tin (24:8.2–6, 28:9.13–15). But it was also a market for a wide selection of drugs or cosmetics: saffron, cyperus, fragrant ointments, storax (24:8.3–5, 28:9.16). And in Arabia there were not only royal courts to supply but the courts of the local governors; together they took in a whole range of high-priced items: horses, pack mules, silverware, goldware, bronze-ware, deluxe clothing, statuary (24:8.7–9, 28:9.16–18).

For India the mix tilted decidedly toward the expensive side. Shippers bound there from Egypt loaded only a few staples, such as metals (lead, tin, copper [49:16.21, 56:18.19, 60:20.10–11]), but a whole range of expensive items: drugs and cosmetics (antimony, realgar, orpiment, storax [39:13.8, 49:16.23, 56:18.19–21, 60:20.10–11]), silverware, glassware, coral, multicolored textiles (39:13.8–9, 49:16.21–23, 56:18.19). And the courts of the rulers required fine ointments, vintage wine, deluxe clothing, handsome slave girls for the harem and slave boys trained in music (49:16.25–28). All the exports to India were loaded aboard at Egypt with two exceptions: the incense imported by Barbarikon (39:13.8) and the Arabian wine by Barygaza (49:16.20–21). The wine could have been picked up at Muza, an area that produced a good deal of it (49:8.6), and the incense at Kanē (see under 27:9.8–9).

To sum up. The Periplus, on careful analysis, reveals several lines of trade over and above the well-known movement of Eastern luxuries to the ports of Egypt. That was, to be sure, the most important and received the most attention. But alongside it we can clearly distinguish a trade in commodities from India to the coasts of Persia, Arabia, and Africa that had nothing to do with the West; some of it may on occasion have traveled in ships from Roman Egypt but the bulk was handled by Arabs and Indians. We can even distinguish certain local forms of trade, so local that the means of transport was small craft and rafts. From its end, Egypt sent out to Africa, Arabia, and India a mix that ranged from everyday tools and cheap clothing to the costliest of luxuries for the courts of regional rulers.

The Trade with India

Roman Egypt's trade with India was so much more important than that with Africa or Arabia that the author devoted almost half his book to it.

19 Inscriptions reveal a line of trade that ran from the head of the Persian Gulf to the mouth of the Indus and back carried on by merchants and shippers of Charax Spasinu and other cities in the area; cf. J. Matthews in Journal of Roman Studies 74 (1984): 166. The author of the Periplus fails to mention it, although he does mention the line to Barygaza (36:12.9–10).
The picture he presents is consequently more detailed, enough so to enable us to identify various sides of India’s trade and to discern differences in nature and function of the major ports.

To begin with, he makes abundantly clear that, for the merchants of Roman Egypt, India’s west coast was the prime trading area, and the east coast played a distinctly secondary role. And his account reveals that the west coast fell into two spheres, in each of which were two major ports: the northwest with the ports of Barbarikon and Barygaza, the southwest with Muziris and Nelkynda.

Turning first to the northwest coast, we find that its two ports, though they handled a number of the same objects of trade (coral, peridots, storax, and multicolored textiles as imports; costus, bdellium, lykion, and silk cloth as exports), were basically dissimilar. Barbarikon was merely a port: all the merchandise that arrived there was forwarded to the royal capital at Minnagar upriver (39:13.5–6). Barygaza, on the other hand, was not only a port but an industrial center as well. This emerges from a comparison of certain of the imports and exports handled by the two places, particularly glass, an item imported at all four of the west coast ports (see under 48:16.15): Barbarikon imported only glassware (39:13.9), Barygaza only raw glass (49:16.23). Barygaza imported such raw materials as copper, tin, and lead (49:16.21); none of these or any other basic raw materials were imported by Barbarikon. In textiles, Barbarikon exported only silk cloth, which had come there from China (see under B 39:13.11), whereas Barygaza exported cotton cloth of all kinds in addition to silk (49:16.29–30); some kinds were supplied by Ozène (Ujjain) inland (48:16.14–16) but some surely must have been manufactured right in town.20

