

In the morning, he wore clothes brought from Pelousion located on the eastern branch of the Nile.⁸⁹ At dusk, the High Priest changed his clothes and wore less expensive ones—although they were also expensive—brought from India, most probably via Egypt.⁹⁰

In the Jerusalem Talmud, Yoma 3:6, 30d, there is a clarifying tradition:⁹¹

We have learnt: And the second clothing from Pelousion was not any more beautiful from the first one from India, and this is based on a tradition stated in a detailed report: type A from the best cloth brought from Pelousion—there is no better than it, the type B from the cloth from Pelousion is equal in quality to type A of the cloth brought from India, and type B from Pelousion is not more beautiful than type A from India, according to the tradition (account) stated in the detailed report.⁹²

The Talmudic teacher knew that the merchandise brought from Pelousion was of better quality than goods from India, and that it was 50% more expensive. Nonetheless, the Talmudic teacher emphasizes that the level of cloth type B from Pelousion is equal to cloth type A from India (according to either R. Meir or the sages).⁹³ The Jerusalem Talmud raised additional traditional points about the expensive garments of priests who worked in the temple. One of them was the High Priest Ishmael ben Phiabi,⁹⁴ and the other was Eleazar ben Harsom, who was extremely wealthy.⁹⁵ These facts explain the high price of the garments exported from either Pelousion or India.⁹⁶

Most probably, the millet wares mentioned in the Talmudic literature a few times as expensive garments were also imported from India. So it is told, for example, in Ketubot 66b:

"Surely it was taught: It was said about Nakdimon ben Guryon that whenever he would leave his house [go] to the academy, carpets of fine millet would be spread out beneath him, and poor people would come: and roll them up after him."

It is clear that extreme wealth is being described here. Consequently: as it is told in the Baba Batra 146a:

"Come, learn that Rav Yehudah said in the name of Shmuel: There was an incident involving a certain person who sent to the home of his father-in-law a hundred wagons, [containing] jugs of wine, jugs of oil, silver utensils, gold utensils and fine wares of millet and in his elation rode..."⁹⁷

The storyteller added more on the subject of millet wares,⁹⁸ but the central issue is still unclear: what are the millet wares, and why were they so expensive?

Indeed, even if the word is pronounced, as some would say it, with an "ah" vowel (as in *milat*), it would still resemble the word "millet" in English, a word that came to English from Latin with French mediation, a word whose meaning is millet, the grain plant.⁹⁹ In the context of this subject, the importance is not only the etymological perspective of the word, but the testimonies that millet was exported

from India to the Roman Empire.¹⁰⁰ Consequently, it appears that the extremely high price of the cloth called millet originated from the fact that it came from India. In fact, no known cloth is woven from millet, but it seems that these products were called after the main export item. Therefore, since the vessel was loaded in India with millet (and at a location also called Millet, the name of its main export item), the cloth itself was called "millet," too, even if it was not actually made from that plant.¹⁰¹

Iron

Iron was exported from India in the period of the Roman Empire, if not for many years before it.¹⁰² Indian iron had a reputation as being a reliable material for weapons. It was produced using a unique technique that made it less fragile than the iron known in Europe and, therefore, was found to be adequate for battle swords. In fact, modern researchers studying ancient metallurgy found that Indian iron was actually steel (iron with at least 1.5% carbon) and was melted at temperatures of at least 1400 degrees Celsius.¹⁰³ Obviously, anyone whose life depended on good armory valued superior metal and was willing to pay for it accordingly. Talmudic Literature includes the following three testimonies in regard to the Indian steel.

1) **In the Babylonian Talmud, Avodah Zarah 16a, it is explained:**

Said Rabbi Ada Bar Ahavah: One should not sell foreigners raw bars of iron. Why? Because, the foreigners use them to make weapons. If so, said the speaker, we would not sell the foreigners even pick-axes or axes from which one can make weapons! Rav Zevid answered: The prohibition is on iron from India, on which the prohibition is valid, because this metal is appropriate for weapons. But aren't we today selling foreigners iron against the original verdict? Responded Rav Ashi: We are selling only to the Persians who are protecting us.

In fact, all this is said in Babylon, not in the land of Israel, but it will immediately be shown below that the export of iron from India didn't stop in Babylon and had reached the land of Israel (and also Rome, of course).

2) **Midrash Tehilim (Psalms) 6 (Yalkut Shimeoni Tehilim, Remez, 635):**

Said R. Elazar: The issue is a parable of a king who was angry with his son while holding an Indian sword in his hand.

Here is a Talmudic scholar in the land of Israel who knows about a sword made of Indian iron.¹⁰⁴

3) **Midrash Tanhuma (Buber), Portion Va'etkhanen, paragraph tag F:**

Said R. Abbahu: What does it resemble to, to one of the highest in the kingdom who found a Indian sword, like nothing similar in the world, and said: This befits no one

but a king! What did he do, he brought it as a present to the king, said the king: Cut his head with it.¹⁰⁵

These two traditional portions from the land of Israel of the third century CE, approximately, make it evident that India exported iron (steel), of excellent quality that reached both the Jews of the land of Israel and the Jews of Babylon. Note that both cases refer to iron in the hands of kings. It was expensive merchandise that only the very rich could afford. But, as is known, there were many kings in ancient times, as there were many wars, a fact that explains how Indian iron reached the fertile crescent region—and, during the same time frame, how numerous coins and goods from the west reached India. Therefore, it is evident that Indian iron was considered “good” iron, just as Indian gold was considered good gold a few hundred years earlier.

