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Rome's Trade to the East, First Century BCE–Second Century CE

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STRABO

The Geography

Early First Century CE

Some three hundred years after Alexander's Central Asian conquests, Strabo (ca. 63 BCE–24 CE), a Greek geographer who lived in the time of the Roman emperor Augustus, traveled extensively to collect information about the conquered lands for his famous geography. He also took advantage of earlier Greek writers and information from traders. His descriptions of Bactria and Sogdiana contain some reliable information, but also much that is fanciful. Like Arrian (Document 5), he records Alexander's strategies of conquest. The Greeks found it interesting that well-established city-dwellers in Central Asia were closely affiliated with the nomads and shared many cultural traits with them. Strabo's descriptions of "barbaric" customs also have been of interest to modern historians. For instance, Sogdians' use of dogs as "undertakers" to dispose of dead bodies indicates that they followed a type of Zoroastrian funeral rite. This information, although strange, is not false, but it is difficult for a scholar from a different culture to understand. Now that the Romans had commercial contacts with Central Asia, how well do you think they understood the cultures of their trading partners?

Strabo, *The Geography of Strabo*, trans. Horace Leonard Jones (Cambridge, Mass.: Harvard University Press, 1928), 5:279–87.

As for Bactria, a part of it lies alongside Aria towards the north, though most of it lies above Aria and to the east of it. And much of it produces everything except oil. The Greeks who caused Bactria to revolt grew so powerful on account of the fertility of the country that they became masters, not only of Ariana, but also of India, as Apollodorus of Artemita says: and more tribes were subdued by them than by Alexander — by Menander¹ in particular (at least if he actually crossed the Hypanis towards the east and advanced as far as the Imaitis), for some were subdued by him personally and others by Demetrius, the son of Euthydemus the king of the Bactrians; and they took possession, not only of Patalena, but also, on the rest of the coast, of what is called the kingdom of Saraostus and Sigerdis. In short, Apollodorus says that Bactria is the ornament of Ariana as a whole; and, more than that, they extended their empire even as far as the Seres² and the Phryni.

Their cities were Bactra (also called Zariaspā, through which flows a river bearing the same name and emptying into the Oxus), and Darapsa, and several others. Among these was Eucratidia, which was named after its ruler. The Greeks took possession of it and divided it into satrapies, of which the satrapy Turiva and that of Aspionus were taken away from Eucratides by the Parthians. And they also held Sogdiana, situated above Bactria towards the east between the Oxus River, which forms the boundary between the Bactrians and the Sogdians, and the Iaxartes River. And the Iaxartes forms also the boundary between the Sogdians and the nomads.

Now in early times the Sogdians and Bactrians did not differ much from the nomads in their modes of life and customs, although the Bactrians were a little more civilised; however, of these, as of the others, Onesicritus does not report their best traits, saying, for instance, that those who have become helpless because of old age or sickness are thrown out alive as prey to dogs kept expressly for this purpose, which in their native tongue are called "undertakers," and that while the land outside the walls of the metropolis of the Bactrians looks clean, yet most of the land inside the walls is full of human bones; but that Alexander broke up the custom. And the reports about the Caspians are similar, for instance, that when parents live beyond seventy years they are shut in and starved to death. Now this latter custom is more tolerable; and it is similar to that of the Ceians, although it is of Scythian origin: that of the Bactrians, however, is much more like that of Scythians. And so, if

¹ Menander, known in Buddhist literature as Milinda, was a Greek king who ruled northwestern India in the late second century BCE.

² Seres, "land of silk," was the Greek and Roman name for China.

it was proper to be in doubt as to the facts at the time when Alexander was finding such customs there, what should one say as to what sort of customs were probably in vogue among them in the time of the earliest Persian rulers and the still earlier rulers?

Be this as it may, they say that Alexander founded eight cities in Bactria and Sogdiana, and that he raised certain cities to the ground, among which was Cariatæ in Bactria, in which Callisthenes was seized and imprisoned, and Maracanda and Cyra in Sogdiana, Cyra being the last city founded by Cyrus³ and being situated on the Iaxartes River, which was the boundary of the Persian empire; and that although this settlement was fond of Cyrus, he raised it to the ground because of its frequent revolts; and that through a betrayal he took also two strongly fortified rocks, one in Bactria, that of Sisimithres, where Oxyartes kept his daughter Rhoxana, and the other in Sogdiana, that of Oxus, though some call it the rock of Ariamazes. Now writers report that that of Sisimithres is fifteen stadia in height and eighty in circuit, and that on top it is level and has a fertile soil which can support five hundred men, and that here Alexander met with sumptuous hospitality and married Rhoxana, the daughter of Oxyartes; but the rock in Sogdiana, they say, is twice as high as that in Bactria. And near these places, they say, Alexander destroyed also the city of the Branchidae, whom Xerxes⁴ had settled there — people who voluntarily accompanied him from their home-land — because of the fact that they had betrayed to him the riches and treasures of the god at Didyma. Alexander destroyed the city, they add, because he abominated the sacrilege and the betrayal.

Aristobolus calls the river which flows through Sogdiana Polytimetus, a name imposed by the Macedonians (just as they imposed names on many other places, giving new names to some and slightly altering the spelling of the names of others); and watering the country it empties into a desert and sandy land, and is absorbed in the sand, like the Arius which flows through the country of the Arians. It is said that people digging near the Ochus River found a spring of oil. It is reasonable to suppose that, just as nitrous and astringent and bituminous and sulphurous liquids flow through the earth, so also oily liquids are found; but the rarity causes surprise.⁵ According to some, the Ochus flows through Bactria; according to others, alongside it. And according to some, it is a different river from the Oxus as far as its mouths, being more to the south than the Oxus, although they both have their outlets into the Caspian Sea in

³ Cyrus (d. 529 BCE) was the founder of the Achaemenid Empire in Persia.

⁴ Xerxes (ca. 519–465 BCE) was a Persian king best known to the Greek world for his defeat at the naval battle at Salamis.

⁵ Refers to petroleum.

Hyrkania, whereas others say that it is different at first, but unites with the Oxus, being in many places as much as six or seven stadia wide. The lax-arteres, however, from beginning to end, is a different river from the Oxus, and although it ends in the same sea, the mouths of the two, according to Patrocles, are about eighty parasangs distant from one another. The Persian parasang, according to some, is sixty stadia, but according to others thirty or forty. When I was sailing up the Nile, they used different measures when they named the distance in "schoeni" from city to city, so that in some places the same number of "schoeni" meant a longer voyage and in others a shorter; and thus the variations have been preserved to this day as handed down from the beginning.

Now the tribes one encounters in going from Hyrcania towards the rising sun as far as Sogdiana became known at first to the Persians—I mean the tribes inside Taurus—and afterwards to the Macedonians and to the Parthians; and the tribes situated on the far side of those tribes and in a straight line with them are supposed, from their identity in kind, to be Scythian, although no expeditions have been made against them that I know of, any more than against the most northerly of the nomads. Now Alexander did attempt to lead an expedition against these when he was in pursuit of Bessus and Spitamenes, but when Bessus was captured alive and brought back, and Spitamenes was slain by the barbarians, he desisted from his undertaking. It is not generally agreed that persons have sailed around from India to Hyrcania, but Patrocles states that it is possible.

5

ARRIAN

The Campaigns of Alexander

ca. 145–160 CE

Arrian (ca. 86–160 CE) was a Greek scholar who served in the Roman Empire as a military commander and administrator. After retiring from imperial politics, he settled in Athens around 145 CE to pursue the life of a scholar and to study accounts of Alexander in preparation for writing

Arrian, The Campaigns of Alexander, trans. Aubrey de Selincourt (Harmondsworth, U.K.: Penguin Books, 1971), 205–10, 227–29.

his own. He deemed the account of Ptolemy, one of Alexander's generals and later a king of Egypt, to be the most reliable, but he also used the account of Aristobulus, an engineer contemporary of Alexander known for his keen observation of geography and nature. The following passages describe Alexander's encounters with nomadic peoples in Central Asia. The Greeks referred to all these nomads as Scythians, but they apparently came from different communities and places and held different attitudes toward the Greeks. Look for the variety of strategies the nomads developed for dealing with this powerful newcomer, as well as for Alexander's strategies of conquest.

