AGATHARCHIDES
OF CNIDUS

ON THE ERYTHRAEAN SEA

Translated and edited by
STANLEY M. BURSTEIN

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<table>
<thead>
<tr>
<th>Fragment</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>76b.</td>
<td>Diodorus 3.35.6</td>
</tr>
<tr>
<td>77a.</td>
<td>Photius, Cod. 250.76, 455b–456a</td>
</tr>
<tr>
<td>77b.</td>
<td>Diodorus 3.35.7–9</td>
</tr>
<tr>
<td>77c.</td>
<td>Strabo 16.4.16, C775</td>
</tr>
<tr>
<td>78a.</td>
<td>Photius, Cod. 250.77, 456a</td>
</tr>
<tr>
<td>78b.</td>
<td>Diodorus 3.35.10</td>
</tr>
<tr>
<td>78c.</td>
<td>Strabo 16.4.16, C775</td>
</tr>
<tr>
<td>79.</td>
<td>Aelian, NA 5.27</td>
</tr>
<tr>
<td>80a.</td>
<td>Photius, Cod. 250.78, 456a</td>
</tr>
<tr>
<td>80b.</td>
<td>Diodorus 3.36–37.9</td>
</tr>
<tr>
<td>80c.</td>
<td>Strabo 16.4.16, C775</td>
</tr>
<tr>
<td>81.</td>
<td>Diodorus 3.38.1–5</td>
</tr>
<tr>
<td>82a.</td>
<td>Photius, Cod. 250.80, 456a</td>
</tr>
<tr>
<td>82b.</td>
<td>Diodorus 3.38.5–39.1</td>
</tr>
<tr>
<td>82c.</td>
<td>Strabo 16.4.5, C769</td>
</tr>
<tr>
<td>83a.</td>
<td>Photius, Cod. 250.81, 456b</td>
</tr>
<tr>
<td>83b.</td>
<td>Diodorus 3.39.1–2</td>
</tr>
<tr>
<td>83c.</td>
<td>Strabo 16.4.5, C769</td>
</tr>
<tr>
<td>84a.</td>
<td>Photius, Cod. 250.82, 456b</td>
</tr>
<tr>
<td>84b.</td>
<td>Diodorus 3.39.3–9</td>
</tr>
<tr>
<td>84c.</td>
<td>Strabo 16.4.5–6, C769–770</td>
</tr>
<tr>
<td>85a.</td>
<td>Photius, Cod. 250.83, 456b–457a</td>
</tr>
<tr>
<td>85b.</td>
<td>Diodorus 3.40.1–9</td>
</tr>
<tr>
<td>85c.</td>
<td>Strabo 16.4.7, C770</td>
</tr>
<tr>
<td>86a.</td>
<td>Photius, Cod. 250.84, 457a</td>
</tr>
<tr>
<td>86b.</td>
<td>Diodorus 3.41.1–4</td>
</tr>
<tr>
<td>87a.</td>
<td>Diodorus 3.42.1–4</td>
</tr>
<tr>
<td>87b.</td>
<td>Strabo 16.4.18, C776</td>
</tr>
<tr>
<td>88.</td>
<td>Photius, Cod. 250.86, 457a</td>
</tr>
<tr>
<td>89a.</td>
<td>Photius, Cod. 250.87, 457a–457b</td>
</tr>
<tr>
<td>89b.</td>
<td>Diodorus 3.42.5</td>
</tr>
<tr>
<td>89c.</td>
<td>Strabo 16.4.18, C776</td>
</tr>
<tr>
<td>90a.</td>
<td>Diodorus 3.43.1–5</td>
</tr>
<tr>
<td>90b.</td>
<td>Strabo 16.4.18, C777</td>
</tr>
<tr>
<td>91a.</td>
<td>Photius, Cod. 250.89, 457b</td>
</tr>
<tr>
<td>91b.</td>
<td>Diodorus 3.43.6–7</td>
</tr>
<tr>
<td>91c.</td>
<td>Strabo 16.4.18, C777</td>
</tr>
<tr>
<td>92a.</td>
<td>Photius, Cod. 250.90, 457b</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fragment</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>92b.</td>
<td>Diodorus 3.44.1–2</td>
</tr>
<tr>
<td>92c.</td>
<td>Strabo 16.4.18, C777</td>
</tr>
<tr>
<td>93a.</td>
<td>Photius, Cod. 250.91, 457b</td>
</tr>
<tr>
<td>93b.</td>
<td>Diodorus 3.44.3</td>
</tr>
<tr>
<td>93c.</td>
<td>Strabo 16.4.18, C777</td>
</tr>
<tr>
<td>94a.</td>
<td>Photius, Cod. 250.92, 457b</td>
</tr>
<tr>
<td>94b.</td>
<td>Diodorus 3.44.4</td>
</tr>
<tr>
<td>94c.</td>
<td>Strabo 16.4.18, C777</td>
</tr>
<tr>
<td>95a.</td>
<td>Diodorus 3.44.4–45.2</td>
</tr>
<tr>
<td>95b.</td>
<td>Strabo 16.4.18, C777</td>
</tr>
<tr>
<td>96a.</td>
<td>Photius, Cod. 250.94, 457b</td>
</tr>
<tr>
<td>96b.</td>
<td>Diodorus 3.45.3</td>
</tr>
<tr>
<td>97a.</td>
<td>Photius, Cod. 250.95, 457b–458a</td>
</tr>
<tr>
<td>97b.</td>
<td>Diodorus 3.45.3–5</td>
</tr>
<tr>
<td>97c.</td>
<td>Strabo 16.4.18, C777</td>
</tr>
<tr>
<td>98a.</td>
<td>Photius, Cod. 250.96, 458a</td>
</tr>
<tr>
<td>98b.</td>
<td>Diodorus 3.45.6–8</td>
</tr>
<tr>
<td>98c.</td>
<td>Strabo 16.4.18, C777–778</td>
</tr>
<tr>
<td>99a.</td>
<td>Photius, Cod. 250.97, 458a–458b</td>
</tr>
<tr>
<td>99b.</td>
<td>Diodorus 3.46.1–5</td>
</tr>
<tr>
<td>99c.</td>
<td>Strabo 16.4.19, C778</td>
</tr>
<tr>
<td>100a.</td>
<td>Photius, Cod. 250.98, 458b</td>
</tr>
<tr>
<td>100b.</td>
<td>Diodorus 3.47.1–2</td>
</tr>
<tr>
<td>100c.</td>
<td>Strabo 16.4.19, C778</td>
</tr>
<tr>
<td>101a.</td>
<td>Photius, Cod. 250.99, 458b</td>
</tr>
<tr>
<td>101b.</td>
<td>Diodorus 3.47.3</td>
</tr>
<tr>
<td>101c.</td>
<td>Strabo 16.4.19, C778</td>
</tr>
<tr>
<td>102a.</td>
<td>Photius, Cod. 250.100, 458b–459a</td>
</tr>
<tr>
<td>102b.</td>
<td>Diodorus 3.47.4</td>
</tr>
<tr>
<td>102c.</td>
<td>Strabo 16.4.19, C778</td>
</tr>
<tr>
<td>103a.</td>
<td>Photius, Cod. 250.101, 459a</td>
</tr>
<tr>
<td>103b.</td>
<td>Strabo 16.4.19, C778</td>
</tr>
<tr>
<td>104a.</td>
<td>Photius, Cod. 250.102, 459a–459b</td>
</tr>
<tr>
<td>104b.</td>
<td>Diodorus 3.47.8–9</td>
</tr>
<tr>
<td>104c.</td>
<td>Strabo 16.4.19, C778</td>
</tr>
<tr>
<td>105a.</td>
<td>Photius, Cod. 250.103, 459b</td>
</tr>
<tr>
<td>105b.</td>
<td>Diodorus 3.47.8–9</td>
</tr>
<tr>
<td>106a.</td>
<td>Photius, Cod. 250.104, 459b</td>
</tr>
</tbody>
</table>
AGATHARCHIDES OF CNIDUS: ON THE ERYTHRAEAN SEA

Fragment Source
106b. Diodorus 3.48.1–2
107a. Photius, Cod. 250.105, 459b–460a
107b. Diodorus 3.48.3–4
108. Diodorus 3.48.5
109. Photius, Cod. 250.107, 460a
110. Photius, Cod. 250.108, 460a
111. Photius, Cod. 250.109, 460a–460b
112. Photius, Cod. 250.110, 460b

APPENDIX: UNPLACED FRAGMENTS

Fragment Source
1. Plutarch, Quaestiones Convivales 8.9.16
2. Pliny, HN 8.24–5
3. Strabo 16.4.5, C769
4. Strabo 16.4.7, C770

SELECT BIBLIOGRAPHY

1. ANCIENT SOURCES: TEXTS AND TRANSLATIONS

Frisck, H., ed., Le Périple de la Mer Érythrée (Göteborg, 1927).
of the capital of the Sabaeans to Mariaba in Fragment 101c. Others, however, were more important. First, since Artemidorus' primary interest in the *On the Erythraean Sea* was its value as a source of geographical information, he also omitted all of its programmatic and narrative sections. Second, he completed the partial description of the African coast of the Red Sea in Book 5 of the *On the Erythraean Sea* by interpolating additional material drawn both from the first book and other now unidentifiable sources. Third and most important, Artemidorus abandoned the thematic organization of Agatharchides' description of the African coasts and hinterlands of the Red Sea, inserting instead the information he culled from the ethnographic and zoological sections of the *On the Erythraean Sea* at various points in his coastal description of the west coast of the Red Sea. For these reasons, thereafter, the value of Strabo's epitome to the editor of the *On the Erythraean Sea* is limited primarily to the fact that it preserves information missing in the other two abridgements and occasionally confirms the Agatharchidean origin of passages attested otherwise only in Diodorus.

The format of the translation reflects these facts. Its basic principles are two: first, to give priority to texts based on direct rather than indirect knowledge of the *On the Erythraean Sea*; and, second, to provide to the extent possible on the same page the full evidence concerning any particular passage. Thus, in those cases in which a passage is preserved only by Photius or Diodorus it is printed without qualification. If different versions of the same passage are found in both Photius and Diodorus, then that of Photius is printed in the left column and that of Diodorus in the right. Finally, passages for which Strabo provides either the only evidence or confirmation of the versions of Photius or Diodorus are placed at the foot of the page and identified with superscript letters. For the reader this format means that not only are the several

1 Leopoldi, pp. 13-17, pointed out that Artemidorus drew on Book 1 of the *On the Erythraean Sea* for his description of the coast from Arsinoe to Ptolemais of the elephant hunts and an unknown *Periplus* for a series of references to islands, coastal stations and hunting grounds south of Ptolemais mentioned in Strabo 16.4.9-10, C771 and 16.4.14, C773.

2 For examples see Fragments 88c, 62c and 103b.

3 E.g. Fragment 80.

4 The only exceptions are Fragments 71b and 79, the source of both of which is Aelian.
other animals of equal size, but that they even join battle with
elephants. They do this by entwining their coils around their
legs and hindering their natural movement. Then, having
raised their necks above the trunk, they position their head
opposite the elephants' eyes and deprive them of sight by shoot-
ing flashes like lightning by means of the fiery character of
their eyes. Then hurling them to the ground, they eat the flesh
of their defeated victims.