What was the origin of the iron in India, a large sub-continent? Well, the suggestion is that the iron originated in a place called Chera.¹⁰⁶ Chera is identified as a kingdom whose main port in southern India was Muziris. This city is now known by its modern name, Cranganore, and is a neighbor of Cochin, which was established hundreds of years later.¹⁰⁷ So, the iron that came from India to the land of Israel in the Roman-Byzantine periods is documented in the Talmud. And, this iron came from the same region of India where hundreds of years later there were Jewish communities, which saw themselves as being of ancient origin.

As long as Rome ruled the Mediterranean, in general, and Egypt, in particular, it imported various products from India. However, apparently, as a result of inflation in the Roman Empire during the third century CE, the demand for luxury items started to decline and the trade between Rome and India shrunk. This reduction was felt also in the land of Israel. With the fall of the Roman Empire, imports from India declined even further and returned to what they were in the past: small scale imports carried out by private merchants without the backing of a central government.

2. Religious Influences on India and Immigration to It

The inhabitants of the Middle East, Jews among them, immigrated to India over the generations, most probably as a result of the broad commercial activity between the two regions. King Ashoka, who reigned over most of India (except the south), in the middle of the third century BCE, mentions the Greek King Antiochus in one of his kingdom's decrees.¹⁰⁸ Scholars identify this king as Antiochus II,¹⁰⁹ and from that period on, the “Yavanah” are mentioned many times in Sanskrit and in Tamil.¹¹⁰

One of King Ashoka's decrees was found in Afghanistan. It had been published as a bilingual document, in Greek and Aramaic, which means that there were enough people in India who spoke and read Aramaic; Jews could have been among them. However, these people came to India from the north over land, and it is somewhat hard to imagine the presence of Jews from the land of Israel in caravans that passed through Persia and Afghanistan. The shortest and easiest route to India for the people from the west, including Jews, was by sea. In fact, plenty of Hellenistic finds exist in India and Sri Lanka, especially along the shores. Those “Yavanah” were not only Greeks from Greece who settled in India, but were also people of the Levant who went through the process of Hellenization. With the strengthening of the economic ties between Ptolemaic Egypt and India, they made their way to India and remained

there as commercial representatives of the west. No doubt, the people of India could not distinguish between Jews and "*Yavanah*," as to them, they were all "white" and foreign. In any event, there is no known reference to Jews in India during this period. The Jews from the land of Israel had only a marginal share in the commerce with India, so their numbers among settlers in India was, most probably, also marginal.

There were exceptions, however. Nicanor, who lived in Alexandria in the first century CE, accumulated his wealth from the Indian-Roman trade,¹¹¹ and possibly also sent his representative to India, was, obviously, a Jew. Maimonides' brother, who lived in Egypt in the twelfth century CE, drowned in the Indian Ocean during a trip to purchase precious stones for his business. That fact only strengthens the understanding of the background of the Jews who settled in India. The people of the "*Yavanah*" settlements were merchants, representatives, and relatives of those who lived in Egypt and who were concerned about the economic interests of their partners overseas.

Nothing is known about the precise time when the Jews came to India, but Thomas, one of Jesus' disciples, who lived as Jew in the land of Israel, spread the Christian gospel when he reached India in 52 CE.¹¹² His area of activity is not as clear as Paul's in Asia Minor, but by using analogy, one can deduce that Thomas worked among the Hellenistic merchants. If a Jewish community existed there, he was likely to have visited it. It is difficult to determine if Thomas was, in fact, persecuted and had to flee to India, but if this was so, then it could have been a precedent for other refugees from the west to follow—fleeing an intolerant, fervently religious culture to live in a multi-cultured, spiritual world that believed in tolerance.

Scholars who reject the church's traditional accounts as unhistorical still must admit that Christian activity in India started among the Hellenistic communities, and that these Christians were located in southern India, close to the shores of Muziris. Scholars stress that Christianity in India started as a Hellenistic spiritual activity, just like in Asia Minor. Since the Middle Ages, the Christians of Saint Thomas have been linked with the Assyrian church (the Nestorian/Syrian and other streams of the religion), that is, with others of the same religion in the Persian Gulf. However, these Christians' spiritual origin was the Mediterranean Hellenism that reached India via Egypt and Yemen. Only after their connection with the west was broken—following the fall of the Roman Empire and the massive decline in commerce in the Indian Ocean—did they build ties with Christians in Iraq and Syria.

The histories of the Christians and the Jews in India have several parallels, as is to be expected of two monotheistic minorities with partially common traditions, living within a pagan society.¹¹³ However, the testimonies on Christian settlements in southern India apparently look more reliable than the ones on Jewish settlement there in the first centuries CE. Yet, remember the possibility that there could have been just an "optical mistake" there, and what was called a Christian settlement was originally a Jewish one that over the years converted to Christianity.