[Alexander and the Asian Scythians]

About this time a force of Asian Scythians arrived at the Tanais. Most of them had heard that some of the tribes beyond the river had declared their hostility to Alexander and intended to join in an attack upon the Macedonians in the event of a serious rising. A report also came in that Spitamenes was blockading the troops which had been left behind in the fortress of Marakanda. To meet this situation, Andromachus, Menedemus, and Caranus were dispatched with a force consisting of sixty Companions, 800 of Caranus' mercenaries, and some 1,500 mercenary infantry. Pharnuches the interpreter was attached to the troops: he was a Lycian, thoroughly familiar with the language of this part of the country, and had often shown a skilful touch in dealing with the natives.

Alexander spent twenty days on the work of fortifying the site of his proposed new town and arranging for the settlement there of any Greek mercenaries and neighbouring tribesmen who expressed a wish to avail themselves of the opportunity, and also of a number of Macedonians no longer fit for active service. To mark the occasion, after his customary religious observances he held games, with athletic and equestrian contests.

Meanwhile the Scythians made no move to leave the Tanais. The river was not broad at that point; they could be seen shooting arrows into the water, and heard calling out, in their barbarous way, insulting remarks to Alexander and boasting that he would never dare to lay a finger upon men like them—or, if he did, that he would soon find out the difference between Scythians and Asiatic savages. To Alexander such an exhibition was most annoying, so he proposed to cross the river and deal with them as they deserved. The skin floats were being prepared for the crossing when he found that the omens, at the preliminary sacrifice, were against him. In spite of his vexation, he nevertheless made

the best of it and abandoned the enterprise. The Scythians, however, continuing their insufferable behaviour, he sacrificed again; but this time, too, Aristander the seer declared that the omens portended danger. Thereupon Alexander replied that it was better to face the worst of perils than for the conqueror of nearly all Asia to make himself ridiculous to a pack of Scythians—as Darius, the father of Xerxes, had done long ago. None the less, Aristander refused to misinterpret the divine prediction merely because Alexander wished it otherwise.

When all the skin floats were ready and the army in full equipment drawn up on the river-bank, the catapults, at the word of command, opened up on the Scythians who were riding along the edge of the water on the further side. Some of them were hit; one was pierced through both shield and breastplate and fell dead from his horse. The Scythians were taken completely aback by the long range of the catapults, and that, together with the loss of a good man, induced them to withdraw a short distance from the river, whereupon Alexander, seeing their consternation, ordered the trumpets to sound and himself led the way over the water, followed by his men. First to be put ashore were the archers and slingers, who were then ordered to open up on the enemy to prevent them from closing on the main infantry units before the mounted troops were all safely over; then as soon as every man was across and the army massed on the river-bank, a regiment of mercenaries and four squadrons of lancers were ordered forward to lead the attack. The Scythians met the challenge; their numbers were for the moment superior; they made circles round the small attacking force, shooting as they rode, and then galloped off to a safe distance. At this Alexander ordered an advance by a mixed force consisting of the cavalry together with the archers, the Agrianes, and the other light troops under Balacrus, and, when they were almost within striking distance, gave the word for three regiments of the Companions and all the mounted javelin-men to charge, while he himself at the head of the remaining cavalry came on at the gallop with his squadrons in column.

This effectually put a stop to the enemy's circling movements; the Macedonian cavalry, with the light troops mixed with it in close support, was now right on top of them, and it was no longer possible for them to repeat their former manoeuvre without the certainty of destruction. Indeed, from this moment they were well and truly beaten; in their attempt to get away, about 1,000 were killed, including Satraces, one of their commanders, and some 150 were made prisoner.

The rapid pursuit, in the great heat, was exhausting; every man suffered acutely from thirst, and Alexander himself, as he rode, was forced to drink whatever water he could find. Unfortunately it was not pure, and

gave him a severe attack of dysentery. This proved the salvation of some, at any rate, of the Scythians; for had not Alexander had this trouble, I do not think a single one of them would have escaped with his life.

Alexander did, in fact, become very seriously ill, and was carried back to camp—so Aristander was a true prophet after all. . . .

[Alexander and the European Scythians]

Alexander was now for the second time visited by envoys from the European Scythians, who arrived in company with the envoys he had himself sent to Scythia. The reigning King of Scythia at the time of their dispatch had died; he had been succeeded by his brother, and the purpose of the present embassy was to express the willingness of Scythia to accede in every point to Alexander's instructions; they brought as presents from the King such things as are reckoned most valuable in their country, and communicated to Alexander their King's desire to cement the friendship and alliance between their countries by giving him his daughter in marriage. Should Alexander be unwilling to marry the Scythian Princess, the King was none the less anxious to do the next best thing and to give as brides to his most trusted officers the daughters of the governors and other personages of rank in Scythian territory. He would, moreover, visit Alexander in person, if he were called upon to do so, and thus be enabled to take his instructions from Alexander's own lips.

About the same time the King of the Chorasmians, Pharasmanes, arrived at the Court with 1,500 mounted troops.¹ He told Alexander that his territory had common frontiers with the Colchians and the Amazon women,² and that if Alexander should ever contemplate an invasion of those countries with the object of reducing the various peoples in that part of the world as far as the Black Sea, he was willing to act as his guide and to provide all the necessary supplies for his army.

To the envoys from Scythia, Alexander gave a polite and suitable reply: he had no need, he said, of a Scythian marriage. He thanked Pharasmanes for his offer and concluded a pact of friendship with him, adding that an expedition to the Black Sea was not at the moment convenient; and, before dismissing him, he put him in touch with Artabazus, the Persian, to whom he had given charge of affairs in Bactria, and

¹ The Chorasmians inhabited the country (Khiva) between the Caspian and Aral Seas. [Translator's note.]

² Valiant women of a matriarchal nation in Greek mythology. Here Alexander could have been encountering a matriarchal community in Central Asia.

also with the various governors of the neighbouring provinces. His own thoughts were at present occupied with India, and he pointed out that once India was his he would be master of all Asia, after which his intention was to return to Greece and to make from thence an expedition to the Black Sea region by way of the Hellespont and the Propontis with all his land and sea forces combined. Pharasmanes, therefore, would oblige him if he deferred the fulfilment of his offer until that occasion should arise.

Alexander now returned to the Oxus. His intention was to proceed to Sogdiana, as a report had come in that many of the people there were refusing to obey the governor he had appointed and had shut themselves up in the forts. While he was in camp on the Oxus, a spring of water and another of oil quite near it came up from the ground close to his tent. Ptolemy, son of Lagus, was informed of this remarkable event, and Ptolemy told Alexander, who, to mark his sense of its miraculous nature, offered sacrifice according to the form prescribed by his soothsayers. Aristander declared that the spring of oil was a sign of difficulties to come and of eventual victory.³

Four officers — Polysperchon, Attalus, Gorgias, and Meleager — were left in Bactria with instructions to destroy all natives who had refused submission and to keep a sharp look-out for any further trouble; and Alexander himself, after crossing into Sogdiana, divided his remaining strength into five, one division to be commanded by Hephaestion, another by Ptolemy, son of Lagus, a third by Perdicas, a fourth by Coenus and Artabazus. The fifth he took over himself and proceeded with it in the direction of Marakanda, while the other four commanders carried out offensive operations as opportunity offered, storming the forts where some of the native tribesmen were trying to hold out, or receiving the voluntary surrender of others.

The greater part of Sogdiana was covered by these operations, and when the whole force was reunited at Marakanda, Alexander sent Hephaestion to plant settlements in the various towns, and at the same time dispatched Coenus and Artabazus to Scythia, where Spitamenes, according to report, had taken refuge. Meanwhile Alexander with the remainder of his force marched against those parts of Sogdiana which were still in rebel hands, and had no difficulty in subduing them.

Spitamenes, while all this was going on, had made his way with a number of fugitives from Sogdiana to that branch of the Scythian people

³The first mention of petroleum in Greek literature. [Translator's note.]

known as the Massagetae,⁴ there they got together 600 native horse-men and presented themselves at one of the forts in Bactria. Neither the garrison nor its commander had expected any hostile move; Spitamenes took them by surprise, killed the men, and captured their officer, whom he kept under guard. This success emboldened him a few days later to approach Zariaspas. They did not venture an assault upon the town, though they rounded up a lot of livestock and carried it off as booty.

⁴The Massagetae were a Scythian tribe, living east of the Caspian Sea, who had defeated and killed Cyrus the Great. [Translator's note.]