Barygaza seems to have been a somewhat more sophisticated place, to judge from the greater number of luxuries it required. Both it and Barbarikon/Minnagar imported clothing, but the latter was content with merely an adequate number of undecorated garments and a limited number of prints (39:13.7–8), whereas Barygaza received “all kinds of clothing with no adornment or of printed fabric” as well as specially wide girdles (49:16.22–23). Barygaza, but not Barbarikon, imported eye shadow and perfume (49:16.23, 25). And the court at Minnagara, where Barygaza’s overlord resided, must have been vastly more luxurious than that at Minnagar, the seat of Barbarikon’s. The latter was the recipient of

20 In later centuries Gujarat was famed for its textiles (M. Pearson, Merchants and Rulers in Gujarat [Berkeley, 1976], 11–12; I. Watson in Indian Economic and Social History Review 13 [1976]:377), enough of which were manufactured at Broach (Barygaza) to induce the British to set up a “factory” or trading post there (Watson 386). Braudel (op. cit. n. 17 above, 511), in his treatment of India in the fifteenth to eighteenth centuries, talks of “the ‘industrial bloc’ of Gujarat, the most impressive in the Far East.”
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all the items unloaded on Barbarikon’s docks, but these included nothing to match what used to go to Barygaza’s ruler—precious silverware, slave musicians, beautiful slave girls for the harem, fine wine, expensive clothing, choice perfume (49:16.25–28 and see under 49:16.25a).

Turning now to the southwest coast, we find that, unlike the northwest, its two major ports were so similar that the author lumps them together and treats them as one (56:18.16–29). What these exported was almost totally different from the exports of the northwest—as one would expect, since the regions involved were dissimilar. There are only two items that appear among the exports of both Muziris/Nelkynda and Barygaza, ivory (49:16.29, 56:18.24) and silk cloth (49:16.29–30, 56:18.24). Nard appears in both, but the nard shipped out of Barygaza was the variety that came from Kashmir and its neighboring regions (see under 48:16.16–18), while at Muziris/Nelkynda it was the Gangetic (56:18.25). Both shipped out pepper, but at Barygaza it was long pepper (49:16.30), while at Muziris/Nelkynda it was black pepper (56:18.22) and the quantities were far greater, for pepper was the export par excellence of the Malabar coast (cf. 56:18.16–17). All their other exports were totally different.

The imports reveal that, like Barygaza, Muziris/Nelkynda were industrial centers as well as commercial: they too were importers of such raw materials as copper, tin, lead, and raw glass (56:18.19). They were less sophisticated places than Barygaza, or at least did not live in so high a style,21 to judge from the reduced emphasis they gave to luxuries. Wine, including varieties from three different areas, stands at the head of the list of Barygaza’s imports (49:16.20–21), but is low on the list at Muziris/Nelkynda; there is no indication of the import of different varieties (56:18.20). Barygaza took in all sorts of clothing, Muziris/Nelkynda only undecorated and not much of that (56:18.18–19). Barygaza took in at least some perfume (49:16.25), Muziris/Nelkynda none at all. At Barygaza, as noted above, the author lists a number of highly expensive items “for the king.” Muziris and Nelkynda were ruled by kings too, each by a different one as the author is careful to point out, citing what he takes to be their names (54:17.29 and note ad loc., 54:18.5–6 and note ad loc.). But he does not supply a list of special items for them, nor in his general list of imports are there any that seem intended for a court; even silverware, a standard court item elsewhere (see under 39:13.7–9), is lacking. The rulers, it would seem, lived as simply as their subjects.

21 But nothing like the exaggerated difference that Raschke thinks he perceives, a difference between a “poorer, less socially and economically developed South” (671) and a North whose areas “with their wealth and high level of culture provided excellent markets for imported Roman manufactured items, particularly luxury goods” (632)
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A key difference between the two areas lies in the nature of their commercial communities. At Barygaza it appears that import-export was handled by local merchants; at least there are no indications otherwise. At Muziris/Nelkynda there are unmistakable indications of a foreign colony.

