

Route and Parasangs in Xenophon's *Anabasis*

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THERE IS A PARADOX in the prevailing view on the route and the chronology of the retreat of the Ten Thousand: it asserts that months are missing from Xenophon's narrative but it endorses the shortest route. Naturally, questions arise: Where are the missing days? Are they not days of march? Are they all days of stay? Where? According to Diodorus (14.29.3), the Greeks marched from Gymnias to Mt. Theches in fifteen days, not in Xenophon's five (*Anab.* 4.7.20–21).¹ Thus, probably they marched to the east in the belief that the river Phasis (Araxes) was the Phasis of Colchis. It is likely that they followed this river even after crossing its tributary, the Harpasos, until the southward bend of the Araxes.² There, in the land of the Scytheni, they realized their mistake, moved to the north, and found Gymnias at *Gymri*, in Armenia. They were supplied with guides who took them to Mt. Theches.

The information provided by Diodorus³ has supplemented Xenophon's account in a model of relative chronology which provided closure to Xenophon's narrative, making compatible his detailed and aggregate⁴ information about time. This model

¹ The credibility of the narrative of Diodorus is discussed in I. K. Paradeisopoulos, "A Chronology Model for Xenophon's *Anabasis*," *GRBS* 53 (2013) 645–686 [hereafter "Paradeisopoulos"], at 648–652. E. H. Bunbury, *A History of Ancient Geography* I (London 1879) 354 n.5, without explanation, believes that the fifteen days' march from Gymnias to Mt. Theches is erroneous.

² Cf. V. Manfredi, *La Strada dei Diecimila: topografia e geografia dell'Oriente di Senofonte* (Milan 1986).

³ That is, a 15 instead of 5 days' march from Gymnias to Mt. Theches (14.29.3), plus 19 additional days of rest (14.29.1–2).

⁴ Paradeisopoulos 654–669; the view that the paragraphs in the *Anabasis*

was employed to define the dates of the events. A late start⁵ proved certain and preferable to the traditional date,⁶ or to an early start.⁷ The 29 additional days of Diodorus provided closure; there was no ‘snow lacuna’:⁸ the expedition departed Sardes on 20 May 401 B.C., the battle at Cunaxa was fought on 19 November, the Greeks arrived at Trapezus on 25 May 400 and at Cotyora on 20 July; they had ascended Mt. Theches on 15 May and had consumed the ‘mad honey’ on 20 May.

In this article we focus on the parasangs. We test the hypothesis that the additional days of Diodorus provide closure not only to the chronology but also to the distance marched. A key assumption of our proposal is that there was a move to the east from the Armenian villages, located between *Erzurum* and *Aşkale*. Thus, first we assess the location of these villages beyond the sources of the Euphrates, and show why this river was not the *Murad*, as in almost all proposals, but the *Karasu*. Also, taking into account the argument that beyond these villages Xenophon’s account “seems to have too many parasangs to fit in,” and that “the preposition *παρὰ* is at issue” in his *παρὰ τὸν ποταμόν* (4.6.4),⁹ we examine alternative routes in the lands of the Taochians and the Khaldians. We show that even without

(2.2.6, 5.5.4, 7.8.26) reporting aggregate information on time and distance are interpolations is discussed at 652–655.

⁵ Cf. G. Gassner, “Der Zug der Zehntausend nach Trapezunt,” *Abh. Braunschw. Wiss. Ges.* 5 (1953) 1–35, and O. Lendle, *Kommentar zu Xenophons Anabasis* (Darmstadt 1995) 105–106 and 291.

⁶ According to the traditional view, proposed in 1816 by J. Rennell, *Illustrations (Chiefly Geographical) of the History of the Expedition of Cyrus* (London 1816), and subsequently by K. Koch, *Der Zug Der Zehntausend* (Leipzig 1850), the expedition departed Sardes on 6 March 401 B.C.

⁷ K. Glombiowski, “The Campaign of Cyrus the Younger and the Retreat of the Ten Thousand: Chronology,” *Pomoerium* 1 (1994) 37–44.

⁸ See for example R. Lane Fox, *The Long March* (New Haven 2004) 46; cf. S. Brennan, “Mind the Gap: A ‘Snow Lacuna’ in Xenophon’s *Anabasis*?” in F. Hobden and C. Tuplin, *Xenophon: Ethical Principles and Historical Enquiry* (Leiden 2012) 307–339.

⁹ Cf. T. Rood, “Xenophon,” in I. de Jong (ed.), *Space in Ancient Greek Literature* (Leiden 2012) 162–178, at 175.

a march along the Araxes, the additional time of Diodorus provides closure to the *Anabasis*.

Xenophon's Euphrates in the retreat

Xenophon says that before their arrival at the Armenian villages with the subterranean houses, the Ten Thousand crossed the Euphrates near its sources (4.5.2–3). Modern commentators¹⁰ as well as older ones¹¹ understand that Xenophon means here the sources of the *Murad*, the East Euphrates. As shown in Map 1, the two tributaries of the big river, the *Murad* and the West Euphrates (*Frat*, *Karasi*), flow quite apart. According to most views (including those mentioned above), the Greeks met the *Murad* in the area of *Muş*. We propose that it is quite unlikely that anyone knew the *Murad* as the Euphrates. Obviously Xenophon speaks about the Euphrates according to the information he had. At his time, the only known written information was that of Herodotus: this does not offer clues; before it enters Mesopotamia, Herodotus mentions only that the Euphrates flows from the land of the Armenians and empties into the Erythraean Sea (1.180). Thus Xenophon relied upon oral information concerning the name of the river he calls Euphrates. It would be interesting to examine the way in which this oral information passed to the written sources after Xenophon's time.

It seems that after Xenophon there is no reference to the *Murad* as the Euphrates. According to Strabo, the Euphrates, with its sources in the northerly region of the Taurus, flows west through Greater Armenia, as it is called, to Lesser Armenia, having the latter on its right and Acilisene (Ἀκιλισηνή, i.e. the area of *Erzincan*) on the left (11.12.3). This means that the Euphrates is the *Karasi* (see Map 1). A second description in Strabo could possibly be understood as not allowing for a dis-

¹⁰ C. F. Lehmann-Haupt, "Zum Rückzug der Zehntausend," in J. Kromayer (ed.), *Antike Schlachtfelder IV* (Berlin 1931) 243–260; Manfredi, *La Strada* 204–205; Lendle, *Kommentar* 232.

¹¹ M. D. Kinneir, *Journey through Asia Minor, Armenia, and Koordistan* (London 1818) 485; W. F. Ainsworth, *Travels in the Track of the Ten Thousand Greeks* (London 1844) 176; A. Boucher, *L'Anabase de Xénophon* (Paris 1913) xvii; etc.

inction between the *Murad* and the *Karasu*;¹² but once again, describing Pontos and Paphlagonia, he refers clearly to the *Karasu* as the Euphrates.¹³

Pliny also takes the *Karasu* as the Euphrates and the *Murad* as the Arsanias. He speaks of the neighbouring sources of the Araxes and the Euphrates, i.e. the *Karasu*.¹⁴ He also says that the Euphrates (*Karasu*) rises in Caranitis¹⁵ in Greater Armenia, receiving in its course the rivers Lycus, Arsanias (*Murad*), and Arsanus (5.83–84). In a third passage he again makes a clear distinction between the Euphrates and the Arsanias.¹⁶ Plutarch too defines the *Murad* (East Euphrates) as Arsanias¹⁷ and the *Karasu* (West Euphrates) as Euphrates.¹⁸

¹² Strabo 11.14.2 says that both the Euphrates and the Araxes flow from Mt. Abus, the former towards the west and the latter towards the east. Pliny (see n.14 below) also says that these two rivers rise from the same mountain at a separation of only six miles. Mt. Abus extends from the neighbourhood of *Erzurum* in the west towards the area to the south of Artaxata in the east (W. Smith, *Dictionary of Greek and Roman Geography* I [London 1856] 7). Pliny is right that the sources of the Araxes and the *Karasu* are close (see Map 1). If this is also what Strabo means here, then his Euphrates is the *Karasu*. Otherwise, if we understand that his Euphrates also rises from the same mountain range but from its southeast end, then here it is the *Murad*.

¹³ Strab. 12.3.28: Mithridates seized “a well-watered mountain near Dasteira [Pontos, *Barrington Atlas* 87 D4] in Acilisene; nearby, also, was the Euphrates [the *Karasu*], which separates Acilisene from Lesser Armenia.”

¹⁴ “The Araxes rises in the same mountains as the Euphrates, at a distance from it of six miles only”: *HN* 6.26.

¹⁵ Καρηνίτις, i.e. in the area of *Erzurum*: Strab. 11.14.5.

¹⁶ “[The water] of the Arsanias, being lighter, floats on the surface of the Tigris for a distance of nearly four miles, after which they separate, and the Arsanias flows into the Euphrates”: *HN* 6.128.

¹⁷ Tigranes “on the fourth day encamped over against the Romans, keeping the river Arsanias between himself and them”: *Luc.* 31.4. Obviously Arsanias here is the *Murad*. Tigranes had encamped to the south of the river, towards his capital at Tigranocerta (cf. Map 1).

¹⁸ “Pompey overtook [Mithridates] near the Euphrates river, and encamped close by; and fearing lest the king should get the advantage of him by crossing the Euphrates, he put his army in battle array and led it against him at midnight”: *Pomp.* 32.3–4. Euphrates here is the *Karasu*, because the



Map 1: The Euphrates and its tributaries (*Karasu, Murad*)

Ptolemy, as Rennell noticed, describes both branches, but also applies the name Euphrates to the former, to the branch from *Erzurum*.¹⁹ He mentions first the segment of the Euphrates that forms the western border of Greater Armenia, i.e. the part from the southward bend of the *Karasu* down to the southern border of this country (*Geog.* 5.13.2). After the borders (5.13.1–4) and the mountains (5.13.5), Ptolemy describes the rivers (5.13.6): first the Araxes, and then the Euphrates (*Karasu*), in its segment from “its already mentioned turn to the east until its sources.” Then he passes to the description of other major rivers in Greater Armenia (5.13.7): “There are also other notable [parts?], the one that joins the Euphrates [*Karasu*] at $71^{\circ} 30' 40''$, the terminus of which near the sources [of this part?] is at $77^{\circ} 41'$ [i.e. the *Murad*?]; also that part of the Tigris river which is within the region of Armenia, from the entrance on the

battles between Pompey and Mithridates, the king of Pontos, were fought in the kingdom of Mithridates.