3. A Talmudic Scholar of Indian Origin

To end this discussion of the ties between the land of Israel and India, it should be mentioned that a Talmudic sage lived in Babylon. He was named Rabbi Yehuda

Hindua, that is Rabbi Yehuda the Indian, and the following is written about him in the Babylonian Talmud *Baba Batra* 74b:¹¹⁴

Rabbi Yehuda the Indian was telling a story: Once we sailed on a vessel, and we saw in the water a precious stone guarded by a crocodile circling around it. A diver descended to bring the stone up, the crocodile came and wanted to swallow the vessel. A predatory bird came and cut the head of the crocodile, and water turned to blood. Another crocodile came, the partner of the first, took the stone and placed it on the dead crocodile and it returned back to life! The crocodile came back and wanted to swallow the vessel again. Came the bird and cut off his head. They raised the stone and brought it on the vessel. We had on our boat salted bird's meat. They put the stone on the birds and they came to life and flew away taking with them the precious stone.¹¹⁵

This story, told by a Jewish sage of Indian origin, probably reflects the way of life in the Persian Gulf—where there are divers and where pearls are collected,¹¹⁶ and where there was room for popular myths about “the stone of life” and about marine monsters (like the stories of Rabba bar bar Hana and their continuation).¹¹⁷ This sage is mentioned only one more time in the Babylonian Talmud, in *Kiddushin* 22b, where he is described as a “converted Jew who has no heirs.” The text notes that he had a slave and that he lived during the days of Mar Zutra (fourth to fifth centuries CE). That is, this sage is an Indian who converted to Judaism and settled in Babylon. It is no surprise, therefore, that the story he tells is about a sea that connects India to Babylon. From the Jewish tradition, it seems that this was a unique case, but from analyzing cultural ties that lasted thousands of years between Mesopotamia and India, it appears that there is nothing to wonder about in this phenomena. Ties between Indians and the residents of Babylon (including Jews) led, most probably, not only to Indians converting to Judaism, but also to the conversion of Jews to Indian religions (and/or to Christianity).

With Rome's decline, the commerce between the west and India diminished, reducing the flow of news about what was happening in the Indian Ocean during the Byzantine period.¹¹⁸ This obscure period in regard to ties between India and the land of Israel lasted for hundreds of years after the conquest of the land of Israel by Islam. It remains very hard to find clues to the history of Indian Jews during the hundreds of years that passed between Hellenistic activity and Jewish settlement in southern India.¹¹⁹

As is known, the Jews of Cochin kept brass tablets written approximately in the year 1000 CE. These tablets show the rights the Jews of Cochin gained from the local government.¹²⁰ Probably, these rights would not have been given to the Indian Jews if they hadn't been in this place for at least 100 or 200 years, but it is impossible to say they were with assurance. Geographical conditions didn't change in the marine arena that included the Indian Ocean or in the areas where the Jews of Yemen and Iraq lived. However, as it turned out, new European colonial activity in India, starting with the arrival of Vasco da Gama in 1497, started a new phase of

commercial and military maritime activity. From this resurgence forward, the Jews of Cochin began to enter the historical consciousness of the Jewish people.

Immigrants probably built the Jewish community in Cochin over many generations, and so it is not the result of a one-time settlement, as the *History of the Jews of Cochin* claims.¹²¹ For many generations, marine and commercial conditions as well as Islamic persecution, or the Roman administration, or Byzantine Christianity, provided good excuses for many generations of immigration to India. Moreover, it seems that analysis of the later, broader history of the Jews of Cochin confirms the community's beginning as a settlement of Jews at the "end of the world," a result of forced immigration from several places, but mainly Yemen.

Summary

Almost 2000 years went by from the time that the ships of King Solomon visited the shores of Ophir in India and the time when Jews are mentioned in India. Almost another thousand years passed until the marine trade-lines between the land of Israel and India were opened.

The fundamental geographical conditions didn't change, but over the years, the world gradually shrank. Once seemingly enormous distances were considered reasonable enough to traverse. The land of Israel enjoyed Roman trade with India, even if it was on its margins, since most of this trade passed through Egypt and Alexandria.

The decline of the Roman Empire caused the "disappearance" (if not the conversion) of the "Yavanah" in India, Jews most probably among them. Actually, Indian Jews, and more precisely, the Jews of Cochin, appear in a "charter" which was written around the year 1000 CE (even if the city of Cochin didn't exist then). One must hope that we can learn more, in a better way, about other ties between India and Egypt, and the Jewish activity there from geniza documents that S.D. Goitein collected in his *Book of India*, a book we are expecting.

NOTES

¹ The Babylonian Talmud, Megila 11a, says: "From India to Kush; Rav and Samuel." One said: "India is the end of the world and Kush is the end of world." Another said: "Both are mentioned as being neighbors." This second interpretation is far from simplistic, and was possibly said under the inspiration of Genesis 14:23: "from a thread even to a shoelatchet."

² The translation attributed to Jonathan says: "Pishon is surrounding all the land of India." Consequently, this is also the translation in the Neofiti version. Genesis 25:17: "From Havilah unto Assyria," was translated in a work attributed to Jonathan as, "From India to Halutza." The Neofiti accepted this version.

³ Scholars disagree about almost every word involved in this entire subject matter, and it is impossible here to consider all the opinions. However, see: I.M. Grintz, *Origins of Generations* (The United Kibbutz, 1969), pp. 50-3. In short, Grintz's

interpretation is that Havilah refers to Ethiopia. He almost completely disregards the possibility that it is India, and does not take into consideration a significant portion of the discussion outlined here. It is worthwhile to view his opinion as a "balance" to the discussion in this research, even though in his entire work, not even one piece of evidence supports a reference to Ethiopia (more on this to follow). Even if some scholars claim that "Havilah" is one of the sons of "Kush," it does not necessarily mean that Havilah must be physically close to Kush. Moreover, there is a Havilah who is Ophir's brother, as well Hazarmaveth's (Genesis 10:21-29). However, compare I.M. Grintz, *The Antiquity and Uniqueness of the Book of Genesis* (Jerusalem, 1983), p. 65, "It seems that the reference is to the land of Ethiopia, even though there are those who assume that Havilah is India." For more on the research, see E.A. Speiser, "The Rivers of Paradise," R. von Kienle, A. Moortgat, and Festschrift Johannes Friedrich, eds. (Heidelberg: Carl Winter, 1959), pp. 473-485.

