PSEUDO-SKYLAX AND THE NATURAL PHILOSOPHERS*

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In memory of Professor Duncan Tanner (1958–2010), ἱστορικωτάτου

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Keywords

Pseudo-Skylax; periplous; Greek geographical writers; Academy; Peripatos; Dikaiarchos of Messana

Abstract

This paper seeks to establish an intellectual context for the periplous of Pseudo-Skylax (probably written in or near Athens in 338–c.337 BC). The unknown author is aware of the work of contemporary natural philosophers, including those in the post-Platonic Academy and those who were to form the Peripatos, especially Aristotle, Theophrastos, and Dikaiarchos. Among known writers, Dikaiarchos is most likely to have written the periplous; but the case remains unproven. Doubts are also raised as to the validity of the so-called periplographic genre.

1. Introduction

The Periplous (Circumnavigation) preserved under the name of Skylax of Karyanda is a prose work of about 8,000 words. It enumerates briefly the coasts and cities of the Mediterranean and Black Sea in a clockwise circuit, beginning and ending just outside the Pillars of Herakles (straits of Gibraltar). Much of the work proceeds by defining regions equated with particular peoples, often (but not always) noting the beginning and end of each territory, naming some important towns (sometimes inland), and ending with the sailing time or distance along its coast, as in these examples:
And past the Iberes there follow the Ligyes (Ligurians) and Iberes, mixed, as far as the river Rhodanos (Rhône). Coastal voyage of the Ligyes from Emporion as far as the Rhodanos river: two days and one night.

And past Hesperides there is a great gulf, which has the name Syrtis, and (is), so to say, as one guesses approximately, of 5,000 stades. In width it is, from Hesperides to Neapolis (Lepcis Magna) on the other side, a voyage of days, three, and nights, three.

According to Herodotos, Skylax of Karyanda was sent by king Darius, with others, to explore India; his expedition thus dates to the late sixth century BC. The periplous, however, is certainly not of that time, since many of the things it asserts entail a fourth-century date. Accordingly, both it and its author are known as Pseudo-Skylax (hereinafter ‘Ps.-Skylax’). The aim of the present paper is not to argue in detail about the work’s date and purpose, but rather—after setting out the current understanding with regard to those questions—to suggest that a plausible intellectual context for its composition has been overlooked.2

The Periplous is a notoriously problematic text, preserved only in an extremely corrupt late medieval manuscript (two derivative copies add nothing of note).3 Its original title, if any, is uncertain. As to where and when it originated, the most persuasive view is that it was composed at or near Athens4 in the third quarter of the fourth century BC.

On a strict interpretation of its internal evidence the text should date from the early 330s.5 I follow those who regard the author’s inclusion of Naupaktos within Aitolia (§35) as decisive in

1 Hdt. 4.44. Panchenko (2002) 11 proposes 518 BC.
2 Special abbreviations: Dik. = Dikaiarchos; M. = fragment in Mirhady (2000); PS = Pseudo-Skylax; W. = fragment in Wehrli (1967). Section divisions within chapters of Ps.-Skylax are those introduced in my edition. Some place-names are italicized to show that they are not ancient.
4 PS seems to display local knowledge of Attica and to expect his readers to share it: Shipley (2010). His Athenian identity is inferred (by e.g. Marcotte (1990) 32 n. 21, 38 n. 36; Counillon (1998) 124) on the basis of phrases such as ‘the sea on our side’ (τὴν ἐπὶ ἡμῶν θάλασσαν, §40) and ‘this sea’ (ταύτην τὴν θάλασσαν §59; τὴν ταύτην, §61); but Marcotte concedes that such words could be used by others—one thinks e.g. of Megarians, Aiginetans, and Boiotians. They are probably compatible with any Aegean standpoint. Still less compelling is the idea that the section on the N. Cyclades (§58.1–2) adopts an Athenocentric perspective (contra Counillon (2001b) 17–19, see Shipley (2011) 132 ad loc.).
favour of a terminus post quem of 338. As to a terminus ante quem, the mention of Boiotian Thebes (§59) is prima facie evidence of a date before that city’s destruction by Alexander the Great in autumn 335. Logically, the period after the city’s refoundation by Kassandros in 316 is also possible; but, as the late antique commentator Markianos saw, the rest of the periplous shows no awareness of Alexander’s expedition or of its consequences. The terminus ante quem can even be raised a little, since the coastal towns of southern Messenia, which Ps.-Skylax puts in ‘Lakedaimon’ (§46.1), ceased to belong to Sparta not long after the battle of Chaironeia; this points to 338, or perhaps 337 if we allow for a delay in the taking, or the implementation, of Philip II’s decision to remove them from Spartan control.

The lower limit of 337 cannot, however, be regarded as impermeable to the same degree as the upper. An author may adopt the standpoint of a time earlier than his own in order to avoid admitting unpalatable truths about the present; he may for some other reason set out to describe the state of knowledge at an earlier time; or he may uncaringly or unknowingly repeat out-of-date information that he has not checked. The more time has elapsed, however, between the apparent and the real date of composition, the more likely it is that the author will betray himself. If Ps.-Skylax is writing well after c.337, he has managed to conceal his actual epoch to an extraordinary degree. More relevantly, perhaps, if a work’s composition spans a period of years, the writer may not feel obliged to correct later what he wrote at the outset, even if the world has changed in the interim. It remains overwhelmingly probable, therefore, that the work as we have it (apart from linguistic changes during transmission in later centuries) was finished a year or two before, or at the latest a very few years after, Alexander the Great’s accession in 336.

Various apparent terminus ante quem dates implied in the text appear, nonetheless, to contradict the above interpretation, notably the inclusion of Greek city-states (poleis) that we know, from other evidence, were destroyed earlier, or at least lost their polis status (e.g. Sicilian Naxos, §13.2). The simplest explanation is that the author has taken data from a

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7 In the prefatory note in the MS, plausibly attributed to him, e.g. by Marcotte (2000) lrvii. For the text of this note and a translation, see FGrHist 2046 T 6 in Shipley (forthcoming 2012).
8 The grounds advanced for dating one passage to the 310s (Counillon (2007b) 37–9, 42) are not compelling. They use of the newer name, ‘Herakleia’, for Latmos (§99.1) need not date this passage to the late 4th cent.: both names were probably current earlier (Shipley (2011) 169; Flensted-Jensen and Hansen (2007) 205 n. 9). The inclusion of Telmissos (Fethiye) within Lykia (§100.1) need not date this passage post-333: it is equally compatible with the early 4th cent., and PS may be using old information (Shipley (2011) 173).
10 We have no evidence about the author’s gender, other than Markianos’ note above the text referring to Skylax of Karyanda; but given the history of Greek geography the author is overwhelmingly likely to have been male.
11 Counillon’s claim cited at n. 8 above would, if accepted, be the only serious argument that part of the text postdates Alexander’s death.
12 The loss of polis status, e.g. through destruction or synoikism, is sometimes harder to demonstrate than its
range of written sources without updating them. (Oral sources are virtually excluded for this kind of information, since they are unlikely to have been significantly out of date.) Both Ps.-Skylax and his contemporary Theophrastos, in a work of the late 310s or 300s, mention the city of Sybaris without noting that it no longer exists; it has been suggested that for the Italian peninsula Theophrastos draws upon Presocratic sources. If an author of his standing can purvey out-of-date information, a fortiori the author of an apparently less sophisticated work may surely be allowed to do so.

