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The Periplus of the Erythraean Sea and the Persian Gulf

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The tentative issue of the present contribution will be to try to understand an obvious paradox: the Persian Gulf is absent from the most important historical source about trade between the West and India in the 1st cent. A.D.¹, the *Periplus Maris Eryhrraei*, and continuous archaeological exploration in the Gulf area since the fifties demonstrate that the region was well-populated at that time and active as a maritime trade lane. This discrepancy of information will lead us to evaluate the true nature of the international trade through the Gulf and, moreover, to attempt to identify the merchants of the Gulf as well as their relations with India.

An easy interpretation could be based on an historical view of the problem, a kind of *longue durée* explanation shortened to a few centuries. During the Achaemenid and early Hellenistic periods (Seleucid), trade between India and the West used to sail through the Persian Gulf, then cross the Arabian Peninsula deserts with caravan middlemen such as the Gerrhaeans or reach the Levantine coast via the Euphrates and a northern trans-Syrian land route - where the Gerrhaeans were present as well². Meanwhile, the Red Sea was just being explored by the Ptolemies³ and most scholars agree that the Bab al-Mandab was not regularly

¹ I am not going to discuss again the date of the *Periplus* (see the three important editions in the bibliographical references *s.v. Periplus*). SCHOFF suggests ca 60 A.D., p. 15; HUNTINGFORD prefers a date between 95 and 135 A.D., p. 12; CASSON concludes to the period 40-70 A.D. So many arguments point to a Claudio-Neronian dotation that we can dismiss later dates without discussion. Another question which is not going to be debated here is whether the *Periplus* was written after or before Pliny's *Natural History*, which seems to ignore it among its sources.

² I have recently dealt with the Achaemenid and Hellenistic period's trade, and I only refer to these papers for the argumentation and bibliographical references: SALLES 1987, «The... Gulf under the Seleucids»; *id.* 1989, «Makkan et Meluhha ... », esp. p. 81-92; *id.* 1990a. «Les Achéménides dans le Golfe...»; SALLES *in press*. «Achaemenid and Hellenistic trade ... ».

³ Among various reasons which might have pushed the Ptolemies to extend their authority over the Red Sea, we should mention the interruption of the flow of trans Arabian caravans as a consequence of the Syrian Wars. See recently the luminous paper by Rouge 1988, «La navigation en Mer Erythré».

crossed by Westerners before the end of the 2nd cent B.C. but exceptionally in 324 by Anaxacrite's expedition and perhaps on other rare occasions⁴. Then in the last decades of the 2nd century B.C. the adventure of Eudoxus of Cyzicus took place, which Strabo declines as a true story but appears as an important event to several modern scholars⁵; besides the individual personality of Eudoxus and his disputes with the Lagid kings, the whole anecdote includes also the "discovery" of the monsoon by Hippalus, perhaps an Egyptian Greek pilot? By discovery, I mean a Western revelation recorded in Western sources that do not imply that the monsoon system was ignored by other sailors, *see infra*. In one sense, Eudoxus and Hippalus opened Egypt and the Red Sea to the Indian trade around 100 B.C., although commercial exchanges stayed at a low level during the 1st century B.C. as stated by Strabo: «... and I learned that as many as one hundred and twenty vessels were sailing from Myos Hormos to India, whereas formerly, under the Ptolemies, only a very few ventured to undertake the voyage and to carry on traffic in Indian merchandise» (*Geo.* 2. 5, 12. Loeb)⁶.

At the same time - second half of the 2nd century B.C. - the political situation dramatically changed in the Middle East. The Seleucid authority over Babylonia and the Gulf area was challenged then ousted by the Parthians who progressively took over the northern end of the maritime lane⁷: the Characene kingdom, whatever the fluctuation of its relations with its Parthian suzerains, became the new owner of the East-orientated emporium of the Shatt al-Arab⁸, Spasinou Charax, at least up to the end of the 2nd century A.D. On the other

⁴ From a huge bibliography on the subject I will only mention ROUGE, *supra*; DESANGES 1978, *Recherches ...*; HOGEMANN 1985, Alexander ... (about Anaxicrates, p. 80-87); SALLES 1988, «La circumnavigation ... ».

⁵ The major work is THIEL 1966, *Eudoxus of Cyzicus...*, with a very convincing historical review of the "conquest" of the monsoons wind by the Westerners. In the paper already cited. J. Rouge 1988 suggests a general interpretation different from that of Thiel and Desanges : "... j'interprète ces voyages comme des voyages d'association entre le souverain, bailleur de fonds, et Eudoxe, commerçant maritime, association qui se serait formée selon le principe qui devait devenir en droit romain la *societas unius negotiationis* et qui aurait dû se conclure par un panage des bénéfices», p. 68.

⁶ See also *Geo.* 17, 1, 13: «... not so many as twenty vessels would dare to traverse the Arabian Gulf far enough to get a peep outside the straits» (Loeb). That the Indian trade might have been operative as early as the mid-2nd cent B.C. could be evidenced by a maritime loan contract SB III 7169, generally interpreted (but not unanimously) as referring to the Indian ocean (*tin ao thalassan*), see recently HAUBEN 1985. Would it be a mere coincidence that the five contractors were military officers of the army and the navy at a precursory period when the travel to the East was so hazardous and risky?

⁷ The detailed history of the Characene kingdom during the 2nd-1st century B.C. remains partly blurred, especially with reference to its hypothetical "imperialism" over the northern Gulf area (NODELMAN 1960. «History of Characene»): for example, the Arab city of Gerrha does not seem to have ever passed under Characene control and should have persevered in its trans-Arabian caravan activity throughout the 1st century B.C.-1st century A.D. We should be rather cautious when decoding the conclusions of political changes.

⁸ After his predecessor Nebuchadnezzar who founded the city of Terodon near Basrah (known as Diridotis by Arrian who adds that merchants used to bring there frankincense and aromatics), Darius founded the emporium of Aginis in the same region, also known as Ampe. Later, Alexander the Great built an Alexandria nearby, which became an Antiocheia and finally Spasinou Charax. Except in the case of the latter, we know nothing about the exact location, history and destiny of these vanished cities clustered along the Shatt al-Arab: they were obviously

hand, the troubled relations between Rome and the Parthians from Crassus to Trajan have supposedly closed the commercial exchanges between these two areas of the ancient world⁹.

Consequently, when peace and security were restored in the Eastern Mediterranean by Augustus, demanding "exotic" products¹⁰, it was entirely logical that the Red Sea should become the "royal route" of the Indian trade and that the Arab-Persian Gulf should vanish, thence being ignored by the Greek merchant of Berenike who wrote the *Periplus*.

As attractive as it could be, this demonstration is oversimplifying and partly erroneous. The first point to make clear is the degree of geographical knowledge the author of the *Periplus* had by scrutinizing his treatment of the area, more specially the Omani peninsula and the Straits of Ormuz.