⁴ Of course, a number of opinions exist about this issue. The choice here was based on considering linking the two rivers in the center of the populated world, and the two other rivers in the "end" of this world. The word "surrounding" in regard to these two rivers testifies about them. See also Geula Cohen, "Pishon," in *Biblical Encyclopedia*, Vol. 6 (Jerusalem, 1981), pp. 480-1. About the views of the past sages, attributed to Jonathan, and for more see A.M. Haberman, ed., *The Writings of Avraham Epstein* (Jerusalem, 1950), pp. 57-9. Note, that the author of the *Book of Enlightenment (Zohar)*, or someone from his school, was under the opinion that the Pishon was the Nile. See *The Book of Zohar, Midrash Ne'elam, Life of Sarah*, 125a.

⁵ Hecataeus, considered the "father of geography," held this view of the world. In this description the world is round (meaning a disk) and surrounded by water. While the Mediterranean Sea is correctly depicted, even if relatively so, to its south Hecataeus describes only four rivers: the Nile, the Euphrates, the Hiddekel (drawn without a name) and the river Indus. See Guido Majno, *The Healing Hand, Man and Wound in the Ancient World* (Cambridge, MA and London: Harvard University Press, 1991), p. 228 (based on a map from the fifth century CE). This means that the Greek grasp of the world was based on the old approach (both Mesopotamian and Biblical), though the Greeks already knew a "larger" world.

⁶ For more about the link between Literature of Wisdom and the story of the Garden of Eden, see R.B.Y. Scott, *The Way of Wisdom in the Old Testament* (New York: Macmillan, 1971), p. 81; R.N. Whybray, *The Intellectual Tradition in the Old Testament* (Berlin and New York: Walter de Gruyter, 1974), pp. 104-8; Calum M. Carmichael, "The Paradise Myth: Interpreting without Jewish and Christian Spectacles," in *A Walk in the Garden*, P. Morris and Deborah Sawyer, eds. (Sheffield: JSOT, Supplement Series 136, 1992), pp. 47-63.

⁷ It is worthwhile to observe that the description "and the gold of that land is good" is close to the one about King Solomon's work on the Temple (II Chronicles, 3:5): "And the greater house he ceiled with fir tree, which he overlaid with fine gold," was, most probably, the good gold mentioned here, and described below, in regard to King Solomon's travels.

⁸ To a certain degree, this description is reminiscent of the Eldorado legend and the gold rush in North America (below you will find discussion of other similarities between the discovery of India from one side and of North America on the other).

⁹ S.N. Kramer, "Dilmun: Quest for Paradise," in *Antiquity* 37 (1963), pp. 111-5.

¹⁰ Sir Mortimer Wheeler, *Civilizations of the Indus Valley and Beyond* (London: Thames and Hudson, 1966), pp. 64-6, 70, 151. This contains descriptions of additional economic ties, as well as chronological issues outside the scope of this article. Modern day proposals to identify Dilmun (together with two other relatively near locations) with Bahrain are not withstanding criticism (first, one must bring evidence to the existence of a culture there in the third millennium BCE, and then one must question if Bahrain could export these products). See W. Horowitz, *Mesopotamia Cosmic Geography* (Winona Lake, IN: Eisenbrauns, 1998), p. 328.

¹¹ In fact, the Mesopotamian sources mention a number of places in the same direction: Dilmun, Magan, and Meluhha, and the researchers struggled about whether to locate these places in India or in Ethiopia, finally deciding for India, in the region of the Indus (among other reasons, because of its closeness compared to Ethiopia). They did all this without yet being aware of the difficulties of sailing in the Indian Ocean (see below). See W.F. Leemans, *Foreign Trade in the Old Babylonian Period* (Leiden: E.J. Brill, 1960), pp. 159-166.

¹² Herodotus, 3, 94; I. Lior and M. Schpitzer, "India," in *Biblical Encyclopedia*, Vol. II (Jerusalem, 1954), pp. 792-5.

¹³ Dilip K. Chakrabarti, "The Old Copper Mines of Eastern India," in Robert Maddin, ed., *The Beginning of the Use of Metals and Alloys* (London: MIT Press, 1988), pp. 239-244. About the origin of iron production in a relatively later period, see D.D. Kosambi, "The Beginning of the Iron Age in India," in *Journal of the Economic and Social History of the Orient* 6 (1963), pp. 218-309.

¹⁴ Vimala Begley and Richard Daniel De Puma, eds., *Rome and India: The Ancient Sea Trade* (Madison, WI: University of Wisconsin Press, 1991), pp. 12, 15.

¹⁵ The deriving explanation is simple: The longer the operational period of the mine, the more difficult it is to satisfy its firing energy needs, and more uneconomical the operation becomes. This phenomenon explains the closing down of other mines (such as the brass mines in the land of Israel and Trans Jordan), even though the need for firing materials was much smaller in the tropical climate of India.

¹⁶ S.A. Loewenstam, "Bdellium," in *Biblical Encyclopedia*, Vol. II (Jerusalem, 1954), pp. 35-6.

¹⁷ Midrash Rabba Genesis 16:b follows: "Rav Aibo said: You might think that the *bedolah* used by perfume-makers is a sap of a tree," therefore it says, "Its fellow telleth concerneth it (Job 36:33), just as the latter is a precious stone, so is the former a precious stone."

