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This article is a comprehensive study of the Bab el-Mandeb Strait in antiquity, based on Greek and Roman sources from the 5th century BC to the 2nd century AD. It consists of six sections, and a corpus of texts in appendix : 1.The historical background: the Greeks and Romans in the area of Bab al-Mandab (from early times to the 2nd century A.D.); 2.From stoma to stena: the making of the Greco-Roman body of knowledge ; 3.The “Greco-Roman Bab al-Mandab”: a synthetic review of the Greco-Roman body of knowledge; 4.The local trade network in the area of Bab al-Mandab; 5.Crossing the strait and mapping the strait: two perceptions of the space; 6.Imperialism and space; power and glory: the rulers / conquerors and the Bab al-Mandab Strait

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Fauces Rubri maris: The Greco-Roman Bab al-Mandab **(5th century B.C. – 2nd century A.D.)**

“Je songe que Bab el-Mandeb veut dire ‘Porte des larmes’, et j’ai bien failli l’apprendre par l’expérience” (H. de Monfreid, *Lettres de la mer Rouge* - 12 janvier 1914)*

“It is the sea more than anything else that defines the contours of the land and gives it its shape, by forming gulfs, deep seas, straits, and likewise isthmuses, peninsulas, and promontories.”¹ Whereas straits delineate the contours of the *oikoumenê* like capes, gulfs etc., they differ from these coastal elements which shape the inhabited world, as they divide seas without closing them; while separating land masses, they link them by allowing the passage from one side to the other. Straits both separate and connect.

In the Greco-Roman representation of the world, four straits were regarded as being different from all others. The inhabited world, thought to be a enormous island, was thought to be surrounded by an external ocean entering the different landmasses through four “passages” and forming four gulfs: the Mediterranean Sea, the Red Sea, the Arab-Persian Gulf and the Caspian Sea.² The strait today named Bab al-Mandab was one of these four “effluents” of the peripheral ocean.

This remarkable locality of the Greco-Roman *oikoumênê* remained for a long time beyond the reach of those dwelling in the countries of the Mediterranean, until Alexander the Great swept away the limits of the Greek horizon. From then on, not only did the “strait of the Red Sea” contribute to “define the contours” of the southern *oikoumenê*, but it steadily opened the Indian Ocean to Greco-Roman merchants. For this reason, although we wish we had more evidence, the *fauces Rubri maris* really deserves a proper inquiry.

N.B. 1) There are many discrepancies between the Greco-Roman and modern geographical names, among which the following must be emphasised: the Red Sea was commonly called « Arabian Gulf » or « Erythraean sea »; the western Indian Ocean (*viz.* the Red Sea, the Arab-Persian Gulf, the Gulf of Aden and the sea of Oman) was generally named « Erythraean sea » (*Erythra thalassa*; *mare Rubrum*). In this paper, the name “Red Sea” is employed only in its modern sense. 2) According to a common Greco-Roman conception, the western shore of the Red Sea belonged to Asia, not Africa. 3) Bold numbers in brackets (e.g., [12]) refer to the texts collected in the appendix 7.1.4) Last but not least, in the present article the name “Bab al-Mandab” generally points to the region of Bab al-Mandab (see map 7.3), instead of the strait *stricto sensu*.

* I would like to thank Pr K. Geus for inviting me to the seminar « The Horn of Africa » held in Berlin on 25th -26th February 2011. The present article is an improved version of my oral presentation.

1 Str. 2, 5, 17 (transl. Jones).

2 See e.g. Dion. Per. 40-57. The four “passages” are the Strait of Gibraltar, the Strait of Bab al-Mandab, the Strait of Hormuz. It was long believed that the Caspian Sea was connected to the outer ocean through a strait.

1. The historical background: the Greeks and Romans in the area of Bab al-Mandab (from early times to the 2nd century A.D.)

1.1. Before Alexander the Great

Did many Greek sailors ever skirt the shores of Bab al-Mandab in the pre-Hellenistic times? Very little textual evidence enables us to answer this question. A couple of scarce allusions from Herodotus' *History* lead us to the conclusion that only a few of them might have reached the strait's area.

Herodotus claims that between the late 7th century and the early 6th century B.C.³ the Egyptian Pharaoh *Nekôs* (Necho II [*regn.* 610-595 B.C.]) sent out an expedition manned by Phoenician sailors; they had been ordered to circumnavigate Libya (= Africa): "When he had finished digging the canal which leads from the Nile to the Arabian Gulf, he sent Phoenicians in ships, instructing them to sail on their return voyage past the Pillars of Heracles until they came into the northern sea and so to Egypt." At some point in this unbelievable voyage, the Phoenicians sailed across the Strait of Bab al-Mandab. Yet Herodotus, or his sources (maybe Egyptian priests), does not comment on this fact and does not even mention it. At any rate, this region was not visited by Greek individuals, since only Phoenician sailors were on board. The same *Nekôs* is reported to have created a war fleet in the Red Sea. But where in the Red Sea did these ships sail?⁴ Herodotus does not give any clue. What purpose were they built for? Herodotus alludes to an occasional (ἐν τῷ δέοντι) military use (πρὸς στρατηγίᾳς). Some scholars think that these vessels supported the expeditions to the mysterious land of Punt, while others surmise that they patrolled as far as the open sea (*viz.* the Gulf of Aden) chasing pirates in different parts of the Red Sea, including around the strait of Bab al-Mandab.⁵ That these triremes were Phoenician and that some Greeks had been enrolled as sailors is a reasonable assumption, which unfortunately cannot be proved.⁶

The only documented case goes back to the time of the Persian rule in Egypt, *viz.* several decades after *Nekôs*' reign. In *ca.* 520 B.C., Skylax of Karyanda, a Greek serving Darius I, performed a notable achievement. He led a naval expedition from the mouths of the Indus – he had previously sailed down this river – to the Gulf of Suez's harbour, where the Phoenician mariners of *Nekôs* had begun their circumnavigation.⁷ Skylax had to pass the strait on his way to Egypt but no piece of evidence refers to this event.⁸ Shortly after Skylax's achievement, Darius had the Nile connected to the Red Sea (*viz.* the Gulf of Suez) by a canal – this is also attested by inscriptions – and sent a certain number of ships

3 Hdt. 4, 42.

4 Hdt. 2, 159.

5 Desanges (b) 228; Lloyd (a) 142-148.

6 A relationship between *Nekôs* and the city of Miletus is alluded to by Herodotus (Hdt. 2, 159). See also Delbrueck 11; de Romanis 78-81.

7 Hdt. 4, 44 (that Skylax reached Bab al-Mandab is doubted by some scholars, such as Salles 80).

8 Hecataeus' fragment *FGrH* F271 points to the Arabian islands named *Kamarênoi*. It has been believed that this name points to the Kamaran Island (Schiwek 14; Högemann 106).

to the Arab-Persian Gulf from Egypt.⁹ Supposing that Greek sailors were on board, no traces of what they did and saw remain in the extant textual evidence.¹⁰

1.2. The time of Alexander the Great

Back in Susa after his incredible expedition to India Alexander commissioned several exploratory missions throughout the Erythraean Sea. The circumnavigation of the whole Arabian Peninsula seems to have received special interest, as Alexander planned naval explorations in two opposite directions.¹¹ Thus, nearly two centuries after Skylax's voyage, the Greeks – or to be more precise, the Greco-Macedonians – penetrated the southern Red Sea again. Whether or not these expeditions were the prelude to future imperialistic plans, they finally failed because of Alexander's premature death.

In the autumn of 324 B.C., three separate missions led by Archias, Androstenes and Hiero respectively explored the western coast of the Arab-Persian Gulf. Hiero, in particular, had been ordered to reach Egypt (i.e. the Gulf of Suez) from the bottom of the Arab-Persian Gulf, but actually he failed¹²: He undoubtedly passed the strait of Ormuz, because he was unable to claim that the Arabian Peninsula was “not smaller than India” without sailing beyond this point. He was, however, forced to turn back because of impossible sailing conditions, perhaps before he entered the strait of Bab al-Mandab.¹³

The same year other mariners had been assigned the task of doing this voyage in the opposite direction (from the northern Red Sea to the Arab-Persian Gulf) by Alexander. Although they failed to achieve their goal, they probably sailed as far as the Gulf of Aden, as shown by three documents.¹⁴ First Theophrastus, in a section of the *Historia plantarum* devoted to the frankincense tree and myrrh tree, mentions explorers travelling from the Gulf “of the Heroes” (Ἡρώων κόλπου = the Gulf of Suez) who reached a country belonging to the Sabaeans. He goes on to say that they managed to observe these trees during the main harvesting season (September). This event is beyond doubt connected to Alexander's plan. Secondly Strabo reports – from Eratosthenes – a measurement of the east coast of the Red Sea (14 000 *stadia*), which had been calculated by “Alexander's companions and Anaxikratēs” (οἱ περὶ Ἀλέξανδρον ἀνέγραψαν καὶ Ἀναξικράτη).¹⁵ Thirdly Arrian informs us of anonymous explorers sent by Alexander from Egypt (a name which actually

9 Schiwek 15-16; de Romanis 94-95; Briant 397: “... jamais il n'exista de communication directe et régulière entre la mer Rouge et le golfe Persique tout au long de la période achéménide.” Also see Högemann 107 (who surmises that the toponym šb, which appear in the inscriptions of Darius, points to *Sabbatha*, “die Stadt der Sabäer am Bab al-Mandab”).

10 Delbrueck 21 states that the Greek colony of *Ampelome* (below, n. 31) was founded by Darius.

11 Arrian. *Anab.* 7, 19, 6.

12 Arrian. *Anab.* 7, 20, 7-9.

13 Delbrueck 29; Högemann 88-94; Salles 84-85.

14 Theophr. *h. plant.* 9, 4, 4-5; Str. 16, 4, 4 [= Berger III B 48, p. 290]; Arrian. *Ind.* 43, 7. There is also an obscure statement by Plin. *nat.* 2, 168 (*victoriae Magni Alexandri lustrare usque in Arabicum sinum*).

15 Ἀναξικράτης: Bernhardt's emendation has been accepted by Jacoby (*FgrH* 307 n. 2) but rejected by Radt 345 who doubts that the Red Sea was explored in Alexander's times. Berger 291-292 believes that this Alexandros was an explorer / writer, and not the Macedonian king. Bernhardt's correction is defended by Gorman 212-213.

points to the Gulf of Suez) to navigate around the Arabian Peninsula, who were compelled to turn back due to lack of water.¹⁶ Whether Alexander ordered one or two naval expeditions cannot be established on the basis of such evidence. Despite this unsolvable problem, however, both Strabo and Theophrastus indicate, however, that the strait of Bab al-Mandab was reached: on the one hand measuring the Arabian coast implied travelling as far as its southern edge; on the other hand the Greek explorers would not have observed frankincense trees if they had not penetrated the region of produce, which was probably situated somewhere around *Kanê* [Qana'] in the Hadramawt, east of Aden.¹⁷ Supposing then that Alexander's mariners reported something about the strait, nothing appears in our evidence.¹⁸ Maybe the discovery of the trees producing the aromatics praised by Herodotus and highly rated in the entire Greek world outshone the crossing of the strait.¹⁹ This assumption can be inferred from the following quotation, which perhaps refers to Anaxikratês' voyage: "However, there goes with them (sc. Herodotus' statements) a story that under the reflected rays of the sun at midday an indescribable sort of collective odour is given off from the whole of the peninsula (...) and that the first news of Arabia received by the fleets of Alexander the Great was carried by these odours far out to sea."²⁰

1.3. The Hellenistic period: the Ptolemaic rule in Egypt (323-30 B.C.)

In 283 B.C. Ptolemy II inherited from his father a kingdom whose core was composed of Egypt and *Koîlê* Syria. The northern end of the Red Sea (i.e. the Gulf of Suez), and the Egyptian coast with its harbours connected by tracks to the Nile Valley (*Myos Hormos*, *Berenikê*), were more or less under his control. As several events such as the reopening of the Nile-Red Sea canal and the grand Dionysiac procession presented to Alexandrian citizens in the 3rd *Ptolemaieia* celebration show, the countries lying south of Egypt, and particularly the Arabian Gulf, which was almost unknown to Greeks at that time, played an important part in Ptolemy II's imperialistic projects.²¹

It is well known that this dynamic king launched expeditions along the western shores of the Red Sea for military and political purposes, namely to capture African war elephants and improve his own prestige – the quest of commercial profit is unlikely –.²² Several settlements (*Arsinoe*, *Philotera*, *Ptolemais Therôn* [= of the Hunts]) established along the western Red Sea coast formed the backbone of Ptolemy's project, which was so successful that, as Huss states, "der nördliche Teil des Roten Meers war eine *mare Ptole-*

16 About this (or these) expeditions, see Högemann 80-87; Desanges (b) 245; Mac Donald 246; Pfister 32-34; Tarn 13; Delbrueck 28; Bianchetti (b) 158-159.

17 On this question, see Delbrueck 28; Högemann 87; Amigues 674-675; Potts 6.

18 Significantly Arrian. *Ind.* 43, 1-3, does not refer to the strait in his short description of the "Great Sea".

19 Hdt. 3, 107.

20 Plin. *nat.* 12, 86. See Burstein 160 n. 2.

21 Desanges (b) 246-252; Huss 288; Fraser (a) 177; Yémen (Cuvigny) 68.

22 Huss 288-290 (*contra*: Fraser a 141; 177). On elephant hunting, see e.g. Kortenbeutel 27-28; 35-38; Scullard 126-133.

maeum geworden.”²³ Whether other bases of operation south of *Ptolemais* were founded under Ptolemy II’s rule remains unclear. It has been claimed, however, that his explorers reached the Bab al-Mandab strait. Two pieces of evidence are supposed to prove it.²⁴ First, a certain Timosthenes, an admiral of Ptolemy II who wrote a treatise entitled *On harbours*, gave a figure of the width of the strait, which implies that, unless he borrowed this data from a previous source – for instance Anaxikratês –, he reached the area of Bab al-Mandab. Secondly, we are aware of a hunting base called *Demetriou skopiai* (the “look-out place of Demetrios”) situated not far from the strait (around Assab?).²⁵ Coincidentally, a certain Demetrios responsible for looking after the elephants is mentioned in a papyrus dated 255 B.C.²⁶, but, as has rightly been observed, this name is too common for any sound conclusion to be drawn from it. In reality, since the identity of the first explorers is not disclosed by our sources [2; 3] it is impossible to determine whether they were sent by Ptolemy II²⁷ or, as Wilcken believes, by Ptolemy III.²⁸

Ptolemy II also had the eastern Red Sea in mind that is to say the shoreline skirted by Alexander’s explorers on their way to the Arab-Persian Gulf. However, compared with the African side, the situation was different. Not only were the resources of the arid Arabian coast particularly scarce and “in general not suited for maritime activity”²⁹, but the south-west edge of the Peninsula was the domain of several ancient and well-organized states, namely Ma’in, Saba’, Qatabân, which the Greeks believed to be extraordinarily wealthy.³⁰ Under such circumstances no Ptolemaic settlement is likely to have been founded in this area.³¹ We are merely aware of a certain Aristôn sent by a king – probably Ptolemy II – to explore the eastern coast of the Arabian Gulf as far as the Ocean, viz. the Gulf of Aden (πρὸς κατασκοπὴν τῆς ἕως ὠκεανοῦ παρηκούσης Ἀραβίας)³², implying that he probably saw the strait of Bab al-Mandab. At least Tarn thinks so, claiming that he provided Eratosthenes with a measurement of the Arabian coast which was more accurate than the previous one established by Anaxikratês (14,000 *stadia*).³³ Much more obscure is Agatharchides’ statement in a passage laden with *paradoxa* (marvels) that some travellers,

23 Huss 290. Arsinoe was located in the bottom of the gulf of Suez; Philotera’s location remains unknown (Marsa Gawasis?); most scholars agree that *Ptolemais* was founded at or near Aqiq; Huss 289; Sidebotham (b) 186-187.

24 Desanges (b) 275-276. See also Fraser a177-178.

25 Str. 16, 4, 9 (Artemidorus).

26 *Pap. Hibeh* 110 (WChr. 435). See Fraser b 305-306 n.365.

27 Kortenbeutel 27-28; Desanges 275. Fraser b 303 n. 353 (and [12]) considers it possible that the ductus points to Arsinoe Philadelphus. Therefore, the straits would have been crossed under Ptolemy II’s rule.

28 Wilcken 87; Hofmann 87; 95; Burstein 9.

29 Raschke 657.

30 Diod. 3, 47, 4-8 (= Agatharchides, *GGM* 1,100-101).

31 On *Ampelome oppidum* (Plin. *nat.* 6, 159) allegedly founded by Ptolemy II, see, Tarn (b) 21-22; Kortenbeutel 21; Fraser (a) 177; Raschke 964, n. 1249; Desanges (b) 245; Cohen 44-45; 307; 329.

32 Diod. 3, 42, 1 (= Agatharchides, *GGM* 1, 85). About Aristôn, see Kortenbeutel 20; Tarn (b) 14; Delbrueck 33; Woelk 259; Fraser (b) 300 n. 349. About the exploration of the eastern side, see Bianchetti (b) 158-159. Delbrueck’s view that Pythagoras (Plin. *nat.* 39, 34) led a “zweiter Erkundung” derives from a misinterpretation: the islands referred to by Pl. are unlikely to lie “innerhalb und außerhalb der Mündung des Golfs”.

33 Str. 16, 4, 4. See Tarn *l.c.* n. 34; Kortenbeutel *l.c.*; Woelk 259-260; von Wissmann (d) 391.

while sailing along the coast of the Sabaeans (τοῖς προσπλέουσι τὴν παράλιον) could smell fragrances coming from trees (viz. incense trees, myrrh trees etc.).³⁴ Who were these travellers: merchants and /or official explorers? When did they skirt the Sabaean coast? Did they sail across the strait and travel on the open sea? As these questions remain unanswered, there is no point in inferring anything from this document.³⁵

As regards the African coast in Ptolemy III's time, the Greeks, who had reached the western side of Bab al-Mandab, actively explored this area and went even further, as proven by several reliable documents.³⁶ First, Agatharchides refers to an ethnographical experiment carried out by Simmias, a *philos* (friend) of *Evergetês*, in order to observe the behaviour of a peculiar tribe of African *Ikhthyophagoi* ("Fish Eaters"). This event took place in the neighbourhood of Tajura.³⁷ Secondly, proof is offered by two ports lying inside the western side of the strait that were named *Berenikê*, after the name of Ptolemy III's wife.³⁸ This exploratory activity was mainly motivated by the quest for war elephants, which at this time were hunted from bases set up inside and beyond the strait along the northern Somalia coast; the latter region was called *Arômatophora* – the Spice-bearing country – and divided into three parts respectively named *Smyrnophoros* (the "Myrrh-bearing country"), *Libanotophora* (the "Incense-bearing country") and *Kinnamôphoros* (the "*Kinnamômon* [a still not clearly identified spice] bearing country").³⁹ An interesting phrase appears in a dedication to the Samothracian gods perhaps dating to Ptolemy III's rule ([13⁴⁰] and below, n. 395): "as he sailed out of the Arabian Gulf" (ἐκπλεύσας ἐκ τῆς Ἐρυθρᾶς θαλάσσης). This expression seems to be synonymous with "to pass the strait".⁴¹

Most historians agree that the demand for war elephants ceased in the early 2nd century B.C. during the rule of Ptolemy V (205-180 B.C.).⁴² Yet this new situation did not

34 Diod. 3, 46, 5 (= Agatharchides, *GGM* 1, 97).

35 According to Agatharchides, there were, close to the country of the Sabaeans (πλησίον), some « blessed islands » (νῆσοι δ' εὐδαίμονες) where unprotected cities lay. Von Wissmann (a) 304-305 believes that these islands should be identified with Aden, (also Högemann 85). However, most scholars (Tkač (b) 1402-14; Kortenbeutel 55, n. 169; Müller (a) 191; Delbrueck 35; Raschke 657; Burstein 169; de Romanis 143 ...) think that Suqutra and the adjacent islands should be favoured. I personally tend to prefer von Wissmann's opinion, since: 1) Aden was also called *Eudaimôn*; 2) the two peninsulas of Aden and Little Aden (Desanges 157 n. 39) might look like islands (see [23]). In addition, according to the short description from *P.m.r.* 30-31, Suqutra does not have the characteristics of a "blessed" place. In contrast, *Eudaimôn* / Aden is described as an "Arab Alexandria" [29] before it was sacked by *Kaisar*.

36 Kortenbeutel 33-34; 37; Rostovtzeff 302; Huss 366.

37 Diod. 3, 18, 4-7 (= Agatharchides, *GGM* 1, 41). See Desanges 292 (Tajura); Woelk 134 (Somaliland).

38 Desanges 295-296.

39 Str. 16, 4, 14 (Artemidorus). For Ptolemy III's hunting stations inside and beyond the strait, see e.g. Rostovtzeff 302-304; Fraser (b) 305-308 n. 365-370.

40 Raschke 949 n. 1193 believes that this document is "the earliest documentary evidence for the voyage to the vicinity of Bab al-Mandeb and beyond."

41 See [6]; Plin. *nat.* 2, 169; Arrian. *Ind.* 43, 2 (τὴν ἔξω θάλασσαν); *P.m.r.* 30. Thus von Wissmann (b) 430 is wrong writing: "about 115 B.C. the strait of Bab al-Mandab was opened for the first time for Egyptian ships, so that these could directly sail to India avoiding transshipment into foreign vessels."

42 See e.g. Rostovtzeff 303-304; Fraser a 179.

put an end to the Greek presence around Bab al-Mandab. The area which the Ptolemaic expeditions had penetrated was from then onwards open to private maritime traders (*emporoi*).⁴³ – whether, or how, or to what extent this phenomenon was connected to a “ptol-emaieische Handelspolitik”⁴⁴ does not directly concern the present inquiry –. Shipowners (*naukleroi*) and merchants (*emporoi*) who were not afraid of the hazards of the sea began – maybe as soon as the early 2nd century⁴⁵ – to import commodities such as myrrh and frankincense from modern-day Eritrea and northern Somalia, and even from the Arabian side of the Bab al-Mandab area⁴⁶, perhaps as far as Aden.⁴⁷ This was a significant change in the pattern of exchanges, since up until then aromatics and spices – no doubt including some varieties harvested in the Horn of Africa – were transported to the Mediterranean world by the trans-Arabian caravan route through Nabatean territory.⁴⁸ A papyrus, probably dated to the mid 2nd cent. B.C., reporting a trade voyage to the *Arômatophora* country, is in this respect a valuable piece of evidence. Interestingly, this document refers to “the outside sea” [13bis], an (common?) expression which probably means “the sea which extends beyond the strait” (see below, n. 396). Finally, there is a passage in Diodorus stating that in Agatharchides’ time (vñv), “many” (πολλοί) merchants “often” (πολλακίς) reached a country lying beyond the strait. This is necessarily an allusion to merchants loading aromatics in *Smyrnophoros*, somewhere in northern Somalia.⁴⁹

To Greeks becoming increasingly familiar with the crossing of Bab al-Mandab the next step was to catch the monsoon winds and reach India. This feat was achieved by a certain Eudoxus of Cyzicus – apparently not a professional *emporos* – in the late 2nd century, during the rule of Ptolemy VIII and Cleopatra III, and, after the former’s death, of Cleopatra III and Ptolemy X Lathyrus (between 116 and 113 B.C.).⁵⁰ This discovery was to have impact on the trade in the Arabian part of Bab al-Mandab. Henceforth commodities could be shipped directly from Indian ports to Alexandria by Mediterranean *emporoi*, eventually decreasing the incomes of south Arabian middlemen.⁵¹ Unfortunately, the

43 Kortenbeutel 44; Raschke 659; Huss 425.

44 Delbrueck 44; Rostovtzeff (b) 741-743. There is a large amount of academic literature dealing with the African/Indian trade. The reader can find useful discussions and many bibliographical references in recent monographs (e.g. Sidebotham; Raschke; de Romanis; Young).

45 The earliest piece of evidence is the papyrus published by Wilcken. See Kortenbeutel 44; Otto & Bengtson 200. Dihle (c) 115 argues the “griechische Seeleute” sailed beyond Bab al-Mandab only after Eudoxus’ voyage to India, a view rejected by Raschke 940, n. 1962.

46 See 13bis (see Wilcken 90-91); 12; Bernand (c) n°2 (dedication offered to Pan by Zenodotos for a safe return from the country of the Sabaeans); 3; 13; 43 etc. (dedications offered to Pan by private individuals returning from the *Trôgodytes*’ country, perhaps from the strait area); Diodorus (below, n. 107); OGIS 132 (130 B.C.). Also see Desanges (b) 299-300; Bernand (c) 570-571; Raschke 950, n.1193-1194; Fraser (b) 309-310, n. 378.

47 See Schiettecatte (b) 239-242.

48 About the coexistence (and /or competition) of the sea route and the trans-Arabian route, see Ryckmans 85-89; Groom (a) 189-213; Rodinson 215-216; *Yémen* (Robin) 181.

49 Diod. 3, 18, 3 (= Agatharchides, *GGM* 1, 41).

50 See e.g. Dihle (c) 111-112; Thiel 44-55; Fraser a 181-184; Desanges 151-173. According to Desanges, Eudoxus sailed with the south-west monsoon wind from the Cape Gardafui.

51 Consensus has it (see e.g. Rostovtzeff (b) 738-740; Sidebotham (a) 2; Desanges 157) that Arab middlemen supplied Alexandrian merchants with Indian commodities until the latter began to use the monsoon winds. For instance, the Indian precious stones (λιθολ’ Ἰνδικόν) used in Ptolemy

scarce and vague textual evidence does not enable us to clearly determine how fast this maritime trade expanded. Strabo [21], probably referring to the time of Ptolemy XII (*regn.* 80-51 B.C.), claims that not even twenty ships (a year?⁵²) would dare to sail out of the Arabian Gulf “as far as India and the extremities of *Aethiopia*” (= *akrôn tôn Aithiōpikôn?*). If, as I tend to believe, Strabo does not take into account the *emporoi* shipping local and re-exported goods from Arabian ports⁵³, one may surmise that more than twenty vessels a year reached the area of Bab al-Mandab in the early 1st century B.C. At any rate, this period witnessed the appearance of an official title, “*epistrategos* of the Erythraean (= the Arabian Gulf ?) and Indian Sea (the Gulf of Aden ?)”⁵⁴ that maybe implied the presence – still not clearly proven by documents – of royal vessels up to the area of the strait.⁵⁵ This novel situation certainly correlates with the increasing maritime trade.

The preceding short presentation would scarcely be comprehensive if I had neglected two documents, whose actual historical value is, however, disputed. The first of these is the narrative by a certain Iamboulos – this name suggests a Nabataean origin – which may go back to the 3rd century B.C. His narrative was summarized by Diodorus. On his way to the *Arōmatophoros* (the “Spice bearing region”, i.e. probably the south-west part of the Arabian Peninsula) through Arabia (ἀναβαίνων δὲ διὰ τῆς Ἀραβίας ἐπὶ τὴν ἀρωματοφόρον), and apparently via the trans-Arabian caravan route⁵⁶, this Iamboulos and his fellow traveller were caught by robbers and taken prisoner. Sometime later they were again captured, this time by Ethiopian bandits, and brought to the coastal part of *Aithiopia* (πρὸς τὴν παραθαλάττιον τῆς Αἰθιοπίας = northern Somalia?⁵⁷). The rest of the story has no relevance for the present investigation. The point is that despite their vagueness, these geographical details seem to refer to the area of Bab al-Mandab. Iamboulos was apparently taken to the African side across the strait, in a region where the two opposing coasts were close to each other. Of course, the main problem is to what extent we can rely on this story – an issue already discussed in antiquity. Even if Iamboulos’ narrative is partly fictional, it nonetheless clearly points to local trade traffic (or piracy) having required light boats in order to move from one side of the strait to the other (to be discussed below). In contrast, the author of the second document, Euhemerus of Messenia, can be

IV’s house-boat (Athenaeus, *Deipn.* 5, 39 [= Kallixenos *FGrH* 627 F1]) may have been imported by them.

52 “Fraser a 184.

53 At the time of the *Periplus* such short round trips (from Egypt to *Adoulis*, *Mouza*, or *Kanê*) were still undertaken by some merchants (Casson 288, n.15).

54 *SB* 1 n°2264 (79 B.C.); 1 n°4084 (62 B.C.); 5.2 n° 8036 (74/73 B.C.?); *OGIS* 186 (62 B.C.); 190 (51 B.C.?). See Kortenbeutel 48-50; Rostovtzeff 305; Fraser (b)314-315 n398-401; Delbrueck 45; Dihle (b) 548; Raschke 971 n.1292-1295; Fraser a 184.

55 Kortenbeutel 45; Rostovtzeff 305: “... der Strateg der Thebais, welcher also auch das Oberkommando über die Küste des Roten Meeres führte.”

56 Diod. 2, 55. *N.b.*: In Phot. *Bibl.* 250, 457b (= Agatharchides, *GGM* 1, 87) the verb κατὰγω refers to the trip from southern Arabia to Palestine.

57 Kroll 681, following Tomaschek, states that the *Arōmatophora* lies on the north Somali coast and that the Ethiopians took him to “einem Stamme der ostafrikanischen Küste”. Altheim 84 thinks that the Ethiopians inhabited the today Eritrea. Also see Winiarczyk 130-132; 134-137; 139-141.

more precisely dated.⁵⁸ He was admitted into the circle of the Macedonian king Cassandros as a “Friend” (*philos*) between 318 and 298 B.C.⁵⁹, and his *Hiera anagraphê* may have been composed between 280 and 260 B.C. He was sent to Blessed Arabia (ἐκ τῆς εὐδαίμονος Ἀραβίας) – probably on some official duty (βασιλικὰς τινας χρείας καὶ μεγάλας ἀποδημίας) – the Sabean country is probably meant⁶⁰. Then he boarded a ship on a voyage of the “ocean” (τὸν πλοῦν δι’ ὠκεανοῦ) to an enigmatic island (Suqutra?).⁶¹ As far as Euhemerus’ narrative is based upon reliable facts it relates a journey to southern Arabia by caravan routes as well as a voyage that probably began in a harbour near the strait. This may support the theory a Greek individual with no relations to the Ptolemies reached the Arabian area of the strait as early as the early 3rd century. Even if the bulk of Euhemerus’ story is fictional⁶² it nonetheless surely incorporates a certain amount of reliable data collected from external sources. It is therefore plausible that this narrative echoes the ongoing exploration of the area of the southern Red Sea carried out during the reign of Ptolemy II.

