



HAL
open science

From India to the Black Sea: an overlooked trade route?

Pierre Schneider

► **To cite this version:**

| Pierre Schneider. From India to the Black Sea: an overlooked trade route?. 2017. hal-01376630v2

HAL Id: hal-01376630

<https://hal.science/hal-01376630v2>

Preprint submitted on 16 Mar 2017

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

From India to the Black Sea : an overlooked trade route? (Slightly revised version with addenda)

Abstract. *Some Hellenistic sources and Pliny the Elder briefly describe a trade route linking the Pontic area and India. Eastern commodities were carried by various middlemen using both land and river routes. The Caspian Sea was even crossed. This existence of this itinerary, which is documented by too few texts and very little archaeological remains, has been called into question by some scholars. On the basis of several literary sources so far overlooked if not missed, I argue that the "northern road" played a continuous role in the so-called Indo-Mediterranean trade, along with the better known Indian Ocean routes.*

Was the Black Sea the ending point of a trade route from Central Asia? P. Lévêque's afterword of the proceedings of a conference held at Vani (Georgia) in 1999, entitled "La genèse de la route de la soie", left no doubt about his opinion¹; yet the road linking the Pontic area to Central Asia and India is tremendously elusive, being documented by a few classical texts, much debated, and scanty archaeological remains. Such poor evidence led some scholars to call into question the very existence of the "northern route". However, several so far neglected classical texts help support the opposite opinion, as this paper aims to show.

1. Written evidence for the India-Black Sea trading route

The existence of a trade route running from India to the Euxine is documented by a small set of Greek and Latin texts, repeatedly quoted by nearly all scholars addressing this issue. The present paper will be no exception, for the sake of clarity.

In the course of the eleventh book of his *Geography*, Strabo describes the rivers flowing across Hyrcania, on the south-east coast of the Caspian Sea, drawing directly and indirectly on three authorities : Aristobulus, who accompanied Alexander on all campaigns and wrote a history of the Asian expedition; Eratosthenes, the well-known Alexandrian scientist; Patrocles, a man appointed by Seleucus I as governor of Sogdiana and Bactriana about 285 B.C. Between 285 and 282, Patrocles was despatched as a commander of a fleet by Seleucus I and Antiochus I to reconnoitre the Caspian Sea². At that time Hyrcania was a Seleucid satrapy.

Aristobulus [*FGrH* 139 F20] says that the *Oxos* [Amu Darya] is the largest of the rivers he has seen in Asia except those in India. And he further says that it is navigable (both him and Eratosthenes [III B 67 Berger] taking this statement from Patrocles³ [*FGrH* 712 F5]), and that large quantities of Indian wares are brought down on it to the Hyrcanian Sea [i. e., the Caspian Sea], and thence on that sea are transported to Albania⁴

¹ Lévêque 313-314.

² On Patrocles' explorations of the Caspian Sea, see Gisinger 2267-2270; Williams (commentary on F5).

³ Contrary to H. L. Jones' interpretation, Tarn (b) 489, convincingly states that the participle *labôn* (φησὶ δὲ καὶ εὐπλοῦν εἶναι καὶ οὗτος καὶ Ἐρατοσθένης παρὰ Πατροκλέους λαβῶν) agrees only with *Eratosthenês*: "Aristobulus is probably only cited here as an authority for the Oxus being *euplous*, for it is unlikely that he wrote late enough to use Patrocles". Yet there is no reason to suggest that this local traffic was unknown to Aristobulus. Also see Jacoby 514-515; Gisinger 2268; Bosworth 373; Radt 277.

⁴ Albania lay along the lower to middle course of the Kyros. It can be more or less equated with modern Azerbaijan. According to Strabo, 11, 4, 2, the twelve mouths of the Kyros were shallow or silted. Appian, *Roman History*, 12, 103, describes them as "navigable".

and brought down on the Kyros River [i. e., the Kura, or Mtkvari] and through the region that comes next after it to the Euxine [καὶ πολλὰ τῶν Ἰνδικῶν φορτίων κατάγειν εἰς τὴν Ὑρκανίαν θάλατταν, ἐντεῦθεν δ' εἰς τὴν Ἀλβανίαν περαιοῦσθαι καὶ διὰ τοῦ Κύρου καὶ τῶν ἐξῆς τόπων εἰς τὸν Εὐξείνιον καταφέρεσθαι]. (Strabo, 11, 7, 3; transl. H. L. Jones⁵).

If we suppose the existence of two sources, Aristobulus and Patrocles, their account of this trade circuit may derive from hear-say information and/or personal observation. In particular, it is likely that Patrocles noticed boats of a local type plying between each side of the Caspian Sea. This trade connection enabled “large quantities of Indian commodities” to reach Asia Minor and, probably the Mediterranean world, prior to the later development of Indian Ocean sea routes. One can confidently number aromatics among these unnamed goods, especially pepper, which was imported to the Greek world for its healing properties as early as the late 5th century B.C.; a cinnamon flower has even been recovered from the 7th century B. C. rubbish dumps at the Heraion of Samos⁶.

Strabo’s report contains no details on the first overland sections of this trade route, from (north-west) India to the Amu Darya / Oxos. Neither does he locate the harbour on the Caspian Sea. Some stages, however, can be guessed with reasonable certainty, thanks to the following excerpt:

The voyage from Amisos to Kolchis is thus toward equinoctial east (which is known by the winds, seasons, crops, and the sunrise itself), as also are the pass to the Caspian and the route from there to Baktra [ὡς δ' αὐτως καὶ ἡ ἐπὶ τὴν Κασπίαν ὑπέρβασις καὶ ἡ ἐφεξῆς ὁδὸς μέχρι Βάκτρων]. (Strabo, 2, 1, 11 = Eratosth. III A 11; transl. D. Roller; also see also Strabo, 2, 1, 5)

Baktra (Balkh), located not far from the upper course of the Amu Darya, was a place of transit for Indian commodities, which were certainly carried along the so-called “vieille route de l’Inde”, from Taxila (Takshaçila) to Baktra, via Bamiyan, Kapici, Pushkarâvatî and Udabhânda⁷. As for Taxila, this city acted as a node in networks of circulation, being connected, for instance, with the Gangetic area⁸. Much more problematic is the Oxos flowing into the Caspian Sea instead of the Aral Sea⁹. As suggested by some scholars, the Oxos may have had a branch called Uzboy leading into the Caspian.

⁵ A slightly different version of the same account appears in Strabo’s Prolegomena: “And further, the River Oxos, which divides Bactriana from Sogdiana, is so easily navigable, they say, that the Indian merchandise packed over the mountains to it is easily brought down to the Hyrcanian Sea, and thence, on the rivers, to the successive regions beyond as far as the Pontus [ὡστε τὸν Ἰνδικὸν φόρτον ὑπερκομισθέντα εἰς αὐτὸν ῥαδίως εἰς τὴν Ὑρκανίαν κατάγεισθαι καὶ τοὺς ἐφεξῆς τόπους μέχρι τοῦ Πόντου διὰ τῶν ποταμῶν].” (Strabo, 2, 1, 15; transl. H. L. Jones; also see Strabo, 2, 1, 3).