L. Casson points out that the description of the coast leading from the Masirah Island (Sarapis in the *Periplus*) north of the Qamar Bay to the Straits of Ormuz is "among the less satisfactory portions of the *Periplus*" (p. 176, s.v. § 34. 11. 21-23). Leaving the island of Masirah/Sarapis, one sails due North «in the vicinity of the entrance of the Persian Gulf» (§ 34, trad. Casson)¹¹; Schoff and Huntigford prefer a translation suggesting a navigation «towards» the entrance of the Gulf and both rightly stress that the term used in this paragraph of the text is *Thalassa* and not *kolpos* as normally used for the Gulf. Could it be the accurate ancient name of the Gulf of Oman (sometimes called Sea of Oman) which is different from the Persian Gulf? In that case we would be sailing up to Ras al Hadd in § 34 and not towards the mouth of the Gulf.

intended to attract and control the convoys of loaded ships coming from the Gulf and further East, SALLES in press.

⁹ As an addition to note 6, *supra*, and referring to the relativity of the implications between political events and commercial exchanges we should stress among other evidence a) the emergence of Palmyra as a major caravan-station as early as the 1st century A.D. that is during a period of Roman-Parthian hostility even though peaceful (TEIXIDOR 1984, *Un port romain ...*, esp. p. 8-14; GAWLIKOWSKI 1988, «Le commerce de Palmyre»); b) the writing of the *Parthian Stations* by Isidore of Charax at the very end of the 1st century B.C., a sign that international overland trade was not abandoned either.

¹⁰ However, SIDEBOTHAM 1986, *Roman Policy...*, insists on the non-luxurious items which were traded from India to Egypt: «... apart from the import of some pearls, precious stones, ivory and animals, 'much of Rome's imports seem to have been plants and plant products which served basic religious, funerary, culinary, and medicinal requirements of ancient life», quoted by BOWERSOCK 1988, review of Sidebotham ... , p. 102.

¹¹ The Masirah island lies at least 550 miles South-East of the Straits of Ormuz; the coast runs nonhwards (NNE) up to the Ras al Hadd and then frankly North-West from the Ras al Hadd to Suhar, finally almost North to the Straits.

Strangely enough, the author of the *Periplus*, a merchant interested in sailing information, does not record the important landmark that the Ras al Hadd is actually a major seamark along the Arabian coastal navigation.

Then comes a rather unorthodox "description" of the Kalaios Islands which could hardly be applied to the modern Daymaniyat islands as rightly pointed by Casson (p. 176, *ibid.*); however since the information provided by the *Periplus* is extremely vague and partly erroneous, there is no reason to dismiss Schoff's suggestion of the name Kalaios being related to the name of the Islamic city of Kalhat, north of Sur (Schoff, p. 147, s.v. Calaei Islands).

"In the vicinity of the furthest tip of the Isles of Kalaios..., a little further on is the mouth of the Persian Gulf", (§ 35. trad. Casson); actually the distance is more than 200 miles when considering the Ras Musandam itself, that is much more than .. "a little further on". About the straits themselves, the description of the *Periplus* raises several problems. The mound/mountain Asabô cannot be identified as a single landmark and probably refers to the whole northern range of the Jebel Akhdar from Dibba to the Ras Musandam (Ruus al Jubal, Casson p. 178. s. v. 35. 11. 27-29); it is an unlikely designation of the cliffs of the Ras Musandam¹² which Arrian knows as the cape Maceta (Ind., 32. 6-7), and the only proper description of the Straits is provided by Strabo quoting Eratosthenes: "its mouth", he says, "is so narrow that from Harmosi, the promontory of Carmania, one can see the promontory at Macae in Arabia" (*Geo.* 13. 3. 2. Loeb): but Eratosthenes and Arrian derive from an older tradition which the author of the *Periplus* was not aware of. L. Casson emphasizes the uncertainty of identifying the mountain Semiramis with the rock Kuh-e Mobarak, near Ras al Kuh on the Persian coast (p. 178, *ibid.*), a suggestion already offered by Schoff (p. 148. s. v. Semiramis)¹³; Casson doubts that the Omani coast - Dibba area - could have been visible from Ras al Kuh as indicated by the text, a fact which is nevertheless confirmed by Arrian's text if the promontory of Carmania where Nearchus' expedition stopped is really the Ras al Kuh: "... [they] moored off a desert shore, where they sighted a long cape jutting out far into the ocean; it seemed as if the headland itself was a day's sail away" (Ind, 32, 6, Loeb). In any case, the description of the mouth of the Persian Gulf in the *Periplus* could be applied more or less

¹² However, Schoff relates the ancient name Asabô/Asabon to the Jebel Sibi in the Musandam promontory (p. 148, s.v. Asabon mountains); Huntingford equates Asabon and Ras Musandam, without any argument.

¹³ Huntingford fixes the Semiramis mountain in the Larak Island in the Straits of Ormuz, without any argument.

indifferently to the straits of Musandam or the area of Dibba, about 50 miles off the Straits of Ormuz in the Gulf of Oman¹⁴: it does not refer to a very specific site.

Finally, the Persian Gulf itself is “a vast expanse [and] spreads up to the places deep within it” (§ 35, trad. Casson); no more information is provided.

No doubt can be left: the author of the *Periplus* never sailed in this region of the Indian Ocean and his knowledge comes only from secondhand and hearsay: Schoff has already pointed that “his own sailing carried him ‘well out at sea’ from Kuria Maria to Masirah, and thence directly to the mouth of the Indus” (p. 147, s.v. A barbarous region...), although the reason he suggests - the area being inaccessible to him because under Parthian rule, - being at war with Rome - is not really convincing; in the text itself where the distances and a description of the interior are given. Masirah appears as the *ultima terra cognita* in Arabia by the author of the *Periplus*¹⁵. Beyond this point, the author departs from his normal practice: very few distances or sailing times between places, harbours, roadsteads, anchorages, prominent landmarks, etc. are given and no information is provided for any journey from the western end of the Straits of the Persian Gulf to the port of Apologos in the Shatt at-Arab (on this port, see infra). The descriptions of the cited sites remain vague, the imports and exports of Apologos are not listed in this section of the text, and the harbours of the Persian Gulf are ignored. Thus we have to understand why the author of the *Periplus* did not travel that leg of the Indian Ocean trade.

A first explanation of this ignorance could be the lack of harbours and trade in these regions (Gulf of Oman, from Musandam to Hadd, and Persian Gulf), a hypothesis strongly denied by recent archaeological finds. A major advancement in our knowledge of the Omani peninsula was the tangible evidence how much it was opened to Eastern influences and men,

¹⁴ However, Casson points that the width of the “Gulf” in the Dibba area is about 60 miles - corresponding to the 600 stades mentioned by the text - while the Ras Musandam is only 30 miles wide.

¹⁵ I would like to quote here an extract of a paper by GROSSET-GRANGE 1977, «La navigation arabe ... », who studied the Arab nautical texts by Ahmed ben Majid al Nejdi and Suleyman ben Ahmed ben Suleyman al Mehri in the XVth cent. The commentator describes the routes around Arabia and stresses the place of Masirah: he reaches first Fanak: «Là commence vraiment le faisceau des routes vers l'Inde. Mais pour contourner l'Arabie on va d'abord chercher la terre au Dhoufar, la région étant une ‘mine de *Kaous* toute l'année à l'exception de la période allant environ du 10 décembre au 20 janvier’. De là on file grand train jusqu'à déborder les Khouria Maria (Suleyman fait passer en dedans), et on double Madraky a une vingtaine de miles nautiques ainsi que Maçira Enfin on court 24 heures ou moins, au long d'une cote franche, attentif desormais à ne pas manquer Hadd, point d'éclatement vers le Gouzerat, le Sind, ou pour continuer sur Mascat, Ormuz ou davantage... » 9th pan, p. 27. According to these texts, Masirah was a crucial point to reach the Sind.

a phenomenon fully achieved at the Harappan period when Indian items and cultural features are scattered on both sides of the peninsula and in the oases of the interior as well¹⁶; the interactions between coastal communities around the Sea of Oman, from Ras al Hadd (an even further West) to Gwadar, Pasni, the Karachi area and further on to the Bombay region have never ceased from the period times to the Roman period and, indeed, later¹⁷.