¹⁸ In the Syrian-Israeli translation: "And Yemen is *gumarta* and the rock *dehirta*." See M. Goshen-Gottstein, *The Bible in the Syrian-Israeli Translation*, (Jerusalem, 1973), p. 4. The "*gumarta*" is a perfume placed on coals to spread good scent, and "*dehirta*" can be explained in a number of ways.

¹⁹ R.H. Warmington, *The Commerce Between the Roman Empire and India*, 2nd revised edition (London: Curzon Press, 1974), pp. 187-8, 216. Apparently, the origin of the mistake was in the system of marine transportation, from which obvious considerations (see later), split the import activity to vessels of one kind for the Indian Ocean, and to smaller vessels of different kinds, in the Red Sea (and in the Gulf of Bengal), and as a result, the Indian merchandise (and merchandise from Sri Lanka, etc.), was constantly stored in warehouses in Yemen and in Somalia (such as glass which was found in Moza in Yemen). This does not mention, however, that no middleman would readily admit that he was not the producer, but merely the go-between.

²⁰ See Y. Felix, *Trees of Perfume, Forest and Ornament: The Vegetation of the Bible and the Sages* (Jerusalem, 1997), pp. 80-4, 89-97; M. Har'el, *The Historical Geography of the Land of Israel* (Tel Aviv, 1997), pp. 457-9; Majno, *The Healing Hand*, pp. 207-227, 447-450. (Very extensive bibliography on the archeological and literary findings in regard to Arabian perfumes.) In approximately 2500 BCE, Egypt imported myrrh from the land of Punt (that is India, see below), and possibly production of myrrh was transferred to Arabia from India.

²¹ Felix, *Trees of Perfume*, pp. 33-5. The origin of the word "b'dolakh" is probably from the Sanskrit "madalaka."

²² About the onyx stone, and about other precious stones, see D. Soler, "Precious Stones," in *Encyclopedia Eshkol*, Vol. A (Berlin, 1929), pp. 273-285; D. Ginzburg, "The Identification of the Breastplate's Stones," in *Appendices to Vol. 2, The Opinion of the Bible: Book of Exodus*, A. Hakham, ed. (Jerusalem, 1991), pp. 67-73.

²³ In the translation of Exodus 35:27 attributed to Jonathan, there is a link between the breastplate's stones and India, because the translator says: "and clouds of the sky flow to Pishon and from Yemen my stones are drawn." Pishon, as mentioned, surrounds the land of Havilah, that is India. See also M. Goshen-Gottstein, *Excerpts from the Aramaic Translations of the Bible* (Ramat-Gan, 1983), p. 65.

²⁴ One related example is in the name of the biblical expression of leprosy. Even if the identification of this disease requires investigation, it is absolutely clear that it does not refer to one illness but to a "family" of illnesses (as with the plague). Consequently, possibly the "shoham stone" is not a particular stone, but a group of ornamental stones now referred to as "semi-precious stones," or a "family of beautiful stones," for which people are prepared to pay a high price, though less than for a diamond.

²⁵ For the identification of Muziris, see Begley and De Puma, *Rome and India*, p. 122, n. 25; see also comments by Brian Weinstein at the end of the article, particularly p. 502.

²⁶ Begley and De Puma, *Rome and India*, p. 116.

²⁷ See M. Bar Ilan, "Prester John: Fiction and History," in *History of European Ideas*, 20/1-3 (1995), pp. 291-8.

²⁸ James S. Roman, *The Edges of the Earth in Ancient Thought* (Princeton, NJ: Princeton University Press, 1992), pp. 82-3. An example of the confusion between

India and Ethiopia is evident in the eighth century CE map based on earlier sources. In this map, most parts of which are "correct," the river Ganges flows in Ethiopia (one must remember that the further an object is from the eye, the larger the scale of the mistake in distinguishing its details). See Evelyn Edson, "The Oldest World Maps: Classical Sources of Three Eighth Century Mappaemundi," in *The Ancient World*, 24/2 (1993), pp. 169-184. (In the various maps there are examples of other mistakes, including that the world is a "disk" and surrounded by water.)

²⁹ Review, M. Avi-Yona, *Essays and Studies in Geography* (Tel-Aviv and Jerusalem, 1964), p. 156; M.H. Stern, *The Influence of the First Israeli Kingdom on the Economy of the Country and the Life of the People* (Tel-Aviv, 1973), pp. 61-3.

³⁰ A.S. Hartum, "Ophir," in *Biblical Encyclopedia* (Jerusalem, 1950), pp. 163-4. Hebrew.

³¹ Glass is implied here for two reasons: 1) The relative advantage of Phoenicia in this area; 2) The vessels assigned to import gold needed to export cargo of similar weight, even if only for ballast or balancing needs (the characteristic weight of gold is 19.3 and of silica approximately 2.2). Also, one should not disregard the exporters of metals, partly as brokers for merchandise from other seafaring countries. It is possible that Phoenicia or the land of Israel were the sources of some of the glass artifacts discovered in India, of which the identity is not yet known. See Begley and De Puma, *Rome and India*, p. 117.

³² Exported products were also foods for the sailors, including fruits, which the land of Israel excelled in growing (Deuteronomy 8:8). Also see Y. Braslavy, *The Historical Geography of the Land of Israel*, pp. 98-107. Brass is also a possibility due to the same reasons given for glass: a) Relative advantage, given the brass mines in "Jordan Square" where King Solomon was active (I Kings 7:46; II Chronicles 4:17); b) The vessel's weight in export which was supposed to be similar to its weight in import. The characteristic weight of brass is 8.92 and the meaning of this data is that the volume of the gold imported to the land of Israel was much smaller than the volume of brass and glass exported. Compare, Y. Braslavy, *Information on the Land of Israel from the Bible* (Tel-Aviv, 1970), pp. 51-4.