¹⁹ Rennell, *Illustrations* 221.

southern border to the sources of the river...”²⁰

Ptolemy’s incomplete text here (5.13.7) is subject to different interpretations. Traditionally it is taken to mean not rivers but mountains [ὄρη].²¹ However, as mentioned, Ptolemy describes first the borders of Greater Armenia (5.13.1–4), then the mountains (5.13.5), next the rivers (5.13.6–7), and then the lakes (5.13.8). After the mountains, and during his description of the rivers, it does not make sense for him to return back to locate two additional mountains after the rivers Araxes and Euphrates exactly before the Tigris, and in the same sentence.²²

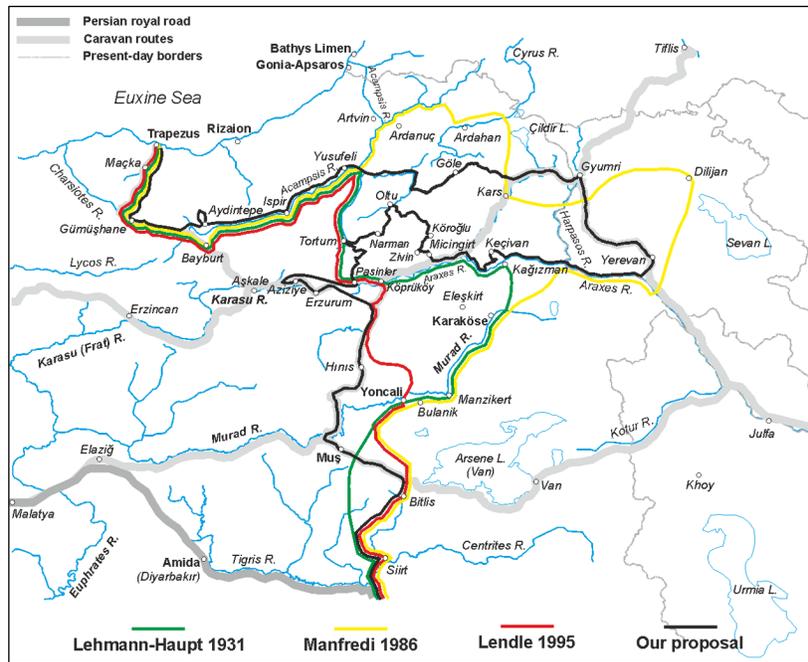
There is no doubt that Ptolemy applies the name Euphrates to the *Karasu*. But if we understand that after the divergence (ἐκτροπή) from the Euphrates (*Karasu*), Ptolemy is not describing a river (the *Murad*) but two mountains (ὄρη), then he has failed to record the flow of the *Murad*. This does not seem probable.²³

²⁰ *Geog.* 5.13.7: ἔστι δὲ καὶ ἕτερα ἀξιόλογα [μέρη?] ἀπὸ τῆς τοῦ Εὐφράτου ποταμοῦ ἐκτροπῆς, τὸ μὲν συνάπτον τῷ Εὐφράτῃ ποταμῷ, οὗ τὸ πέρασ ἐπέχει μοίρας οα λ μ λ, τὸ δὲ κατὰ τὰς πηγὰς τοῦ [μέ]ρου[ς] (?) πέρασ ος μα, καὶ τὸ ἀπολαμβάνομενον τοῦ Τίγριδος ἐν τῇ Ἀρμενίᾳ μέρος ἀπὸ τοῦ γινομένου ὑπὸ τῆς μεσημβρινῆς πλευρᾶς τμήματος μέχρι τῶν πηγῶν αὐτοῦ τοῦ Τίγριδος...

²¹ K. F. A. Nobbe, *Claudii Ptolemaei Geographia* II (Leipzig 1845) 51: ἔστι δὲ καὶ ἕτερα ἀξιόλογα [ὄρη]... Karl Müller, *Κλαυδίου Πτολεμαίου Γεωγραφικὴ Ὑφήγησις* I.2 (Paris 1901) 41–42: ἔστι δὲ καὶ ἕτερα ἀξιόλογα ὄρη...

²² The only complete English translation, E. L. Stevenson *The Geography by Claudius Ptolemy* (New York 1932), criticized for not mentioning its sources, as well as for errors in converting Greek geographical names into English, apparently from a Latin translation (A. Diller, review in *Isis* 22 [1935] 533–539), takes this passage (5.13.7) as referring to a river: “there is another noted river which empties into the Euphrates” (124).

²³ The latest edition of the Greek, A. Stückelberger and G. Graßhoff, *Ptolemaios Handbuch der Geographie* (Bern 2006), comes from the Codex Seragliensis, found in 1927, i.e. after the editions of Nobbe and Müller. Johannes Engels’ review in *Aestimatio* 8 (2011) 101–109, states that “the new Greek text in this book differs from Nobbe’s edition in more than 1000 passages” (103). It seems that this time (II 548) there are no mountains in Ptolemy’s 5.13.7 and that this sentence reads: ἔστι δὲ καὶ ἕτερα ἀξιολογώτερα ἀπὸ τοῦ Εὐφράτου ποταμοῦ ἐκτροπή, ἧς τὸ μὲν συνάπτον τῷ Εὐφράτῃ ποταμῷ πέρασ ἐπέχει μοίρας ... τὸ δὲ κατὰ τὰς πηγὰς πέρασ ... Thus the longitudes/latitudes of the joining point and the sources are assigned to the “other more notable divergence” (ἕτερα ἀξιολογώτερα ἐκτροπή) from the Euphrates, i.e. to the *Murad*.



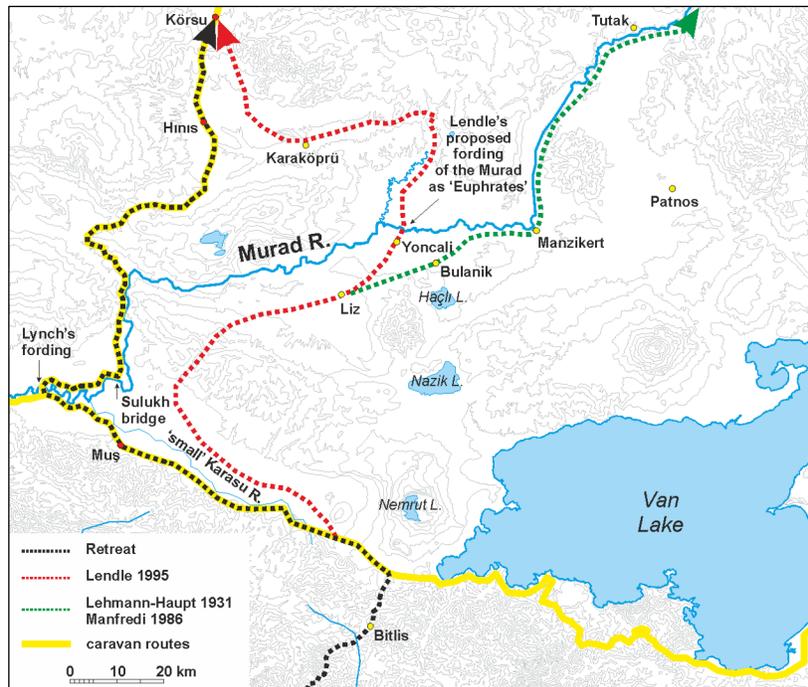
Map 2: Modern route proposals for the retreat

To summarize, the perception that Xenophon's Euphrates in the retreat was the *Murad* is not justified by the written sources. The natives applied the name Euphrates (*Frat*) to the upper and western branch, the *Karasu*, not only in early times, as shown, but also subsequently: in the sixth century A.D.,²⁴ the twelfth,²⁵ as well as in modern times.²⁶

²⁴ Procop. *Aed.* 3.5, *Wars* 1.17.

²⁵ E.g. the Muslim geographer and cartographer al-Idrisi, cited in J. Williams, *Two Essays on the Geography of Ancient Asia* (London 1829) 291.

²⁶ According to Rennell (*Illustrations* 211), the natives in his time applied the name Euphrates (*Frat*) to the western branch, i.e. to the *Karasu* (West Euphrates). However, Rennell probably is responsible for this confusion on which branch bore the name of the river in antiquity. Initially he says that "this river [the Teleboas] answers to the Arsanius of Plutarch, to which Lucullus came, on the fourth march from the northern foot of Taurus" (207 note). Thus he identifies the Teleboas with the *Murad* (Arsanias). But later (210–211) he confuses the headwaters of the *Murad* (according to Hadji Khalifa) with Pliny's headwaters of the Euphrates (the *Karasu*). Rennell goes



Map 3: Retreat from *Bitlis* to *Hms*

If Xenophon's Euphrates was not the *Murad* but the *Karasu*, then all route proposals that imply a northeasterly march from the area of *Muş* in order to ford the *Murad* at *Karaköse*, near its sources, do *not* ford Xenophon's Euphrates.

As shown in Map 2, this includes the proposals of Lehmann-Haupt and Manfredi in this leg of the route, as well as that of Lendle who proposed that the Ten Thousand forded his "Euphrates" (the *Murad*) near *Yoncali* (see detail in Map 3).

For this leg of the route, Lendle cites Lynch frequently,²⁷ but not when Lynch refers to the fording of the *Murad* much to the

on to assert that "the Murad is also the Euphrates of Strabo. So the ancients applied the name of the confluent stream to the eastern branch, as the natives do *Frat* to the western" (211).

²⁷ Lendle, *Kommentar* 247, 250, 259.

south, to the north of *Muş*.²⁸ The same fording was also described sixty years earlier.²⁹

In our proposal (Map 3) we adopt this fording along the caravan route, to the west of the confluence of the *Murad* and the local stream of *Muş*, the *small Karasu* (not to be confused with the West Euphrates/*Karasu*). The *small Karasu* was not forded; thus Teleboas was the *Murad*.

Implications of a march towards the Karasu (West Euphrates)

We have proposed that there was a northerly march from the area of *Muş* towards the *only* river known as the Euphrates, i.e. the *Frat* or *Karasu*, the West Euphrates. We considered two alternatives.³⁰ First, that in fact the Ten Thousand did not cross the West Euphrates (*Karasu*) near its sources but the neighbouring river Araxes (*Aras*) also near its sources, at *Köprüköy*.³¹ Second, that they deviated to the northwest from their route along the north-south caravan link, did not reach the Araxes at *Köprüköy*, and did cross the West Euphrates near its sources.