Although a date in the mid-fourth century may now be regarded as secure, we should note alternative theories since their acceptance would have implications for the authorship and aims of the work. Older views that it is a late antique abridgement of a classical work, or a Byzantine compilation, find no support today. The chief remaining competitor to the view that the *periplous* was created in the mid-fourth century BC is the idea, advanced most insistently by Peretti, that the *periplous* contains an ‘ancient nucleus’ of genuine travel observations written in the late archaic period—perhaps by Skylax of Karyanda himself—which was modified piecemeal over time in order to maintain its usefulness as a navigational aid. Peretti also believes the work has connections to early cartography. He still has his followers, but his interpretation raises more problems than it solves. For reasons not to be set out in detail here, I believe that the work does not preserve the experiences of voyagers directly, but only at several removes; that it is not intended for sailors; that the author does not necessarily report anything he has seen himself, except perhaps in Attica; and that it has no connection to maps, which were not in regular use at this period. It aligns itself, rather, with those works of literature that display ‘hodological’ features, describing space acquisition, and rhetoric (e.g. on the part of exiles) may deny realities; but it seems to be a real phenomenon. For relevant criteria, see the introduction to M.H. Hansen and Nielsen (2004), e.g. at 53–4.

13 HP 1.9.5. Date: Fraser (1994) 171.
14 At §13.5 PS mentions Sybaris even though—as ‘Sybaris V’, not yet identified archaeologically—it had been destroyed within living memory (Diod. 12.22.1).
15 Fraser (1994) 182.
16 Vossius (1838) [1651], 167–8; Müller (1855) xlix.
17 e.g. Fabricius (1878) v–vi.
18 At greatest length in Peretti (1979).
19 e.g. Garzón Díaz (1998–9).
21 The author never claims to have been to the places he names, unlike e.g. Hanno. He is not simply juxtaposing eye-witness reports: the framing of the narrative is too consistent. Nevertheless, Panchenko (2005), accepting Peretti’s date, maintains unconvincingly that PS visited the straits of Gibraltar. See Shipley (2011) 147–8.
22 For example, as noted below, the text does not furnish ship-captains with what they need to know. Distances in stades, as opposed to days and nights, are unlikely to have been of use to them; many of the stated distances are longer than a day; and navigational landmarks are sporadically recorded.
23 Shipley (2010).
sequentially in order to engage readers’ attention through what has been called the ‘verbal map’.  

Situating the composition of the work at or near Athens in the years 338–c.337 immediately raises the question of its relationship to contemporary philosophical and scientific research. Dominating the field at the time were the post-Platonic Academy, led since 348/7 by Speusippos, as well as Aristotle, Theophrastos, and others outside the Academy; Aristotle was soon to find his Peripatos or Lyceum after returning to Athens in late 335. If our periplous was not yet written, it took shape very soon afterwards. It will be the task of the rest of this paper to try to clarify the relationship of the periplous to those intellectual activities, with a view to understanding its aims better and, if possible, identifying its author.

Ps.-Skylax and his contemporaries were in a position to draw both information and ideas both from each other—at a time of increasingly active data-gathering about the natural world—and from earlier writers. Although space forbids full discussion here, we should note that Ps.-Skylax takes relatively little, at least at the level of detail, from his geographical predecessors such as Hekataios, Herodotos, Theopompos, and Ephoros. The periplous of Hanno the Carthaginian, often invoked as a model for the pages on NW Africa, has in fact few points of concurrence with them after its eighth chapter; in any case, Hanno’s periplous may be early Hellenistic rather than, as used to be assumed, archaic (though it may describe a genuine early voyage).

Müller raises, though only tentatively, the possibility that Phileas of Athens wrote our periplous; but current opinion makes Phileas fifth-century. Ps.-Skylax certainly used him, but must have taken the bulk of his information, including any relevant to the fourth century, from other sources, written or oral. It is in connection with the far West, perhaps, that Ps.-Skylax is most likely to have relied upon oral evidence, perhaps from non-Greek traders. If he also used written sources, they were of a kind or kinds not mentioned in extant literature. It

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26 Diog. Laert. 5.10.
27 Peretti (1979) 118–49.
30 Peretti (1961).
32 Desanges (1978) 83; Euzennat (1994) 578. For a more detailed analysis of PS’s relationship to earlier writers, see Shipley (forthcoming 2012), sect. III.0.4.
33 Müller (1855) 1, more cautiously than those who cite him often acknowledge (e.g. Baschmakoff (1948) 23).
34 e.g. Marcotte (1986) 169–70; González Ponce (2011a).
36 See further Shipley (2011) 12. Mark Woolmer suggests (pers. comm.) that PS may have talked to Carthaginians or Phoenicians at the Piraeus.
is unlikely that they included navigational gazetteers: ship-captains needed no books to help them, for they could gather information at the waterfront or use interpreters and guides in distant places. Administrative or mercantile records kept by merchants or financiers are a theoretical possibility, though less likely for regions where Ps.-Skylax is significantly out of date. More likely these written sources included earlier regional periploi with a literary, rather than a functional or navigational, character.\(^{37}\)

2. Context

As noted above, there are signs that the author, whatever his polis affiliation, is writing in or near Athens. Given the date and place of production, what was the possible intellectual genesis of the work?

2.1. The Form of the Earth

The author of the periplous does not state the aim of his work (possibly the opening words are missing). Although the periplous divides up most of the oikoumenē into ethnē, it also presents features at odds with such a scheme. Recent studies point to its having had, in general terms, an aim that may truly be called geographical.\(^{38}\) In particular, the author shows interest in amalgamating his ethnic units into continental entities (Europe, Asia, Libyē), for which he calculates total lengths, as well as into blocs of intermediate size within them. Examples of the latter include the coast from Iberia to France, which he characterizes as well provided with harbours (§4), and the area he describes as ‘continuous Hellas’ (§§33.2–65.2) and within it the Peloponnese (§§40–55). In the case of European Thrace, he divides it into three parts, adding up their separate paraploi (coastal sailings) to make a total for the region (§67.10). Also at variance with his normal practice is his description of Crete (§47), a single topographical unit (containing a mixture of ethnē, like Sicily), where he abandons the normal coastwise organization of the text, §47), instead zigzagging along the island from west to east.\(^{39}\)

The periplous is far from being an early equivalent of the Mediterranean Pilot; it is, rather, a study seeking to represent verbally a large portion of the known world, seemingly conceived as the part accessible to Greeks by sea. The systematic inclusion of sailing distances (some in days and nights, others in stades) can be understood in the context of these observations. Ps.-Skylax calculates the length of each of the continents (§§69, 106.4, 111.8) from the sailing distances he has previously stated, by converting both the nights’ sailing, and the distances given in stades, into days’ sailing and arriving at a grand total. Although some scholars regard

\(^{37}\) For the probability that PS draws upon earlier, more local periploi in the Black sea, see Counillon (2004) 42–3.

\(^{38}\) e.g. Counillon (1998) 123–4; Counillon (2001a) 389–91, 393.

\(^{39}\) See Counillon (2001a).
these passages as later additions, none of their language is inconsistent with a classical date; neither is their purpose discordant with the rest of the *periplous*. Even if we do discount them, it seems clear that by listing the shorter coastal trajectories the author means us to appreciate and compare the dimensions of the parts of the inhabited, accessible world as he has framed it.