The clearest evidence comes from the Tabula Peutingeriana (see under 51:17.15). Next to Muziris this map shows (section 5 of segment xi) a building identified as Templ(um) Augusti, “temple to Augustus”; such a building could only have been put up by Roman subjects living there.22 Almost as clear evidence is provided by the papyrus from the Vienna collection (see above, “Between Alexandria and the Red Sea”). It contains a reference23 to “loan agreements at Muziris,” agreements between two merchants, one of whom very probably was resident at Muziris. And there is an indication in the Periplus itself that points in the same direction. The author states (56:18.21–22) that Muziris/Nelkynda imported grain “in sufficient amount for those involved with shipping, because the merchants do not use it.” The explanation can only be that the merchants “do not use it” because they are natives of the area and hence eat the local rice,24 whereas “those involved with shipping” are Westerners who prefer to eat what they have been accustomed to even though it means importing it from thousands of miles away.25 These Westerners, permanently established, served as middlemen between their countrymen who arrived with the cargoes and the local merchants.

To the east coast the author gives short shrift. Indeed, at one point he clearly implies that Western ships went no further than the waters between India and Ceylon (see under 51:17.16). There was good reason for this. The ships that plied between Roman Egypt and Limyrikē (the Malabar coast) were of large size, big enough to brave the waters of the Arabian Sea when the southwest monsoon was blowing its hardest (cf. App. 3). They could not have negotiated the shallow channels between the southern tip of India and the northern tip of Ceylon; they would have had to make the time-consuming voyage all around the island (cf. under 60:20.7–8). Thus it was to the advantage of Western shippers to leave to local craft the forwarding of merchandise from the west coast of India to

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23 Harrauer-Sijpesteyn 130 (rect, col. ii.12–13) and cf. Casson 1986a.
24 Cf. Marco Polo 3.17: “No wheat grows in this province, but rice only.”
25 Grain, to be sure, was available in northern India. The province of Ariakē, for example, produced it (41:14.5) and shipped it overseas (14:5.9–10). However, it obviously did not ship to southern India, where the rice eaters would have no use for it. Westerners resident there must have found it easier to draw from home the small quantities they needed rather than attempt to redirect the normal flow of Indian commerce in grain.
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the east coast. As for the goods the east coast had to offer, these regularly went by local craft to Limyrikē (60:20.6–7) and were available for purchase there. Gangetic nard is a good case in point: collected at and shipped out from a port at the mouth of the Ganges (63:21.3–5), it was picked up by the merchants of Roman Egypt at Muziris or Nelkynda (56:18.25). Malabathron followed the same route (63:21.3–5, 56:18.25), and it was a major item in the trade of Muziris and Nelkynda (56:18.17).

There was also some transport between the two coasts by land. Some goods, for example, went from the east coast to Tagara and from there to Barygaza (51:17.11–14 and cf. under 51:17.14).

In the light of the author's manifest secondary interest in the east coast, it is curious that, at Arikamedu some two miles south of Pondicherry, archaeology has brought to light convincing signs of a colony of Westerners, an abundance of Roman pottery, especially Arretine ware, which reveals that its members were active from the early years of the first century A.D. on (see under 60:20.6a). In addition, a passage in a Tamil poem attests to the presence of a colony of Westerners at a port on the mouth of the Kāverī River to the south of Arikamedu (see under 60:20.6).²⁶ It could well be that the Westerners resident in these places were chiefly engaged in forwarding goods not all the way to Egypt but only to associates stationed in Muziris/Nelkynda, who then sold them to the merchants from Roman Egypt.