For the period of the *Periplus* the following evidence can be summarized from the Ras al Hadd¹⁸ to the Shatt el-Arab:

1. Nothing datable to the Roman period is recorded by the French-Italian project at Ras al Hadd. A survey was carried out by Monique Kervran on the site of *Kalhat* where no pre-Islamic evidence was found, at least to my knowledge.
2. In the interior, several cemeteries of the *Samad* culture were dated by the German archaeologists from 300 B.C. to 700 A.D.: no imports can illustrate any contact with the East¹⁹.
3. *Muscat* might be the Harbour that Ptolemy names *kryptos limen* and is reputed to have been founded by Himyaritic traders; no archaeological evidence can support this tradition²⁰.
4. Surveys and regular excavations have been carried out in the region of *Suhar*: a 1st century B.C. (?) - 1st cent. A.D. settlement is clearly attested. However, the interpretations are quite different :”Finally, since the SH11

¹⁶ On Harappan finds, a good statement is given by CLEUZIOU 1986, “Dilmun and Makkan...”, with earlier references (specially the interpretation of the “Wadi Suq” culture by Cleuziou himself); new Harappan discoveries are disclosed by AL-TAKRITI 1989, «Bida ... », and CLEUZI ou 1989a, «Hili ... ». The most recent discussions are presented by CLEUZIOU 1989b. «The chronology ... » and CLEUZIOU & Tosi, in press, «The Southern Frontier ... ». New information on the early second millennium B.C. is being provided by the German mission at Ras al-Khaimah. A well-stratified site from the third millennium to the Iron Age with Harappan connections, near Umm al-Qaywain (U.A.E.) is just published now by POTTS. 1990, «Tell Abraq...».

¹⁷ For the emergence of coastal prehistoric communities around the Sea of Oman and the interactions between Arabia and Baluchistan, Pakistan and India, see Tosi 1986a. “The emerging picture...” and 1986b “Early maritime cultures...” (with references to Harappan finds at Ras al-Junayz, Ras al Hadd). For the Hellenistic period, for example, LONGO 1987, «The Fish Easters». More discoveries are expected from the survey of coastal Baluchistan by an Italo-French team (Roland Besenval and Valeria Piacentini).

¹⁸ Further South, a thesis was recently written by Dr Al-Sbanfari, Director of The Department of Antiquities of the Sultanate of Oman, on an archaeological exploration of Masirah Island: I was told that “Hellenistic finds” were numerous. A re-examination of “Hellenistic” items from Khor Rori is being carried by the German team at Samad, *infra*.

¹⁹ An account of the finds of the Samad culture will appear soon in the acts of a Seminar held in Tübingen under the direction of Dr Uwe Finkbeiner (1987 and 1989) on the theme: *Southern Mesopotamia and the Gulf Region. 300 BC-300 AD*, with several contributions on the chronology and ceramic typology from Seleucia on the Tigris to Oman (*referred infra as Tubingen papers*). Some *Indian Red Polished Wares* from Khor Rori will be presented on this occasion.

²⁰ COSTA 1989, “Historical ... Muscat”, p. 99.

site appears to have been occupied at last as the very last centuries B.C., this settlement by the coast may well have been the pan of Omana, or associated in trade with that port” is the conclusion of the Harvard Archaeological Survey in 1973; on the other hand, emphasizing that SH11 is located more than 1 mile inland and the coast cannot have progressed so far since the historical times. Kervran concludes: « I me paraît peu probable que SH11 ait pu être le site d'une ville hellénistique importante »²¹ In her soundings inside the fortress of Suhar, Kervran reports Mesopotamian-like glazed potteries and Indian Red Polished Wares in the deepest levels of the site, which nevertheless became important in the Sassanian period only²².

5. At *Bidya*, about halfway between Fujairah and Dibba, “Hellenistic” burials re-used 2nd millennium built-graves²³; a green-glazed high-footed kylix with thumb-handles was uncovered and a pillar-molded glass bowl as well, together with a small glass flask²⁴: all this material can be dated to the 1st century A.D. and is most probably imported, especially the pillar-molded bowl which might originate in Alexandria or in Italy; the small flask likely comes from Eastern Mediterranean workshops (Syria? Phoenicia?). More is expected from the survey and excavations carried out by a Swiss mission in the Emirate of Fujairah.
6. The site of ed-Dur, near Umm al-Qaiwayn in the United Arab Emirates, appears as a major place of the eastern pan of the Gulf and should be labelled as an emporium despite the qualifications expressed by a few archaeologists of the international team which has been working there from 1987 to 1990²⁵. The architectural remains include temples, public buildings and a large number of subterranean built-tombs, sometimes of a very

²¹ KERVRAN 1984, «A la recherche de Suhar ... », p. 285-286.

²² KERVRAN and HIEBERT, in press, «Sohar pré-islamique».

²³ Although inadequate, the term “Hellenistic” has been in use for several decades among archaeologists working in the Gulf area for the designation of a long period from ca 300 B.C. to ca 300 A.D.: it is still used with all the necessary qualifications. The term Late Iron Age for the period 300 B.C. - 700 A.D. is confusing.

²⁴ AL TAKRITI 1989, «Bidya ... », p. 106-107 and pl. 75 & 97 for the kylix (I do not full agree on the parallels suggested by al-Takriti); p. 108 and pl. 82 for the glass vessels. The pillar-molded glass bowl finds very close parallels at ed-Dur, *infra*, and in Bahrain (DURING-CASPERS 1980, «Bahrain Tumuli ... », Fig. 6a and pl. XXV-XXVI: similar finds are reported at Arikamedu); the flask can be compared to a similar one in Bahrain, BOUCHARLAT & SALLES 1989, «The Tylos period», n° 201, p. 115, a common fabric of the “Early Imperial Period” in the Levant.

²⁵ Two preliminary reports were published by the international team: BOUCHARLAT *et alii*. 1988, «Archaeological reconnaissance...», BOUCHARLAT *et alii*, 1989, “The European expedition...” where previous bibliography can be found. Further information is expected in the Tübingen papers.

elaborated architecture: the "city" itself remains unknown and might have been built of light and perishable material²⁶. On the other hand, the environmental components do not preclude the living feasibility of a large community²⁷.

The archaeological finds are over numerous and various (pottery, glass vessels, stone vases, carved ivory; beads, metal objects, etc.) and the imports obvious: *Eastern Sigillata* pottery - *Indian Red Polished Ware* being doubtful -, Roman and Syrian glassware, Characenic coins, a coin from Tiberius, Latin graffiti, bronze objects, etc.²⁸. The local culture exhibits several foreign influences: the glazed pottery is inspired by Mesopotamian and Northern Gulf models, a painted ware is related to contemporary productions in the Baluchistan, the local bronze coinage imitates "degenerated" Alexander types, and several architectural features, alabaster vessels and decorated bronze bowls point to a South Arabian inspiration. Such an intermixture of imports and foreign influences together with the local components is probably the best clue to support the view of an *emporion* widely opened to inter-regional and international (?) trade.