If we accept that one of the author’s aims is to present a composite dimension for part of the world, this aligns him with contemporary natural philosophy. Calculating the length of a gulf or an inland sea was not a new exercise—Herodotos does it for the Pontos—but calculating longer maritime distances is a feature of the early Peripatetics within a very few years of Ps.-Skylax. Dikaiarchos of Messana, a ‘pupil’ of Aristotle, is credited with reckoning the distances from the Peloponnese to the Pillars, from the Peloponnese to the head of the Adriatic, from the Peloponnese to Sicily, and (by subtraction) from Sicily to the Pillars. One of Ps.-Skylax’ data, 7 days and 7 nights for Carthaginian territory (§111.6)—which on his own formula of 500 stades per day (§69) equals 7,000 stades—even matches Dikaiarchos’ distance from Sicily to the Pillars, though Ps.-Skylax reckons along the coast (probably from cape to cape) whereas Dikaiarchos expressly gives the distance in a straight line.

Dikaiarchos also devised a *diaphragma* or ‘partition’ between the northern and southern halves of the inhabited portion of the world; it ran from the Pillars of Herakles via Sardinia, Sicily, the Peloponnese, and Asia Minor to Mt Imaos (the Himalayas?). The expression with which Agathemeros describes this *diaphragma*, ‘a straight, well-adjusted section’ (τομὴ εὐθεῖα εὔκρατος), brings to mind the much shorter pair of *diaphragmata*—from Chalkis to Mykale, and from Cape Malea to Rhodes—that stand at the end of Ps.-Skylax (§113.1–2), where the headings that introduce them insist upon their directness and straightness: ‘fairly direct in a straight fashion . . . straight in a direct fashion’ (ἐπιεικῶς εὐθὺ κατ’ ὀρθὸν . . . ὀρθὸν κατ’ ἐυθύ). These short transects, however, in no way cohere with the rest of Ps.-Skylax: not only do they eschew a coastwise progress, each being instead a series of hops from island to island, but they cover only a small part of Ps.-Skylax’ world, lying entirely within the Aegean. They seem to be later additions to the text—though nothing requires them to be much later. Likewise the list of the twenty largest islands with which the text concludes (§114)—limited to the Mediterranean and biased towards the Aegean—may not be much later than the main text.

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40 e.g. Counillon (2004) 8.
41 Hdt. 4.85–6.
42 Fr. 124 M. = fr. 111 W. = Strabo 2.4.1–3.
43 The comparison between PS’s distance and that in Dik. is noted by Peretti (1979) 363, 417.
44 Fr. 123 M. = fr. 110 W. = Agathemeros 1.5.
45 So Diller (1975) 61, following ms. B; ἔχρατος in earlier editions, following ms. C.
46 Agathemeros, dated 1st or 2nd cent. AD by (Diller (1975) 59, records (at proem. 4) a *diaphragma* from Euboia to Mykale, essentially the same as that in PS §113.1 (Diller (1975) 72).
47 It recalls similar lists in hellenistic authors: see Shipley (2011) 211 ad loc.
Either they or the main *periplous* may somehow relate to Dikaiarchos’ work; if both, then to two different works of his.

The principle of using shorter distances to calculate the grand proportions of the world, or a large part of it, appears also in a striking passage of Aristotle’s *Meteorologika*, a work completed in or after December 337 and probably after 335, and thus very likely after Ps.-Skylax. Aristotle expressly refers to calculating the dimensions of the inhabited area of the world on this basis:

τὸ γὰρ ἀπὸ Ἑρακλείων στηλῶν μέχρι τῆς Ἰνδικῆς τοῦ ἐξ Ἀιθιοπίας πρὸς τὴν Μαιῶτιν καὶ τοὺς ἐσχατεύοντας τῆς Σκυθίας τόπους πλέον ἢ πέντε πρὸς τρία τὸ μέγεθός ἐστιν, ἐὰν τέ τις τοὺς πλοὺς λογίζηται καὶ τὰς ὁδούς, ὡς ἐνδέχεται λαμβάνειν τῶν τοιούτων τὰς ἀκριβείας.

The distance from the pillars of Herakles as far as India is more than 5 to 3 in size as compared with that from Aithiopia to Lake Maiotis and the places lying in the furthest part of Skythia, if one reckons up the sea voyages and the roads, to the extent that one can gather the exact dimensions of such things.

(Mete. 2.5.362b 19–25)

‘Reckoning up sea voyages’ is what Ps.-Skylax does in his summative *paraploi* of the three continents, as well as those of some of his intermediate blocs. Since Aristotle’s calculations extend twice as far as those of Ps.-Skylax, it is hard to imagine that Ps.-Skylax wrote after him—at least if, as now seems likely, PS was working in the ambit of natural philosophers active in Athens. Perhaps he made the first attempt, to which Dikaiarchos responded by refining the method and extending the calculation to India, and Aristotle employed Dikaiarchos’ results to compare the length and breadth of the *oikoumenē*. It may have been in a similar spirit of response to earlier investigations that Pytheas of Massalia—not a member of the Peripatos but quite possibly in touch with it—set out, in about the 320s, to explore the North Atlantic, perhaps because Ps.-Skylax had left it out.

A further possible point of contact between Ps.-Skylax and contemporary philosophy is

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48 Another possible point of contact is that PS §77 and Mete. 1.13.351a 11 both mention the Koraxoi of the E. Black Sea; the only other pre-hellenistic mention appears to be Hekataios fr. 210 Jacoby (ap. Steph. Byz. s.v.).

49 Cohen and Burke (1990), identifying Jupiter’s occultation of (or close conjunction with) a star in Gemini (Mete. 1.6.343b 30–2) as that of 5 Dec. 337. The next latest date in Mete. is that of the archon Nikomachos, 341/0 BC (1.7.345a 1–2). The work had already been dated after 335 on other grounds (e.g. Peretti (1979) 417 n. 447, citing Jaeger (1955) 321 n. 1).

50 Aristotle uses λογιζομαι, as does PS in his first two continental summings-up (§§69, 106.4); cf. λογισμοῦ in the third (§111.8).

51 Roller (2006) 64.

And some say that these Aithiopes stretch along inhabiting continuously from here to Egypt, and that this sea is continuous, and that Libyē is a headland.

Here Ps.-Skylax takes sides in a long-running debate about whether the seas south of Libyē were connected with each other and thus whether one could sail direct from the Red Sea to the Pillars of Herakles. In taking this view, which he implies was not universally shared, he concurs not only with Herodotos but also with his contemporary Aristotle. He may be responding to Herodotos or another early writer, and Aristotle may not yet have formulated his view when Ps.-Skylax wrote; but given that he is writing at a time when such things were being discussed, it seems likely that it is the current debate to which he is reacting.