1.4. The Early Roman Empire (from Augustus to the 2nd century A.D.)

With the defeat of Cleopatra VII and Mark Antony (31 B.C.) and the annexation of Egypt, Rome under the leadership of Augustus was from then onwards in contact with the southern edge of the *oikoumenê*. In fact it did not take long before the *arma Romana* were sent southwards to *Aethiopia* (the common designation of the Nubian kingdom of Meroe) and to southern Arabia.⁶³ In 26 B.C. – or perhaps in 25 – an overland expedition headed by the *praefectus* of Egypt Aelius Gallus, a friend of Strabo, penetrated southern Arabia. If taking control of the Sabaeen kingdom and the east side of Bab al-Mandab was part of Octavius’ plan [20]⁶⁴, the Roman ruler was unsuccessful, at least from the military point of view. Aelius Gallus’ army reached *Mariba* (Mârib) but could not advance further. Still, this arduous campaign was not entirely unsuccessful as the local Arab kingdoms got a taste of the power of Rome: “Local rulers in southern Arabia certainly would have wanted to stay on good terms with Rome to prevent any future military adventures in their territo-

58 Eusebius Caesariensis, *Praep. Ev.* 2, 5 (= Diod. 6, 1-11). See also Diod. 5, 41-46. See Jacoby 959; Fraser (a) 289-298; Braunert, especially 258-259; 265-268; *Yémen* (Cuvigny) 68.

59 *Stricto sensu*, Cassandros ruled Macedonia as king from 306 to 298 B.C., but actually he acted as a king before 306.

60 Delbrueck 36 identifies *Eudaimôn Arabia* as Aden.

61 Tkač (b) 1403.

62 Such was Eratosthenes’ opinion (Str. 2, 4, 2).

63 See R. Gest. div. 26, 5.

64 “The campaign of Aelius Gallus at the beginning of the principate has always been something of a mystery, but it is quite clear that Augustus had some kind of expansionist interest at that stage in controlling the rich trade in spices and perfumes” (Bowersock (a) 227). Rostovtzeff 306-309 claims that the Roman policy – like the Ptolemaic one – was driven by “commercial” interests”. See also Delbrueck 231; Raschke 871 n. 901; Sidebotham (a) 121; Desanges (b) 308; Scheid 72; Roddaz 273, among many scholars.

ry”.⁶⁵ It is, however, pure speculation that the strait came under Roman control at the same time.⁶⁶

We do not know exactly which goals concerning Arabia Augustus’ grandson, Gaius Caesar, had in mind in the early years of the 1st century A.D. Pliny the Elder credits him with mysterious “Arabian operations”⁶⁷ (*Arabicas res*) as well as a shadowy expedition in Arabia (*expeditione Arabica*). According to the same author, G. Caesar is also said to have headed a naval unit in the Red Sea ([...] *in Arabicum sinum, in quo res gerente G. Caesare Augusti filio* [...]) and explored Arabia (*G. Caesar Augusti filius prospexit tantum Arabiam*).⁶⁸ Bowersock may be right in thinking that the name *Arabia* actually designates the country of the Nabataeans, on the north-east coast of the Red Sea.⁶⁹ Beside these two passages Gaius Caesar, “whose imagination was fired by the fame of Arabia” (*ardentem fama Arabiae*) is, however, reported to have sought glory in the *turifera* (“frankincense bearing”) Arabia (*Gaius etiam Caesar Augusti filius inde gloriam petiit*).⁷⁰ In his excerpt Pliny associates Gaius Caesar’s enterprise with another Arabian expedition, no doubt that led by Aelius Gallus. Accordingly, the Arabian country targeted by Gaius Caesar can reasonably be equated with the Sabaeen kingdom, which was the goal of Gallus’ incursion. At any rate, one can assume that if Gaius Caesar did not actually reach the area of the Arabian side of Bab al-Mandab, at least his plans may have encompassed it.⁷¹

The author of the *Periplus of the Erythraean sea* – written between A.D. 40 and 70 – refers in vague terms to a Roman military intervention around Bab al-Mandab, not documented elsewhere [29]: a certain *Kaisar* is reported to have sacked (“subdued” is however an alternative translation of the verb *katastrepsato*) *Eudaimôn Arabia* (here referring to Aden instead of the whole Blessed Arabia) not long before the author’s time.⁷² The author goes on to say that following this action the maritime road to India, which was previously under Arabian control, was opened – obviously to Alexandrian merchants and sailors. Contrary to the statement of the *Periplus*, this nebulous expedition could not have affected the whole maritime traffic to India, since Strabo states that Greek ships were capable of making the round trip between Egypt and India before and after the battle of Actium.⁷³ This puzzling text has been much commented on, and the most convincing explanation is one of the following two: either the author alludes in a confused way to Gallus’ expedition

65 Sidebotham (a) 128.

66 According to Rostovtzeff 310-311, the Romans set a customs checkpoint on the Arabian Bab al-Mandab and hencefore were capable of locking the strait by its two opposite sides and levying taxes (see also Kortenbeutel 55; 59). This view is barely supported by firm evidence (Raschke 647).

67 Plin. *nat.* 6, 141. This may have been connected with Parthian affairs (Villeneuve 182, n.206; see also Raschke 872 n. 906).

68 Plin. *nat.* 2, 168; 6, 160.

69 Bowersock (a) 227: the *sinus Arabicus* is identified with the Gulf of Aqaba.

70 Plin. *nat.* 12, 55-56 (transl. Rackham).

71 Desanges (b) 319-320.

72 This passage has been much debated. See e.g. Delbrueck 241; Dihle (a) 22-25; Fraser (b) 313; Wellesley; Casson 37; Seland. Some scholars (e.g. Sidebotham (a) 131-132) reject the reading “*Kaisar*” as a corruption.

73 Strabo [21] and above, p. 7-8. Note that the *P.m.r.* 57 points to a monsoon voyage starting at the cape Gardafui (*Arômata*), which means that some ships might avoid calling in at an Arabian port. See also Plin. *nat.* 6, 174 (Juba) and Desanges (c) 91.

mixing the name of the country (*Eudaimôn Arabia*) up with that of the city (*Eudaimôn*); or the *Kaisar*, who allegedly attacked Aden (in c. A.D. 2?), must be identified with Gaius Caesar. Be that as it may, a Roman military presence around Bab al-Mandab in the mid 2nd century A.D. is attested by an inscription recently found in the main Farasan island (Saudi Arabia). It is dated to the reign of Antoninus (A.D. 144) and refers to a Roman detachment (*vexillatio*), headed by a *praefectus*, being sent to an outpost at this site.. This Roman presence may be, to some extent, explained by troubles in south Arabian kingdoms making the area of Bab al-Mandab insecure. According to the editors of the inscription, the duties of the *praefectus* of Farasan may, however, have included overlooking the trade traffic, hunting pirates or levying customs at the entry of the Red Sea, as the Farasan islands lie close to Bab al-Mandab⁷⁴ From a certain point of view, one could even perceive the *vexillatio* as being garrisoned at its north entrance.

Closely connected to Roman penetration into the Red Sea area is the significant boom in Roman sea trade with East Africa, Arabia and India, which started in the late 1st century B.C. Many ships mainly operated by Alexandrian *emporoi* would sail across the strait towards India or East Africa [21]. Since several studies have been devoted to the various aspects of the commerce in the Indian Ocean (above, n. 44) there is no point in dealing further with this topic. Two important issues must, however, be addressed (even though they still remain beyond answer): Firstly, Pliny informs us of the existence of several maritime routes between the northern Red Sea and the west coast of India, but he does not find it important to say along which side the strait was crossed.⁷⁵ Secondly, the question arises as to how many freight ships crossed the strait. The only reliable figure comes from Strabo.⁷⁶ As mentioned above 120 ships (a year?) headed to India at the time when Aelius Gallus was *praefectus* of Egypt (from 28 to 25 B.C.) – see also the expression “large fleets” [21]. How many ships went to East Africa is, however, not stated by Strabo.⁷⁷ Supposing that the Arabian expedition of Aelius Gallus facilitated an easier voyage to India after 25 B.C. the number of ships passing the strait may have increased, but there is no accurate evidence to support this hypothesis.⁷⁸

To sum up: Over a period of about 350 years following Alexander’s expedition, the strait of Bab al-Mandab gradually became a spot familiar to more and more Mediterranean people. It took about a century for Greco-Macedonians explorers and officials to discover and cross the strait. These men opened the way for an increasing number of *emporoi* who eventually reached the main places of trade located in the western Indian Ocean. Such is the simplified historical background to which I will repeatedly refer in this investigation.

74 Villeneuve 167-178. On Roman military presence in the Red Sea, see Kortenbeutel 59; 62; 64; Rostovtzeff 306; 310-311 (whose conclusions are partly questionable); Raschke 648-649; 894 n. 964.

75 Plin. *nat.* 6, 101-106. Without doubt the third route (via *Muza /Ocelis Arabiae / Cane turiferae regionis*) passed along the eastern side.

76 Str. 2, 5, 12. Raschke 662 states that the figures quoted by Strabo are at best “an indication in the change of scale of the traffic”.

77 In my opinion Strabo does not mix India up with *Aithiopia*: see Raschke 973, n.1302.

78 See Rathbone 187, n. 29.

2. From *stoma* to *stena*: the making of the Greco-Roman body of knowledge

2.1. Was there a “strait” at the edge of the Arabian Gulf in the Greek geographical knowledge before Alexander the Great?

As stated above, very few Greeks – and no Greek ships – are likely to have reached the area of Bab al-Mandab at the time when Egyptian and Persian rules prevailed in the northern Red Sea. Accordingly, very little information was available to the Greeks. In fact, Herodotus’ *Histories*, which is the only substantial document left from this period, shows that the author was poorly informed about the Arabian Gulf, as were probably also his contemporaries. In fact he managed to gather more information about Arabia, India or Ethiopia than about the Red Sea. What Herodotus knew of the latter region is concentrated within a couple of sentences, the sources of which cannot be traced⁷⁹: his Ionian predecessors (Skylax of Caryanda, or Hecataeus of Miletus) and local sources (Persian or Egyptian informants) are possible candidates.⁸⁰ At any rate, Herodotus states that the Arabian Gulf is an extension of the Erythraean Sea – i.e. the outer ocean – penetrating the landmass (ἐσέχων ἐκ τῆς Ἐρυθρῆς καλεομένης θαλάσσης): such a “dynamic” conception was common in Greco-Roman geographical thought.⁸¹ Herodotus is also aware of a measure given in sailing days rather than *stadia* or any other units: the length [μῆκος μὲν πλόου] from the bottom, viz. the Gulf of Suez, as far as the “open sea”⁸² [ἀρξαμένῳ ἐκ μυχοῦ διεκπλῶσαι ἐς τὴν εὐρέαν θαλάσσαν] is a forty days’ trip. The west-east crossing of the gulf (viz. its width) takes half a day, at its widest [εὖρος δὲ, τῇ εὐρύτατός ἐστι ὁ κόλπος]. This incredible figure proves beyond a doubt that Herodotus imagines the Red Sea as an extremely narrow body of water, the biggest ratio of width to length being 1 to 80!⁸³ Herodotus’ Red Sea more or less has the shape of a long river. It must be noted that despite the improvements of geographical knowledge the extreme narrowness of the Arabian Gulf was to remain a *locus communis* in Greco-Roman conceptions [6; 19; 20⁸⁴].

Now what about the spot where the external ocean flows into the Arabian Gulf, that is to say the strait itself? In his narrative of *Nekôs*’ expedition, Herodotus ignores its existence, for he just writes that “the Phoenicians set out from the Erythraean sea and sailed the southern sea” [ὁρμηθέντες (...) ἐκ τῆς Ἐρυθρῆς θαλάσσης ἔπλεον τὴν νοτίην θάλασσαν]. Similarly, in the passage devoted to Skylax’s voyage no strait is mentioned. Although Herodotus was aware that royal ships sailed out of the Arabian Gulf to reach the external (southern) ocean he did not, or could not, provide any details about this passage.

79 Hdt. 2, 11.

80 See Berger (b – part 1) 33-37; Lloyd (a) 77-140; Högemann 107-111.

81 See e.g. Mela, 3, 71; Plin. *nat.* 6, 107; Manilius 4, 650-651.

82 See Lloyd (a) 64.

83 Lloyd (a) 64-65 estimates the length at ~28000 *stadia* (3240 naut. miles). As regards the width, he agrees that “we have no alternative but to assume that H., or his source, has made a very bad mistake.” Schiwek 14-15 (“Auch die verhältnismäßig richtigen Maße, die Herodot vom Arabischen Golf anführen kann, rühren vielleicht – über Hekateios – von Skylax her”) is purely speculative.

84 See also Phot. *Bibl.* 250, 441b (= Agatharchide, *GGM* 1, 2).

The Greek historian does not even employ the words *stena* and *stoma* (which on the contrary appear in the passages dealing with the Hellespont or the Bosphorus⁸⁵). Under such circumstances one can reasonably infer that the Bab al-Mandab strait was unknown to Herodotus. As a matter of fact, given the extreme narrowness of his Arabian Gulf – of which the largest width was actually that of a strait⁸⁶ – he probably never imagined a strait lying at this place. As we shall discuss later on, a strait is created by a noticeable shrinking of the sea.

This may explain why Herodotus does not count the crossing of Bab al-Mandab among the achievements of *Nekôs* and Darius – this was to change in Hellenistic times, as will be seen below –. From his point of view, which was probably shared by his contemporaries, the true feats of these kings were respectively the successful circumnavigation of Libya [i.e. Africa] and the voyage from the Indus to the Gulf of Suez, for such unprecedented undertakings were a sign of their power and also contributed to an increased knowledge of the inhabited world.⁸⁷

Apart from Herodotus' account, two documentary fragments going back to this period and relating to this sector have been preserved. First, Pliny the Elder reports an obscure story borrowed from the historian Ephorus of Kymê⁸⁸ (4th cent. B.C.). According to the former, people sailing from the *Rubrum mare* (unfortunately we cannot determine whether this designation covers the Red Sea or the Arab-Persian Gulf) towards the island of *Cerne* (lying opposite the Persian Gulf [*contra sinum Persicum*]) could not go beyond anonymous small islands (*parvae insulae*) referred to as “columns” (*quasdam columnas*), due to the unbearable heat. Whether these islands are located around Bab al-Mandab, and whether these *columnae*, which could be the southern or eastern counterpart of the columns of Heracles, point to the strait cannot be clearly established.⁸⁹ The second fragment is attributed to Damastes of Sigeion, a “logographer” flourishing in the 5th cent. B.C., who “is said to have frequently taken Hecataeus as an authority”⁹⁰. Damastes claimed that “the Arabian Gulf is a lake” (τὸν μὲν Ἀράβιον κόλπον λίμνην ὑπολαμβάνοντος εἶναι)⁹¹, denying any connection between it and the outer ocean. In fact no serious conclusion can be drawn on the basis of such vague statements, except that very little was known about the shape and limits of the southern Red Sea before Alexander's time.⁹²

In conclusion, in the pre-Hellenistic times most Greeks may have believed that the Arabian Gulf flowed into an external sea. It was probably conceived of as a river discharging its waters into the sea through a mouth (*stoma*) which was not regarded as an actual strait.

85 See Hdt. 4, 85.

86 See ps-Skyl. 111 about the Columns of Heracles: the crossing is a one day sailing..

87 Briant 495 (about Darius).

88 Plin. *nat.* 6, 199 (= Ephorus, *FGrH* 70 F172).

89 See Delbrueck 23-24; Högemann 106 (“Sie liegen in der straße von Bab al-Mandab”); Desanges 217-218.

90 Van Paassen 138. See also Berger (b) 65.

91 Str. 1, 3, 1 (= Damastes, *FGrH* 5 F8). See Schmitthenner c. 46. For the sake of comparison, see Str. 1, 2, 31.

92 I do not share Högemann's 86 view that the *polis eudaimôn* (Aristoph. *Av.* 144) should be identified as Aden, thus that Aden “war längst in Griechenland bekannt.”

2.2. The “Hellenistic “invention”

A conqueror laying claim to an empire reaching the limits of the inhabited world (i.e. Alexander the Great) could not ignore the Asian gulfs of the Ocean. Not surprisingly Alexander stated that he had discovered (ἐξεῦρε) that the Arab-Persian Gulf was formed by the “Great Sea” penetrating the land mass. Alexander is also reported to have planned an exploratory mission to determine whether the Caspian Sea was an effluent (ἀναχέεται) of the external ocean but died before its completion. Furthermore, as mentioned above, he ordered Anaxikratēs to skirt the western side of the Arabian Peninsula. This voyage, however, is not listed by Arrian among Alexander’s glorious feats.⁹³ The reason may be that the exploration of the Arabian Gulf was actually achieved by Ptolemy II Philadelphus and Ptolemy III Evergetes, who committed huge means to reconnoitring the southern part of the *oikoumenê*.⁹⁴ In the wake of the expeditions commissioned by these kings a substantial amount of geographical and ethnographical knowledge based upon direct observation (*autopsia*) was made available to Greek scholars. Only autopsy, lacking in Herodotus’ times⁹⁵, could lead to such a considerable enhancement of knowledge. It is worth recalling here that the dichotomy between *opsis* / *autopsia* (“observation”; “seeing with one’s own eyes”), and *akoê* (the sense of this word may vary according to context but in this case it means “second-hand information”; “hearsay evidence”) was common in Greco-Roman antiquity and prevailed before Hellenistic times (for instance it can be traced in Herodotus’ *Histories*⁹⁶). With regards to the description of the *oikoumenê*, sight (*opsis*) ranked higher than hearsay (*akoê*), for observation was considered the best source of information available.⁹⁷ Indeed several centuries after Herodotus, Strabo still claims that knowledge based on *opsis* is more reliable (*pistis*) than information collected from *akoê*, for instance from previous Greek authors who did not travel in the countries they dealt with⁹⁸ or from local informants: *Akoê* cannot be deemed entirely reliable, if it is not supported by *autopsia*.

It was in the 3rd century B.C. that a large amount of evidence based upon autopsy was brought to Alexandria; unlike Alexander’s explorers who due to circumstances hastily went around Bab al-Mandab the Ptolemaic observers repeatedly cruised in this area, particularly along the western side of the strait. Thus, they managed to gradually reconnoitre the African side of Bab al-Mandab [2; 3]. Observing the decreasing distance between the two sides of the Arabian Gulf they claimed that the cape *Deirê* (below, p. 23) was the gate to the open sea. Sometime later, however, sailing further southwards (*plo-*

93 See Arrian. *Anab.* 7, 16, 1-3; *Ind.* 43, 1-10. Plin. *nat.* 2, 168 is too vague to support any conclusion (*victoriae Magni Alexandri lustravere usque in Arabicum sinum*).

94 Geminus, *Isag.* 16, 24.

95 The only piece of information given by Herodotus about the Red Sea which could be based upon *autopsia* is the tides of the Gulf of Suez (Hdt. 2, 11). On this topic see Lloyd (b) 66).

96 Hdt. 2, 29. See, among later authors, Diod. 1, 4, 1.

97 “*Histôriê* ist ein Bemühen, durch Autopsie (*histôr* bedeutet ursprünglich der Augenzeuge), Verhör und Forschung die Erkenntnis von *ta eonta* zu gewinnen” (Högemann 103 n. 4, quoting B. Snell, “Wie die Griechen lernten”, *JHS* 93 (1973) 181).

98 Str. 15, 1, 2-7.

spleusasin) and observing crafts coming from the Arabian coast and landing there, they stated that “from then onwards” (*nuni*) the strait was better located in this place (below, p. 23-24). At any case, by reaching a remarkable place of the inhabited world these men enlarged the geographical knowledge of the time, for the theoretical opening imagined by Herodotus and many others in previous times had been replaced by a real strait identified by the means of trustworthy observation.

Besides these official explorers, numerous men stayed for months in the hunting bases around the area of the strait, being hunters, soldiers, craftsmen *etc.* sent by the kings to hunt for elephants. These men were repeatedly in contact with various neighbouring tribes. For this reason it is likely that a certain amount of information collected from local informants (*akoê*) supplemented autopsy. We also see, as mentioned above, private individuals (*ιδιώται*⁹⁹) not hesitating to sail into this area as early as the 2nd century. Almost all of them may have been merchants purchasing aromatics, although there were a few people out of the common, e.g. the famous Eudoxus of Cyzicus (a literate person keen on “geography” [*historia tôn topôn*¹⁰⁰], but also an *emporos* and an “adventurer”) and Iamboulos. No doubt, these men were capable of gathering information relating to this country. Such private individuals may, however, not have been highly esteemed, even if they dared to travel as far as the edge of the world. Strabo thought that they were driven by private interests, and accordingly they were “of no use as regards the history of the places they have seen” (οὐδὲν πρὸς ἱστορίαν τῶν τόπων χρήσιμοι).¹⁰¹ Perhaps they were also regarded as poorly educated men.

They certainly contrasted with the Ptolemaic officials¹⁰²: not only did the expeditions commissioned by the Ptolemies require skilled men, important means and appropriate equipment (*khoregia*¹⁰³) that only kings could afford, but unlike the *emporoi*, the search for immediate commercial benefit was not the primary goal of royal explorations.¹⁰⁴ This was especially true of the kings, who were keen on science, e.g. Ptolemy II and probably also Ptolemy III. Consequently, observations supplied by observers serving as official explorers were not deemed as forgeries (*pseusmata*¹⁰⁵). On the contrary, they would confidently (*pistis*) be accepted by Alexandrian scientists. That said, information coming from traders venturing into the area of the strait was not systematically rejected, even by those who criticized them.¹⁰⁶ An interesting example – the only one to have survived – is offered by Agatharchides: Ptolemy III’s officer Simmias happened to meet a tribe of Fish Eaters somewhere beyond the strait, who fascinated him because of their extraordinary nature and behaviour (above, p. 6; below, p. 26). Had this *paradoxon* (marvel) not been based on “official” *autopsia*, it would probably have been regarded as a mere forgery. Ac-

99 Str. 15, 1, 4.

100 See Str. 2, 3, 4.

101 Str. 15, 1, 5 (transl. Jones). See Jacob 119-120.

102 Such as Satyros (Str. 16, 4, 5), or Simmias (above, p. 6): the latter is said to have sought accurate information (ἀκριβῶς ἐξήτασε).

103 Diod. 3, 18, 4 (= Agatharchides, *GGM* 1, 41). See also Diod. 1, 30, 3. The huge costs of such expeditions may explain why Polybius rejected Eudoxus’ voyages as a fictitious narrative (Pol. 34, 3, 5 [= Str. 2, 4, 2]).

104 See, however, Burstein 9 (about ivory).

105 Str. 2, 4, 5.

106 See e.g. Str. 2, 5, 11.

according to Agatharchides, the account was confirmed by a number of merchants who, sometime after Simmias' voyage, also witnessed their strange behaviour. In this case, the *emporoi* were fully trusted as they did not contradict official reports.¹⁰⁷

Generally, explorers and observers would not conceal what they had witnessed. Some, such as the abovementioned Alexandrian merchants, probably transmitted their observations by oral accounts. Apart from this case, we can, unfortunately, hardly trace their presence in textual evidence. Thus, we are not capable of estimating the amount of information which might have been provided by elephant hunters, mariners, soldiers, merchants etc. on their return to Egypt. Others would record what they had seen in written reports: to put it in Greek concepts, one could say that *opsis* was converted into a form of *akoê*, or *episteme*.¹⁰⁸ This body of knowledge (*akoê* / *epistemê*) resting on trustworthy *opsis* was highly valued. As Strabo explains, scholars and scientists describing the *oikoumenê* (geographers and / or "chorographers") needed such written material, since they were unable to visit the whole world in order to collect information by themselves. Strabo does, however, add that so large an amount of *akoê* required a careful assessment (= *dianoia*; *gnômê*) before it could be used.¹⁰⁹ Unfortunately, almost all of these written reports dealing with the southern Red Sea area are lost. It has only been possible to establish that a number of officials – particularly those serving Ptolemy II and Ptolemy III – published "periplus" (a sort of narrative of a voyage), or *historia* ("inquiry", "knowledge so obtained", "information"). Simmias and Ariston may have composed such works.¹¹⁰ We are also aware of a genre called by the name *hypomnêmata* ("Berichte", "official report", "archives". The meaning of the Greek word is not clear) and *anagraphai* ("register", "record", "description", "treatise").¹¹¹ This material was probably stored in the royal archives in Alexandria and /or in the *Mouseion* Library.

Such were the written sources available for scientific purposes (*epistêmê*). It seems that Eratosthenes (ca 275 – ca 195) was the first to compile this material, no doubt with a critical commentary. He certainly drew on this evidence when writing his note on the strait [2; 3]. As director of the Alexandria Library (from the reign of Ptolemy III to ca 194 B.C.) he may have had an easy access to information.¹¹² Interestingly, his presentation is found in a general description of Arabia which was included in the third part of his *Hy-*

107 See Diod. [7]; 3, 18, 3-4 (= Agatharchides, *GGM* 1, 41). *N.B.*: I believe that μέχρι τοῦ νῦν ["down to this day"] points to Agatharchides' time, not that of Diodorus.

108 Str. 2, 5, 11.

109 Str. 2, 5, 11: "... generals, too, though they do everything themselves, are not present everywhere, but they carry out successfully most of their measures through others, trusting the reports of messengers and sending their orders around in conformity with the reports they hear. And he who claims that only those have knowledge who have actually seen abolishes the criterion of the sense of hearing, though this sense is much more important than sight for the purposes of science." (transl. Jones). See Jacob 155-179; 606-614.

110 On Aristôn, see Tarn 1929 (b) 14; Rostovtzeff (b) 741; Woelk 259-262; Högemann 102. *Contra*: Fraser b 300 n. 349; Raschke 944, n. 1182. On Simmias, see, Diod. 3, 30, 2 (=Agatharchide, *GGM* 1, 59).

111 The word *basilika hypomnêmata* appears in Diod. 3, 38, 1, no doubt from Agatharchides (Müller (a) 165). On *anagraphai*, see Str. 16, 4, 4 (Artemidorus). See Kortenbeutel 9-10; Woelk 192; 255-266; Högemann 95, n. 4; Peremans 443-446; Burstein 29-33; Jacob 152.

112 Str. 2, 1, 5.

*pomnēmata geographika*¹¹³, the whole Arabian Gulf being regarded as part of Arabia. As far as we can rely on Strabo's paraphrase Eratosthenes did not describe the eastern side of the strait, which allows for the assumption that his documentary material mainly related to the western side, and that a minimal amount of information about the "Arabian Bab al-Mandab" had been collected by Anaxikratēs and Aristōn. As just important as Eratosthenes, Agatharchides flourished in the third quarter of the 2nd century B.C. in Alexandria.¹¹⁴ Most of the sources utilised in his *On the Erythraean Sea*¹¹⁵ date back to no later than the reign of Ptolemy III¹¹⁶, but, as seen above (Simmias and the Fish Eaters), he may have obtained several pieces of information from Alexandrian *emporoi*. He apparently did not have much to say about the area of the strait [6-11]¹¹⁷, even though he offers several details, which are absent from Eratosthenes' book. Particularly striking in this respect is the puzzling passage in which the strait (*stoma*) appears more or less as the symmetric counterpart of the *mukhos* of the Arabian Gulf (= the Gulf of Suez) [9]: "Its width, at the mouth and at the innermost recess, is about sixteen stades"(see below, n. 346). Besides these two authorities very few authors who may have dealt with the strait of Bab al-Mandab are known to us. We are aware of a certain Pythagoras, who lived under Ptolemy II or Ptolemy III – he served as *Ptolemaei praefectus*, Pliny vaguely claims¹¹⁸ –, and wrote a treaty devoted to the Erythraean Sea (Περὶ τῆς Ἐρυθραίας θαλάσσης). To surmise that he paid some attention to the strait may not be complete nonsense, but his book is almost entirely lost.¹¹⁹ Several excerpts from Artemidorus (*floruit* c. 110 B.C.) who adds a little more to Eratosthenes's note have also come down to us [14-17].¹²⁰ Any further statement about other Hellenistic scientists (for instance Poseidonius) would be speculative.

To conclude, the Hellenistic period, especially the reigns of Ptolemy II and Ptolemy III, witnessed the discovery of the "mouth" of the Red Sea actually being a strait. In other words the theoretical limit between the Red Sea and the external ocean – *stoma* – had become the *stena* of the Arabian Gulf.¹²¹ It was not by accident that Eratosthenes, who first put the strait on the Hellenistic map (*chorographikos pinax*)¹²², used the word *stena* seven times. It must also be stressed that the most important features of Bab al-Mandab were depicted in this period, and even that very little data was added after the third century B.C.: Artemidorus, though he remarkably improves the description of the Horn of Africa, offers few fresh details about this area, as we shall later see. Similarly, as we will deal

113 Aujac 65-86; van Paassen 46-50; Geus 260-276; Marcotte lx.

114 Woelk 253.

115 Agatharchides confesses that he could not complete his work in the way he wanted (Phot. *Bibl.* 250, 460b [=Agatharchides, *GGM* 1, 110]). See Woelk 256; Burstein 12-28.

116 Woelk 256; Desanges (a) 83; Burstein 33 (*contra*: Delbrueck 33-34).

117 Woelk 258, wrongly states that "Agatharchides bei der Beschreibung der Westküste nicht bei Bab al-Mandab fortgefahren ist." (see also Kortenbeutel 9). Although *Ptolemais Therōn* is the southernmost place referred to in his periplus – apart from an allusion to the Dahlak archipelago (Desanges 274), the mention of Simmias' experiment proves that he was aware of the strait.

118 Plin. *nat.* 37, 24.

119 Kortenbeutel 34; Pfister 60; 64; Desanges 278-279. Dihle (c) 109 denies that he was aware of the strait without explaining his view.

120 Desanges (a) 85.

121 The word *stoma* happens to be used after the discovery of the strait, particularly when it applies to the connection *in abstracto*, regardless of its physical shape. See e.g. Strabo [19]; 2, 5, 18.

122 Str. 2, 5, 17.

with in the following chapter, this Hellenistic body of knowledge was hardly enhanced in the Roman times, since it was probably considered to be sufficiently accurate.¹²³

2.3. The minor improvements of the Roman times (from Augustus to the 2nd century A.D.)

After the annexation of Egypt, those who could reach the strait and provide new pieces of information were the Roman army and, to a greater extent, Alexandrian merchants (*emporoi*; *negotiatores*), who travelled further than the armies.¹²⁴ Strabo indeed claims that “since the Romans have recently invaded *Arabia Felix* with an army of which Aelius Gallus (...) was the commander, and since the merchants of Alexandria are already sailing with fleets by way of the Nile and of the Arabian Gulf as far as India, these regions also have become far better known to us of today than to our predecessors”.¹²⁵ Although the area of Bab al-Mandab had become a frequented place, the area still lacked accurate description in the Roman period.