⁶ Amigues (b) 369-375. Indian aromatics could also be introduced via the Strait of Hormuz and Mesopotamia, as Amigues (b) 375 rightly points out.

⁷ Foucher 13-53, and particularly 47-53. A fragment of Ctesias’ *Indika* (F 45 (6) in D. Lenfant’s edition) may have some ties with this itinerary: “Ctesias describes a gemstone called *pantarba*, which, when it was thrown into the river (i. e. the Indus), was retrieved clinging together gems and precious stones that belonged to a Bactrian dealer.” (transl. Nichols; also see Nichols 23-25). Note that the participle ὑπερκομισθέντα (above, n. 5) may point to a passage over mountains.

⁸ Filliozat 13; Sen xiii-xiv.

⁹ Jacoby 514-515; Tarn (a) 10-12; Tarn (b) 491; Callieri 539-540; Williams (commentary on F5a). The Amu Darya may have gone through several shifts in the historic times, by this has not been established. Tarn (b) 113 has imagined another more complicated scenario: “Patrocles sent to explore the Caspian mistook the mouth of the Atrek, seen from the sea, for that of the Oxus, and believing that the Oxus flowed into the Caspian, reported to Antiochus I that such a trade route could easily be made; in due course his report was turned into a statement that it existed.” (also Gisinger 2268). André & Filliozat 70-71 rightly emphasize that neither Strabo nor Pliny explicitly state that the Oxos empties into the Caspian Sea.

This now dried up channel, which split off the Amu Darya south of the delta in former times, could be understood to be this Oxos pouring into the Caspian Sea¹⁰. In the face of these difficulties, however, E. H. Warmington prudently concludes “that after a journey down the river wares were carried by land to the Caspian and then across or round it.”¹¹

With respect to the western and final section of the Black Sea-India route, Strabo lists several transshipment points:

It [i. e., the Phasis, today's Rioni] is navigated as far as Sarapana [ἀναπλεῖται δὲ μέχρι Σαραπανῶν ἐρύματος]¹², a fortress capable of admitting the population even of a city. From here people go by land to the Kyros in four days by a wagon-road [δὲ ἄμαξιτοῦ]. On the Phasis is situated a city bearing the same name, an emporium of the Colchi, which is protected on one side by the river, on another by a lake, and on another by the sea. Thence people go to Amisos and Sinopê by sea ... (Strabo, 11, 2, 17; transl. H. L. Jones)

These data are partially echoed by Pliny the Elder who, although showing himself less prolific than Strabo, seems to have benefited from more recent sources. He quotes indeed the first century polymath Varro, whose direct involvement in the third Mithridatic war (74-63 B.C.) as a legate is debated¹³.

Varro further adds that exploration under the leadership of Pompey ascertained that a seven days' journey from India into the Bactrian country reaches the river Bactrus, a tributary of the Oxus, and that Indian merchandize can be conveyed from the Bactrus across the Caspian to the Cyrus and thence with not more than five days' portage by land can reach Phasis in Pontus [*adicit idem Pompei ductu exploratum, in Bactros septem diebus ex India perveniri ad Bactrum flumen quod in Oxum influat, et ex eo per Caspium in Cyrum subvectos, et V non amplius dierum terreno itinere ad Phasim in Pontum Indicas posse devehī merces*¹⁴]. (Pliny the Elder, 6, 52; transl. H. Rackham)¹⁵

Some scholars deny for no reason that Varro obtained fresh information and think that he paraphrased a geographical treatise, maybe that of Eratosthenes¹⁶. In fact, whereas Pliny's account recalls Strabo in pointing to Indian merchandise being imported to the Pontus, two discrepancies can be found. First Strabo's sources are not aware of the Bactrus river (Balkh-ab, Balhāb), which nowadays no longer merges with the Amu Darya and empties into the ground¹⁷; second, in the final section of the route, from the middle course of the Cyrus to Phasis, goods are said to be transported

¹⁰ See Callieri 540-541 (with references). Archaeological fieldwork has shown that the Uzboy valley hosted human settlements between the 6th/5th centuries B. C. and the 4th century A. D. (see, however, Williams [commentary of F5a]).

¹¹ Warmington 27.

¹² Today's Shorapani (Barrington Atlas 88 B2). Sarapana is referred to in Strabo, 11, 3, 4 as a pass from Colchis to Iberia; also see Procopius, 2, 29, 18; 8, 13, 15; 8, 16, 17. For further details, see Furtwängler 267. Note that there used to be a more northern branch beginning at the Caspian Sea and ending at the Lake Meotis (Sea of Azov), which was under the sway of the Upper Aorsoi: “The upper Aorsoi (...) ruled over most of the Caspian coast; and consequently they could import on camels the Indian and Babylonian merchandise, receiving it in their turn from the Armenians and the Medes, and also, owing to their wealth, could wear gold ornaments.” (Strabo, 11, 5, 8; transl. H. L. Jones). See Olbrycht 440-442.

¹³ See, e. g., Olshausen.

¹⁴ *Bactrum* is an emendation by Detlefsen (manuscripts give *iacrum* or *iachrum*); Tarn (b) 488 suggests emendating *subvectos* to *subvectas*, to make it agree with *merces*.

¹⁵ Compare with Solinus, 19, 4-6, basically a paraphrase of Pliny with slight variations (see Callieri 539).

¹⁶ On this issue, see André & Filliozat 11-12; Lordkipanidze (a) 116; Callieri 538-539.

¹⁷ See Tomaschek.

by land (*terreno itinere*), while Strabo apparently points to a riverine traffic (ἀναπλεῖται) between Phasis and Sarapana.

Further texts, which do not add much to what has been gathered from previous documents, are of lesser interest. Both texts describe Phasis as a city into which merchants flock. First Arrian (*Periplus M. Eux.* 10) claims that 400 auxiliaries were garrisoned in Phasis, and refers to merchants staying there. Second, according to a late antiquity *periplus* (6th-7th century A.D.), “sixty peoples are said to descend [i. e., to Phasis], using different languages. And they say that among them come together certain barbarians from India and Bactria (εἰς ταύτην δὲ καταβαίνειν λόγος φωναῖς διαφόροις χρώμεν’ ἐξήκοντ’ ἔθνη, ἐν οἷς τινὰς λέγουσιν ἀπὸ τῆς Ἰνδικῆς καὶ Βακτριανῆς <γῆς> συναφικνεῖσθαι βαρβάρους).” (*Periplus of the Pontus Euxinus*, p. 127 Diller = Pseudo-Skymnos F20 Marcotte¹⁸).

2. The scholarly debate on the “northern route”

With so little documentary material, either written or, as we will see, archaeological, the “northern road” pales in comparison with the Indian Ocean sea routes: not only are the latter documented by many more texts, but they have also benefited from a leap forward in archaeological research over the past decades. Hence a spectrum of opinions among scholars: while some did not hesitate to doubt the existence of this northern route, others admitted it with varying degrees of conviction¹⁹.