2.2. Tides

Ps.-Skylax occasionally evinces an interest in tides. Few classical authors refer to them, but among them the natural philosophers of his day feature strongly. He refers twice to tides (§§110.8) and once to islands being submerged (sc. at high tide, §112.2). The transitive verb ἐπικλύζειν, ‘overflow’ (§112.2), which can also refer to submergence from other causes, is used in the fifth century by Euripides; later by Ephoros (c.405–330); then by Ps.-Skylax’ contemporaries Theophrastos and the ethnographer Hekataios of Abdera (c.360–c.290); then, among a slightly younger generation, by the explorer Megasthenes (c.350–290) and the philosopher Zeno (335–263); as well as in later sources. More remarkably, πλημμυρίδες, ‘flood tide’ (§1), and cognate words are used, before the third century, only by Ps.-Skylax’

53 As noted by Peretti (1979) 416–17.
54 On the debate about a possible land link between E. Africa, or even W. Africa, and India see e.g. Panchenko (2003) 280–1.
55 Hdt. 4.42; Mete. 2.1.353b 35–354a 3; cf. 2.5.362b 28.
56 PS’s description of Asia as convex (περιφερής, §106.4) may reflect similar debates.
58 Eur. Tro. 1326.
59 FGrHist 70 F 65.
60 HP 4.6.3; Physicorum opiniones, 12 (fr. 30 Wimmer = fr. 184 Fortenbaugh = Philo Judaeus, De aeternitate mundi, 120.3 Cohn); fr. 171 Wimmer (not in Fortenbaugh, Huby et al. (1992)).
61 Fr. 38c Müller.
62 Fr. 105 von Arnim. Cf. also ἐπίκλουσις, Thuc. 3.89.3 and 5.
older contemporaries Ephoros and Herakleides Pontikos, and then by Aristotle and Theophrastos. The term ἀνάπωτις, ‘ebb tide’ (§110.8), occurs elsewhere before the third century only in Pindar. The Attic form ἀμπωτις, however, is used by Herodotos and then by Ps.-Skylax’ contemporaries Aristotle, Theophrastos, Herakleides, Pytheas, and Dikaiarchos, the last of whom has a theory of solar attraction to explain the tides.

Thus, apart from two earlier poets and Herodotos, these terms are used, before the later hellenistic period, chiefly by authors of a philosophical or geographical character who are approximately coeval with Ps.-Skylax. This clustering is hardly surprising, given those writers’ interests (and the fragmentary preservation of the earlier natural philosophers), but given Ps.-Skylax’ date the shared terminology situates him firmly in their intellectual milieu.

2.3. Hydrology

An interest in water supply is not a prominent feature of Ps.-Skylax, but it does make appearances and provides another point of contact with contemporary geography. We learn that the Egyptians drink water from Lake Mareia in Egypt (§107.1), whose people’s musical habits were of interest to Aristotle. The Libyan Makai, whose hairstyle and armour feature in Herodotos, are said to move their flocks inland when the waters of the Syrtis recede in summer (§109.3).

Rivers will naturally have featured in Ps.-Skylax’ lost sources, just as they feature in known writers such as Hekataios and Herodotos. Occasionally, however, he treats rivers as more than demarcators of ethnic regions, but rather in a way that connects him with the debates about the composition of the oikoumenē that we see in philosophers. Examples include the divisions between regions and continents: the Peneios is the terminus of ‘continuous Hellas’ (συνεχὴς Ἑλλάς, §§33.2 and 66.1), the Strymon bounds Macedonia and Thrace (§§66.5, 67.1), the Istros (Danube) is the end of Thrace (§67.1 and 9–10), the Tanais bounds Asia and Europe

63 FGrHist 70 F 132.
64 Fr. 117 W.
65 As above (n. 57); also Mir. ausc. 844a 28, though dated C3 by Amiotti (1987) 48 n. 18; frr. 246, 680 Rose; FGrHist 646 T 2a–b (on the Nile).
66 HP 4.7.4–7; Phys. opin. l.c.; fr. 6 Wimmer (not in Fortenbaugh’s edition).
67 Pl. O. 9.52.
68 Hdt. 2.11, 7.198, 8.129.
69 As above (n. 57); also Mir. ausc. 844a 27, but see n. 65 above; Problemata 933b 8; fr. 680 Rose.
70 HP 4.7.4–5; fr. 6 Wimmer; CP 2.5.2.
71 Fr. 117 W.
72 Roller (2006) 64; frr. 2, 8 Mette.
73 Fr. 114 W. = fr. 127 M.
74 Keyser (2000) 368–70.
75 Fr. 319 Rose. L. Mareia is also mentioned by Hekataios FGrHist 1 F 25 (Diod. 1.68.5); Thuc. 1.104.
76 4. 175.
and the Kanopic mouth of the Nile divides Asia from Libya (§106.3). Europe is characterized in terms of its greatest rivers, the Tanais, Istrus, and Rhodanos (§69), though the other two continents receive no such characterization. The partly corrupt passage about the Istrus having a second mouth in the northern Adriatic (§20), plausibly reconstructed as a comparison with the Nile delta, recalls Herodotos’ placement of the Nile opposite the mouth of the Istrus.

Dikaiarchos makes the Nile flow eastwards through Africa from the Atlantic. Ps.-Skylax, in the most lacunose passage of the text (§105.1), may have described it as flowing into Africa from either the Red Sea or the outer ocean.

Ps.-Skylax comments that the outflow from the river Acheloös is turning islands into dry land (§34.3); here he may echo Thucydides rather than a source closer to his own time. Similarly, Theophrastos mentions Cape Kirkaion as having been joined to the land by alluviation, and both authors situate the Kirkaion in Latium. Ps.-Skylax’ statement that the island of Leukas, conversely, has been separated from the mainland by the dredging of a channel (§34.1) reflects the same curiosity about the alteration of maritime landscapes.

2.4. THE GREEK WEST

Theophrastos had a rather limited knowledge of Italy, and the early Peripatetics recorded curiosities about the non-Greeks of the peninsula under the general heading of νόμιμα βαρβαρικά. Some fragments of these stories are proximate to disconnected asides in Ps.-Skylax’ narrative.

(a) Herakleides Pontikos’ reference to the Gauls’ attack on Rome, probably in 387 BC, recalls Ps.-Skylax’ curiously allusive mention (§18) of the Keltoi of NE Italy ‘left over from the expedition’; clearly he expects his readers to know which expedition is meant. If these readers belonged to Athenian philosophical circles, they would probably know Herakleides’ work.

(b) We noted earlier that both Ps.-Skylax and Theophrastos mention Sybaris as if it still exists. Fraser speculates that Theophrastos got his information from the Presocratic Menestor of Sybaris, which does not explain why he fails to update the report but at least makes it more understandable that Ps.-Skylax does not do so either. Generally, he seems to use sources for

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78 Hdt. 2.33–4.
79 Fr. 126 M. = fr. 113 W. = Johannes Lydus, De mensibus, 4.107.
80 ἐστιν ἐκ τῆς ἐρ[υθρᾶς θαλάττης] or less likely ἐκ τ. ἐξ[ωθεν 9]. He is at least as likely to be talking about the Nile’s origin as about the size of Arabia (as in Müller’s reconstruction).
81 Thuc. 2.102.
82 HP 5.8.3; cf. Pliny 3.57.
83 Cf. also Fraser (1994) 185.
84 Fraser (1994) 186–7, cf. 188.
85 Fr. 102 W. = FGrHist 840 F 23.3.
southern Italy that are a little out of date. Thus the short coastline of the ‘Olsoi’ (i.e. Volsci, §9) may reflect a date in the first half of the fourth century;\(^8^6\) while elsewhere (§12) he omits to mention the Bruttii, who had formally become an *ethnos* in 356.\(^8^7\)

(c) Herakleides (in the fragment just cited) wrongly calls Rome ‘a Greek city’ (πόλις Ἑλληνίς), and it has been suggested that he took his information from a *periplous*.\(^8^8\) It was was not the *periplous* of Ps.-Skylax, who mentions Rome without calling it Greek (§5); but the phrase is one he uses regularly to describe Greek cities located among non-Greeks, and may reflect the use of similar sources by himself and Herakleides.