6

PLINY

Natural History

77 CE

Pliny the Elder (ca. 23–79 CE) was by far the most famous scholar of natural science in the Roman world. For his accounts of the many lands far to the east of Greece, he gathered information from Greek writers of earlier times and from Hellenistic writers of his own time. He was interested in all the products of the East and tried to explain their origins and manufacturing processes. Obviously, his account of silk from distant China is far less accurate than his account of frankincense and myrrh or of purple dye, which he describes in great detail. As a scholar of natural history, Pliny observed the life cycles and environments of the purple murex. He also described the fashions of the Roman elite and their desire

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to display their wealth through collections of gems. His Natural History, an encyclopedia of natural science, provides much information about Rome's trade in goods from Arabia, India, and China. What is Pliny's attitude toward the Chinese and toward Chinese and other luxuries in Rome? How does his curiosity about nature reflect the Roman market for the Silk Roads trade?

[Chinese Silks]

After leaving the Caspian Sea and the Scythian Ocean our course takes a bend towards the Eastern Sea as the coast turns to face eastward. The first part of the coast after the Scythian promontory is uninhabitable on account of snow, and the neighbouring region is uncultivated because of the savagery of the tribes that inhabit it. This is the country of the Cannibal Scythians who eat human bodies; consequently the adjacent districts are waste deserts thronging with wild beasts lying in wait for human beings as savage as themselves. Then we come to more Scythians and to more deserts inhabited by wild beasts, until we reach a mountain range called Tabis which forms a cliff over the sea; and not until we have covered nearly half of the length of the coast that faces north-east is that region inhabited. The first human occupants are the people called the Chinese, who are famous for the woollen substance¹ obtained from their forests; after a soaking in water they comb off the white down of the leaves, and so supply our women with the double task of unravelling the threads and weaving them together again; so manifold is the labour employed, and so distant is the region of the globe drawn upon, to enable the Roman matron to flaunt transparent raiment in public. The Chinese, though mild in character, yet resemble wild animals, in that they also shun the company of the remainder of mankind, and wait for trade to come to them. . . .

[Ebony]

We have already described the wool-bearing trees of the Chinese in making mention of that race, and we have spoken of the large size of the trees in India. One of those peculiar to India, the ebony, is spoken of in glowing terms by Virgil,² who states that it does not grow in any other country. Herodotus, however, prefers it to be ascribed to Ethiopia, stating that the Ethiopians used to pay as tribute to the Kings of Persia

¹The "woollen substance" from the Chinese could be silk.

²Virgil (70–19 BCE), a Roman poet, is most famous for his epic poem the *Aeneid*.

every three years a hundred logs of ebony, together with gold and ivory. Nor also should we omit the fact, since that author indicates it, that the Ethiopians used to pay twenty large elephant tusks on the same account. So high was the esteem in which ivory was held in the 310th year of our city, the date at which that author composed his history at Thurii in Italy, which makes all the more surprising the statement which we accept on his authority, that nobody of Asia or Greece had hitherto been seen who had ever seen the river Po. The exploration of the geography of Ethiopia, which as we have said had lately been reported to the Emperor Nero,³ showed that over a space of 1,996 miles from Syene on the frontier of the empire to Meroe trees are rare, and there are none except of the palm species. That is possibly the reason why ebony was the third most important item in the tribute paid. . . .

[Indian Cotton]

In the same gulf is the island of Tyros, which is covered with forests in the part facing east, where it also is flooded by the sea at high tide. Each of the trees is the size of a fig-tree; they have a flower with an indescribably sweet scent and the fruit resembles a lupine, and is so prickly that no animal can touch it. On a more elevated plateau in the same island there are trees that bear wool,⁴ but in a different manner to those of the Chinese, as the leaves of these trees have no growth on them, and might be thought to be vine-leaves were it not that they are smaller; but they bear gourds of the size of a quince, which when they ripen burst open and disclose balls of down from which an expensive linen for clothing is made.

Their name for this tree is the gossypinus; it also grows in greater abundance on the smaller island of Tyros, which is ten miles distant from the other. Juba⁵ says that this shrub has a woolly down growing round it, the fabric made from which is superior to the linen of India. He also says that there is an Arabian tree called the cynas from which cloth is made, which has foliage resembling a palm-leaf. Similarly the natives of India are provided with clothes by their own trees. But in the Tyros islands there is also another tree with a blossom like a white violet but four times as large; it has no scent, which may well surprise us in that region of the world. . . .

³Nero (37–68 CE) was a Roman emperor (t. 54–68) whose cruelty provoked widespread rebellions, which led to his suicide.

⁴This wool-bearing tree could be kapok, a tropical tree producing cotton-like fiber.

⁵Juba, king of Mauretania, was respected by Pliny for his knowledge, and Pliny frequently quoted him in the *Natural History*.

[Spices, Frankincense, and Myrrh]

Resembling these substances both in name and in the shrub that produces it is cardamomum, the seeds of which are oblong in shape. It is gathered in Arabia, in the same manner as amomum. It has four varieties: one very green and oily, with sharp corners and awkward to crumble—this is the kind most highly spoken of—the next sort a whitish red, the third shorter and of a colour nearer black, while an inferior kind is mottled and easily friable, and has little scent—in the true kind the scent ought to be near to that of costus. Cardamomum also grows in the country of the Medes. The price of the best sort is 3 denarii a pound.

Next in affinity to cardamomum would have come cinnamonum,⁶ were it not convenient first to catalogue the riches of Arabia and the reasons that have given it the names of Happy and Blessed. The chief products of Arabia then are frankincense and myrrh; the latter it shares also with the Cave-dwellers' Country, but no country beside Arabia produces frankincense, and not even the whole of Arabia. About in the middle of that country are the Astramitae, a district of the Sabaei, the capital of their realm being Sabota, situated on a lofty mountain; and eight days' journey from Sabota is a frankincense-producing district belonging to the Sabaei called Sariba—according to the Greeks the name means "secret mystery." The region faces north-east, and is surrounded by impenetrable rocks, and on the right hand side bordered by a seacoast with inaccessible cliffs. The soil is reported to be of a milky white colour with a tinge of red. The forests measure 20 *schoeni* in length and half that distance in breadth—by the calculation of Eratosthenes a *schoenus* measures 40 furlongs, that is five miles, but some authorities have made the *schoenus* 32 furlongs. There are hills rising to a great height, with natural forests on them running right down to the level ground. It is generally agreed that the soil is clay, and that there are few springs and these charged with alkali. Adjacent to the Astramitae is another district, the Minaei, through whose territory the transit for the export of the frankincense is along one narrow track. It was these people who originated the trade and who chiefly practise it, and from them the perfume takes the name of "Minaean"; none of the Arabs beside these have ever seen an incense-tree, and not even all of these, and it is said that there are not more than 3000 families who retain the right of trading in it as a hereditary property, and that consequently the members of these families are called sacred and are not allowed to be polluted by ever meeting women or funeral processions when they are engaged in making incisions in the trees in order to obtain the frankincense, and that

⁶ Cinnamon. Both cardamom and cinnamon likely came from India in the time of Pliny.

in this way the price of the commodity is increased owing to scruples of religion. Some persons report that the frankincense in the forests belongs to all these peoples in common, but others state that it is shared out among them in yearly turns.

Nor is there agreement in regard to the appearance of the incense-tree itself. We have carried on operations in Arabia, and the arms of Rome have penetrated into a large part of it; indeed, Gaius Caesar, son of Augustus,⁷ won great renown from the country; yet no Latin writer, so far as I know, has described the appearance of this tree. The descriptions given by the Greeks vary: some have stated that it has the leaf of a pear-tree, only smaller and of a grass-green colour; others that it resembles the mastich and has a reddish leaf; some that it is a kind of terebinth, and that this was the view of King Antigonus, to whom a plant was brought. King Juba in his volumes dedicated to Gaius Caesar, son of Augustus, whose imagination was fired by the fame of Arabia, states that the tree has a twisted stem and branches closely resembling those of the Pontic maple and that it gives a juice like that of the almond; he says that trees of this description are to be seen in Carmania and in Egypt, where they were introduced under the influence of the Ptolemies when they reigned there. It is well known that it has the bark of a bay-tree, and some have said that the leaf is also like that of the bay; at all events that was the case with the tree when it was grown at Sardinia—for the Kings of Asia also interested themselves in planting it. The ambassadors who have come to Rome from Arabia in my time have made all these matters still more uncertain, which may well surprise us, seeing that even some sprigs of the incense-tree find their way to Rome, on the evidence of which we may believe that the parent tree also is smooth and tapering and that it puts out its shoots from a trunk that is free from knots.