³³ Braslavy, *Geography to the Bible*, p. 54.

³⁴ Support for the assumption that Ophir is actually Sopara can be found in the two words transliterated from Sanskrit to Hebrew—"ophir" and "algum," by dropping the prefix consonant. Actually, this is also the case in the transliteration of the name Indus, whose origin in Sanskrit is "sind." Here too, the prefix consonant was dropped (similar to the dropping of the first letter in psychology). To complete the understanding of the transliteration of "supara" "ophir," one must first make an observation about the vocalization and, later, about the consonants. The biblical author wrote in a short style, using only consonant-based writing. The "yod" was added later to the words as a vowel-letter (especially towards the end of the word), in the much earlier period before vowel-signs were added. The adding of the "hey" at the end of the written word was accomplished by a similar, though different, method, and there are examples of the letter "reish" as a final form with a consonantal force

(as in Genesis 24:57; Deuteronomy 22:20; and others). During the period of the First Temple, the guttural letter "fei" was pronounced hardened as "pei," that is, with an aspirated sound. See J. Liebes, "Seven Doubled Consonants: Bet, Gimel, Daled, Khaf, Fei, Reish and Taf." More on the "doubled reish," and the background of the "Sefer Yezira," in *Tarbiz* 61 (1992), pp. 237-247 (particularly p. 240). A further point can be made about the word India (*Hodu*). In Sanskrit, the letter "samekh" was used as a breathed, initial letter; the initial "samekh" was then dropped, and the "nun" disappeared due to its closeness to the other consonant (as in other cases in other languages). The remaining letters "he" and "daled" were vocalized in the Bible just like other foreign words (such as: Pharaoh or Sennacherib), according to "Jewish" rules. On the other hand, in Greek, the "samekh" disappeared and so did its aspirated sound but the letter "nun" remained in India, due to its different pronunciation and spelling rules.

³⁵ Remember that the ancient navigators did not possess maps, and if they had "guide-books," these, most probably, were kept secret as maps in Europe were kept secret during the fifteenth and sixteenth centuries, as were directions to hidden treasures. Probably, this is why a precise description of the route is missing, so the places cannot be clearly identified without further archeological finds.

³⁶ There are two interpretative directions: 1) The word "tarshish" was introduced here by the author by a mistake, because it appears in its place later in the verse, but the subject actually deals with Ophir. 2) In this "Tarshish," one can see a name of a different place than the one in the Mediterranean Sea, and if so, the "ani-tarshish" is referring to vessels headed to Tarshish (in this case, there is no author's mistake and the description in the sources is the same). The Bible mentions a precious stone called "tarshish" (beryl) together with onyx and "jasper," all in the clothes of the High Priest and in the court of the King of Tyrus. (Ezekiel 28:13: "Thou hast been in Eden the garden of God; every precious stone was thy covering, sardius, topaz, and the diamond, the beryl, the onyx, and the jasper, the sapphire, the emerald; and the carbuncle, and gold.") It is possible that the stone is named after its origin, and if so, not only gold was brought from Tarshish but also precious stones that found their way to Tyrus as a result of the cooperation mentioned above, between Judea and Tyrus. Also see M. Eilat, *Economic Ties Between the Countries of the Bible During the First Temple* (Jerusalem: Mosad Bialik, 1977), p. 190, n. 36.

³⁷ The settlement of people from Tyrus and Phoenicia in western Africa is known from a later period. It is obvious that there, too, the Phoenicians had no need for joint ventures with King Solomon, just as it is obvious that the length of the voyage was not so long.

³⁸ This is a counter argument against those who want to find Tarshish in Spain, even though no data has been provided on gold mines in this region. See Z. Herman, *Peoples, Seas, Ships* (Tel-Aviv: Masada, 1962), pp. 205-220. For more on Tarshish, see M. Eilat, "Tarshish," in *Biblical Encyclopedia*, Vol. 8 (Jerusalem, 1982), pp. 942-5; Eilat, *Economic Ties*, pp. 150-3.

³⁹ The large difference between the two descriptions could indicate that two separate kingdom clerks authored them. Both wrote about the cooperation between King Solomon and King Hiram that brought gold to Jerusalem, but beyond it, there accounts are different in all the other details. However, this difference does not necessarily point to a different departure port, or to a real difference in the definitions of the destination ports of the various expeditions.

⁴⁰ For a picture of a model of a Phoenician vessel from the seventh century BCE, featuring a crew of approximately 25 people, see Herman, *Peoples, Seas, Ships*, opposite p. 200. In the carvings from Sennacherib's palace, Phoenician vessels are described with triangular sails, two rows of rowers, and a crew numbering altogether approximately 20 to 25 people. See Eilat, *Economic Ties*, Table 4, opposite p. 47.

⁴¹ John H. Pryor, *Geography, Technology, and War: Studies in the Maritime History of the Mediterranean* (Cambridge: Cambridge University Press, 1988), pp. 649-1571.

⁴² All data is taken from top expert in the area: L. Casson, "Ancient Naval Technology and the Route to India," in *Rome and India*, pp. 8-11. See also Y. Braslavsky, *Do You Know the Land?* 4 (En-Harod: Hakibuz Hameuhad, 1952), pp. 430-3.