(d) Theophrastos is among the earliest sources to mention the cult of Diomedes in the Adriatic, which seems to have spread rapidly in the fourth century even among non-Greeks.\(^8^9\) Ps.-Skylax himself states that the non-Greek ‘Ombriokoi’ (Umbrians) worship Diomedes. His words ‘having received benefaction from him’ (εὐεργετηθὲν ὑπ’ αὐτοῦ, §16) suggests that he or his source was aware of the traditions that were now being elaborated in a literary form.

(e) Ps.-Skylax’ other disconnected references to the Homeric geography of the West (Elpenor’s tomb in Tyrrenia, §§8; Kalypso’s island off Lucania, and Odysseus’ visit, §13.5) and of the Adriatic (Alkinoös in Korkyra, §22.1; Hyllus son of Herakles, founder of the Hylloi, §22.2; the stones of Kadmos and Harmonia, §24.2; Geryones’ oxen, §26.3) likewise connect him, directly or indirectly, with the philosophers’ interest in these regions as a zone of Greek–barbarian confrontation.\(^9^0\)

2.5. **Flora (and Fauna)**

It seems hardly controversial to observe—though it does not appear actually to have been observed—that Ps.-Skylax’ unexplained *obiter dicta* about natural species, while few and scattered, place him in the same intellectual ambit as contemporary natural philosophers. Under Plato’s successor, Speusippos, the Academy conducted a programme of data collection about natural species; and it seems likely that even before Aristotle left Athens in c.347 he had, as a member of the Academy, begun those researches on living creatures which he would develop so spectacularly, in collaboration with Theophrastos, in the late 340s.\(^9^1\)

Ps.-Skylax has something to say about animals. As well as the domestic animals of the Makai and the cattle of Geryones (above), he notes the flocks of the Arabes (§105.1) and

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\(^8^6\) Shipley (2011) 96 ad loc. The short coastline of the Volsci in PS may reflect a stage in Roman expansion between the late 5th cent. and the Latin war (341–338); see Marcotte (1986); Fabricius (1846).

\(^8^7\) Diod. 16.15.2, cf. Strabo 6.1.5.

\(^8^8\) Fraser (1994) 186–7.

\(^8^9\) *HP* 4.5.6; Fraser (1994) 183–4.

\(^9^0\) For Homeric geography note also the references to Chryses (Troad, §95), Telephos (Lydia, §98.2), Andromeda (Phoenicia, §104.3), and Menelao (Egypt, §106.5).

\(^9^1\) See e.g. Ostwald and Lynch (1994) 610–11, citing Cherniss (1944) 44–8; Cherniss (1945) 31–59.
those of the Gyzantes in what is now Tunisia (§110.9). In NW Morocco he notes guinea-fowl (§112.1) and the animals, domesticated and wild, of the Aithiopes (§112.8–9).

He is more informative about plants, both natural and cultivated. The inhabitants of Brachion I. (Djerba), for example, use lotus as food, make wine from it, and grow olives, wheat, and barley (§110.1 and 4); vines are also grown in NW Morocco (§112.11). Reeds, galangal, and rushes are recorded at a lake in the same area (§112.1), while the broad seaweed off West Africa is sharp enough to cut one’s hand (§112.6). Most intriguing is the description of the Garden of Hesperides (§108.4), which is unlike any other passage:

ἔστι δὲ τόπος βαθὺς ὀργυιῶν γῆς, ἀπότομος κύκλῳ, οὐδαμοῦ ἕχων κατάβασιν· ἔστι δὲ δύο σταδίων πανταχῇ, oὐκ ἔλαττον, εὖρος καὶ μῆκος, οὗτός ἐστι σύσκιος δένδρεσιν ἐμπεπλεγμένοις ἐν ἀλλήλοις, ώς ὅτι μάλιστα πυκνότατος· τὰ δένδρα ἐστὶ λωτός, μηλέαι παντοδαπαί· ῥοαί, ἄπιοι, μεμαίκυλα, συκάμινα, ἄμπελοι, μυρσίναι, δάφναι, κισσός, ἐλαίαι, κότινοι, ἀμυγδαλαί, χαρώια.

And it is a place 18 fathoms deep, sheer in a circle, nowhere having a descent; and it is of 2 stades every way, not less, width and length. This is shaded with trees woven in one another as densely as possible. The trees are lotus (and) fruit-trees of all kinds: pomegranate-trees, pear-trees, arbutus fruits, mulberries, vines, myrtles, bay-trees, ivy, olive-trees, wild olive-trees, almond-trees, and nut-trees.92

Whether or not such a variety of cultivated and wild trees could really grow together,93 the passage surely shows Ps.-Skylax, as elsewhere, attempting to respond to the interest of, or whet the appetite of, philosophical colleagues to whom the collection of data about natural species was a very present concern.

Ps.-Skylax may be the earliest prose writer to mention wild olives (κότινοι, §110.4), noted not much later by Aristotle94 and Theophrastos.95 Other plants mentioned by him are, as one would expect, also noted by Theophrastos in his botanical works. One such is silphium in Cyrenaica,96 which Ps.-Skylax says grows in γύαι (§108.2);97 this unusual word for ‘fields’ may derive from earlier literary writings98 rather than anything we might consider a navigational source, or may perhaps reflect a specialized cultivation technique.99

92 For the species identifications see Shipley (2011) 189 ad loc.
93 Lin Foxhall (pers. comm.) advises me that they are suited to different altitudinal zones.
95 Often in HP, c.g. 1.4.1; also CP 1.3.3, 1.6.10.
96 HP 1.6.12, 3.1.6, 3.2.1, 4.3.1 and 7, 6.3 passim, 6.5.2, 7.3.2, 9.1 passim; CP 1.5.1, 1.16.9, 3.1.4–5, 6.11.14–15, 6.12.8.
97 The meaningless γύης of the MS is plausibly emended to ἐν γύαις.
98 Silphium is recorded as early as Solon (fr. 39 West)
99 I owe this suggestion to David Mattingly.
Only one of Ps.-Skylax’ observations about natural species does not refer to North Africa, but it is this one that connects him most closely to Theophrastos. In the middle of his ‘continuous Hellas’ passage (§§33–65), which is mostly devoid of non-topographical remarks, he comments that after Delphoi lies ‘Antikyra, a city, where the best hellebore treatments take place’. He does not elaborate. Theophrastos, too, links hellebore with Antikyra.\(^{100}\)

Ps.-Skylax has not set out to assemble such information systematically; it remains tantalizingly dispersed through his text. He has, perhaps, lit upon it when it has caught his eye, and thinks it worth including in order to meet certain expectations on the part of his readers.