The existence of the “supposed Oxo-Caspian route” was more or less dismissed by W. W. Tarn²⁰. His demonstration is based on somewhat farfetched arguments. For instance, he claims that Patrocles was the only source of the three major documents (Pliny; Strabo 2, 1, 15; 11, 7, 3; the other texts are ignored). In other words, neither Aristobulus nor Varro are acknowledged as true sources. Moreover, the existence of the trade route itself is denied. Patrocles, Tarn argues, did not observe any actual traffic but just deemed this voyage as being feasible; he then goes on to imagine that Patrocles, mirroring the “mercantile sensitivity”²¹ of his sovereign, said to king Antiochus I: “You can easily (*radiôs*) make a trade route from Bactria across the Caspian Sea if you like”. There is no need here to dissect Tarn’s arguments one by one. Suffice it to say that most of them rest on nothing but his own conviction, such as the view that “Eratosthenes [= Strabo, 2, 1, 15] has altered the whole sense (i. e., of Patrocles’ report [= Strabo 11, 7, 3]) by turning ‘easily’ into ‘many goods’”. Yet one of his objections deserves more attention: Tarn recalls a passage by Strabo proving that the Caspian Sea was not sailed:

However, neither the country itself [i. e., Hyrcania] nor the sea that is named after it [i. e., the Hyrcanian Sea / Caspian Sea] has received proper attention, the sea being both without vessels and unused [ἄπλους τε οὖσα καὶ ἀργός].” (Strabo, 11, 7, 2; transl. H. L. Jones)²².

¹⁸ According to Marcotte 256, however, this passage is unlikely to derive from Pseudo-Skymnos, who wrote his account of the world between 133 B.C. (or 127/6) and 110 B.C. (Marcotte 7-16). Thus the source of the author of the *Periplus Ponti Euxini* author remains unknown.

¹⁹ For a good review, see Callieri 538-540.

²⁰ Tarn (b) 488-490. Tarn’s judgment has been adopted by various scholars: see, e. g. Karttunen 337, n. 9; Lasserre 139, n. 5 (“la prétendue route fluviale des Indes”); Waugh 190 (presenting himself as a “skeptic”). See also the scholars mentioned by Callieri 539-540 and below, p. 5-6.

²¹ Kosmin 202.

²² Tarn (a) 26.

In reality, Strabo blamed the Hyrcanians for not properly exploiting the important resources of their sea, as attested by the absence of large ships. On the other hand, he certainly paid less or little attention to small crafts manned by fishermen or freight carriers, the existence of which seems to me beyond doubt²³. The point is that Tarn, having in mind the great roads of the long distance trade operated by Greeks and Romans (e. g., the trans-Asian land road described by Maes Titianos²⁴), was to some degree scornful of interconnected small scale networks, which actually were the building blocks of many interregional circuits:

On the whole it appears to me that we are safe in saying that whatever trade came down the Oxus and across the Caspian Sea was entirely in native hands during the whole period of Greek knowledge of this river; and that it was of no great extent.²⁵

Yet the conclusion he drew some time later was even less qualified: “There is no evidence at all that, in Greek times, any such trade-route from India ever existed”²⁶.

E. H. Warmington, being of the opposite opinion, did not call into question the extant textual evidence²⁷. Wisely leaving open the question raised by the current course of the Oxos/Amu Darya, he just observed that Indian wares could have been carried from this river to the Caspian Sea by land. Some scholars adopted this view, but opinions as to how important the role played by this circuit was vary. Considering the lack of documents and Ptolemy’s relatively mediocre knowledge of this part of the world, K. Karttunen is inclined to belittle its importance: “In any case this route was hardly important for Indian trade”²⁸. Quite the reverse D. Schur, on the basis of literary evidence (Pliny, Tacitus ...), claims that Nero’s foreign policy in the Caspian Sea and Hyrcania, following in the footsteps of Seleucus and Antiochus, comprised economic goals (“Kaspische Handelsplänen”). Controlling the Oxo-Caspian road was part of Nero’s wide plan to secure distant commerce routes for the Roman Empire – a similar “Südostpolitik” was conducted in Arabia and Ethiopia [Nubia]–²⁹. E. H. Warmington rather believes that “the Romans left the trade in the hands of middlemen, perhaps in order to avoid offending Parthia, contenting themselves (...) with obtaining influence among the tribes”³⁰.

W. W. Tarn, due to the lack of archaeological remains, drew his conclusion solely on the basis of literary evidence. Interestingly, D. Braund, an archaeologist focusing on the ancient Black Sea and Georgia, agrees more or less with his critical analysis:

Much has been written about a trade-route by which goods could pass from India through Central Asia across the Caspian, and thence from Iberia across the Surami Ridge to Colchis and the Black Sea. The notion was encouraged by Patrocles, who reported to Antiochus I of Syria on the region of the Caspian

²³ For further objections – including archaeological arguments –, see Callieri 541.

²⁴ Tarn (a) 26.

²⁵ Tarn (a) 28; “There is no good evidence ... for an important trade route by the Oxus, though some trade undoubtedly came that way.” (Tarn (a) 28).

²⁶ Tarn (b) 490.

²⁷ Warmington 26 (nor does Haussig 79). See also Callieri 539; Bosworth 373; Karttunen 337, n. 94.

²⁸ Karttunen 337.

²⁹ Schur 67; 80-83. Mc Laughlin 90-92 and 201, on the basis of epigraphic evidence, states that as time progressed Rome was more involved in controlling Colchis and extending her authority to the small kingdom of Iberia. Wisseman 193, pursuing Schur’s ideas, argues that Rome intended to gain greater influence in the western arm of this trade route (Colchis, Iberia, Albania, and Armenia).

³⁰ Warmington 28.

Sea. Strabo expresses no view on the matter, but reports the statement of others. Pliny, summarizing Varro, is still more restrained: he states only that this route was deemed to be a possibility³¹.

However, as Tarn sharply observes, Varro's evidence tells against the existence of such a route, for such a route can hardly have functioned significantly, if its feasibility was still in question in Pompey's day and if its activity was deemed no more than potential by Varro, who had visited this region³².

He then goes on to discuss the archaeological evidence:

Despite some ancient and much modern talk of a trade-route between the Black Sea and India, the inescapable fact is that the Surami Ridge constituted a significant obstacle to trade and movement. Archaeology reinforces Strabo's account of the difficulty of its passage. For example, from the archaic and classical periods, only a very few fragments of fine Greek pottery have been found east of that ridge, while it is relatively commonplace in Colchis, to the west. (...) And even with extensive use of available waterways, the distance from the Caspian to the Black Sea was long enough to deter much trade. Only light, precious items are likely to have found their way to the Black Sea in such a manner.³³

In contrast, O. Lordkipanidze, an archaeologist who wrote extensively on ancient Georgia, does not share Tarn's scepticism. He believes that Patrocles paid attention to an actual trade road, about which he managed to collect information; he also admits that Pliny's account derives from Varro who accompanied Pompey in the Third Mithridatic war, and subsequently that Strabo and Pliny documented the same route. This activity would have preceded the Hellenistic period, as shown by coins of Amisos recovered in Colchis and ancient Nissa, in Parthia³⁴. Pottery and coins ranging from the 6th century to the 3rd-2nd centuries B. C are also commonly found in Colchis along the Rioni, where it is navigable³⁵. Going eastwards, however, less material has been unearthed in Iberia, and even less in Albania – note that neither he nor D. Braund take the Bagram treasure into account³⁶ –. Thus, Lordkipanidze concludes, the eastern branch of the "northern route" was not as intensively used as its Transcaucasian section:

