

Frankincense and Myrrh of Ancient South Arabia

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I

Since the early dynasties, the Egyptian pharaohs often made expeditions to Punt which was supposed to be Somaliland. And they brought back frankincense, myrrh, gold, ivory, and others. South Arabia, which is opposite Somaliland across the narrow strait, also produced frankincense and myrrh. It is uncertain whether or not the pharaohs gained frankincense and myrrh of South Arabia as well through their expeditions to Punt. The Old Testament, however, gives us various accounts of the incense of South Arabia and its trade. Moreover, in the annals of Tiglath-Pileser III (745–727 B.C.) of Assyria, it is recorded that the Mas'ai tribe, the city of Temai (Taymâ') and the Sab'ai (Sabaeans) sent him tributes of gold, camels and spices;⁽¹⁾ Herodotus also tells us that the Arabs brought every year a thousand talents of frankincense to Darius III of Persia.⁽²⁾ Judging from these sources, there seems to be little doubt that frankincense and myrrh of South Arabia might largely be known among the adjacent, more advanced countries from a considerably earlier times.

But it was scarcely before the Hellenistic age when the incense trade of South Arabia emerged from its long obscurity. Since the days of Alexander the Great, when the Greek world extended to Orient, their knowledge about this region gradually increased. And the classical writers tell us that not only was a great deal of incense of this region exported to the Western world but that the South Arabians also played the role of middlemen in commerce between East and West, and that they were much prosperous on these accounts. Indeed, the Greco-Roman writers called their land "Arabia Felix" (Happy Arabia) and described it as a paradise on earth.⁽³⁾

II

Then, which parts of South Arabia are the producing regions of frankincense and myrrh? Strabo, after Eratosthenes, states that Cattabania (Qatabân) produces frankincense and Chatramotitis (Hadhramaut) myrrh.⁽⁴⁾ On the contrary, Pliny the Elder informs us that the frankincense-producing district is in Astramitae (Hadhramaut) and that it is eight days' journey from Sabota, the capital of this country.⁽⁵⁾ This suggests us that this land is situated in the remote corner of Hadhramaut.

That the frankincense region is situated far away in the eastern part of Habhramaut can be observed from the accounts of *The Periplus of the Erythraean Sea*, which is supposed to have been written in the middle of the first century A.D. The *Periplus* names the coastland of the Bay of Sachalites as the Frankincense Country and states that this land lies in the eastern direction of the market-town Cana and that on the bay is projected a very great promontory named Syagrus. The *Periplus* further continues to say that passing by Syagrus there lies the Bay of Omana which cuts deep into the coastline and beyond this comes Moscha, a port for receiving frankincense.⁽⁶⁾ Schoff identified Cana with Hisn Ghurab (14° 10' N., 48° 20' E.), Syagrus with Ras Fartak (15° 36' N., 52° 12' E.), and Moscha with Khôr Rôri (17° 2' N., 54° 26' E.); and, though Ras Fartak does not project so remarkably as the *Periplus'* description about Syagrus, he thought that the *Periplus'* account of this part was incorrect and that the whole strip of coast rather seemed to be applied to Sachalites.⁽⁷⁾ Citing the account of Ptolemy's Geography (Book I, xvii) which states that the Bay of Sachalita does not lie in the western shore of the promontory of Syagrus but lies towards the east, Van Beek asserts that the frankincense-producing area is clearly confined to the mountains of Dhofar surrounding the Bay of Oman where the Libanotophoros (bearing frankincense) region on Ptolemy's sixth map of Asia can be precisely found.⁽⁸⁾

In the mountains of Dhofar, modern explorers found frankincense trees still growing there. Already in 1848 H.J. Carter pointed out this fact, and Bertram Thomas also wrote in 1932 that the region, where frankincense trees were found still growing, was in the Qara mountains of Dhofar between longitude 53° and 55° 21' E. and at an elevation between 2000 and 2500 feet (610 m. and 760 m.).⁽⁹⁾