The possibility of a direct route towards the northwest has been testified to by modern travellers.³² It seems therefore that

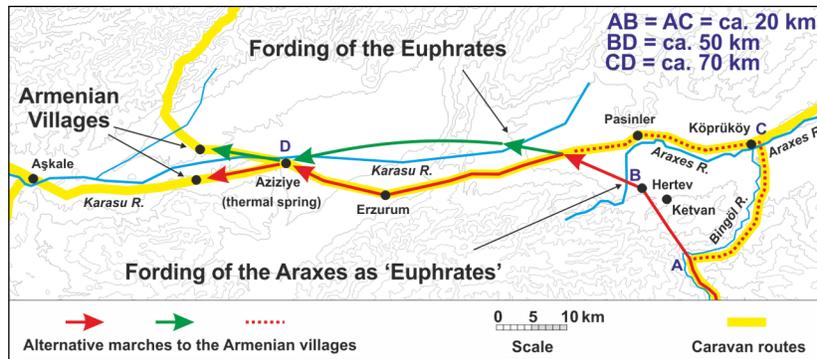
²⁸ H. F. B. Lynch, *Armenia: Travels and Studies* II (London 1901) 175–176: “It was the 29th of November ... About a mile beyond the village we approached the margin of the noble river ... It appeared to be flowing in two channels through a bed having a width of 200 yards or more. After fording the first of these branches ... we made our way over a beach to the second branch ... the water reaching to the horses’ knees ... We prepared to say good-bye to the *Murad*. What was our surprise to meet a third and magnificent river, sweeping towards us in an independent bed! ... The confluence of the *Kara Su*, the stream which collects the drainage of the plain of *Mush*, is situated some little distance above the ford.”

²⁹ *The Penny Cyclopaedia* 25 (London 1843) 472: “A few miles below its junction with the *Karasu*, the *Murad* was forded in the month of August, where it is divided into two channels. The northern channel was only knee-deep; in the southern the water reached to the horse's shoulders.”

³⁰ Paradesiopoulos 657–658 and n.81.

³¹ The sources of these two rivers are close; cf. Pliny in n.14.

³² Lynch, *Armenia* II 193: “We descended into one of the long valleys by which the heights we were leaving meet the plain. If Erzerum be the next objective, you cross [the *Bingöl* river, a tributary of the Araxes] to its western side and proceed by way of Ertev [*Hertev*]. Our own point was Hasan Kala



Map 4: Alternative marches to Armenian villages

it is more rational to accept that the Greeks followed such a route towards the mountain roads leading to *Bayburt* and the Euxine Sea (see Map 4). This route is somewhat shorter than the route via *Köprüköy*, on which we based the kilometres of this segment in the chronology study,³³ but this is advantageous: this leg was marched in three days at reduced speed “over a plain and through deep snow.” During the third day “the north wind was blowing full in their faces, absolutely blasting everything and freezing the men” (4.5.3–8).³⁴

But this route does not overcome the uncertainty about the exact meaning of Xenophon’s “sources of the Euphrates,”³⁵ because again (cf. Map 4) the Ten Thousand first forded the Araxes near its sources. If this is what he means by “sources of the Euphrates,” then afterwards they continued west along the caravan route, suffered the march in deep snow for three days,

[*Pasinler*], a more northerly course, leading through the village of Ketivan [*Ketvan*].”

³³ Paradeisopoulos 657–658.

³⁴ As shown in Map 4, the distance marched from the south towards either the crossing of the “Euphrates” (Araxes) near its sources or its crossing at *Köprüköy* is the same. But the distance marched in the snow for three days towards the thermal spring (*Ilca/Aziziye*) counted from near the sources is ca. 50 km., and counted from *Köprüköy* ca. 70 km.

³⁵ In Paradeisopoulos 670 we mentioned this probable confusion between West Euphrates (*Karasu*) and Araxes (*Aras*) in the area of their neighbouring sources.

from the crossing of the “Euphrates” (Araxes) until their arrival at the thermal spring of Ἐλέγεια (*Ilca/Aziziye*), and found the Armenian villages to the west of this spring, on the left (south) bank of the Euphrates (*Karasu*). Otherwise, if they also forded the Euphrates (*Karasu*) near its sources, then the Armenian villages were again to the west of the thermal spring but this time on the right (north) bank of the *Karasu*. In both cases, they were in the valley of the Euphrates (*Karasu*) between *Ilca* (*Aziziye*) and *Aşkale*.³⁶

We have offered various justifications of this proposal, including the location of these villages near the caravan route from *Erzurum* to *Bayburt* and the Black Sea, and near the thermal spring of Elegeia (*Ilca/Aziziye*).³⁷ This leg of the route (from *Bilis* and *Muş* to *Erzurum*) has been described by 19th-century travellers.³⁸ In the 19th century, loaded pack animals travelling as

³⁶ Paradeisopoulos 658–659.

³⁷ According to Lendle, *Kommentar* 239, the hot spring near which the snow had melted has been overvalued by some commentators in the determination of the route. Thus Koch, *Der Zug* 93, identified a hot spring at the southern foot of the *Bingöl Dağ* with the one mentioned by Xenophon. Also W. Strecker, *Beiträge zur geographischen Erklärung des Rückzuges der Zehntausend* (Berlin 1870) 6, derived his westward route with respect to a hot spring in *Haçigan*. Lendle states that he does not take into account any of these springs, not even a third one observed at *Pasinler* (*Hasankale*), in the vicinity of *Erzurum*. However, this last spring is much after his Armenian villages at *Karaköprü* and not before as it should be (cf. Map 5). He says that as F. Segl, *Vom Kentrites bis Trapezus* (Erlangen 1925), and Lehmann-Haupt cannot prove the existence of hot springs on their route proposals, one should give up this search and adopt Segl's argument: in a volcanic land with many hot springs, but also many earthquakes, as in eastern Turkey, such springs after 2.5 millennia either have dried up or have lost their hot temperature.

³⁸ Lynch, *Armenia* II 174–197. The route (in the opposite direction, i.e. from *Erzurum* to *Muş*) has also been described in detail by James Brant and A. G. Glascott, “Notes of a Journey Through a Part of Kurdistán, in the Summer of 1838,” *JRGS* 10 (1840) 341–434, at 345–349; and by Viscount Pollington, “Notes on a Journey from Erz-Rúm, by Músh, Diyár-Bekr, and Bîreh-jik, to Aleppo, in June, 1838,” *JRGS* 10 (1840) 445–454, at 445–447. In these two descriptions, the *Murad* was crossed to the north of *Muş* over the 14th-century “ancient bridge of fourteen arches” (*Sulukh* bridge, cf. Map 3). This bridge still exists, and obviously existed also when Lynch later forded the river a few kilometres below (to the west), “the water reaching to the

part of a caravan could cover the distance from *Billis* to *Erzurum* in 9 days.³⁹ In our proposal, it took them 10 days to a point east of *Erzurum*.⁴⁰

We have shown that the Ten Thousand had arrived without deviations at the Armenian villages, at or near the point from which the summer road from *Erzurum* ascended towards *Bayburt* and *Trapezus*.⁴¹ After crossing the Centrites and entering Western Armenia, they found themselves in favourable conditions: they passed from populous places (4.4.2 *Siirt*; 4.4.3 *Muş*; 4.4.7 *Hms*), so they had more than once the opportunity to confirm the route. They had made a treaty with *Tirivazos* (4.4.6); thus they were marching through friendly country.⁴² We may

horses' knees." Probably he did so because already fifty years earlier the bridge was "in so dilapidated and dangerous a condition, that it was unsafe to ride over, and we all dismounted and led our horses" (Brant and Glascott 349). However, its construction along the north-south route, near *Muş*, testifies to the layout of the ancient route. If this caravan route crossed traditionally the *Murad* at *Yoncalı*, then the bridge would have been there. Lynch's fording of the river shows also that in the months before the melting of the snow (29 November in Lynch, 13 February in our proposal), the *Murad* was fordable to the north of *Muş*. It was also fordable in August (*The Penny Cyclopaedia*, n.29 above). Consequently, the proposal for a fording at *Yoncalı* (Lendle, *Kommentar* 231) should not be taken to mean that the *Murad* was fordable only there or further northeast towards its sources.

³⁹ Christopher Clay, "Labour Migration and Economic Conditions in Nineteenth-Century Anatolia," in Sylvia Kedourie (ed.), *Turkey before and after Atatürk* (Abingdon 1999) 1–32, at 13.

⁴⁰ According to Lendle (*Kommentar* 223–248), it took them 17 days to march from *Billis* to *Küllü*, to the south of *Köprüköy* (cf. Map 5). He holds that all the incidents of the *Anabasis* from the sources of the Eastern Tigris (4.4.3) until the arrival at the Araxes (Phasis, 4.6.4), i.e. 17 days of march (cf. Table 3) plus the stay at the Armenian villages, happened between *Billis* and *Küllü*, to the south of *Köprüköy*. His Phasis (Araxes), at which the Greeks arrived, was initially its tributary, the *Bingöl* river, at *Küllü* (247; see Map 5).

⁴¹ Cf. Map 2 at Paradeisopoulos 669 and Maps 3–5 here.