### 2.6. THE PELOPONNESE AND CRETE

Cicero, in a letter of 50 BC to Atticus,\(^{101}\) says he has asked the freedman and scholar Dionysius to check out Dikaiarchos’ statement that all Peloponneseans have maritime access. Cicero finds the claim surprising, because Dikaiarchos was ‘a most historical man’ (ἵστορικώτατος)\(^{102}\) and lived in the Peloponnese himself.\(^{103}\) Cicero’s question to Dionysius is, in effect, a question about the Arkadians, since the other ethnic regions of the Peloponnese are transparently coastal. Dionysius has reported back, says Cicero, that ‘he thought that in Arcadia there was a certain coastal place called Lepreon’ (Ἀρκαδίας κενσεβάτ esse Lepreon quoddam maritimum), thus confirming Dikaiarchos’ statement. Dikaiarchos must have been responding to the statement in the Catalogue of Ships that Agamemnon gave the Arkadians vessels ‘since the works of the sea were no concern to them’ (ἐπεὶ οὐ σφι θαλάσσια ἔργα μεμήλει).\(^{104}\) The only other classical author who deals explicitly with Arkadian maritime access is our own Ps.-Skylax, who makes Arkadia extend to the sea at Lepreon (§44). This became true only around 369, when the Triphylian towns, of which Lepreon was the most important, joined the new Arkadian league. It remained true down to Dikaiarchos’ day and beyond, for although the league soon collapsed (probably in 362), so that Lepreon was no longer politically part of Arkadia, it retained an Arkadian geographical and cultural identity, as Polybios and Pausanias reveal.\(^{105}\) Dikaiarchos would naturally have known of Triphylia’s involvement in the league, and perhaps also of Lepreon’s subsequent Arkadian identity, and

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\(^{100}\) *HP* 9.9.2.

\(^{101}\) Cic. *Att*. 6.2.3 (Dik. fr. 79 M.).


\(^{103}\) Despite this and his writings on the Peloponnese, it appears reasonably certain that Dik. was from Sicilian Messana, not Peloponnesian Messene. *Suda* (s.v.) calls him Σικελιώτης ἐκ πόλεως Μεσσήνης; he discusses Sicilian customs and language at *frr.* 106, 108–9 M. = *frr.* 95, 94, 97 W.


\(^{105}\) Nielsen (1997) 129–32.
appears to have used this knowledge to update Homer’s well-known identification of the Arkadians as an inland people.

Evidently Dikaiarchos did not name Lepreon in the work Cicero consulted, which was not our periplous but the book *On the Descent into the Cave of Trophonios*.106 Dionysius, in answering Cicero, either drew on his own knowledge or turned to another source, perhaps the periplous. As regards the intellectual context of the periplous, it is at least suggestive that Ps.-Skylax and Dikaiarchos are the only Greek authors known to have commented directly or indirectly on Arkadian access to the sea via Lepreon.

Ps.-Skylax names two towns in Crete that are mentioned by Peripatetic authors and hardly anywhere else in classical sources: Prasos or Praisos, named twice by Theophrastos107 and rarely elsewhere; and Pergamos, named only by Aristoxenos.108

2.7. Famous People and Peoples

Several legendary figures (as we would term them), besides those we mentioned earlier with reference to the West, appear momentarily: Medea at Aia in Kolchis (§81), Chryses in the Troad (§95), Telephos at Achaiōn Limēn in Lydia, formerly in Mysia (§98.1), and Menelaos’ steersman Kanopos in Egypt (§105.6).

Besides Homer (born in Smyrna, §98.2; buried on Ios, §58.2), two historical personages make fleeting appearances. Referring to the island of Tenedos (§95), Ps.-Skylax mentions Kleostratos the astronomer (late sixth century?), whose home was there. The only other classical author who mentions him is Theophrastos.109 The other figure is from Ps.-Skylax’ own day: Kallistratos ‘the Athenian’, a controversial general who founded a colony110 in Aegean Thrace c.360 (§67.2) and was executed at Athens c.355.111 We can only speculate about why he caught our author’s attention, presumably in a source he consulted for information about Thrace. Perhaps he spotted his Athenian ethnikon and chose to include him as a point of interest to readers in Athens; or his attention was drawn to the rare phenomenon of a newly founded polis.112 Quite possibly, however, Kallistratos also had philosophical connections, as did other generals such as Chabrias and Phokion.113 Kallistratos, indeed, is

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106 For this work, see Dik. frr. 13–22 W.; frr. 1.8a, 11a–c, 79–81 M.
107 *HP* 3.3.4; fr. 113 Wimmer = Strabo 10.4.12. I thank James Whitley for directing me to Thphr. on this point.
109 *De signis tempestatum* 4.26 Sider = fr. 6.1.4 Wimmer. Sider and Brunschön (2007) 109 ad loc. suggest that Kleostratos could be early Hellenistic and still contemporary with Thphr.; but PS §67.2 dates him before Alexander’s reign.
110 Probably not Krenides, the later Philippoi: see Counillon (1998) 121.
112 I owe this suggestion to Chris Pelling.
113 Ostwald and Lynch (1994) 613.
linked directly to Chabrias by their simultaneous election as generals in 378\textsuperscript{114} and by the fact they were later charged with treason together.\textsuperscript{115}

Ps.-Skylax’ occasional inclusion of facts about barbarian peoples links him, as one would expect, to a range of earlier writers. Besides the Gyzantes and Makai (above), he knows of the ‘great Aithiopes’ (§1), who also appear in Herodotos and Aristotle;\textsuperscript{116} of the sexual habits of Libyrnian women (§21.1); of a Mysian migration (§98.1); of the Arabes’ domesticated animals (§105.1); and of the Lotus-eaters’ diet (§110.1). He also dwells at some length on the customs of the ‘sacred Aithiopes’ (§112.5, 8–12).\textsuperscript{117}

3. Authorship

With a philosophical context for Ps.-Skylax well established, the field is open for speculation as to the identity of the author. As we shall see, however, certainty is not attainable.

There is clearly common ground between Ps.-Skylax and philosophers:\textsuperscript{118} both earlier Academics such as Herakleides Pontikos, and those who became Peripatetics such as Aristotle, Dikaiarchos, and Theophrastos. That is not to say that one of these well-known figures wrote the periplous. It offers no theories about ethnography or natural phenomena, and merely mentions interesting data that have caught the author’s eye when they bear upon current debates of which he is aware. It is an undeveloped piece of research with irregularities and inconsistencies, and the differences in organization from the known work of his contemporaries are numerous.

In theory the completion of the work should precede the sack of Thebes, and thus Aristotle’s return to Athens a few weeks afterwards; if so, it is not a Peripatetic work, strictly speaking, since that school was not yet founded.\textsuperscript{119} It was probably not compiled by Aristotle before his return, as the adoption of an Athenian vantage-point would be hard to explain. If he, or indeed any other well-known writer, were the author one could legitimately ask how the work came to be separated from their corpus; though such a fate would be understandable if it was a juvenile effort later discarded, or a preparatory study for another work.\textsuperscript{120}

\footnotesize
\begin{itemize}
\item \textsuperscript{114} Diod. 15.29.7.
\item \textsuperscript{115} Arist. \textit{Rhet.} 1.7.1364a 19–23; cf. Swoboda (1919).
\item \textsuperscript{116} Hdt. 3.20; Arist. \textit{Pol.} 4.4.1290b 4–5.
\item \textsuperscript{117} If \textit{ἱεροὶ} in the MS is correct.
\item \textsuperscript{118} Peretti (1979) 417 notes Peripatetic ‘echoes’ in PS, even mentioning (at n. 449) the Aristotelian title νομιμὰ βαρβαρικά; but he does not expand the point.
\item \textsuperscript{119} Diog. Laert. 5. 2 seems confused about the chronology, supposing Aristotle to have discovered on his return from an Athenian diplomatic mission to Macedonia that Xenokrates had been elected head of the Academy, and then to have adopted the habit of teaching in the Lykeion instead. But Xenokrates’ election is usually dated 339, when Aristotle was simply living in Macedonia had been away for c.8 years.
\item \textsuperscript{120} Counillon (2007b) 42 theorizes that it is a groundwork for a history of Greece down to 338, but this is because of his tentative attachment to a date in the 310s.
\end{itemize}
Pytheas may have had contact with the Peripatos, but is unlikely to be the author of the *periplous* given its Athenocentric outlook.