7. About 30 miles inland is the site of Mleiha, in a large agricultural plain on the western piedmont of the Omani range²⁹. A "Hellenistic" level was uncovered which yielded Rhodian amphoras handles among the imports and a rich local culture. The 1st century A.D. level is closely related to the material culture of ed-Dur, and the historical/economical relationship between the two sites should be an issue for further research.
8. Scattered finds datable to the 1st cent. B.C. /1st cent. A.D. is occasionally mentioned in the United Arab Emirates and a review of these discoveries is really needed.

²⁶ Reeds, wood, pisé, mudbrick, etc., as it was usually done in "urban" compounds of the region just before the recent modernization.

²⁷ Should we remind, for example, that the community settled in Kuwait-City in the XVIII-XIXth centuries used to have its pure water from as far as Jahra to the North, sometimes Failaka, and even the Shatt al-Arab in the early XXth century?

²⁸ Some of these objects have been published in the preliminary reports mentioned above; several other ones are still unpublished. See a brief summary in BOUCHARLAT 1989a, "Etablissements...", p. 216-217. The local coinage was studied by SALLES 1980, «Monnaies d'Arabie ... » and POTTS 1988b, «Arabia and Characene».

²⁹ Preliminary report in BOUCHARLAT 1989b, "Documents arabes..." and summary in *id.*, 1989a, «Etablissements...». Further information is expected in the *Tübingen papers*.

9. "Hellenistic" green glazed pottery was found in Qatar, but the context remains uncertain.
10. The archaeology of the Bahrain islands was presented in several contributions since the pioneering works of the Danish expedition in the fifties, leading to preliminary reviews of evidence in the early eighties³⁰ The period 300-100 B.C. is well-documented in the "City V" level at Qal'at at Bahrain, the main site of the island, and in a few cemeteries of the interior, but is diversely interpreted. Truly enough, the extension of the settlement, the organization of the city, and the exact place of Tylos/Bahrain in the Gulf system remain blurred questions, but some awkward comparisons should be avoided, e.g. between Bahrain as a whole or Qal'at al-Bahrain alone with the Arabian city of Gerrha of which we know archaeologically speaking, strictly nothing³¹. I have argued elsewhere³² that the Greeks had a good knowledge of the archipelago according to the literary sources, and suggested that Greek or Greek-partners merchants could have traded with Bahrain (and even lived there ?) during the Seleucid period, when the kings of Seleucia were striving to maintain the Mauryan alliance.

The period 100 B.C. - 200 A.D. has yielded hundreds of objects from the numerous cemeteries of the island, but very little is known from the contemporary settlement at Qal'at at-Bahrain³³; actually, imports datable to this period in the archaeological material are very scarce in the present stage of our knowledge (beads?). However, the island undoubtedly enjoyed the wealth of its agricultural products, pearls and other productions, and the facilities it offered to the Gulf navigation for landing and fresh watering: excluding Bahrain from the inter-regional network of trade would be nonsense. As a matter of fact, the true function of the island probably lies in the historical context of the region, *infra*.

³⁰ BOUCHARLAT & SALLES 1981, «Hist. and arch. of the Gulf...», p. 74-76; SALLES 1984a, . «Bahrain h ellenistique...»; a detailed chronology of the ceramic evidence from 300 B.C. to ca 200 A.D. will appear in the T ubingen papers.

³¹ *E.g.*, BOUCHARLAT & SALLES 1981, *op. cit.*, p. 75; BOUCHARLAT 1986, « Qal'at al Bahrain ... », p. 443-444.

³² SALLES, in press, «Achaemenid and Hellenistic trade ... ».

³³ New excavations are being carried out by Pierre Lombard on the site of Qal'at al-Bahrain since 1988: a preliminary account is expected in the *T ubingen papers*, and a preliminary report is in preparation for the journal *Arabian Archaeology and Epigraphy*, Munksgaard, Copenhagen.

11. Several surveys and regular excavations took place in the Eastern province of Saudi Arabia during the past twenty years: beside the numerous reports in the Saudi journal of archaeology *Atlal*, an essential archaeological and historical synthesis on the region was presented in 1984 and fulfilled by reports on the site of Thaj³⁴. The fabulous city of Gerrha which Strabo, Pliny and Ptolemy knew of remains unidentified yet³⁵, and there is not the slightest hint for weaving a real relationship between the supposed wealth of the province as a major trading place on the East West route in the Hellenistic period (see above) and the archaeological finds in Eastern Arabia which, occasionally, show foreign influences and appear as true imports³⁶.
12. The main phase of occupation on Failaka Island, off Kuwait, is the Seleucid period. ca 300 - 150 B.C., and it was demonstrated that the history of the site is to be related with the growth and decline of the Seleucid power. However, a late 1st cent. B.C. /1st cent. A.D. re-occupation was evidenced by the Danish expedition³⁷, although its chronological and historical interpretation is still problematic³⁸. As far as we can understand, close relations have existed between Failaka and the kingdom of Characene from ca 50 B.C. to ca 50 A.D. (100 A.D.?); the discovery of Characene coins and pottery in other islands of Kuwait (Akhaz. Umm an-Namel) would incline us to believe that the area was an important stage of the trade heading to Spasinou Charax, perhaps a tenure of the Characene/Mesene kingdom. Incidentally, a fragment of *Northern Black Polished Ware* was found in 1989 in the deepest levels of the Hellenistic fortress FS (ca 300 B.C.) : we cannot suggest more than a souvenir brought back by one of the soldiers who took part in Alexander's expeditions to India and/or Nearchus' return.

This very brief review of the archaeological evidence from Failaka to Muscat - not to speak of the Iranian coast that is still badly known³⁹ - demonstrates a rather dense settling of the Arabian coast of the Gulf and a great activity often related to regional or international

³⁴ POTTS 1984, "Northeastern Arabia..."; POTTS 1983, "Thaj ... »; reports on Thaj in *Atlal* 1984 and *Atlal* 1985.

³⁵ A recent attempt was proposed by LOMBARD 1989, "The Salt mine...", with all previous bibliography.

³⁶ For example, black-glazed Attic pottery, Rhodian amphoras handles, etc., see POTTS 1984, «Northeastern Arabia ... » and SALLES 1987, "The Gulf...under the Seleucids", p. 82-84. Updated statements on Thaj and Ayn Jawan chronology and finds will appear in the *Tübingen papers*. A thorough study of the coins found in Eastern Arabia is being prepared by D. Potts.

³⁷ HANNESTAD 1983. *Ikaros Hellenistic pottery...*, p. 78.

³⁸ SALLES 1990b, "The BI-Ware...".

³⁹ See the review of evidence in BOUCHARLAT & SALLES 1981, "Hist. and arch. of the Gulf...", p. 65-72.

trade⁴⁰ The author of the *Periplus* could not ignore the region because it was an *empty quarter*, and other explanations should be proposed.

L. Casson warrants the looseness of some geographical descriptions in the *Periplus* by the lack of interest of the author in these sectors because they had no commercial value for him, e. g. the East African coast or the east coast of India to the mouths of the Ganges (p. 8); the suggestion is not supported by any argument (and cannot be indeed) and could appear weak since Casson himself offers a more valid explanation elsewhere.