Let us first consider Strabo: he provides no fresh information in the time of the Early Principate is provided Strabo has almost nothing to say about the eastern side of Bab al-Mandab, a sector that had not been much utilised by the Ptolemies but had become increasingly familiar to the people of the Mediterranean.¹²⁶ On the contrary, Strabo’s description of the strait is based upon Eratosthenes and Artemidorus’ books bearing no signs of having been updated. The remaining passages in which Strabo refers to Bab al-Mandab are – at best – allusions to its narrowness: in the narrative of Eudoxus’ voyages [19], he merely reports that the strait is so narrow that no one would believe that an Indian castaway could enter this channel by accident.¹²⁷ When, however, Strabo states that in his time more ships would sail across the strait than in the previous decades [21], he remains silent about this remarkable place. Apparently, the narrowness of the strait¹²⁸ and the Red Sea¹²⁹ was in Strabo’s eyes its main and perhaps only significant characteristic. One may be under the impression that this area did not need further description, as if Hellenistic explorers had already given an account of its features (*idiômata*¹³⁰). Rather, Strabo focuses on newly discovered peoples and countries, e.g. Germans, *Geti*, Britons, *Arabia Felix*, and, to a lesser degree India¹³¹, intending to emphasize that Rome’s power had improved the knowledge of a number of countries (μάλιστα ἄμεινον). From this perspective, the Bab al-Mandab region which had been explored for more than two centuries could not be regarded as an unknown area. One could say that it belonged to Hellenistic geography, rather

123 *Contra*: Kortenbeutel 56 (“ein Rückgang der geographischen Kenntnisse”).

124 Str. 2, 5, 12; 16, 4, 24; Plin. *nat.* 6, 149 (*nostris negotiatores*); 12, 57 (ambassadors). See Pfister 66.

125 Str. 2, 5, 12 (transl. Jones).

126 Str. 16, 4, 22.

127 See Str. 2, 5, 18.

128 Also see Mela, 3, 74. See Desanges (a) 86.

129 Str. 1, 2, 28.

130 On this word, see below, p. 22.

131 Str. 1, 2, 1 ; 2, 5, 12; 15, 1, 2.

than to the geography of the *imperium Romanum*.¹³² This is the reason why Strabo does not contradict himself when he states that merchants heading to India enhanced the geographical knowledge while still referring to the strait as it had been described by Eratosthenes and Artemidorus.¹³³

Of course no one would deny that the information relating to this region had been partly updated, but apart from a limited number of topographical and political facts the Hellenistic body of knowledge was not modified much. Pliny the Elder, who mainly draws on Juba's *Arabika*¹³⁴, provides several recent toponyms related to the area of Bab al-Mandab. In particular, he mentions *Adoulis*, a harbour apparently unknown to Artemidorus and accordingly also to Strabo, and *Aualitu* etc. (below, p. 25). Pliny is also aware of several measurements of the width of the strait (see app. 7.8), but it cannot be established which of them had actually been estimated in Roman times. There is no description of the area of the strait in Claudius Ptolemy's *Geographika*, a book completed in ca A.D. 150 and partly based on Marinus of Tyros' research (early 2nd cent. A.D.): "Ptolemy's geography is geodesy and cartography and he preferred to leave out all that had no direct connection with that aim".¹³⁵ The reader only has access to the coordinates of the strait as well as a series of new toponyms, the location of which (for instance Perim) is sometimes incorrect (below, p. 55).¹³⁶ That several of these appear in the famous *Periplus of the Erythraean Sea* written in the mid 1st century A.D. by an Alexandrian *emporos*¹³⁷ supports the view that such data were mostly gathered from merchants who visited these places for trade, provisions, etc. In addition, as merchants came across local kings whom they supplied with prestigious goods, they were capable of collecting fresh information about the political situation (below, p. 28; 32). The author, who was informed about the sea routes to India and East Africa partly by experience, partly by hearsay¹³⁸, more than once mentions the strait [27-29]. On the one hand, what he reports indicates that he was aware of Hellenistic information on this subject, since his figure of the width of the strait repeats that known to the Greeks and Romans since Eratosthenes' time (below, p. 49). On the other hand, when he refers to the crossing of the strait by the eastern route, he gives a dynamic description of space found in no other document (below, p. 44). Such details were probably ignored by other authorities (Strabo, Pliny, Eratosthenes etc.), since they may not have regarded them as relevant to scientific knowledge (*epistēmē*).

132 See Str. 1, 2, 1; 2, 5, 18; Diod. 3, 38, 2-3.

133 On this "conservative" attitude, see for instance Marcotte LXV-LXVI. The ways in which Strabo selected data has been examined by van Paassen 14-16.

134 Pliny [22] expresses his surprise that Juba was unaware of *Berenice epi Dires* (below, p. 23). Consequently, one wonders to which extent Juba had knowledge of the strait. About Pliny's sources, see Desanges (a) 86.

135 Van Paassen 2.

136 As Bianchetti (b) 158 rightly points out, Arrian does not mention the strait.

137 Casson 7-9.

138 Arnaud 27-30.

2.4. An “anonymous” strait

However strange it may seem, the strait between the Arabian Gulf and the Erythraean sea was not given a specific name. Eratosthenes [2] and Artemidorus [15] refer to the “strait of *Deirê*” or the “strait of the six Islands” (below, p. 23-24), but these expressions are in fact not proper names, nor were they, as far as we know, commonly used. In addition, and most importantly, they were relevant only to the African side of the strait, not to the whole Bab al-Mandab sector. In later sources (Strabo, Pliny, Ptolemy) there are only “neutral expressions” such as “the strait of the Erythraean sea” (τὰ στενὰ ἐν τῇ Ἐρυθρᾷ θαλάσσει [31]), or “the mouths of the Erythraean sea” (*fauces Rubri maris* [22]), which, again, cannot be classified as proper names. The same reasoning applies to Strabo’s phrase “Arabian strait”, an expression synonymous with “the strait of the Arabian Gulf”.¹³⁹ More significantly – because this document certainly reflects the designations employed by the Alexandrian *emporoi* – the author of the *Periplus* refers only to “the strait” (*stena*). In Dionysus’ *Periegesis*, a geographical poem depicting the whole *oikoumenê*, which dates back to the mid 2nd century A.D., Bab al-Mandab not only remains anonymous but is not even referred to as a strait.¹⁴⁰

Unlike the Bosphorus, the Hellespontus and above all the Pillars of Heracles, the strait of Bab al-Mandab was not granted a specific name connected to a particular myth. This fact may seem puzzling when taking into consideration that this strait was not only one of the four “effluents” from the external sea but also an important landmark of the eastern/southern trade routes of the Roman empire. Maybe this spot, of which only the Alexandrian merchants were informed, was too remote from the rest of Mediterranean world to merit its own proper name. The Pillars of Heracles, serving as the gates of the Mediterranean world, were much more important to the Greco-Romans.¹⁴¹ Perhaps no legend involving a famous mythical character such as Heracles, Io, Helles etc. presented itself as adequate to so distant a place.¹⁴² One could, however, object that Alexander the Great designated the northern part of the Arab-Persian Gulf as “the Sea of *Ikaros*”, inspired by the myth of Icarus.¹⁴³ But still the king himself had given this name, and I doubt that those who discovered the strait of *Deirê* would have acted the same way.

139 Str. 2, 5, 18 (“All these aforesaid gulfs have narrow inlets from the Exterior Sea, particularly the Arabian inlet and that at the Pillars, whereas the others are not so narrow” [transl. Jones]).

140 Dion. *Perieg.* 43-50: only the columns of Heracles are described (64-68).

141 Plato, *Phaid.* 109c; Diod. 4, 18, 4-5; Plin. *nat.* 3,3, among many texts.

142 On the contrary, the name “Erythraean <sea>” which was used at least from the 5th century B.C. received a “mythical” explanation in the Hellenistic period, involving a mythical king called Erythras (see e.g. Phot. *Bibl.* 250, 442a-b [= Agatharchides, *GGM* 1, 5]). See, however, Villeneuve 161-166, about the *Pon(tus) Herculis* referred to by the Farasan inscription.

143 Arrian. *Anab.* 7, 20, 4-5.

3. The “Greco-Roman Bab al-Mandab”: a synthetic review of the Greco-Roman body of knowledge

Collecting as thoroughly as possible all the pieces of information scattered among written material, I shall present the strait and the surrounding regions as they were described in Greco-Roman geography. Before surveying what was known to Greco-Romans about places, peoples, fauna and flora, I would, however, like briefly to comment on the genre of the *periplus*, for the bulk of ancient knowledge was supplied by this particular literary genre.

3.1. The framework of ancient knowledge: the “*periplus*”

Information relating to places, relief, waters, landscapes, peoples etc. – in a nutshell “geographical information” – could be found in various genres and literary formats: *periodos*, *periegesis*, *chorographia*, *periplous*, historiography etc. With regard to Bab al-Mandab, most data ultimately derives from written reports often referred to as *periplous* (or *paraplous*: “account of a coasting voyage”). Such texts present information about places situated on maritime routes according to the order of a journey along the shoreline. Besides toponyms, distances and directions, the author generally provides information on peoples, fauna, flora etc. In addition, the main features of the hinterland are often commented upon.¹⁴⁴ The Bab al-Mandab region was mostly depicted either in *periploi*, or in texts composed on the structure of a *periplous*: for instance, Strabo draws on Artemidorus’ *Geographoumena* which has the format of a *periplous*; Eratosthenes’ *Geographika* derives from reports of explorers (*hypomnemata*), some of which were probably written in the form of a *periplus*. Many words and phrases characterizing this specific literary form can easily be detected in the corpus of texts (*en dexiai apopleousi*¹⁴⁵, *prospleusasi* [2], *parakomisthenti*¹⁴⁶, *meta* [4], *entos/ektos* [15], *ephexes* [16] etc.).

We must also keep in mind the fact that only a limited number of topics are developed within this framework: the *periplous* is not designed to be an exhaustive or methodical description of the world, nor a description of but a part of it¹⁴⁷. The *periplous* sometimes gives the impression of being a fragmentary or selective report.

More specifically, the “*periplus* description” focuses primarily on topographical matters (locations, distances, toponyms), places and regions in need of as accurate a position as possible. Concerning the strait of the Erythraean Sea, the main goal of the first explorers was to estimate its position by reckoning the distance between it and *Ptolemais Therôn* (below, p. 47). Besides these fundamental data, a *periplous*, however, usually includes the

144 About the *periplous*, see Gisinger; Marcotte lx-lxiv; about the relationship between *periplous* and *khôrographia*, see Marcotte lvii-lix.

145 Str. 16, 4, 4 (“on the right as one sails” [transl. Jones]).

146 Diod. 3, 39, 4 (= Agatharchides, GGM 1, 82 [“as a man coasts along these regions” – transl. Oldfather]).

147 See e.g. Arrian. *Anab.* 7, 20, 10.

most noteworthy features of the country (*idiôma, idiôtês*).¹⁴⁸ These generally relate to: a) physical geography (*topoi, khôra, phainomena*), i.e. rivers, mountains, shapes of the coastline etc.; b) peoples (*ethnê*) and their habits (*nomoi*); c) nature (*phusis*), i.e. animals, plants etc.¹⁴⁹ It is worth adding that marvellous facts (*paradoxon; thaumasia*) happened to be taken into account by the authors of *periploi*. Provided that they were based on reliable *opsis* such pieces of information were not discarded as lies or fictions, and belonged to the domain of geographical knowledge.¹⁵⁰

A strait is formed by two separate landmasses (*êpeiroi* [6]) pointing towards each other. Thus, a description based upon the periplus framework was generally divided into two parts, each side appearing in its specific coasting voyage.¹⁵¹ In the case of a clockwise *periplus* of the whole *oikoumenê* with the shoreline lying on the right (e.g., Pliny the Elder), the Arabian side of the strait is first mentioned. Having reached the bottom of the Red Sea (the Gulf of Suez) the person providing the description turns southwards and then depicts the African side of Bab al-Mandab before he continues his voyage along the rest of the African coast. Strabo's description is, however, organized in a different way: he starts from the bottom of the Red Sea (*Heroônpolis*) and proceeds to the account of the African shoreline in which the "African Bab al-Mandab" is described (= Strabo, 16, 4, 4 & [2-3]). Once this periplus has been completed the author returns to the northern extremity of the Red Sea (say the Gulf of Aqaba) and starts his account with the shoreline on the left, along the Arabian coast, as far as Bab al-Mandab (= Strabo 16, 4, 2-4 & [1]).¹⁵² Agatharchides' treatise and the *Periplus of the Erythraean Sea* are arranged this way.

N.B.: owing to its importance, the question of local trade will be treated in a specific section.

3.2. The western side

Exploring the African side of the southern Red Sea, the explorers of Ptolemy II and Ptolemy III reached a cape pointing towards the Arabian side [2], which turned out to mark the narrowest part of the Arabian Gulf. They also noticed a small settlement lying here and a monument allegedly built by Sesostrius. They assigned both this place and the cape were with the name *Deirê*, actually a Greek word meaning "neck" or "neck of land pro-

148 See Diod. 3, 38, 5 (= Agatharchides, *GGM* 1, 80): "We shall (...) then sail along (*παράπλων*) its two sides past the mainlands, in connection with which we shall describe what is peculiar to them and most deserving the discussion (*τὰς ἀξιολογωτάτας κατ' αὐτὰς ιδιότητας*)". See also Str. 1, 1, 13; 1, 1, 16; 1, 2, 23; 16, 4, 22; Pol. 3, 58.

149 As Jacob 769 writes, such descriptions were intended to provide "un savoir sur le monde, sur la nature des paysages comme sur les mœurs des habitants."

150 As a consequence this sort of *paradoxon* is different from *μυθώδη / πλάσματα* ("lies" / "fabrications" / "fictions") which no one should believe (*ἄπιστα*) and does not belong to *ἱστορία*: see e.g. Str. 1, 2, 17; 15, 1, 6-7 & 9; Diod. 3, 33, 7 (= Agatharchides, *GGM* 1, 65). The passage in which Strabo describes the plain of the Crau (Str. 4, 1, 7) facilitates an understanding of this original aspect of ancient knowledge.

151 As far as I know, Bab al-Mandab is never described as a single entity. Nonetheless, the Greco-Romans were aware of the strait's unity when considering it in a very general way as the mouth of the Arabian Gulf [e.g. 26 and app. 7.7]).

152 See also Phot. *Bibl.* 250, 456a (= Agatharchides, *GGM* 1, 80); *P.m.r.* 19.

jecting a long way out” (Pliny [22] gives the Latin translation of this toponym: *cervix*). Either they did not come upon any vernacular name, or they thought that a Greek word would be more convenient for this remarkable spot. The same explorers estimated the distance between *Ptolemais* of the Hunts and *Deirê*, noticing that the shoreline turned slightly eastwards past *Ptolemais* (Eratosthenes drew on such data to devise his map of the *oikoumenê*: below, p. 46-49). The name *Deirê* clearly points to the modern Ras Siyyan, as Desanges rightly states. This long and thin promontory was originally an island until it was linked to the mainland by a coral plateau, so that the Ras Siyyan can really be compared with a “neck”.¹⁵³ The city of *Deirê* probably lay somewhere between the Ras Siyyan and a nearby place known today as Heirkale.¹⁵⁴ Convincingly, J. Desanges argues that at a later period some Greeks settled in or near *Deirê*, which was then renamed *Berenice* after the name of Ptolemy III’s wife [22].¹⁵⁵ In the mid 1st century A.D. neither *Berenice* nor *Deirê* are, however, referred to by the *Periplus* suggesting that this place was of no interest to Greco-Roman *emporoi* at that time, probably because Mediterranean people had long abandoned this settlement. That Ptolemy mentions *Deirê* does not compromise what we learn from the *Periplus*, for this geographer lists all kinds of toponyms regardless of the actual existence of the places referred to.¹⁵⁶

Sometime after the discovery of the strait at *Deirê* the Ptolemaic explorers noticed, if they did not it from natives¹⁵⁷, that the “true” African side of the strait was located further away: “It is not these [sc. the straits at *Deirê*] that are called straits now, but a place farther along on the voyage.”[3]. There is much to say of this puzzling assertion (see below, p 45). What is most striking perhaps is the fact that this new location seems to be marked neither by a distinctive physical feature or landmark (such as the characteristic promontory of *Deirê*), nor by a noticeable human settlement. It was merely the final stop (δεῦρο) of a trade traffic (below, p. 34) connecting the African side to the Arabian one (κακεῖσε) via six anonymous and mysterious islands. In fact many islands and islets in the waters between *Eumenous limên* (around Assab ?) and the open sea were known to the Greeks [9; 11; 15]¹⁵⁸; hence the name “the strait *kata* (“throughout”?) the Six Islands” –. Regrettably, the distance between *Deirê* and this anonymous spot is missing in the textual evidence. Eratosthenes only informs us that the channel lying between the two opposite land masses (ἡπεύρων) is 200 *stadia* wide, i.e. more than three times wider than the strait at *Deirê*, which in no way aids us in identifying this mysterious point.¹⁵⁹ Artemidorus’ text contains

153 Desanges & Reddé 162; 176-177.

154 Desanges (a) 94-95; 100-101, challenging Müller (b) 760 (*Deirê* = ras Bir; *Arsinoe* = ras Siyyan) and Conti-Rossini 60 (= Rayahta, north of Dumeira).

155 Kortenbeutel 35-36; Desanges (a) 95. However, Desanges & Reddé 178-179 (quoting Rostovtzeff) admit that the name *Berenice* could be given in honour of the daughter of Ptolemy IX *Lathyros* (116-107 and 87-80 B.C.) who married Ptolemy X *Alexandros* I (107-87 B.C.).

156 *Contra*: Kortenbeutel 67, believing that Ptolemy’s toponyms referred to places occupied by Romans.

157 The subject of λέγουσι may be the same as the one of κομίζουσι, i.e. the natives involved in the local traffic.

158 Also see Str. 16, 4, 14; *The Red Sea and Gulf of Aden pilot*, especially chapters 5 and 9.

159 According to Desanges & Reddé 180, “une telle traversée ne peut aboutir, du côté africain, que dans l’anse située à l’ouest du ras Siyyan.”

nothing [15] but the vague idea that the distance between *Deirê* and this unlocated place was not excessive.¹⁶⁰

These “Six Islands” have been identified as the Sawabi (or Seven Brothers) Islands, six islets lying off the Eritrean coast in the east-west direction. In former times the *ras Siyyan* was the seventh of these islets, until it was joined to the landmass by the above-mentioned isthmus.¹⁶¹ This view may, however, be challenged: Firstly the Sawabi and *Ras Siyyan* are more or less situated at the same latitude. This barely fits with Eratosthenes’ report, on the basis of the data gathered by the Ptolemaic *autoptes* (λέγουσι) saying that the so-called strait of the Six Islands lies “farther along the voyage”, i.e. somewhere beyond *Deirê* / *Ras Siyyan* (προσπλεύσασιν ἀπωτέρω) [3]. Since Artemidorus’ statement is less accurate than that of Eratosthenes it is almost without use here [15]. Secondly, the Six Islands are said to “follow one another in a close succession” and to “fill up the channel” (i.e. the interval between the Arabian and African sides [διάρμα]). A glance at a map will indicate the discrepancy between this account and the actual location of the Sawabi Islands¹⁶², and one wonders how they would make the trip easier by “filling up the channel”. Accordingly, I believe that these islets scattered between the two sides of the Red Sea remain unidentified. Whatever their location may be, there is no doubt that in terms of topography and cartography the strait of *Deirê* aroused greater interest to the Greeks and Romans than the passage of the Six Islands, which disappears from the textual evidence after Artemidorus (see below, p. 47).¹⁶³

Artemidorus also shows awareness of some places in the area of Bab al-Mandab, which were probably unknown to Eratosthenes and Agatharchides. Since most of them are linked to the hunt for war elephants, they are likely to have been founded in the reign of Ptolemy III and were destined to be abandoned once the hunting for elephant came to an end. North of *Deirê* / *Berenikê* was the Island of Philippos, the Hunting-base of Pythangelos and *Arsinoe* (a city and harbour¹⁶⁴). Beyond *Deirê*, in the vicinity of which elephants were hunted, were the Hunting-base of *Likhas* and the promontory of Pytholaos with its two remarkable lakes. Given that the “Frankincense bearing country” (*Libanotophoros*) starts after the promontory of Pytholaos, it seems that these unlocated and unidentified places were a part of the Myrrh-bearing country, whose boundary was *Deirê* [16]. Pliny, probably drawing on Hellenistic sources, reports the following toponyms: the islands called *Pylae* and *Pseudo-Pylae* (= the Gates and the Pseudo-Gates, maybe the Sawabi Islands), the Island of Diodorus (below, n. 350) and the port of Isis (near *Deirê* ?).¹⁶⁵ In addition, there was a number of small indigenous settlements whose vernacular names were

160 Eratosthenes states only that the coast turns toward east and south straight (ἐξῆς) after the strait of the Six Islands, forming a bay (ἐγκολπίζουσι).

161 Müller (b) 760; Desanges (a) 91; Desanges & Reddé 162; 178-180; Desanges (c) 87-88. On the *Stenae Dirae insulae* (Plin. nat. 6, 169, actually the *stenae Thyrae*), see Desanges (c) 61-62.

162 This point is accepted by Desanges (a) 91.

163 Note that Agatharchides’ informants [7; 8; 10; 11] probably referred to the strait of *Deirê*.

164 Str. 16, 4, 14. Kortenbeutel 38 claims that it was founded by Ptolemy *Philopatôr*. Rostovtzeff 305 believes that two *Berenikê* were founded “zur Bewachung *Sabae* und *Deire*”, and were “Handelsstationen”). See also Desanges & Reddé 180-181.

165 Desanges (c) 86-88.

either unknown to, or ignored by Artemidorus' informants [15].¹⁶⁶ The author of the *Periplus*, who probably did not pay much attention to places that had not been engaged in the Greco-Roman trade, mentions only *Adoulis* – an *emporion* which was to reach its climax in the following centuries – and *Aualitês* (probably Zeila, rather than *Deirê*, Tajura or Assab).¹⁶⁷ Pliny was aware of both toponyms.¹⁶⁸ This topographical review ends with Ptolemy's catalogue (see app. 7.6), which is a compilation of ancient (e.g. *Arsinoe*) and more or less recent toponyms (e.g. *Adoulis*, *Aualitês*). Ptolemy does, however, provide several names hitherto not attested (*Mandaïth komê*; *Antiokhou sôlen*), the origin and location of which escape us completely.¹⁶⁹

The area of the “African Bab al-Mandab” including the hinterland was generally regarded by Hellenistic scholars as a part of *Aithiopia* [2; 17]: this term is not easily defined but generally the name *Aithiopia* covered all lands lying south of Egypt as far as the southern Ocean, the Nile commonly being considered to be the boundary between Libya [Africa] and *Aithiopia*. This concept was taken over by most scholars of the imperial period, as attested by Pliny.¹⁷⁰ Similarly, in Ptolemy's *Geography* the whole region of the strait is part of *Aethiopia infra Aegyptum*.¹⁷¹ This vast country could, however, be divided into smaller units: the inner part of the Bab al-Mandab area was included in what was called the *Trôglodytikê* [6; 20?; 21?]¹⁷². On the basis of testimonies this country seems to extend beyond the strait of *Deirê* (see 12 and above, n. 46, the dedications offered to Pan by the travellers who safely returned from the country of the Troglodytes). The Ptolemaic explorers, however, would call the region beyond the strait *Smurnophoros* (“myrrh bearing country”), probably because of the presence of trees thought to be myrrh trees [3], unless this name originated from the local spice trade taking place beyond *Deirê*. At any rate, this name was still employed by Greek merchants, or hunters, in the following decades [12]. Less frequent and accurate was the alternative (?) name *Arômatophoros* (“Spice bearing country”) attested by Artemidorus as well as by the loan agreement published by U. Wilcken¹⁷³.

Whereas the common and ancient name *Aithiopia* remained firmly rooted in Greek and Roman geographical conceptions, the designations of the smaller territorial subdivisions were subject to alterations. It is not easy to explain why such changes in toponymy took place, but this certainly has much to do with the growing Greco-Roman trade activity: merchants and travellers tended to employ the toponyms of their time regardless of an-

166 See Str. 16, 4, 18: “I am not giving most of the names of the tribes because of their insignificance (ἀδοξίαν) and at the same time because of the oddity of the pronunciations.” (transl. Jones)

167 The case of *Aualitês* is discussed by Casson 115-117: although *Deirê* fits the *Periplus*' words this identification “would leave Aualitês with a very poor harbour indeed”; on the other hand “the *Periplus*'s figure of 4800 stades from *Adoulis* to *Aualitês* seem to favor Zeila”. In Ptolemy's geographical handbook *Aualitês* (Ptol. 4, 7, 10) lies far south of *Deirê* (see fig. 5).

168 Plin. *nat.* 6, 172; 174.

169 Müller (b) 760.

170 Plin. *nat.* 6, 173-174.

171 Ptol. 4, 7, 1.

172 Pliny thinks that the *Trogodytice* extends along the entire African side of the Arabian Gulf. See Desanges (a) 83; 90; 96.

173 Wilcken 90; Str. 16, 4, 14.

cient geographical *doxa*. In particular, the author of the *Periplus* who, deliberately or not, ignores the name Troglodytes, calls the coast projecting from *Berenikê* as far as the “Spice Promontory” (*akrôtêrion tôn Aromatôn* = cape Gardafui / Ras Asir) *Barbaria* / *Barbarikê*.¹⁷⁴ In contrast, Pliny relying on reports from unknown sources refers to an *Azanium mare* (“sea of Azania”) stretching out beyond the strait.¹⁷⁵ Finally, Ptolemy who partly draws on Marinus of Tyrus gives the name *Trôglodytikê* to a wide coastal area (*παράλιος χώρα*) extending as far as the cape *Elephas* (Ras el-Fil, west of Cape Garfaiui).¹⁷⁶ He removes the *Smyrnophoros* far from its original location in the outer part of the Bab el-Mandab strait.¹⁷⁷

Far more fascinating than these topographical issues are the issues relating to peoples dwelling in the area of Bab al-Mandab. The 3rd century explorers encountered various tribes which, as was usual in Greek ethnography, were primarily distinguished by their physical appearance and *nomima* (“usages; customs”). Fortunately, a reasonable amount of valuable and sometimes lively information has survived.

For obvious reasons coastal sedentary populations were the first to be met by the Greeks. Accordingly, we are quite well informed of the *Ikhthyophagoi* (“Fish Eaters”) [2; 7; 10; 15; 16]¹⁷⁸, a Greek name pointing to peoples fully dependent on sea products (fish, shellfish, beached whales *etc.*). The name *Ikhthyophagoi* applied indiscriminately to a number of tribes settled on the African shore of the Red Sea and the Gulf of Aden as well, that is to say inside and outside the strait. They lived in shelters built from every kind of locally available material and grouped in small villages. Such was probably the *polikhnion* (“very small town”¹⁷⁹) of *Deirê* [2], the only one to be noticed by the ancient travellers probably because it lay in a conspicuous place. Although the Greeks employed the generic name *Ikhthyophagoi*, they managed to observe distinctive features of several tribes. As is common in ancient Greek ethnography, these relate to livelihood (*trophê*) and customs. The groups of Fish Eaters settling within the strait were reported to enjoy a comparatively long life, due to their simple diet [7], and the tribes living beyond the strait (*ἐκτὸς τοῦ κόλπου*), which seem to have been approached for the first time by Simmias, appeared as extraordinary (the words *thaumasion* / *paradoxon* occur three times in the paragraph 3, 18): they did not need to drink. Whoever has visited the countries of the Red Sea may share the Greeks’ amazement. This marvellous fact (*paradoxon*) received a rational explanation: these *Ikhthyophagoi* were supposed to get the minimal amount of fresh water required to survive from the juicy raw fish that they ate.¹⁸⁰ Secondly they could bear any physical and moral pain without complaining [7; 10], as cruel experiments *in vivo* carried out by Simmias himself showed. This conduct of Simias was presumably an attempt to investigate and understand this *paradoxon*. We are also informed of a tribe called *Khelo-*

174 *P.m.r.* 2; 5; 7; 12. See Casson 97-100; 110; 129.

175 *Plin. nat.* 6, 153; 6, 172. See Dihle (b) 562-565; Desanges (c) 75-77.

176 *Ptol.* 1, 17, 5; 4, 7, 4; 11; 28; 31. Ptolemy refers also to the *Adoulitikos* Gulf (1, 15, 11) and the *Aualitês* Gulf (4, 7, 10), which lies inside the Gulf of Aden (see Müller (b) 759-760; Desanges (a) 97).

177 *Ptol.* 4, 7, 31; 4, 7, 3.

178 On the *Ikhthyophagoi*, see Longo.

179 Desanges et Reddé 176.

180 *Diod.* 3, 18, 2 (= Agatharchides, *GGM* 1, 40).

nophagi, i.e. “Turtle Eaters”. These lived on the numerous islands lying off the Bab al-Mandab coast in the open sea where they hunted for the sea-turtles that supplied them with flesh and tortoise shell [11].¹⁸¹ On the nearby coast dwelt other Fish Eaters who, due to their low level of expertise, were unable to catch fish and were consequently compelled to feed on beached whales.¹⁸²

Taken together, the tribes who did not depend on sea food were called *Trôg(l)odytes*¹⁸³, alternatively Nomads.¹⁸⁴ These peoples were ruled by a “chief” (τύραννος; δυνάστης) and lived “a nomadic life off their flocks”.¹⁸⁵ They were confronted with the severe environmental conditions prevailing in this area: for instance they had to “go to war about pasturage” in the dry season.¹⁸⁶ Unlike the *Ikhthyophagoi* forced to dwell on the coastal zone (*paralia*)¹⁸⁷, their livelihood enabled them to occupy the hinterland (*mesogaia* [15])¹⁸⁸ but they would occasionally share the coastal zone with the *Fish Eaters* [13].¹⁸⁹ Again, unlike the *Ikhthyophagoi*, the Greek travellers seem to have feared the Troglodytes [12, and above, n. 46]. Artemidorus, however, mentions “insignificant cities” [15], enabling us to infer that a certain number of Troglodytes were committed to agriculture, leading a sedentary life in villages. Two tribes stood out among the various groups settled in the vicinity of the strait, and thus were given a specific name of Greek origin: the *Khreophagoi* (“Flesh Eaters”) were undoubtedly a Troglodyte tribe of hunters or breeders. This points to a carnivorous diet, while other Troglodytes would normally “live off blood and milk which they mix together”.¹⁹⁰ According to Artemidorus, they occupied an area inside and beyond *Deirê* and the strait of the Six Islands, probably between Assab and Zeila [15; 16].¹⁹¹ The Greeks were, however, particularly impressed by the *Koloboi* (“Mutilated glands people”¹⁹²) [8; 14; 15], most likely another Troglodyte group. No doubt, the sight of men showing a mutilated penis must have struck the Greek observers. Agatharchides claims that they lived inside the strait (= before *Deirê*?), and other evidence proves that the *Koloboi* moved to seek pastures south of *Eumenous limên* (around Assab?) as far as *Deirê* [14]. They probably led a nomadic life, as attested by the anonymous dedicant [12]

181 In the parallel version of Diod. 3, 21, 1-5 their islands are said to lie in the ocean near the land (κατὰ τὸν ὠκεανὸν πλησίον τῆς γῆς). Artemidorus (Str. 16, 4, 14) is also aware of *Khelonophagoi*, but does not clearly say where they dwelt. See Desanges (a) 88.