AFRICAN COAST OF THE RED SEA

81. Now that we have examined in sufficient detail Aethiopia and
Trogodytice and the adjacent territory as far as the region that is
uninhabited because of the heat and, in addition, the coast of the
Erythraean Sea and the Atlantic ocean which faces southward,66
we shall describe the remaining portion, I mean, the Arabian Gulf, on
the basis of information that we have obtained from the royal
hypomnemata at Alexandria and that we have learned from eyewitness-
sees... .

The Arabian Gulf, as it is called, opens into the ocean that lies in the
south. In length the gulf extends for very many stades67 and its

1 Pliny reports a number of similar stories of snakes killing elephants in *HN* 8.33–4; and a python tripping an elephant is depicted on a late Roman mosaic discovered at Carthage (*Toynbee, p. 26*). For this theme at Meroe see Inge Hofmann, *Zur Kombination von Elefant und Riesenschlange in Altägypt*, *Anthropos*, LV (1970), pp. 623–6.
2 The Persian Gulf and Indian Ocean, the latter viewed as part of a single ocean encircling the earth (cf. Strabo 1.4.6, 64, for this usage of the term Atlantic Ocean).
3 Omitted is a promise by Diodorus to summarize new information concerning Britain when he narrates the campaigns of Julius Caesar. For the *hypomnemata* and eyewitnesses’ introduction.
4 For the various ancient estimates of the length of the Red Sea from Suez to Bab al-
-Mandab, which range from a low of 10,400 stades (=1,300 miles) by Ptolemy (*Geography* 5.17) to a high of 15,000 stades (=1,875 miles) by Strabo (1.2.28, C35) see Müller, *GGM*, I, 165. The actual length is 1,380 miles (*Western Arabia*, p. 12).

innermost recess1 is bounded by the furthest regions of Arabia and
Trogodytice. Its breadth at the mouth and the innermost recess is
about sixteen stades.2 The crossing from the harbour of Panormus3
to the opposite mainland is a day’s run for a warship. Its greatest
width is at Mount Tauricus4 and the offshore island of Maria,5
where the two mainlands are not mutually visible. But from this
point its breadth steadily decreases and contracts as far as the mouth.
At many points in the course of the sailing route along the coast there
are long islands divided by narrows straits and strong and turbulent
currents.

82a. Since there are many places that are remarkable and
situated far off the beaten path... .

82b. Such is the general character of the gulf. Beginning
from the furthest points of the

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1 From Fragment 82 it is clear that 'innermost recess' is *Agatharchides’ term for the northernmost portion of the Gulf of Suez.
2 I.e. two miles which is far short of the actual breadth of sixteen miles (*Western Arabia*, p. 58) as are the estimates of sixty stades (=7.5 miles) by Eratosthenes as reported by Strabo (16.4.4, C769) and the author of the *Periplus of the Erythraean Sea*, 23 and the seven and a half miles of Pliny (*HN* 6.170).
3 The statement that the distance from Panormus to the Arabian coast was equivalent to one day’s sail for a warship is useless for reconstructing *Agatharchides’* views concerning the breadth of the Red Sea for two reasons: first, the location of Panormus is unknown (Müller’s [*GGM*, I, 165–6] equation of Panormus with Myus Hormus is unconvincing); and second, no consistent ancient rule survives for converting distances stated in terms of days sail into stades (cf. Bunbury, I, 544–6).
4 Müller, *GGM*, I, 165–6, plausibly suggested that the otherwise unattested Mount Tauricus (τό τούρχιον ὄρος) was a corruption of τούρχιον νόον, i.e., the Tauri (cf. Fragment 86). This suggestion is strengthened by *Agatharchides’* reference to the coast narrowing beyond Mount Tauricus, clearly the same eastward trend of the coast as that mentioned in Fragment 84. Woell’s objection, pp. 190–1, that the Red Sea’s widest point is as Massawa (c. 230 miles; cf. *Western Arabia*, p. 58) and not Suskin is not compelling in view of *Agatharchides’* ignorance of the coast of Eritrea.

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182c. Then... . Arainoe, then springs of hot water that are bitter and brackish and pour out from a certain high cliff into the sea.

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183
track, I shall discuss those that are worthy of notice.

Immediately after Arsinoe as one sails along with the coast on the right hand side streams of hot water are encountered which pour out from a high cliff through several channels into the sea. The channels are narrow, and the water is not sweet but brackish and salty as it has a source of that kind.

1 Agatharchides' limitation of his description to highlights, which has been noted by all commentators (e.g. Müller, GCM, I, 166; Woelk, pp. 191–2; Fraser, I, 544), applies primarily to his account of the African coast of the Red Sea, probably because, as he notes in Fragment 86, he had already dealt in detail with Ptolemaic activity along that coast elsewhere in the On the Erythraean Sea. 2 Named after Arsinoe II, the queen and sister-wife of Ptolemy II, Arsinoe was founded in 270/69 n.c. on the site of an earlier Egyptian settlement named Kemouer near the southern end of the canal that connected the Nile with the Gulf of Suez via the Wadi Tumilat and the Bitter Lakes and served as a nodal point for various roads entering Egypt from the east (Naville, 'Steles', p. 72, lines 17–20; Pliny,HN6.167; Oertel, pp. 25–6). Its exact location, however, is uncertain. Agatharchides and Strabo (17.1.25, C804), who says it was also called Cleopatra, perhaps having been renamed by Cleopatra VII (51–30 n.c.), seem to place it at the head of the Gulf of Suez. This has occasionally led to its being identified with Suez, but more probably it should be placed either north of Suez at Kabrit on the southwest shore of the Great Bitter Lake or somewhere east of the Great Bitter Lake to the Gulf of Suez (cf. Oertel, ibid.; Bernard Bruyère, Fouilles de Clyma-Qatuss (Suez) 1930–1932 [Cairo 1966], pp. 17–21; Woelk, pp. 192–3).

3 On the west coast of the Gulf of Suez the only possible identification is with the sulphur springs at Ayn Sukhna (29°35′N, 32°20′E; Western Arabia, p. 86). The description, however, fits better the hot springs at Jebel Hammam Pamun (Bath of Pharaoth), 3 miles south of Ras Maleh (28°12′N, 32°55′E; cf. Wellsted, 2.34–5; Western Arabia, p. 79) where there is a 'precipitous cliff... near the sea' and 'hot springs gush out near the foot of the cliff'. Most likely Agatharchides mistakenly interpolated in his account of the Egyptian side of the Gulf of Suez information concerning the west coast of the Sinai Peninsula (cf. Müller, GCM, I, 167, for discussion of a similar error).

Then after the lake one encounters the Nile which flows through some gaps into a deep recess.

83a. Near the lake, in the midst of a broad plain is a red mountain which is distinguished by no other peculiarity except that it reflects this colour so strongly from the topmost point of its peak that the eyes of those who stare at it intently are generally harmed. Immediately following is a large harbour which previously was called Myus.

83b. Passing by these streams one reaches a large plain above which rises a mountain that is red in colour and impairs the sight of persons who stare at it for a long time. At the edge of the skirts of the mountain lies a harbour which has a twisting entrance and is named Aphrodite. Above this harbour are three islands, two of which are full of olive trees and

1 This passage, which is preserved only by Photius, has been condensed to the point of unintelligibility. No lake is mentioned in the fragments, and the Nile does not reach the Gulf of Suez. Probably, as Woelk, p. 194, suggested, the reference is to a deep bay into which the wadi drains that could be mistaken for a branch of the Nile such as al-Zayt Bay (entrance 27°46′N, 33°33′E) or al-Jamsa Bay (entrance 77°14′N, 13°36′E). Certainty, however, is impossible.

2 Red granite mountains are common along the coast of the Red Sea (Schweinfurth, 'Kossir', p. 135; H. Kees, 'Mitodes Mons', RE, XV, 2 [1932] cols. 1707–8). Identification of the particular mountain question is, however, not possible. Although, as Wellsted, II, 125n, noted, no such mountain exists in the immediate vicinity of Abu Shar, such do exist nearby. Thus, Jules Couy, 'Le Route de Myos Hormos et les carrières de porphyre rouge', BIFAO, VII (1910), p. 24, reported such a mountain a little north of Abu Shar. Wilkinson, 'Notes', p. 51, suggested that the reference might be to the Zayt mountains while Murray, 'Trogodytica', p. 32, identified it with the red granite Shayb al-Banat, 7217 feet high, the tallest of the Red Sea hills north of the Sudan border, southwest of Myos Hormos, an identification that is supported by Pliny's reference (HN 6.168) to a Mons Eos, 'Dawn Mountain', immediately after mentioning Myos Hormos.

3 Cf. Wellsted, II, 124–5, who noted that H.M.S. Palmarus entered Abu Shar harbour by a winding and intricate passage...
thickly shaded while one is deficient in the number of the trees just mentioned but abounds with the birds called Guinea Fowl.

1 Certainly 'Mussel Harbour' and not 'Mouse Harbour'. Myus Hormus together with Berenice (23°56'N, 35°29'E) at the northern end of Foul Bay and Copitus and Apollonia on the Nile and the desert roads linking them formed a quadrilateral characterized by Strabo (17.1.45, C815) as an 'isthmus' through which by the late first century B.C. passed the bulk of commerce between the Nile and the Red Sea. Myus Hormus' non-royal name and the silence concerning the port in the Pithom Stele suggests that it was not an official Ptolemaic foundation, but one that developed because the experience of sailors along the Egyptian coast of the Red Sea demonstrated its usefulness as a port. Although various locations have been proposed as the site of Myus Hormus including Ras Abu Soma (Müller, GGM, I, 167-9; Brumber, I, 607), Safaga (Jules Couyart, 'Ports Greco-Romaines de la Mer Rouge et grandes routes du desert Arabique', Comptes rendus de l'Academie des Inscriptions et Belles-Lettres [1910], pp. 527-8) and Kosseir (Desanges, Recherches, pp. 270-1), Bir Abu Shar (27°22'N, 33°41'E; cf. Wilkinson, 'Notes', p. 50-1; Wellstead, II, 123-5; II Kee, 'Myus Hormos', RE, XVI, I [1935], cols. 1081-3; Murray, 'Trogodytis', p. 32; and Woelk, pp. 195-6) has been generally considered the site that best meets the indications of the ancient texts, namely: (1) 1,800 stades (=225 miles from Berenice (Periplus 1:2) nearby Red Mountain (cf. above note 13); (3) a water source ca. 3 miles from the site at Bir Abu Schar which could be identified with Pliny's fons Tadros (HN 6.168); and, most important, (4) three nearby offshore islands (cf. below note 16). The only visible traces of ancient occupation at Abu Shar, however, are the ruins of a small late Roman fort for which trial excavations conducted by Professor S. Sidebotham in the summer of 1987 suggest a fifth to seventh century A.D. date (personal communication). For descriptions of the site see Wilkinson, 'Notes', ibid. David Meredith, 'The Roman Remains in the Eastern Desert of Egypt', JEA, XXXVIII (1952), pp. 102-4; L. A. Tregenna, The Red Sea Mountains of Egypt (London, 1955), pp. 89-108; and Murray, 'Trogodytis', ibid.