⁴² Paradeisopoulos 656. We endorse Lendle's view, *Kommentar* 229, that it is unlikely that *Tirivazos* really planned a raid on the Greeks. Cf. *Anab.* 4.4.21: "When the barbarians heard the uproar, they did not wait to offer resistance, but took to flight" (οἱ δὲ βάρβαροι ἀκούσαντες τὸν θόρυβον οὐχ ὑπέμειναν, ἀλλ' ἔφευγον).

add here that in their march through the snows of Armenia they had many guides.⁴³ Thus, despite the difficulties in the snow during the last days before their arrival at the villages, there was no reason to lose their way and they did not. They arrived there in late February.⁴⁴ They could not ascend the *Kop* mountain towards *Bayburt* (see Map 5). They numbered more than ten thousand. After a stay of eight days, they had to leave. The villages were covered by snow and, probably, were running out of food. Two options were available: to follow the caravan highway to the west, in the valley of the West Euphrates (*Karasu*); or to follow the same caravan highway to the east, towards *Erzurum* and beyond, in the valley of the Araxes (Phasis, *Aras*).⁴⁵

It has been proposed that the Greeks were in the area of *Erzurum* not in late February but in early May.⁴⁶ This proposal acknowledges the existence of two summer roads towards Trapezus in the vicinity of our Armenian villages.⁴⁷ As it was not winter and these roads, depicted on Map 5, were not blocked

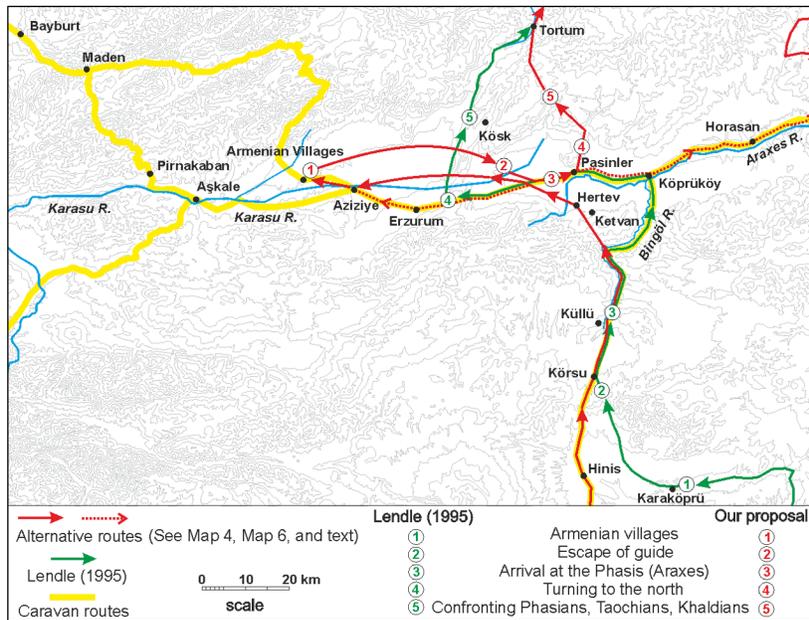
⁴³ *Anab.* 4.5.1: συσκευασάμενοι δ' εὐθὺς ἐπορεύοντο διὰ χιόνος πολλῆς ἠγεμόνας ἔχοντες πολλούς.

⁴⁴ We have proposed 27 February 400: Paradeisopoulos 659.

⁴⁵ Paradeisopoulos 660. Researchers of the retreat probably have not always taken into account Rennell, *Illustrations* 232, note: "It was necessary, of course, that they should travel on a road, although that road might not point exactly to the place they wished to arrive at finally."

⁴⁶ Lendle has the Greeks at Trapezus in late May-early June (*Kommentar* 291). They had arrived at 'Gymnias' (*Bayburt*) after a "three weeks' detour" (260) via the valleys of the rivers *Tortum*, *Olu*, and *Çoruh*.

⁴⁷ Lendle, *Kommentar* 259–260: "The shorter route was from Erzurum westwards first to Ilica [Ἐλέγεια, *Aziziyeye*, the hot spring near our Armenian villages] where a very difficult road, only usable in the summer, was crossing a pass at altitude approx. 2,600 m. to Maden and from there branched off to Bayburt. The main route was initially in the ever-narrowing valley of the Frat [the *Karasu*, West Euphrates] until it began to rise behind Aşkale the mountains, the *Kop Dağ*. It crossed the high point at an altitude of approx. 2,400 m. through a narrow canyon pass and was reunited at Maden with the summer route. This was obvious from the beginnings of the usual trade from Iran and Armenia towards the Black Sea."



Map 5: From *Huns* to the Armenian villages

by snow, the only reason for not using them is attributed to the information the Ten Thousand had, according to which “it would be very difficult to win the battle for access to the pass through the canyon behind Pirnakaban [on the *Aşkale-Bayburt* road; see Map 5]. So they took the rather large detour through the valley of Tortum.” However, “they could hardly expect that the detour would take almost three weeks.”⁴⁸

This argument does not seem convincing. In fact the Greeks encountered strong opposition from the Taochians and the Khaldians exactly on the alternative detour they followed. On the other hand, if they were not Armenians, who had recently sheltered the Greeks in their subterranean houses, or Scytheni, who later on equipped them with a guide (or guides in Diodorus) to take them to Mt. Theches, who else could possibly control the pass through the canyon behind *Pirnakaban* on the road to *Bayburt* (the supposed *Gymnias*)?

⁴⁸ Lendle, *Kommentar* 260.

We have proposed that the decision that the Greeks arrived at, when they were at the Armenian villages in the valley of the Euphrates, was based on the false belief that the Araxes was the Colchian river Phasis.⁴⁹ We have seen here that according to the names applied by the natives to the rivers in the area, as well as according to the documentation offered by the written sources, Xenophon's Euphrates was the *Karasu*. Therefore, these villages were between *Erzurum* and *Aşkale*.

The uncertainty from the Phasis (Araxes) to the Harpasos

We have shown that the parasangs reported by Xenophon from the crossing of the Centrites (*Bohtan*) to the south of *Sürt* until the Armenian villages with the subterranean houses between *Erzurum* and *Aşkale*, by Herodotus' definition of the parasang, equal the true distance.⁵⁰ We have also shown that the reported parasangs from the crossing of the Harpasos (*Arpa çay*) to the villages of refreshment (in the vicinity of *Erevan*), from there to *Gymnias* (at *Gyumri*), and from *Gymnias* to Mt. Theches (north of *Hart/Aydintepe*), taking into account Diodorus' fifteen days, likewise equal the actual distance by Herodotus' definition of the parasang.⁵¹

However, the intermediate leg of the retreat from the Armenian villages (between *Erzurum* and *Aşkale*) to the Harpasos (*Arpa çay*) allows for alternative routes, depending on the assumptions made. This leg includes, first, a three days' march from the Armenian villages until the escape of the guide (4.6.2–3); second, probably a short march of undefined duration, from the escape of the guide until the arrival at the Phasis (Araxes); third, the seven days' march along the Araxes at five parasangs per day (4.6.4); fourth, the two days' march at five parasangs

⁴⁹ Paradeisopoulos 660–661.

⁵⁰ Paradeisopoulos 657–658. The kilometric distances in that paper, from the mountain pass to the north of *Hms* to the thermal spring (at *Ilca/Azizije*), were associated with a route via *Köprüköy*. Here we have proposed a somewhat shorter route directly to the north-west (Map 4), but this is advantageous because, as mentioned above, this leg was marched at reduced speed through deep snow and under a violent wind.

⁵¹ Paradeisopoulos 664–667.

per day until their confrontation with the enemies (4.6.5); fifth, the five days' march among the Taochians at six parasangs per day (4.7.1); and sixth, the seven days' march among the Khaldians at ca. seven parasangs per day⁵² until the crossing of the Harpasos (4.7.15). It is the most disputed part of the route of the retreat. Its uncertainty was depicted with a dotted line in the map in the chronology article.⁵³

To trace a probable route depends on the identification of the abode of the nations involved. We can locate the Phasians around *Pasinler*.⁵⁴ There is consensus that the toponym derives from the classical Armenian Basiane/Phasiane, and it is almost certain that the Araxes bore the name Phasis in this region.⁵⁵ There is agreement that the land of the Taochians incorporated the valleys of the *Oltu*, the *Narman*, and the *Tortum*⁵⁶ and is so treated in the proposals of Lehmann-Haupt and Lendle.

However, in their route of the retreat in this segment (from *Pasinler* on the Araxes to *Yusufeli* on the *Çoruh/Oltu* confluence), it seems that there is not sufficient documentation on the location of the Chalybes of Xenophon's Book 4.⁵⁷ We have proposed a connection between the Chalybes (Khaldians) and the Urartu.⁵⁸ The Khaldians encountered by the Ten Thousand were the remnants of the Urartu, after the decline of that empire in the sixth century. We have mentioned that their territories are supposed to be to the north of the Araxes, especially

⁵² 50 parasangs in 7 days.

⁵³ Paradeisopoulos 669, Map 2.

⁵⁴ Paradeisopoulos 661 and n.64.

⁵⁵ R. W. Edwards, "The Vale of Kola: A Final Preliminary Report on the Marchlands of Northeast Turkey," *DOP* 42 (1988) 119–141, at 126–127. The Araxes, in its initial part, was called both Phasis and Araxes (Erax): Const. Porph. *De admin. imp.* 45.

⁵⁶ Edwards, *DOP* 42 (1988) 127, in Paradeisopoulos 662.

⁵⁷ Paradeisopoulos 663 n.71: Xenophon speaks of Chalybes (Χάλυβες), but Diodorus (14.29.1–2) of Khaldians (Χαλδαῖοι); Xenophon, however, when addressing the ambassadors of Sinope (5.5.17), refers to Khaldians.

⁵⁸ Cf. V. M. Kurkjian, *A History of Armenia*² (Los Angeles 2008) 38–39; E. Herzfeld, *The Persian Empire, Studies in Geography and Ethnography of the Ancient Near East* (Wiesbaden 1968) 313; cited in Paradeisopoulos 662 n.67.

in the valley of the small river *ζῖν* northeast of *Horasan*.⁵⁹ Here it can be added that Pliny's Armenochalybes were probably Xenophon's Chalybes of Book 4 (*HN* 6.29):

the whole plain which extends away from the river Cyrus [*Kura*] is inhabited by the nation of the Albanians [in modern Azerbaijan], and, after them, by that of the Iberians [in modern Georgia]. The river Alazon [*Alazani*, see Map 1], which flows into the Cyrus from the Caucasus mountains, separates these two nations. Beyond the mountains known as the Paryadres⁶⁰ are the deserts of Colchis, on the side of which that looks towards the Ceraunian mountains⁶¹ dwell the Armenochalybes [i.e. the Khaldians, to the south of lake *Çıldır*]; and there is the country of the Moschians [apparently between the Armenochalybes and the Moschian mountains], extending to the river Iberus [*Iori*, see Map 1], which flows into the Cyrus.

We may also add that this view is in Hecataeus of Miletus, who stated that the Armenians were at the south of the Chalybes.⁶²

Now if the territories of the Khaldians were to the north of the Araxes, especially in the valley of the *ζῖν*, then in a seven days' march along the Araxes from east to west, from *Kağızman* towards *Erzurum*,⁶³ the Khaldians should be encountered *before* the Phasians and the Taochians, not after.⁶⁴

⁵⁹ Claudia Sagona, "Literary Tradition and Topographic Commentary," in A. G. Sagona and C. Sagona, *Archaeology at the North-East Anatolian Frontier I* (Louvain 2004) 30, cited in Paradeisopoulos 662.