When studying the trade patterns on the East African coast and the approximate knowledge the author of the *Periplus* shows of this section. Frezouls⁴¹ points that the coast beyond the Cape of Aromates (Cape Guardafui) “is under the rule of the governor of Mapharitis, since by some ancient right it is subject to the kingdom of Arabia as first constituted. The merchants of Muza [...] send out to it merchant craft that they staff mostly with Arab skippers and agents, who, through continual intercourse and intermarriage, are familiar with the area and its language” (§ 16, trad. Casson). The text clearly indicates a monopoly of Muza’s trade beyond the Cape Guardafui, at the time “forbidden” or at least closed to non-Arab merchants and sailors (Egyptian, Greek, Roman or whoever they could be)⁴². It seems obvious that this specific section of the Indian Ocean trade. Muza-RhaptaMuza, was an outgrowth of the Alexandria-India main route, a segment firmly autonomous and non-Greek.

The fact that several other segments existed along the major route is clearly indicated by the *Periplus*. I have already tried to elucidate some of purely the local ones⁴³: Muza-Adulis, Muza-Socotra, Kane-Moscha, Kane-Sarapis, Socotra-Syagros, etc. probably managed by Arab agents and sailors, or transoceanic: Kane-India⁴⁴, East Africa-India, where Indian sailors were apparently numerous. Casson argues in the same direction and details other “external routes”, from India to Ceylon and Malaysia, between India’s west and east coast,

⁴⁰ The distinction being between trade inside the Gulf (= regional) and exchanges with countries outside the Gulf (= international).

⁴¹ FREZOULS 1984, «Quelques enseignements... », p. 311.

⁴² And that does not mean there cannot be Roman objects in the Horn of Africa. As evidenced by glass vessels for example (see the recent and essential study by STERN 1985); they would have been carried by Arab sailors, from Muza or Adulis since the latter Harbour is reputed for its exportation of glass (§ 6 of the *Periplus*), and the presence of Roman objects would not be an indication of Roman traders. The same opinion will be developed below about the Arab-Persian Gulf area.

⁴³ SALLES 1988, «La circumnavigation ... », p. 96-97.

⁴⁴ *Periplus* § 32. On this subject, see CASSON 1980, p. 33.

etc., his major example being the Persian Gulf: «The merchants of Roman Egypt must have been indifferent to [the trade of the Persian Gulf], for the author carries his readers right past the mouth of the gulf» (p. 19). However, I am not fully convinced by his general argument concerning the ramifications along the main route. He assumes that, although Roman merchants were not interested in the trade of these areas, the author of the *Periplus* wanted to give a total picture of the Indian ocean trade, leaving the opportunity to Roman skippers to visit them: «if one happened to leave India with space still left in his hold, presumably he could, if he chose, fill it with cargo of this cheaper nature to be dropped off en route home» (p. 19). The term "cheaper" is certainly an exaggeration since the different degrees in quality which the *Periplus* mentions on several occasions do not fit the division between the main route and its subsidiaries. On the other hand, the accurate analysis proposed by Casson on «Baner and Purchase» (p. 29-31) cannot adapt with his previous suggestion of "filling the cargo on the way back": a merchant who would have spent all his money by purchasing goods in India could hardly "buy" something more on his return trip unless he wasted his capital. *i.e.* his Indian goods.

The reason why these ramifications and subsidiaries of the main route were badly known by the Roman merchants, and thence cursorily described in the *Periplus* is in my opinion, that they were held by non-Greek agents and sailors and rather tightly closed to "non-authorized persons". An indication of this seems to be the so-called "secrets of navigation" expressed for example by the fabulous tales recorded from Herodotus to Sindbad the Sailor⁴⁵, which were intended to keep away intruders and newcomers from its own area of navigation and trade: "It is reasonable to suppose that the Arabs made a concerted effort - perhaps involving various forms of intimidation - to keep the Greeks out the Indian Ocean and to guard their trade secrets; only in this way could they maintain their monopoly over this lucrative trade"⁴⁶. The case of the Arab-Persian Gulf appears as a good opportunity to approach the question.

The first point will be the political situation. The *Periplus* clearly states that Persia begins beyond Mocha limen, somewhere near the Kuria Muria islands, including then a large pan of the Dhofar and the whole coast of Oman. This cannot be a surprise since the Oman

⁴⁵ Her. III, 107: the theme of the winged snakes protecting rare products is common in the stories of Sindbad, such as some other themes common to Herodotus: these are probably fabulous tales intended to protect a specific area.

⁴⁶ VAN BEEK 1958, «Frankincense ... », p. 147 and note 41.

peninsula has been "Persian" for centuries. *e.g.* during the Achaemenid period⁴⁷; when Schoff assumes that Oman was recently conquered by the Parthian empire at the time of the *Periplus* (p. 127 and p. 147), it would mean that another power ruled over Oman in the preceding centuries, which is not evidenced by any historical source. Following most of the classical sources, we rather assume that the Omani area never ceased being "Persian" at least since the mid-first millennium B.C., whatever the autonomy of local rulers (shaykhs) might have been. The Persian domination extends from the Dhofar to the Shatt alArab where Apologos is reputed, *paralipsis*, to be a Persian Harbour since Omana is designated as «another port of the Persis» (§ 36): the eastern boundary of Persia/Persis remains vague, perhaps including the whole coast of Makran up to the Indo-Parthian kingdom of the Parsidae⁴⁸. The Gulf is then wholly Persian⁴⁹, which elucidates that Apologos and Omana trade with Arabia: it does not designate at all the Arabian coast of the Gulf which is definitely Persian, but the South Arabian coast starting near Mocha and stretching westwards.

The strict definition of the term "Persian" remains debatable, whether it is a generic name for Parthian or it reveals the real domination of the more or less independent Persis province of the empire. However, more precise information was recently presented which may point to a closer link between the two extremities of the Arabian coast of the Gulf, Mesen and Oman⁵⁰. A passage from Pliny refers to «the country as far as Charax [...] inhabited by the Omani» (*N.H.*, VI, 145), suggesting the presence of Omani people in the kingdom of Characene in the early 1st cent. A.D. and, at a very close date, Isidore of Charax knows of Goaesus king of the Omani, emphasizing the specific relation between the two regions in the late 1st cent B.C. Later on, legends of some coins of the king Meredat designate him as "Omanophilos" or "King of the Omani" (141/142 A.D.); the same king appointed a governor in Bahrain in 131 A.D. Potts assumes that Meredat may have annexed the archipelago and the "kingdom" of Oman becoming, in 142, "a kind of 'emperor' of the Arabian coast of the Gulf"⁵¹, a fact which has provoked a reaction against the Mescene kingdom by the Parthian king Vologases IV in 152 A.D. Indeed, there are still, many blanks

⁴⁷ SALLES 1990. «Les Achéménides dans le Golfe ... », p. 114-115.

⁴⁸ Schoff considers Parsidae as a corruption of Persis and refers to the Carmania in this section of the *Periplus* (p. 161); Casson considers that the Makran coast belongs to Persis and ends on the boundary of the *Parsidae* Kingdom (p. 182. r.v. 37, 12: 14-16). Both commentators agree on the river Putali as the limit of Persis. When sailing back from the mouths of the Indus. Nearchus finds Greek-speaking pilots as far East as Gedrosia and reaches a friendly country in Carmania, see SALLES 1988, «La circumnavigation ... », p. 86-87.