Furthermore, the 1952 archaeological expedition to Oman by the American Foundation for the Study of Man brought new materials which seemed to show that not only ancient Sachalites was in Dhofar but that this region belonged to the kingdom of Hadhramaut. F.P. Albright, a member of this expedition, excavated an old fortress overlooking the beautiful bay of Khôr Rôri that was identified with Moscha, and found several inscriptions, which indicated that this region had been called S'KLHN [Sa'kal]. W.F. Albright noted that this name would be rendered "Sachalites" in Greek transcription.⁽¹⁰⁾ In the inscriptions was also found a king's name Il'azz;⁽¹¹⁾ according to other inscriptions there were several kings in Hadhramaut who possessed this name, while Eleazus in the *Periplus* who governed Cana and the Frankincense Country⁽¹²⁾ can be identified with one of these kings, i.e., Il'azz Jalît (c. 25–65 A.D.).⁽¹³⁾ On the other hand, the excavation showed that the ancient city at the site of Khôr Rôri had been called SMHRM (Sumhuram);⁽¹⁴⁾ if so, it is difficult to identify Moscha with Kôkr Rôri as Schoff did, but we must search for the site of Moscha in another way. Owing to the fact, however, that Kôkr Rôri is the best harbour on the coast of Dhofar and its actual geographical setting is well harmonious with what is described in the *Periplus*, Van Beek suggests that Sumhuram might be the name of the fortress while Moscha might be the harbour installations and warehouses nearby.⁽¹⁵⁾

Later on, in the mediaeval times, Dhofar was also noted for production and trade of frankincense, as related by Işṭakhri and other Arab geographers.⁽¹⁶⁾ This fact is pointed out in the Chinese literary sources, too. For instance, in the third volume of *Ling-wai-tai-ta* 嶺外代答, written in the latter half of the twelfth century under the Sung Dynasty, is found an account stating that Ma-li-pa 麻離拔, one of the Ta-shi 大食 countries, produces *ju-hiang* 乳香 (frankincense) and *mo-yau* 沒藥 (myrrh) and large ships and rich merchants gather there. *Chufan-chi* 諸蕃志, written at the beginning of the following century, states under the article of *ju-hiang* in its Part II that *ju-hiang*, also called *hün-lu-hiang* 薰陸香, comes from three countries of Ta-shi, that is, Ma-lo-pa 麻囉拔, Shī-ho 施曷, and Nu-fa 奴發, and that the Ta-shi people bring this products by ships to San-fo-ts'i 三佻齊, namely to Palembang in Sumatra, in order to barter for other goods. Among the above-named places, Ma-lo-pa is identified with Murbat which is found to the east of Khôr Rôri, Shī-ho with Shihr, situated in the east of Cana, and Nu-fa with Dhofar;⁽¹⁷⁾ and there is no doubt that Ma-li-pa is Ma-lo-pa. Besides, Marco Polo also refers to Esher (Shihr) and Dufar (Dhofar),

stating that a great deal of white incense is produced in these places.⁽¹⁸⁾ His white incense as well as *ju-hiang*, the latter of which means milky incense, would be probably frankincense. After pointing out that the incense trade of Somaliland was dull in the mediaeval times, Heyd insists that South Arabia was the incense country par excellence in those days and that it was exported to Mesopotamia and Persia through the Persian Gulf.⁽¹⁹⁾

Judging from the various accounts mentioned above, there seems to be little doubt that the Dhofar province was the frankincense-producing region in the ancient and mediaeval times, that frankincense produced there was exported to the outside world in those days, and that this region was under the sway of the kingdom of Hadhramaut at least in the middle of the first century A.D.

III

As for myrrh-producing region, it is difficult to locate it definitely. Pliny says that myrrh-producing region is different from that of frankincense and it grows in many places in Arabia.⁽²⁰⁾ Moreover, he points out that there are a great many varieties, and probably according to producing areas, he enumerates them as follows: first, the Troglodytic myrrh of Africa, second, the Minaean which includes Astramitic, Gebbanitic, and Ausaritic from the kingdom of the Gebbanitae, third, the Dianite, fourth, a mixture from various sources, fifth, the Sambracene from a seaboard state in the kingdom of the Sabaei, and sixth, the Dusirite.⁽²¹⁾ Among these varieties, the Dianite and the Dusirite are incomprehensible, but producing areas of other varieties may possibly be conjectured, and it seems probable that their range covered not only Ma'in, Saba', Qatabân, and 'Ausân, but as far as Hadhramaut also. In fact, Van der Meulen found and photographed a myrrh tree near Nişab in Hadhramaut.⁽²²⁾

Next, the *Periplus* does not refer to myrrh-producing regions in particular, but in the account of Muza (Mocha) it states that "stacte" produced in the country is exported from this market-town.⁽²³⁾ According to Pliny, "stacte" is the most highly valued of all myrrh, the juice of which is exuded of itself before incisions are made on a myrrh tree;⁽²⁴⁾ therefore stacte is supposed to be much refined myrrh. But the *Periplus* qualifies it as $(\gamma)\alpha\beta\epsilon\rho\mu\nu\alpha\iota\alpha$. Müller and Fabricius separated this word into two sections and explained as "Abiraea and Minaea," and so did K. Murakawa in his Japanese translation of the *Periplus*.⁽²⁵⁾ Schoff, on the other hand, thought that, though Abiraea appeared on Sprenger's map of

Arabia, it was not in the myrrh district, and he translated this word as "Gebbanitae-Minaean."⁽²⁶⁾ Thus, as to *(γ)αβειρμυνάα* opinions are varied. But there seems to be little doubt that refined myrrh was exported from Muza situated near the exit of the Red Sea and that the hinterland of this port, that is, the south-western part of South Arabia, produced myrrh. Ptolemy also places the myrrh-producing regions (Smyrnophoros Interior and Smyrnophoros Exterior) to the north and north-west of Aden in his sixth map of Asia.