182 Shell middens have been reported in this area (Desanges & Reddé 164-175; 181-183).

183 The “l” is absent from papyri (Burstein 100 n. 1) The *Ikhthyophagoi* who inhabited the African shore of the Red Sea are sometimes considered as *Trôglodytai* (Casson 98).

184 Diod. 3, 32, 1.

185 Diod. 3, 32, 1-3 (= Agatharchides, *GGM* 1, 61); 3, 40, 1 (= Agatharchides, *GGM* 1, 83). Str. 16, 4, 13 (Artemidorus): “The greatest part of the people are nomad and those who till the soil (γεωργοῦντες) are few in number.

186 Str. 16, 4, 17 (transl. Jones).

187 However a tribe living inside the strait would go every fifth day to the foothills of the mountain in order to get fresh water (Diod. 3, 17, 2-5 [= Agatharchides, *GGM* 1, 37-39]).

188 Also see Str. 16, 4, 4 [Eratosthenes]: “Though there are not many cities on the coast, there are many in the interior that are beautifully settled” (transl. Jones).

189 Tkač (a) 2524-2527.

190 Diod. 3, 32, 1.

191 Str. 16, 4, 9: *Kreophagoi* and *Koloboi* could be encountered “above” the harbour of *Antiphilos* (located south of Hawakil Bay by Müller (b) 760]).

192 See Burstein 111-112.

telling us that they could be encountered beyond the strait, somewhere in the *Smyrnophoros*, a fact implicitly confirmed by Artemidorus.¹⁹³ This remarkable body of knowledge scarcely improved in later times, apart from a significant shift in the local political organisation reported by the *Periplus*: in the 1st century B.C. a certain Zôskalês turned out to rule “as a king” from south of *Berenikê* as far as the strait (perhaps he had his residence in *Adulis*). Actually, Casson convincingly uses the word “sway” to define Zôskalês’s power. He was probably powerful enough to restrict the independence of the above-mentioned tribes, but a general modification of the local tribal organisation seems by no means plausible.¹⁹⁴

Concerning fauna and flora, as I stated above, the Greeks focused only on the most striking facts. The mangroves (called “olive” groves and “laurel” groves) were probably the most bewildering and fascinating feature of the coastal landscape. Thus Artemidorus [16] refers to the groves growing inside the strait (*Deirê*?) and to numerous ones (*pollê*) located beyond. Nowadays mangrove woods survive between Assab and Zeila.¹⁹⁵ Palm trees, the most remarkable “land trees” (mangrove trees were regarded as “sea trees”) in so torrid a country, were also reported inside and beyond the strait. Artemidorus’ statement that myrrh trees grow beyond *Deirê* (“the first country <after *Deirê*> produces myrrh” [16]) seems particularly questionable: firstly, myrrh trees grow in today’s Eritrea, north of *Deirê*.¹⁹⁶ Secondly, the identification of myrrh trees and frankincense trees was subject to much confusion in antiquity.¹⁹⁷ As a consequence I severely doubt that Greek observers were able to identify the true myrrh tree (*Commiphora* spp). Conversely, they witnessed people trading aromatics including a special quality of myrrh in this area (below, p. 34-35). Hence, a place where myrrh was supplied could be conceived of as an area with myrrh trees, regardless of the botanical determination. As for animals, no animal species is explicitly linked with the area of the strait¹⁹⁸, except elephants, which were hunted from the shores of the African side of Bab al-Mandab.

3.3. The eastern side

In Greco-Roman geography the Arabian side of the strait was clearly a part of *Arabia Felix* / *Eudaimôn*. A further look at local topography is the subject of this chapter. When the first Greek explorers reached the Ras Siyyan, they certainly claimed that they had discovered the strait of the Erythraean Sea because of a promontory projecting out from the Arabian side towards the Cape *Deirê*. While Eratosthenes was aware of the Arabian counterpart of *Deirê*, its name seems to be unknown to him. Agatharchides, less informed than Eratosthenes, is of no benefit in this discussion. In contrast, Artemidorus is the first¹⁹⁹ to

193 Str. 16, 4, 14 (past the promontory of *Pytholaos*, in the *Smyrnophoros*, “the people are wholly free from mutilation of the body” - transl. Jones).

194 *P.m.r.* 5. See Casson 109-110.

195 Schneider (a) 364-367. “The coast from ras Jibuti to Zeila (...) is low and swampy, tickly covered with mangrove jungle.” (*The Red Sea and Gulf of Aden pilot* 368).

196 Groom (a) 99.

197 Theophr. *h.plant.* 9, 4, 2-3. See Amigues 82-85.

198 Diod. 3, 35-37 (= Agatharchides, *GGM* 1, 67-78) and Str. 16, 4, 15-16 (= Artemidorus) give a synthetic review of the Ethiopian and Arabian fauna.

199 Dihle (b) 559: “Artemidor als erster”.

give the vernacular name of this promontory, *Akila* (*Okêlis* / *Acila* / *Ocilia*) [14]. Most scholars identify *Okêlis* with the peninsula of Shaik Saïd.²⁰⁰ Almost no place lying before or beyond *Okêlis* was known to the Greeks: Aden was perhaps referred to by Agatharchides, but the identification of the *Eudaimones* islands (above, n. 35) with this harbour is not firmly established. Thus, in contrast with the African side the Greeks were poorly informed about its Arabian counterpart, a situation which obviously derives from the lack of direct observation. As stated above, only a few official explorers and *emporoi* sailed along the eastern strait area in the 3rd-2nd centuries B.C. In addition, whereas hunting teams stayed in their African bases for months, no Greek made the Arabian coast his permanent home, except perhaps the colonists from the city of Miletus who allegedly settled in *Ampelome* (above, n. 31).

The growth of Greco-Roman sea traffic from the late 2nd cent. B.C. resulted, however, in an increase in the knowledge of the eastern side of Bab al-Mandab. First of all the name *Okêlis* appears in the evidence not only as a cape but also as a harbour. It has been generally located in the north-west part of the peninsula of Shaik Saïd.²⁰¹ Mediterranean cargo ships would put in there and get water supplies before starting on their voyage to India [23; 24; 28; 32²⁰²]. The author of the *Periplus* does not regard *Okêlis* as an *emporion*, which reinforces the assumption that this port was mainly involved in local trade (below, p. 40). Another toponym appears in Greco-Roman documents of that time, namely *Mouza* / *Muza*, ranked by the *Periplus* among the “legally limited ports of trade”, which has been identified with Mocha / Al Makhā.²⁰³ Finally, there is *Eudaimôn* / *Adanu* / Aden [23; 29]²⁰⁴, a place which appeared to some travellers at the last stage of their voyage across the strait (below, p. 45). Both *Mouza* and *Eudaimôn* were integrated into the local trade network. In addition, a certain *portus Laupas* situated between *Camari* (Kamaran Island?) and *Acila* / *Okêlis*, and far less important than the previous places, appears in a list of toponyms coming from Juba [24]. The same authority also points out an anonymous promontory, probably in the vicinity of Bab al-Mandab [25], as well as several cities (*oppida*) lying somewhere in the region of the strait (*in Rubro litore*): *Merme*, *Marma*, *Corolia*, *Sabbattha*. Almost none of these places can be identified.²⁰⁵ The myrrh called *Sambracena* was named, Pliny adds, after an unidentified Sabaeon city vaguely located near the coastline, perhaps a harbour from which this variety was exported or re-exported.²⁰⁶ It cannot be established if this place was located in the strait area. Ptolemy's *Geography* (see app. 7.6) contains several other original toponyms from either vernacular or Greek origin. The Greek toponyms may have been created by Greco-Roman merchants. Two of them merit special attention, namely *Palindromos akra* (the “cape of the running

200 Desanges (a) 92; Dihle (b) 561-562; Casson 157-158; Schiettecatte (a) 235-236.

201 The port of *Okêlis* was probably in the north-west part of the Sheikh Sa'id peninsula, in a lagoon named Sheikh Sa'id or Khawr Ghurayrah: Desanges-Reddé 180; Dihle (b) 562; Casson 158; Schiettecatte (a) 235-236. Also see von Wissmann (b) 437; 440; Robin (b) 225.

202 See also Plin. *nat.* 6, 104.

203 *P.m.r.* 21; 24; Plin. *nat.* 6, 104. See Casson 147-148; Schiettecatte (a) 233-235.

204 Casson 158-160; Desanges (c) 97-98. Ptolemy calls it *Arabias emporion* (see fig. 5). *Adanu* is the form that Pliny drew from Juba: it bears much resemblance with the word *Adaneitês*, “citizen of Aden”.

205 See, however, Tkač (b) 1440; von Wissmann (a) 308.

206 Plin. *nat.* 12, 69 (a civitate regni Sabaeorum mari proxima).

back again”) and *Poseidion akra* (the Cape of Poseidon), south of *Okêlis*. Indeed, the route along the peninsula of Shaykh Saïd bears some resemblance to a hairpin bend, a feature vividly expresses by the word *Palindromos*. As to the name Cape of Poseidon it may be linked with the open sea appearing to men after they had passed the strait.²⁰⁷

Another significant consequence of the increasing Greco-Roman maritime trade is that, whereas most of the Hellenistic authors (e.g. Artemidorus) were unaware of the islands lying along the Arabian side of Bab al-Mandab, many were reported by later sources. In fact, the route leading to the Arabian side of the strait seems to be dotted with islands. The *Periplus* refers to the *Katakekaumenê nêsos* (Burnt island -Jabal al Ta’ir²⁰⁸), after which one comes to *Mouza* and “the very last bay of the left-hand shore of this sea (= the Red Sea)”. Pliny /Juba [23; 24²⁰⁹] points out numerous islands in his presentation of the southern Arabian Red Sea: *insulae Alaea* (possibly a confusion with the *Alalaïou* islands [Dahlak archipelago])²¹⁰, *Chelonitis*²¹¹, *Ichthyophagon multae*, *multae Sabaeorum*, *Doricae*, *Pteros*, *Camari*, *Malichu* (the Hanish Islands²¹²), not to mention other anonymous islands. No doubt Farasan, an island to which a Roman military detachment was sent in the mid 2nd century B.C. (above, p. 10), appears in this list under another name.²¹³ Fewer islands were reported by Ptolemy whose presentation, however, offers two puzzling inaccuracies: the islands *Adanu* (Aden²¹⁴) are wrongly situated in the Arabian Gulf, and the island of Perim (*Diodôrou nêsos*) lying between Ras Siyyan and Shayk Saïd is not correctly located (below, p. 50).

Eratosthenes’ short account [1] contains valuable pieces of information about the ethno-political organisation in the area of Bab al-Mandab, even if it describes the Arabian societies in a very general way. He is aware of four major Arabian states (μέγιστα ἔθνη) occupying the south-west peninsula, namely Ma’in, Saba’, Qatabân²¹⁵, Hadramawt²¹⁶, but

207 See Groom (b) 69. For the sake of comparison, see Str. 14, 1, 14.

208 *P.m.r.* 20-21. The *K. nêsos* is situated by Ptol. 6, 7, 44 approximately at the latitude of *Mouza*; it is called *Exusta* by Plin. *nat.* 6, 175 (= Juba, *FGrH* 275 F 35). Casson 147, has identified it as the Jabal al Ta’ir Island (15° 33’ N / 40° 50’ E), which has “a volcano not yet completely dead”.

209 See also Plin. *nat.* 6, 150.

210 Plin. *nat.* 6, 150 (= Juba, *FGrH* 275 F33). See *P.m.r.* 4; Diod. 3, 45, 6 (Agatharchides, *GGM* 1, 96 [an Arabian tribe named *Alilaioi*]). See Müller (a) 184-185; Desanges (c) 84-85.

211 There are Islands of Turtle Eaters on the opposite side (Str. 16, 4, 14 [Artemidorus]; Ptol. 4, 7, 37; Pliny [24]).

212 Desanges (c) 95.

213 Tkač (b) 1441.

214 Actually the peninsulas of Aden and Little Aden (see Desanges (c) 96). Mela, 3, 80, also locates Aden in the Arabian Gulf: *ab ea parte* (of the Arabian Gulf) *quae introeuntibus sunt Charra* (an unknown place) *et Arabia* (Aden, wrongly repeated?) *et Adanus* (see Desanges (c) 98).

215 The vocalization Qatabân is based on the Greek name *Kattabaneis*; the form Qutbân, quoted by al-Hamdânî, may be the original one. It has been preserved in Pliny’s *Gebbanitae* (*Yémen* 98 [A. Avanzzini]). According to Pirenne 147-148 (see also von Wissmann [b] 440), the *Kattabaneis* and the *Gebbanitae* were two tribes of the kingdom of Qatabân (however, see below, n. 273).

216 Compare with Theophr. *h.plant.* 9, 4, 2, probably drawing on Anaxicrates: Σαβᾶ, Ἀδραμύτα, Κυτίβαινα, Μαμάλι (= Ma’in? see Tkač (b) 1331-1333). The kingdom of Awsan was apparently unknown.

only the third one is unambiguously specified as extending as far as the sea. Ma'in is said to lie "on the side [of the Arabian Peninsula] towards the Erythraean Sea [viz. the Arabian Gulf²¹⁷]". Quite accurately this reflects the political situation prevailing at the time, since in the early Hellenistic period the *mukarrib* (sovereigns) of Qataban seem to have prevailed over the Sabaeen power.²¹⁸ Consequently in the late 4th-early 3rd centuries B.C. Qatabân's rule had probably extended as far as the strait and the coastal plain (Tihamā)²¹⁹, although its core and capital (Tamna) remained in the mountains.²²⁰ Nonetheless, the word *diabasis* employed by Eratosthenes implies that this kingdom was to some extent involved in the local sea trade. Agatharchides certainly cannot compare with Eratosthenes' degree of accuracy. Not only is Saba' the only kingdom he refers to (so does Artemidorus²²¹), but he wrongly calls its *metropolis* (capital) *Sabas* instead of *Mariaba*.²²² Some scholars argue that Agatharchides used pre-Hellenistic sources reflecting the period when Saba had reached its climax.²²³ Alternatively, Agatharchides may have favoured this kingdom, which outshone the rest of south Arabian states in the eyes of the Greek writer.²²⁴ As Ryckmans rightly points out: "La description de l'Arabie par Agatharchide de Cnide (...) après s'être attachée aux détails de la côte de l'Arabie jusqu'à la hauteur du Yémen, substitue à cet endroit, à la description des côtes, une description de Saba' (...) manifestement inspirée de récits fabuleux parvenus par la route terrestre."²²⁵ The phrase "récits fabuleux" naturally refers to the Sabaeans' extraordinary wealth, idleness and luxury, lavishly depicted by Agatharchides. The same author vaguely reports a trading traffic in a place seemingly under Sabaeen control and possibly identical to Aden.²²⁶ He also mentions a marvellous fact (*paradoxon*) concerning the coastal part of Saba': "The sea in these parts

217 Berger 299-300, however, thinks that the name *Erythra thalassa* points to the outer ocean, instead of the Arabian Gulf.

218 Robin (a) 52.

219 Tkač (b) 1325; Wissmann (d) 375; 392; Avanzini 90: "De nouvelles études, impliquant une réévaluation des sources classiques, nous portent à croire que, même avant J.-C., les États sudarabiques s'étendaient sur tout le haut plateau et dans les régions côtières: les Sabéens dans la *Tihamā*, les Qatabanites dans la Dathina, vraisemblablement jusqu'à Aden, et même au nord d'Aden, sur la mer Rouge, au temps de leur plus grande splendeur". Also see *Yémen* 94 (Robin); 100 (Avanzini): "Pour le royaume de Qatabân commence alors (sc. 6th cent. B.C.) une longue période de splendeur qui se poursuivra jusqu'au I^{er} siècle. Son territoire semble s'étendre jusqu'à Bab al-Mandab).

220 Robin (a) 52.

221 Str. 16, 4, 19; 21. Artemidorus, however, is aware of *Mariaba* (Str. 16, 4, 19).

222 Diod. 3, 47, 4 (= Agatharchides, *GGM* 1, 100). See, however, Pirenne 111-112. *N.b.*: Elsewhere Strabo, drawing on an unknown source, provides a puzzling division of *Arabia Eudaimôn* into five *basileia* (Str. 16, 4, 25).

223 Woelk 233; 260-262 (quoting von Wissmann); Mommsen 75; Rodinson 59: "On voit que tous les Sudarabiques sont purement et simplement identifiés aux Sabéens. On ne peut savoir jusqu'à quel point cela dérive d'une suprématie réelle de Saba."

224 See Str. 16, 4, 19 (Artemidorus).

225 Ryckmans 86. See Diod. 3, 47, 4 (= Agatharchides, *GGM* 1, 100); 3, 47, 6 (= Agatharchides, *GGM* 1, 102).

226 See above, n. 35. *Contra*: Ryckmans 86: "ce récit (...) ignore (...) l'existence (...) des ports de Qana' et Aden."

looks to be white in colour, so that the beholder marvels at the surprising phenomenon and at the same time seeks for its cause.”²²⁷

The documents from the Roman period contain new data and improve the Hellenistic body of knowledge. Pliny quotes Juba’s confusing list of south Arabian peoples, among which one can recognise Qataban (*Catabani*), Saba’ (*Sabaei*) – the latter being praised because of their frankincense (*Sabaei Arabum propter tura clarissimi*) – and Hadramawt (*Chatramotitae*).²²⁸ These states are vaguely located before and after Bab al-Mandab (*ad utraque maria porrectis gentibus*²²⁹). The changing balance of power in this region did not remain unknown to Pliny, the author of the *Periplus* or Ptolemy either. All authors indeed are aware of the growing power of the *Homeritai* [Ḥimyar / Dhu Raydan]²³⁰, a kingdom which at that time was competing with Saba’ to control the south-west peninsula, while Qatabân’s power was vanishing. It is, however, only the *Periplus* that clearly points out the Sabaeo-Ḥimyarite rivalry.²³¹ Their business apparently enabled Alexandrian merchants to obtain a correct understanding of Ḥimyar’s administrative organisation, as the *Periplus* reports a local “governor” based in *Sauê* (as-Sawā²³²). This official stood in subordinate relation to the king living in *Saphar*. Finally, by mentioning the road from *Mouza* to the inland cities of *Sauê* (Sawwā) and *Saphar* (Zafār), the author informs us that, although Saba’ and Ḥimyar were involved in the regional and local sea trade, their real centre did not lie on the coast.²³³

With regards to the coastal area (Tihama), it was not until Roman times that tribes scattered along this narrow plain, of which some are known from Arabian epigraphy²³⁴, appeared in Greek and Latin sources, even if less attention was paid to such destitute tribes than to the kingdoms surrounding them. The *Periplus* and Pliny [24] point to tribes of Fish Eaters (*Ikhthyophagoi*) settling in southern coastal places – certainly including the Bab al-Mandab area – and on Red Sea islands.²³⁵ As for the *Elisaroi*, a people dwelling on the shore between *Adêdos* (Hudayda) and *Okêlis*, they have been identified with the “tribu de al- Aš’ar (...) qui s’étendait jusqu’au delà du Bab al-Mandab”.²³⁶ Finally, there is a tribe of *Scenitae* Sabaeans (=Sabaeans living in a tent, a clear indication of their nomadic life) situated by Pliny [24] at *Ocelis*, whose identity remains obscure. As von Wissmann states, “zur Zeit seiner (sc. Pliny) Abfassung das Sabäerreich bis zum Bab al-Mandab reichte.”²³⁷ At any rate, Pliny’s statement offers an interesting parallel to a Ḥimyarite in-

227 Diod. 3, 47, 8-9 (= Agatharchides, *GGM* 1, 103 - transl. Oldfather).

228 Plin. *nat.* 6, 153-154 (= Juba, *FGrH* 275 F33). See Ryckmans 83.

229 Tkač (b) 1439, thinks that *gentibus* refers only to the Sabaeans.

230 Plin. *nat.* 6, 158; 6, 161; *P.m.r.* 23; Ptol. 6, 7, 25.

231 Von Wissmann (d) 311-312; Rodinson 213-214; Robin (a) 52-53.

232 Ryckmans 79; Schiettecatte (a) 234.

233 *P.m.r.* 21-24 (Plin. *nat.* 6, 104, and Ptol. 6, 7, 41-42 are less accurate). See Schiettecatte (a) 276.

234 Gajda 55; 66; 89-90; 195. On the Ṣabir culture which developed in the Tihama, see Schiettecatte (a) 226-228.

235 *P.m.r.* 20. See Tkač (a) 2528-2529.

236 Ptol. 6, 7, 5-8; Ryckmans 79-80.

237 Von Wissmann (c) 1341.

scription dating from the mid 5th century A.D., in which several kings claim sovereignty over a number of nomadic tribes of the Tihama.²³⁸

There is little information concerning climate, fauna, and flora, and almost nothing specifically relating to the area of the strait. In particular, mangroves, which fascinated those who visited the African side of the Arabian Gulf, are ignored by written sources.²³⁹ The few natural facts listed by Eratosthenes concern the hinterland and aim at glorifying a fertile and wealthy country. The region “lying opposite to *Aithiopia*”, “watered by summer rains”, “sowed twice”, having “all kinds of birds” clearly does not point to the barren Tihama. As for aromatics, the most praised product of south Arabian countries, Eratosthenes provides further details when saying that frankincense was collected in Qatabân, while myrrh was produced “farthest towards the east”, in *Khatramôtis* / Hadramawt.²⁴⁰ These names do, however, hardly apply to the coastal parts of Arabia. Theophrastus, to whom we owe the best description of incense and myrrh trees, claims that Alexander’s explorers observed them in the mountains (ἐν τῷ ὄρει), far from the seashore.²⁴¹ Agatharchides contrasts with the previous authorities when he claims that two varieties of aromatics respectively named *balsamon* and *kasia*, and a mysterious herb “having a nature peculiar to itself” (ἰδιάζουσιν φύσιν ἔχουσιν [?]) grew along the coast (παράλιον) controlled by the Sabaeans. Agatharchides may have been misled, thinking that products actually exported (or re-exported) from a Sabaean port were grown in the Sabaean country. On the other hand, he rightly says that the most renowned commodities (frankincense and myrrh) were harvested in the hinterland (μεσόγειον), i.e. the mountains.²⁴² No noticeable improvement is to be found in later documents. Pliny had much to say about the Arabian spices marketed in Italy but almost nothing about the trees of *Arabia Felix*. It is significant that Pliny expressed disappointment at the *arma Romana* not having improved the description of the incense tree provided by the Greeks.²⁴³

To conclude, it must be stressed that from the Greco-Roman perspective the Arabian side of Bab al-Mandab served as a contrast to its African counterpart. As regards the western sector, the coastal area (*paralia*) and the hinterland (*mesogaia*) were not perceived as disconnected from each other, while the Arabian *paralia* was overshadowed by the inner region in many respects. In addition, the various tribes (*Fish Eaters*, *Troglodytes*, *Koloboi* etc.) scattered on the African side were thought to have a poor livelihood and a weak political organisation (at best they were under the authority of “headmen” [*turannos*]).²⁴⁴ In contrast, powerful and wealthy kingdoms (*basileia*) flourished in southern Arabia. With their social division into classes (traders, farmers, soldiers etc.), their political organisation and their urban civilization, they appeared to Greco-Romans as structured states.²⁴⁵

238 Gajda 195: “Ils se nommaient ainsi ‘roi de Saba’, dhū-Raydan, Ḥadramawt et leurs nomades de Ṭawd^{um} et de la Tihāmat’.”

239 See, however, Bretzl 102; Schneider (a) 364-367.

240 Str. 16, 4, 4 (= Eratosth. Berger III B 48 - transl. Jones).

241 Theophr. *h. plant.* 9, 4, 4.

242 Diod. 3, 46, 2-3 (=Agatharchides, *GGM* 1, 97 – transl. Oldfather). Artemidorus repeats Agatharchides’ statement (Str. 16, 4, 19).

243 Plin. *nat.* 12, 55.

244 This was to change significantly with the rise of the Aksumite kingdom (Munro-Hay 61-75).

245 Breton 97-114.

4. The local trade network in the area of Bab al-Mandab

4.1. Eratosthenes – Agatharchides - Artemidorus

When the first Greek explorers reached the area of Bab al-Mandab, around the mid third century, they noticed a local sea traffic.²⁴⁶ However poor the extant pieces of evidence are, they give the earliest information about a local network which may have had a long existence.²⁴⁷ The trade exchanges before this time have been documented only by archaeological remains, e.g. obsidian artefacts. No doubt, this traffic was important and visible enough to attract the attention of Ptolemaic observers, who may have been interested in understanding where valuable commodities imported to the Greek world were coming from. On the other hand, they may have paid little attention to staples of local interest which were likely to have been transported on the same crafts (for instance, foodstuffs or wood²⁴⁸).

Some traces of this trade activity can be detected in the half-fantastical narrative of Iamboulos' adventures (above, p. 8): the hero is reported to have been transferred from Arabia to the opposite side by Ethiopian bandits. Considering that between piracy and trade there is often not much difference, this fictional account may echo a local trade activity involving all kinds of people in the strait area. The earliest set of reliable data, however, comes from Eratosthenes [3]: The two sides of Bab al-Mandab (*êpeiroy*), he says, were connected by a maritime traffic, apparently only observed from the African side. Light boats (*skhediai* = "raft", "float"²⁴⁹) would carry freight from one side to the opposite, not directly but *via* the Six Islands mentioned above (p. 24), which seem to have served as intermediary stops. The natives used small crafts, well suited for short voyages. They put in at moorings which did not require special infrastructure²⁵⁰, at least on the African side. Wherever the final stop of the "Six Islands crossing" may be²⁵¹, no particular settlement,

246 As far as I know, this topic has not been much investigated: see Delbrueck 21-22; 240-241; Raschke 656; 931 n. 1135-36; Desanges & Reddé 179-180; Casson 19-21; Villeneuve 173-178; Sidebotham (b) 38; Bianchetti (a) 283. Some scholars have overestimated the position of the Mediterranean newcomers, such as Rostovtzeff (b) 747 ("The Ptolemies (...) almost succeeded in monopolizing the African goods for themselves. Only a small part of these wares was still handled by the south Arabian merchants."), or Kortenbeutel 40 ("dadurch, daß die Ptolemäer jetzt das eine Ufer der Enge in der Hand hatten, wird dieser Handel zugunsten der Ptolemäer unterbunden worden sein").

247 De Romanis 98-99; Munro-Hay 61-66; Schiettecatte (a) 225.

248 For the sake of comparison, see *The Red Sea and Aden Pilot* 230: "In the vicinity of ras Siyyan are bushes of considerable extent, where the natives of Perim and the Arabian coast come for wood."

249 Compare with Str. 16, 4, 18 (Nabatean *skhediai*); 16, 4, 20 (Persian *skhediai*).

250 See *P.m.r.* 3: *Ptolemais* of the Hunts "has no harbor and offers refuge only to small crafts (*skaphai*)" (transl. Casson).

251 It has been long assumed that African places located near the strait and called *Sabaïtikon stoma*, *Saba*, *Sabai* (Str. 16, 4, 8; 10 [= Artemidorus]) were ancient "sabaeische Niederlassungen am afrikanische Ufer" (Delbrueck 35; Kortenbeutel 34). Extremely ancient relationships between each side of the Red Sea have been disclosed by archaeological remains (Anfray 57-60). On the so-called Sabaeen thalassocracy, see, for instance, Raschke 654-655.

such as *emporion*, *polis*, *polikhnion*, was noticed by the Greeks in this area. Neither did they mention which African tribes –Troglodytes? *Ikhthyophagoi*? – were involved in this trade exchange. But who were the Arabians coming from the opposite shore? It seems plausible that some people of Qatabân, whose kingdom encompassed the eastern side of the strait (*stena*), would cross the channel (*diabasis* [1]) and take part in this trade. Of the freight transported in their crafts, nothing is said by Eratosthenes, but fortunately we learn more from other authorities.

Indeed, Artemidorus [17] and Agatharchides provide further information, though the latter neither explicitly mentions the strait²⁵² nor seems to have a clear idea of the traffic.²⁵³ That said, both authors emphasize the role of the Sabaeans, as if this nation was in control of these exchanges this trade, differing thus from Eratosthenes in being unaware of the presence of Qatabân. Artemidorus claims that a part of the “masses” (*plethê*) lived off this local trade²⁵⁴, while Agatharchides vaguely attributes the trading activity to “many Sabaeans” (τῶν δὲ Σαβαίων οὐκ ὀλίγοι). According to the former, the Sabaeans imported certain varieties of aromatics, which were not produced in their own country, from the opposite side, certainly because they intended offering for sale a variety of items. The country from which these *arômata* were obtained is called *Aithiopia* by Artemidorus, a name which may point to the Somali coast [16].²⁵⁵

Arômata and other goods were carried in light boats made of leather (δερματίνοις πλοίοις / δερμ. πορείοις; the case of the *σχεδία* is less certain). Due to lack of details, we cannot determine whether these crafts were made from sewn pieces of leather or were “supported by floats made from animal skin”, like the crafts employed by Arabian pirates.²⁵⁶ At any rate, they were suited for transporting relatively light loads, e.g. spices. Agatharchides concludes with the following puzzling comment: “The tides themselves have instructed (διδασκούσης τῆς ἀναπώτιδος) them (sc. the Sabaeans) in their (= boats) use, although they live in luxury” (transl. S. M. Burstein). Among the Greeks, the Sabaeans had the reputation of being extremely affluent, and were not thought to be simple merchants, hence Agatharchides’ surprise. Whatever the value of this final moral inclusion, it indicates that the Arabs were capable of properly using the ebb and flow of the tides and of coping with the dangerous tidal currents in the strait. This interesting remark

252 Phot. *Bibl.* 250, 459a (= Agatharchides, *GGM* 1, 101, with no similar passage in Diodorus’ paraphrase): “All the other <Sabaeans> men train for war, work all the land, and voyage from home using large rafts (*σχεδία*). They transport cargoes of various sorts including especially an aromatic plant which grows in the interior (ἐν τῷ πέραν φούμενον) and is called in the language of the Arabs *larimna* (Str. 16, 4, 19 [*larimnon*]; see Woelk 247; Burstein 167 n. 2). Not a few of the Sabaeans also employ boats made of skins. The tides themselves have instructed them in their use, although they live in luxury.” (transl. Burstein). This may point to a “side to side crossing”. *Contra*, Tkač (b) 1394, referring to Sabaeans exportations to India (a statement probably based on the theory of the “Sabaeans thalassocracy”).