A better candidate, at first sight, is Herakleides Pontikos, who outlived Aristotle but was already a senior personage when he was acting head of the Academy\(^{121}\) in 361/0; but the inconsistent and sometimes contradictory organization of the *periplous* makes it unlikely to be the work of a mature scholar. In any case, his interests do not overlap with Ps.-Skylax’ *obiter dicta* so well as do those of Dikaiarchos, the strongest candidate for authorship.

Dikaiarchos’ dates are a potential problem if the work dates from 338–c.337, for his active years are usually placed in the last quarter of the fourth century, perhaps extending into the very early third.\(^{122}\) Let us review the evidence, most of which we shall find inconclusive.\(^{123}\)

(a) The Suda’s date of the 111th Olympiad (336–332 BC)\(^{124}\) might imply that Dikaiarchos was born c.376, since in ancient writers a person’s *floruit* sometimes marks their 40th year. Were that so, Dikaiarchos could certainly have been writing before 335. It would be unwise to place much weight on this evidence, however: the date coincides too neatly with Alexander’s accession, and is really the *floruit* of Aristoxenos, with whom Dikaiarchos is merely stated to be coeval.\(^{125}\)

(b) Aristotle, on his death in 322, is said to have he left behind Theophrastos, Aristoxenos, and Dikaiarchos (among others and in that order) as his pupils.\(^{126}\) This might imply that they were still relatively young, and also that Dikaiarchos was younger than Theophrastos (b. 372/1 or 371/0). On the other hand, Aristotle (b. 384) need not have been his first teacher, and may have been called a teacher even before Plato’s death in 348/7. He is thought to have taught Alexander the Great in about 342–340, when already aged over forty, and need not have waited until he founded his college in 335/4\(^{127}\) to earn that title. (Censorinus includes Dikaiarchos in a very short list of philosophers of the ‘Old Academy’,\(^{128}\) which may point to involvement with the Platonists before 335/4; but all other sources call him a Peripatetic, which suggests that his pupillage with Aristotle included part of the period 335–322 though it could have begun earlier.)

(c) Dikaiarchos mentioned Lesbos in one of his works,\(^{129}\) and it is theoretically possible that

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121 Suda s.v. Ἡρακλείδης Εὔφρονος.
122 I can find no discussion of Dik.’s chronology in Fortenbaugh and Schütrumpf (2000), other than by Ax (2000) 279, who simply infers c.376 from Suda.
123 Glucker (1998) at 311 (citing Wehrli (1967) 43) misrepresents Wehrli as saying that Dik. was born c.342. W. only says that this is the latest possible date.
124 Dik. fr. 3 M. = fr. 2 W. = Suda s.v. Aristoxenos.
125 As at Cic. *Tusc.* 1.41.
127 In Ol. 111.2, Diog. Laert. 5.10.
128 De die natali, 4.2–4 = Dik. fr. 53 M. = fr. 47 W.
129 Fr. 27 M. = fr. 9 W. = Cic. *Tusc.* 1.77.
he worked there with Aristotle and Theophrastos in the late 340s. On the other hand, he may have had other reasons to mention the island, for contacts between it and the Peripatos probably endured after Aristotle’s visit.

So far, nothing allows us to extend Dikaiarchos’ career back into the early 330s with any confidence, but leaves open the possibility that he was writing then. Other evidence points to the 320s as a period when he was writing, but not all of it is secure.

\((d)\) Dikaiarchos, as we saw, probably referred to the Himalayas. This may mean he was in touch with members of Alexander’s expedition (334–323); but he may simply have drawn upon the writings of the archaic Skylax of Karyanda or talked to travellers, before making his calculations of the length of the \textit{oikoumenē}.

\((e)\) More significantly, he criticized the work of Pytheas, who seems to have made his voyage in about the 320s.

\((f)\) Most securely, in his lost work \textit{On the Sacrifice at Ilion}, presumably referring to Alexander’s entry into Asia Minor in 334, Dikaiarchos described an event that took place in Karmania during Alexander’s return from the east. Plutarch’s account of the same occasion shows that it belongs to the end of Alexander’s expedition, giving a \textit{terminus post quem} of c.325 for Dikaiarchos’ book. This is the only firm date for Dikaiarchos, other than the information (above) that he outlived Aristotle.

\((g)\) Dikaiarchos’s career would be extended towards the end of the fourth century if we had firm evidence that it was he who measured the difference in latitude between Syene (Aswan) and Lysimacheia in Thrace—a city not founded until 309/8—using the difference in the angle of the sun’s shadow at noon, like Eratosthenes a generation later. There is, however, no positive evidence to link him with this measurement.

130 Diog. Laert. 5. 9. 8 dates Aristotle’s arrival in Mytilene to Euboulos archonship and to Ol. 108.4 (345/4), cf. Dion. Hal. \textit{Ad Ammaeum}, 5. 13; accepted e.g. by Solmsen (1978) 467.

131 Solmsen (1978) 471.

132 On Skylax of Karyanda as having crossed India via the Indus and Ganges and travelled to Taprobane, see the convincing arguments of Panchenko (1998); Panchenko (2002); Panchenko (2003).


134 The exercise is not attributed to anyone by the Roman-period author Kleomedes (\textit{Caesestia} 1.5.57–62 Bowen–Todd), who reports it elliptically. Its connection to Dik. is accepted by Wehrli (1967) 77 (citing Berger (1880) 173–4), who thinks the figure of 300,000 is an advance on the 400,000 of Arist. \textit{De caelo} 2.298a 17, taken from a contemporary mathematician (Eudoxos?), and must be earlier than Eratosthenes because of the ‘primitive method’ used; none of this, however, links the measurement directly to Dik. The measurement is linked to Dik. most recently by Keyser (2000) 361–5, dating the observation to 308–302 rather than 299–c.281 on the grounds that only when Ptolemy and Lysimachos were allies could a scientist from one dynasty’s territory have worked in another’s. There is, however, no reason to suppose travel was controlled in that way. Collinder (1964) is prepared (as an astronomer) to separate the observation from Dik.
Thus far, the evidence proves conclusively only that Dikaiarchos was writing in c.325 or later and outlived Aristotle. If our earlier speculation that Aristotle employed Dikaiarchos’ results in the *Meteorologika* is justified, Dikaiarchos was writing before 322. He is coupled with Theophrastos,136 but this could equally refer to the years after 322 as to an earlier time. At any rate, it is not impossible that Dikaiarchos was active by the early 330s, in which case the *periplous* could be an immature work of his.