⁴⁹ A thorough interpretation of the archaeological and historical evidence is presented by POTTS, in press. "The Parthian Presence ..."

⁵⁰ The following development is borrowed from POTTS 1988, «Arabia and Characene ... ».

⁵¹ POTTS, *op. cit.* p. 155.

in this incomplete history, but all the evidence, texts, coins and archaeological finds⁵², demonstrate a great concern of the Characene/Mesene kingdom in the affairs of the Arabian coast of the Gulf from Failaka to Oman in the 1st and 2nd centuries A.D. (and perhaps earlier). Whether the Persian authority over the Gulf recorded in the Periplus should be explained as a Characenean control or not remains a working hypothesis; but there is no conclusive objection that the "trade-unit" Apologos-Omana (*infra*) defined by the Periplus could not rely on a political unity.

Apologos, near Spasinou Charax⁵³, was an *emporion nominon*. The definition proposed by Rougé is: «l'emporion nominon est l'emporion d'un état plus au moins organisé dont le souverain veille à la sauvegarde du commerce moyennant des dons obligatoires qui ne peuvent être considérés comme les taxes que l'on préleverait *ad valorem* sur des objets de commerce transitant par un port marchand», and the author adds another specificity of the *emporion nominon* : «la sécurité est assurée»⁵⁴. It would mean that besides the "economic" usual tax (*ad valorem* on the products in transit) probably imposed by the administrators of the market-place, there would be a "political" tax imposed by the king in exchange of the security of foreign cargoes and merchants: despite the silence of the texts, such a situation could well have been existing at Apologos where both the Characenean merchants and the Characenean king would have profited together from the long-distance trade. As for him, Casson argues that «neither king nor gifts are mentioned in connection with Apologos» and defines the *emporion nominon* as «one whose ruler insisted that all trade pass through his hands or those of his agents, where there was no free bazaar but only an authorized office of trade» (p. 276 and note 24), emphasizing the monopoly imposed by the political authority; however, the commentator seems to underestimate the vicinity of the capital of the kingdom, Spasinou Charax. Whatever might have been the legal reality, there is not a single hint for the view sometimes expressed that the *emporion nominon* could have accepted some special arrangements with Rome: as they were politically absent from the Gulf. The Romans were legally absent from Apologos⁵⁵.

⁵² See the suggestion that the so-called *Bl-Ware* group of pottery could be of Characenean origin, SALLES 1990, "The Bi-Ware...", p. 327-329.

⁵³ Schoff and Casson relate the name Apologos with the port of Ubullah, known as a Persian place in sources related to the Nestorian history, VI-VIIIth cent. A.D., often given to the Arab tribes during the pre-Islamic... Arab Wars"; it will be the port of Basra in medieval times.

⁵⁴ ROUGE 1987, «*Emporion nominon* ... », p. 409.

⁵⁵ Where the Palmyrenian merchants had most probably a privileged status.

Omana, another port of Persis, is simply described as an *emporion* that is a place where goods are exchanged. The term does not connote any indication on the size of the site - there might be immense emporia such as Alexandria or rather small ones if one considers the seven emporia spread out along the East African coast, on the presence or not of any anchorage or mooring facilities, on the buildings (docks) which might have existed or not, on the administrative status, etc. It is important to stress such a distinction since, looking for the location of Omana will not mean that the *emporion* must be a large archaeological site or cannot have existed here or there because there is no archaeological site of importance – considering however that the fortunate combination of an important archaeological site where the archaeological finds attests important exchanges, and of the textual indications about the location of Omana could help in identifying the emporion.

The location of Omana has been much debated problem, which I do not intend to review here⁵⁶. If a location in the vicinity of Suhar can be dismissed without too long a discussion, the alternative between the coast of Carmania⁵⁷ and a location inside the Arab-Persian Gulf is still open. The main objection which I opposed in 1980 to my real temptation of locating Omana at ed-Dur was the length of the sailing trip from the Straits to Omana, six days being too much to reach ed-Dur in my opinion; Potts replies that this trip can even take eight days⁵⁸. Since the reconciliation of Pliny and the *Periplus* leads to a likely location inside the Arab-Persian Gulf, which the text of the *Periplus* cannot refute, the archaeological and historical arguments in favor of a location at et-Dur, since they have been brilliantly demonstrated by Potts, appear strongly convincing⁵⁹.

The maritime route Apologos-Omana appears as a "unit" where the exchanges between the two *emporion* accept a single subsidiary (§ 36): a direct navigation brought

⁵⁶ Various argumentations and bibliographical references are summarized in SALLES 1980, «Monnaies d'Arabie...», p. 102-105, and POTTS 1985, «From Qâdé...», p. 86.

⁵⁷ Chah Bahar or Tiz according to Casson (p. 180, s.v. 36, 12: 3-4), who even suggests Gwadar or Pasni if the sailing distance (six runs) is, reckoned from the Persian side of the Straits, that is Kuh-e Mobarak.

⁵⁸ SALLES 1980, «Monnaies d'Arabie ... », p. 104; POTTS 1988b, «Arabia and Characene», note 110 p. 166, and p. 154-155.

⁵⁹ A qualification could be raised: if Omana is ed-Dur, there is no indication of a further stage on the sail to Barbaricum/Karachi which should have thus taken place in the open sea. However, indications on the traditional navigation in this region stress two points, if we follow the descriptions given by MICHEA 1955, «Sous voiles...»: a) the area of ed-Dur was a gathering place for the booms before going out from the Gulf: «Vers la fin de septembre ou le début d'octobre, on voit aux approches du Détroit d'Ormuz des voiles qu'il serait vain de vouloir compter. Ce sont les flottes qui descendent des ports du Golfe Persique et se rendent au détroit ou elles se groupent en attendant le début de la mousson. Les bateaux mouillent une ancre sur des petits fonds au voisinage d'un pauvre point d'eau... Quand viendra le vent ?... Enfin, un jour l'agitation gagne la flotte. Les antennes sont hissées, les voiles tombent et se gonflent. A l'horizon, on ne voit déjà plus que les triangles des voiles des premiers partis...»: b) the sailing trip to India does not stop at any stage and keeps the open sea up to the final destination.

frankincense from Kane to Omana which exported sewn boats to Arabia - most likely South Arabia, see above. The list of imports and exports is not differentiated or divided between the two centers and everything which went to or came out from one of them was to be found in the other; nothing exterior is added, which implies that all the products from the Gulf destined for exportation were collected in one of these two *emporia*: before being "international" places, Apologos and Omana played the role of "regional" points of trade, in the Polanyi's acceptance⁶⁰. The final destination of this trading unit was Barygaza in the Gulf of Cambay⁶¹. The question whether ships from/to the Gulf used to stage at Barbaricum at the mouths of the Indus or not, is not elucidated by the text of the *Periplus*, although it may be likely, as the Harbour was another head of the Western trade: no technical need of an intermediate landing between Omana and Barygaza is recorded in our sources on the traditional navigation along this route, but unless Barbaricum was a "protected" or "forbidden" port - there is no mention of a legal status in the *Periplus* - there should be no reason why the Gulf ships would not stop there in order to negotiate or supply their cargoes (see note 61). A last point should be stressed: the text of the *Periplus* mentions that Apologos and Omana export to Barygaza and Arabia. Since Arabia likely means South Arabia, and taking into consideration the different segments of routes we have defined, this precise mention might explain a travel to Arabia via Barygaza: we find here a "unit": Barygaza-Arabia, which seems as strong as the Apologos-Omana unit⁶². However, the true picture which emerges from the *Periplus* is a three-station sailing route. Apologos-Omana Barygaza: we can see it as steady and invariable with the same ships and same agents working along regularly. At first glance, no Roman ships would use this route, since no exports from the Egyptian ports ever reached Omana or Apologos directly: the sailors would have been Indians or Arab-Persians, the Arabs being in charge of the route Kane-Omana (see *infra*).