2 This name for Myus Hormus is not attested elsewhere. Müller (GGM, I, 169) suggested that the name actually should be connected with the island of Iambe (cf. below note 16) which Ptolemy (Geography 4.3.77) refers to as 'Apbrodite Island'. Equally possible, since Arsinöe II was posthumously identified with Aphrodite as protectress of sailors (Fraser, I, 239), the name may indicate a later official attempt to regularize the status of Myus Hormus.

3 Probably the islands of Shadwan, Tawaya and Jubal (27°39'N, 33°48'E). According to Pliny (HN 6.168) their ancient names were Saphirne, Sykatalia and Laimbe.

4 The shora (cf. Fragment 43a). G. W. Murray, The Roman Roads and Stations in the Eastern Desert of Egypt', JEA, XI (1925), p. 141, noted that the islands were largely denuded when he visited them but that patches of shora still existing on them suggested that they may have been more densely covered with the tree in earlier times.

that are called Guinea Fowl. Near these places is a gulf which people call Foul Bay. Sailing past it one encounters an island situated out to sea. It is about eighty stades in length and is called Snake Island. It previously

4b. After these islands there is a large gulf which is called Foul Bay, and near it there is an extremely long peninsula. Across its neck, which is narrow, people drag ships to the sea on the opposite
supported in great numbers all sorts of serpents, but in our
time it is free of them. On this
island is also found the stone
called Topaz. 1 This is a stone
that is transparent, similar to
glass and has a pleasant golden
appearance. The inhabitants of
the island, who guard and col-
clect the stone by royal decree,
gather it in the following way.

One who has passed by
these places encounters an
island that lies some distance
out to sea and which extends for
eighty stades in length. It is
called Snake Island; and in
ancient times it was full of all
types of fearful snakes from
which it gained its name. Later,
however, the kings in Alex-
andria strove so vigorously to
reclaim the island that not one
of the animals that previously
existed there is still to be seen
on it.

1 References to its green (actually yellowish-green) colour in Pliny (HN 37.108) and Epiph. pp. 105–9, identify the stone they call topaz as peridotite which is found in the southeastern portion of Gazirat Zabarjad (Bonatti, 'Zabarjad', p. 687; 'Peridotites from the island of Zabarjad (St. John), Red Sea: Petrology and Geochemistry', Journal of Geophysical Research, XCI, B1 [1986], pp. 602–3). The mines were visited and described by Wellsted, II, 310–11, in the early nineteenth century. Agatharchides' description of its nocturnal brilliance, however, suggests that he may have conflated in his account information concerning peridotite with data regarding another mineral found in close association with it on Zabarjad and also mined by the Ptolemies under the name risi (Pliny, HN 37.24, 136–7; Bonatti, 'Zabarjad', p. 688), namely, canarite, a silicate of sodium, magnesium and calcium which forms large hexagonal crystals and was noted for the spectacular visual effects that could be produced with it under darkened conditions.

The meaning of the term Topazus is unclear. Pliny quotes Juba (HN 37.108 = FGrH, 275 F 75) as saying 'topazus means 'to seek' in the language of the Troglodytes, sailors
often having to search for the island because it was always fog-bound. On the basis of this text Schaefer, p. 100, and Wainwright, 'Zebegard', p. 32, n. 1, proposed an Old Nubian etymology for topazus, deriving it from a conjugated form of a verb tabi, 'to seek'. The word, however, is not securely attested, as Professor Gerald Browne has informed me, nor is there evidence suggesting that the Troglodytes were Nubian speakers. More probable, therefore, is Desanges' (Sources de Plinie, p. 283, n. 29) suggestion that Pliny misunderstood Juba who followed the familiar ancient practice of
exploiting superficial similarities of sound to suggest Greek etymologies for non-Greek names, topazus being merely the Greek infinitive to topazov, 'to guess or conjecture'.

2 Ras Banas peninsula (23°N, 35°47'E). The practice of dragging ships across a
narrow peninsula or isthmus is well attested in antiquity as a means of shortening sailing
distances, in this case, probably for ships bound for Berenice from the north because of
the prevailing northerly winds in this portion of the Red Sea. The best known example
is the archaic shipway across the isthmus of Corinth (the so-called dikos; cf. J. Wiseman,
The Land of the Ancient Corinthians [Goteborg, 1978], p. 45) of which there is
still preserved a stretch of the ancient roadway together with the ruts that guided the
wagons used to transport the ships.

At night they traverse the
island area by area with bowls
of various sizes. By day the
stone, overwhelmed by the
brightness of the daylight, is
invisible among the rocks be-
cause of the glare. But when
darkness falls, wherever it is, it
shines in all directions. When a
guard observes one, he covers
the gleaming stone with a bowl
that matches in size the pheno-
menon seen by him and serves
as a marker. Then, when day
comes, he cuts out a circle of
rock equal in size to the afore-
mentioned bowl and turns it
over to skilled workmen who are
able to polish it. 1

1 The island is barren and without sources of fresh water (Western Arabia, p. 106). The miners were probably free men performing a liturgy, that is, a compulsory public service (Fitzler, pp. 50–1) rather than convicts as suggested by Wellsted, II, 311). The security measures described by Agatharchides are similar to those attested for other Ptolemaic monopolies involving the production and processing of valuable goods (cf. Pliny, HN 15.59 on the processing of aromatic substances at Alexandria). Presumably, after preliminary cleaning and polishing the stones were sent to Berenice for transshipment to Alexandria via Coptus. The use of the imperfect tense by Strabo in Fragment 82c suggests that organized royal exploitation of Gazirat Zabarjad's mineral deposits had ceased by the early first century A.D.
The aforementioned stone, however, which is found among the rocks, is invisible during the day because of the glare since it is overwhelmed by the brightness of the sun; but when night falls, it shines in the dark and is visible from afar wherever it may be. The island’s guards, who have divided up these places by lot, go the rounds and cover a stone that has become visible with a bowl the same size as the glowing stone, which serves as a marker. In the daytime they then go around and cut away the marked piece of rock and turn it over to the craftsmen who are able to polish it properly.

85b. After sailing by these places one comes to a section of coast inhabited by many tribes of Pisheaters and numerous Troglodyte nomads. In these regions there are all kinds of mountains with their own peculiarities as far as the harbour called Soteria, which received this name from the first Greek sailors to find safety there. After these areas the gulf begins to narrow and to turn towards Arabia. The nature of the land and the sea take on a different character also because of the peculiarity of the region. For the mainland is observed to be lowlying without high ground rising above it anywhere; and the sea, being all shalloes, is found to be not more than three fathoms in depth and extremely green in colour. People say this phenomenon does not occur because the nature of the water is of such a sort but as a result of the

The disasters that befall the elephant transports, however, arouse great pity for their victims from spectators. For sudden waves impale the ships on

\footnote{Fragment 86b makes it clear that the reference is to the coast after Soteria/Suakin, which is low and sandy as far as Ras Ans (18°25'N, 38°08'E; \textit{Western Arabia}, p. 113). Cf. the similar remarks of the sixteenth century \textit{A.D.} Portuguese navigator Don John de Castro (B. Kennedy Cooke, 'The Red Sea Coast in 1540', \textit{SNR}, XVI (1933), p. 153) on dangers of the waters near Suakin: 'For strength, the City seems naturally well secured; by the many shoals, islands, Rocks, Sandbanks, and intricate channels, that lie for sixteen leagues about it; which makes the approach by Sea very dangerous and terrible to Navigators. . . .

\textit{Salvation Harbour.} Probably to be identified with Ptolemy’s (\textit{Geography} 4.7.6) Harbour of the Saviour Gods (\textit{theon soteron limen}), i.e., Ptolemy I and Berenice who were posthumously deified by Ptolemy II in the 270s B.C. Two locations have been proposed for Soteria, namely, Port Sudan (19°37'N, 37°14'E; \textit{Crowfoot, Red Sea Ports}, p. 350) and Suakin (19°07'N, 37°20'E; Müller, \textit{GGM}, 1, 172; Woelk, pp. 204–5). Although indications of possible ancient occupation have been reported at both sites (cf. H. N. Chittick, 'A cistern at Suakin, and some remarks on burnt bricks', \textit{Asyutia}, XVI (1981), pp. 181–3). Agatharchides’ reference to the eastward trend of the coast after Soteria suggests the latter is to be preferred.

\footnote{The term \textit{elephantegor}, found only in this passage of Agatharchides and P. Petrie II 40 (a), designates a ship specifically designed for the transport of elephants. Unfortunately, no details survive concerning the design of these ships, which P. Petrie II 40 (a) indicates were built and based at Berenice, but Professor L. Casson has pointed out to me that Agatharchides’ emphasis on the problems they encountered when running under sail suggests that they were modified large merchant galleys (personal communication). The more detailed reconstruction proposed by Walter Krebs, 'Einige Transportprobleme der antiken Schiffahrt', \textit{Das Altertum}, XI (1965), pp. 96–101, on the assumption that such a ship should have been able to transport ten elephants together with sufficient food and water for ten days is too speculative to be convincing.}
rocks or drive them onto sandbars and make rescue impossible for the sailors that man them. At first, the sailors are depressed by great sadness, but they do not give up hope for a good outcome since some, who were thus stranded, have been saved by the tide which lifts them off as the mass of water rises suddenly from the sea. But when their supplies begin to fail, they endure a myriad of ills and then, finally, they all die either from hunger or—not enduring a lengthy period of hunger—by the knife or by hurling themselves into the sea.

abundant seaweed and vegetation that is visible under the water. The region presents no problems for oared ships as waves do not come in from afar, and it furnishes abundant fishing. But the elephant transports, which ride deep in the water because of their weight and are burdened with their gear, encounter great and terrible dangers sailing in these areas. For running with sails set and often continuing through the night because of the strong winds, they are wrecked when they run aground on the rocks or submerged bars. The sailors are unable to disembark because generally the water is deeper than the height of a man. When they do not succeed in saving their ship with their poles, they throw overboard everything except the food. If they do not escape in this way, they fall into great despair because there is neither island nor headland nor another ship to be seen in the vicinity. For these places are completely inhospitable, and rarely do people sail through them in ships. Besides these evils the tide quickly throws so great an amount of sand around the hull of the ship and heaps it up in so remarkable a way that a circular mound is built up, and the ship becomes bonded to the land as though it were done intentionally.