It used to be the custom, when there were fewer opportunities of selling frankincense, to gather it only once a year, but at the present day trade introduces a second harvesting. The earlier and natural gathering takes place at about the rising of the Dog-star,⁸ when the summer heat is most intense. They make an incision where the bark appears to be fullest of juice and distended to its thinnest; and the bark is loosened with a blow, but not removed. From the incision a greasy foam spurts out, which coagulates and thickens, being received on a mat of palm-leaves where the nature of the ground requires this, but in other places

⁷ Augustus (63 BCE–14 CE) was the first emperor of the Roman Empire (r. 27 BCE–14 CE).

⁸ A popular name for Sirius, the most brilliant star in the sky, which lies in the constellation Canis Major, the Great Dog. The rising of the Dog-star coincides with the beginning of summer.

on a space round the tree that has been rammed hard. The frankincense collected in the latter way is in a purer state, but the former method produces a heavier weight, while the residue adhering to the tree is scraped off with an iron tool, and consequently contains fragments of bark. The forest is divided up into definite portions, and owing to the mutual honesty of the owners is free from trespassing, and though nobody keeps guard over the trees after an incision has been made, nobody steals from his neighbour. At Alexandria, on the other hand, where the frankincense is worked up for sale, good heavens! no vigilance is sufficient to guard the factories. A seal is put upon the workmen's aprons, they have to wear a mask or a net with a close mesh on their heads, and before they are allowed to leave the premises they have to take off all their clothes: so much less honesty is displayed with regard to the produce with them than as to the forests with the growers. The frankincense from the summer crop is collected in autumn; this is the purest kind, bright white in colour. The second crop is harvested in the spring, cuts having been made in the bark during the winter in preparation for it; the juice that comes out on this occasion is reddish, and not to be compared with the former taking, the name for which is *carfiathum*, the other being called *dathiatum*. Also the juice produced by a sapling is believed to be whiter, but that from an older tree has more scent. Some people also think that a better kind is produced on islands, but Juba says that no incense grows on islands at all.

Frankincense that hangs suspended in a globular drop we call male frankincense, although in other connexions the term "male" is not usually employed where there is no female; but it is said to have been due to religious scruple that the name of the other sex was not employed in this case. Some people think that male frankincense is so called from its resemblance to the testes. The frankincense most esteemed, however, is the breast-shaped, formed when, while a previous drop is still hanging suspended, another one following unites with it. I find it recorded that one of these lumps used to be a whole handful, in the days when men's eagerness to pluck them was less greedy and they were allowed to form more slowly. The Greek name for frankincense formed in this manner is "drop-incense" or "solid incense," and for the smaller kind "chick-pea incense"; the fragments knocked off by striking the tree we call manna. Even at the present day, however, drops are found that weigh as much as a third of a *mina*, that is 28 denarii. Alexander the Great in his boyhood was heaping frankincense on the altars in lavish fashion, when his tutor Leonides told him that he might worship the gods in that manner when he had conquered the frankincense-producing races; but when

Alexander had won Arabia he sent Leonides a ship with a cargo of frankincense, with a message charging him to worship the gods without any stint.

Frankincense after being collected is conveyed to Sabota on camels, one of the gates of the city being opened for its admission; the kings have made it a capital offence for camels so laden to turn aside from the high road. At Sabota a tithe estimated by measure and not by weight is taken by the priests for the god they call Sabis, and the incense is not allowed to be put on the market until this has been done; this tithe is drawn on to defray what is a public expenditure, for actually on a fixed number of days the god graciously entertains guests at a banquet. It can only be exported through the country of the Gebbanitae, and accordingly a tax is paid on it to the king of that people as well. Their capital is Thomna, which is 148 $\frac{1}{2}$ miles distant from the town of Gaza in Judaea on the Mediterranean coast; the journey is divided into 65 stages with halts for camels. Fixed portions of the frankincense are also given to the priests and the king's secretaries, but beside these the guards and their attendants and the gate-keepers and servants also have their pickings: indeed all along the route they keep on paying, at one place for water, at another for fodder, or the charges for lodging at the halts, and the various octrois; so that expenses mount up to 688 denarii per camel before the Mediterranean coast is reached; and then again payment is made to the customs officers of our empire. Consequently the price of the best frankincense is 6, of the second best 5, and the third best 3 denarii a pound. It is tested by its whiteness and stickiness, its fragility and its readiness to catch fire from a hot coal; and also it should not give to pressure of the teeth, and should rather crumble into grains. Among us it is adulterated with drops of white resin, which closely resemble it, but the fraud can be detected by the means specified.

Some authorities have stated that myrrh is the product of a tree growing in the same forests among the frankincense-trees, but the majority say that it grows separately; and in fact it occurs in many places in Arabia, as will appear when we deal with its varieties. A kind highly spoken of is also imported from islands, and the Sabaei⁹ even cross the sea to the Cave-dwellers' Country to procure it. Also a cultivated variety is produced which is much preferred to the wild kind. The plant enjoys being raked and having the soil round it loosened, as it is the better for having its roots cool.

⁹The Sabaeans lived in southern Arabia. The queen of Sheba who visited the biblical King Solomon was probably a Sabaean chief.

The tree grows to a height of nearly eight feet; it has thorns on it, and the trunk is hard and twisted, and thicker than that of the frankincense-tree, and even thicker at the root than in the remaining part of it. Authorities state that the bark is smooth and resembles that of the strawberry-tree; and others that it is rough and prickly; and they say that the leaf is that of the olive, but more wrinkled and with sharp points—though Juba says it is like that of the alexanders. Some say that it resembles the juniper, only that it is rougher and bristling with thorns, and that the leaf is rounder but tastes like juniper. Also there have been writers who have falsely asserted that the frankincense-tree produces myrrh as well as frankincense.

The myrrh-producing tree also is tapped twice a year at the same seasons as the frankincense-tree, but in its case the incisions are made all the way up from the root to those of the branches that are strong enough to bear it. But before it is tapped the tree exudes of its own accord a juice called stacte, which is the most highly valued of all myrrh. Next after this comes the cultivated kind, and also the better variety of the wild kind, the one tapped in summer. No fishes are given to a god from myrrh, as it also grows in other countries; however, the growers have to pay a quarter of the yield to the king of the Gebanitæ. For the rest it is bought up all over the district from the common people and packed into leather bags; and our perfumiers have no difficulty in distinguishing the different sorts by the evidence of the scent and consistency. There are a great many varieties, the first among the wild kinds being the Cave-dweller myrrh, next the Minæan, which includes the Astræmitic, Gebbanitic and Ausaritic from the kingdom of the Gebbanitæ; the third quality is the Dianite, the fourth a mixture from various sources, the fifth the Sambracene from a seaboard state in the kingdom of the Sabæi, and the sixth the one called Dusirite. There is also a white kind found, in one place only, which is brought into the town of Mesalum for sale. The Cave-dweller kind is distinguished by its thickness and because it is rather dry and dusty and foreign in appearance, but has a stronger scent than the other sorts. The Sambracene variety is advertised as surpassing other kinds in its agreeable quality, but it has not a strong scent. Broadly speaking, however, the proof of goodness is given by its being in small pieces of irregular shape, forming in the solidifying of the juice as it turns white and dries up, and in its showing white marks like finger-nails when it is broken, and having a slightly bitter taste. The second best kind is mottled inside, and the worst is the one that is black inside; and if it is black outside as well it is of a still inferior quality.

The prices vary with the supply of buyers; that of stacte ranges from 3 to 50 denarii a pound, whereas the top price for cultivated myrrh is 11 denarii and for Erythrean 16—this kind is passed off as Arabian—and for the kernel of Cave-dweller 16½, but for the variety called scented myrrh 12. Myrrh is adulterated with lumps of lentisk and with gum, and also with cucumber juice to give it a bitter taste, as it is with litharge of silver to increase its weight. The rest of the impurities can be detected by taste, and gum by its sticking to the teeth. But the adulteration most difficult to detect is that practised in the case of Indian myrrh, which is collected in India from a certain thorn-bush; this is the only commodity imported from India that is of worse quality than that of other countries—indeed it is easily distinguished because it is so very inferior. . . .