Two apparent discrepancies between Ps.-Skylax and Dikaiarchos might be held to rule out their identification with one another, but the first is only apparent, the second inconclusive. (a) The two have been portrayed as representative of different currents of thought: Ps.-Skylax as the descriptive geographer, Dikaiarchos as the scientific.137 Since, however, we can now credit Ps.-Skylax with an interest in earth measurement, and since it is far from certain that Dikaiarchos included maps in his work,138 there may be little or no clear blue water between them. (b) Strabo remarks that Dikaiarchos and others (namely Eratosthenes, Polybios—both later than Dikaiarchos—‘and most of the Hellenes’) located the Pillars of Herakles ‘around’ (περί) the straits of Gibraltar, whereas the ‘Iberians and Libyans in Gadeira’ (*Cádiz*) placed them further west.139 This contradicts several of Ps.-Skylax’ contradictory statements about the Pillars (§§1, 2, and possibly 111.9), but not the passage in which he places the African Pillar at, or just west of, C. Abilyke on the south side of the strait and describes the Pillars as ‘the one in Libyē low and the one in Europe high’ (§111.6–7). These words sound like an accurate comparison between Mt Abilyke (*Monte Acho*) south of the strait and Mt Kalpe (*Gibraltar*) to the north. He is evidently using two or sources, at least one of which agreed with his contemporary Dikaiarchos. It is possible that Dikaiarchos himself compiled these conflicting pieces of evidence when he wrote the *periplous*, and only later decided which was more credible.

Dikaiarchos actually has a spare title, *Gēs periodos*,140 that would fit the *periplous*; it is the work in which he is said to have made the Nile flow from the outer ocean, as Ps.-Skylax may have done (above). The title also happens to match the only one, out of the four attributed to Skylax of Karyanda by the Suda, that could describe our *periplous*; but Dikaiarchos’ *periodos* is mentioned only once and by a late author. Conceivably Dikaiarchos annotated an existing *periplous* by adding his own observations—but we must not let speculation run riot, and should resist the temptation to use fragmentary authors to whom a large number of lost works

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136 Also in Dik. fr. 33 M. = fr. 25 W. = Cic. *Att*. 2.16.3.
137 Marcotte (1986) 182.
139 Strabo 3.5.5.
140 Fr. 1.19 M. = fr. 126, cited in n. 79 above.
are attributed to ‘fill a gap in the more dubious reaches of Quellenforschung’.141

The case that Dikaiarchos wrote our periplous remains unproven. The essential point, however, is that the periplous—for all its shortcomings—can be firmly set in the ambit of the philosophical investigation taking place at Athens around 337 BC, with particular affinities to Dikaiarchos.

This conclusion may have implications for the ‘periplographic genre’ to which historians of Greek geography habitually refer.142 In the first place, since Ps.-Skylax’ periplous is not an archaic work updated later, then (if Hanno is hellenistic rather than archaic) the author is the earliest survivor of any such tradition. If he was also in fact the first periplous writer, he was the innovator and was therefore not writing generically.143 On the other hand, as we saw, his sources may have included earlier, non-utilitarian periploi. Whether that body of lost work had a generic character is unknowable.

Limiting ourselves to the surviving works usually subsumed under the heading ‘periplographic’, we can see that the term ‘genre’ is scarcely applicable to such a diverse group. Only a few examples are needed in order to make the point. Ps.-Skylax is a researcher, not a navigator and writes mainly in the third person. Hanno’s much shorter periplous, on the other hand, is in the first person and probably narrates a real voyage. The iambic poem of ‘Pseudo-Skymnos’ (late second century BC)144 is a conceit presented to a king, and covers the world in even less detail than Ps.-Skylax. A work somewhat similar in conception to Ps.-Skylax is the pseudo-Aristotelian De mundo (Περὶ κόσμου) of the late hellenistic period, whose third chapter briefly lays out the seas and gulfs of the world, with the major islands and rivers, but does not adopt a consistently coastwise arrangement.145 From the Roman period, we have some works with genuine navigational foundations, such as the Periplus maris Erythraei (PME),146 Arrian’s Periplus of the Euxine,147 and the Stadiasmos.148 On the other hand, the later pseudo-Arrianic Periplus of the Euxine (usually known as Eux.)149 is a compilation from earlier writings.

As well as the obvious differences of content and organization between these works, they

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142 e.g. González Ponce (1991) and later articles; Counillon (2001b) 16; more subtly, Marcotte (2000) Iv–Ixxii, esp. lxiv–Ixxvi. Panchenko (2005) 179 regards PS as the originator of the periplous genre.
143 Cf. Pelling (2007) 77–81, for the fluidity of ‘generic expectations’ in antiquity.
144 Marcotte (2000) esp. 35–46, suggests that Apollodoros wrote the anonymous work we misleadingly call Ps.-Skymnos (no ancient authority or manuscript attributes it to Skymnos; the suggestion is modern, and rejected).
145 For the date, see Forster and Furley (1955) 337–41; Counillon (2001b) 20 n. 34, citing Gottschafl (1987) 1131–8.
146 Casson (1989); note the acute analysis by Parker (2001).
147 Liddle (2003).
148 Müller (1855) 427–514; Raschieri and Arnaud (forthcoming).
149 Diller (1952) 102–46; Podossinov (2011).
appear to share none of the literary features—for example, in narrative construction, overall architecture, or selection of content—that might amount to the sort of rules of composition we could regard as constitutive of a literary genre. The exception may be the very fact of coastwise arrangement, for which both Hekataios and Herodotos (especially the latter’s fourth book)\(^{150}\) offered precedents—as, presumably, did the now lost *periploi* on which Ps.-Skylax drew—but which is adopted to varying degrees and in different ways by the surviving authors. Beyond that, any intertextuality between these texts is almost entirely limited to the bare exposition of sometimes similar, even identical, facts and does not (as in, say, tragedy or the novel) invite us as readers to reflect on our knowledge of similar texts. It is unwise, therefore, to over-amplify the degree to which these authors were consciously writing in such a way as to invite comparison with one another.

A fragmentary work of a different kind extends further the range and variety of ‘geographical’ writing. The prose travelogue attributed to Herakleides Kritikos (\(c.270\) BC)\(^{151}\) is not a *periplous* but the exposition of a land journey from the Peloponnese to Thessaly. Nevertheless it has many points of contact with Ps.-Skylax, such as the exclusion (in some sense) of Macedonia from Hellas. It therefore represents an interesting comparison with Ps.-Skylax and other texts, as a spatial narrative with both an ideological agenda and comic features. Like Ps.-Skylax, it seems to stand outside considerations of genre, as far as as we can judge from surviving literature, and may be seen as a model for later Greek travel writing.\(^{152}\)

Ps.-Skylax, himself in some ways a pioneer—if not in composing a coastal narrative, at least in amalgamating sea journeys into a holistic picture—surely meant his work as an addition to the philosophical corpus of works dealing with the form of the world, rather than to any tradition that integrated coastally arranged exposition into a coherent and defined subset of literature. Given the interest of the Academy in the structure of the earth, and particularly that of the early Peripatetics in trying to gather hard data to support their theories on that question, we would do better to regard Ps.-Skylax not as a genre writer, or even a very literary writer,\(^{153}\) but—within limits—as an innovative scientific investigator.

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\(^{150}\) e.g. Hdt. 4.16–40 (Skythia), 168–97 (Libyē).

\(^{151}\) I follow Arenz (2006), not cited by McInerney (2008), who prefers 262–229 BC. The edition of Pfister (1951) is still useful.


\(^{153}\) Though see Shipley (2011) 18–21 for narratological and rhetorical features of the text.
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