Those who experience such a misfortune, at first, bewail their fate moderately to a mute land as they have not completely abandoned hope of ultimate salvation. For often the tidal swell has come on such men, lifted up their ship and, like the manifestation of a god, saved those who were in the most extreme peril. But when the divine aid just mentioned does not materialize and the food begins to run out, the stronger sailors throw the weaker into the sea so that the remaining supplies might last several days longer. Finally, however, after having lost all hope, they die a far worse death than those who had perished previously. For they returned to nature in a brief moment the spirit it had given them. These men, however, by dividing the process of dying into many wretched moments, suffer an end to living that is a long drawn-out agony. These ships, thus pitifully deprived of their crews, remain like cenotaphs for a long time buried on all sides in sand. With their sails and masts set, they impel to pity and sympathy for the dead sailors people who see them from afar. For there is a royal decree that they be left as
AGATHARCHIDES OF CNI'DUS: ON THE ERYTHRAEAN SEA

86a. The places as far as the 'Tauri' and Ptolemais have been described. Beyond those places, however, the coast changes significantly since the land further on no longer faces eastward and casts shadows for up to two hours in the direction opposite north. In addition, it is watered by rivers that arise from sources in the Psebean Mountains. The reference to the connection of this description with Agatharchides' account of Ptolemy (II)’s elephant hunting activity is in Fragment 86b suggests that it was in book 1 of the On the Erythraean Sea. For possible fragments see Appendix. The similar reference to the sharply eastward turn of the coast beyond Ptolemais by Eratosthenes (Strabo 16.4.4, C768) clearly indicates that Agatharchides’ third century B.C. sources ignored or were ignorant of the southerly trend of the coast between Ras Kasar and Massawa (15°37’N, 39°29’E). The reference is probably to the report of a naval officer of Ptolemy II named Philon that at Ptolemais for a period of forty-five days before and after the summer solstice shadows fell to the south from noon to sunset (Strabo 2.5.36, C133; Ptolemy, Geography 8.16.9–10) Eratosthenes wrongly concluded that Meroe and Ptolemais were on the same parallel of latitude (Ptolemais is further north; cf. Strabo, ibid.; Pliny, HN 6.220; Treidler, ‘Ptolemais’, cols. 1876–7). The puzzling claim that shadows fell to the south for ‘up to two hours’ (τέσσερα δύον διάκοπα) in Fragment 84a or ‘until the second hour’ (ξυνί απὸ ἀπὸν δυτικά), i.c., until 7 a.m., suggests, however, that Agatharchides may have misunderstood his source since ancient astronomers considered only the direction of the sun’s shadow at noon as significant for the determination of latitude.

86b. As for the voyage along the coast after these places, we markers to signal to mariners the places that produce destruction. Among the Fishermen who live nearby there is a traditional tale, whose outline has been preserved by their forefathers, to the effect that during one particularly great ebb tide the whole portion of the gulf that appears green became dry land as the sea divided into opposing parts and the land under the water was uncovered. Then a huge flood came back and restored the water to its former place.

1. i.e., the Bulls. Presumably a prominent mountain group near Suskin since Strabo (16.4.7, C770) and Ptolemy (Geography 4.7.6) both place them in the immediate vicinity of Soteria, the former before and the latter after, but identification with particular mountains is not possible.

2. It is clear from the reference in the Pithom stele (Neville, Stele, p. 73, line 24) to cultivated fields that Ptolemais of the Hunts was a true self-supporting colony and not a hunting station (Conti Rossini, pp. 5–10). Unlike most of the Ptolemaic foundations south of Egypt Ptolemais survived into the Roman imperial period, albeit having lost much of its importance as the principal gateway to the African interior to Adulis as a result of the emergence of the kingdom of Axum in the Ethiopian highlands as an important power in the first century A.D. (Pliny, HN 6.173; Periplus 4).

3. Although it is clear that Ptolemais was located somewhere between Suskin and Ras Kasar (18°02’N, 38°33’E), the bulk of scholarly opinion concerning its exact location is divided between the vicinity of Trinkitat (18°41’N, 37°45’E: Müller, GCM, 1, 172; Hans Treidler, ‘Ptolemais’, RE, XXIII, 2 [1959], cols. 1878–80; Woelk, pp. 203–4) and ‘Aqiq (18°12’N, 38°10’E: Crowfoot, Red Sea Ports, pp. 530–4; Hofmann, pp. 89–94, Desanges, Recherches, pp. 273–4) where Crowfoot reported the discovery of classical architectural fragments. The few explicit classical references to Ptolemais’ location, Pliny (HN 2.183, 6.171) placing it 602.5 miles and the Periplus of the Erythraean Sea (3) (4,000 stades (=560 miles) south of Berenice, unfortunately, are of little use since both are greatly exaggerated, the actual distance being c. 350 miles. More important, however, is the circumstantial evidence. Particularly significant are three facts, namely, that Ptolemais lay south of the mouth of a branch of the Atbara River, i.e., the Baraka whose headwaters are, in fact, near those of the Abbara (Strabo 16.4.8, C770); its being an open roadstead rather than a proper harbour (Periplus 3); and the eastward turn of the coast near Ptolemais. Taken together these facts point to ‘Aqiq rather than Trinkitat as the correct location of Ptolemais.

4. Psebean Mountains, as Woelk, p. 205, noted, is Agatharchides’ term for the chain of mountains that begins east of the Baraka river and extends southward through Eritrea and Ethiopia to Bab al-Mandab (cf. Western Arabia, p. 144). The interpretation of the significance of the adjective Psebean is not clear. First attested in the late fourth century B.C. in the form Psbeo or Psepha as the name of a region in southern or southeastern Ethiopia, i.e., the southern Sudan or western Eritrea (Aristobulus, PGRH, 68 F.10; Theophrastus, De Lapidibus 6.34), it also occurs as the name of a lake south of Meroe containing an island, presumably Lake Tanu (Strabo 17.2.3, C822; Stephanus, s.v. Psebeo). Taken together this evidence indicates that Psbeo and the related adjective Psebean designated not just the coastal mountains but the Ethiopian plains as a whole and its western approaches. -1. Treidler, ‘Psbea an or’, RE, XXIII, 2 (1959), col. 1320, plausibly suggested that the usage originated from the presence of an ethnic group of that name in this area, but the sources contain no reference to such a group. Conceivably, Psbeo might be explained as a transcription of an Egyptian toponym consisting of the article Pa + Sebo and be interpreted as referring to the Sabacans whose presence along the coast of

145
part of the country that stretches into the interior is full of elephants, rhinoceroses, bulls and pigs, but the whole coastal region is dotted with numerous islands that are naturally infertile but abound with unknown species of birds. 

From this point on the sea is deep and navigable, and contains whales so huge that observers experience anxiety. No one, however, has died as a result unless they accidentally fell on their backs because of ignorance of the

reports concerning these beasts. For they cannot boldly follow sailors because these creatures’ eyes are blinded whenever they raise their heads out of the sea.

Arabian Coast of the Red Sea

87a. But we shall take up the remaining portion, the opposite shore which joins Arabia, and describe it, beginning again from the innermost recess. This is named Poseidon and was founded by Ariston, who was dispatched by Ptolemy to explore Arabia as far as the ocean and established there an altar dedicated to Poseidon Pelganeus. Immediately after the innermost recess is a place by the sea which is exceptionally highly regarded by the natives because of the benefit derived from it. The place is named Palm-Grove, and it contains an abundance of this kind of tree which is extraordinarily fruitful and particularly conducive to pleasure and luxury. All the nearby surrounding country, however, lacks springs and is fiery hot

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1 Etriraeas is attested in Hellenistic sources (Strabo 16.4.8, C770; 16.4.10, p. 771; Ptolemy, Geography 4.7.8) and archaeologically on the Ethiopian plateau as early as the beginning of the fifth century B.C. (Kobishchanov, p. 25), a suggestion that is strengthened by Stephanus’ (ibid.) possible reference to a related ethnic in the form of Sabaites.

2 The list of animals indicates the region is the same as that discussed in Fragments 90-6 and 67-79. Like the Egyptians before them, Ptolemaic agents gained access to this area via the Harara River valley (cf. Haken, pp. 202-3; Fattovich, In Search of Punt, pp. 108-9).

3 Probably a reference to the Takar district which has become an important cotton growing area in the twentieth century (Western Arabia, pp. 113-4).

4 As in Fragment 81 Agatharchides begins his description from the head of the Gulf of Suez, describing first the west coast of the Sinai Peninsula before passing to the coast of the Arabian Peninsula in Fragment 89.

5 Exact location unknown, although clearly somewhere on the northwest coast of the Sinai Peninsula. The foundation of an altar to Poseidon Pelganeus, ‘Poseidon of the sea’, one of the commonest forms of Poseidon (Pausanias 7.21.3) marked the formal beginning of Ariston’s voyage.

6 More probably to be identified with the village of Tag (14°5’N, 39°30’E), cf. Woell, p. 209-10; Western Arabia, p. 81) than Feiran as suggested by Averham Negev, Nubmian Architecture Today (New York, 1986), p. 114). In the early nineteenth century, when Willett, 2, 9-13, visited and described it, the palm trees were watched over by a priest who lived in a small tower in one corner of the grove.

7b. After saying these things about the Trogodytes and the neighbouring Aithiopians, Artemidorus turns to the Arabs, and describes first the Arabs who border on the Arabian gulf and are located opposite the Trogodytes, beginning from Poseidon. He says that this place is located further in than the Adamesse Gulf. Adjacent to Poseidon is a palm grove that is well-watered and is highly valued because the whole surrounding area is fiery hot, waterless and shadyless, but the fertility of the palms there is remarkable. A man and woman watch over the grove. They are appointed on a hereditary basis, wear skins and derive their sustenance from the palms. They build huts in the trees and sleep in them because of the numerous wild animals.
because of its southern orientation. For this reason the barbarians rightly designated as sacred the place that supports trees and that, although situated in the midst of the most desolate regions, supplied their food. For not a few springs and streams emerge in it that are not inferior in their coldness to snow. These make the land on either side of them green and pleasant in every way. There is also an ancient altar that is made of hard stone and bears an inscription in lettering that is archaic and unintelligible. The sanctuary is cared for by a man and a woman who occupy their sacred office for life. The inhabitants of this place are long-lived and make their beds in the trees because of their fear of wild animals.

88. The portion of the interior that is visible from the Palm-Grove is filled with rocky peaks of various heights, but the part that extends towards the sea is narrow and long.

89a. Adjacent to the coast just mentioned is a region people have named Duck Country because of the abundance of these creatures. Duck Country itself lies near a very thickly wooded promontory. If one sights along a straight line drawn through it, the line would extend to the so-called Rock.

89b. After sailing past the Palm-Grove one encounters near a promontory of the mainland an island which has been named Seal Island from the animals that live on it. For so great a number of these animals frequent these places that observers were amazed. The promontory, which is situated

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1. In fact, the reference is to Seal Island as is clear from Fragments 89a and 89c, 'Duck Country (Nihoon) in Fragment 89b being the result of a misinterpretation of the word wiqeu, 'island,' by Photius (cf. Woelk, p. 73, n. 1). Seal island is the Island of Tirín (27°55'N, 34°34'E; cf. Alois Musil, The Northern Hécat: A Topographical Itinerary [New York, 1926], p. 302).

2. The description of the promontory as oriented towards Palestine and lying in front of the promontory Tirín indicates that it is to be indentified with Ras al-Qubab (28°02'N, 34°37'E) which terminates the mountain chain that extends along the eastern side of the Gulf of Aqaba and not Ras Muhammad (27°44'N, 34°15'E) at the southern tip of Sinai as suggested by Woelk, p. 211.