⁶⁰ The name applied to the mountain chain which connects the range of the Anti-Taurus with the Caucasus: Smith, *Dictionary* 373.

⁶¹ Probably Pliny means here the Moschian mountains, because the Ceraunian mountains, according to Strabo 11.4.1, were the eastern portion of the Caucasus, overhanging the Caspian and forming the northern boundary of Albania. Cf. Ptolemy *Geog.* 5.13.5.

⁶² *FGHist* 1 F 203, from Steph. Byz.: Χαλύβουσι πρὸς νότον Ἀρμένιοι ὀμουρέουσι.

⁶³ As proposed by Lehmann-Haupt. On the other hand, Lendle (*Kommentar* 251 map) does not consider a march in the supposed main area of abode of the Khaldians (valley of the *ζῖν*).

⁶⁴ Because according to C. Sagona, "Did Xenophon take the Aras High Road? Observations on the Historical Geography of North-East Anatolia," in A. Sagona (ed.), *A View from the Highlands* (Louvain 2004) 299–333, at 308, the territories of the Khaldians were especially in the valley of the small river

We should add here that Xenophon, narrating the passage from the Taochians, refers to “places” (χωρία, 4.7.1–2), but among the Khaldians to “towns” (πολίσιμα, 4.7.17). We may also add that these χωρία, the natural fortresses of the Taochians, were merely a series of strongholds without walls.⁶⁵ The main stronghold of the Taochians “contained no town, nor houses, but was only a place where men and women and a great number of cattle were gathered ... It was not possible to surround it in a continuous line, because its sides were precipitous.”⁶⁶ Such rocky formations are numerous in the valleys of the *Oltu*, the *Narman*, and the *Tortum*, including the present-day towns bearing the same names with the respective rivers. Any of these could be the main stronghold of the Taochians. But where were the towns (πολίσιμα) of the Khaldians?

In the prevailing view, the Chalybes (Khaldians) are somehow squeezed into the upper reaches of the land of the Taochians, between the *Oltu* and the *Çoruh*.⁶⁷ But this presents two kinds of problems. First, there is no significant Urartu or post-Urartu (Khaldian) evidence in this area. Second, the 12 days’ march in the lands of the Taochians and the Chalybes along this route implies an average daily advance of only 10–12 km.⁶⁸

ζῆνιν, but extending in the general direction from north to south, from *Kars* down to the ancient city of Tushpa, present-day *Van*.

⁶⁵ “The Greeks found a form of habitation which they had not seen hitherto, merely a series of strongholds on precipitous outcrops stocked with provisions. The population, together with its cattle and sheep, could gather within these places in times of emergency. These sites appear to be natural formations without masoned walls; normally, the Taochians lived in collapsible tents”: Edwards, *DOP* 42 (1988) 127.

⁶⁶ *Anab.* 4.7.2: πόλιν μὲν οὐκ εἶχεν οὐδ’ οἰκίας, συνεληλυθότες δ’ ἦσαν αὐτόσε καὶ ἄνδρες καὶ γυναῖκες καὶ κτήνη πολλά ... οὐ γὰρ ἦν ἀθρόοις περιστῆναι, ἀλλ’ ἀπότομον ἦν κύκλω.

⁶⁷ Cf. Lehmann-Haupt; Lendle, *Kommentar* 251; and Map 2. Edwards, *DOP* 42 (1988) 128, locates the land of the Chalybes in the area of *Ispir*, i.e. upstream the *Çoruh* (the supposed Harpasos). However, according to the predominant view, the villages of refreshment in the land of the Scytheni (*Anab.* 4.7.18) were there.

⁶⁸ The average daily advance throughout the anabasis and the retreat was 5 parasangs. In most cases they match Herodotus’ definition (30 stadia per

It seems, therefore, that we have to bypass the difficulties associated with the absence of Khaldian (Urartian) towns (πολίσιμα) and with the inconsistency in the average daily advance over twelve consecutive days along this proposed route. Probably we have additional reasons to do so. First, because this proposal cuts short hundreds of kilometres from Xenophon's narrative;⁶⁹ thus it questions the meaning of his parasang and also renders unsolvable the issue of the chronology of the *Anabasis*.⁷⁰ Second, because it proposes that the four days' march over a level plain was in the gorge of the *Çoruh*, where there is no plain.⁷¹ Third, because it takes the Greeks to a supposed Gymnias (*Bayburt*) which, though located on or near the principal

parasang) and are approximately equal to 30 km. Even in marches outside highways, where Xenophon employs a shorter 'parasang' (ca. 3 km.), each daily march advanced 15 km. The proposal here implies that the Greeks marched in 14 days the ca. 140 km. distance from the area of *Erzurum* to *Yusufeli*. Lendle, *Kommentar* 261, admits that this "strange phenomenon" of an average daily advance of only 10–12 km. cannot be explained in terms of an error in Xenophon's narrative, because in this segment the reported stathmoi and parasangs are mutually supportive. He states that this information has probably caused researchers to let the Greeks reach the *Çoruh* (as Harpasos) only after prolonged detours or by completely different routes. In Lendle's view, they advanced here very slowly because they had to overcome on the way particularly time-consuming problems caused by the behavior of the local population. He claims (262) that Xenophon used the parasang here in a time dimension, in the sense of hours spent on the route.

⁶⁹ Compare Lendle's proposal with those of Lehmann-Haupt and Manfredi in Map 2.

⁷⁰ Cf. Paradeisopoulos 675 n.111. With this shortened route, Lendle has not explained having the army at Cunaxa in October 401 but not reaching Trapezus until June 400: see C. Tuplin's review, *CR* 48 (1998) 286–288.

⁷¹ Cf. Paradeisopoulos 664 n.76, 686 n.135. In topographical terms a view of the *Çoruh* as the Harpasos is incompatible with Xenophon's account. It asserts that the level plain was the valley of this river, from its confluence with the *Oltu* in the area of *Yusufeli*, and in the direction upstream, towards *Ispir*. But it does not seem probable that Xenophon (4.7.18), as well as Diodorus (14.29.2), when narrating a march of ca. 120 km. (20 parasangs) over a level plain, had in mind the upper valley of the *Çoruh*. Detailed topographical maps of this area depict dense contour lines (cf. Map 6), the opposite of a level plain.

caravan route to the sea,⁷² rendered necessary the services of a guide.⁷³ Moreover, the guide who came did not take them to the sea along the caravan route; he took them to the mountains.

Xenophon's towns of the Khaldians should be sought to the north of the Araxes, in and around the valley of the *Živin*.⁷⁴ We propose further that the castles of *Živin*,⁷⁵ *Micingirt*,⁷⁶ *Köroğlu*,⁷⁷ and possibly *Kecivan*⁷⁸ in this area were the towns of the Khaldians and that the Ten Thousand went past them after leaving the land of the Taochians, before meeting again the Araxes and following its course to the east, towards its confluence with the Harpasos (*Arpa çay*) and beyond.⁷⁹

⁷² Lendle, *Kommentar* 272: "Gymnias was at Bayburt, or at least in close proximity to this city, through which passed the usual caravan route from Tabriz to Trapezus via Erzurum."

⁷³ Cf. Paradeisopoulos 686.

⁷⁴ See Paradeisopoulos 663 n.72.

⁷⁵ Located in the *Sürgütüs* (*Živin*) village, 35 km. southwest of *Sarkamış*, the castle is built on a rock 40 m. above ground level; in front of it passes the old *Erzurum-Kars* road. This is a strategic location as it commands the road connecting eastern Anatolia and Caucasia. The Northern Campaign inscription (now at the museum of *Tbilisi*) of the Urartian king Menua was found in this fortress. Researchers on Urartian civilization agree that *Živin* is one of the most important fortresses in the region: *The Archaeological Settlements of Turkey*, www.tayproject.org.

⁷⁶ Located within the borders of *Sarkamış*, at the village *Inkaya* (*Micingirt*). Today only a part of the city walls survives, showing a rectangular plan; it belongs to the Urartu period. Urartian rock-cut tombs are also here. *The Archaeological Settlements of Turkey*.

⁷⁷ Built on a natural hill in the village *Köroğlu*, 30 km. west of *Sarkamış*, it has the same characteristics as the *Živin* and *Micingirt* fortresses but is smaller than both. The location dominates the surrounding area. No finds show that the fortress was inhabited in antiquity, but the foundation stones and the stone walls on the skirts of the fortress suggest that it too was built in the Urartu period like *Živin* and *Micingirt*. *The Archaeological Settlements of Turkey*.

⁷⁸ Near the village *Tunçkaya*, 40 km. northwest of *Kağzman*, with walls on all four sides. The exact date of construction has not been established. *The Archaeological Settlements of Turkey*.

⁷⁹ Xenophon (4.7.17) makes clear that the Ten Thousand did not manage to take any of these castles and continued to feed on the cattle they had

Alternative routes from the Phasis (Araxes) to the Harpasos

We have mentioned⁸⁰ that the reported dearth of settlements to the east of *Pasinler*⁸¹ may explain the move of the Ten Thousand to the north, away from the Araxes: it was obligatory and associated with the scarcity of food. Map 6 depicts three possible points of transit to the north of the Araxes, and also the proposals of Lehmann-Haupt and Lendle in this area. On the proposal that the guide had escaped ca. 40 km. to the east of the Armenian villages, 15 km. to the east of *Erzurum*, we have proposed that the Ten Thousand found the Araxes 10 km. to the west of *Pasinler*.⁸² If the (7 x 5 =) 35 parasangs marched in seven days along the Araxes from the point they met the river (to the west of *Pasinler*) were each of 30 stadia, then they moved to the north of the Araxes at *Kağızman*.⁸³ If Xenophon had employed here a shorter parasang, then they had marched along the Araxes for ca. (35 x 3 =) 105 km., and moved to the north at *Karakurt*, 65 km. to the west of *Kağızman*.⁸⁴ In both cases, after ascending, confronting their enemies, putting them to flight, and descending to the plain, they should divert westwards in order to pass from the land of the Taochians, and then continue to the east in the land of the Khaldians and southeast towards the Araxes.

seized from the Taochians.

⁸⁰ Paradeisopoulos 663 and n.70.

