Cypraea tigris*, and *Pinctada margaritifera*; beads of *Polynices mamilla* and *Engina mendicaria* (Tosi and Biscione, 1981, 65-67, Figs. 46-54); and bracelets or bangles of *Xancus pyrum* (Durante, 1979, Fig. 3). Finally, a perforated *Spondylus exilis*, perhaps intended to be used as a pendant, as well as examples of *Architectonica perspectiva*, *Polynices mammilla*, *Cypraea turdus*, *Cassis rufa*, *Oliva bulbosa,* and *Arca inaequivalvis* were also found in the late 3rd/early-2nd-millennium contexts during the excavations at Bampur (Biggs, 1970, 333).

The presence of shell waste fragments at both Tepe Yahya and Shahr-e Sokhta proves conclusively that shell-working was carried out at both sites (Durante 1979, pp. 323 ff). All of this material implies the existence of maritime sources in the Persian Gulf and/or Arabian Sea and suggests that organized trade and transport mechanisms may have facilitated the movement of shells from the points at which they were gathered to the settlements of the Persian interior (Durante, 1979, 341-42).

Cross-Gulf trade is also suggested by the presence of Persian archaeological material at sites on the Arabian side of the Persian Gulf. Large quantities of carved chlorite vessels and vessel fragments in the "Intercultural Style" or *série ancienne*, found in such profusion in Jiroft (Majidzadeh 2003) and known to have been manufactured in southeastern Persia, have been found on the island of Tārut, off the coast of eastern Saudi Arabia (Zarins, 1978; cf. Potts, 1989, 18; Pittman, 1984, 20). Black-on-gray pottery of analytically proven Persian provenance, dating to the late 3rd millennium, has been discovered in both the Oman peninsula (e.g. Tell Abraq, Umm an-Nar (Omm al-Nār), Hili) and eastern Arabia (Dhahran tombs; Méry, 2000). Archaeological finds of bitumen, in the form of balls, basket-lining, and otherwise unidentifiable fragments, from Qalat al-Bahrain, Saar (Sār), Karranah (Karrāna), and Buri on Bahrain, spanning the period from the late 3rd millennium BCE to the Parthian era, are now known to have been made of bitumen from sources in Fars, Khuzestan (Kuzestān), and/or Lorestān (Connan et al., 1998). This material clearly demonstrates the ongoing supply of Persian bitumen to

Bahrain over the course of two millennia (note also that other pieces date to the 13th-15th centuries CE). Also of late 3rd millennium date and of probable east Persian origin is a small number of alabaster vessels, including two from the foundation deposit of temple IIa at Barbar (Bārbār) on Bahrain and two from plundered graves on Tārut island (Potts, 1986, 283-84; Potts, 1989, 20-22).

Several complete Kaftari beakers have been found in the United Arab Emirates with late 3rd-millennium, Umm an-Nar-style graves at Tell Abraq in Sharjah (Šarja) and Shimal (Šemāl) in Ras al-Khaimah (Raʾs al-Ḵayma). Possible Kaftari shards (which could date anywhere between 2200 and 1600 BCE) have been identified on Failaka (Faylaka), in the bay of Kuwait; in some of the tombs near Dhahran (Ẓahrān) in the Eastern Province of Saudi Arabia; and at Qalat al-Bahrain (Potts, 2003, p. 157). Second millennium Elamite cylinder seals have been discovered on Failaka at the head of the Persian Gulf (Kjærum, 1983, 162-70) and at Tell Abraq (Potts, 1990, Figs. 150-51).

When we move into the Iron Age and later periods, the evidence becomes increasingly sparse. A text like DSf (Lecoq, 1997, 234-37) contains no clues as to the means by which the exotic materials (e.g. ebony, sissoo wood) employed in the construction of Darius' palace at Susa were actually transported, but it is unlikely that they arrived by other than royal command and hence they should be excluded from a discussion of "normal" trade. Likewise, it is not clear how Herodotus' statement (*Hist.* 4.44) should be interpreted, to the effect that, following Scylax's exploration of the Indus, Darius I opened the Indian Ocean to his ships (Salles, 1996). It is, however, interesting to note that a late Achaemenid grave at Susa, dated by numismatic evidence to about 350-32 BCE, contained three strands of 400-500 pearls interspersed with gold spacer beads (de Morgan 1905; Tallon 1992, 242). A second necklace from the same grave, made of sixty-five agate beads (Tallon 1992, 249), attests to the continued supply of high-quality semi-precious stones from, in all probability, an Indian source. Agate, like carnelian, is most likely to have reached Persia via maritime commercial channels, although overland trade cannot be excluded as a possibility.

With regard to the Parthian period, the anonymous *Periplus of the Erythraean Sea,* apparently written during the 1st century CE by a Greek-speaking mariner of Roman Egypt (Casson 1989), which contains little intelligence on the Persian Gulf itself, identifies "Ommana" as a market town of Persia (sec. 36). Regardless of where Ommana was located (scholars and the ancient sources themselves disagree as to whether it was on the Arabian or the

Iranian side of the Gulf), the entrepŰt was a center of importing and exporting, receiving sandalwood, teak, and ebony from Barygaza in India (often bearing goods from even further east), and frankincense from Kane in south Arabia. Unfortunately, the text is ambiguous about Ommana's exports, mentioning slaves, gold, dates, wine, clothing, purple, and pearls amongst the goods shipped from Kane and Ommana, without distinguishing which town sent what commodities.

Certainly pearls are associated in many sources with the Persian Gulf, most commonly with Bahrain (e.g. Athenaeus, *Deipnosophistai* 3.146). During the Sasanian period, pearls were highly prized by Sasanian rulers (Simpson, 2003), and Pseudo-Moses of Khorene states that Rishahr (Rišahr) was the source of the best pearls and "Perlenedelsteine" (Marquart, 1901, 138), a term which may refer to a type of stone like agate. Sasanian investment in the fortifications at Rishahr (ancient Rev-Ardashir (Rēv-Ardašir) and Sirāf (Whitehouse and Williamson, 1972, 33-42) may well reflect a desire to bolster their position as commercial entrepŰts through which goods passed from the East. In this regard, moreover, the fact that Māni passed through Rev-Ardashir on his way from India to Mesopotamia is surely relevant (Sundermann 1981, 56-57; cf. Gropp 1991, 86). Commercial maritime traffic with India and China is also indicated by an anecdote related in the *Chronicle of Seert* (Scher, 1908, 324) according to which Yazdegerd I (r. 399-421) sent the Nestorian *catholicos* Aḥdai to Fars, charged with the task of investigating the alleged theft of pearls by pirates preying on the fleets trafficking between the Persian Gulf, India, and China (cf. Whitehouse and Williamson, 1972, 43). The existence of such commercial traffic between the Persian Gulf and the East means that other commodities besides pearls must also be considered as a potential part of Gulf maritime trade. Thus, for example, although Chinese silk entering Persia is usually associated with the continental Silk Road it is also possible that at least some of it reached the region by sea. Conversely, some of the Sasanian glass that wound up in graves in China, Korea, and Japan (Whitehouse, 1996) may well have traveled by ship rather than caravan.

(See also PERSIAN GULF IN ANTIQUITY).

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