Daraus kann man ersehen, dass der beschriebene Handels- und Transitweg von Indien zum Schwarzen Meer (...), nicht regelmässig und intensiv genug funktionierte, d.h. man hatte ihn nur in einzelnen Fällen benutzt. ... Ein Abschnitt dieses Weges, und zwar die Phasis (Rioni-Kwirila) Magistrale muss aber doch recht regelmässig funktioniert haben.³⁷

³¹ Braund's interpretation of *posse* in Pliny's text is as restrictive as questionable: Varro points to a virtual voyage, he argues. *Posse*, however, may well relate to the possibility of a very short overland voyage, meaning that it was possible to carry Indian wares from the Kyros to Phasis within five days (*V non amplius dierum*). Other scholars are less skeptic: see, e. g., Dreher 203 and 206 ("Bei all dem scheint Pompeius auch an die Sicherung der Handelswege, besonders dessen von Indien her zum Schwarzen Meer, gedacht zu haben").

³² Braund (a) 40-41.

³³ Braund (a) 40-41.

³⁴ Lordkipanidze (a) 114-117.

³⁵ See Callieri 538 on a Greco-Bactrian coin found at Tbilisi.

³⁶ Unlike Callieri 537. Raschke 746, n. 435, reports a hoard unearthed in "Soviet Albania" which contained Parthian and Greco-Bactrian coins. According to Furtwängler & alii 170 "the discovery of shells of the species *Cyprea moneta* in the archaeological material of Georgia is quite common, starting from the Early Iron Age. They were probably imported from the coasts of the Indian Ocean."

³⁷ Lordkipanidze (a) 116-119. Also see Lordkipanidze (b) 28-31: "This (i.e. archaeological finds) would seem to suggest that the presumed trade route from India to the Black Sea, attested by Strabo and Pliny, on the whole functioned irregularly, being used casually."

3. The quest for further evidence

For now little hope can be entertained of the discovery of decisive archaeological elements to throw light on this road³⁸. In other words, one must look for overlooked or missed pieces of literary evidence to possibly enhance our knowledge.

In an article published some time after his monograph on ancient Georgia, D. Braund again tackled the problem of the “Northern route”. Dealing with a cloth called in Greek *sardonikon* (a kind of linen produced in Colchis)³⁹, he suggested that this designation might derive from the toponym *Sardô*, a mountain in India mentioned by Ctesias⁴⁰ and echo a trade connection. Here D. Braund appears less hostile to the existence of the “northern route”, though with limited enthusiasm:

It seems to me that we must seek a balance. The tradition of trade between India and Colchis is supported by several authorities. Moreover, a glance at the map shows that it must have been a possibility. But on the other hand, some of our ancient authorities retained a doubt about its reality [i. e., Pliny the Elder; see above, n. 30]. Moreover, as far as I am aware, archaeology provides no significant support to the tradition of such a route.⁴¹

In the face of this scarcity of archaeological traces, E. de la Vaissière similarly turns to literary testimonies:

La seule véritable preuve de l'existence d'un commerce relativement régulier entre l'Asie centrale et la mer Noire se trouve dans les lapidaires gréco-romains: ceux-ci connaissent plusieurs variétés de pierres bleues, dont la meilleure, dite *cyanos* scythique, est importée de la mer Noire et correspond certainement au lapis-lazuli du Badakhstan⁴² [= Pliny the Elder, 37, 119⁴³]. La pyrite contenue dans le lapis-lazuli correspond exactement à cette description. Il y a donc eu une diffusion régulière du lapis, nécessairement à travers la Sogdiane, en direction de la steppe puis de la mer Noire⁴⁴.

Incidentally, E. de la Vaissière has omitted to mention the so-called Black Sea beryls, which are likely to have been Indian beryls transhipped through one of the Pontic trade centres⁴⁵ (for other “Pontic” items probably imported from India, see below, p. 11).

In the course of my research work, I came across three texts which may strengthen the view that such a trade system is not fictitious. These will be discussed in order of relevance. The first excerpt is taken from the *Description of the inhabited world* by Dionysius of Alexandria, also known as Dionysius Periegetes, a contemporary of Hadrian (*regn.* 117–138 A. D.). He was the author of a description (*periegesis*) of the world in hexameter verse. Before describing the Caspian Sea region,

³⁸ For a more optimistic point of view, see Callieri 542. For further archaeological evidence, see addendum 2, and below, n. 57.

³⁹ Herodotus, 2, 105: “The Colchian kind [of linen] is called by the Greeks *sardonikon*.”

⁴⁰ Braund (b) 293-294.

⁴¹ Braund (b) 292. See also Braund (b) 293: in his *Medea* (lines 483-487), Seneca “presented the palace of Aetes in Colchis crammed with goods taken from India”.

⁴² Many other examples of producing regions and transshipment points being mixed up are known to us: see, e. g., Pliny the Elder, 12, 32 (Arabian *saccharon* [cane sugar]); Statius, *Silv.* 4, 9, 12 (Nile valley pepper).

⁴³ Note, however, that Pliny does not explicitly mention the Pontus: “The best kind is the Scythian, then comes the Cyprian and lastly there is the Egyptian ...” (transl. D. E. Eichholz). In addition, the *cyanus* must be identified with azurite; the true lapis lazuli was called *sappiri* (see Pliny the Elder, 37, 120).

⁴⁴ De la Vaissière 45-47, with further references relating to archaeological remains in the Black Sea area.

⁴⁵ Pliny the Elder, 37, 76-79: “Beryls are produced in India and are rarely found elsewhere (...). In our part of the world beryls, it is thought, are sometimes found in the neighbourhood of the Black Sea.”

Dionysius embarks upon a digression to explain the sources of his geographical information: unlike those who describe the Caspian Sea from personal experience, Dionysus declares that his knowledge derives from the goddesses of the inspiration of literature, science, and the arts, namely the Muses. In other words, a poet taught by the Muses is not compelled to travel around the world as merchants do⁴⁶:

Easily could I describe this sea [= the Caspian Sea], also to you, although I have not seen its channels far away, nor have I traversed it with a ship. For I do not make my living upon black ships, nor does my family engage in commerce, nor do I go to the Ganges, as many do, through the Erythraean Sea, not caring for their lives, in order to gain indescribable wealth. Nor do I have dealings with the Hyrcanians, nor do I search after the Caucasian ridges of the Erythraean Arians. But the mind of the Muses convey me etc. (Dionysius Periegetes, 707-716; transl. D. D. Greaves)

Certainly there is not much originality in invoking the Muses. These lines echo, as observed by nearly all commentators, a passage from Hesiod's *Works and Days*⁴⁷. On the other hand, this commonplace – the mind of the Muses – is treated in a very personal way here: in contrasting his position to that of merchants, Dionysius, instead of referring to the traders sailing the Mediterranean Sea, who were certainly familiar to his audience, mentions those engaged in the long distance eastern commerce. This is certainly an oblique reference to the pivotal role of Alexandria – Dionysius' city of birth – in Rome's trade with India⁴⁸. Moreover, in so doing, Dionysius hints at three trading centres of the eastern world: first the Ganges, linked to Egypt and Alexandria via the Indian Ocean – called the Erythraean Sea – sea roads⁴⁹; second Ariana, a renowned source of lapis-lazuli linked to north-western Indian ports⁵⁰; finally there are the Hyrcanians. Their name may point to the “northern route”, though admittedly this testimony does not ascertain whether this circuit was used in the early 2nd century A.D.: that Dionysius paraphrases one of his sources is all but implausible⁵¹.