⁶⁰ A suggestion which, consequently, curtails the role of Gerrha and Qal'at at-Bahrain in the 1st century A.D., as possibly indicated by the archaeological evidence.

⁶¹ The epigraphical evidence recorded by Casson (p. 21, note "19, citing Matthews, *JRS* 1984) comes from Palmyra and is dated to the middle of the 2nd cent. A.D.: two inscriptions honor the "sponsors" or managers of maritime expeditions to Scythia. A common name of the mouths of the Indus already found in the *Periplus* (§ 38): they sailed from the Gulf (Charax is not mentioned, although it was the terminus of most of the caravans from Palmyra; Apologos ?) to most probably Barbaricum although the name is not cited; there is no mention of a destination further East. See SEYRIG 1941, «Commerce de Palmyre» and SEYRIG 1946, «Rapports de Palmyre», 203-207.

⁶² These secondary routes were first mentioned when the *Periplus* described the activity of Kane on the South Arabian coast: «It also carries on trade with the pons across the water – Barygaza, Skythia, Omana - and with its neighbor, Persis”. (§ 27, trad. Casson): Omana is for frankincense, *supra*, and the relation Kane Barbaricum confirm that the latter was a stage on the route Omana-Barygaza (see *infra*).

The list of goods travelling along the Apologos-Omana-Barygaza segment of the Indian Ocean trade does not raise difficult problems. The Gulf area imported: “teakwood, and beams, saplings and logs of sissoo and ebony» (§ 36, trad. Casson); this is no surprise since wood had been imported in the region since the 3rd millennium at least and still is. Part of it might have been for the construction of the market of Babylonia, Susiana and Mesopotamia which lacked wood for building, common or "exotic...: the palace of Darius included teak - and other woods from the Sind⁶³. But wood was certainly used too in large quantities for shipbuilding in the Gulf itself. These imports of heavy freight required big vessels» (§ 36). Copper was brought from Barygaza to the Gulf as well, a fact which has puzzled the commentators: after he emphasized that, despite being a copper-producing country, India imported. Western copper through Barygaza, Casson concludes, that our information about Indian copper is contradictory» (p. 29). As for him, Schoff has argued that Western copper imported to Barygaza was re-shipped to Omana and Apologos; it might fit with the processes to be described in the conclusion of the present paper. Besides these explicit mentions of imported goods which deal exclusively with raw materials, we must assume other perishable products such as grain, rice, oil and slaves exported from India to Socotra or Moscha limen (§ 31, § 32). Such imports did not leave any archaeological trace, as expected, unless we accept that a particular type of pottery, the Black Ware ⁶⁴ found at ed-Dur, in Bahrain and in South Arabia exemplifies Indian containers.

Apologos and Omana exported regional products: the pearls of the Gulf reputed inferior in quality to the Indian ones: the dates⁶⁵ and its wine for it is unlikely that the wine exported from Apologos could have come from local vineyards; and native clothing. The purple cloth⁶⁶ might have originated in Babylonia, well-known for its manufactures of garments. According to Schoff, the gold and slave trade was an ancient tradition among the Arabs. Apparently, this list of exports does not record the goods that were carried down to Charax by the Palmyrenian caravans, which are not explicitly known actually. Finally, another paradox emerges from this brief survey of the goods traded along the Gulf-India

⁶³ E.g. SALLES 1990. « Les Achéménides dans le Golfe...», p. 127, with references.

⁶⁴ See my suggestion that this type of pottery could be of Indian origin. SALLES 1984b «Céramiques d'ed-Dour...» p. 247; a more detailed study of the Black. Ware question (with references to finds in Yemen) will appear in a forth coming issue of *Vestnik Drevnej Istorii (Vdl)*, Moscow.

⁶⁵ There is no reason (except the proposed location of Omana) to suggest that the dates of Apologos-Omana could have come from the Dashtiari Plain, in the Persian Baluchistan (Casson p. 182. s. v. 36, 12: 10-12); we can find lavish evidence that dates were a specialty of Southern Iraq, East Arabia and Bahrain since the period of the famous Dilmun date. About date wine, see Schoff. p. 157, s. v. wine).

⁶⁶ Schoff translates “purple dye”, and Huntingford as well, without any reference to cloth. *Murex* is present in the waters of the Gulf, and it should be reminded that producing purple dye requires enormous quantities of shells.

route: apart from the problematical copper, there is no mention of Western products. The *Periplus* shows the Apologos-Barygaza segment as an almost entirely autonomous one in the Indian Ocean trade without any Roman interference; on the other hand, as scarce as they are, there are Western imports in the archaeological sites of the Gulf.

Let us try to trace the itinerary of a Roman pillar-molded glass bowl found in Bahrain, at ed-Dur or Bidya: whether it was manufactured in Italy or in Alexandria does not matter since it had to come from the West and reach the Gulf through one of its ports Apologos or Omana.

An arrival through Apologos would mean that the glass bowl had first sailed to Antioch or any port of Syria, then reached Palmyra by the means of a caravan; from this desert *emporion* (see Teixidor), it has continued its way by caravan again and by stream-navigation on the Euphrates down to Spasinou (see Gawlikowski) from where it was re-exported again to Bahrain, ed-Dur or Bidya - and perhaps further East since similar bowls were found at Arikamedu. I will not comment upon such a trip which, although feasible, even for glassware, asserts its limits by itself; on the other hand, as just mentioned, the goods of the Palmyrenian caravans are not listed in the exports of Apologos. I will leave to others the care of scrutinizing the traces of this supposed trade route through each of its stages, keeping our pillar-moulded bowl as an example.

An arrival through Omana should be considered along the two proposed locations for this port. If it is a port of Carmania, our Roman glass bowl has been re-exported from Carmania to the Gulf, sailing first along the coast from Alexandria to Masirah island, then in the open sea to Omana and finally into the Gulf; incidentally, it should be reminded that glassware is not listed by the *Periplus* among the imports at Omana (§ 36). This kind of trip would have been rather complex, and although it did not leave any trace in the texts or archaeological remains, it should not be denied *a priori*: in the context of international trade, zigzag patterns are always more elaborated than a straight line advocate would think. If Omana is located inside the Gulf, at ed-Dur or somewhere else, the merchant carrying our glass bowl had to circumnavigate the Arabian Peninsula, from Alexandria to the Ras Musandam and ed-Dur, Bidya being probably one of his stages. I have tried to demonstrate elsewhere⁶⁷ that the circumnavigation of Arabia was *not* a trade route and if it ever existed,

⁶⁷ SALLES 1988, «La circumnavigation ... »

remained individual and extraordinary an adventure; in one way, the author of the *Periplus* comforts my view when he ignores the Gulf of Oman/Persian Gulf section.