[The Source of Purple Dye]

And nevertheless [the pearl] is an almost everlasting piece of property—it passes to its owner's heir, it is offered for public sale like some landed estate; whereas every hour of use wears away robes of scarlet and purple, which the same mother, luxury, has made almost as costly as pearls.

Purples live seven years at most. They stay in hiding like the murex for 30 days at the time of the rising of the dog-star. They collect into shoals in spring-time, and their rubbing together causes them to discharge a sort of waxy viscous slime. The murex also does this in a similar manner, but it has the famous flower of purple, sought after for dyeing robes, in the middle of its throat: here there is a white vein of very scanty fluid from which that precious dye, suffused with a dark rose colour, is drained, but the rest of the body produces nothing. People strive to catch this fish alive, because it discharges this juice with its life; and from the larger purples they get the juice by stripping off the shell, but they crush the smaller ones alive with the shell, as that is the only way to make them disgorge the juice. The best Asiatic purple is at Tyre, the best African is at Meninx and on the Gaetulan coast of the Ocean, the best European in the district of Sparta. The official rods and axes of Rome clear it a path, and it also marks the honourable estate of boyhood; it distinguishes the senate from the knighthood, it is called in to secure the favour of the gods; and it adds radiance to every garment, while in a triumphal robe it is blended with gold. Consequently even the mad lust for the purple may be excused; but what is the cause of the prices paid for purple-shells, which have an unhealthy odour when used for dye and a gloomy tinge in their radiance resembling an angry sea?

The purple's tongue is an inch long; when feeding it uses it for piercing a hole in the other kinds of shell-fish, so hard is its point. These fish die in fresh water and wherever a river discharges into the sea, but otherwise when caught they live as much as seven weeks on their own slime. All shell-fish grow with extreme rapidity, especially the purple-fish; they reach their full size in a year.

But if having come to this point our exposition were to pass over elsewhere, luxury would undoubtedly believe itself defrauded and would find us guilty of remissness. For this reason we will pursue the subject of manufactures as well, so that just as the principle of foodstuffs is learnt in food, so everybody who takes pleasure in the class of things in question may be well-informed on the subject of that which is the prize of their mode of life. Shell-fish supplying purple dyes and scarlets—the material of these is the same but it is differently blended—are of two kinds: the whelk is a smaller shell resembling the one that gives out the sound of a trumpet, whence the reason of its name, by means of the round mouth incised in its edge; the other is called the purple, with a channelled beak jutting out and the side of the channel tube-shaped inwards, through which the tongue can shoot out; moreover it is prickly all round, with about seven spikes forming a ring, which are not found in the whelk, though both shells have as many rings as they are years old. The trumpet-shell clings only to rocks and can be gathered round crags.

Another name used for the purple is "pelagia." There are several kinds, distinguished by their food and the ground they live on. The mud-purple feeds on rotting slime and the seaweed-purple on seaweed, both being of a very common quality. A better kind is the reef-purple, collected on the reefs of the sea, though this also is lighter and softer as well. The pebble-purple is named after a pebble in the sea, and is remarkably suitable for purple dyes; and far the best for these is the melting-purple, that is, one fed on a varying kind of mud. Purples are taken in a sort of little lobster-pot of fine ply thrown into deep water. These contain bait, cockles that close with a snap, as we observe that mussels do. These when half-killed but put back into the sea gape greedily as they revive and attract the purples, which go for them with outstretched tongues. But the cockles when pricked by their spike shut up and nip the creatures nibbling them. So the purples hang suspended because of their greed and are lifted out of the water.

It is most profitable for them to be taken after the rising of the dog-star or before spring-time, since when they have waxed themselves over with slime, they have their juices fluid. But this fact is not known to the dyers' factories, although it is of primary importance. Subsequently the

vein of which we spoke is removed, and to this salt has to be added, about a pint for every hundred pounds; three days is the proper time for it to be steeped (as the fresher the salt the stronger it is), and it should be heated in a leaden pot, and with 50 lbs. of dye to every six gallons of water kept at a uniform and moderate temperature by a pipe brought from a furnace some way off. This will cause it gradually to deposit the portions of flesh which are bound to have adhered to the veins, and after about nine days the cauldron is strained and a fleece that has been washed clean is dipped for a trial, and the liquid is heated up until fair confidence is achieved. A ruddy colour is inferior to a blackish one. The fleece is allowed to soak for five hours and after it has been carded is dipped again, until it soaks up all the juice. The whelk by itself is not approved of, as it does not make a fast dye; it is blended in a moderate degree with sea-purple and it gives to its excessively dark hue that hard and brilliant scarlet which is in demand; when their forces are thus mingled, the one is enlivened, or deadened as the case may be, by the other. The total amount of dye-stuffs required for 1,000 lbs. of fleece is 200 lbs. of whelk and 111 lbs. of sea-purple; so is produced that remarkable amethyst colour. For Tyrian purple the wool is first soaked with sea-purple for a preliminary pale dressing, and then completely transformed with whelk dye. Its highest glory consists in the colour of congealed blood, blackish at first glance but gleaming when held up to the light; this is the origin of Homer's¹⁰ phrase, "blood of purple hue."

I notice that the use of purple at Rome dates from the earliest times, but that Romulus¹¹ used it only for a cloak; as it is fairly certain that the first of the kings to use the bordered robe and broader purple stripe was Tullus Hostilius, after the conquest of the Etruscans. Cornelius Nepos, who died in the principate of the late lamented Augustus, says: "In my young days the violet purple dye was the vogue, a pound of which sold at 100 denarii; and not much later the red purple of Taranto. This was followed by the double-dyed Tyrian purple, which it was impossible to buy for 1000 denarii per pound. This was first used in a bordered robe by Publius Lentulus Spinther; curule aedile, but met with disapproval, though who does not use this purple for covering dining-couches nowadays?" Spinther was aedile in the consulship of Cicero, 63 B.C. Stuff dipped twice over used at that time to be termed "double-dyed," and

¹⁰ Homer, the Greek epic poet (ca. 850 BCE), is the author of the *Iliad* and the *Odyssey*.

¹¹ Romulus, one of the legendary founders of Rome, and his twin brother, Remus, were supposed to have been raised by a wolf.

was regarded as a lavish extravagance, but now almost all the more agreeable purple stuffs are dyed in this way.

In a purple-dyed dress the rest of the process is the same except that trumpet-shell dye is not used, and in addition the juice is diluted with water and with human urine in equal quantities; and only half the amount of dye is used. This produces that much admired paleness, avoiding deep colouration, and the more diluted the more the fleeces are stinted.

The prices for dyestuff vary in cheapness with the productivity of the coasts, but those who buy them at an enormous price should know that deep-sea purple nowhere exceeds 50 sesterces and trumpet-shell 100 sesterces per 100 lbs. But every end leads to fresh starts, and men make a sport of spending, and like doubling their sports by combining them and re-adulterating nature's adulterations, for instance staining tortoiseshells, alloying gold with silver to produce amber-metal ware, and adding copper to these to make Corinthian ware. It is not enough to have stolen for a dye the name of a gem, "sober-stone," but when finished it is made drunk again with Tyrian dye, so as to produce from the combination an outlandish name and a twofold luxury at one time; and when they have made shell-dye, they think it an improvement for it to pass into Tyrian. Repentance must have discovered this first, the artificer altering a product that he disapproved of; but reason sprang up next, and a defect was turned into a success by marvellous inventions, and a double path pointed out for luxury, so that one colour might be concealed by another, being pronounced to be made sweeter and softer by this process; and also a method to blend minerals, and dye with Tyrian a fabric already dyed with scarlet, to produce *hygine* colour. The kermes, a red kernel of Galatia, as we shall say when dealing with the products of the earth, or else in the neighbourhood of Merida in Lusitania, is most approved. But, to finish off these famous dyes at once, the kernel when a year old has a viscous juice, and also after it is four years old the juice tends to disappear, so that it lacks strength both when fresh and when getting old.

We have amply dealt with the method whereby the beauty of men and women alike believes that it is rendered most abundant. . . .