3. I.e., Petra, the religious and political centre of the Nabataeans located at and around the flat-topped cliff of Umm al-Bayrah at Selah (30°10'N, 35°26'E) in Jordan. Archaeological indications that in the early Hellenistic Period Petra was primarily a place of refuge and a sanctuary (cf. Diodorus 2.48.2, 19.94.5) rather than a city, since the extensive ruins still visible at the site date to the late 3rd century B.C. and early 2nd centuries A.D. (cf. J.-P. Rey-Coquais, Petra, The Princeton Encyclopedia of Classical Sites, ed. Richard Stillwell et al. [Princeton, 1976], pp. 694-5; Avraham Negev, 'The Nabataeans and the Province Arabia,' AVCRV, II, 8 [Berlin, 1977], pp. 590-1).

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and Palestine to which the Gerraheans,1 Minaeans2 and all the Arabs, whose settlements are nearby, bring frankincense, as is the report, together with cargoes of incense from the upper country. in front of the island, lies below the area called the Rock and Palestine. It is to this region that the Gerraheans and Minaeans bring, as is the report, frankincense and other aromatic products from what is called upper Arabia.

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Footnotes:

1. Linkage of the Gerraheans and Minaeans in the third century B.C. incense trade is confirmed by the reference to Gerraheans and Minaean weights in P. Cairo Zeno 59536, lines 11-12. When first mentioned by Greek historians during the reign of Alexander (Aristobulus, FGRH, 139 F 57=Strabo 16.3.3, C766; cf. Polybius 13.9), Gerra was an Arab state whose prosperity depended on its role as middleman in the commerce between the Persian Gulf region and Syria via a route that ran up the Euphrates River to Thapsacus and thence westward to Syria-Palestine. The site of Gerra has not been located, a problem that is complicated by two facts: (1) Gerra may not be a proper name at all but merely a Greek transcription of Arabic garasa, 'town,' (A. F. L. Beeston, Some Observations on Greek and Latin Data Relating to South Arabia, BSOAS, XLII [1979], p. 7, n. 5); and (2) it was not merely a port but a state in eastern Arabia opposite Bahrein with a sizable territory that included both inland and coastal districts. Nevertheless, among the various possible locations for the capital of the state of Gerra that have been proposed most scholars now favor Hufud in the Hasa Oasis although the ruined city of Tha'if west of Juhayrat and the coastal site of Dhubh Dhaham are still considered possible (cf. the recent reviews of the problem by Geoffrey Bibby, Looking for Dilman [New York, 1969], pp. 307-28; W. E. James, 'On the Location of Gerra,' in Franz Altheim and Ruth Steinhilber, Die Araber in der Alten Welt, V, 2 [Berlin, 1961], 36-57; N. St. J. Groen, 'Gerra: A Lost Arabian City,' ATLAL, VI [1982], pp. 97-108; and Daniel T. Potts, 'Tha'if and the Location of Gerra,' PSAS, XIV [1984], pp. 87-93).

2. The earliest mention of the kingdom of Ma' in with its capital Carna (Qarnawu) is found in Strabo's summary (16.4.2, C768) of Eratosthenes' description of Arabia. At its peak between the fourth century B.C. and its conquest by Saba c. 120 B.C. the kingdom extended from its centre in the oasis of al-Jawf southeastward to the Hadramawt and enjoyed a virtual monopoly of the caravan trade in aromatic substances and the incense growing areas in Dhufar through the Hejaz via Medina and al-Ula, where there was a Minaean trading colony, to Palestine (cf. Doc. pp. 66-70; H. von Wissmann, 'Die Mari Ehrettost', p. 307; 'Geschichte,' pp. 341, 415-21; Groom, Frankincense and Myrrh, pp. 177-8; and David F. Graf, 'Deadite and Minaean (South Arabian) Inscriptions from the Hisma,' Annual of the Department of Antiquities, XXVII [Amman, 1983], pp. 563-5). Besides the epigraphical evidence cited in note 1 Minaean involvement in the trade in aromatics is attested outside the Arabian peninsula in the third and second centuries B.C. by the sarcophagus of a Minaean merchant who supplied Egyptian temples with incense (cf. Abdul Moneim A. El-Sayed, Reconstructions of the Minaean Inscription of Zaytib ibn Zayb, PASAS, XIV [1984], pp. 93-9; see also A. F. L. Beeston, Further Remarks on the animals. Near this island is a promontory which stretches towards the Rock of the Arabs called Nabataeans and the country of Palestine. To this region the Minaeans, Gerraheans and all their neighbours bring cargoes of aromatic substances.
around which there are many villages of the so-called Nabataean Arabs.¹ They occupy much of the coast and not a little of the adjacent country which extends into the interior and contains a population that is unspeakably great as well as herds of animals that are unbelievably numerous. In ancient times they led a just life and were satisfied with the livelihood provided by their flocks, but later, after the kings in Alexandria had made the gulf navigable for merchants, they attacked those who suffered shipwreck. They also built pirate vessels and plundered sailors, imitating the ferocity and lawlessness of the Tauroi in the Pontus.² But later they were caught at sea by quadriremes and properly punished.³

91b. After these places there is a well-watered plain which, because of the streams that flow through it everywhere, grows
dog's tooth grass, lucerne and

¹ It is not clear if the Nabataeans were a single tribe or union of tribes at the time their presence as a semi-nomadic Arab population near Petra is first attested in 312 B.C. by Hieronymus of Cardia, who led an unsuccessful campaign against them in that year. The most extensive account is preserved in Diodorus 2.48.2 and 19.94.100 (cf. Jane Hornblower, Hieronymus of Cardia [Oxford, 1981], pp. 144–50). Agatharchides' description of their life prior to the beginning of Ptolemaic activity in the Red Sea is considerably idealized since Hieronymus already described them as both middlemen in the trade in aromatic substances and raiders (Diodorus 2.48.2, 19.94.4). By the first half of the second century B.C., at the latest, however, they had coalesced into a kingdom which at the time of its suppression by the Romans in 106 B.C. included much of Sinai, the Negev and Transjordan from the Syrian Hauran to the Gulf of 'Aqaba and the northern Hejaz as far south as al-Ula (cf. Nelson Gluck, Deities and Dolphins [New York, 1965]; Negev, 'The Nabataeans and the Provincia Arabia', pp. 521–686; G. W. Bowersock, Roman Arabia [Cambridge, Mass., 1983], pp. 12–28, 59–75).

² A non-Greek population inhabiting the southern coast of the Crimea who were notorious for their activities as wreckers and for their reputed practice of sacrificing foreigners who fell into their hands to their patron goddess (cf. E. E. Minns, Scythians and Greeks [London, 1913], p. 100; V. F. Gaidukevič, Das Bosporanische Reich [Berlin, 1971], p. 303, n. 1).

³ Probably during the reign of Ptolemy II (cf. Fraser, II, 300, n. 350, who dates this campaign to the 270s B.C.).

⁴ The reference is to the lower portion of the Wadi el-Abjaz, namely, the so-called Wadi el-'elaf, a lowland 50 km long by 20 km wide just east of the Gulf of 'Aqaba (Musil, p. 363; Western Arabia, p. 40).

⁵ 90b. Then there is another stretch of coast, formerly called the land of the Maranitae, some of whom were farmers and some tent-dwellers, but now that of the Garindanes who destroyed the former people by treachery. For they attacked and killed some of them while they were conducting a certain festival that was celebrated every four years. They also set on and utterly destroyed the rest of the people. Then there is the Aelanes Gulf and Nabataea, a land that is populous and rich in pasture. These people also inhabit the nearby offshore islands. Formerly, they were peaceful, but later they began to use rafts to plunder those sailing from Egypt. They paid the penalty for this, however, since a fleet attacked and ravaged their country.
watered and lush with vegetation, albeit only dog's tooth grass, lucerne and lotus as tall as a man. All crops are restricted to this, and people cultivate nothing else. For this reason there are many wild camels in the plain and numerous herds of antelope and gazelles, many flocks of sheep and untold numbers of onagers and cattle. Joined to these advantages, however, is a countervailing evil since the region abounds with lions, wolves and leopards so that the natural bounty of the land is the cause of misfortune for its inhabitants.

92a. Next after this section of the coast is a bay which extends into the interior of the country for a distance of not less than five hundred stades. Those who inhabit the territory within the gulf are called Batimonzemans and are hunters of land animals.

92b. Sailing past these plains one encounters a bay which is of a paradoxical character. For it narrows to a point as it penetrates into the heart of the country. In length it extends for five hundred stades and is bounded on all sides by cliffs of amazing size. Its mouth is

1 Deer are not found in Arabia. Presumably antelope of some kind was intended.
2 Probably Ayruna Bay (25°02'N, 35°03'E) whose 'approach is much encumbered with rocks and reefs' but can be entered from the south by a tortuous channel (Red Sea Pilot, p. 155; cf. Müller, OGM, II, 180).

93a. Off shore from the territory just mentioned lie three islands which create numerous harbours. The first of these islands is named the Shrine of Isis, the second Soukabaya and the third Salydo. All are uninhabited and densely covered with olive trees, not, however, the kind that grows in our countries but that native to these places.

1 Probably, as suggested by Müller, I, 180, and Woelk, p. 221, the three large islands southeast of Tiran, namely, Sinafr, Shusha and Banegan. If, however, the island of Dia, i.e. 'Zeus Island', mentioned in Fragment 91c is to be identified with Sinafr as suggested by Musul, pp. 124, 305, then the third island may be either Al Banagan or Al-Musul.
2 I.e. the Shora Tree.

93b. Immediately after the stretch of coast just described are three offshore islands which provide numerous harbours. Historians record that the first of these is sacred to Isis. It is deserted but there are found on it some foundations of ancient houses and steles inscribed with barbarian characters. The other islands are likewise deserted, but they all are overgrown with olive
trees that differ from those found in our countries.

94b. After these islands the shore is full of sheer cliffs and difficult to sail along for a thousand stades. For there exists neither harbour nor roadstead for ships to anchor at and no breakwater to furnish needed shelter to sailors in distress.

95a.* A mountain range with sheer and frighteningly high rocks on its summits runs along this coast. At its base there are numerous sharp rocks in the sea, and behind them are ravines which have been eaten away from below and are twisted in shape. As these are interconnected and the sea is deep, the tide when it comes in and

1 The Thamud. First attested in central Arabia in the eighth century B.C. as a nomadic Arab tribe in conflict with the Assyrians (ANE, p. 286), the Thamud were from the sixth century B.C. until the fifth century A.D. the head of a confederation of tribes located in the northern Hejaz with an extensive territory which included not only the stretch of coast indicated by Agatharchides but also a sizable territory with several towns in the interior (Pliny, HN 6.157; cf. A. van den Branden, *Histoire de Thamoud* [Beirut, 1960] 1–30; and David F. Graf, *The Saracens and the Defense of the Arabian Frontier*, *Bulletin of the American Schools of Oriental Research*, CXXXIX [1978] 10–12).\[125 miles. The reference is to the rugged stretch of coast from Al Muwaylah (27°41'N, 35°06'E) to Al Wajh, (26°13'N, 36°27'E); *Western Arabia*, pp. 126-7; and Woelk, pp. 221-2.

95b. Next is a gulf with scattered islands and in succession three extremely high dunes of black sand. After these is the harbour of Charmouthas which is a hundred stades in circumference and has an entrance that is narrow and dangerous for all kinds of craft. A river also flows into it, and in the middle is an island that is well-wooded and suitable for cultivation.