253 Agatharchides thought that all aromatic gums and spices exported by the Sabaeans were collected in their own country (Diod. 3, 46, 2-3 [= Agatharchides, *GGM* 1, 97]).

254 On the Sabaeans organization in the south Arabian kingdoms, see Woelk 245-247; Breton 119-147. See also *Yémen* 102 (Robin): “Le négoce était tenu en piètre estime par les aristocraties guerrières des grandes tribus.”

255 The aromatics were also harvested in the hinterland (Str. 16, 4, 14: “the *kinnamômon* is more abundant in the neighbourhood of the places that are deep in the interior” – transl. Jones).

256 Plin. *nat.* 6, 176; Burstein 167. See also *P.m.r.* 27 (leather made crafts at *Kanê*).

somehow matches Eratosthenes' statement that the natives sailed from one island to another for security purposes.

4.2. Pliny the Elder

Further information comes from Pliny, whose sources unfortunately cannot be identified – meaning that the historical context escapes us –, and whose statements seem imprecise to the reader on more than one occasion.

Pliny is aware of a local trade network connecting the natives from the coastal parts of the African side of the strait with the hinterland. A certain quantity of myrrh, he says, was conveyed by land and/or by sea from the *Trogodytice* country (= the *Smyrnophoros* country?) to a harbour named “the port of Isis”, which probably lay at, or near *Deirê*.²⁵⁷ No doubt, Pliny refers to a renowned variety of myrrh being carried from the harvesting points to an entrepôt located at *Isis portus*. There it was sold to neighbouring peoples, such as the Arabs, which does, however, not exclude the possibility of Greco-Roman merchants purchasing myrrh at *Isis portus*. It must be remembered, at any rate, that this small-scale transport was basically the starting point of the whole trade activity in the Erythraean Sea.

Elsewhere Pliny claimed that the Sabaeans were involved in the local sea traffic bringing them to the opposite side of the sea, where a special kind of myrrh could be obtained: “A kind highly spoken of is also imported from islands, and the *Sabaei* even cross the sea to the Troglodyte country to procure it.”²⁵⁸ (transl. Rackham). The phrase *transitu maris* points to a “side to side crossing” no doubt somewhere in the southern Red Sea and probably in the vicinity of Bab al-Mandab. As far as can be judged from this elliptical text, it is the Troglodytes that loaded myrrh in these unidentified islands (*Suqutra*?²⁵⁹) and shipped it to their homeland, where the Sabaeans could purchase it. There this top quality myrrh was transported to a Sabaean port, either for local consumption or more plausibly for re-exporting. As said above, they probably aimed to offer a large variety of aromatics so that Greco-Roman merchants calling at a Sabaean port could get all the items they wanted in the same place. By importing aromatics from other spice bearing regions, the Sabaeans were able to meet the Mediterranean demand.

257 Plin. *nat.* 6, 174: “And further on, Port of Isis, ten days' row distant from the city of the *Adulitae* (= *Adoulis*), and a centre to which Troglodytic myrrh is brought.” (*Isidis portus, decem dierum remigio ab oppido Adulitarum distans; in eum Trogodytis myrra confertur* – transl. Rackham). Desanges (c) 86-88 avoids converting Pliny's figure into a kilometric distance, and cautiously concludes that this place was situated “around the strait”. According to Eratosthenes [2], “reproductions of temples of Aegyptian gods” stood in many places along the Red Sea, which may explain the name “Port of Isis”.

258 Plin. *nat.* 12, 66 (*convehitur et ex insulis laudata* [sc. *murra*], *petuntque eam ad Trogodytas Sabaei transitu maris*). See also Plin. *nat.* 12, 60 (frankincense from anonymous islands: compare with Theophr. *h. plant.* 9, 4, 10); 6, 155.

259 Groom (a) 116. There is no other island large enough to grow myrrh and incense trees in this area. Neither myrrh nor frankincense are, however, listed in the *P.m.r.* 30 among the goods exported from *Suqutra* (*Dioskouridês*). See also Pirenne 163 (“Il s'agit évidemment des ‘îles sabéennes’ de la côte de la mer Rouge dont Plin [24] a parlé.”). Desanges & Reddé 180 connect this allusive text with the “Six Islands”, although they merely seem to be transit points.

This variety of commodities was probably made available at the port of *Muza* (Al Mukha), for, according to Pliny, Alexandrian merchants importing spices and aromatics would stop at *Muza*. In contrast, those who desired Indian products would moor at *Ocelis* or *Cane* before they sailed by the south-west monsoon wind: “There is also a third port named *Muza*, which is not called at on the voyage to India, and is only used by merchants trading in frankincense and Arabian perfumes (*quem Indica navigatio non petit, nec nisi turis odorumque Arabicorum mercatores* – transl. Rackham).”²⁶⁰ The *Periplus* informs us that the *emporoi* heading to Arabia left the Egyptian ports in September, while those going to India had to begin their trip earlier, in July.²⁶¹ Even if Pliny speaks of *odores Arabici* not all aromatics grew in Arabia: from the author’s point of view, all products exported from *Muza* were regarded as Arabian ones, despite the fact that some were gathered in other countries.

Finally there is the famous narrative dealing with the *cinnamomum* trade²⁶²:

“*Cinnamomum* (...) grows in Ethiopia, which is linked by intermarriage with the Troglodytes. The latter buy it from their neighbours and convey it over the wide seas in ships that are neither steered by rudders nor propelled by oars or drawn by sails, nor assisted by any device of art (...). Moreover they choose the winter sea about the time of the shortest day, as an east wind is then chiefly blowing. This carries them on a straight course through the bays, and after rounding a cape a west-north-west wind brings them to the harbour of the *Gebbanitae* called *Ocilia*. On this account that is the port most resorted to by these people, and they say that it is almost five years before the traders return home and that many perish on the voyage. In return for their wares they bring back articles of glass and copper, clothing, and buckles, bracelets and necklaces.” (transl. Rackam)

No doubt clues are lacking for us to fully understand this text. In particular, the spice named *cinnamomum* is far from being identified. As for the voyage, a duration of five years is simply unbelievable and contradicts the story itself (see in particular the return trip which lasts as long as one winter’s time). In short, some data must have been distorted, misunderstood or falsified. Moreover, Pliny cannot help but give a moral judgment – actually a commonplace in his time –, saying that this dangerous voyage was completed in order to fulfil women’s desires. This implies that some parts of the story may have been distorted by Pliny himself. In face of such complications, some scholars have rejected this document as spurious, as if it reflects “the commercial lies told to the western merchants.”²⁶³

Despite these difficulties, I believe that Pliny’s narrative contains an altered description of an actual local trade circuit involving the Troglodytes.²⁶⁴ Whatever this mysterious

260 Plin. *nat.* 6, 104.

261 *P.m.r.* 25; 39; Casson 288-289.

262 Plin. *nat.* 12, 86-88.

263 Warmington 191.

264 Miller 156-159, identifying *cinnamomum* with today’s cinnamon, imagined that it was shipped from south-east Asia. De Romanis 110-112, assuming that this *cinnamomum* grew in the Horn of Africa, gives a more convincing commentary to this text. See also Desanges, Stern, Ballet 30.

cinnamomum may be – either an unidentified but genuine “Ethiopian” spice²⁶⁵, or a commodity imported from an unknown place in the western Indian Ocean and re-exported from *Aethiopia* – the Troglodytes probably acquired it from a place located on the northern Somalia coast. This view is supported by the following two arguments. First, Pliny claims that this spice was supplied in <a part of> *Aethiopia* “linked by intermarriage with Troglodytes”, which means that this area was not too far from the Troglodyte country (it is worth noting that these *Aethiopes* are said to be the neighbours [*conterminis*] of the Troglodytes).²⁶⁶ Secondly, one must remember that the *Kinnamômophoros* country reported by the Ptolemaic explorers was not far from the *Trogodytice* and was defined as a part of *Aethiopia* (below, p. 48).²⁶⁷ Let us turn to Pliny’s account in an attempt to suggest a coherent interpretation.

It seems that the Troglodytes purchased (*mercantes*) this *cinnamomum* from their “half-blood” “Ethiopian” neighbours; they reached *Aithiopia* with light boats (*ratibus*) that, according to Pliny, “are neither steered by rudders (*neque gubemacula regant*) nor propelled by oars (*neque remi impellant*) or drawn by sails (*uel trahant uela*), nor assisted by any device of art (*ratio*)”. This description reminds us of the Sabaeen rafts pushed by the tidal currents and winds, according to Agatharchides. As far as can be ascertained, the Troglodytes were probably carried along the African seashore by the surface currents and by the north-west winds, which prevail in the southern Red Sea from June to September.²⁶⁸ They would then cross the strait and reach a place somewhere in northern Somalia. Having loaded some *cinnamomum* they directly (*recto cursu*) sailed back across the Gulf of Aden (*per sinus*). They were aided in this by the north-east or winter (*hibernum*; *brumam*) monsoon (*euris maxime flantibus*). This detail is in stark contrast to the previous statement that the Troglodyte crafts were not drawn by sails, a fact which makes Pliny’s description rather suspect on this point: even if their rafts may have been pushed by surface currents²⁶⁹, they were no doubt also fitted with some sort of sails. Then the Troglodytes rounded a cape (*promuntarii ambitu*)²⁷⁰, an expression which recalls the *Palindromos akron* referred to by Ptolemy), which is probably to be located near the cape Sheikh Saïd. Finally, they were carried by a north-west wind (*argestae*) to *Ocilia* (= *Ocelis*).²⁷¹ Here, their cargoes of *cinnamomum* were exchanged with the manufactured goods mentioned by Pliny²⁷², which the Troglodytes then transported back home. This *cinnamomum* was no

265 See Raschke 652-655.

266 Only close relationships can lead to intermarriage. Compare with *P.m.r.* 16.

267 See Str. 16, 4, 14 (Artemidorus).

268 See the corresponding charts provided by the National Geospatial-Intelligence Agency (<http://msi.nga.mil/NGAPortal/>).

269 According to *The Red Sea Pilot* 33, currents run out of the Red Sea from June to September and into from November to April, at the rate of 40 m. per diem during the strength of the monsoons.

270 Compare with Plin. nat. 3, 103: portus Aggasus, promunturium montis Gargani, a Sallentino sive Iapygio CCXXXVIII m.p. ambitu Gargani.

271 According to Plin. nat. 6, 106, the Alexandrian *emporoi* sailing back from India would use the *voluturus* straight to the entrance to the Red Sea, and then (*cum intravere Rubrum mare*) the *af-ricus* or *auster*.

272 Some items may have been imported from Alexandria, or Syria, to *Ocilia*, especially glassware: *P.m.r.* 6-8; Casson 126-127; Desanges, Stern, Ballet 21-61, and especially p. 30-31; de Romanis 111-112.

doubt offered for sale in the *emporium* of *Ocelis* [see 24: *emporium Acila*], which does not exclude the possibility of a certain quantity being re-exported to *Muza*.

In conclusion, this fascinating text discloses a kind of “triangular” local trade circuit enabling Troglodyte tribes of the southern African Red Sea to obtain manufactured goods in exchange for valuable raw products, in other words by bartering. Pliny’s reports that *Ocilia* belonged to the *Gebbanitae* indicate that Qatabân was involved in this trade, which echoes Eratosthenes’ statement. Thus, Pliny’s source may go back to the time when Qatabân still played a prominent role in this area.²⁷³ The point is that some African tribes seem to have played an active part in the local trade: Pliny’s Troglodytes have almost nothing to do with the “Naturvolk” depicted by Agatharchides in his philosophy oriented presentation. As a matter of fact, it is not by chance that, according to Pliny, they possessed an important port of trade which was destined to have a prominent role in the centuries to come, namely *Adoulis* (*maximum emporium Trogodytarum*).²⁷⁴

4.3. The Periplus maris Erythraei

In the first part of his narrative (i.e. the voyage from *Myos Hormos* / Quseir al-Qadim to *Rhapta*, near Mombasa) the anonymous author gives a short account of the small port of *Aualitês* [27]. Although, according to him, Greco-Roman ships occasionally put in at *Aualitês*, this small harbour seems to have been mostly involved in local trade activities, for light boats – a detail that characterises local trade – stopped here. The author distinguishes two types of crafts: the *skhediai* (“raft”?) and the *skaphê* (“small crafts”?) but, as elsewhere in his work, he does not find it important to describe them and explain their differences.²⁷⁵ Some of these might be the above-mentioned crafts propelled by tides and currents. At any rate, we learn from this document that *Aualitês* was connected to both *Mouza* and *Okêlis* on the opposite side: “Exports from here, with the transport across to *Okêlis* and *Mouza* on the opposite shore at times carried out by the *Barbaroi* on rafts, are: aromatics [the so-called *cinnamomum* was perhaps included in this general category], a little ivory, tortoise shell, a minimal amount of myrrh but finer than any other.” (transl. Casson)

Who were the peoples involved in this local traffic? The author vaguely refers to *Barbaroi* using *skhediai*, and given that he generally refers to people living on the east coast as “Arabs”²⁷⁶ and states that the “*Barbaroi* who inhabit the place (sc. *Aualitês*) are rather unruly (*ἀτακτότεροι*)”, one may deduce with certainty that the name “*Barbaroi*”

273 De Romanis 110-111 (quoting Plin. *nat.* 12, 93) rightly points out that the king of *Gebbanitae* had full control of the *cinnamomum* market (also see Breton 64). The question of who the *Gebbanitae* were is, however, debated (see above, n. 215). Beeston (a) 5 thinks they were “a dominant group within Ma’in” (but he does not deal with the present passage). Pirenne 161-166 thinks that this excerpt relates to Qatabân’s position in Pliny’s time (de Romanis 110 is of a similar opinion: “commercio del *cinnamomum* o *cinnamum* nel I sec. d.C.”). According to Pliny, however, the *Sabaei* were supposed to control *Ocelis* [24] (see von Wissmann [b] 440; Id. [c] 1341).

274 Plin. *nat.* 6, 173.

275 On these so-called rafts, see Casson 117-118.

276 *P.m.r.* 20; 25.

points to the inhabitants of *Aualitês*.²⁷⁷ Thus, the African people of *Aualitês* appear to have played a role in a local trade network. It is, however, unlikely that the Arabs could have been excluded from these activities, and maybe the so-called *skaphê* were operated by them. In conclusion, whatever the true location of *Aualitês* may be (above, n. 167), this place was a centre for the local traffic in the Bab al-Mandab area at the time of the *Periplus*.

Let us now turn our attention to the products listed in the *Periplus*. The following goods are said to be exported to *Mouza* and *Okêlis*: ivory, *arômata*, a special quality of myrrh as well as tortoise shell. All of these commodities were collected on the African side of Bab al-Mandab, either in the coastal area or in the hinterland. At this stage it is worth emphasizing the presence of two commodities which have not been referred to in the previous documents, i.e. ivory and tortoiseshell. Ivory was obtained from elephants hunted by the natives, probably in inner Somalia. The Greeks indeed gave up this activity a couple of centuries ago. Thus *Aualitês*, as an ivory entrepôt, was connected to the hinterland and its peoples (*Adoulis* was linked to *Koloê* and *Axoum* likewise²⁷⁸). As for tortoise shell, Agatharchides (above, p. 27) claims that the *Khelonophagoi* were particularly good at hunting sea turtles. Despite the fact that he describes them as a primitive tribe having to fight harsh environmental conditions, it is clear that this allegedly destitute people had managed to take part in the local network by supplying the middlemen of *Aualitês* with this precious material. A similar pattern can be observed in the area of *Adoulis*, which was an entrepôt for tortoise shell brought there by the *Ikhtyophagoi*²⁷⁹ from the *Alalaiou* Islands (Dahlak Archipelago), who they used very large turtle shells as crafts to reach *Adoulis* or *Aualitês*.²⁸⁰

These commodities were shipped from *Aualitês* to *Mouza* on the Arabian side, confirming that *Mouza* ranked first among the local trade places. Not surprisingly this port is described as particularly busy, full of Arabian shipmasters and sailors trading with the coast on the opposite side (τῇ τοῦ πέραν ἐργασίᾳ) by means of their specific (= local) boats (ἰδίῳ ἐξαρισμοῖς).²⁸¹ As a matter of fact, *Mouza* also traded with *Adoulis*, exporting (= re-exporting) the “aforementioned merchandise from *Adoulis* across the water”.²⁸² There was also another African *emporion* called *Malaô* (= Berbera²⁸³) east of *Aualitês*, from which varieties of *arômata* “were exported to Arabia”²⁸⁴, which may be an allusion to *Okêlis* and *Mouza* – nonetheless, it cannot be excluded that this refers to *Kanê* (Khor Ror).²⁸⁵ To what extent *Eudaimôn Arabia* / Aden played a role as a local trade centre is less clear. Supposing that the name *Fortunate Islands* (*Eudaimones nêsoi*) points to Aden, this place was inserted in the patterns of both regional and local trade in the 3rd century

277 *P.m.r.* 7 (transl. Casson) and above, p. 43.

278 *P.m.r.* 4 (elephants and rhinoceros were hunted in the hinterland, west of *Axoum*).

279 *P.m.r.* 4. (also *Plin. nat.* 9, 35). See Desanges (c) 217-218.

280 *Str.* 16, 4, 14 (these *Khelonophagoi* apparently lived inside the strait). See also Agatharchides [11] (*Khelonophagoi* settling beyond the strait); *Plin. nat.* 9, 35.

281 *P.m.r.* 21.

282 *P.m.r.* 24.

283 Casson 120.

284 *P.m.r.* 8. See Casson 122-127.

285 *P.m.r.* 27. See Schiettecatte (b) 248; 253-259.

B.C.: not only ships arriving from north-west India and the Arab-Persian Gulf converged on this port, but also numerous “crafts” coming from the whole nearby region (οὐκ ὀλίγας <σχεδίας> [...] ἀπὸ [...] τῆς σύνεγγυς πάσης).²⁸⁶ According to the *Periplus*, Greco-Roman captains would, however, moor in this harbour in the mid 1st century A.D., only to be supplied with fresh water²⁸⁷, as if *Eudaimôn* was disconnected from the Mediterranean sea trade. Still there is no reason to think that Aden was not integrated in the local and regional network, as indicated by the dedication of Hermeros, son of Athenion, presenting himself as an Erythraean Sea merchant from Aden [*Adaneitês*], in an inscription dating to A.D. 70.²⁸⁸

To sum up, the *Periplus* attests to an important trade activity around the strait of Bab al-Mandab and its vicinity, not only because of the Greco-Roman ships crossing the strait, but also because of the flourishing local trade. *Mouza*, Aden, *Adoulis*, *Malaô*, *Aualitês* were the main spots of a significant local network. Some of these ports were linked to the long distance Greco-Roman network, *Mouza* and *Adoulis* serving as entrepôts for the Mediterranean merchants and as terminals for local trade. On the other hand, *Aualitês* certainly received more local crafts than ships belonging to Mediterranean *emporoi*. The same could be true for *Okêlis* where, according to the *Periplus*, Greco-Roman *emporoi* would not buy and sell. This Arab *kômê* (village) was used as a watering station and a place to moor their boats.²⁸⁹ Thus, when Rome set up a military detachment in the Farasan Islands in the 2nd century A.D., she judiciously chose a place located near this local trade area, “à peu près à l’entrée nord d’une zone (...) peuplée, contrôlée à l’ouest (...) par le royaume d’Axoum ou le royaume pré-axoumite d’Adoulis, et à l’est, en Arabie, par les royaumes sudarabiques”, as Villeneuve writes.²⁹⁰

4.4. Additional observations

This inquiry into local trade inevitably raises the question of to what extent the Bab al-Mandab trade was controlled by local rulers or polities. Unfortunately, only a few documents are available to us when trying to answer this question, most of them being provided by the *Periplus*. Clearly, some rulers were strong enough to set regulations: *Mouza*, for instance, was under the authority of a “tyran” (τύραννος, that is to say a local king, namely the governor of the region of *Mapharitis*) named *Kholaibos*, who was in turn subordinate to *Kharibael*, the king of Himyar and Saba. Apparently, Arab merchants could do business in *Rhapta* only “through a grant from the king” (παρὰ δὲ τοῦ βασιλέως ὑποφόρον ἔχουσιν οἱ ἀπὸ Μούζα, the word “king” points to *Kharibael* and not *Kholaibos*²⁹¹). In the light of this evidence, one might think that the traffic linking *Mouza* with *Aualitês* was similarly subject to a form of control, at least for tax purposes. For the sake of comparison

286 Phot. *Bibl.* 250, 459b (= Agatharchides, *GGM* 1, 103).

287 *P.m.r.* 26.

288 Bernand (b), n°65 (also see n°62: *Ada[n]itês emporos*). About Aden’s “renaissance” in the following centuries, see Ryckmans 80-81; Schiettecatte (a) 236-237; 284.

289 *P.m.r.* 25.

290 Villeneuve 155.

291 *P.m.r.* 16; 22-23. See Casson 45; Rodinson 205-206.

it must be remembered that according to Pliny (above, n. 273) Qatabân held a sort of monopoly on the cargoes of *cinnamomum* coming to *Ocilia* from the Horn of Africa via the Troglodytes: “The right of controlling the sale of *cinnamomum* is vested solely in the king of the Gebbanitae, who opens the market by public proclamation.” (transl. Rackham). On the basis of a somewhat overlooked text we can assume that such a control may have been oppressive. The prices of *cinnamomum*, Pliny writes, were “raised to half as much again after the forests (*silvis*)²⁹² had been burnt, so it is said, by infuriated Barbarians (*ira Barbarorum*)”. In this case Pliny is no doubt thinking of a species growing in the Horn of Africa. These *Barbari* are obviously the inhabitants of *Barbaria* (or *Barbarikê*), a name referring to the north Somalian coast (above, p. 26). Pliny does, however, add that it is not certain whether “this was incendiarism provoked by injustice on the part of those in power (*ob iniquitatem praepotentium* = the local rulers? The middle-men involved in the *cinnamomum* commerce?), or was due to accident.”²⁹³ Local authorities also engaged in providing safety to merchants, and this was most likely the duty of those laying claim to a certain trade area. In particular, the *Periplus* informs us that Arabian chiefs and kings fought against the tribes who plundered the shipwrecked sailors in the middle part of the eastern Red Sea.²⁹⁴ They might have acted the same way in the southern sector.

As for the African side of the Red Sea, the ruler named *Zôskalês* (above, p. 28) is reported by the *Periplus* to have controlled an area extending from south of *Berenikê* as far as the strait (“the rest of *Barbaria*”), including *Adulis*.²⁹⁵ Much has been said about this figure whose identity still needs to be established. Be that as it may, he is portrayed as a man “always holding out for getting more” (transl. Casson [τοῦ πλείονος ἐξεχόμενος]). This may explain why he was supplied with items of the finest quality by Greco-Roman *emporoi*. So close a relationship with a number of Alexandrian merchants strongly suggests that he was not indifferent to trade activities (as a matter of fact, *Adoulis* is classified among *emporion nomima* (“legally limited ports of trade”)²⁹⁶ as is *Mouza* by the *Periplus*). He is likely to have been at least somewhat concerned with securing commercial exchanges, since, at the time of the *Periplus*, *Adulis* was still a risky place to moor²⁹⁷ as was perhaps also *Aualitês*. Unfortunately we have no knowledge of how, or to what extent the local traffic was regulated by *Zôskalês*: did the *Ikhtyophagoi* transport tortoiseshell to *Adoulis* on behalf of *Zôskalês*? Did the Troglodytes freely purchase *cinnamomum* from “Ethiopians” and sell it in Arabia? Given the lack of documents there is no point in speculating about these issues, however important they may appear to us.

No one would deny that the development of Greco-Roman sea trade had an impact on the general pattern of commercial exchanges in the western Indian Ocean. For instance, as is well known, the trans-Arabian spice route was less resorted to as more and

292 It is probably these *cinnamomum* groves that are referred to by Artemidorus in his description of the Horn of Africa: “The *kinnamômon* is more abundant in the neighbourhood of the places that are deep in the interior” (Str. 16, 2, 14 - transl. Jones).

293 Plin. *nat.* 12, 93 (transl. Rackham). These accidental fires are caused by the south winds which “are so hot that they set fire to the forests in summer.”

294 *P.m.r.* 20.

295 *P.m.r.* 5.

296 On these ports, see, for instance, Casson 274-276.

297 *P.m.r.* 4.

more Mediterranean seamen ventured to the western Indian Ocean. Likewise, piracy certainly increased in the wake of the increasing quantities of goods being transported.²⁹⁸ Thus the important alteration in long distance trade generated by the involvement of Alexandrian merchants may have affected the local trade in the area of Bab al-Mandab, in particular the activity of local markets and the pattern of trade routes. Firstly, we know that several ports absent from early Ptolemaic sources (*Aualitês*, *Mouza*, *Adoulis*) became important places of trade for they supplied the Greco-Roman *emporoi* with local goods. Secondly, by purchasing some commodities and offering others the Greco-Romans inevitably modified the local supply and demand. In particular, the local suppliers will have tried to meet the Mediterranean demand in terms of quantity and/or quality. Fortunately, this is documented by several texts.

Let us consider first the case of tortoiseshell. This material was so highly regarded in the Roman world that the demand necessarily increased from the early 1st century A.D. onwards.²⁹⁹ For this reason the *Ikhthyophagoi* and the *Khelonophagoi*, the primary producers in the area of Bab al-Mandab, must have become more and more involved in the local network. Interestingly, Pliny mentions a special sort of tortoise-shell called *chelum* (= *χέλειον*), which seems to have been praised in the Mediterranean world (*eximiae testudinis*)³⁰⁰. This commodity was made available to Mediterranean merchants at Adulis, as Pliny elsewhere relates³⁰¹. Next Pliny states that this particular variety was not abundantly supplied (*rarae*): “it (sc. *chelum*) is of tortoise shell of exceptional quality, but it is seldom seen, as the very sharp rocks frighten the Turtle-eater tribe (*Chelonophagi*: see above, n. 181), while the Troglodytes (no doubt settling in the vicinity of *Adoulis*) on whose coasts the turtles swim, worship them as sacred.”³⁰² This statement may imply that despite the probable indirect pressure caused by Mediterranean demand, both tribes refused to engage in dangerous or sacrilegious hunting. The “triangular” *cinnamomum* traffic provides another example: supposing that some of the “manufactured” items offered at *Mouza* and looked for by the Troglodytes were imported from Alexandria, it is possible that they intensified their trade activity in order to purchase more of them.

5. Crossing the strait and mapping the strait: two perceptions of the space

Despite the meagre amount of surviving evidence, the strait of Bab al-Mandab offers a remarkable case study to those focusing on ancient geography, since two perceptions of space are present in our sources: on the one hand the hodological representation of space³⁰³, a concept thoroughly studied and popularized by P. Janni, and the cartographic

298 About piracy in the Red Sea, see Schneider (b).

299 Warmington 166-167; Casson 101-102; Burstein 87 n. 1; de Romanis 159-166.

300 Plin. *nat.* 9, 38.

301 Plin. *nat.* 6, 173

302 Plin. *nat.* 9, 38 (transl. Rackham).

303 “The term ‘hodological space’ is derived from the Greek word ‘hodos’, path, way. In contrast to the mathematical concept of space as presented on maps, plans, etc. ‘hodological space’ is based on the factual topological, physical, social, and psychological conditions a person is faced with

concept. The hodological depiction of the strait, which reflects the perceptions of those who sailed across it (*diaplous* or *diabasis*), contrast with the more abstract data enabling the mapping (*pinax*) of Bab al-Mandab. As a matter of fact, these two kinds of information may occur simultaneously in most of our evidence.

5.1. Crossing the strait

Significant traces of a hodological perception of space, which encapsulates the traveler's physical and psychological perceptions, appear in Eratosthenes, Agatharchides and Artemidorus' reports. There is nothing suprising about this, as these authorities borrowed most of their topographical information from people who had sailed as far as, and beyond, the strait. The most valuable document relating to this question is, however, the *Periplus of the Erythraean Sea* including a unique description of the crossing (*diaplous*), and Casson may be right when stating that the author's experience "included the African route (...) and the Arabian-Indian route at least down to Cape Comorin".³⁰⁴ Without doubt, this text offers more "hodological" vocabulary than any other (for a full list of the terms, see app. 7.7). Thus, it is worth beginning with this document, in which three ways to cross Bab al-Mandab are described.

The first of the three accounts concerns the "right-hand" crossing, along the west coast of the Arabian Gulf [27] (known today as the "Great Strait"). The author says that past *Adoulis* and the "Obsidian Gulf" (Hauachil Bay) the seeline turns eastwards³⁰⁵, which means that the two sides of the Arabian Gulf approach each other; in others words, the sea appears to the traveller to be shrinking. Then follows the port of *Aualitês* (probably Zeila; see above, n. 167) at the narrowest section of the passage, a place where Greco-Roman ships and local small boats moor. *Aualitês* also marks the shortest interval (*diaplous*) between the two sides of the Arabian Gulf.

The account of the Arabian route contains a description of the "left-hand" crossing, i.e. along the east shoreline of the Arabian Gulf [28-29] (today's "Small Strait"). After a course of 300 *stadia* (about 50 km) past *Mouza* the Arabian and African coast (in the vicinity of *Aualitês*) approach each other. Next the traveller enters an *aulôn* ("channel", or "strait") not very "large" and reminiscent of a double door closing (*apokleiô*), and the two sides of the gulf now appear to lie so close to each other as to provide only a narrow passage. Here lies the *Diodôros* Island (Perim³⁰⁶), between the two sides of the strait, which is 60 *stadia* wide. At this point the traveller faces strong currents³⁰⁷ and a wind coming down from the mountains of the mainland. In this *isthmus* (a word probably pointing to

on the way from point A to point B, whether in an open landscape or within urban or architectural conditions." (*Termium Plus, la banque de données terminologiques et linguistiques du gouvernement du Canada*).