The second text, dating back to the sixth century A.D., seems far less ambiguous. The facts related by Procopius take place during the war between Justinian and Khosrow I (*regn.* 531 -579). At some point in the course of events, the Roman army proceeded to *Doubios* – today's Dvin, in Armenia⁵² –, which Procopius describes as follows:

Now *Doubios* is a land excellent in every respect and especially blessed with a healthy climate and abundance of good water; and from *Theodosiopolis* it is removed a journey of eight days. In that region there are plains suitable for riding, and many very populous villages are situated in very close proximity to one another, and numerous merchants conduct their business in them. For from India and the neighbouring regions of Iberia and from practically all the nations of Persia and some of those under Roman sway they bring in merchandise and carry on their dealings with each other there [ἔκ τε γὰρ Ἰνδῶν καὶ τῶν πλησιοχώρων Ἰβήρων πάντων τε ὡς εἶπεῖν τῶν ἐν Πέρσαις ἔθνῶν καὶ Ῥωμαίων

⁴⁶ See Greaves 109-111.

⁴⁷ See, e. g., Greaves 110-111.

⁴⁸ See Schneider 560-562.

⁴⁹ See the *Periplus of the Erythraean Sea*, 63; Strabo, 15, 1, 4.

⁵⁰ See Schneider 554-555.

⁵¹ I do not, however, adhere to Lightfoot's excessive opinion: “The area (Hyrcania) was explored by Patrocles, but although Strabo reports that the region was better known than it used to be (2.5.12) a journey there looks more like a fantastic foil in a priamel than a serious proposition for a classical traveller.” (Lightfoot 421).

⁵² See Kettenhofen.

τινῶν τὰ φορτία ἔσκομιζόμενοι ἑνταῦθα ἀλλήλοις ξυμβάλλουσι]. (Procopius, *History of the wars*, 2, 25, 1-3; transl. by H. B. Dewing)

This passage recalls the above quoted passage (above, n. 12) in which Strabo presents Armenians and Medes as middlemen receiving Indian and Babylonian commodities before they supply the *Aorsoi* with them (ἐνεπορεύοντο καμήλοις τὸν Ἰνδικὸν φόρτον καὶ τὸν Βαβυλώνιον παρά τε Ἀρμενίων καὶ Μήδων διαδεχόμενοι). Similarly Procopius gives evidence of Indian wares conveyed to *Doubios* by Indian merchants; some were bartered or purchased by Iberian traders, who would transport these back home. Although Procopius does not explicitly say that they were re-exported, one can reasonably assume that a certain quantity of Indian commodities – probably pepper and other spices – reached some Black Sea ports. In any case, Procopius attests that India was connected to the Transcaucasian area by a land route (also see addendum 1). Regrettably the actual itinerary remains speculative.

The last piece of evidence comes from Persius, a Roman satirical poet of the Neronian period (34-62 A.D.). His fifth satyr, dedicated to his teacher Cornutus, praises philosophy as the source of inner freedom, which such people as merchants were not able to enjoy, being on the dependency of their greed – actually a common place of the time–. At some point Persius imagines a merchant dashing to the Pontus to load various commodities:

You are snoring lazily in the morning: “Up you get,” says Avarice; “come, up with you!” – You do not budge: “Up, up with you!”, she cries again. – “O, I can’t!” you say.–“Rise, rise, I tell you! – “O dear, what for? – “What for? Why, to fetch salt fish from Pontus, beaver oil, tow, ebony, frankincense and glossy Coan fabrics; be the first to take the fresh pepper off the camel's back before he has had his drink; do some bartering, and then forswear yourself [*En saperdas aduehe Ponto, / castoreum, stuppas, hebenum, tus, lubrica Coa. / Tolle recens primus piper e sitiante camelo*].” (Persius, *Satur.* 5, 132-136 - translation by G. G. Ramsay)

Satirical poetry was not intended to convey positive and accurate facts. On the contrary, such documents are liable to confusions and mistakes. The main issue to emerge here is whether Persius refers solely to the Pontus, or implicitly mixes up several places of trade. For instance, according to the German editor Jahn, the camel is an allusion to pepper imported from India to Alexandria – actually camels never reached Alexandria, for the caravan routes, either from Myos Hormos or from Berenikê, ended at Coptos – : “Piper Indicum ex India camelis potissimum Alexandriam asportabatur.”⁵³ I take the view, however, that Persius did not compose these lines in an ambiguous and inconsistent way. In other words, he gave a list of commodities available in the Pontic area, and accordingly the reader would normally understand that this array of commodities was fetched from the Pontus. This seems to me corroborated by the fact that the Pontic region was famous not only for salted fish (*saperdas*), but also beaver-oil (*castoreum*)⁵⁴; in addition the *stuppa* (the coarse part of flax⁵⁵) is likely to belong to the same area, for, according to Strabo⁵⁶, the Colchians grew flax in abundance. I am thus convinced that Persius’ list relates to the Pontus, to which the merchant is strongly advised to head.

⁵³ Jahn 203 (also see Jahn 202: “Diversas merces de consilio miscet”).

⁵⁴ See Pliny the Elder, 8, 109; Virgil, *Georg.* 1, 57-59 (*India mittit ebur, molles sua tura Sabaei, / at Chalybes nudi ferrum uirosaque Pontus / castorea, Eliadum palmas Epiros equarum*).

⁵⁵ Pliny the Elder, 19, 17; Sextus Pompeius Festus, *De Verborum Significatione*, 317, 31.

⁵⁶ Strabo, 11, 2, 17 (λίνον τε ποιεῖ πολὺ καὶ κάνναβιν καὶ κηρὸν καὶ πίτταν).

If the reader accepts this premise, it appears therefore that some Indian wares reached the Black Sea during the early Roman Empire – which could be corroborated by a hoard found in Georgia⁵⁷ – . The trade place hinted at by Persius was perhaps located where an overland route ended, as suggested by the camels (see addendum 3). Phasis, standing at the extremity of such a road (above, p. 3), could be a suitable candidate⁵⁸. The imports possibly of Indian origin are the following ones.