1 Agatharchides' description is particularly applicable to the coast south of Ras Abu Madhab (27°08'N, 35°46'E) which is 'fronted by steep overhanging cliffs of coral and sandstone; a level ledge of rocks extends nearly 40 m (131 ft) from the base of these cliffs and against it the sea at times breaks with violence and produces a surf which renders landing between the various islets impracticable' (*Red Sea Pilot*, 156; cf. *Western Arabia*, p. 126).

2 The indented portion of the coast between Ras Karkama (25°54'N, 36°39'E) and Ras Abu Madd (24°50'N, 37°08'E); cf. Woelk, p. 223.


4 Müller, p. 182, interpreted the name Charmuthas as Sheram Mudd=Char Muthas, and placed the harbour near Ras Abu Madd, but admitted that no harbour fitting Agatharchides' description exists in that area. More probable, therefore, is the suggestion by H. von Wissmann, *Zaabras*, cols. 1209–10, that the lagoon of Al-Sharifa northwest of Al-Lith (20°09'N, 40°16'E) is intended. The island is probably Qishan and the river the Wadi Lath.

5 12.5 miles.

6 In fact, the only 'rivers' which enter the Red Sea on the Arabian coast are wadis which carry a seasonal flow of water.

155
Cothon. A multitude of fish from the sea congregate in it because of its calmness and the sweetness of the waters that flow into it.

After sailing past these places five mountains, separate from one another, rise on high. Their peaks narrow to rocky knolls, producing an appearance similar to the pyramids in Egypt. Next is a circular gulf which is enclosed by large promontories. A trapezoidal shaped hill lies midway along a diagonal line drawn through the gulf. On the hill three temples, remarkable for their height, have been built for gods which are unknown to the Greeks but highly honoured by the natives.

96a. After this segment of coast, not, however, immediately after it but some distance beyond, is an extremely well-watered stretch of coast and the mountain that is called Laemus. Its perimeter is indescribably great in extent, and it is covered over with trees of all kinds.

97a. The Debae inhabit the region that borders on the mountainous district. Some are nomads and some are farmers. Through the middle of their country flows a river that is tripartite in nature. It carries down gold nuggets that are so obviously abundant that the mud that is deposited at its mouths gleams from afar. The inhabitants of this region are unskilled in working this sort of metal. They are extremely hospitable to strangers, not, however, to all men but to those who come to them from the Peloponnese and Boeotia because of some mythical tale about Heracles.

96b. After these places is a damp stretch of coast that it is intersected by streams of sweet water that flow from springs. In this section of the coast there is a mountain called Chabinus which is overgrown with thickets of all kinds.

97b. The land bordering the mountainous area is inhabited by Arabs who are called Debae. They are camel raisers who rely on this beast for all the most important necessities of life. They fight against their enemies from these animals, and they easily accomplish all their business by transporting their wares loaded on their backs. They live by drinking their milk, and they roam their whole country on racing camels. A river runs through the middle of their country which carries down so many nuggets of gold that the silt which is deposited at its mouths gleams. The natives are completely without experience in the working of gold, but they are hospitable to strangers, not to all visitors, however, but only to those from Boeotia and the Peloponnese because of some ancient bond of kinship derived from Heracles with this people, which they say has been handed down in mythical form from their ancestors.

98a. The Alilacii and

98b. The next region is

1 Omitted is a promise by Diodorus to describe in detail the Carthaginian Cothon, that is, the circular artificial naval harbour which supposedly contained 220 docks, in a now lost book of his history.

2 H. von Wissmann, 'Zoabrem', col. 13109, identifies these with the mountains in the immediate hinterland of Ash Sharifa lagoon, the three western peaks probably being those referred to by Pliny, *HN* 6.150, as *mones Tricypheus*, 'the Three-Headed Mountain'.

3 Al-Mahaseen Bay (19°44′N, 40°40′E).

4 It is not clear which name is correct. Probably intended are the mountains between Al-Lith and Wadi Hali (cf. H. von Wissmann, 'Zoabrem', cols. 1310-1).

5 Roughly the area from Al-Qunfudha (19°08′N, 41°04′E) to the Wadi Bayash with its centre in the area of Wadi Qanaa (regio Camaenus; Pliny, *HN* 6.150). The importance of the area as a source of gold in antiquity is indicated by Pliny's reference (ibid.) to the presence of gold mines (sauri metalla) there and its ancient name, Manali (Theophrastus, *HP* 9.4.2); cf. Pliny's [ibid. titus Mammaeum], i.e., Arabic 'Admala, 'Mining Area' (H. von Wissmann, 'De Mari Erythraeo', pp. 299-301; 'Opheir und Halia', RE, Suppl., XIII [1970] cols. 905-8; 'Geschichte', p. 391).

6 Identification uncertain. The name may survive in the place name Hali el Halja, thirty-nine miles south-south-east of Al-Qunfudha (18°32′N, 41°03′E; cf. Weeke, p. 231). H. von Wissmann, 'Opheir', cols. 910-11, interpreted the name as Bani Hila and suggested a possible identification with the Apitani (Abid Aram, i.e., Servants of the Moon god Amon) of Pliny, *HN* 6.150 on the ground that Hila also means 'New Moon' and was the name of a god attested among the Thamud, but certainty is not possible.

7 Identification uncertain. 1998c. Next is a people, who are more civilized people than the Debae and inhabit a
Casandrii\(^1\) are neighbours of these people, and they possess a country that is not at all similar to those just described. For the air is neither cool nor dry nor fiery hot but is characterized by soft and thick clouds from which come even in summer rain storms and gentle showers.\(^2\) Most of the land is very fertile, but not all of it is cultivated since the people are comparatively inexperienced. They do, however, mine gold in the land's underground strata and discover a great amount, not the sort that must be smelted from ore with knowledge and skill but the kind that occurs naturally and is called 'unfired' by Greeks because of this fact. The smallest nugget of this kind of gold is the size of an olive pit, the mid-sized nugget that of the stone of a medlar and the largest is comparable to a walnut. They wear around their wrists and necks bands consisting of perforated gold nuggets alternating with transparent stones. They bring these to their neighbours and sell them cheaply, for they exchange bronze for three times its weight in gold and iron for twice its weight in gold. Silver is worth ten parts of gold since value is determined by abundance and scarcity.\(^3\) In such matters all life considers not nature but need.

99a. The Carabae\(^2\) occupy the region immediately after these people. Then follows a deep water harbour into which empty several springs.\(^4\) Immediately adjacent is the tribe of the Sabaens, the greatest of the peoples in Arabia and the possessors of every sort of good having bored a hole through it and strung it in alternation with transparent stones. As this kind of gold is abundant in their country and bronze and iron are rare, they exchange these goods with merchants on an equal basis.

99b. After these peoples are those called Carabae and after them the Sabaens who are the most populous of the Arab peoples. They inhabit the region called Eudaemon Arabia\(^3\) which bears most of the products considered valuable by us. It also supports herds of

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\(^1\) Yemen is, in fact, poor in iron deposits (Western Arabia, p. 536). The reference to these metals being traded on an equal basis in Fragment 98b is an arbitrary modification of Agatharchides' text by Diodorus.


\(^3\) The Khur al-Wahlah (16°44'N, 42°40'E); probably the same as the fonts Corali of Pliny, HN 6.150 and the Corali of HN 6.154, i.e., C. Corali=Hor (W)a(b)la (cf. H. von Wissmann, 'Ophir', cols. 924–5; Western Arabia, pp. 134, 585).

\(^4\) I.e. 'Fortunate Arabia (Arabia Felix)', the classical name for south-west Arabia, which is attested as early as the late fifth century B.C. (Aristophanes, Birds, line 144; Euripides, Bacchae, lines 16–21; cf. H. von Wissmann, De Mari Erythraeo, pp. 304, 321, Geschichts, p. 358).

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\(^\) 99c. Immediately adjacent is the very fertile country of the Sabaens, a very large tribe, in whose territory are found myrrh, frankincense and cinnamon. On the coast there is also found balsam and a certain other very fragrant herb, the odour of which, however, quickly fades.
fortune. For their country produces all the necessities for life as lived among us, and the bodies of the inhabitants are very attractive. They have herds of cattle in untold numbers. Fragrance pervades the whole coast, providing a pleasure to visitors that is greater than what can be seen or described. For by the sea itself balsam grows in abundance and cassia and another sort of plant which, when fresh, is very sweet and pleasant to the eye but which quickly fades so that the quality of the plant is dulled before it can reach us with its full strength. In the interior there are dense and large forests. For there grow tall trees—myrrh and frankincense, cinnamon, and myrrh trees and in addition palm trees, calamus, and cinnamon trees and others which have a fragrance similar to these. It is not possible to enumerate the peculiarities and characteristics of each because of the amount and overwhelming

1 Exact identity unknown although presumably an oleo-resin of some kind. Woelk, p. 238, suggested Jasmin, either Jasminum Sambac or Jasminum officinale, the former of which is cultivated commercially in Yemen (Western Arabia), pp. 597–8.

2 Myrrh is a gum resin collected from any one of several trees of the genus Commiphora myrrha. Engl. found in southern and western Arabia, modern Ethiopia and especially Somalia which was the principal ancient source for myrrh (cf. Van Beek, Frankincense and Myrrh, pp. 143–4; Miller, pp. 104–5; Groom, Frankincense and Myrrh, pp. 115–20).

3 Frankincense is a gum resin collected from various trees of the genus Boswellia of which only Boswellia Carteri is native to the Arabian peninsula. Carteri and another species, Boswellia Frereana, however, also occur in Somalia and four species are peculiar to the island of Socotra. Contrary to the opinion of Agatharchides and his predecessors, however, the centre of frankincense production in antiquity appears to have been in recent times in the mountains of Hadramaut (Van Beek, Frankincense and Myrrh, p. 142; Miller, pp. 102–4; Nigel Groom, 'The Frankincense Region', PSAS, VII [1977], pp. 79–89; Frankincense and Myrrh, pp. 96–101; Crane, p. 20). By the first century A.D. this was known and clearly indicated by Pliny, HN 12.52, and the unknown author of the Periplas of the Erythraean Sea, p. 27.

4 Like cassia, cinnamon in medieval and modern times designates the bark of a tree of the laurel family, namely, Cinnamomum zeylanicum Nees, a tree native to Ceylon and southern India and not, as was the view of all classical authors prior to the first century A.D., East Africa and Arabia but now is extinct or, more plausibly, since no tree of the laurel group appears to be native to these areas, that in antiquity these terms referred to different and hitherto unidentifiable plants as has recently been argued by Groom, Frankincense and Myrrh, pp. 84–5, and most fully by Crane, pp. 253–63. At present, however, evidence is insufficient to definitively resolve this controversy is lacking, but the similarities between ancient and modern descriptions of these plant products as noted by Casson and the very fact that the western origin of cinnamon could be ascertained and was denied (cf. Pliny, HN 12.52) once direct contact with India was established on a regular basis seriously weakens the hypothesis that ancient cinnamon and cassia were still unknown African and Arabian plants.
impact of the combined fragrance from all the trees. For the fragrance appears as something divine and greater than the power of speech to describe as it strikes and stimulates the senses of everyone. As for persons sailing along the coast, although they are far from land, that does not prevent them from sharing this kind of pleasure for in summer, when there is an offshore breeze, it happens that the fragrance which is given off by the myrrh and other such trees reaches the nearby parts of the sea. The case is not as in our countries where the aromatics, having been stored, have a stale quality but, as its power is fresh and in full bloom, it penetrates to the most delicate parts of the senses. For when the breeze carries away the exhalations of the most fragrant trees, a mixture of the noblest perfumes falls on persons sailing towards the coast which is pleasant and powerful as well as healthful and unique since the fruit has not been cut into pieces and lost its peculiar

100a. In the forests of incense trees, however, there is found an extraordinarily peculiar species of snake. It is as though Fortune is envious of great good luck and mixes evil with good so that no one might become outrageously arrogant and, by forming an opinion on the basis of accidental goods, come to despise the divine but instead be instructed by the experience and memory of opposites. The species of snake is purple in colour and about a span in length. Its bite is incurable if it draws blood above the thigh. They leap into the air as they strike.