⁴³ In a very later period, a monsoon vessel sailed only for seven months in a year; for the remaining time, it was anchored in a port without being able to shorten its voyage. On the other hand, vessels of the "normal" (Phoenician) model, sailed along the shores and had to be careful with these winds. However, the sailors who sailed to India and returned had to overcome barriers of the kind that even Odysseus could not manage: 1) Sailing from Muza along the shores of Arabia without being swept with the winds toward the open sea (and the same difficulty coming back), 2) Sailing along the shores of India under wind conditions that either push or pull the vessel from or to the shores; 3) Sailing the Red Sea, "The Sea of Storms," and after that heading north toward Ezion-geber against the wind. Moreover, sailing along the shores of western India was considered extremely dangerous during a little more than three months, and it meant that a ship arriving at the mouth of the Indus in the month of June had to wait a few months before it could proceed southward. To summarize this subject matter, even if it is difficult to calculate precisely the number of months that the sailors had to sit idle, it is obvious from the three years the vessels were absent from Ezion-geber, that a little more than half of this time was spent in port (from here derives the genealogy of the sons of Joktan in Genesis 10:26-29: Hazarmaveth, Sheba, Ophir, Havilah, and Jobab, which were stations in the maritime voyage from the land of Israel to India. Compare this with the claim of those who believe that Ophir was on the shores of the Red Sea, and that the trip to Ophir lasted only a year and a half or two (this without doubting the author's report on the large amount of gold). See Eilat, *Economic Ties*, pp. 146, 192. On the other hand, Har'el, *Historical Geography of the Land of Israel*, A, p. 220, is of the opinion that the other Tarshish was located in the Malay islands. That is, he considered the extremely long duration of the voyage and "translated" it to a long distance, but without taking into

account the special conditions in the Indian Ocean as well as other considerations upon which he did not elaborate.

⁴⁴ Herman, *Peoples, Seas, Ships*, pp. 241-7. Moreover, Herman identifies Ophir with Punt, as known from Egyptian sources, starting from the fifth dynasty as the "land of El" (and this is also the opinion of most scholars, see Eilat, *Economic Ties*, pp. 193-4, but he didn't mention India as he didn't evaluate the export products of Punt). From Punt, Egypt imported perfumes, myrrh oil, ebony trees, silver and gold alloys, and midgets. Later, in the fifteenth century BCE, Egypt imported from Punt: myrrh essence, ebony trees, ivory, gold, cinnamon, frankincense, kohl for eye-shadow, long-tailed monkeys, gray dogs, and panther hides. (Herman, *Peoples, Seas, Ships*, pp. 39-48) From this description, it appears clear that the land of Punt was in India, and no "so-called discovery" can change this. About the culture in Zimbabwe, see R. Summers, "City of Black Gold," in *Vanished Civilizations*, Eduard Bacon, ed. (London: Thames and Hudson, 1963), pp. 33-54. For more on Indian export products see below. As to midgets, this seems to refer to the people of the Andaman Islands in the Bay of Bengal, a few hundred kilometers east of India (which were, and still are, part of India). See A. Montego, *The Man—His First Million Years* (Jerusalem: Targumei Hamada Haisraeli, 1964), pp. 78-81. After I wrote this, I found a book that claims to be a research work, but is actually a fairytale. See E. Valikovsky (Israel, 1997). While there is no need to discuss all the mistakes in the book, it is enough to mention that according to him, both Punt and the "land of El" are the land of Israel. If one ignores the question of timing (and that is the author's method), it is still completely clear that the land of Israel never exported perfumes, ivory, or high quality wood. See, for example, *Periods in Tohu*, pp. 86-91, 101-4. For more on the rejection of his work, see E.C. Krupp, "Observatories of the Gods and Other Astronomical Fantasies," in *In Search of Ancient Astronomies*, E.C. Krupp, ed. (New York: McGraw-Hill, 1979), pp. 241-278.

⁴⁵ From the history of this research, it is worthwhile to note that the many scholars who dealt with the issues covered here considered only a part of the data and not all of it, moreover, they did not try to tackle navigational issues in the Indian Ocean, an unknown problem to the inhabitants of Europe and to scholars originating there. Therefore, the study of research work on the issues related to this article is similar to a study of a journey in suppositions than to ordinary and orderly research. The zoological discussion below, as well as the review of oceanographic problems, are essential to any world-broad discussion of this kind whose beginnings are in biblical philology and whose issues are spread over many fields.

⁴⁶ H. Rabin, "Indian Words in Hebrew," in *Our Language to the People* 14 (1963), pp. 232-245. Among the suggested words in the article are: horse (*soos*), sheath (*nadan*), violin (*kinor*), saffron (*karkom*), spikenard (*nerd*), aloes (*ohalot*), plumb line or lead, (*anakh*), tin (*b'dil*), sapphire (*sapir*), topaz (*piteda*), carbuncle (*bareket*), fine linen (*carpas*), crimson (*karmil*), mauve (*argaman*), monkey (*kof*), parrot (*tookit*), and more. The Indian word is "kapi" and the rules of the ancient transliteration discussed in relation to Ophir are valid here as well. The parrot (*tukki*)

is the "togai" and it is the peacock (which anyway is a more fitting gift to a king than is a parrot). See also Braslavsky, *Did You Know the Land* 4, p. 419, for more issues related to the research work on Ophir.

⁴⁷ On the attempts by the people of Carthage to use elephants as war animals, see H.H. Scullard, *The Elephant in the Greek and Roman World* (Cambridge: Thames and Hudson, 1974), pp. 146-9. Note that even if there was any success in training African elephants, it was done with the assistance of Mahouts from India; so, in any event, India carries an advantage in this case.