304 Casson 8.

305 See Casson 115: "Following the coast, the course from Ptolemais *Therôn* to Adulis would have been roughly south-southeast. From Adulis to Avalitês it would have been southeast, in other words, not due east but merely a little more easterly".

306 Casson 157 (see below, p. 50).

307 According to Lapidoth 132, the navigation in the Small strait "is dangerous due to strong and irregular tidal streams".

the space between Perim and the Arabian shore) lies *Okêlis*, the first place to drop anchor for “those sailing on (*esô*)”.³⁰⁸ Beyond *Okêlis* the distance between the African and Arabian coasts increases reminiscent of an opening “double door” (in my opinion, *palin* means “contrariwise”, a translation seemingly more adequate than that of Casson: [“with the waters again opening out”]). The shoreline trends eastwards, leading gradually (*kata mikron*) to the open sea (*pelagos*). After sailing 1200 *stadia* (about 200 km) one arrives at *Eudaimôn* (Aden), the next place to moor with “its suitable harbours”.³⁰⁹ It seems as if the crossing of the strait actually ended at Aden. This recalls Pliny’s words (with Juba as his authority) [23] that the “open sea” begins at *Adanu*/Aden. In the hodological perception of space the limit of the “open sea” is not marked by the narrowest interval between the two landmasses but rather by the first place where the traveler can call in having left behind him the dangers of the crossing.

The last way to cross the strait, namely the “side to side” sailing (see the discussion about the local trade activity above, p. 34 sq) is only alluded to [27], for Mediterranean merchants would probably avoid this transverse route.³¹⁰ Firstly, only light boats could technically manage this difficult crossing: the Mediterranean *ploia* leaving Egyptian harbours headed for the opposite side of the Red Sea more or less beyond *Berenikê*³¹¹ and certainly did not venture into the smalls channels of Bab al-Mandab. Secondly, the Greco-Romans did not take part in the local trade and hence had absolutely no reason to ply between the two sides of the strait. Actually, what is of major interest in this short text is the author perception of space: when defining the smallest width of the strait of Bab al-Mandab the author refers to a sailing “side to side” instead of quoting figures (Ἀναλίτης, καθ’ ὃν καὶ στενώτατός ἐστιν ἀπὸ τῆς Ἀραβικῆς εἰς τὸ πέραν διάπλους). Such a crossing only concerns the natives plying with their light crafts (*skhediai*) between a place situated 300 *stadia* from *Mouza* (*Okêlis*?³¹²) and *Aualitês*. The point is that “shortest” in terms of *diaplous* does not necessarily mean “shortest” in terms of distance.³¹³ For people facing currents, wind and reefs, the “shortest” crossing was not necessarily a straight course from Sheikh Saïd to Ras Siyyan, where Africa and Arabia lie nearest to each other as the crow flies, but rather the shortest safe trip.

The rest of the evidence (Eratosthenes, Agatharchides, Artemidorus) dates back to the Hellenistic period and precedes the *Periplus*. At that time, Greek ships would skirt the African shore more often than the Arabian side, which explains why the “left hand” crossing is not documented. Although these texts are not as elaborate as the *Periplus*, they offer several “hodological” details. For instance Agatharchides’ account [9] contains several

308 Note that *exô* generally means “(going) out of the Arabian Gulf” [3;19; 21], and *eis* “into the Gulf” [19; Plin. *nat.* 6, 106].

309 Aden is ignored by Plin. *nat.* 6, 104.

310 Casson 157: “Only locals made the crossing”.

311 *P.m.r.* 19-20 (also see Juba [23]).

312 The strait is situated at a distance of 40 nautical miles (400 *stadia*) from *Mouza* (Casson 147).

313 Compare with the Strait of Gibraltar, which was not crossed at its narrowest part: “A une navigation aléatoire entre la Bétique et la Tingitane traversant le détroit de Gibraltar en son point le plus étroit, les Anciens préféraient une route plus longue mais plus sûre hors des influences dangereuses de celui-ci. » (Ponsich 273).

expressions similar to those employed in the *Periplus*: past the *Tyrkaïos* mountains³¹⁴, the Arabian Gulf steadily “closes” (*sugkleietai*) and decreases in size (*sunagogê*); “the mainlands” are no longer “out of sight of each other”. At this stage it is worth noticing that straits are fundamentally defined by such a “closing” / “opening” sequence.³¹⁵ The existence of the strait of the Arabian Gulf was actually not established until the Ptolemaic explorers observed the decreasing/increasing width of the sea. Similarly, the Strait of Hormuz was discovered when Nearchus entering the Arab-Persian Gulf from the “Great Sea” (i.e. the Indian Ocean) observed the shrinking of the passage.³¹⁶

What I, however, believe to be the most striking point is that the *diaplous* mentioned by the *Periplus* was also reported by the Ptolemaic travellers: the so-called “strait of the Six Islands”, which is situated beyond the Strait of *Deirê*, is nothing but the sea route used by local people with their *skhedïa*. From this alternative perspective, it is the shortest safe crossing which defines the strait, regardless of the actual distance between the two sides. Actually, the strait of the Six Islands is about three times as wide as the strait of *Deirê* [3]. This dramatically emphasises the contrast between the hodological perspective, i.e. “the unidimensional view of space as a path”³¹⁷ and the two-dimensional space-representation which characterizes maps.

5.2. Mapping the strait

This text in which Eratosthenes refers to the two above-mentioned straits is unique in the sense that two conceptions of space were – probably unintentionally – brought together: On the one hand there is the hodological perception in which the traveller’s experience plays a prominent part. On the other hand, when Eratosthenes deals with the strait of *Deirê* (*kata Deirên*) he offers a set of more abstract data which serves as the basis of a geometrical description of the strait, namely points, measurements, and directions.³¹⁸ This is, one might say, the two-dimensional or cartographic Bab al-Mandab, which was for the first time set into a “map” (*pinax*) of the *oikoumenê* by this renowned scholar.³¹⁹ This geometrical representation of the strait may have remained unchanged for a long time, for only Ptolemy is likely to have modified the mapping of the Bab al-Mandab area (nothing can be said of Agrippa’s conception, as there is no surviving fragment relating to the strait in details).

As mentioned above, the explorers serving the interests of the Ptolemies in the 3rd century noticed that the narrowest part of the Arabian Gulf on its western side was marked by the Ras Siyyan (promontory of *Deirê*), a cape rising to 136 metres above the sea level, which could hardly be missed. On the opposite side stood another noticeable promontory

314 This unidentified range is probably situated in the vicinity of Suakin, or Mitswa [Massawa] (Woelk 190; Burstein 133 n. 4).

315 Compare with Str. 2, 5, 19; Diod. 4, 18, 5 (the Pillars of Heracles).

316 Arrian. *Anab.* 7, 16, 1-2; *Ind.* 32, 6-9 (also Amm. 23, 6, 10). See Högemann 74.

317 Dan & Geus 18.

318 Jacob 114-116.

319 On Eratosthenes’ goals, principles and method, see: Jacob 114-115; van Paassen 39-43; Aujac 41-122; Geus 260-288.

with the dominating Djebel Men Ali (229 metres) called *Akila* (*Okêlis*), a name apparently unknown to Eratosthenes but not to Artemidorus. These capes, extending towards one another, appeared to reduce the mouth of the Arabian Gulf to its narrowest³²⁰ (ποιεῖ ἄκρα τὰ στενὰ [2]). In other words these two spots had been regarded by the Ptolemaic explorers as perfect markers when defining the strait. J. Desanges rightly says: “Ces deux repères ont joué en somme le rôle de *Calpê* et *Abila* de part et d’autre du *fretum Gaditanum* (détroit de Gibraltar).”³²¹ Reports of this supplied Eratosthenes with two topographical points that could be joined by a straight line. This line represented the shortest interval between the two sides of the Arabian Gulf at its mouth. This was the “geometrical strait”, unequivocally marking the limit between the Arabian Gulf and the ocean from a cartographic perspective, “die eigentliche Meerenge” as Berger writes³²² (this is still the way we define the Bab al-Mandab strait today). Differently, the strait of the Six Islands – which Berger refers to as “die sogennante Meerenge” – could neither be geometrically defined nor represented as a straight line. Being estimated at 60 *stadia* in width – probably by Timosthenes [26] –, the *kata Deirên* strait was thought by some authorities to be as narrow as the Columns of Heracles.³²³ There can be little doubt that even if the educated public was aware of the “strait of the Six Islands”, Greco-Roman geography in most cases referred to the strait of *Deirê*, for it represented an unambiguous landmark and a clear limit. For instance Artemidorus says that the northern Somali coast extends over an unknown distance, from *Deirê* as far as the *Notou keras* (cape Gardafui [16bis]), and ignores the Six Islands. The importance of *Dire* is also present in Pliny’s account [22].

The importance of the *kata Deirên* strait in the construction of ancient geographical knowledge cannot be underestimated, as the discovery of one of the four inlets of the Outer Ocean was a considerable step. Equally important for improving the Greek geographical knowledge of the time were the set of distances involving this place: 4500 *stadia* were measured from *Ptolemais Therôn* to *Deirê*, while the distance from *Deirê* to the edge of the *Kinnamômophoros* had been estimated at 5000 *stadia*³²⁴ [2; 3; 4; 5; 15]. Although only approximate,³²⁵ these round figures may have met Eratosthenes’ needs. As for the length of the opposite side, i.e. the line stretching from the bottom of the Gulf of Aqaba to the promontory facing *Deirê*, Eratosthenes thought that Anaxikratês’ (?) figure (14,000 *st.*) was a little excessive.³²⁶ These figures were to be coupled with some indications of directions [2; 3] (those relating to the African seashore being more accurate than those con-

320 Compare with the discovery of the strait of Hormuz (above, n. 316).

321 Desanges (a) 100. See Ponsich 267.

322 Berger (a) 297. For a modern definition of the Bab al-Mandab strait, see e.g. Lapidoth 130-132, or the *Encyclopaedia Britannica* (“Strait between Arabia (...) and Africa (...) that connects the Red Sea (...) with the Gulf of Aden and the Indian Ocean (...). The strait is 20 miles (32 km) wide and is divided into two channels by Perim Island; the western channel is 16 miles (26 km) across, and the eastern is 2 miles (3 km) wide.” See also Warnecke 334-335.

323 According to Str. 2, 5, 19, the Columns of Heracles are 70 *stadia* wide; a different figure (60 *stadia*) is reported elsewhere (7, 3, 6). See Ponsich 259.

324 The latitude of *Ptolemais* was estimated by astronomical observations (i.e. the duration of the day at the summer solstice). See Berger 295; Desanges (c) 305-307.

325 On this topic see Str. 2, 1, 39; 2, 1, 41; Jacob 207-209.

326 Str. 16, 4, 4. About the alternative figure (12,000 *stadia*) see Berger 294-295; Desanges (c) 39-42.

cerning the opposite coast). From *Heroônpolis* to *Ptolemais Therôn* the coastline was reported to extend southwards and slightly eastwards (the angle formed by the coastline and the meridian of *Ptolemais* is estimated at 48° by H. Berger³²⁷); from *Ptolemais* to *Deirê* the shoreline was said to continue southwards, however, turning more eastwards; finally, from *Deirê* to the edge of *Kinnamômophoros*, where the world known to Eratosthenes terminated, and through which an important parallel was established, the sea line was reported to run southwards and eastwards (see also [5]³²⁸). In contrast, the whole Arabian coast seems to veer due southwards.³²⁹ Thus, *Deirê* – with the strait – was one of those landmarks which remarkably helped to map the southern part of the inhabited world.

The mapping process includes dividing (*temnein*³³⁰) the area under consideration into sectors to which a name is given. As regards Eratosthenes, we are not told by our main source Strabo, how the *sphragis* division (geometric division of the inhabited world determined by natural boundaries³³¹) applied to this section of the *oikoumenê*. Nor do we hear of the relevance of the strait of *Deirê* for this matter.³³²

From a general point of view, Eratosthenes regarded the whole area of the strait as a part of Arabia, regarding, as many others, the Nile's right bank as the boundary of both Arabia and Asia – hence the name Arabian Gulf given to the modern Red Sea.³³³ The eastern part of the Bab al-Mandab area is included in the part of Arabia called “Blessed” (*Eudaimôn*). His division of the eastern side rests upon an ethnical basis (*ethnê*): with Qatabân stretching down to the strait the reader has a useful landmark to roughly locate the three other tribes (kingdoms).³³⁴ As for the African side Eratosthenes' sources supplied him with topographical designations. The western coastal part of the Red Sea as far as the strait was known as the *Trôglodytikê*.³³⁵ Beyond *Deirê* lay the *Smyrnophoros* country, next to which was the *Kinnamômophoros*.³³⁶ No doubt the country named *Aithiopia* encompassed the Horn of Africa and accordingly also the two latter countries.³³⁷ The case of the *Trôglodytikê* does, however, demonstrate how difficult it will have been to establish topographical divisions: on the one hand, this region was theoretically included in Arabia, as mentioned above; on the other hand, the same territory may be regarded as a part of *Aithiopia*.³³⁸ Moreover, from an ethnographic perspective most of the Troglodytes could have had physical and cultural features that led them to be characterised them as *Aithiopes*

327 Str. 16, 4, 4. See Berger 297; Geus 278-280.

328 See Berger 297.

329 Desanges (c) 41.

330 On this issue, see Jacob 561-562. See also Str. 2, 1, 30-31.

331 Van Paassen 42-43.

332 On the fourth *sphragis*, see Str. 2,1, 36; 2,1,32; Berger 283.

333 See Str. 16, 4, 2; 16, 4, 4. See also Plin. *nat.* 6, 177 (= Juba *FGrH* 275 F36); Str. 2, 1, 31-32.

334 The four kingdoms follow each other (see Tkač (b) 1321-3).

335 Str. 16, 4, 4. See also Str. 16, 4, 18, and above, p. 25-26.

336 Str. 16, 4, 4.

337 Str. 16, 4, 4; 2, 1, 14; 1, 2, 26. See also Diod. 3, 18, 4 (= Agatharchides, *GGM* 1, 41): the “insensible *Ikhthyophagoi*” are called “Aethiopians”.

338 See, for instance, Str. 16, 4, 17: the Troglodytes are not clearly distinguished from the Ethiopians. See J. Desanges vii-ix.

(above, p. 27). In other words, countries might be defined according to at least two different criteria: topography or ethnicity.³³⁹

Eratosthenes' spatial arrangement was to be slightly improved and / or altered in later times.³⁴⁰ One may notice that Pliny when referring to *Dire* as a conspicuous place mentions the southeast orientation of the strait [22; 26]. Ptolemy [30], Agathemerus [4] and Marcianus³⁴¹ place the strait at *Deirê* ignoring the Six Islands, while the former provides a set of new toponyms (above, p. 25). Ptolemy primarily interested in the location (*thesis*) of places and peoples rather than geometry and figures³⁴² (see app. 7.6) allocated coordinates to the "strait of the peninsula of *Okêlis* and of *Deirê*", [31; 32]. Although this geographer benefited from a greater amount of information than Eratosthenes, there are puzzling statements which must be regarded as inaccuracies or errors. Firstly, the distance between *Okêlis* and *Deirê* is excessive (40' = ~330 *stadia*) [30].³⁴³ Secondly, Ptolemy confusingly locates the strait beyond *Okêlis* and before *Deirê*.³⁴⁴ Thirdly, the opening is oriented in a west-east direction. Finally, the *Koloboi* reported by the Hellenistic observers around Bab al-Mandab are curiously pushed northwards, between *Ptolemais Therôn* and *Adoulis*.³⁴⁵

To close this section I would like to examine two issues that are perhaps beyond solution: the first one relates to the width of the strait (append. 7.4, which offers a collection of figures ranging from 60 *stadia* to 400 *stadia*; I do not take into consideration Agatharchides' "aberrante mesure"³⁴⁶). Not only do the numbers vary. In fact they all contradict the actual distances. According to some scholars, this confusion must be explained by the presence of the Perim Island, which actually divides the strait into two channels, namely the great Bab al-Mandab and the small Bab al-Mandab.³⁴⁷ Even if this view is accepted as a plausible hypothesis, it does, however, not explain the discrepancy between the most common figure³⁴⁸ (60 *stadia*) and the actual distance. How could such a short distance be incorrectly measured? If, as I have stated above, the Greco-Romans abstained from crossing the strait from *Deirê* to *Okêlis*, then they may have estimated the distance by visual observations³⁴⁹, unless they were informed by natives. In both cases the figures were very likely to be rough estimates. Most importantly, it must be remembered that there was not one, but several ways to ply between the two sides. No doubt, this variety of figures – par-

339 See van Paassen 48.

340 See Geus 286-287.

341 Marcian. Heracl. 1, 11; 1, 15.

342 Jacob 583.

343 Compare with Ptolemy's map of the strait of Gibraltar (Ponsich 266-268; 271-272).

344 About Ptolemy's "inexacte représentation", see Desanges (a) 98-99.

345 Ptol. 4, 7, 7.

346 Desanges (a) 89. Also see Woelk 189; Müller (a) 165. Curiously, the strait is as wide as the *mukhos*, i.e. perhaps the entry of the gulf of Suez, as if it there was a predilection for symmetry. For a full discussion of this topic, see Desanges (c) 39-40; 42.

347 See Desanges (a) 89-98 (passim); (c) 92; Müller (b) 760.

348 Berger (a) 297.

349 See Warnecke 334. Compare with Arrian. *Ind.* 32, 6 (see Högemann 74); Str. 16, 3, 2 ("its [= the Gulf] mouth, he [= Eratosthenes] says, is so narrow that from *Harmozi*, the promontory of Carmania, one can see the promontory at *Macae* in Arabia." – transl. Jones).

ticularly the highest ones, 200 *stadia* and 50 Roman miles – reflects the various routes taken by the natives for trade purposes.

The second question is why the large island of Perim dividing the strait between *Deirê* and *Okêlis* into two unequal parts is so rarely mentioned and badly described. Eratosthenes seems to be unaware of it, as do Agatharchides and Artemidorus. How could such a noticeable spot have been ignored? Considering that the bulk of Hellenistic knowledge originates from observers mostly skirting the African shore and not sailing from *Deirê* to *Okêlis*, this omission could to some extent be understandable. At the time when the Alexandrian merchants would sail down the coast of Arabia on their way to India, Perim could, however, hardly have gone unnoticed. In fact, Pliny reports a certain island of *Diodorus*, which must be Perim, although he wrongly locates it in the Gulf *Aualitu*, viz. beyond the strait.³⁵⁰ In addition, it is surprising that Pliny connects this island to the “right-hand” (i.e. African) periplus, since Perim lies close to the Arabian coast. Ptolemy is even more inaccurate than Pliny. His island of *Diodoros*³⁵¹ is mistakenly situated near Adulis.³⁵² In reality, the only solid information is to be found in the *Periplus* [28], which correctly locates the island of *Diodoros* when relating the crossing of the small Bab al-Mandab. Curiously, along with this accurate information we find the common but erroneous figure of 60 *stadia* transmitted, as if the author of the *Periplus* intended to portray himself as a knowledgeable person.

6. Imperialism and space; power and glory: the rulers / conquerors and the Bab al-Mandab Strait

Ancient historiography contains several narratives in which the crossing of a strait bears a political significance. For instance Herodotus tells us that before crossing the Bosphorus and reaching Europe Darius the Great erected two steles to commemorate his power: “When he had viewed the Bosphorus also, he set up two pillars of white marble by it, engraving on the one in Assyrian and on the other in Greek characters the names of all the nations that were in his army: all the nations subject to him.” Alexander symbolically hurled a javelin at land before his ship reached the shore of the Asian or the Hellespontus, as if the conquest began with the passage across the strait: “Alexander advanced with his army to the Hellespont and transported it from Europe to Asia. He personally sailed with sixty fighting ships to the Troad, where he flung his spear from the ship and fixed it in the ground, and then leapt ashore himself the first of the Macedonians, signifying that he received Asia from the gods as a spear-won prize.”³⁵³

Crossing a strait is somehow similar to crossing a border and may accordingly convey a political message. As Strabo says in a general discussion relating to the monuments

350 Plin. *nat.* 6, 174 (*ultra sinus Aualitu, insula Diodori et aliae desertae*). See Desanges (c) 79; 89, who disagrees with Dihle. *N.B.*: the island *Citis* referred to by Pliny [22] cannot be identified as Perim (Desanges (c), 71).

351 About this *Diodoros*, see Müller (b) 787; Desanges (c) 89.

352 Ptol. 4, 7, 11. According to Desanges (c) 79; 89, Ptolemy mixed the *Diodorou nêsos* up with the *Didôrou nêsos*. In addition, Ptol. 6, 7, 44 wrongly locates the *Adanu* islands in the Red Sea.

353 Hdt. 4, 87 (transl. Godley); Diod. 17, 17, 2 (transl. Oldfather). See Warnecke 336.

that Heracles and Dionysus left behind in India: “It is not improbable that they who first <visited these regions>, set up boundary marks fashioned by the hand of man, such as altars, towers, and pillars, in the most remarkable situations, to indicate the farthest distance they had reached (and straits, the surrounding mountains, and little islands, are indubitably the most remarkable situations for pointing out the termination or commencement of places).”³⁵⁴ Does this similarly apply to the Bab al-Mandab strait?

As I have stated in my general introduction the inhabited world was believed to be an immense island surrounded by the Ocean, from which it received four seas that were regarded as “gulfs”. The Bab al-Mandab was one of the four inlets through which the Ocean penetrates the land-masses. Appropriately, the strait, being a marvellous landmark, might enhance the glory of conquerors. Significantly, Strabo, when discussing the controversial question of the identification and location of the Pillars of Heracles, claims that, like the “Pillars of India”, the name and celebrity of this boundary of the world had been conferred by conquerors and generals (ἡγεμόνων), but not merchants³⁵⁵. It comes as no surprise that several semi-historical conquerors, i.e. the Babylonian Nebuchadnezzar and the Ethiopian Thearkhon (Taharqa), were said to have reached the Pillars of Heracles.³⁵⁶ Coming back to the Bab al-Mandab strait, it must be remembered that before the discovery of the passage to the open sea by Ptolemaic explorers, Nekôs and Darius were famous for having sailed outside the Arabian Gulf. Could then the Ptolemaic kings, and later the Romans, afford to ignore the role of Bab al-Mandab as a boundary of the inhabited world? In last section I will argue that the surviving evidence supports the view that the *fauces Rubri maris* served the glory of rulers, i.e. they were used for propaganda purposes.

6.1. The Ptolemaic rulers: Ptolemy II and Ptolemy III

Before examining how the activity of Ptolemy II and Ptolemy III in this part of the world enhanced their glory, it must be remembered that Alexander the Great was a model for his successors. Among his numerous feats, the following are particularly relevant to the issue which I am addressing: firstly, he defeated a famous nation settled at the edge of the world, namely the Indians and their elephants. Secondly, at the end of the Indian expedition he briefly sailed on the “Great Sea” (i.e. the Indian Ocean) surrounding the inhabited world to symbolically but manifestly express that he had reached the edge of the world.³⁵⁷ Not only was he the first Greek to have achieved this (*prôtos euretês*), but in so doing he proved himself to have outdone Heracles and Dionysus, his mythical predecessors. Finally, he considered subduing a renowned people living in the southern part of the *oikoumenê*, the Arabs.

354 Str. 3, 5, 6 (transl. Hamilton).

355 Str. 3, 5, 6. On the “columns” raised by Dionysos in India near the ocean, see e.g. Dion. Per. 623-625.

356 Str. 15, 1, 6 (= Megasthenes, *FGrH* 715 F11a).

357 See e.g. Arrian. *Ind.* 43, 1-10. As van Paassen 265 writes, “Alexander had an geographical picture of the world in mind during his campaign and the problem of the ocean and the boundaries of the world played a great part in it”. For the sake of comparison, see Str. 1, 2,3 4 on Menelaus in Egypt and Ethiopia.

Similarly, Ptolemy II and Ptolemy III sought the glory of exploring and controlling the most distant countries. For instance the expeditions of Ptolemy II in *Trôglodytikê* and *Aithiopia*³⁵⁸ – the latter being a name praised by Homer – aimed to present him as the first Greek to extend his power as far as the southern limit of the world. The same rulers also boasted about the successful hunting and taming of African elephants, which was indeed a remarkable achievement. Thus, it is likely that passing the mouth of the Arabian Gulf may have all the more expanded the prestige of the Ptolemies, since Alexander's men had not actually achieved this.³⁵⁹ Incidentally, it is worth noticing that Seleukos I and his son Antiochos I gave orders to explore the Caspian Sea with the goal of discovering (through *autopsia*) the fourth inlet of the outer Sea.³⁶⁰ Such an attempt that implied great prestige.

Regrettably, no piece of evidence has survived explicitly connecting the crossing of the strait to the esteem of the Ptolemaic kings. We only have a number of short texts alluding to prestigious royal actions taking place in the area of Bab al-Mandab. However poor this material is, it enables us to reasonably conclude that Ptolemy II and Ptolemy III had realised that reaching this region was beneficial in terms of propaganda.

The name of Ptolemy III appears twice in association with elephant hunting: In an inscription going back to the beginning of his reign, this king proudly claims that he and his father were the first to hunt elephants in *Trôglodytikê* and Ethiopia (= the Nile valley? the southern part of the Red Sea?) and have them trained for war purposes.³⁶¹ In addition, we are informed by Agatharchides of Ptolemy III having founded hunting stations beyond the strait: "The third Ptolemy also, who prided himself (φιλοτιμηθείς) upon the hunting of elephants which are found in this region [περὶ τὴν χώραν ταύτην, viz. outside the <Arabian> Gulf], sent one of his friends named Simmias to spy out the land." (transl. Oldfather slightly modified)³⁶² The word φιλοτιμηθείς in connection with the name of Ptolemy III may preserve some traces of royal propaganda: it seems as if hunting elephants beyond the strait was an achievement more admirable than the previous ones. As a matter of fact, it was during his rule that ships crossed the strait with the purpose of shipping elephants to Egypt. Interestingly, Hipparchus also alludes to the ancient elephant hunting in *Kinnamômophoros* [18], which may corroborate the view that this achievement increased the glory of Ptolemy Evergetes.

Besides securing Ptolemy's demand in elephants, explorers and hunters studied this remote part of the world bordered by the outer Sea called the *Kinnamômophoros*. It is likely that Ptolemy III (if not Ptolemy II: see above, p. 5-6) could claim to have rivalled his glorious predecessor Alexander, as well as the similarly famous Nekôs and Darius by reaching the southern fringe of the *oikoumenê*. In particular, such explorations carried great significance as knowledge of the *oikoumenê* was improved through the endeavour of Ptolemy.³⁶³ In fact, it was the expeditions around Bab al-Mandab that contributed to solving the question of the Nile's summer flood, a major geographical issue. Sometime before

358 See Desanges (b) 252-279.

359 Arrian. *Ind.* 43, 2-6.

360 Plin. *nat.* 2, 167; 6, 58.

361 *OGIS* 54.

362 Diod. 3, 18, 4 (= Agatharchides, *GGM* 1, 41). Compare with Diod. 3, 36, 3 (= Agatharchides, *GGM* 1, 78): Ptolemy II also took pride (φιλοτιμηθείς) in having elephants hunted.

363 Also see Geminus, *Phain.* 16, 24.

the Ptolemies, Alexander and his Friends had explained this phenomenon in a mere theoretical way, by comparing the Nile with Indian rivers overflowing during the rainy season of the summer. Strabo says that thanks to the explorations of Ptolemy II (or III), the phenomenon was explained for the first time not by “conjecture” (στοχασμῶ) but observation (αὐτόπται), since the explorers witnessed the heavy rainfalls falling each summer in “Upper Ethiopia” (τῆς Αἰθιοπίας τῆς ἄνω) and its “most distant mountains” (ἐν τοῖς ἐσχάτοις ὄρεσι). Next Strabo goes on to add: “this fact was particularly clear to those who navigated the Arabian Gulf as far as the *Kinnamomôphoros*, and to those who were sent out to hunt elephants (τοῖς πλέουσι τὸν Ἀράβιον κόλπον μέχρι τῆς κινναμομοφόρου καὶ τοῖς ἐκπεμπομένοις ἐπὶ τὴν τῶν ἐλεφάντων θήραν) or upon any other business which may have prompted the Ptolemaic kings of Egypt to despatch men thither”.³⁶⁴ Following immediately upon this sentence is the mention of Ptolemy II: “For these kings were concerned with things of this kind (οὗτοι γὰρ ἐφρόντισαν τῶν τοιούτων); and especially the Ptolemy sur-named Philadelphus etc.” (transl. Jones). Despite this statement, I do, however, tend to believe that the exploration of northern Somalia should be dated to the rule of Ptolemy III because of the famous Simmias who carried out ethnographic research beyond the strait.

In conclusion I propose that having pushed his power beyond the African side of Bab al-Mandab, Ptolemy III – that it was Ptolemy II seems uncertain to me – was aware that he had achieved something, which no Greek had done before: his ships sailed out of the Arabian Gulf, reached the Outer Ocean and skirted the *Kinnamomophoros*, a country bearing the name of a mythical spice.³⁶⁵ Despite the regrettable lack of textual evidence we are informed of some achievements of the Ptolemies in the area, namely the quest for war elephants and the explanation of the flooding of the Nile. This may be the remains of Ptolemaic propaganda.

Sesostris is the Greek form of the name of three Egyptian rulers of the 12th Dynasty (Senwosret). In the 5th century B.C. the Greeks were already aware of a sort of “legend of Sesostris”. In Herodotus’ *Histories* Sesostris (perhaps the third Senwosret: 1872-1853/52 B.C.) is described as a semi-mythical conqueror who, among other achievements, led his armies into *Aithiopia* and undertook a naval expedition in the Erythraean Sea, until he was forced to turn back. This legendary Sesostris may have been a heroic figure invented by some Egyptian priests for ideological purposes in order to challenge the Persian rulers.³⁶⁶ Be that as it may, the legend of Sesostris was to change during the Ptolemaic period. In Greek Hellenistic sources³⁶⁷ (or in Latin documents based on Greek sources) the imperial space of Sesostris tends to coincide with that of Alexander the Great and his successors. In particular, Sesostris is said to have subdued Scythia, Bactria and the countries bordered by the Erythraean Sea as far as India. Diodorus even claims that Sesostris reached the Ocean after he defeated India. This feature clearly echoes Alexander’s brief navigation of the “Great Sea” off the mouth of the Indus, probably the acme of his Indian campaign.³⁶⁸ In

364 Str. 17, 1, 5.

365 Hdt. 3, 111: “it [*sc. kinnamômon*] is reported, reasonably enough, to grow in the place where Dionysus were reared.” (transl. Godley).