Goods went from India's west coast to the east coast as well as in the other direction: the east coast craft that came to Limyrikē were sent back loaded down not only with products that had originated in Limyrikē but also with some that had come to it from overseas (60:20.10–11); thus cash the merchants of Roman Egypt had brought with them found its way to the east coast (60:20.11–12) as payment for east coast goods purchased in Limyrikē. The author mentions only here and there (59:20.2–3, 61:20.19–20) what these products are until he comes to the port of Gangēs in the Ganges Delta, where he provides detail. Gangēs was an entrepôt: it received goods from inland areas near and far (63:21.5–6: nard and mala-

²⁶ Contact with resident Westerners may well be responsible for the representations of armchairs in Buddhist reliefs of the second century A.D. found in Andhradesha, the coastal area from the Kistna River north to the Godavarti; see La vie publique et privée dans l'Inde ancienne. fasc. ii, Le mobilier (iiie siècle av. J.-C.—viiie siècle environ), by I. Gobert, Publications du Musée Guimet, Recherches et documents d'art et d'archéologie, 6 (Paris, 1976), 126 and cf. pl. 29. There is evidence for the presence in eastern India not only of Western merchants but of their wives as well. A statue found at Dīdārganj (25°39'N, 82°46'E, i.e., a little northeast of Benares) portrays a young girl whose hairdo is strikingly similar to that on busts of Roman women of the Augustan period; see D. Schlumberger, “Coiffures féminines similaires à Rome et dans l'Inde,” in R. Chevallier, ed., Mélanges d'archéologie et d'histoire offerts à André Piganiol (Paris, 1966), 587–95.
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bathron from far away, pearls and deluxe garments from nearby) as well as some by sea from areas further east (63:21.10: tortoise shell, almost certainly shipped to Gangês, although this is not stated in so many words) and forwarded these to the west coast.

Gangês also—again, this is not stated in so many words but is practically certain—handled silk, thereby making this one of the very few products that could be acquired in all of the four major exporting regions of India. At Barbarikon in the Indus Delta, silk cloth and yarn were available (39:13.11 and see under B 39:13.11); at Barygaza on the northwest coast, silk cloth and yarn (49:16.30 and under B 49:16.30); at Muziris/Nelkynda on the southwest coast, silk cloth (56:18.24); in the Ganges Delta, silk cloth and yarn and floss (64:21.13-14). And yet in this trade India was solely an intermediary, for the products all came from China. They made their way to India by a route that went "by land via Bactria to Barygaza" as well as "via the Ganges River back to Limyrike" (64:21.14-15). The first, the one that went "via Bactria," was the famed Silk Route that ran from China clean across Asia; from it one or more branches turned off to go down to India. The route began at Loyang or Sian and traveled inside the Great Wall to An-hsi where, to bypass the grim Taklamakan Desert, it split into a northern and a southern loop. These came together at Kashgar, and from there the track snaked through the lofty Pamirs into Bactria. Shipments intended for the Mediterranean market continued westward, while those for the Indian followed a branch that took off perhaps near Balkh and headed southward. On reaching the upper Indus this route split: one branch followed the river down to Barbarikon, while another more to the east followed the well established road that passed through Sialkot and Mathura to Ujjain (cf. under 48:16.16-18) and from there to Barygaza (cf. under 48:16.12-13). There was also a shorter but more difficult route that from Kashgar struck out southward through the Pamirs and, passing by Gilgit, ended in Kashmir.

27 There were but two, of which the other was nard; see 39:13.10 (Barbarikon), 49:16.28 (Barygaza), 56:18.25 (Muziris/Nelkynda), 63:21.5 (Gangês).
28 On this term, see under 64:21.13-14.
29 Barbarikon received shipments of Chinese furs as well as of silk products (39:13.11). Although India had a silk industry of its own (see L. Gopal in JESHO 4 [1961]: 61-64), the Periplus's references are all to the Chinese import (cf. 64:21 13-15).
30 For the Silk Route, see J. Thomson, History of Ancient Geography (Cambridge, 1948), 177-81, 306-12; W. Watson in CHI iii 544-45 (map), 547-48 (1983); Needham (op. cit. n. 17 above) i 181-82 (1954), iv.3 17-18 (details of the routes around the Taklamakan Desert); Wheeler 156 (branch to India).