[The Lighthouse at Alexandria]

Another towering structure built by a king is also extolled, namely the one that stands on Pharos, the island that commands the harbour at Alexandria. The tower is said to have cost 800 talents. We should not fail

to mention the generous spirit shown by King Ptolemy,¹² whereby he allowed the name of the architect, Sostratus of Cnidos, to be inscribed on the very fabric of the building. It serves, in connection with the movements of ships at night, to show a beacon so as to give warning of shoals and indicate the entrance to the harbour. Similar beacons now burn brightly in several places, for instance at Ostia and Ravenna. The danger lies in the uninterrupted burning of the beacon, in case it should be mistaken for a star, the appearance of the fire from a distance being similar. The same architect is said to have been the very first to build a promenade supported on piers: this he did at Cnidos. . . .

[Gemstones]

The first Roman to own a collection of gemstones (for which we normally use the foreign term "dactylithoea," or "ring cabinet") was Sulla's¹³ stepson, Scourus. For many years there was no other until Pompey¹⁴ the Great dedicated in the Capitol among his other offerings a ring cabinet that had belonged to King Mithridates.¹⁵ This, as Varro and other authorities of the period confirm, was far inferior to that of Scourus. Pompey's example was followed by Julius Caesar,¹⁶ who during his dictatorship consecrated six cabinets of gems in the temple of Venus Genetrix, and by Marcellus, Octavia's son, who dedicated one in the temple of Apollo on the Palatine.

However, it was this victory of Pompey over Mithridates that made fashion veer to pearls and gemstones. The victories of Lucius Scipio and of Cnaeus Manlius had done the same for chased silver, garments of cloth of gold and dining couches inlaid with bronze; and that of Mummius for Corinthian bronzes and fine paintings. To make my point clearer, I shall append statements taken directly from official records of Pompey's triumphs. Thus, Pompey's third triumph was held on his own birthday, September 29th of the year in which Marcus Piso and Marcus Messala were consuls, to celebrate his conquest of the pirates, Asia, Pontus and all the peoples and kings mentioned in the seventh volume of this work. In this triumph, then, there was carried in the procession

¹² King Ptolemy II (ca. 308-246 BCE, r. 285-246 BCE).

¹³ Sulla (138-78 BCE) was a Roman general and dictator (82-79 BCE).

¹⁴ Pompey (106-48 BCE), a Roman general, was the rival of Julius Caesar.

¹⁵ Mithridates, or Mithradates VI (ca. 120-63 BCE), king of Pontus, was defeated by Pompey in 66 BCE.

¹⁶ Julius Caesar (100-44 BCE), a Roman general and statesman, became dictator in 45 BCE but was murdered a year later.

a gaming-board complete with a set of pieces, the board being made of two precious minerals and measuring three feet broad and four feet long. And in case anyone should doubt that our natural resources have become exhausted seeing that to-day no gems even approach such a size, there rested on this board a golden moon weighing 30 pounds. There were also displayed three gold dining couches; enough gold vessels inlaid with gems to fill nine display stands; three gold figures of Minerva,¹⁷ Mars¹⁸ and Apollo¹⁹ respectively; thirty-three pearl crowns; a square mountain of gold with deer, lions and every variety of fruit on it and a golden vine entwined around it; and a grotto of pearls, on the top of which there was a sundial. Furthermore, there was Pompey's portrait rendered in pearls, that portrait so pleasing with the handsome growth of hair swept back from the forehead, the portrait of that noble head revered throughout the world—that portrait, I say, that portrait was rendered in pearls. Here it was austerity that was defeated and extravagance that more truly celebrated its triumph. Never, I think, would his surname "the Great" have survived among the stalwarts of that age had he celebrated his first triumph in this fashion! To think that it is of pearls, Great Pompey, those wasteful things meant only for women, of pearls, which you yourself cannot and must not wear, that your portrait is made! To think that this is how you make yourself seem valuable! Is not then the trophy that you placed upon the summit of the Pyrenees a better likeness of yourself? This, to be sure, would have been a gross and foul disgrace were it not rather to be deemed a cruel omen of Heaven's wrath. That head, so ominously manifested without its body in oriental splendour, bore a meaning which even then could not be mistaken.²⁰ But as for the rest of that triumph, how worthy it was of a good man and true! 200,000,000 sesterces were given to the State, 100,000,000 to the commanders and quaestors who had guarded the coasts and 6000 to each soldier. However, he merely made it easier for us to excuse the conduct of the Emperor Gaius when, apart from other effeminate articles of clothing, he wore slippers sewn with pearls, or that of the Emperor Nero, when he had scepters, actors' masks and travelling couches adorned with pearls. Why, we seem to have lost even the right to criticize cups and other pieces of household equipment inlaid with gems or, again, rings with stones set in open bezels. For compared

¹⁷ Minerva was the goddess of wisdom and art in Roman mythology, equivalent to the Olympian goddess Athena.

¹⁸ Mars was the god of war in Roman mythology.

¹⁹ Apollo was the Olympian god of prophecy, music, poetry, medicine, and the sun.

²⁰ A reference to his murder in Egypt in 48 BCE. [Translator's note.]

with Pompey's, there is no extravagance that can be considered to have been so harmful.

It was the same victory that brought myrrhine ware for the first time to Rome. Pompey was the first to dedicate myrrhine bowls and cups, which he set aside from the spoils of his triumphs for Jupiter of the Capitol. Such vessels immediately passed into ordinary use, and there was a demand even for display stands and tableware. Lavish expenditure on this fashion is increasing every day. . . . an ex-consul, drank from a myrrhine cup for which he had given 70,000 sesterces, although it held just three pints. He was so fond of it that he would gnaw its rim; and yet the damage he thus caused only enhanced its value, and there is no other piece of myrrhine ware even to-day that has a higher price set upon it. The amount of money squandered by this same man upon the other articles of this material in his possession can be gauged from their number, which was so great that, when Nero took them away from the man's children and displayed them, they filled the private theatre in his gardens across the Tiber, a theatre which was large enough to satisfy even Nero's desire to sing before a full house at the time when he was rehearsing for his appearance in Pompey's theatre. It was at this time that I saw the pieces of a single broken cup included in the exhibition. It was decided that these, like the body of Alexander,²¹ should be preserved in a kind of catafalque for display, presumably as a sign of the sorrows of the age and the ill-will of Fortune. When the ex-consul Titus Petronius was facing death, he broke, to spite Nero, a myrrhine dipper that had cost him 300,000 sesterces, thereby depriving the Emperor's dining-room table of this legacy. Nero, however, as was proper for an emperor, outdid everyone by paying 1,000,000 sesterces for a single bowl. That one who was acclaimed as a victorious general and as Father of his Country should have paid so much in order to drink is a detail that we must formally record.

Myrrhine vessels come to us from the East. There the substance is found in several otherwise unremarkable localities, particularly within the kingdom of Parthia. It is in Carmania, however, that the finest specimens exist. The substance is thought to be a liquid which is solidified underground by heat. In size the pieces are never larger than a small display stand, while in bulk they rarely equal the drinking vessels that we have discussed.

²¹ Alexander the Great (356–323 BCE), king of Macedon, led conquest expeditions all the way to Central Asia and India, but died on the way back to Greece.

Minæan; white marble—as well as all the aforementioned merchandise from Adulis across the water. The best time for sailing to this place is around the month of September, that is Thoth, though there is nothing to prevent leaving even earlier.

About a 300-stade² sail past this port, the Arabian mainland and the country of Barbaria across the water in the vicinity of Avalites converge to form a strait, not very long, that contracts the waters and closes them off into a narrow passage; here in the middle of the channel, 60 stades wide, stands Diodoros Island. For this reason, and because a wind blows down from the mountains that lie alongside, the sail through along the island meets strong currents. Along this strait is Okelis, an Arab village on the coast that belongs to the same province; it is not so much a port of trade as a harbor, watering station, and the first place to put in for those sailing on.

Beyond Okelis, with the waters again opening out towards the east and little by little being revealed to be open sea, about 1200 stades distant is Eudaimon Arabia, a village on the coast belonging to the same kingdom, Charibaet's. It has suitable harbors and sources of water much sweeter than at Okelis. It stands at the beginning of a gulf formed by the receding of the shore. Eudaimon Arabia ['prosperous Arabia'], a full-fledged city in earlier days, was called Eudaimon when, since vessels from India did not go on to Egypt and those from Egypt did not dare sail to the places further on but came only this far, it used to receive the cargoes of both, just as Alexandria receives cargoes from overseas as well as from Egypt. And now, not long before our time, Caesar³ sacked it.