100b. Fortune, however, has not granted to these men happiness that is complete and free of envy, but to such great gifts she has also joined something harmful to warn those who might become accustomed to despise the gods because of an unbroken string of good fortune. For in the midst of the most fragrant forests there are numerous snakes, which are purple in colour, a span in length and whose bite is completely incurable. They leap as they bite, and as they spring up high, they bloody their victim's skin.

1 Perhaps the date palm (Phoenix dactylifera; cf. Western Arabia, pp. 486–7) which Theophrastus, HP 9.4.4, also seems to associate with areas in which frankincense and myrrh trees grew.

2 Literally 'reed'. Usually identified with Sweet Flag (Acorus calamus L., Araceae; Miller, pp. 92–4), but Crone, pp. 264–6, noting that Sweet Flag is not found in either Arabia or East Africa, suggests that it more likely was one of the scented reeds of the genus Cymbopogon which do occur in the area and were known to the Greeks and Romans (cf. Miller, pp. 94–6).

3 Probably the horned viper (Cerastes cornutus Forsk.; cf. Bruce, V. 200; Woelk, p. 241), although this species is sandy rather than purple in colour and can reach 60 cm in length. The association of deadly snakes with the Arabian incense forests is found already in Herodotus (3.107), albeit in more fantastic form.

4 There are also fragrant palm trees and calamus and snakes, a span in length and purple in colour, that leap as far as the ribs and have a bite that is incurable.
AGATHARCHIDES OF CNIDUS: ON THE ERYTHRAEAN SEA

101a. The fragrance of the incense is strongest in the country of the Sabaeans, but the pleasure derived from it is imperfect since continuous exposure from infancy affects the senses less and dulls them as there is no variation in their experiences. In addition, they cannot impose stability on their life since their bodies are suffused by a strong and piercing stimulus which increases its normal congestive state to such an extreme point that it causes extreme faintness. At such times, by fumigating briefly with resin and the beard of a goat they remove the stimulus of the excessively sweet odour, and by the admixture of something that seems to cause discomfort they counteract the harmful aspect of their pleasure. Thus, any natural advantage managed with moderation and order promotes life, but if deprived of due measure and proportion, it becomes a burdensome possession.

101b. A peculiar thing happens to those natives whose bodies have been weakened by long illness. For when the body has been flooded by a substance of a pure and piercing nature, and particles crowd together and clog the pores, a feebleness ensues that is difficult to cure. For this reason they burn resin and the beard of a goat for such people, seeking to overcome the excessive strength of the fragrance with substances of the opposite nature. For the good, when measured in the proper quantity and order aids men and brings them pleasure, but when it is totally lacking in proportion and order, its gift is useless.

102a. The city of the Sabaeans bears the name of the whole nation and is situated on a small mountain. This city, which is called Sabas, is far the most beautiful of those in Arabia. The ruler of the whole nation enjoys a precedence granted by the people which is both high in honour and most unfortunate. It is high in honour because he commands many people and does whatever he wishes without being subject to judicial scrutiny of his actions. It is unfortunate because after taking up the office, he may not again leave it.

102b. The capital of this tribe, which is called Sabae, is built upon a mountain. Their kings succeed by right of descent. The people assign them honours in which advantages are mingled with liabilities. For they seem to lead a blessed life in that while they give orders to all, they are subject to no review of their actions. They are considered unfortunate, however, because they are not allowed ever to leave their palace, and if they do not remain within, they are stoned by the populace in accordance with some ancient oracle.

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1 Actually Sabae, Phoibus having mistaken the accusative plural Σώκρατος for an indeclinable nominative. Agatharchides' assertion that the Sabaean capital was located on a small mountain and called Sabae is, however, puzzling for two reasons: (1) its name was Marib (MRBB) and it is always so called in classical sources (cf. H. von Wissmann, 'Geschichte', 396), and (2) its ruins are located in a plain near the modern city of the same name (15°26'N, 45°16'E). Artemidorus recognized the problem, but his attempt to correct Agatharchides' error by substituting the name Mariba for Sabae was unsatisfactory since it ignored Agatharchides' geographical error. Equally unsuccessful is the recent attempt by Jaqueline Frenze, Le Royaume Sud-Arabe de Qatabân et sa Dotation: d'après l'Archéologie et les Sources Classiques jusqu'au Péripole de la Mer Érythrée (Louvain, 1961), p. 110, to show that Marib was also called Saba since it was based on a misunderstanding of Medieval Arabic sources (cf. Jacques Ryckmans, Rev. of Frenze, Le Royaume, Bibliotheca Orientalis, XXI [1964], p. 377). More probable is the suggestion that Agatharchides confused Marib with Shabwa (Sabata in Strabo 16.4.2, 768), the capital of the kingdom of Hadramaut (Ryckmans, ibid.; H. von Wissmann, Geschichte, p. 359, n. 100), a suggestion that is strengthened by the fact that the caravan route from Hadramaut to the Mediterranean ran through the kingdom of Ma'in and not Saba.

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102c. The city of the Sabaeans, Mariba, is located on a densely wooded mountain and is the residence of the king who is sovereign in judgments and other matters. It is not, however, permitted for the king to leave the palace or the populace immediately will stone him in accordance with some oracle.
for war, work all the land, and voyage from home using large rafts. These plants are so abundant that instead of firewood and kindling they use cinnamon, cassia and other such substances. Larinum, a most fragrant incense, is also found in the land of the Sabaeans.

106c. From this commerce they and the Gerrhaecans have become the wealthiest of the kings of Arabia. They possess abundant furnishings of gold and silver objects: couches, tripods, mixing bowls with drinking cups and luxurious homes. For their doors, walls and ceilings are adorned with ivory, gold and silver inlaid with precious stones.
Ptolemaic portion of Syria rich in gold. They have also created a profitable commerce for the industry of the Phoenicians and a myriad of other things. Their riches can be seen not only in wondrous embossed objects and manifold kinds of drinking vessels but also in the size of their couches and tripods and in the abundance they possess of the other items found in our own homes since many of them, as it seems, have a regal style of furnishing. The author also says they have made for their buildings gilded and silver columns and that, in addition, their ceilings and doors are adorned with numerous ornaments inlaid with gems and that likewise also the intercolumniations have a fine appearance. In general, there is a great difference between their wealth and that of others.

These are the facts concerning their way of life that have been reported until our time. If, however, they did not occupy a home that is situated far from those people who direct their armies everywhere, those who are masters of the fruits of their own wars would become the stewards of other people's property since slackness is unable to preserve freedom for a long time.

105a. The sea near this country is white in appearance and similar to a river, so that the cause of the phenomenon is a source of perplexity. Located near the country are the Fortunate Islands on which all the cattle are white and none of the females grow horns. In these islands one can see riding at anchor merchant vessels from neighbouring countries. Most of those encountered there are from the port Alexander built by the Indus River. Not a few, however, come from Persia and Carmania and the whole nearby region.

105b. In these regions the sea appears white in colour so that at once a person is amazed at the paradox and seeks the cause of the phenomenon. There are also prosperous islands nearby which contain unwalled cities. On these islands all the cattle are white in colour and horns do not grow at all on their cows. Merchants sail to these islands from everywhere, but especially from Potana, which Alexander founded beside the Indus River because he wished to have a port on the shore of the ocean. With regard to the country and its inhabitants, therefore, we will be satisfied with what has been said.

Salt, pp. 196-7, suggested that minute luminous molluscs were responsible for the phenomenon, noting that off the coast of Arabia that 'the sea looked at night as white as milk'. The phenomenon may also have been noted by ancient Indian sailors if the 'bright white sea' mentioned in the Buddhist Jataka stories refers to Arabia as suggested by Richard Debrueck, 'Sudasiatische Seefahrer im Altertum', *Bonner Jahrbucher*, CLV (1955), p. 42.

Probably Socota (12°22'N, 53°18'E) rather than Aden and Little Aden as suggested by H. von Wisemann, 'De Mari Erythraeo', pp. 304-5, since there is no evidence that the latter were islands in antiquity. Reflecting Socota's role as a transit point for the sea-borne trade with India, Agatharchides' Fortunate Islands and the island's other attested ancient name, Dioscoria (Periplus 30; Ptolemy, *Geography* 6.7.45), are both of Indian origin, being probably derived from Sanskrit *Sukhatautra*dvipa, 'The Most Pleasant Island' (A. L. Basham, *The Wonder that was India*, 3rd ed. [New York, 1968], p. 230). Greek settlers were introduced to the island, probably by one of the late second or first century B.C. Ptolemies as a result of the opening of the direct sea-route to India by Eudoxus of Cyzicus between 120 and 110 B.C. (Cosmas Indicopleustes, *The Christian Topography* 3.65; cf. Hermann Bengston, *Cosmas Indikopleustes und die Ptolemäer*, *Historia*, IV [1955], pp. 155-6; Thiel, 7-20). Hitherto, however, no pre-Islamic remains have been discovered on the island (cf. P. L. Winnic, *Greece*, *Antiquity*, XXXIV [1960], pp. 100-10).

I.e., Patala, the port near modern Hyderabad at the head of the Indus River delta where in 325 B.C. Alexander repaired the ships of his fleet prior to its voyage to Babylonia (Arrian, *Anabasis Alexandri* 5.18; cf. P. H. L. Eggertsson, Alexander's *Campaigns in Sind and Baluchistan and the Siege of Brahman Town of Harmatella* [Leuven, 1975], pp. 189-90].
AGATHARCHIDES OF CNIDUS: ON THE ERYTHRAEAN SEA

106a. In their country the heavenly bodies also behave remarkably. One example is what happens concerning the Bear. For from Maenacteron in the calendar used by the Athenians, no star of the seven appears until the first watch, in Poseideon until the second watch and in the succeeding months things proceed according to the same scheme. As for the other heavenly bodies, the planets are invisible, some stars are greater in size and others do not set or rise at their regular times.

106b. We must not omit, however, the unusual heavenly phenomena in these regions. Most remarkable is what has been recorded about the Bear and which causes great perplexity to sailors. For people say that from the month which the Athenians call Maenacteron not one of the seven stars in the Bear is visible until the first watch, and in Poseideon until the second and as the months succeed in order after this one, they gradually become invisible to sailors. As for the other heavenly bodies, those called planets are in some cases larger than they are in our countries, and in other cases they do not have the same risings and settings.