- Coan fabrics. The name *Coa* usually applies to a fine and light clothing from the island of Cos⁵⁹. This fabric was woven from the raw silk of the bombyx, whose cocoons produced short threads, differing thus from genuine silk. *Coae vestes* are mentioned during the Roman Imperial period, being “regarded as luxury clothing for demi-mondaines (e. g., Hor. *Sat.* 1, 2, 101; Tib. 2, 3, 57)”⁶⁰. However, when Tibullus lists the *Coae vestes* among the most highly esteemed luxuries of his time – emeralds, purple clothes, Erythraean pearls – , the name Coan fabric may apply to genuine silk (*serica*)⁶¹. If Persius resorted to a similar assimilation, then this text points to silk reaching the Mediterranean world via the northern road and the Black Sea.
- Ebony. The Greek word ἔβενοϋς and its Latin counterpart *hebenus* designate the true ebony obtained from *Diospyros ebenum* in “Ethiopia” (i. e., Nubia, East Africa) and India as well. It also applies to a lower quality of wood produced by a different species (*Dalbergia sissoo*, or “seesham”), which is very common in the Pendjab and is also found in southern Iran and the rest of the subcontinent⁶². This material was exported from north-west India by sea-route from *Barygaza* to the Arab-Persian Gulf⁶³. It may have also been sent to the Pontic area.
- Pepper. Two distinct species grow in India: the long pepper (*Piper longum*) and the black pepper (*Piper nigrum*). The latter is native to south India, while the former occurs from the foothills of the Himalaya to south India⁶⁴. The high volume of Roman consumption is well known and the importance of Indian Ocean sea routes has been brought to light following the excavations at Berenikê and Myos Hormos⁶⁵. Persius gives evidence for Indian pepper being conveyed to the Eastern Pontus and the Mediterranean by an alternative itinerary.
- Frankincense. This name presents difficulties of which it is not easy to give a satisfactory explanation. True frankincense was produced in South Arabia and not in India. A certain quantity of Arabian aromatics travelled by an overland road to Mesopotamia via the city of Gerrha – a

⁵⁷ De Romanis 179, n. 78: “The significant number (350) of CL CAESARES *denarii* found in Georgia has to be explained with the import of items brought from central Asia: Str. 11.7.3.”

⁵⁸ On Phasis in the early second century A. D., see Arrian, *Peripl. Eux.* 9 (Arrian says that he had a wall built for merchants’ [ἐμπορικῶν ἀνθρώπων] security). On how Roman authority over Colchis and Iberia, and trade activities were interrelated, see Mc Laughlin 91-92; Thorley 215.

⁵⁹ See Pliny the Elder, 4, 62; 11, 76-77; 24, 108.

⁶⁰ See Hirschmann. Also see Propertius, 4, 2, 23; 2, 1, 5; Tibullus, 2, 5, 38.

⁶¹ Tibullus, 2, 4, 27-30: “Ah, ruin to all who gather the emeralds green or with Tyrian purple dye the snowy sheepskin. The stuffs of Cos and the bright pearl from out of the Red sea sow greed in lasses” (compare with Seneca, *De benefic.* 7, 9). Also see Tibullus, 2, 3, 53-54: “Let her wear the gossamer robe which some woman of Cos has woven and laid it out in golden tracks. [*Ille gerat vestes tenues, quas femina Coa / Texuit, auratas disposuitque vias.*]” (transl. G. P. Goold); the Coan fabric interwoven with gold clearly recalls the silken texture mixed with gold (see A. Peckridou-Gorecki).

⁶² Theophrastus, *H. P.*, 4, 4, 6: “The ebony is also peculiar to this country [India]; of this there are two kinds, one with good handsome wood [*Diospyros ebenum*], the other inferior [*Dalbergia sissoo*]. The better sort is rare, but the inferior one is common.” (transl. A. Hort). See Amigues (a) 223-224.

⁶³ *Periplus of the Erythraean Sea*, 36. See Casson 181 ; 259.

⁶⁴ Amigues (c) 238-239.

⁶⁵ See Van der Veen 44-46.

trading post in north-east Arabia –, according to Strabo drawing on Aristobulus⁶⁶. Some may have been carried northward as far as the Black Sea. Here it is worth recalling Strabo’s report about the *Aorsoi*: the “Babylonian wares” received by Armenians and Medes for re-export to the northern Pontic area may well have been Arabian aromatics. Alternatively *tus* may vaguely refer to a kind of aromatic gum imported from India: Pliny (12, 71) speaks of an Indian myrrh of low quality and Philostratus (*V. A.*, 3, 4) says that both “frankincense” and pepper grow on the southern face of the Caucasus (= Himalaya). Incidentally, let us mention two additional documents reporting eastern spices seemingly transhipped to the Mediterranean world by an overland northern route: 1) according to Dioscorides, the best *kardamōmon*, collected in India and Arabia, was imported from Commagene, Armenia and Bosphorus [καρδάμωμον ἄριστον τὸ ἐκ τῆς Κομμαγηνῆς καὶ Ἀρμενίας καὶ Βοσπόρου κομιζόμενον· γεννᾶται δὲ καὶ ἐν Ἰνδίᾳ καὶ Ἀραβίᾳ]; 2) a Plautian character gives a lady frankincense from Arabia and *amomum*⁶⁷ from the Pontus as presents (Plautus, *Truc.* 539-540 [*ex Arabia tibi /attuli tus, Ponto amomum*])⁶⁸.

Conclusion

The “northern route” is so poorly documented that, in my opinion, this set of literary documents – not mentioned in previous academic literature, to the best of my knowledge – should not be ignored or despised. They tend to confirm the existence of this road along which eastern commodities would be carried to the Pontic area, in some cases via the Caspian Sea. These texts, ranging from the late 4th century B. C. (Aristobulus) to the 6th century A. D. (Procopius) give evidence for a most likely continuous trade activity, even if shifts probably occurred in the course of time. A significant conclusion is that the boom in the Indian Ocean trade, which followed the annexation of Egypt by the Roman power, did not put an end to this trade traffic. K. Ruffing, in a study devoted to the two main routes of the eastern commerce of Rome – the first one ending at Alexandria and the other at Antioch – observed that they somewhat complemented each other: “Schliesslich waren die beiden Hauptrouten nicht voneinander so unabhängig, wie es auf den ersten Blick scheint”⁶⁹. The long existence of the “northern route” may be understood in a similar way: this trade circuit supplied the northern regions of the Roman world and the Pontic area with Indian wares through an efficient and thousand-year-old trade network, and worked independently of the southern supply chain. As such, the Pontus acted as a third end point of the eastern routes.

Addenda

- Addendum 1 (on *Doubios* / Dvin, above, p. 8). See Preiser-Kapelle 3: “As also Procopius indicates, from Dvin routes both to the north through Georgia and beyond the Caucasus as well as to the south to Azerbaijan and Media in the interior of the Sasanian Empire would connect to the ‘Silk roads.’”

⁶⁶ Strabo, 16, 3, 3 = Aristobulus, *FGrH* 139 F57. On this circuit, see, e. g., Young 92-94.

⁶⁷ A kind of spice produced in India (Pliny, 12, 48; 16, 135) and praised in the Roman world at Pliny’s time (Pliny, 37, 204).

⁶⁸ See also Thorley 215: “The evidence does therefore seem sufficient to establish the existence of this Caspian route in Republican times. There is no direct reference to trade along it in the Empire period, although there are reasons to believe it continued to be used. It seems from its name that *radix pontica*, the drug rhubarb (Celsus, *De med.* 5, 23, 3), which was a Chinese export, may have reached the West by this route.” The Latin sources, however, gives no clue about the origin of the *radix pontica*.

⁶⁹ Ruffing 375.