366 Hdt. 2, 102 -103; 110. See Delbrueck 20; Lloyd (c) 37-40; Malaise 252-255; 262-266; Obsomer 80-113; Desanges (c) 90-91.

367 See Diod. 1, 55-58. See Malaise, *loc. cit.* n. 388.

368 See e.g. Arrian. *Anab.* 6, 19, 4-19.

the face of such coincidences one can wonder to what extent the Egyptians used the Hellenistic royal ideology and the myth of Alexander to recast Sesostri's legend for either propaganda purposes or because of "nationalist" feelings.³⁶⁹ Coming back to my topic, this renewed story of Sesostri may plausibly mirror the Ptolemaic propaganda relating to the crossing of the strait.

It is curious that a narrative of Sesostri's conquests comes after the account of Ptolemaic explorations around Bab al-Mandab [2]. Having reported the discovery of *Deirê* and the strait Strabo quoting Eratosthenes says that Sesostri sailed across the strait and erected a stele, apparently to proclaim that "he was the first to subdue the countries of the Ethiopians and the Troglodytes". Afterwards, crossing the channel he subdued the Arabs and conquered the whole of Asia. Although Strabo's text remains partly obscure, one can assume that the Greek explorers at, or in the vicinity of *Deirê*, found an inscription in hieroglyphic letters.³⁷⁰ This discovery was later reported to some knowledgeable Egyptians, e.g. priests, who claimed that this proved that the great Sesostri had reached the strait. The point is that *Deirê* marking the end of the Arabian Gulf had been incorporated into the legend of Sesostri. In my opinion this peculiar and novel development of the legend of Sesostri reflects the importance attached to the strait by Ptolemy II and/or Ptolemy III. This embellished version of the Pharaoh's expedition was probably invented after the successful Greek exploration. With the crossing of the strait it seems likely that the royal propaganda will have proclaimed the edge of the *oikoumenê* to be under Ptolemaic power, at least symbolically. Some Egyptians, wanting to credit Sesostri with a similar achievement and to outdo the Macedonian kings, put forward the inscription discovered in *Deirê*: not only did it prove that their hero successfully subdued the Arabs, a people who escaped the Ptolemaic domination, but also that he was the first (*prôtos*) to reach the mouth of the Arabian Gulf. This particular aspect of the story of Sesostri is likely to have been devised in order to echo the prestige of the Ptolemies brought about by the successful crossing of Bab al-Mandab.

I stated above that the name *Kinnamômophoros* probably increased the glory of Ptolemy II and / or Ptolemy III. Interestingly, this particular toponym appears in a less known variant of the legend of Sesostri. According to Pliny, (probably quoting Juba) Sesostri went (*Sesostri exercitum ducit*) to the cape and port *Mossylites*, at the edge of the Horn of Africa, in the country where the *cinnamomum* grew.³⁷¹ Again, Sesostri seems to have been praised for crossing the strait before the Greek kings and travelling as far as they did. Strabo adds that Sesostri led an expedition in the *Kinnamômophoros*, the proof of which could be found in (hieroglyphic) inscriptions: "We may well be surprised (...) by the fact that Sesostri traversed the whole of *Aethiopia* as far as the *Kinnamômophoros*, and that memorials of his expedition, pillars and inscriptions, are to be seen even to this day."³⁷² Being biased in favour of the Greeks, Strabo does, however, go on to say that the Ptolemies actually outdid Sesostri, as the latter failed to solve the question of the flood of

369 Lloyd (c) 37-40.

370 Plin. *nat.* 6, 174, also reports *stelae* "inscribed with unknown characters" around the strait (see Desanges (c) 87-88). This has been connected with the Pharaonic voyages to Punt (see e.g. Helck).

371 Plin. *nat.*, 6, 174.

372 Str. 17, 1, 5.

the Nile. At any rate, these few documents no doubt unveil another aspect of the competition between the old Egyptian legend of Sesostrius and the Ptolemaic propaganda, in which the strait of the Erythraean Sea and the access to the Outer Ocean will have played an important role.

6.2. Augustus and the Roman imperium

With the annexation of Egypt Augustus to some extent renewed Ptolemy's "southern policy", turning his attention to Arabia, Ethiopia and the Red Sea area. Yet his goals and means were different. Augustus' diplomatic and military action in the Red Sea was guided by a "conception tranquillement œcuménique de l'empire romain", as Nicolet writes.³⁷³ In his late years, Augustus summarized his achievements in the southern part of the *oikoumenê* in his *Res Gestae*. *Aethiopia* and Arabia are listed among the nations that he subdued: "At my command and under my auspices two armies were led almost at the same time into *Aethiopia* and *Arabia Felix* (*in Aethiopiam et in Arabiam, quae appellatur Eudaemon*); vast enemy forces of both peoples were cut down in battle and many towns captured. *Aethiopia* was penetrated as far as the town of *Nabata*, which adjoins *Meroe*; in Arabia the army (i.e. led by Aelius Gallus) advanced into the territory of the Sabaeans to the town of *Mariba* (*in Arabiam usque in fines Sabaeorum processit exercitus ad oppidum Mariba*)."³⁷⁴ (transl. Brunt & Moore). Augustus' foreign policy indeed focused on two countries of the southern part of the inhabited famous among the Greco-Romans: *Aethiopia* (viz. the kingdom of *Meroe*) and the south Arabian kingdom of Saba. As Strabo [20] explains, both were regarded by Rome as neighbours since they were more or less in "contact" with Roman Egypt: Troglodytes and Ethiopians border on Egypt; as for the Arabs, they are located close to Egypt, since the Arabian Gulf, separating them from *Trôglo-dytikê*, is "extremely narrow".

At first glance neither this text nor the rest of the evidence proves that the *fauces Rubri maris* were of any importance to the *laus imperii* (glory of the Empire). This is not surprising: How could a strait, which had been discovered long ago and was now being traversed by numerous merchants, be of any significance in terms of prestige? A closer look does, however, shows how an extraordinary source of glory, so to speak, remained at the disposal of Rome: the Arabian kingdoms in the south-west part of the Arabian Peninsula, which neither Alexander nor the Ptolemies had been able to integrate into their empires. In his *Res Gestae* Augustus, far from mentioning the withdrawal of his army, suggests that the Sabaeans were subdued. It has often been argued that Augustus aimed to control the rich Arabian states for economic purposes³⁷⁵, but this is consistent with the view that Augustus aimed to overdo the "Alexandrian kings" in terms of prestige by dom-

373 Nicolet 28 (also see Roddaz 262-270).

374 *R. Gest. div.* 26, 18-23.

375 Casson 37 n. 71 emphasises the economical aspect of Augustus's plan: "Just as the conquest of Egypt had put in Rome's lap an annual tribute (...) of grain, so the conquest of Arabia would add an annual tribute of precious myrrh and frankincense." Also see e.g. Sidebotham (a) 134; 141-141; Speidel 303-305; *Yémen* (Cuvigny) 69.

inating south-west Arabia, an area including the eastern side of Bab al-Mandab.³⁷⁶ Displaying his forces in this remote area was tantamount to victory, regardless of the outcome of the expedition. By doing so he surpassed the Ptolemies, who never attempted an attack on the Arabian kingdoms, turning most of their attention to the western side of Bab al-Mandab. Similarly, he equalled and even overcame Alexander by subjugating the Arabs, the only people who did not send ambassadors to Alexander³⁷⁷: “But at present both they (sc. the Nabataeans and the Sabaeans) and the Syrians are subject to the Romans.”³⁷⁸ No doubt the “Arabian glory” – of which even Augustus’ grandson dreamed (above, p. 10) – must have been a source of great political profit. Such must have been the ideological motives lying behind the south Arabian expedition, if there were any.

At any rate, the expeditions led by Aelius Gallus, and maybe Gaius Caesar, changed the balance of power in south-west Arabia and the Bab al-Mandab area³⁷⁹: Rome acquired some influence in the eastern part of the Bab al-Mandab area, for in the mid-1st century B.C. the king of Saba’ and Dhu Raydan in Saphar had both become “a friend of the emperors, thanks to continuous embassies and gifts”.³⁸⁰ Consequently, the conditions of maritime trading in the Erythraean Sea were necessarily modified. The establishment of direct communications with India in the Ptolemaic period does not imply that Arabian control over the east side of the strait had been weakened, for ships sailing along the Arabian coast may have been forced to stop there (maybe at Aden³⁸¹), unless they headed to India via cape Gardafui and the western side of the strait.³⁸² At any rate, the Indian trade is likely to have been partly controlled by the Arabs. In contrast, as attested by the following documents, the Roman *imperium* created a serious barrier against the presence of an Arab control in the southern Red Sea. In other words, the “Arabian sea route” was from then on free from real control and pressure. First, as discussed above (p. 10) the (mysterious) sack of Aden enabled a form of free trading, since the Alexandrian merchants were no longer forced to load Indian commodities in this port. Secondly, Strabo, who praises both Aelius Gallus and Augustus for the Arabian expedition [20], elsewhere says that the *emporoi*, even those having large ships, were no longer afraid (ἐθάρρει) of crossing the strait and reach *Aethiopia* or India [21]. This means that distant but profitable places of trade in the Indian ocean could be freely accessed.³⁸³ This new situation, which is in great contrast to

376 For the sake of comparison, notice how C. Cornelius Gallus, the first prefect of Egypt, prides himself on leading Roman armies beyond the cataracts (= against *Aethiopia*), claiming – wrongfully – that the (Ptolemaic) kings never attempted such an expedition (Dessau *ILS* 8995).

377 Arrian. *Anab.* 7, 19, 6.

378 Str. 16, 4, 21 transl. Jones).

379 See e.g. Speidel 301-303 (this does not imply a military control of Bab al-Mandab; see, however, Speidel 305). *Contra*: Beeston (b) 12: “Seen from the Sabaeans angle, the whole affair must have appeared not as a major threat to themselves, but as a minor ‘frontier incident.’”

380 *P.m.r.* 23. Casson 37 believes that the diplomatic initiative came from Arabia, for Kharibaël feared that the emperors repeated Augustus’ military attempt. See also Plin. *nat.* 12, 57.

381 Ryckmans 80-81; Desanges (a) 319-321; von Wissmann (d) 312; Dihle (c) 109. The strategic role of *Eudaimôn Arabia* before the Roman expedition is stressed by the *P.m.r.* [29]. Note that Plin. *nat.* 6, 100-106 does not mention Aden (*contra*: Warmington 45-46). The Indian castaway who taught Eudoxus the monsoon route (above, p. 7) is likely to have missed Aden (certainly because of a gale).

382 Bianchetti (a) 283-289.

383 Dihle (b) 548-549. Compare with Str. 2, 5, 12.

the weakness of the Ptolemies (τὰ νῦν διὰ τῶσαύτης ἐπιμελείας οἰκονομούμενα), is obviously linked to Augustus' policy. Roman power had managed to deprive the Arabs of their control over the eastern side of Bab al-Mandab and had provided the Alexandrian merchants with free and unlimited access to the Erythraean products. In this Rome could definitely take great pride.

To some extent, establishing trade with the countries of the Indian Ocean contributed to Rome's prestige. Interestingly, this idea is expressed in two significant texts: The first one is an often quoted excerpt from Aelius Aristides' *Roman Oration*: "No marine rocks and no Chelidonian and Cyanean islands define your empire (...), nor do you rule within fixed boundaries, nor does another prescribe the limit of your power. But the sea is drawn as a kind of belt without distinction through the middle of the inhabited world and your empire. About the sea the continent lie 'vast and vastly spread', ever supplying you with products from those regions. Here is brought from every land and sea all the crops of the seasons and the produce of each land, river, lake, as well as of the arts of the Greeks and barbarians, so that if someone should wish to view all these things, he must either see them by traveling over the whole world or be in this city. It cannot be otherwise than that there always be here an abundance of all that grows and is manufactured among each people. So many merchant ships arrive there, conveying every kind of goods from every people every hour and every day, so that the city is like a factory common to the whole earth. It is possible to see so many cargoes from India and even from Arabia Felix, if you wish, that one imagines that for the future the trees are left bare for the people there and that they must come here to beg for their own produce if they need anything."³⁸⁴ With Pliny we may conclude our inquiry: "For who would not admit that now that intercommunication has been established throughout the world by the majesty of the Roman Empire (*maiestate Romani imperii*), life has been advanced by the interchange of commodities and by partnership in the blessings of peace, and that even things that had previously lain concealed have all now been established in general use?"³⁸⁵

384 Aelius Aristides, *Rhômês egkômion*, 10-12 (transl. C. A. Behr). Also see Dion Chrys. *Orat.* 32, 36.

385 Plin.*nat.* 14, 1.

7. Appendices

7.1. The documents

Eratosthenes [Strabo - Agathemerus]

1. Strabo, 16, 4, 2 [Berger III B 48, p. 290]

... τρίτοι δὲ Κατταβανεῖς καθήκοντες πρὸς τὰ στενὰ καὶ τὴν διάβασιν τοῦ Ἀραβίου κόλπου, τὸ δὲ βασιλεῖον αὐτῶν Τάμνα καλεῖται.

... the extreme part of the country above-mentioned (= Arabia Felix) is occupied, third (i.e. after the the *Minaioi* and the *Sabaioi*), by the Kattabaneis, whose territory extends down to the straits and the passage across the Arabian Gulf and whose royal seat is called *Tamna*. (transl. Jones)

2. Strabo, 16, 4, 4 [Berger III B 48, p. 291]

Ἐντεῦθεν δὲ μέχρι τῶν στενῶν ὡς τετρακισχίλιοι καὶ πεντακόσιοι πρὸς τὴν ἑω μᾶλλον. ποιεῖ δὲ ἄκρα τὰ στενὰ πρὸς τὴν Αἰθιοπίαν Δειρὴ καλουμένη, καὶ πολίχνιον ὁμώνυμον αὐτῇ· κατοικοῦσι δὲ ἰχθυοφάγοι. καὶ φασιν ἐνταῦθα στήλην εἶναι Σεσώστριος τοῦ Αἰγυπτίου μηνύουσαν ἱεροῖς γράμμασι τὴν διάβασιν αὐτοῦ· φαίνεται γὰρ τὴν Αἰθιοπίδα καὶ τὴν Τρωγλοδυτικὴν πρῶτος καταστρεψάμενος οὗτος, εἶτα διαβὰς εἰς τὴν Ἀραβίαν κἀντεῦθεν τὴν Ἀσίαν ἐπελθὼν τὴν σύμπασαν· διὸ δὴ πολλαχοῦ Σεσώστριος χάρακες προσαγορεύονται, καὶ ἀφιδρύματά ἐστιν Αἰγυπτίων θεῶν ἱερῶν. τὰ δὲ κατὰ Δειρὴν στενὰ συνάγεται εἰς σταδίους ἐξήκοντα· (continued n. 3)

And thence (i.e. from Ptolemaïs of the Hunts), as far as the straits, 4500 *stadia*, in a direction more towards the east. The straits are formed towards *Aethiopia* by a promontory called *Deirê* and by a town bearing the same name, which is inhabited by the *Ichthyophagi*. And here there is a pillar of Sesostris the Aegyptian which tells in hieroglyphics of his passage across the strait³⁸⁶; for manifestly he was the first man to subdue the countries of the Aethiopians and the Troglodytes; and he then crossed into Arabia, and thence invaded the whole of Asia; and accordingly, for this reason, there are in many places palisades of Sesostris, as they are called, and reproductions of temples of Egyptian gods. The straits at *Deirê* contract to a width of 60 *stadia*. (transl. Jones)

3. Strabo, 16, 4, 4 [Berger III B 48, p. 291]

Οὐ μὴν ταῦτά γε καλεῖται νυνὶ στενά, ἀλλὰ προσπλεύσασιν ἀπωτέρω, καθὸ τὸ μὲν διάρμα ἐστὶ τὸ μεταξὺ τῶν ἡπείρων διακοσίων που σταδίων, ἐξ δὲ νῆσοι συνεχεῖς ἀλλήλαις τὸ διάρμα ἐκπληροῦσαι στενοὺς τελέως διάπλους ἀπολείπουσι, δι' ὧν σχεδίαίς τὰ φορτία κομίζουσι δεῦρο κάκεισε, καὶ λέγουσι ταῦτα στενά. μετὰ δὲ τὰς νήσους ὁ ἐξῆς πλοῦς ἐστὶν ἐγκολπίζουσι³⁸⁷ παρὰ τὴν συμυρνοφόρον ἐπὶ τὴν μεσημβρίαν ἅμα καὶ τὴν ἑω μέχρι πρὸς τὴν τὸ κιννάμωμον φέρουσαν, ὅσον πεντακισχιλίων σταδίων.

However, it is not these that are called straits now, but a place farther along on the voyage, where the voyage across the gulf between the two continents is about 200 *stadia*, and where are six islands, which follow one another in close succession, fill up the channel,

³⁸⁶ Jones writes: "the gulf".

³⁸⁷ ἐγκολπίζειν (*LSJ*): 1) "to form a bay" 2) "to go into or follow a bay". Desanges (a) 91: "(...) la navigation, quand on sort du golfe (Arabique)."

and leave between them very narrow passages; through these merchandise is transported from one continent to the other; and for these the name “straits” is used. After the islands, the next voyage, following the sinuosities of the bays (*sic*), along the myrrh-bearing country in the direction of south and east as far as the cinnamon-bearing country, is about 5000 *stadia*. (transl. Jones)

4. **Agathemerus, 2, 14, GGM 2 p. 475 [Berger III B 49, p. 291-292]**

Ὁ δὲ Ἀραβίος κόλπος, στενὸς ὢν καὶ προμήκης, ἄρχεται ἀπὸ Ἡρώων πόλεως, παρὰ τὴν Τρωγλοδυτικὴν ἕως τῆς Πτολεμαίδος τῆς ἐπὶ θήρας, σταδίων ,θ τὸ μήκος· [έντεῦθεν δὲ ἕως τῶν κατὰ Δειρὴν **στενῶν**] πλοῦς σταδίων,δϛ' [Müller δψ' – however the latin translation gives 4500] · τὰ δὲ κατὰ Δειρὴν **στενὰ** σταδίων ξ'. ἐνθεν ἐξῆς πλοῦς παρὰ τὴν Ἐρυθρὰν θάλασσαν ἕως ὠκεανοῦ σταδίων ,ε · τὸ δὲ λοιπὸν οὐ πλεῖται.

The Arabian Gulf is narrow and fully extends in length. It is 9000 *stadia* long from *Herôdnopolis* to *Ptolemais* of the Hunts along the *Trôglodytikê*; the voyage [from there to the strait at *Deirê*] is 4500 *stadia*. The straits at *Deirê* are 60 *stadia* wide. From there the sailing is 5000 *stadia* along the Erythraean sea up to the ocean. No one sailed further.

Eratosthenes and other authorities [Strabo]

5. **Strabo, 16, 4, 20**

Λέγεται δ' ὑπὸ τινων τὰ ἀπὸ **τῶν στενῶν** τοῦ Ἀραβίου κόλπου μέχρι τῆς κινναμωμοφόρου τῆς ἐσχάτης πεντακισχιλίων σταδίων, οὐκ εὐκρινῶς, εἴτ' ἐπὶ νότον εἴτ' ἐπὶ τὰς ἀνατολάς.

Some writers³⁸⁸ say that the distance from the straits of the Arabian Gulf to the extremity of the cinnamon-bearing country is five thousand *stadia*, without distinguishing clearly whether they mean towards the south or towards the east. (transl. Jones)

Agatharchides of Cnidus [Diodorus of Sicily - Photius]

6. **Diodorus, 3, 15, 1 [= Agatharchides, GGM 1, 31]**

Περὶ πρώτων δὲ τῶν Ἰχθυοφάγων ἐροῦμεν τῶν κατοικούντων τὴν παράλιον τὴν ἀπὸ Καρμανίας καὶ Γεδρωσίας ἕως τῶν ἐσχάτων τοῦ μυχοῦ τοῦ κατὰ τὸν Ἀράβιον κόλπον ἰδρυμένου, ὃς εἰς τὴν μεσόγειον ἀνήκων ἄπιστον διάστημα δυσὶν ἡπείροις **περικλείεται** πρὸς **τὸν ἔκπλουν**, τῇ μὲν ὑπὸ τῆς εὐδαίμονος Ἀραβίας, τῇ δ' ὑπὸ τῆς Τρωγλοδυτικῆς.

The first people we shall mention are the Ichthyophagi who inhabit the coast which extends from Carmania and Gedrosia to the farthest limits of the recess (= the Gulf of Suez) which is found at the Arabian Gulf, which extends inland an unbelievable distance and is enclosed at his mouth [literally: is enclosed as for the sailing out] by two landmasses, on the one side by Arabia Felix and on the other by the land of Troglodytes (transl. Oldfather, slightly modified).

7. **Diodorus, 3, 17, 5–18, 1 [= Agatharchides, GGM 1, 39-40]**

Οἱ μὲν οὖν τὴν παράλιον τὴν **ἐντὸς τῶν στενῶν** κατοικούντες οὕτω βιοῦσι, νόσοις μὲν διὰ τὴν ἀπλότητα τῆς τροφῆς σπανίως περιπίπτοντες, ὀλιγοχρονιώτεροι δὲ πολλὴ τῶν παρήμιν ὄντες. Τοῖς δὲ τὴν **ἐκτὸς τοῦ κόλπου** παράλιον νεμομένοις πολλῶ τούτων παραδοξότερον εἶναι τὸν βίον συμβέβηκεν, ὥς ἂν ἄδιψον ἐχόντων καὶ ἀπαθῆ τὴν φύσιν.

388 See Str. 16, 4, 19 in fine.

Now the inhabitants (sc. the Ichthyophagi) of the coast inside the strait lead the kind of life which has been described, and by reason of the simplicity of their food they rarely are subject to attacks of disease, although they are far shorter-lived than the inhabitants of our part of the world. But as for the inhabitants of the coast outside the gulf, we find that their life is far more astonishing than that of the people just described, it being as though their nature never suffers from thirst and is insensible to pain. (transl. Oldfather, slightly modified)

8. Diodorus, 3, 32, 4 [= Agatharchides, GGM 1, 63]

Τὰ δ' αἰδοῖα πάντες οἱ Τρωγοδῦται παραπλησίως τοῖς Αἰγυπτίοις περιτέμνονται πλὴν τῶν ἀπὸ τοῦ συμπτώματος ὀνομαζομένων Κολοβῶν· οὗτοι γὰρ μόνοι τὴν ἐντὸς τῶν στενῶν νεμόμενοι χώραν ἐκ νηπίου ξυροῖς ἀποτέμνονται πᾶν τὸ τοῖς ἄλλοις μέρος περιτομῆς τυγχάνον.

Moreover all the Troglodytes are circumcised like the Egyptians with the exception of those who, because of what they have experienced, are called *Koloboi*; for only these who live inside the straits have in infancy all that part cut completely off with the razor which among other peoples merely suffers circumcision. (transl. Oldfather, modified)

9. Diodorus, 3, 38, 4-5 [= Agatharchides, GGM 1, 79]

Ὁ δὲ προσαγορευόμενος Ἀράβιος κόλπος ἀνεστόμωται μὲν εἰς τὸν κατὰ μεσημβρίαν κείμενον ὠκεανόν, τῷ μήκει δ' ἐπὶ πολλοὺς πάνυ παρήκων σταδίους τὸν μυχὸν ἔχει περιοριζόμενον ταῖς ἐσχατιαῖς τῆς Ἀραβίας καὶ Τρωγλοδυτικῆς. εὖρος δὲ κατὰ μὲν τὸ στόμα καὶ τὸν μυχὸν ὑπάρχει περὶ ἑκκαίδεκα σταδίους, ἀπὸ δὲ Πανόρμου λιμένος πρὸς τὴν ἀντιπέραν ἥπειρον μακρᾶς νεὼς διωγμὸν ἡμερήσιον. τὸ δὲ μέγιστόν ἐστι διάστημα κατὰ τὸ Τύρκαιον ὄρος καὶ Μακαρίαν νῆσον πελαγίαν³⁸⁹, ὥς ἂν τῶν ἡπείρων οὐχ ὁρωμένων ἀπ' ἀλλήλων. ἀπὸ δὲ τούτου τὸ πλάτος αἰεὶ μᾶλλον συγκλείεται καὶ τὴν συναγωγὴν ἔχει μέχρι τοῦ στόματος. ὁ δὲ παράπλους αὐτοῦ κατὰ πολλοὺς τόπους ἔχει νήσους μακρὰς, στενοὺς μὲν διαδρόμους ἐχούσας, ροῦν δὲ πολὺν καὶ σφοδρόν.

But the Arabian Gulf, as it is called, opens into the ocean which lies to the south, and its innermost recess, which stretches over a distance of very many *stadia* in length, is enclosed by the farthest borders of Arabia and the *Trôglodytikê* country. Its width, at the mouth and at the innermost recess, is about sixteen stades, but from the harbour of *Panormos* to the opposite mainland is a day's run for a warship. And its greatest width is at the *Tyrkaion* mountain and *Makaria* (?), an island out at sea, the mainlands there being out of sight of each other. But from this point the width steadily decreases more and more and continually tapers as far as the mouth. And as a man sails along the coast he comes in many places upon long islands with narrow passages between them, where the current runs full and strong. (transl. Oldfather slightly modified)

10. Photius, Bibl. 250, 450a [= Agatharchides, GGM 1, 40]

Ἀλλ' οἱ μὲν ἐντὸς τῶν στενῶν τὰς οἰκήσεις ἔχοντες ἰχθυοφάγοι οὕτω καταγίνονται· οἱ δὲ τὴν ἐκτὸς παραλίαν κεκτημένοι, ἄγρας μὲν ἐνδεδεχῶς τοιαύτης εὐποροῦσιν, ὕγροῦ δ' ἀπλῶς οὐ δέονται.

389 Μαρίαν δυσπελαγίαν: Müller (a) 165-166; Μαρίαν δυσπελαγίον: Bommelaer (see Burstein 133 n.5).

The *Ikhtyophagoi* who dwell inside the strait live in such a way (i.e. they enjoy a simple and healthy life); but those who inhabit the coast outside <the strait> continually catch an extraordinary quantity of fish and need not water at all.

11. Photius, Bibl. 250, 451a [= Agatharchides, GGM 1, 47]

Ὅτι τῶν στενῶν ἐπέκεινα, φησί, τῶν συγκλειόντων τὴν τε Ἀραβίαν καὶ τὴν ἀπέναντι χώραν, νῆσοι κείνται σποράδες, ταπειναὶ πᾶσαι, μικραὶ τῷ μεγέθει, τὸ πλῆθος ἀμύθητοι, καρπὸν οὐδένα γεννῶσαι πρὸς τὸν βίον, οὔτε ἡμερον οὔτε ἄγριον, ἀπέχουσαι μὲν τῆς εἰρημένης ἡπείρου σταδίους ὡς ἐβδομήκοντα, τετραμμέναι δὲ πρὸς τὸ δοκοῦν πέλαγος παρεκτείνειν τὴν Ἰνδικὴν καὶ Γεδρωσίαν.

He says that beyond the strait which is closed by Arabia and the opposite country joining each other there are scattered islands, all low; those are small, unbelievably numerous; they grow neither cultivated nor wild produce which would be useful to live and lie about 70 *stadia* from the above said landmass and face the sea which is supposed to stretch towards India and Gedrosia.³⁹⁰

N.B.: the poros referred to by Photius, Bibl. 250, 460a (= Agath., 108; also Photius, Bibl. 250, 441b (= Agath., 2) is unlikely to be the strait (see Schneider [a] 358-361).

Greek inscriptions from the Egyptian eastern desert; papyri

12. Bernand 1969 n° 164, l. 1-5

Of unknown origin but certainly from the Paneion of Redesiyeh; probably dedicated by a hunter (see euagrōi).³⁹¹

Πανὶ τόδε εὐάγρῳ καὶ ἐπ[ηκό]φῳ, ὃς διέσωσεν / Τρωγοδυτῶν με [ἐκ] γῆς, πολλὰ παθόντα πόνους / δισσοῖς, Σ[μυρνο]φόρου θ' ἱερᾶς Κολοβῶν τε ἀπὸ - - -³⁹²/ σώϊσας [δὲ (?) ἐν πε]λάγει πλαζομένους Ἐρυθρ[ῶ] etc.

(I dedicate) this to Pan, helper in the hunt, propitious one, for bringing me safely from the land of the Troglodytes, where I suffered many hardships during two enterprises³⁹³ (Bernand: “j’avais été (...) éprouvé par des peines redoublées”), from the holy Myrrh-land and the *Koloboi*. And you saved (us) as we wandered on the [Erythraean ?] sea, by sending a fair wind to our ships when they were drifting around in the sea etc. (transl. Household & Prakken)

13. Bernand 1984 n° 48 (=OGIS 69)

Θεοῖς μεγάλοις Σαμοθράξι Ἀπολλώνιος Σωσιβίου Θῆραιος ἡγημὼν τῶν ἔξω τάξεων σωθεὶς ἐν μεγάλων κινδύνων, ἐκπλεύσας ἐκ τῆς Ἐρυθρᾶς θαλάσσης, εὐχὴν.

390 Compare with Diod. 3, 21, 1: “There are islands in the ocean (ὠκεανόν), which lie near the land etc.” (transl. Oldfather). Burstein 85 rightly argues that Agath. refers to Bab al-Mandab (*contra*: Woelk 140-141).

391 First published by Householder & Prakken. According to the editors, this inscription is not later than 200 B.C. See also Bernand 569; Desanges (a) 100 (reign of Ptolemy IV).

392 *χώρης? ἀγροῖο? ἄκροιο?* The editors referring to Ptolemy prefer the last reading (the cape of the *Koloboi*). Bernand suggests *ἐγρανα*. For the adjective “holy” see Desanges (a) 100.

393 “This expression probably refers to two stops at different points on the same trip, i.e. at the *Smyrnophoros gē* and among the *Koloboi*.” (Household & Prakken 112).

Apollônios, son of Sôsiobios from Thera, officer at disposal³⁹⁴, (dedicated this monument) to the Great Gods of Samothrace for saving (him) from great dangers as he sailed out from the Erythraean sea, *ex voto*.³⁹⁵

13bis. Wilcken p.90 l. 20

... [τῶν τὴν ἔξω (?) θάλασσαν πλοιοζομένων ...