⁸¹ Sagona, in *A View from the Highlands* 309: "Most of the Iron Age settlements in the north of the Pasinler Plain are close to the lower foothills, west of *Pasinler*, and there is a notable lack of sites in the floor of the valley [of the Araxes] itself."

⁸² Paradeisopoulos 662.

⁸³ At a distance of 164 km. (28.4 parasangs) from where they met the river and 193 km. (33.5 parasangs) from the escape of the guide.

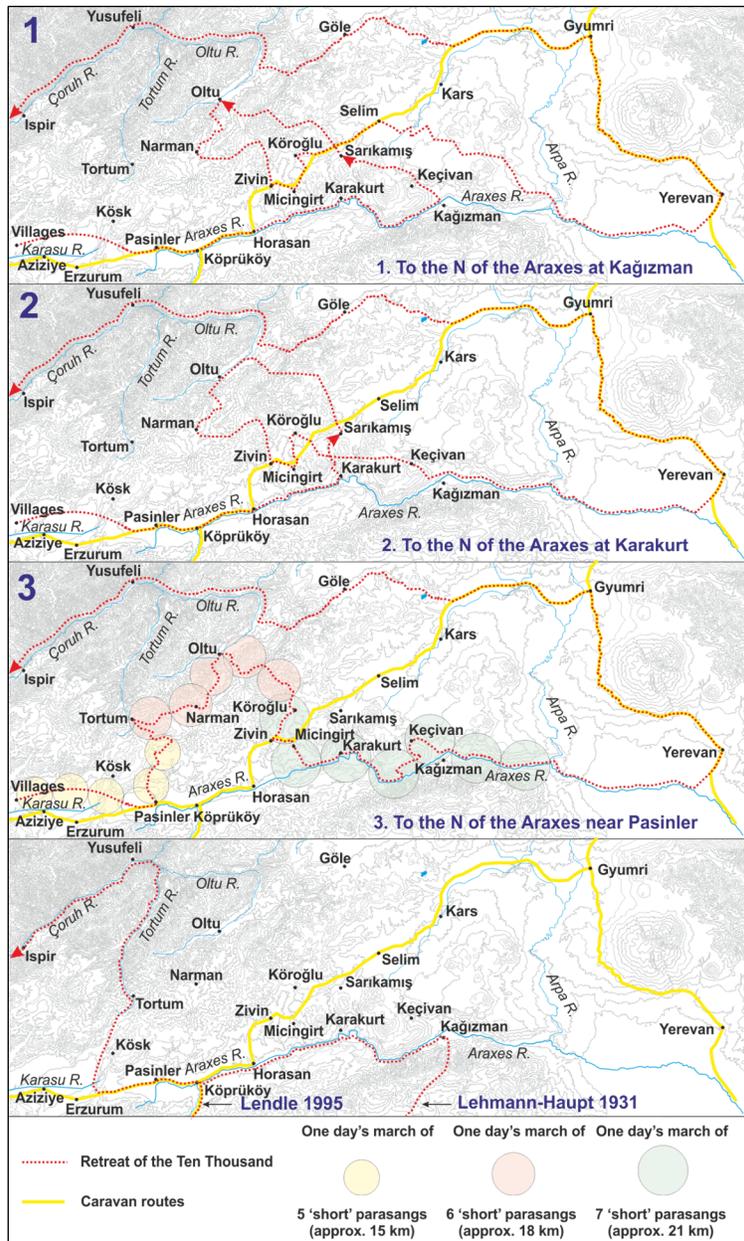
⁸⁴ Cf. Paradeisopoulos 663–664 and n.73: in the anabasis to Cunaxa, Xenophon reports 125 parasangs from the river *Khabour* to Pylae, which correspond to an actual distance of 379 km. and imply a parasang's length (an hour's march) of 3 km. for this segment.

However, we may add here that a third and more direct route, first northerly towards *Tortum*, *Narman*, *Oltu*, and thence southeasterly towards *Koroğlu*, *Živin*, *Micingirt*, *Kecivan*, and the Araxes, would have been followed, if they had moved to the north of the river from some point near *Pasinler*. In this third case, the seven days' eastward march along the Araxes would not correspond to Xenophon's parasangs, either standard (30 stadia) or reduced; in fact there would be no march along the Araxes at all. It has been proposed that Xenophon's text here (4.6.4) is corrupt.⁸⁵

As shown in Map 6, this third alternative for a route to the north of the river from some point near *Pasinler* towards the Taochians and thence southeasterly towards the castles of the Khaldians and the Araxes, *without* a seven days' march along this river, has the following advantages: it justifies a quick move to the north because of the dearth of settlements (and food) to the east of *Pasinler*; it passes from the land and the natural fortresses of the Taochians without back-and-forth movements; it continues regularly, passing from the towns of the Khaldians and arriving at the Araxes.

It seems that in the lands of the Taochians and the Khaldians Xenophon is not reporting marches of standard (30 stadia) parasangs, because his daily marches among the Taochians (six parasangs per day, 4.7.1) and the Khaldians (ca. seven per day, 4.7.15) exceed the average march length along highways in the *Anabasis* (five parasangs per day). As they were now marching outside of highways, obviously Xenophon uses here the 'short'

⁸⁵ Lendle, *Kommentar* 249; Lendle reckons with a 4 instead of 7 days' march along the Araxes (from east to west). Jan P. Stronk, review in *Mnemosyne* SER. IV 51 (1998) 228–238, at 231, finds this argument convincing.



Map 6: Possible points of transit to the north of the Araxes

parasang (3 km.).⁸⁶ The 17 days of march along this route, that is, 3 from the villages until the escape of the guide, 2 to the north of the Araxes towards the enemies, 5 in the land of the Taochians, and 7 in the land of the Khaldians, are depicted graphically on Map 6 (alternative 3) as corresponding, respectively, to daily marches of ca. 15, 15, 18, and 21 km. (5, 5, 6, and 7 ‘short’ parasangs). We examine below this alternative with respect to the chronology and the parasangs of the *Anabasis*.

Detailed and aggregate parasangs

In three paragraphs in the *Anabasis* we find the aggregates that are depicted in Table 1. These paragraphs, as well as the one mentioning the nations and rulers encountered by the Ten Thousand during their anabasis and retreat (7.8.25), are often regarded as interpolations.⁸⁷ The discussion on interpolations is not repeated here; we mention only that this characterization does not seem to be certain.⁸⁸

	Days of march		Parasangs		Days total	Xen. <i>Anab.</i>
Ephesos-Cunaxa	<i>a</i>	93	<i>f</i>	535		2.2.6
Cunaxa-Cotyora	<i>b</i>	122	<i>g</i>	620	<i>d</i> 8 months ²	5.5.4
Ephesos-Cotyora	<i>c</i>	215	<i>h</i>	1,150 ¹	<i>e</i> 1 year 3 months ³	7.8.26

¹ 5 parasangs’ error in the sum.
² As the march from Cunaxa to Cotyora lasted from 20 Nov. to 20 July, eight months = 11 + 31 + 31 + 28 + 31 + 30 + 31 + 30 + 20 = 243 days.
³ 1 year and 3 months = 365 + 30 + 31 + 30 = 456 days.
a-h: Conditions to be satisfied by proposals.

TABLE 1: Aggregate information in Xenophon’s *Anabasis*

These ‘interpolated’ paragraphs reflect the eight conditions labelled *a* to *h* in Table 1. Conditions *a*, *b*, *c*, *d*, and *e* refer to time (in days or months). Taking Diodorus into account, we have shown that they hold.⁸⁹ Conditions *f*, *g*, and *h* refer to distance

⁸⁶ Cf. Paradeisopoulos 663–664 and n.73, and n.84 above.

⁸⁷ E.g. Rood, in *Space in Ancient Greek Literature* 162–178, at 170.

⁸⁸ Paradeisopoulos 652–654.

⁸⁹ Paradeisopoulos 678–680.

(in parasangs) and are examined in the following section of this article.

Xenophon's detail on the parasangs is depicted in Tables 2 and 3. The parasangs of the anabasis (Table 2) are almost complete and add up to 517. This is not the case for the parasangs of the retreat (Table 3).

Location	Parasangs	Days of march	Xen. <i>Anab.</i>
Sardes			
Macander river	22	3	1.2.5
Colossae	8	1	1.2.6
Celaenae	20	3	1.2.7
Peltae	10	2	1.2.10
Ceramona Agora	12	2	1.2.10
Caystrou Pedion	30	3	1.2.11
Thymbria	10	2	1.2.13
Tyriaeion	10	2	1.2.14
Iconion	20	3	1.2.19
Through Lycaonia	30	5	1.2.19
Through Cappadocia to Tyana	25	4	1.2.20
[Cilicia Pass]			1.2.21-22
Tarsos	25	4	1.2.23
Psaros river	10	2	1.4.1
Pyramos river	5	1	1.4.1
Issos	15	2	1.4.1
Gates of Cilicia-Syria	5	1	1.4.4
Myriandos	5	1	1.4.6
Sardes-Myriandos	262	41	
Myriandos			
Chalos river	20	4	1.4.9
Dardas river	30	5	1.4.10
Thapsacos, Euphrates river	15	3	1.4.11
Araxes (Aborras) river	50	9	1.4.19
Corsote	35	5	1.5.1-4
Pylae	90	13	1.5.5
	12	3	1.7.1
Through Babylonia to the battlefield	3	1	1.7.14
		1	1.7.19
At Cunaxa and the battle		1	1.7.20
Return to the camp			1.10.1-18
Myriandos-Cunaxa	255	45	
SARDES-CUNAXA	517	86	