- Addendum 2 (on recent archaeological finds [above, p. 6]). See Shortland and Schroeder 961-963, about beads unearthed in the Pichvnari necropolis on the Black Sea coast of Georgia. Some “are made of a plant ash-based glass, which at that time was not produced in the Mediterranean. The very high alumina composition of two of the beads suggests that they may be from India, the only place where such beads are common. They therefore represent part of the trade from the subcontinent, and part of the reason why Colchis, forming as it did a major port and a staging post to the trade routes to Central Asia and beyond, was such a wealthy place in the fifth and fourth centuries BC. Further work now needs to be undertaken, looking for more such trade objects both in Colchis and in Central Asia and India to further establish the level and nature of long-distance trade through this important and interesting junction between East and West.”

Remains of silk have been recovered at Dedoplist Gora in Georgia. See Kvavadze 214: “In this case silk thread was probably used to make the textile glitter and beautiful. It should be noted that this is one of the first discoveries of silk in Georgia. So far the earliest information about silk in Georgia comes from the archaeological material from Armazi where a piece of silk fabric was found, which has been dated to the second century A. D. (Isakadze 1970). Silk originated in China and the “Silk Road” which established the trade contacts between China and the Mediterranean, Asia and Europe began in the first or second century B. C. (Wild 1984). The discovered silk fibres in the Dedoplist Gora layers confirm the theoretical assumption that both the Caucasus (Babaev 1998) and Georgia (Abesadze 1957; Isakadze 1970) were involved in this trade from the beginning. It is believed that at that time China sold only silk thread, and silk textile was exported much later (Wild 1984). The results of the investigation in Dedoplist Gora completely confirm this concept.”

A set of archaeological remains, and especially ivory hairpins found in the Oxus Valley, caused E. V. Rtveladze to draw the following conclusion: “The diffusion of the above mentioned objects can also imply that Parthian, Bactrian and Indian merchants had set up trading stations along the Oxus that were used for shipment of ivory and other articles on their way from India to Bactria and Margiana. From here these goods were shipped to Chorasmia along the Oxus, and from Margiana they were transported along the Great Indian Road across the southern Caucasus and the Euxine Pontus to the northern Black Sea region. The finds at Olbia of carved ivory bearing the image of a Parthian nobleman and imitations of Greco-Bactrian coins along the northern Black Sea coast, and Sanabares’ coins minted in Margiana found in the Kura valley in Georgia are links in a chain and testify to the movement of goods along the Great Indian Road.”
- Addendum 3 (on camels, above, p. 9). See Peters & von den Driesch 662: “For the 1st Millennium BC, different sources of information confirm the presence of Bactrian camels in many parts of Asia including the Near East and Asia Minor. It is worth mentioning its increasing economic importance in Iran, and its appearance in Mesopotamia (...), e.g. Bactrian camels depicted on the Black Obelisk during the reign of Shalmaneser I 11 (859-824 BC). Its occurrence (and consumption) in Hellenistic Chorasmia (Khorezm), to the south of the Aral Sea in the lower Amudarya (Oxus) region, has been noted by Calkin (1966). Bactrian camels played an important role for the opening of western trade routes from China to the Black Sea in Han (206 BC-24 AD) and Tang (618-907 AD) times (...), and this might explain why their remains have occasionally been found in Greek colonial towns on the northern shore of the Black Sea (Calkin, 1960; Bokonyi, 1969). Using data in Chinese literature, Schafer (1950) convincingly argued that the exploitation of Bactrian camels on a larger scale in northern China began during the western Chou dynasty (11th century-771 BC) and increased as trade with western Asia increased. Camels reached Central Europe in the Imperial Roman Period, as occasional finds from sites such as Vindonissa-Windisch

(...), Vienna (...), Abodiacum-Epfach (...), Vermania-Isny (...) and Augusta Vindelicum-Augsburg illustrate. For reasons of climate, it is probable that Bactrian camels were involved. However, the few isolated bones do not allow an identification to the species level, and the presence of the dromedary *a priori* cannot be excluded.”

Pierre Schneider

Université d'Artois – Maison de l'Orient et de la Méditerranée

pierre.schneider@univ-artois.fr

<https://sites.google.com/site/mererythree/>

References

- Amigues (a) = Théophraste, *Recherches sur les plantes* (livres 3 et 4), edit., transl. and commentary by S. Amigues, Paris, 1989.
- Amigues (b) = S. Amigues, “Végétaux et aromates de l'Orient dans le monde antique”, *Topoi* 12-13/1 (2005), p. 359-383.
- Amigues (c) = Théophraste, *Recherches sur les plantes* (livre 9), edit., transl. and commentary by S. Amigues, Paris, 2006.
- André & Filliozat = Pline l'Ancien, *Histoire naturelle* (livre 6, 2^e partie [L'Asie centrale et orientale; l'Inde]), edit., transl. and commentary by J. André et J. Filliozat, Paris, 1980.
- Bosworth = A. B. Bosworth, *A Historical Commentary on Arrian's History of Alexander* (vol. 1), Oxford, 1980.
- Braund (a) = D. Braund, *Georgia in Antiquity*, Oxford, 1999.
- Braund (b) = D. Braund, “Indian Traders at Phasis: neglected texts on ancient Georgia”, in *Pont-Euxin et commerce. La genèse de la 'route de la soie' (Actes du 9^e symposium de Vani [Colchide] ; 1999)*, Besançon, 2002, p. 287-295.
- Callieri = P. Callieri, “La presunta via commerciale tra l'India e Roma attraverso l'Oxus e il Mar Caspio : nuovi dati di discussione”, *Topoi* 11/1 (2001), p. 537-546.
- Casson = *The Periplus of the Erythraean Sea*, edit., transl. and commentary by L. Casson, Princeton, 1989.
- De la Vaissière = É. de la Vaissière, *Histoire des marchands sogdiens* (2nd ed.), Paris, 2004.
- De Romanis = F. de Romanis, “Julio-Claudian *denarii* and *aurei* in Campania and India”, *Annali dell'Istituto Italiano di numismatica* 58 (2012), p. 161-192.
- Dreher = M. Dreher, “Pompeius und die kaukasischen Völker: Kolcher, Iberer, Albaner”, *Historia: Zeitschrift für Alte Geschichte* 45/2 (1996), p. 188-207.
- Filliozat = J. Filliozat, *Les relations extérieures de l'Inde* (tome 1), Pondichéry, 1956.
- Foucher = A. Foucher, *La vieille route de l'Inde de Bactres à Taxila* (volume 1: introduction, première et deuxième partie), Paris, 1942.
- Furtwängler & alii = A. Furtwängler, I. Gagoshidze, H. Löhr, N. Ludwig (eds), *Iberia and Rome. The Excavations of the Palace at Dedoplist Gora and the Roman Influence in the Caucasian Kingdom of Iberia*, Langenweißbach, 2008.
- Gisinger = F. Gisinger, *RE* 18.4, s. v. “Patrokles 5”, c. 2263-2273.
- Greaves = D. D. Greaves, *Dionysius Periegetes and the Hellenistic Poetic and Geographical Traditions*, PhD. Stanford University, 1994.
- Haussig = H. W. Haussig, *Die Geschichte Zentralasiens und der Seidenstrasse in vorislamischer Zeit*, Darmstadt, 1983.
- Hirschmann = R. Hirschmann, *Brill's New Pauly*, s. v. “Coe vestes”.
- Jacoby = F. Jacoby, *Die Fragmente der griechischen Historiker* (Teil 2 [Zeitgeschichte]; Band 2 [Kommentar zu Nr. 106-153]), Berlin, 1927.