107a. As for the appearance of the sun, people say that it is peculiar and different in the regions beyond Ptolemais. First, there is not, as in our part of the world, that twilight we see for a considerable period just before dawn and then sunrise. Instead, while the darkness of the night still persists, the sun suddenly shines forth. Day does not begin there before one sees the sun. Second, the sun appears to rise from the middle of the sea. Third, when it does rise, it is like a blazing coal, scattering great sparks, some into the disc of light and some beyond. Fourth, people also say that the shape of the sun is not like a disc but most closely resembles a thick column which appears fatter at the end as if it had a head. Fifth, neither ray nor beam shines on the earth or the sea until the first hour, but the sun is a lightless fire in the dark. At the beginning of the second hour, however, the whole star rises with the shape of a shield, and it casts a shadow of this shape together with its light onto the land and sea that is so strange and fiery that both appear enormous. Sixth, people say that an opposite phenomenon concerning the sun is observed at dusk, for people report that after the sun has sunk below the horizon, its light is seen for not less than three hours after sunset, a period which the inhabitants of the area consider the pleasantest part of the day.

1 Maenacteron, the fifth month of the Athenian calendar, equals approximately November. In the second century B.C., at the latitude of Ptolemais of the Hunts the first star of the Great Bear did rise on the first day of Maenacteron at 5:45 P.M.; that is, during the first of the four watches into which the Greeks divided the night, but Agatharchides' further claim that it appeared an hour later each successive month is incorrect, its rising actually occurring earlier in the evening; cf. C. H. Oldfather, <i>Diodorus of Sicily (London, 1935) 11, 233 n. 4</i>. 2 The various phenomena described in this passage are typical results of atmospheric refraction of the sun's rays in low latitudes.

sun is seen to rise from the midst of the sea, it resembles a fiery piece of charcoal and shoots out great sparks. In shape it does not appear to be cone-shaped, as we consider it, but to have a form like that of a column which seems to be a little thicker at the top. Moreover, it casts neither light nor rays before the first hour but appears as a dull ball of fire in the dark. At the beginning of the second hour, however, it takes on the shape of a round shield and gives off an exceptionally bright and fiery light. When the sun sets, an opposite set of phenomena occur with regard to it. For it appears to observers to light up the universe with strange rays for not less than two hours but, as Agatharchides the Cnidian writes, for three. This time seems most delightful to the natives since the heat is reduced by the setting of the sun.

1 Apropos of the accuracy of this passage Salt, p. 93, reports that at sunset near Pemba Island the sun, "emerging from a dark cloud, when its disc touched the horizon, . . . seemed to expand beyond its natural dimensions, became of a palish red hue, and assumed a form greatly resembling a portion of a column".
AGATHARCHIDES OF CNIDUS: ON THE ERYTHRAEAN SEA

108. Of the winds the north and west and also the northwest and the east blow just as in other countries, but in Aithiopia the south wind neither blows nor is known at all. In Trogodytice and Arabia, however, they are so extremely hot that they set forests on fire, and the bodies of those who take refuge in the shade of their huts become enfeebled. The north wind, on the other hand, may justly be thought the best since it reaches every part of the inhabited world and remains cool.

109. In discussing the tides the author adds various explanations and rejects all of them as in no way true. 'That all of these are empty verbiage that ought to be shamed into silence as they have no connecton with any fact capable of shedding light on the subject under discussion,' he says; 'is easy to discern.' Then, after adding other remarks of the same character, he continues again, 'wherefore, with regard to proposing explanations of why the tide, earthquakes, winds, thunderbolts and all such phenomena occur, we leave that to those more prone to facile talk than we. But as for the circumstances which have resulted in conspicuous disasters, we have given an account based on information obtained from knowledgeable informants. Our ambition is to discover more convincing explanations of unusual subjects, but as for giving a true account, that we wouldn’t dare.'

110. In the strait just mentioned, he says, a strange thing occurs with regard to olive trees. When the tide comes in they are all submerged, but they bloom during the whole period of the ebb tide in the sea.

There is a kind of plant that grows underwater there in the tidal zone. It resembles black rush, and the nativee call it 'Iise treeees' in an attempt to add a naive credibility to a mythical tale. When this plant is struck by a wave, it bends every-which-way since its whole stalk is soft and like that of other plants. But if a person cuts off a piece and exposes it to the air, the separated piece immediately becomes harder than iron.}

1 I.e. Agatharchides. The connection of the tides with the phases of the moon was first convincingly established by the first century a.c. historian Poseidonius on the basis of observations made by him at Cadiz (cf. J. Oliver Thompson, History of Ancient Geography [Cambridge, 1948], p. 211).

2 Again the Shora (cf. Western Arabia, p. 193).

3 Cf. Piny, HN 13.142 who compares it to coral. Although certain identification is not possible, a strong possibility is one of the so-called Sea Fans (Phylum Coelenterata, Class Anthozoa, Subclass Alcyonaria, Order Gorgonasia) which occur in the Red Sea in either tree-like or fan shaped colonies and whose protein core quickly stiffens if the animal is removed from the water (cf. Stephen M. Head, 'Minor Invertebrate Groups', Red Sea, p. 240).

111. Many other kinds of fish, he says, also are born in the previously mentioned places which are unusual in character. There is, however, one kind of fish that is extremely black in colour, about the size of a man, and is called 'Aithiopian' because its face is snubbed in shape. At first, those who catch it think it is not right to either sell or eat it because of this resemblance, but with the passage of time they do both without compunction.

112. We have carefully recorded in five books the situation concerning the tribes located in the south as they were in our time. But we have entirely given up the idea of writing an account of the islands in the sea which were discovered later, the peoples beyond these and the aromatic substances which grow in Trogodytice since our age is unable to similarly bear the toil, particularly after we had written large works about Europe and Asia and because we have been unable to accurately examine the hypommnemata as a result of the disturbances in Egypt. He, however, will not hold back who has familiarized himself with the subject in detail, provided himself with a style worthy of history, and decided to seek fame through toil.

1 Cf. Woelt, pp. 252–3, who suggests either a member of the family Lutjanidae or of the genus Cheilinus.

2 Agatharchides' reference is unclear since Greek knowledge of the two principal island groups in the Indian Ocean north of the equator, the Maldives and Laccadives, is not attested before Roman imperial times (cf. Cary and Warnington, pp. 99 and 103).

3 For incense from Trogodytica, i.e., the African coastal region of the southern Red Sea, and its commercial importance see Strabo 16.4.14, C773; Piny, HN 6.174, 12.66, 69; and Crone, pp. 21–2.

4 Photius' paraphrase of this passage in Codex 213 indicates that in his original text Agatharchides gave the actual number of books in each of these works.
APPENDIX

UNPLACED FRAGMENTS

I. Certain Fragment
1. People near the Erythraean Sea who become sick, as Agatharchides says, not only suffer other symptoms but also ones that are novel and unrecorded. Small worms eat through the skin and come out from their arms and legs. If touched, however, they retreat back into the skin and, curling up in the muscles, cause unbearable inflammation.¹

II. Probable Fragments
1. They (sc. elephants) are also captured in India in this way.² A mahout riding a tame elephant beats with an iron goad an animal found alone or separated from the herd. When it has become exhausted, he crosses over to it and guides it just as he did his previous mount.³ Africa⁴ captures elephants by means of pits. Immediately upon one wandering into such a pit, others gather branches, roll down masses of stones, construct ramps and try with all their strength to draw the animal out. In earlier times the kings⁵ in order to tame them forced them with horsemen into an enclosure that had been constructed by hand and was deceptive because of its

¹ As in Fragment 59 the reference is to Guinea Worm infestation; cf. R. Hoenpli, Parasites and Parasitic Infections in Early Medicine and Science (Singapore, 1951), pp. 8, 213, 242. The clinically precise description of the worm responsible for the symptoms proves that Agatharchides' source for this passage was not the same as that used in Fragment 59.
² The probable Agatharchidean origin of this passage was recognized by Woelk, p. 100, who connected it with Fragment 9 of the first book.
³ This account is probably ultimately derived from Ctesias' Indica in view of the similar description in Aristotle, History of Animals 9.1, 610a 15; cf. Scullard, p. 48. A fuller description of the method of hunting elephants in India is provided by Megasthenes (FGH, 715 F 20) Arrian, Indica 13 and Strabo 15.1.42-3, C704-6) who served as ambassador for Seleucus I to the court of the Maurya king Chandragupta (322-299 B.C.).
⁴ I.e. North Africa.
⁵ I.e. the Ptolemies.

APPENDIX

great extent. The animals which were confined by its banks and ditches they broke by hunger. The proof was when one gently accepted a branch offered by a man.¹
2. Those² who depart from the City of Heroes to sail along the coast of Trogodytice encounter the city of Philotera,³ which was named after the sister of the second Ptolemy, a foundation of Satyrus⁴ who was sent to gather information about the hunting of elephants and Trogodytice.
3. Then follow the Tauri, two mountains which from a distance have a shape that has a certain similarity to these animals. Then there is another mountain with a temple of Isis, a foundation of Sesostris. Then an island planted with olive trees but subject to flooding. After this island is Ptolemais which was founded for the hunting of elephants. It is a foundation of Eumedes who was despatched for purpose of hunting by Philadelphus.⁵ First, he secretely fortified the peninsula with a ditch and stockade; then he conciliated the people who were seeking to obstruct him and made them friends instead of enemies.

¹ Cf. the account of the taming of the great snake in Fragment 80.
² Fragments 2 and 3 clearly derive from the paraplu or the African coast of the Red Sea referred to by Agatharchides in Fragment 84 as was pointed out by Leopold, pp. 15-17. Like Fragment 1 these two passages probably belong to Agatharchides' account of the beginnings of Ptolemaic elephant hunting and exploration of the Red Sea in Book 1.
³ Ancient Pithon, modern Tell al-Mashbata (30°33'N, 32°06'E) near the eastern end of the Wadi Tumilat. The ancient history and archaeology of the site is surveyed by John S. Holladay, Jr., Tell el-Mashbata (Malibu, 1982).
⁴ Usually located at the entrance to the Wadi Iasus (26°40'N, 34°00'E). This was doubted by Miller, OIM, 1, 168, because in this section Strabo mentions Myus Hormus after Philotera instead of before as does Pliny, HN 6.168 and Ptolemy, Geography 4.5.14. The discrepancy is, however, illusory since the mention by Strabo of Arsinoe at the head of the Gulf of Suez immediately after Philotera makes it clear that it resulted from the fact that his source, Artemidorus, mechanically inserted this fragment as a block into his account of the African coast of the Red Sea at the appropriate point for a reference to the City of Heroes.
⁵ Satyrus made a dedication to the deified Arsinoe II at the temple of Pan Euodos at al-Kaai on the road from Berenice to Coptus, probably on his return from another voyage to Trogodytice sometime after 270 B.C. (A. Bernard, Panion 9 with Bernard's commentary).
⁶ A carpenter named Dorian, probably employed on the construction of Ptolemais, made a dedication to Pan Euodos at the temple of Pan at al-Kaai (A. Bernard, Panion 9bis).