TABLE 2: Xenophon's detailed parasangs of the anabasis

Location	Para-sangs	Days of march	Xen. <i>Anab.</i>
Departure from the camp			
With Ariacos	4	1	2.2.8, 1.10.1
To the plundered villages		1	2.2.15-17
Truce. To the Babylonian villages		1	2.3.1-2.3.17
At the Wall of Media		3	2.4.12
Sittace	8	2	2.4.13
Opis	20	4	2.4.25
Villages of Parysatis	30	6	2.4.27
Zapatas river. Murder of Greek generals	20	4	2.4.28-2.5.1
Attack of Mithradates	1	1	3.3.11-4.1
New attack, arrival at Larissa		1	3.4.2-7
Mespila	6	1	3.4.10
Attack of Tissaphernes. Villages with provisions	4	1	3.4.13-18
At the hills		5	3.4.24-31
New attack of Tissaphernes		1	3.4.32
Escape from Tissaphernes		3	3.4.37
In the plain near Tigris river		1	3.5.1
On the mountains of the Carduchians		1	4.1.7-8
Cunaxa-Carduchian mountains	93	37	
On the mountains of the Carduchians			
In the land of the Carduchians. Centrites river		7	4.3.2
In town with palace	5	1	4.4.1
Sources of Eastern Tigris river	10	2	4.4.3
Teleboas (Eastern Euphrates) river	15	3	4.4.3
In the villages with the first snow	15	3	4.4.7
Attacking Tirivazos. Crossing mountain pass		1	4.4.8-4.5.1
(Western) Euphrates river	15	3	4.5.2
Northerly march in the snow	15	3	4.5.3
Arrival at the Armenian villages		1	4.5.9-22
March with the village's headman as guide		3	4.6.2
March next to Araxes (Phasis) without guide	35	7	4.6.4
Confronting Taochians, Phasians, Chaldeans	10	2	4.6.5
In the land of the Taochians	30	5	4.7.1
In the land of Khaldians. River Harpassos	50	7	4.7.15
In the land of Scytheni	20	4	4.7.18
At the city Gymnias	20	4	4.7.19
At Mt. Theches		5	4.7.20-21
In the land of the Macronians	10	3	4.8.1-8
In the land of Colchians. Sickness by honey		1	4.8.9-21
At Trapezus	7	2	4.8.22
Carduchian mountains-Trapezus	257	67	
At Trapezus			4.8.22
At Cerasus		3	5.3.2-5.3.3
At the border of the Mossynoecians		1	5.4.1
In the land of the Mossynoecians		8	5.5.1
At Cotyora		2	5.5.2-3
Trapezus-Cotyora		14	
CUNAXA-COTYORA		118	

TABLE 3: Xenophon's detailed parasangs of the retreat

Evaluating conditions f, g, and h on aggregate parasangs

Starting with condition *f*, it is obvious that it holds. There were 517 parasangs from Sardes to Cunaxa (Table 2), and the distance between Ephesos and Sardes was 18 parasangs.⁹⁰ Thus, whether an interpolation or not,⁹¹ this paragraph (2.2.6) on the aggregate days and parasangs holds for both its legs.

Also we have shown that the 29 additional days of Diodorus, added to Xenophon's account, produce for the retreat 122 days of march and 243 days total.⁹² Thus the paragraph (5.5.4) reporting the aggregate days of march, days total, and parasangs (620 or 615)⁹³ from Cunaxa to Cotyora already holds in respect to the days of march and the days total.

Things are not equally straightforward for the parasangs of the retreat (condition *g*) because here Xenophon omits several distances in parasangs (Table 3). Thus, in order to compare his information with the aggregate, we have to adopt a method of filling in the missing information in Table 3.

In terms of distance, we are also obliged to respect the two assumptions made when setting up the model of chronology: first, that there were 15 (and not 5) days of march between Gymnias and Mt. Theches; and, second, that in the land of the Mossynoecians there were 2 days of march and 6 days of rest instead of Xenophon's 8 days of march (5.5.1).⁹⁴

⁹⁰ According to Herodotus (5.54) 540 stadia, which at 30 stadia per parasang (5.53) is 18 parasangs.

⁹¹ Cf. Stronk, *Mnemosyne* SER. IV 51 (1998) 230.

⁹² Paradeisopoulos 680.

⁹³ There is an error of 5 parasangs in the sum (cf. Table 1, condition *h*). Thus, if there were 1150 parasangs total, there were 615 in the retreat. Conversely, if there were 620 parasangs in the retreat, there were 1155 total.

⁹⁴ We assume 2 and 6 instead of Xenophon's 8 days of march (cf. Rennell, *Illustrations* 257–258). The distance between Cerasus (*Giresun*) and Cotyora (*Ordu*) is 43 km. However circuitous might have been the journey through the land of the Mossynoecians, it could not have lasted 8 day marches, also because the first part between Cerasus and the eastern border of the Mossynoecians was traveled in an additional march (5.4.1–2), and the last part between the western border of the Mossynoecians and Cotyora in two more marches (5.5.3). Cf. Lendle's view (n.102 below).

Location	Parasangs		Days of march	Days of rest	Days total
	<i>Anab.</i>	+ added			
Departure from the camp					
With Ariacos	4	4	1		
In the plundered villages		5 ¹	1		
In the Babylonian villages of the truce		5 ¹	1	26	
At the Wall of Media		15 ¹	3		
Sittace	8	8	2		
Opis	20	20	4		
Villages of Parysatis	30	30	6		
Zapatas river	20	20	4	3	
Attack of Mithradates	1	1	1	1	
New attack, arrival at Larissa		5 ¹	1		
Mespila	6	6	1		
Attack of Tissaphernes. In villages with provisions	4	4	1	1	
At the hills		25 ¹	5	3	
New attack of Tissaphernes		5 ¹	1	1	
Escape from Tissaphernes		15 ¹	3		
In the plain near river Tigris		5 ¹	1		
On the mountains of the Carduchians		5 ¹	1		
Cunaxa-Carduchian mountains	93	178	37	35	72
On the mountains of the Carduchians					
Centrites river		35 ¹	7	1	
In town with palace	5	5	1		
Sources of Eastern Tigris river	10	10	2		
Teleboas (Eastern Euphrates) river	15	15	3		
In the villages with the first snow. Attacking Tirivazos	15	15	3	3	
Crossing the mountain pass		5 ¹	1		
(Western) Euphrates river	15	15	3		
Northerly march in the snow	15	15	3		
Arrival and stay at the Armenian villages		5 ¹	1	8	
March with the village's headman as guide		15 ¹	3		
March next to Araxes without guide. Stay (<i>Diodorus</i>)	35	35	7	4 ²	
Confronting Phasians, Taochians, and Khaldians	10	10	2		
In the land of the Taochians. Stay (<i>Diodorus</i>)	30	30	5	15 ²	
In the land of the Khaldians. River Harpassos	50	50	7		
In the land of the Scytheni	20	20	4	3	
At the city Gymnias	20	20	4		
At Mt. Theches (<i>in 15 and not in 5 days, Diodorus</i>)		75 ¹	15 ²		
In the land of the Macronians	10	10	3		
In the land of the Colchians. Sickness by the honey		5 ¹	1	4	
At Trapezus	7	7	2		
Carduchian mountains-Trapezus	257	397	77	38	115
At Trapezus				30	
At Cerasus		15 ¹	3	10	
At the border of the Mossynoecians		5 ¹	1	2	
In the land of the Mossynoecians		10 ¹	2 ³	6 ³	
At Cotyora		10 ¹	2		
Trapezus-Cotyora		40	8	48	56
Thus Retreat: Cunaxa-Cotyora		615	122	121	243
Plus Anabasis : Ephesos-Cunaxa		535	93	120	213
Equals Anabasis and Retreat: Ephesos-Cotyora		1150	215	241	456

¹ Parasangs in *italics* estimated as days of march x 5 parasangs per day.

² According to Diodorus (14.29.1-3).

³ 2 days of march and 6 days of rest instead of (*Anab.* 5.5.1) 8 days of march.

TABLE 4: Adding the missing parasangs of the Retreat

The number of the aggregate parasangs of the retreat (Table 1, condition *g*, *Anab.* 5.5.4) could only be arrived at, if the missing parasangs in any segment of Table 3 were calculated by applying an average day march (in parasangs) to the number of marches reported in the respective segment. Assuming for the missing parts an average day march of 5 parasangs (which is the average day march throughout the *Anabasis*), the length of the march of the retreat of the Ten Thousand (Cunaxa-Cotyora) is 615 parasangs⁹⁵ (Table 4). It coincides with the aggregate,⁹⁶ and satisfies condition *g*.

Finally, after the satisfaction of condition *g*, the distance marched between Ephesos and Cotyora was 1150 parasangs.⁹⁷ Thus condition *h* is also satisfied.

Verification of data compatibility in the two articles

In the process of the review of this article, it emerged that it was not readily clear that the figures (days and parasangs) concerning the retreat from Cunaxa to Cotyora and contained in the tables here were fully compatible with those used in the chronology model article. The following Table 5 is given in order to demonstrate this compatibility.

As shown both in this table and in those to which it refers, the differences do not have to do with errors but with the inclusion (or non-inclusion) of the additional time of Diodorus (and the modification concerning the Mossynoecians), accordingly to the *scope* of each table. Thus, the highlighted part of Table 5 illustrates the compatibility when Diodorus is taken into account, whereas the rest of this table illustrates this compatibility when Diodorus is not taken into account.

⁹⁵ Cunaxa-Carduchian mts. + Carduchian mts.-Trapezus + Trapezus-Cotyora = 178 + 397 + 40 = 615 parasangs.

⁹⁶ Recall n.93 above: the aggregate is 615 or 620 parasangs.

⁹⁷ Ephesos-Cunaxa + Cunaxa-Cotyora = 535 + 615 = 1150 parasangs.

Location	Parasangs		Days of march	Days of rest	Days total
	<i>Anab.</i>	+ added			
Data from Table 3 in this article					
Cunaxa-Carduchian mountains	93		37		
Carduchian mountains-Trapezus	257		67		
Trapezus-Cotyora			14		
CUNAXA-COTYORA			118		
Data from Table 4 in this article					
Cunaxa-Carduchian mountains	93	178	37	35	72
Carduchian mountains-Trapezus	257	397	77 ¹	38 ²	115
Trapezus-Cotyora		40	8 ³	48 ⁴	56
CUNAXA-COTYORA			122	121	243
Data from Table 5 in Paradeisopoulos 2013					
Cunaxa-Carduchian mountains			37	35	72
Carduchian mountains-Trapezus			77 ¹	38 ²	115
Trapezus-Cotyora			8 ³	48 ⁴	56
CUNAXA-COTYORA			122	121	243
Data from Table 4 in Paradeisopoulos 2013					
Cunaxa-Carduchian mountains	93		37	35	72
Carduchian mountains-Trapezus	257		67	19	86
Trapezus-Cotyora			14	42	56
CUNAXA-COTYORA			118	96	214
Data from Table 2 in Paradeisopoulos 2013					
Cunaxa-Carduchian mountains	93		37	35	72
Carduchian mountains-Trapezus	257		67	19	86
Trapezus-Cotyora			14	42	56
CUNAXA-COTYORA			118	96	214
¹ 10 additional days of march according to Diodorus. ² 19 additional days of rest according to Diodorus. ³ In the land of the Mossynoecians 2 days of march instead of Xenophon's 8 days of march. ⁴ In the land of the Mossynoecians 6 days of rest instead of Xenophon's 0 days of rest					

TABLE 5: Compatibility of data in the two articles

Comparisons and alternatives

A comparison of Table 1 with the last three lines of Table 4 shows that the 29 additional days of Diodorus provide closure both to the chronology and to the distance marched. These additional days imply also a route of the retreat which took the Greeks to the city of Gymnias, at a distance of *fifteen* daily marches from Mt. Theches. We have proposed that Gymnias

was at *Gyumri*, Armenia,⁹⁸ and that they had arrived there in the mistaken belief that the Araxes was the Colchian river Phasis and thus that it would lead them to the Euxine Sea.⁹⁹

We have addressed all aspects of the *Anabasis* (route, chronology, and parasangs), without assuming that periods of time are missing or that there were false interpretations on the part of Xenophon concerning river names, place names, and nations encountered. We have considered only two modifications to his text: first, the additional 29 days of Diodorus; and, second, 2 days of march and 6 days of stay in the land of the Mosynoecians, instead of Xenophon's 8 days of march. In what follows we show that under certain assumptions, Diodorus provides closure even without this second modification.