⁴⁸ See Warmington, *The Commerce*, pp. 150-1.

⁴⁹ Eilat, *Economic Ties*, pp. 124-7. One must pay attention to the difference between a one-time export or war spoils and continuous import, which was the case with King Solomon's vessels (even if one could claim that the biblical author was imprecise).

⁵⁰ See also S. Bundheimer, *The Wild Life in the Countries of the Bible*, A (Jerusalem: Mosad Bialik, 1950), p. 296, about an ornament from Megiddo consisting of the front part of an animal identified as an African baboon. In Egypt, and maybe also in Mesopotamia, many animals were kept as "holy animals" in temples, but it is very doubtful that one can say that there was a similar situation in the land of Israel.

⁵¹ The narrative in II Chronicles 20:35-37 describes the issue somewhat differently, but the end result is the same, and is unimportant to the issue at hand: "And after this did Jehoshaphat, King of Judah, join himself with Ahaziah, King of Israel, who did very wickedly; and he joined himself with him to make ships to go to Tarshish: and they made the ships in Ezion-geber. Then Eliezer, the son of Dodavah of Mareshah, prophesied against Jehoshaphat, saying, 'Because thou hast joined thyself with Ahaziah, the Lord hath broken thy works.' And the ships were broken, that they were not able to go to Tarshish." Originally it was clear to the author that Tarshish is a name of a place.

⁵² It seems that the Crusaders' maritime failure in this arena was due to different reasons than Jehoshaphat's, even if in both cases, the issue was the lack of experience in the region. See I. Prawer, *History of the Crusader's Kingdom in the Land of Israel* (Jerusalem: Mosad Bialik, 1963), pp. 501-3.

⁵³ In addition to the serious problem of lack of sufficient good drinking water, there were a number of elements that when combined, prevented settlement in this place:

- a) The difficult wind patterns for northbound sailing in the Bay of Eilat, analogically to the lack of development of Suez (Clysma, Cleopatris). (See, Begley and De Puma, *Rome and India*, pp. 12-21.) The winds in the Bay of Eilat blow almost always southward and very rarely northward, a fact that denies the vessels the ability to sail north most days and in most hours, and the south wind turns into storms reaching up to 85 knots. (See Braslavsky, *Did You Know the Land*, pp. 360-7; the writing there is "must reading" to King Jehoshaphat's advisers.) These facts clarify Strabo's testimony that the spices and perfumes brought to Rhinocorura (*Al-Arish*) from Petra, were unloaded in the port of Leuke Kome which is located south of the Bay of

Eilat, approximately in the latitude line of Myos Hormos (Har'el, *Historical Geography*, pp. 427, 459).

- b) Both in the land of Israel and in Eilat, the vessels had to unload their cargo and transfer it by land to a waiting ship in the Nile or in the Mediterranean Sea. However, because the overland transportation increased the cost of the imports significantly compared to the cost of marine transport, the relative advantage of Egypt was very obvious; there, the overland routes from the Red Sea to the Nile were much shorter compared to the route connecting Eilat to Gaza, for example. See Albert C. Leighton, *Transport and Communication in Early Medieval Europe AD 500-1100* (Newton Abbot: David and Charles, 1972), pp. 157-165.
- c) A monsoon ship had to be relatively large and, consequently, the volume of merchandise in it was large and required large capital for the initial investment. This capital existed in the Ptolemaic and Roman densely populated Egypt, but not in the land of Israel, which was scarcely populated, and therefore, lacked a centralized administration that could support such broad import and export business. In light of all this, it is understandable why Eilat was a small place and almost without Jews in the Roman period. See I. Zafrir, "Eilat and the Bay of Eilat in the Greek and Roman Sources," in *Kathedra* 53 (1990), pp. 149-193. Hebrew.

⁵⁴ Some of the issues brought up here, as well as a similar research approach, were already proposed more than a hundred years ago, but were missed by the researchers. According to this view, Ophir was located at the mouth of the river Indus, even if the defenders of this approach were aware of the problem of a lack of similarity between the biblical name and the later name. See J. Kennedy, "The Early Commerce of Babylon with India—700-300 BC," in *Journal of the Royal Asiatic Society* 5 (1898), pp. 241-288.

⁵⁵ Y. Felix, *The Biblical Vegetation World*, 2nd edition (Ramat-Gan: Masada, 1968), pp. 244, 263-9; the origin of the word *nerd* (spikenard) is in Sanskrit, pp. 263-9.

⁵⁶ The word "cassia" is already known in the Greek literature, and those who trace its etymology from Chinese should not say that the "cassia" reached Israel from China (even if the origin of the plant is in southern China). Such suppositions were made because it was not known that there were Chinese merchants in Mantai, Sri Lanka, the source of the cinnamon and cassia. (Their western post, that is, the entrance to the Indian Ocean, required special expertise.) See Felix, *Trees of Perfume*, pp. 107-112; Begley and De Puma, *Rome and India*, pp. 10-1, 199-200; and Majno, *The Healing Hand*, pp. 219-221.

⁵⁷ Ch. Rabin, "Indian Connections of the Song of Songs," in *Sefer Baruch Kurtzweil*, A. Soltman, M.Z. Kadari, and M. Schwartz, eds. (Tel-Aviv: Schocken, 1975), pp. 264-274; Ch. Rabin, "The Song of Songs and Tamil Poetry," in *Studies in Religion* 3 (1973-4), pp. 205-9. For additional literature and questions related to the Song of Songs, see M. Bar Ilan, "Examination of Syntax, Erotic Issues, and