(Dêmêtrios, son of Apôllonios), one of those who sail on the outer sea.³⁹⁶

Artemidorus [Strabo]

14. Strabo, 16, 4, 5

Φησὶ δ' Ἀρτεμίδωρος τὸ ἀντικείμενον ἐκ τῆς Ἀραβίας ἀκρωτήριον τῇ Δειρῇ καλεῖσθαι Ἀκίλαν· τοὺς δὲ περὶ τὴν Δειρὴν κολοβοὺς εἶναι τὰς βαλάνους.

Artemidorus says that the promontory on the Arabian side opposite to *Deirê* is called *Akila*; and that the males in the neighbourhood of *Deirê* have their sexual glands mutilated (transl. Jones)

15. Strabo, 16, 4, 13

Μετὰ δὲ Εὐμένους λιμένα μέχρι Δειρῆς καὶ τῶν κατὰ τὰς ἐξ νήσους στενῶν ἰχθυοφάγοι καὶ κρεοφάγοι κατοικοῦσι καὶ κολοβοὶ μέχρι τῆς μεσογαίας. εἰσὶ δὲ καὶ θῆραι πλείους ἐλεφάντων καὶ πόλεις ἄσημοι καὶ νησία πρὸ τῆς παραλίας.

After the Harbour of Eumenês, as far as *Deirê* and the strait opposite the six islands, the country is inhabited by the *Ichthyophagoi* and the *Kreophagoi* and the *Koloboi*, who extend as far as the interior. In this region are several hunting-grounds for elephants, and insignificant cities, and islands lying off the coast (transl. Jones).

16. Strabo, 16, 4, 14

Πᾶσα δ' ἡ παραλία φοινικὰς τε ἔχει καὶ ἐλαιῶνας καὶ δαφνῶνας, οὐχ ἡ ἐντὸς τῶν στενῶν μόνον ἀλλὰ καὶ τῆς ἐκτὸς πολλή (...). ἀπὸ δὲ τῆς Δειρῆς ἡ ἐφεξῆς ἐστὶν ἀρωματοφόρος, πρώτη μὲν ἡ τὴν σμύρναν φέρουσα, καὶ αὕτη μὲν ἰχθυοφάγων καὶ κρεοφάγων.

And the whole of the coast has palm-trees, olive groves, and laurel groves, not only the part inside the straits, but also most of the part outside. (...). The next country after *Deirê* produces aromatics, the first that produces myrrrh (this country belongs to the *Ichthyophagoi* and *Kreophagoi*) (transl. Jones).

16 bis. Strabo, 16, 4, 15

394 See Bernand 168.

395 Dittenberger 122 suggests that this document dates to the reign of Ptolemy III when an important Ptolemaic garrison was stationed in Thera. He also rightly states that *ekpleusas* means "to sail beyond the strait".

396 Wilcken 97: "Am wahrscheinlichsten ist mir, daß mit der *exô thalassa* hier das Rote Meer gemeint ist, aber auch darüber hinaus das Meer bis zu Somaliküste (Punt) und zur Südküste Arabiens, denn da (...) sehe ich keinen Grund, weshalb man hier etwa die Enge von Bab el Mandeb als Endgrenze für diesen Begriff nehmen sollte." I personally tend to believe that *exô thalassa* applies only to the sea outside the strait rather than both the Red Sea and the Gulf of Aden.

(...) κατὰ τὴν γνώριμον παραλίαν τὴν ἀπὸ Δειρής μέχρι Νότου κέρως, τὸ δὲ διάστημα οὐ γνώριμον.

(the pillars and altars of Pytholaos, Likhas, Pythangelos etc. lie) along the known coast extending from *Deirê* as far as the *Notou keras* (=cape Gardafui), but the distance is unknown. (transl. Jones)

17. Strabo, 16, 4, 19

Τὰ δὲ πλήθη τὰ μὲν γεωργεῖ τὰ δ' ἐμπορεύεται τὰ ἀρώματα τὰ τε ἐπιχώρια καὶ τὰ ἀπὸ τῆς Αἰθιοπίας, **πλέοντες ἐπ' αὐτὰ διὰ τῶν στενῶν** δερματίνοις πλοίοις.

But the masses (sc. of Sabaeans) engage partly in farming and partly in the traffic in aromatics, both the local kinds and those from *Aethiopia*; to get the latter they sail across the straits in leathern boats (transl. Jones).

Hipparchus [Strabo]

18. Strabo, 2, 5, 35

Τῷ δὲ λεχθέντι μεσημβρινῷ παράλληλός πως παράκειται ἔωθεν ὁ Ἀράβιος κόλπος· τούτου δ' ἔκβασις εἰς τὸ ἔξω πέλαγος ἡ Κινναμομοφόρος ἐστίν, ἐφ' ἧς ἡ τῶν ἐλεφάντων γέγονε θήρα τὸ παλαιόν.

The Arabian Gulf lies eastward parallel to the said meridian (i.e. of *Syenes*). Its egress into the exterior ocean is [in the same latitude as] the *Kinnamōmophoros*, the place where anciently they used to hunt the elephants (transl. Hamilton)

Strabo

19. Strabo, 2, 3, 5

Τίς γὰρ ἢ πιθανότης πρῶτον μὲν τῆς κατὰ τὸν Ἰνδὸν περιπετείας; Ὁ γὰρ Ἀράβιος κόλπος ποταμοῦ δίκην στενός ἐστι καὶ μακρὸς [πεντακισχιλίους] ἐπὶ μυρίοις πού σταδίοις μέχρι **τοῦ στόματος**, καὶ τούτου **στενοῦ** παντάπασις ὄντος· οὐκ εἰκὸς δ' οὐτ' ἔξω πού τὸν πλοῦν ἔχοντας εἰς τὸν κόλπον παρῶσθῃναι τοὺς Ἰνδοὺς κατὰ πλάνην (**τὰ γὰρ στενὰ ἀπὸ τοῦ στόματος** δηλώσειν ἔμελλε τὴν πλάνην), οὐτ' εἰς τὸν κόλπον ἐπίτηδες **καταχθεῖσιν** ἐτι πλάνης ἢν πρόφασις καὶ ἀνέμων ἀστάτων.

For, in the first place, what plausibility is there in the "strange mischance" which the Indian tells about? Why, the Arabian Gulf is like a river in its narrowness, and it is about 15000 *stadia* (~ 2400 km) long up to its mouth, which, in its turn, is extremely narrow; and so it is not likely that the Indians who were voyaging outside this gulf were pushed out of their course into it by mistake (for its narrowness at its mouth would have shown their mistake), nor, if they sailed into the gulf on purpose, did they any longer have the excuse that they mistook their course or encountered inconstant (transl. Jones)

20. Strabo, 16, 4, 22

Τοῦτον δ' ἔπεμψεν ὁ Σεβαστὸς Καῖσαρ διαπειρασόμενον τῶν ἐθνῶν καὶ τῶν τόπων τούτων (viz. the Arabians) τε καὶ τῶν Αἰθιοπικῶν, ὁρῶν τὴν τε Τρωγλοδυτικὴν τὴν προσεχῆ τῇ Αἰγύπτῳ γειτονεύουσαν τούτοις (viz. the Ethiopians), καὶ τὸν Ἀράβιον κόλπον στενὸν ὄντα τελέως τὸν διείργοντα ἀπὸ τῶν Τρωγλοδυτῶν τοὺς Ἀραβας· προσοικειοῦσθαι δὴ διενόηθη τούτους ἢ καταστρέφεσθαι· ἦν δέ τι καὶ τὸ πολυχρημάτους ἀκούειν ἐκ παντὸς χρόνου, πρὸς ἄργυρον καὶ χρυσὸν τὰ ἀρώματα διατιθεμένους καὶ τὴν

πολυτελεστάτην λιθείαν, ἀναλίσκοντας τῶν λαμβανομένων τοῖς ἔξω μηδέν· ἥ γὰρ φίλοις ἤλπιζε πλουσίοις χρήσεσθαι ἢ ἐχθρῶν κρατήσιν πλουσίων.

He (viz. Aelius Gallus) was sent by Augustus Caesar to explore the tribes and the places, not only in Arabia, but also in *Aethiopia*, since Caesar saw that the *Trôglodytikê* which adjoins Aegypt neighbours upon *Aethiopia*³⁹⁷, and also that the Arabian Gulf, which separates the Arabians from the Troglodytes, is extremely narrow. Accordingly he conceived the purpose of winning the Arabians over to himself or of subjugating them. Another consideration was the report, which had prevailed from all time, that they were very wealthy and that they sold aromatics and the most valuable stones for gold and silver, but never expended with outsiders any part of what they received in exchange; for he expected either to deal with wealthy friends or to master wealthy enemies (transl. Jones modified).

21. Strabo, 17, 1, 13

Ὅπου οὖν ὁ κάκιστα καὶ ῥαθυμότατα τὴν βασιλείαν διοικῶν τοσαῦτα προσωδεύετο, τί χρή νομίσαι τὰ νῦν διὰ τοσαύτης ἐπιμελείας οἰκονομούμενα καὶ τῶν Ἰνδικῶν ἐμποριῶν καὶ τῶν Τρωγλοδυτικῶν ἐπηυξημένων ἐπὶ τοσοῦτον; πρότερον μὲν γε οὐδ' εἴκοσι πλοῖα ἐθάρρει τὸν Ἀράβιον κόλπον διαπερᾶν ὥστε ἔξω τῶν στενῶν ὑπερκύπτειν, νῦν δὲ καὶ στόλοι μεγάλοι στέλλονται μέχρι τῆς Ἰνδικῆς καὶ τῶν ἄκρων τῶν Αἰθιοπικῶν, ἐξ ὧν ὁ πολυτιμώτατος κομίζεται φόρτος εἰς τὴν Αἴγυπτον (...)

If, then, the man who administered the kingdom in the worst and most careless way obtained so large a revenue, what should one think of the present revenues, which are managed with so much diligence, and when the commerce with the Indians and the Troglodytes has been increased to so great an extent? In earlier times, at least, not so many as twenty vessels would dare to traverse the Arabian Gulf far enough to get a peep outside the straits, but at the present time even large fleets are despatched as far as India and the extremities of Aethiopia, from which the most valuable cargoes are brought to Aegypt (...)(transl. Jones).

See also Str. 2, 5, 12.

Juba of Mauretania; Pliny the Elder

22. Pliny, 6, 170 (=Juba, FGrH 275 F34)

Juba, qui videtur diligentissime persecutus haec, omisit in eo tractu (...) et tertiam (sc. Berenicen) quae epi Dires, insignem loco: est enim sita in cervice longe procurrente, ubi **fauces** Rubri maris VII·D p. ab Arabia distant. Insula ibi Citis, topazum ferens et ipsa. (text edited by J. Desanges)

Juba, who appears to have investigated these matters extremely carefully, has omitted to mention in this district (...) and a third called Berenice on the Neck, which is remarkable for its situation, being placed on a neck of land projecting a long way out, where the straits at the mouth of the Red Sea separate Africa (sic) from Arabia by a space of only 7 ½ miles.³⁹⁸ Here is the island of Citis, which itself also produces topaz. (transl. Rackham)

23. Pliny, 6, 175 (=Juba, FGrH 275 F35)

397 See Desanges (b) 308 n.6.

398 Literally: "where the strait (...) is 7 ½ miles from Arabia".

Cujus (sc. Juba) tota sententia hoc in loco subtrahenda non est. a promunturio Indorum quod vocetur Lepte Acra, ab aliis Drepanum, proponit recto cursu praeter Exustam ad Malichu insulas [XV] p. esse, inde ad locum quem vocant Sceneos³⁹⁹ [CCXXV] p., inde ad insulas Adanu CL; sic fieri ad apertum mare [XVIII]·LXXXV p. (text edited by J. Desanges)

He (sc. Juba) puts forward the view that the distance from the cape of the Indians called in Greek the Narrow Head, and by others the Sickie (= Ras Banas, near Berenikê)], in a straight course past Burnt Island to the Islands Malichu is 1500 miles, from there to the place called Sceneos 225 miles, and on from there to the Adanu Islands 150 miles making 1875 miles to the open sea. (transl. Rackham slightly modified)

24. Pliny, 6, 151 (Juba, FGrH 275 F 33)

Insulae Chelonitis, Ichthyophagon multae, Odanda deserta, Basa, multae Sabaeorum. flumina Thanar, Amnum, insulae Doricae, fontes Daulotos, Dora, insulae Pteros, Labatanis, Coboris, Sambrachate et oppidum eodem nomine in continente. a meridie insulae multae, maxima Camari, flumen Musecros, portus Laupas, Scenitae Sabaei, insulae multae, emporium eorum Acila, ex quo in Indiam navigatur.

Chelonitis islands and a number of islands of the Fish-eaters, the uninhabited Odanda, Basa, a number of islands belonging to the Sabaei. The rivers Thanar and Amnum, the Islands Doricae, the Daulotos and Dora springs, the islands of Pteros, Labatanis, Coboris and Sambrachate with the town of the same name on the Mainland. Many islands to the southward, the largest of which is Camari, the river Musecros, Port Laupas; the Scenitae⁴⁰⁰ Sabaei, many islands and their emporium, Acila, from where one sails for India (transl. Rackham modified).

25. Pliny, 6, 154 (Juba, FGrH 275 F 33)

Promuntorium a quo ad continentem Trogodytarum L.

Then a cape⁴⁰¹ the distance between which and the mainland in the Trogodytae's territory is 50 miles. (transl. Rackham)

26. Pliny, 6, 163-164

Nunc reliquam oram Arabiae contrariam persequemur. Timosthenes totum sinum quadridui navigatione in longitudinem taxavit, bidui in latitudinem, angustias VII·D p.; Eratosthenes ab ostio [XII] in quamque partem; Artemidorus Arabiae latere [XVII]·L, Trogodytico vero [XI]·XXXVII·D p. Ptolomaida usque; Agrippa [XVII]·XXXII sine differentia laterum. Plerique latitudinem CCCCLXXV prodiderunt, faucesque hiberno orienti obversas alii IIII, alii VII, alii XII patere. (text edited by J. Desanges)

We will now follow along the rest of the the coast lying opposite to Arabia. Timosthenes estimated the length of the whole gulf at four days' sail, the breadth at two, and the width of the strait as 7½ miles; Eratosthenes makes the length of the coast on either side from the mouth of the gulf 1200 miles; Artemidorus gives the length of the coast on the Arabian side as 1750 miles and on the side of the Trogodytae country as far as Ptolemais 1137½

399 Desanges (c) 95: "Le locus appelé Sceneos semble identifiable (...): il s'agirait d'Ocelis".

400 Scenitae ("living in tents") generally applies to the nomadic Arabs of the northern Arabian Peninsula (e.g. Str. 16, 3, 1) and does not fit the Sabaeans *stricto sensu*.

401 This cape is situated in the region of the Larendani, Catabani and Gebbanitae, somewhere beyond Nagia and Thomna.

miles; Agrippa says that there is no difference between the two sides, and gives the length of each as 1732 miles. Most authorities give the breadth as 475 miles, and the mouth of the gulf facing south-east [Rackham: south-west] some make 4 miles wide, others 7 and others 12. (transl. Rackham)

Periplus maris Erythraei

27. P.m.r. 7

Ἡδη [δὲ] ἐπ' ἀνατολὴν ὁ Ἀραβικὸς κόλπος διατείνει καὶ κατὰ τὸν Αὐαλίτην μάλιστα **στενοῦται**. Μετὰ δὲ σταδίους ὥσει τετρακισχιλίους, κατὰ τὴν αὐτὴν ἡπειρον εἰς ἀνατολὴν πλεόντων, ἔστιν ἄλλα ἐμπόρια Βαρβαρικά, τὰ πέραν λεγόμενα (...) Πρῶτος μὲν ὁ λεγόμενος Αὐαλίτης, καθ' ὃν καὶ **στενώτατός** ἐστὶν **ἀπὸ τῆς Ἀραβικῆς εἰς τὸ πέραν διάπλους**. Κατὰ τοῦτον τὸν τόπον μικρὸν ἐμπόριον ἐστὶν ὁ Αὐαλίτης, σχεδίαις καὶ σκάφαις εἰς τὸ αὐτὸ προσερχομένων (...) Φέρεται δ' ἐξ αὐτῆς, ποτὲ καὶ τῶν βαρβάρων ἐπὶ σχεδίαις **διαφερόντων** εἰς τὴν ἀντικρὺς Ὀκην καὶ Μούζα, ἀρώματα καὶ ἐλέφας ὀλίγος καὶ χελώνη καὶ σμύρνα ἐλαχίστη, διαφέρουσα δὲ τῆς ἄλλης.

By now [sc. after *Adulis*] the Arabian Gulf trends eastward and at *Aualitês* is it at its narrowest. After about 4000 stades [from *Adulis*: Casson 115] on an eastward heading along the same coast, come the rest of the ports of trade of the *Barbaroi*, those called “far-side” (...). The first is called *Aualitês*; at it the crossing from Arabia to the other side is the shortest. At this place there is a small port of trade, namely *Aualitês*, where rafts and small crafts put in (*list of imported goods*). Exports from here, with the transport across to *Okêlis* and *Mouza* on the opposite shore at times carried out by the *Barbaroi* on rafts, are: aromatics, a little ivory, tortoise shell, a minimal amount of myrrh but finer than any other. (transl. L. Casson)

28. P.m.r. 25

Μετὰ δὲ ταύτην ὥσει τριακοσίους παραπλεύσαντες σταδίους, ἤδη **συνερχομένης** τε τῆς Ἀραβικῆς ἡπείρου καὶ τῆς πέραν κατὰ τὸν Αὐαλίτην Βαρβαρικῆς χώρας, **αὐλών**⁴⁰² ἐστὶν **οὐ μακρὸς**, ὁ **συνάγων** καὶ εἰς **στενὸν ἀποκλείων τὸ πέλαγος**, οὗ τὸν **μεταξὺ πόρον** ἐξήκοντα σταδίων **μεσολαβεῖ** νῆσος ἡ Διοδώρου· διὸ καὶ **ροώδης**, καταπνεόμενος ἀπὸ τῶν παρακειμένων ὄρων, ἐστὶν ὁ **κατ' αὐτὴν διάπλους**. Κατὰ **τοῦτον τὸν ἰσθμὸν** παραθαλάσσιός ἐστιν Ἀράβων κώμη τῆς αὐτῆς τυραννίδος Ὀκῆλις, οὐχ οὕτως ἐμπόριον ὡς ὄρμος καὶ ὕδρευμα καὶ πρώτη καταγωγὴ τοῖς ἔσω διαίρουσι.

About a 300-stade sail past this port (viz. *Mouza*), the Arabian mainland and the country of *Barbaria* across the water in the vicinity of *Aualitês* converge to form a strait, not very long, that contracts the water and close them into a narrow passage; here, in the middle of the channel, 60 stades wide, stands *Diodoros* Island. For this reason, and because a wind blows down from the mountain that lies alongside, the sail through along the island meets strong currents. Along this strait is *Okêlis*, an Arab village on the coast that belongs to the same province; it is not so much a port of trade as a harbor, a watering station, and the first place to put in for those sailing on. (transl. L. Casson)

29. P.m.r. 26

402 LSJ: “hollow between hills or banks, defile, glen” (Hdt. 7,128;129”); “channel, trench” (Hdt. 2,100,127, Xen. An. 2, 3,10); “strait”, (Μαιωτικὸς Aesch. Pr. 731; πόντια αὐ. sea-straits, channels, Soph.Tr.100 [lyr.]).

Μετὰ δὲ Ὀκηλιν, **ἀνοιγομένης** πάλιν **τῆς θαλάσσης** εἰς ἀνατολὴν καὶ κατὰ μικρὸν εἰς **πέλαγος ἀποφαινομένης**, ἀπὸ σταδίων ὡς χιλίων διακοσίων ἐστὶν Εὐδαίμων Ἀραβία, κόμη παραθαλάσσιος, βασιλείας τῆς αὐτῆς Χαριβαήλ, τοὺς ὅρμους μὲν ἐπιτηδεῖους καὶ ὑδρεύματα γλυκύτερα [καὶ] κρείσσονα τῆς Ὀκίλεως ἔχουσα, ἥδη δὲ ἐν ἀρχῇ κόλπου κειμένη τῷ τὴν χώραν ὑποφεύγειν. Εὐδαίμων δ' ἐπεκλήθη, πρότερον οὕσα πόλις, ὅτε, μήπω ἀπὸ τῆς Ἰνδικῆς εἰς τὴν Αἴγυπτον ἐρχομένων μηδὲ ἀπὸ [τῆς] Αἰγύπτου τολμώντων **εἰς τοὺς ἔσω τόπους διαίρειν**, ἀλλ' ἄχρι ταύτης παραγνομένων, τοὺς παρ' ἀμφοτέρων φόρτους ἀπεδέχετο, ὥσπερ Ἀλεξάνδρεια καὶ τῶν ἔξωθεν καὶ τῶν ἀπὸ τῆς Αἰγύπτου φερομένων ἀποδέχεται. Νῦν δὲ οὐ πρὸ πολλοῦ τῶν ἡμετέρων χρόνων Καῖσαρ αὐτὴν κατεστρέψατο.

Beyond *Okêlis*, with the water again opening out towards the east and little by little revealed to be open sea, about 1200 stades distant is *Eudaimôn Arabia*, a village on the coast belonging to the same kingdom, Charibaêl's. It has suitable harbors and sources of water much sweeter than at *Okêlis*. It stands at the beginning of a gulf formed by the receding of the shore. *Eudaimôn Arabia*, a full-fledged city in earlier days, was called *Eudaimôn* when, since vessels from India did not go on to Egypt and those from Egypt did not dare sail to the places further on but came only this far, it used to receive the cargoes of both, just as Alexandria receives cargoes from overseas as well from Egypt. And now, not long before our time, Caesar sacked it. (transl. L. Casson)

Ptolemy

30. Ptolemy, *Geographia*, 1, 15, 11

(...) Πτολεμαῖδος δὲ καὶ τοῦ Ἀδουλιτικοῦ κόλπου <ἀναλικωτέρα ἐστὶ> **τὰ στενὰ** τὰ κατὰ Ὀκηλιν τὴν χερσόνησον καὶ Δείρην σταδίοις τρισχλίοις πεντακοσίοις

The straits on *Okêlis* peninsula and *Deirê* are 3500 stadia east of Ptolemaïs and the Adoulitikos Gulf.

31. Ptolemy, *Geographia*, 4, 7, 9-10

Μετὰ **τὰ στενὰ** ἐν τῇ Ἐρυθρᾷ θαλάσσει, Δείρη πόλις ἐν **ἄκρᾳ**, οδ' ☉' ια. Εἴτα ἐν τῷ Ἀυαλίτῃ κόλπῳ, Ἀυαλίτης ἐμπόριον, οδ' η γ' ιβ · Μαλαῶ (ἢ Μάλεως) ἐμπόριον, οη ς.

Past the strait of the Erythraean sea *Deirê*, a town located on a cape: 73° 40' – 10° 40'. Beyond, in the Gulf *Aualitês*, the port of trade of *Aualitês*: 74° - 8° 35'; the port of trade of *Malaô*: 75° - 6° 30'.

32. Ptolemy, *Geographia* 6, 7, 7-8

Ὀκηλὶς ἐμπόριον, οε ιβ · Παλίνδρομος **ἄκρᾳ**, οδ' ☉' ια γο' · Ἐρυθρᾶς θαλάσσης μετὰ **τὰ στενὰ**, Ποσειδῖον ἄκρον οε ια ·

The port of trade of *Okêlis*: 75° 12° ; the cape *Palindromos* ("going back again"): 74°30' 11°40'. Past the strait of the Erythraean sea, the cape *Poseidon*: 75° 11°30'.

7.2. Maps

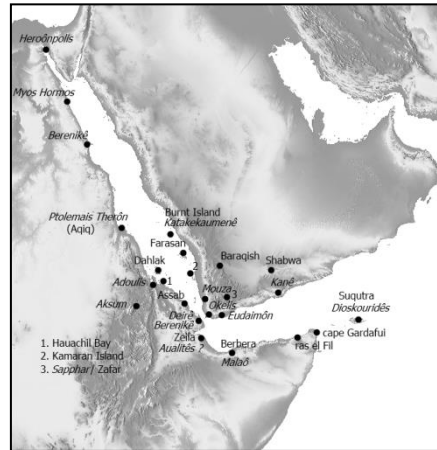


Fig. 1: the Arabian Gulf and the Horn of Africa

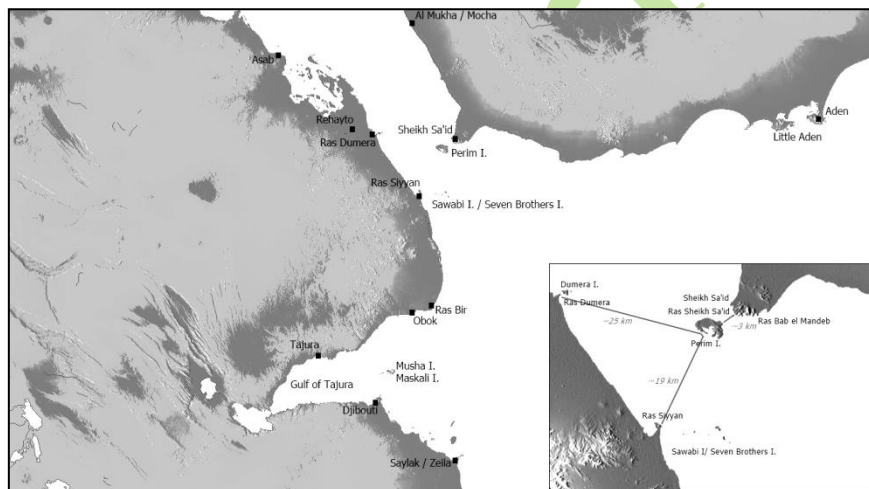


Fig. 2: the Bab al-Mandab area



Fig. 3: the local trade network

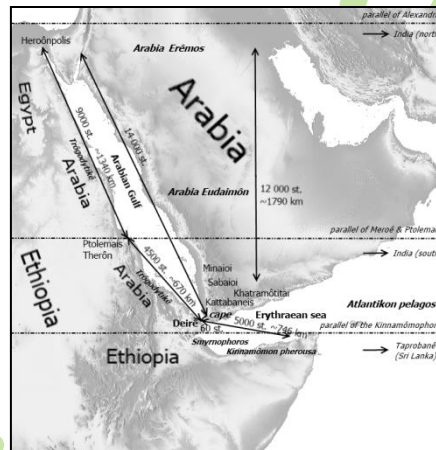


Fig. 4: Deirê in Eratosthenes' map

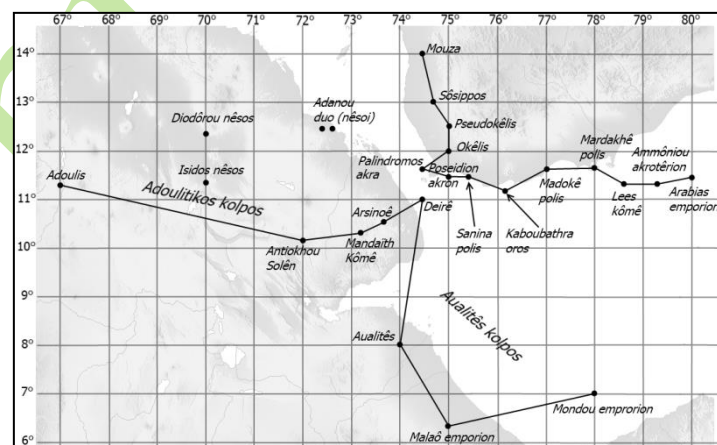


Fig. 5: Deirê in Ptolemy's map. (N.B.: There is no correspondence between Ptolemy's coordinates and the scale of the map in the background.)

7.3. Vocabulary relating to the strait (synoptic table)

	<i>stena</i> and other words relating to the strait - landmarks	inside / beyond - interval	widening / narrowing	crossing - sailing
Eratosthenes	<i>stena - akra</i>	<i>diarma to metaxu tôn êpeirôn-</i>	<i>sunagetai</i>	<i>diabasis / diabas - diaplous</i>
Agatharchides	<i>stena - stoma</i>	<i>entos (tôn stenôn) - ekstos (tou kolpou)</i>	<i>sunagôgê – perikleietai – anestomatai - sugkleietai</i>	<i>ekploun</i>
Artemidorus	<i>stena - to antikeimenon akroterion</i>	<i>entos tôn stenôn - ekstos (tôn stenôn)</i>		<i>pleontes dia</i>
Strabo	<i>stena – stoma - stena apo tou stomatos</i>			<i>huperkuptein exô tôn stenôn - kataktheisin eis ton kolpon</i>
Pliny the Elder	<i>fauces - angustiae - ostium</i>			
<i>Periplus m. r.</i>	<i>isthmon - ton metaxu poron - mesolabei (nêsos) - aulôn</i>		<i>stenoutai – sunerkhomenês - sunagôn (to pelagos) - apokleiôn eis stenon (to pelagos) - anoigomenês tês thalassês - apophainomenês (eis pelagos)</i>	<i>diaplous (stenotatê.) - diapherontôn (eis tèn antikrus) - eis tous eisô topous diairein - diaplous - eis tous esô topous diairein</i>
Ptolemy	<i>stena - akra / akron</i>			

7.4. The width of the strait (synoptic table)

Ancient figures (original figures are printed in bold)				
Eratosthenes	[2; 4] (Timosthenes)	~11 km	60 st.	7 ½ R.m. ⁴⁰³
	[3]	~37 km	200 st.	25 R.m.
Agatharchides	[9]	~3 km	16 st.	2 R.m.
Pliny the Elder	[26]	~6 km	32 st.	4 R.m.
	[26]	~10.3 km	56 st.	7 R.m.
	[26] (Timosthenes)	~11 km	60 st.	7 ½ R.m.
	[12]	~17.7 km	96 st.	12 R.m.
	[25] (Juba?)	~74 km	400 st.	50 R.m.
<i>Periplus maris Erythraei</i>	[28]	~11 km	60 st.	7 ½ R.m.
Actual figures				
The Great Strait (between the African coast and Perim)		~18 km	~97 st.	~12 R.m.
The Small Strait (between Perim and the Arabian coast)		~3 km	~16 st.	~2 R.m.
The Strait		~23 km	~124 st.	~15 ½ R.m.

403 According to Desanges's conversion ratio (Desanges (c) 39).

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