Was there a seven days' march along the Araxes?

We have mentioned that the third alternative route in Map 6 has advantages. However, the layout and the kilometres of this route make redundant Xenophon's seven days' march along the Araxes (4.6.4). This does not mean that we have to return to the old controversy, whether the expression *παρὰ τὸν ποταμὸν* means *towards* or *along* the river. It means that possibly there was *no* seven days' march along or towards the Araxes, as described by Xenophon; or, precisely, that this march has intentionally been reported twice by Xenophon: first, as a march from the escape of the guide until their arrival at the river and ascent to the north (4.6.5); and, second, during their march in the land of the Khaldians until the crossing of the river Harpasos (4.7.15–18).

If this was the case, Xenophon had good reasons for it. First,

⁹⁸ Cf. Ainsworth, *Travels* 186: "It was designated Gymnasia by Diodorus Siculus, and although by name there appears to be a greater connexion between the Russian fort of Gumri on the upper Arpa-chai, still other circumstances forbid that identification..." Obviously these 'circumstances' were no other than Xenophon's five days from Gymnias to Mt. Theches.

⁹⁹ Cf. Otar Lordkipanidze, *Phasis, the River and City in Colchis* (Stuttgart 2000) 18, cited in Paradeisopoulos 660 n.58: "Perhaps closer to the truth is the view of some scholars who believe that Xenophon's troops mistakenly took this great river [i.e. the Araxes] for the Phasis, the legendary river of the Argonauts, hoping that it would lead them to the sea."

he was rendering incomprehensible the route to the east.¹⁰⁰ Maybe it was not accidental that in the same area he has amplified the confusion, by omitting the nineteen days of stay attested by Diodorus. Second, by reporting a seven days' march twice, probably Xenophon had devised a way of hiding a large part of the fifty parasangs he had subtracted from the march from Gymnias to Mt. Theches (five instead of fifteen days).¹⁰¹ It should be noted that this march along the Araxes does not exist in the narrative of Diodorus.

However, this third alternative route, though plausible, is in general equally probable with the two other alternatives, based respectively on a standard (of 30 stadia) and a shorter parasang, and taking into account all marches reported by Xenophon in this area. It should be evaluated against historical, archaeological, and topographical evidence, in comparison with other possible routes from the area of *Pasinler* to *Kağızman* and to the confluence of the Araxes and the *Arpa çay* in the east, on the basis of the general layout proposed here.

What matters, for the purposes of this article, is whether this third alternative is also compatible, like the other two, with the proposal that the additional days of march and rest of Diodorus provide closure to the chronology and the parasangs of the *Anabasis*. The answer is yes, it is compatible, as illustrated in Table 6.

The left part of the table depicts the figures we have accepted so far and have incorporated both in the chronology model and in the calculation of the parasangs of the *Anabasis*. The right part assumes that there was no march along the Araxes. There was only one day's march (depicted with a white circle in Map 6, third alternative) from the escape of the guide to the arrival at

¹⁰⁰ Xenophon's possible reasons are discussed in Paradeisopoulos 677–678 and 685–686.

¹⁰¹ The possibility that Xenophon may have transferred, in his recorded marches in the lands of the Taochians and the Khaldians, the 50 parasangs (10 days' march) that he has subtracted from the next leg between Gymnias and Mt. Theches, in order to safeguard the credibility of his aggregate in this leg of the route, was mentioned at Paradeisopoulos 664.

the river. Additionally, it assumes that there was no mistake in Xenophon's 8 days of march in the land of the Mossynoecians. Thus now we do not alter it to 2 days of march and 6 days of rest and we accept Lendle's view on this issue.¹⁰²

March	With the seven days' march along the Araxes				Without the seven days' march along the Araxes			
	para- sangs	days of march	days of rest	days total	para- sangs	days of march	days of rest	days total
...
Until guide's escape	15	3		3	15	3		3
Along river Phasis	35	7	4	11	5	1	4	5
Towards the enemies	10	2		2	10	2		2
Among the Taochians	30	5	15	20	30	5	15	20
Among the Khaldians	50	7		7	50	7		7
...
Among the Mossynoecians	10	2	6	8	40	8		8
...
Partial sums	150	26	25	51	150	26	19	45
Retreat totals	615	122	121	243	615	122	115	237

TABLE 6: Third alternative

The outcome is that neither the parasangs (615) nor the days of march (122) in the retreat are affected. There is only a deficit of 6 days of rest (from 121 to 115) which results in the same deficit in days total (from 243 to 237). However (cf. Table 1), Xenophon has not reported aggregates for the days of rest; thus the adoption of this alternative is not incompatible with the text of the *Anabasis*. Also, Xenophon's aggregates on the overall duration of the retreat (Cunaxa-Cotyora) and of the expedition (Ephesos-Cotyora) are not expressed in days but in months. Although the 243 days equal 8 calendar months, the 237 days

¹⁰² Lendle, *Kommentar* 310–311, believes that Xenophon's Cerasus was not present-day *Giresun* but a second city with the same name much farther east, in the bay of *Vakfikebir*, ca. 45–50 km. to the west of their camp at Trapezus. They marched to that place in three days, thence in eight days through the Mossynoecians and the Chalybes, and finally, after two days' march among the Tibarenians, arrived at Cotyora (*Ordu*). Cf. our assumption in n.94, based on Rennell, *Illustrations* 257–258.

are almost equal to 8 and could not be expressed differently in terms of months. But considering lunar months,¹⁰³ Xenophon's 8 months of the retreat are 240 days and the 237 days of this alternative are equally close to 8 months as the 243 days total we have accepted so far. Thus, in practice, neither total duration is affected. Moreover, this explanation is probably desirable, because it permits us to get rid of the peculiar assumption that the duration of the retreat (Cunaxa-Cotyora) was exactly eight complete months and at the same time the duration of the expedition (Ephesos-Cotyora) was also exactly fifteen complete months.

It seems therefore that, considering calendar months, the only consequence of the adoption of this third alternative would be a 6 days' shift of all events after the escape of the guide (to the west of *Pasinler*), until the arrival at Cotyora, and, correcting for lunar months, that there would be a shift 3 days earlier of all events from the departure from Sardes until the escape of the guide,¹⁰⁴ as well as a shift 6 days earlier of the events after the escape of the guide (west of *Pasinler*), until the arrival at Cotyora. But this shift of some key dates does not falsify our approach. It is still possible that they arrived at Gymnias (*Gymni*) on the 24th (instead of the 30th) of April; that they ascended Mt. Theches on the 9th (instead of the 15th) of May; that they consumed the mad honey on the 14th (instead of the

¹⁰³ According to a valuable comment, Xenophon knew only lunar months. Though nowadays we know that a lunar month equals 29.53059 days and 8 lunar months equal 236.24 days, almost identical to the reduced sum of days total (237), obviously Xenophon could not interpret aggregate time (i.e. lunar months) in terms of fractions of days. His lunar month (the full cycle of the moon) was 30 days.

¹⁰⁴ The 7 months of the anabasis (Ephesos-Cunaxa), i.e. the difference between the one year and three months of the expedition (Ephesos-Cotyora, 7.8.26) and the eight months of the retreat (Cunaxa-Cotyora, 5.5.4), in *lunar* months equal 210 days and not 213 (7 *calendar* months), as we have accepted in the chronology article. All days of march and rest in the anabasis (Ephesos-Cunaxa) are provided by Xenophon except for the duration of the stay at Sardes. In order to provide for a sum of 210 days (7 *lunar* months) instead of 213 (7 *calendar* months), we must reduce by 3 days the stay at Sardes (from 23 to 20 days).

20th) of May; that they arrived at Trapezus on the 19th (instead of the 25th) of May; and that they plundered the new wheat of the Mossynoecians between 4 and 11 of July (and not between 10 and 17 July). After all, it is still possible to retain these original significant dates, by shifting the start of the expedition (Xenophon's departure from Ephesos) from the 20th to the 26th of April 401.

Conclusion

In two articles we have attempted to evaluate the probable implications of the adoption of the additional days of march and rest offered by Diodorus. We have shown that these additional days provide closure both to the chronology and to the parasangs of Xenophon's *Anabasis*.

We have provided evidence that Xenophon's Euphrates in the retreat was the *Karasu* (West Euphrates), and not the *Murad* (East Euphrates) as accepted by most proposals. If this was the case, then inevitably the Armenian villages with the subterranean houses were in the valley of the *Karasu*: they were between *Erzurum* and *Aşkale*.

The details of the route of the retreat through the lands of the Phasians, the Taochians, and the Khaldians, towards the Araxes, the Harpasos (*Arpa çay*), and present-day Armenia depend on the inclusion (or non inclusion) of Xenophon's debated seven days' march along (or towards) the river Phasis (Araxes). As the additional days of Diodorus provide closure with or without this march, it is most likely that the Ten Thousand marched from Gymnias to Mt. Theches in fifteen and not in five days. Thus Gymnias could not possibly be located at or near *Bayburt*.¹⁰⁵

February, 2014

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¹⁰⁵ I thank an anonymous referee and the journal's editor for their helpful comments.