The problem we are facing can be submitted in another way: through which maritime lanes did the Roman traders suspected to call at the Persian Gulf ports use to sail *e.g.*: “Homna and Attana, towns said by our traders to be now the most frequented ports of the Persian Gulf” (Pliny, *N.H.*, 32, 149, Loeb)? The point is that the *negotiators* Pliny quotes do not claim that they have visited these ports themselves - the illegible description of this region proposed by Pliny and his sources would prove the contrary, in the same way that the author of the *Periplus* records his - poor - knowledge of this area from second-hand information⁶⁸. Actually, there is not a single piece of textual evidence that Roman traders used to call at ports of the Persian Gulf in the 1st cent A.D., and everything that was said above tends to prove they did not. However, true Roman items were found in excavations on sites of the Gulf area and somebody must have carried them there. Who and where from where will be the last issue of this paper.

The classical sources which provide us with a western judgement on the Indian Ocean trade hardly mention the Indian merchants: an early reference is the Indian pilot whom Eudoxus of Cyzicus took back with him and the *Periplus* relates that Indians were sailing to Mocha Limen (§ 32. although they are not clearly cited), to Socotra (§ 30) and eventually to East Africa. Casson cites references of Indians who visited Alexandria (p. 34 and note 53), not to speak about the Indian embassies to Augustus (*ibid.* p. 38). A preliminary interpretation of Indian sources should be followed on⁶⁹ but does not give much information on Indian sailing in the Indian Ocean and not at all about Indians in the Arab-Persian Gulf. Most certainly, with the exception of the Palmyrenian expeditions to the mouths of the Indus, the merchants and sailors were Arab and/or Persians⁷⁰ as their Dilmunites ancestors, and it could

⁶⁸ Schoff. p. 15, argues that Pliny has used the *Periplus* among his sources without citing it: «His index would omit an obscure sea-captain, just as his text omits him, referring merely to information in which reliance can be placed»; if so, Pliny would have used by secondhand a secondhand information. Without dealing with the question of the *Periplus ante or post* Pliny, we should emphasize that Pliny never used anything else than secondhand information, often reliable, but which, in this case, does not specify the physical presence of Roman traders in the Gulf and only echoes that Homna and Attana were active ports. I must confess that using this passage to assert a presence of Roman merchants in the Gulf was clearly an overstatement, *e.g.* SALLES 1980, «Monnaies d'Arabie ... », p. 105. However, I do not see that any scholar ever considered the Arab-Persian Gulf as «une région dont les seuls étrangers seraient des Grecs, puis des marchands venus du monde romain - un Golfe Persique réduit à n'être qu'un segment de la route du commerce à longue distance entre la Méditerranée et l'Inde» (BOUCHARLAT 1989a. «Etablissements ... », p. 218), an obvious falsehood.

⁶⁹ SCHLINGLOFF 1982. «Indian Seefahrt ... », see bibliography in note 13, p. 72-73.

⁷⁰ A recurrent characteristic of the regional settlement since “immemorial times” is that Arabs and Persians are settled indifferently on both shores of the Gulf, without any strict division based upon their “national” origin.

appear a truism to assert that the Apologos-Barygaza segment of the Indian Ocean was handled by Arabo-Persians.

I would suggest that the western goods found in the archaeological sites of the Gulf used to travel along this non-Roman segment of the trading route and were cargoed from Barygaza and Barbaricum by Arabo-Persian merchants and sailors. The fact that Barygaza was one of the major *emporía* in the whole system of the Indian trade cannot be questioned: the Harbour is cited twenty-eight times in the Periplus (Casson. p. 22-23 and 271-277). It was suggested that western copper exported to the Gulf was brought to Barygaza first; on this large market, the traders or sailors could have taken Roman pottery, other western items or even Indian Red Polished wares at the same time, in order to fill their cargoes and sell such valuable objects in their home country. On their stage to Barbaricum, they could have got Alexandrine glassware such as the pillar-molded bowl which we previously used as an example: the Indus Harbour was known for its imports of Roman glassware (§ 39)⁷¹. Actually, Barygaza, as the prominent Harbour of the region and Barbaricum as well, were centres of re-distribution of oriental and western goods, that is places where, for example, a Roman merchandise ceased to be economically Roman and became anything else, even though it kept its cultural essence from Roma or Alexandria. Is it a mere coincidence if the single Roman coin found at ed-Dur is from Tiberius, the coinage par excellence of the Roman-Indian exchanges ? I would suspect it was brought back from India by a merchant of the Apologos-Barygaza segment. Without any commercial purpose: while the "serious" money of long-distance trade was Roman, the "authorities" around ed-Dur were minting a bronze coinage which was still imitating immobilized and degenerated Alexander types⁷².

To sum-up, nothing we know from the Periplus and other sources about the organisation of long-distance trade in the Gulf pertains to any Roman presence in the area, and there is no true evidence that this route was participating in the flow of exchanges

⁷¹ See the interrogations by SEYRIG 1946. «Rapports de Palmyre...», p. 205-206, discussing the trade of Palmyrenian caravans: among the goods carried by the caravans. «On voudrait pouvoir citer aussi les verreries, pour lesquelles les Phéniciens avaient tant de réputation, et sans doute le transport de ces objets par caravanes est-il possible malgré leur fragilité. Mais la précieuse série de verres peints et modelés... à Begram en Afghanistan (ou il ne me paraît pas douteux qu'elle soit montée de Barbaricum ou de Barygaza) comprend certaines pièces d'un caractère trop indiscutablement alexandrin pour que l'on puisse s'aventurer dans une hypothèse syrienne».

⁷² Indeed, we cannot as certain that these small bronze values had a commercial purpose: at least, they might have very unlikely been related to the "international" trade of the Gulf. Coin finds from ed-Dur and Eastern Arabia is being published by D. Potts.

between the West and the East, namely Alexandria and India. Two inscriptions mention Palmyrenian expeditions from Charax to the Indus valley in the 2nd century A.D., and we may assume that they were not exceptional if not frequent; however, these straight navigations without references in textual sources and economic information from Palmyra itself look somehow “aside” of the general activity, as if the Palmyrenians had a kind of autonomous trip inside a wider system more or less foreign to them⁷³. The real nature of the “international” trade in the Gulf area is clearly evidenced by archaeological finds at ed-Dur. Bahrain and other places can be described as Arabo-Indian exchanges, even though Roman items were sometimes carried from the Indian markets along this local and independent channel; in one way, the Arab-Persian Gulf was fed with western products by India.

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⁷³ One would object the presence of Palmyrenian graves in the Kharg Island, off Buchir in Iran. On the one hand, they should be compared with the Palmyrenian inscription mentioning a Characene governor on Bahrain, at an earlier date; they would evidence a Mesenian/Palmyrenian “control” over the Gulf. On the other hand, they attest a reinforcement of the rather given up Iranian coast, absent from the texts and poor in archaeological finds; they would denote a specific “new” route, on the fringe of the main flow along the Arabian coast, a view which might go back to the abovementioned notions of “separation” and “autonomy”.

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