Immediately after Eudaimon Arabia come a long coast and bay, populated by the villages of Nomads and Ichthyophagoi, that stretch for 2000 stades or more, at which point, beyond the projecting headland, is another port of trade on the coast, Kane, belonging to the kingdom of Eleazos, the frankincense-bearing land; near it are two barren islands, one called Orneon ['of the birds'] and the other Trullas, 120 stades off shore from Kane. Above it inland lies the metropolis of Saubatha, which is also the residence of the king. All the frankincense grown in the land is brought into Kane, as if to a warehouse, by camel as well as by rafts of a local type made of leathern bags, and by boats. It also carries on trade with the ports across the water—Barygaza, Skythia, Omana—and with its neighbor, Persis.

²A Greek measurement that equals 185 meters or 607 feet.
³Julius Caesar.

The Voyage around the Red Sea

First Century CE

The Voyage around the Red Sea (*in Greek*, Periplus Maris Erythraei) was a manual for Red Sea pilots who wanted to navigate along the coasts of the Arabian Sea. Maris Erythraei means, literally, "Red Sea," but for the Greeks that designation included the Persian Gulf and the Indian Ocean. In the ports now located in Yemen and Oman, Greek-speaking Roman traders obtained frankincense and myrrh from Arab traders for the Mediterranean home market and to trade in India for goods from farther east. At ports around the mouth of the Indus River, they obtained silk from China, spices from the Himalayas, and gems and tropical produce from India and Southeast Asia. Some four hundred years after Alexander's conquest, Greek was still spoken in northwestern India, even in areas never occupied by the Greeks. Take note of all the goods that were part of the Silk Roads trade by the first century CE.

The port of trade of Muza, though without a harbor, offers a good roadstead for mooring because of the anchorages with sandy bottom all around. Merchandise for which it offers a market are: purple cloth, fine and ordinary quality; Arab sleeved clothing, either with no adornment or with the common adornment or with checks or interwoven with gold thread; saffron; *cyperus*;¹ cloth; *abollai*; blankets, in limited number, with no adornment as well as with traditional local adornment; girdles with shaded stripes; unguent, moderate amount; money, considerable amount; wine and grain, limited quantity because the region produces wheat in moderate quantity and wine in greater. To the king and the governor are given [?]: horses and pack mules; goldware; embossed silverware; expensive clothing; copperware. Its exports consist of local products—myrrh, the select grade and *stacte*, the Abeirian [?] and

¹*Cyperus* and other italicized words in this document name goods that cannot be identified.

The *Periplus Maris Erythraei*, trans. and ed. Lionel Casson (Princeton, N.J.: Princeton University Press, 1989), 63–67, 75–81.

Its imports from Egypt are: wheat, limited quantity, and wine, just as to Muza; also as to Muza, Arab clothing, either with common adornment or no adornment or of printed fabric, in rather large quantities; copper; tin; coral; storax; and the rest of the items that go to Muza. Also, for the king, embossed silverware and money [?], rather large quantities, plus horses and statuary and fine-quality clothing with no adornment. It exports local wares, namely frankincense and aloë; the rest of its exports are through its connections with the other ports of trade. The time to set sail for this place is about the same as for Muza, but earlier.

After Kane, with the shoreline receding further, there next come another bay, very deep, called Sachalites, which extends for a considerable distance, and the frankincense-bearing land; this is mountainous, has a difficult terrain, an atmosphere close and misty, and trees that yield frankincense. The frankincense-bearing trees are neither very large nor tall; they give off frankincense in congealed form on the bark, just as some of the trees we have in Egypt exude gum. The frankincense is handled by royal slaves and convicts. For the districts are terribly unhealthy; harmful to those sailing by and absolutely fatal to those working there—who, moreover, die off easily because of the lack of nourishment. . . .

Vessels moor at Barbarikon, but all the cargoes are taken up the river to the king at the metropolis. In this port of trade there is a market for: clothing, with no adornment in good quantity, of printed fabric in limited quantity; multicolored textiles; peridot [?]; coral; storax; frankincense; glassware; silverware; money; wine, limited quantity. As return cargo it offers: costus; bdellium; *lykion*; nard; turquoise; lapis lazuli; Chinese pelts, cloth, and yarn; indigo.⁴ Those who sail with the Indian [winds] leave around July, that is, Epeiph. The crossing with these is hard going but absolutely favorable and shorter.

After the Sinthos River there is another bay, hidden from view, to the north. It is named Eirion, with the additional names Little and Big. Both are bodies of water with shoals and a succession of shallow eddies reaching a long way from land so that frequently, with the shore nowhere in sight, vessels will run aground and, if caught and thrust

⁴Not all these goods can be identified, but peridot is likely a kind of green stone, coral the red coral from the Mediterranean, storax a fragrance from tropical and semitropical regions, bdellium a fragrance from the dry region of West Asia, nard or spikenard a fragrance from a Himalayan herb, turquoise a semiprecious blue-green stone from Persia, and indigo a blue dye from India. Lapis lazuli was the most desired stone in the ancient world. Precious and blue in color, it was found only in Badakhshan in Central Asia.

further in, be destroyed. Beyond this bay a promontory juts out, curving from Eirion first east and south and then west; it embraces the gulf called Barake, which itself embraces seven islands. Ships around its entrance that blunder in and then pull back the short distance into open water, escape; those that get closed inside the basin of Barake are destroyed. For not only are the waves there very big and oppressive, but the sea is choppy and turbid, with eddies and violent whirlpools. The bottom in some places has sheer drops, in others is rocky and sharp, so that the anchors lying parallel [i.e., dropped from the bows], thrust out to withstand [the difficult waters], get cut loose and some even get smashed on the sea floor. An indication of these [dangers] to vessels coming from the sea are the snakes, huge and black, that emerge to meet them. In the areas beyond, and around Barygaza, snakes that are smaller and yellow and golden in color are met with.

Immediately after the gulf of Barake is the gulf of Barygaza and the coast of the region of Ariake, the beginning both of Manbanos's realm and of all of India. The part inland, which borders on Skythia, is called Aberia, the part along the coast Syrastrene. The region, very fertile, produces grain, rice, sesame oil, ghee, cotton, and the Indian cloths made from it, those of ordinary quality. There are a great many herds of cattle, and the men are of very great size and dark skin color. The metropolis of the region is Minnagara, from which great quantities of cloth are brought to Barygaza. In the area there are still preserved to this very day signs of Alexander's⁵ expedition, ancient shrines and the foundations of encampments and huge wells. The voyage along the coast of this region, from Barbarikon to the promontory near Astakapra across from Barygaza called Papike, is 3000 stades.

Beyond it is another gulf, on the inside of the waves, that forms an inlet directly to the north. Near the mouth is an island called Baiones, and, at the very head, a mighty river called the Mais. Vessels whose destination is Barygaza cross the gulf, which is about 300 stades wide, leaving the island, whose highest point is visible, to the left and heading due east toward the mouth of Barygaza's river. This river is called the Lamnatos.

This gulf which leads to Barygaza, since it is narrow, is hard for vessels coming from seaward to manage. For they arrive at either its right-hand side or its left-hand, and attempting it by the left-hand side is better than the other. For, on the right-hand side, at the very mouth of the gulf,

⁵Alexander the Great (356-323 BCE), king of Macedon, led conquest expeditions all the way to Central Asia and India, and died on the way back to Greece.

there extends a rough and rock-strewn reef called Herone, near the village of Kammoni. Opposite it, on the left-hand side, is the promontory in front of Astakpra called Papike; mooring here is difficult because of the current around it and because the bottom, being rough and rocky, cuts the anchor cables. And, even if you manage the gulf itself, the very mouth of the river on which Barygaza stands is hard to find because the land is low and nothing is clearly visible even from nearby. And, even if you find the mouth, it is hard to negotiate because of the shoals in the river around it.

For this reason local fishermen in the king's service come out with crews [of rowers] and long ships, the kind called *trappaga* and *kotymba*, to the entrance as far as Syrastrane to meet vessels and guide them up to Barygaza. Through the crew's efforts, they maneuver them right from the mouth of the gulf through the shoals and tow them to predetermined stopping places; they get them under way when the tide comes in and, when it goes out, bring them to anchor in certain harbors and basins. The basins are rather deep spots along the river up to Barygaza. For this lies on the river about 300 stades upstream from the mouth.