- Jahn = *Auli Persii Flacci satirarum liber cum scholiis antiquis*, edited by O. Jahn, Leipzig, 1843.
- Karttunen = K. Karttunen, *India and the Hellenistic World*, Helsinki, 1997.
- Kettenhofen = E. Kettenhofen, *Encyclopaedia Iranica*, vol. 7/6, s.v. "Dvin", p. 616-619.
- Kosmin = P. Kosmin, "Seleucid Ethnography and Indigenous Kingship: the Babylonian Education of Antiochus I", in J. Haubold, G. B. Lanfranchi, R. Rollinger & J. M. Steele (eds.), *The World of Berossos: Proceedings of the 4th International Colloquium on "The Ancient Near East Between Classical and Ancient Oriental Traditions" (Durham 7th-9th July 2010)*, Wiesbaden, 2013, p. 199-212.
- Kvavadze = E. Kvavadze & I. Gagoshidze, "Fibres of Silk, Cotton and Flax in a Weaving Workshop from the First Century A.D. Palace of Dedoplist Gora, Georgia", *Veget. Hist. Archaeobot.* 17 Suppl. (2008), p. 211-215.
- Lasserre = Strabon, *Géographie* (livre 11), edit., transl. and commentary by Fr. Lasserre, Paris, 1975.
- Lévêque = P. Lévêque, "Postface. La genèse de la 'route de la soie'", in *Pont-Euxin et commerce. La genèse de la 'route de la soie' (Actes du 9^e symposium de Vani [Colchide] ; 1999)*, Besançon, 2002, p. 313-314.
- Lightfoot = Dionysius Periegetes, *Description of the Known World*, with introduction, text, translation, and commentary by J. L. Lightfoot, Oxford, 2014.
- Lordkipanidze (a) = O. Lordkipanidze, *Das alte Georgien (Kolchis und Iberien) in Strabons Geographie : neue Scholien*, Amsterdam, 1996.
- Lordkipanidze (b) = O. Lordkipanidze, *Phasis. The River and City in Colchis*, Stuttgart, 2000.
- Marcotte = D. Marcotte, *Géographes grecs. Tome I. Introduction générale. Ps.-Scymnos. Circuit de la terre*, Paris, 2000.
- Mc Laughlin = R. Mc Laughlin, *Rome and the Distant East Trade Routes to the Ancient Lands of Arabia, India and China*, London - New York, 2010.
- Nichols = Ctesias, *On India, and Fragments of his Minor Works*, introd., transl. and commentary by A. Nichols, London-New York, 2011.
- Olbrycht = M. Olbrycht, "Die Aorser, die Oberen Aorser und die Siraker bei Strabon. Zur Geschichte und Eigenart der Völker im nordostpontischen und nordkaukasischen Raum im 2.-1. Jh. v. Chr.", *Klio* 83 (2001), p. 425-450.
- Olshausen = E. Olshausen, *Brill's New Pauly*, s. v. "Mithridatic Wars".
- Peckridou-Gorecki = A. Peckridou-Gorecki, *Brill's New Pauly*, s. v. "Silk".
- Peters & von den Driesch = J. Peters & A. von den Driesch, "The two-humped camel (*Camelus bactrianus*): new light on its distribution, management and medical treatment in the past", *J. Zool., Lond.* 242 (1997), p. 65 1-679
- Preiser-Kapeller = J. Preiser-Kapeller, "Peaches to Samarkand. Long distance-connectivity, small worlds and socio-cultural dynamics across Afro-Eurasia, 300-800 CE", Draft for the workshop: "Linking the Mediterranean. Regional and Trans-Regional Interactions in Times of Fragmentation (300 -800 CE)", Vienna, 11th-13th December 2014 (<https://www.academia.edu/9461845>).
- Radt = S. Radt, *Strabons Geographika* (Band 7: Buch 9-13 [Kommentar]), Göttingen, 2008.
- Raschke = M. G. Raschke, "New Studies in Roman Commerce with the East", *Aufstieg und Niedergang der römischen Welt* 9/2, Berlin, 1978, p. 604-1378.
- Rtveladze = E. V. Rtveladze, "Parthians in the Oxus Valley: Struggle for the Great Indian Road", *Anabasis. Studia Classica et Orientalia* 2 (2011), p. 149-178.
- Ruffing = K. Ruffing, "Wege in den Osten", in E. Olshausen & H. Sonnabend, *Zur Wasser und zu Land: Verkehrswege in der antiken Welt (Stuttgarter Kolloquium Historischen Geographie des Altertums 7, 1999)*, Stuttgart, 2002, 360-378.
- Schneider = P. Schneider, "Savoirs lettrés et savoirs pratiques: Denys d'Alexandrie et les marchands alexandrins", *Topoi* 19/2 (2014), p. 7-23.
- Shortland & Schroeder = A. J. Shortland & H. Schroeder, "Analysis of first millenium BC glass vessels and beads from the Pichvnari necropolis, Georgia", *Archaeometry* 51/6 (2009), p. 947-965.
- Schur = D. Schur, *Die Orientpolitik des Kaisers Nero*, Leipzig, 1923.
- Sen = T. Sen, "Introduction: Buddhism in Asian History", in T. Sen (ed.), *Buddhism across Asia. Networks of Material, Intellectual and Cultural Exchanges* (vol. 1), Singapore, 2014, p. xi-xxx.

- Tarn (a) = W. W. Tarn, "Patrocles and the Oxo-Caspian route", *Journal of Hellenic Studies* 21 (1901), p. 10-29.
- Tarn (b) = W. W. Tarn, *The Greeks in Bactria and India* (2nd ed.), Cambridge, 1951.
- Thorley = J. Thorley, "The Development of Trade between the Roman Empire and the East under Augustus", *Greece & Rome* 16/2 (1969), p. 209-223.
- Tomaschek = W. Tomaschek, *RE* 2.2, s.v. "Baktros", c. 2814.
- Van der Veen = M. van der Veen, *Consumption, Trade and Innovation. Exploring the Botanical Remains from the Roman and Islamic Ports at Quseir al-Qadim (Egypt)*, Frankfurt, 2011.
- Warmington = E. H. Warmington, *The Commerce between the Roman Empire and India*, Cambridge, 1928.
- Waugh = Daniel C. Waugh, "A road less taken?", *The Silk Road* 11 (2013), p. 188–191.
- Williams = M. F. Williams, "Patrokles (712)", in I. Worthington (ed.), *Brill's New Jacoby*, Brill Online, 2015.
- Wisseman = M. Wisseman, "Rom und das Kaspische Meer", *Rheinisches Museum für Philologie* 127. 2 (1984), p. 166-173.
- Young = G. K. Young, *Rome's Eastern Trade: International Commerce and Imperial Policy (31 BC-AD 305)*, London – New York, 2001.