All over India there are large numbers of rivers with extreme ebb-and-flood tides that at the time of the new moon and the full moon last for up to three days, diminishing during the intervals. They are much more extreme in the area around Barygaza than elsewhere. Here suddenly the sea floor becomes visible, and certain parts along the coast, which a short while ago had ships sailing over them, at times become dry land, and the rivers, because of the inrush at flood tide of a whole concentrated mass of seawater, are driven headlong upstream against the natural direction of their flow for a good many stades.

Thus the navigating of ships in and out is dangerous for those who are inexperienced and are entering this port of trade for the first time. For, once the thrust of the flood tide is under way, restraining anchors do not stay in place. Consequently, the ships, carried along by its force and driven sideways by the swiftness of the current, run aground on the shoals, and break up, while smaller craft even capsize. Even in the channels some craft, if not propped up, will tilt over on their sides during the ebb and, when the flood suddenly returns, get swamped by the first wave of the flow. So much power is generated at the inrush of the sea even during the dark of the moon, particularly if the flood arrives at night, that when the tide is just beginning to come in and the sea is still at rest, there is carried from it to people at the mouth something like the rumble of an army heard from afar, and after a short while the sea itself races over the shoals with a hiss.

Inland behind Barygaza there are numerous peoples: the Aratriori, Arachusioi, Gandaraioi, and the peoples of Proklais, in whose area Bukephalos Alexandria is located. And beyond these is a very warlike people, the Bactrians, under a king. . . . Alexander⁶ setting out from these parts, penetrated as far as the Ganges but did not get to Limyrke and the south of India. Because of this, there are to be found on the market in Barygaza even today old drachmas engraved with the inscriptions, in Greek letters, of Apollodotus and Menander, rulers who came after Alexander.

There is in this region [of Barygaza] towards the east a city called Ozene, the former seat of the royal court, from which everything that contributes to the region's prosperity, including what contributes to trade with us, is brought down to Barygaza: onyx; agate [?]; Indian garments of cotton; garments of *molochnon*; and a considerable amount of cloth of ordinary quality. Through this region there is also brought down from the upper areas the nard that comes by way of Proklais (the Kattyburine, Patropapige, and Kabalite), the nard that comes through the adjacent part of Skythia, and costus and bdellium.

In this port of trade there is a market for: wine, principally Italian but also Laodicean and Arabian; copper, tin, and lead; coral and peridot [?]; all kinds of clothing with no adornment or of printed fabric; multi-colored girdles, eighteen inches wide; storax; yellow sweet clover [?]; raw glass; realgar; sulphide of antimony; Roman money, gold and silver, which commands an exchange at some profit against the local currency; unguent, inexpensive and in limited quantity. For the king there was imported in those times precious silverware, slave musicians, beautiful girls for concubinage, fine wine, expensive clothing with no adornment, and choice unguent. This area exports: nard; costus; bdellium; ivory; onyx; agate [?]; *lyxion*; cotton cloth of all kinds; Chinese [silk] cloth; *molochnon* cloth; [silk] yarn; long pepper;⁷ and items brought here from the [nearby] ports of trade. For those sailing to this port from Egypt, the right time to set out is around the month of July, that is Epeiph.

⁶This Alexander is a Greek king who ruled Bactria and made an incursion into India.

⁷Again, not all these goods can be identified. Onyx is a precious stone with bands of different color, and agate has similar features.

PTOLEMY

* *The Geography*

Mid-Second Century CE

The Greek scholar Ptolemy (ca. 100–170 CE), who lived in Alexandria at the height of the Roman Empire's prestige and power, wrote about astronomy, mathematics, and geography. Because he was a Greek, most of his information about Central Asia came from Hellenistic sources, some of them probably dating back to the time of Alexander. Ptolemy invented the system of locating places in grids that later developed into the longitudes and latitudes of modern cartography. At this time, Bactria and Sogdiana were part of the Kushan Empire, yet Ptolemy used Greek place names for these regions and knew that the Greek language was still in use there. Look for the kinds of information Ptolemy provides.

Chapter XI

LOCATION OF BACTRIANA
(SEVENTH MAP OF ASIA)

On the west Bactriana is bounded by Margiana; on the north and also on the east by Sogdiana and a part of the Oxus river; on the south by the part of Aria which extends from the terminus in the confines of Margiana to the terminus in 111 30 39 and along the parallel of Paropanisadus an equal distance through the mountains to the sources of the Oxus which are located in 119 30 39

Rivers flow through Bactria which rivers empty into the Oxus, and the Oxus river, the sources of which are in 110 39 the Dargamanis, the sources of which are in 116 30 36 40 the Zariaspes the sources of which are in 113 39

Ptolemy, *Ptolemy's Geography*, trans. and ed. E. L. Stevenson (New York: New York Public Library, 1932), 6:142–43.

the Artamis the sources of which are in 114 39 the Dargoedus the sources of which are in 116 39 it flows into the Oxus in 116 30 44 the others are the Artamis and the Zariaspes which, after uniting their waters in 113 40 they flow into the Oxus in 112 30 44 the Dargamanis moreover after uniting with the rivers in the location 109 40 10 flows into the Oxus 109 44 20

The *Salaterae* and the *Zariaspa*e inhabit northern Bactria along the Oxus river; toward the south below the *Salaterae* are the *Chomari*; below whom are the *Comi*, then the *Acinacae*, then the *Tambyzi*; below Zariaspa are the *Tochari* a great race;¹ below these are the *Marycaei*, the *Scordae* and the *Varni*, and below these are the *Sabadi*; and next below *Sabadi* are the *Orysi* and the *Amarisipi*.

The Bactrian towns in that part near the Oxus are

Charracharta	110	44	10
Zaripa	115	44	
Choana	117	42	
Suragana	117	30	30
Phratrua	119	39	20
near the other rivers			
Alicodra	107	30	30
Chomara	106	30	30
Curindra	109	30	10
Cavaris	111	20	43
Astacana	112	43	20
Evusmi regia	108	20	10
Menapia	113	41	20
Eucratidia	115	42	
Bactra regia	116	41	
Estobara	109	30	40
Maracanda	112	39	15
Maracodra	115	40	40

¹A nomadic tribe arrived from Central Asian steppe, probably in the Yuezhi confederation.

Chapter XII

LOCATION OF SOGDIANA
(SEVENTH MAP OF ASIA) *

The boundary of Sogdiana on the west is a part of Scythia near the section of the Oxus river which runs along the confines of Bactria and Margiana, then through the Oxius mountains near the Jaxartes river in 110 49
 on the north by a part of Scythia along the Jaxartes river where it bends near the terminus which is in 120 48 30
 on the east alone by the Sacara region along the Jaxartes river where it bends from the sources in 125 43
 and along a direct line to the terminus which is located in 125 38 30
 on the south and the west by Bactriana along the Oxus, which section we have noted, and near the Caucasus mountains which are called the mountains of India, to the line which connects the indicated terminus and the sources of the Oxus river 119 30 39

The mountains between the rivers of Sogdiana have their termini in 111 47
 and 122 46 30
 one of its rivers flows from the Oxia lake, the middle of which is located in 111 45
 and there are other rivers flowing from these mountains called the Comedarum from which the Jaxartes flows, and into which river they empty; another is called the Dymus, the sources of which are in 124 43
 where it joins with the Jaxartes 123 47
 another of these rivers is called the Bascatis, the sources of which are in 123 43
 and where it unites with the Jaxartes 121 47 30

In parts of the region near the Oxius mountains the *Pasicae* dwell, near the section of Jaxartes on the north dwell the *Iali* and the *Tachori*, below whom are the *Augali*; then next to the Sogdios mountains are the *Oxytrancae*, the *Drybactae* and the *Candari*, and below the mountains are the *Mardyeni*; and near the Oxius are the *Oxiani* and the *Chorasmi*; in the parts which are near these toward the east dwell the *Drepsiani* bordering both of the rivers; and near these but more toward the source are the *Aristenses* near the Jaxartes, the *Cirrodaces* near the Oxus; and between the Caucasus mountains and Imaus mountains the region is called Vandabanda.

The mountain towns of Sogdiana near the banks of the Jaxartes are
 Cyrescha 125 46 20

and near the Oxus

Oxiana 117 30 44 40

Maruca 117 15 43 40

Cholbisina 117 40 41

between the rivers and more remote

Trybactra 112 15 45 30

Alexandria Oxiana 113 44 40

Indicomordana 115 44 40

Drepsa metropolis 120 45

Alexandria ultima 122 41