Recently Bowen reports that he found in Beihân the marks which showed the cultivation of myrrh trees. During the investigation of the ancient irrigation works in Beihân which is supposed to be the centre of the kingdom of Qatabân, he found on the mud silt surface strangely discoloured circles arranged in rows three meters or so apart from each other. One expert suggested to him that these circles might have been "filled in, shallow, temporary wells for supplementary water for the fields." But it was proved that they were seen only on the surface and, once broken, they disappeared. From this fact he rejected the above suggestion and assumed that these mud circles might reflect the position of some ancient cultivated trees. In that case, as the distance between circles might be too narrow for date palms and 'elb trees, the latter of which are often found in the Himyaritic inscriptions, he tentatively concludes that these circles might show the cultivation of myrrh trees.⁽²⁷⁾

In any case, myrrh-producing regions might be spread to the considerably wide range of South Arabia, but, generally speaking, its chief regions seem to be confined to its western part, not in the east as in that of frankincense.

IV

Now I will consider how the trade of frankincense and myrrh was carried on and how it developed. Strabo says that it takes Gerrhaeans forty days to reach Chatramotitis and, like the Sabaeans, they have become the richest of all through traffic in aromatics.⁽²⁸⁾ From this account, it may be imagined that the incense of South Arabia was sent to Mesopotamia and Persia via Gerrha on the Arabian coast of the Persian Gulf. While a Minaean inscription from Gizeh, dated probably in 263 B.C., reveals that a Minaean called Zayd'il, a priest of Egypt, used to import myrrh and calams from his own country for the use of his temple and export in return fine linen garments known as byssos by his own merchant ship.⁽²⁹⁾ This suggests that the incense was carried to Egypt by sea.

But in earlier times the land route, which runs northward along the verge of the desert to Gaza on the Mediterranean coast, seems to have played a most important role in this trade. This route may have been used in as early as the tenth century B.C., when the queen of Sheba visited King Solomon. In 1957, a large fragment of a South Arabian clay stamp was discovered at Beitin (Biblical Bethel). It is presumed to have been brought there between the late tenth and the fourth quarter of the eighth centuries B.C.⁽³⁰⁾ This discovery makes us believe that the above-mentioned queen's visit was not a mere fable.

Now, the stratigraphically controlled excavation at Hajar bin Ḥumeid in Beihân showed that the first city had probably been established there on the original land somewhere between 1100 and 900 B.C., with 1000 B.C. a reasonable estimate.⁽³¹⁾ While the radiocarbon test on three lumps of charcoal, with a combined weight of 30 grams, which were obtained from the second (latest) phase of the second stratum from the bottom of the ruin at Hajar bin Ḥumeid, gave the following result: "851 years or 852 B.C. plus or minus an error factor of 160 years, or within the limits of 1012 and 692 B.C." And based upon this result together with the stratigraphic data above mentioned, Van Beek asserts as follows: "We now have a clear time point, ... in the early first millenium B.C. around which we must begin to order our chronology."⁽³²⁾

Viewing from these materials, in South Arabia the origin of the ancient civilization may probably be at the beginning of the first millenium or the end of the second millenium B.C. Besides, it is presumed that the domestication of camels in Arabia would go back to those days.⁽³³⁾ Then, it may be no exaggeration to say that the incense trade by camel caravans along the land route towards Gaza began at the beginning of the first millenium B.C. or a little earlier.

Since then, the trade of frankincense and myrrh of South Arabia may have developed gradually. Unfortunately our material sources are too scanty to trace the process of its development until the arrival of the Hellenistic age in the West. In South Arabia, however, the political unity proceeded in the first half of the first millenium B.C., and the states, ruled by the MKRB (mukarrib), were established.⁽³⁴⁾ And these states seem to have had great interest in this trade. Under these circumstances, this trade, especially by the camel caravans following on the above route to Gaza, is supposed to have made gradual but steady progress. Otherwise, when Gaza was conquered, Alexander the Great could not have bestowed five hundred talents' weight of frankincense and a hundred of myrrh to his preceptor Leonidus, as Plutarch spoke.⁽³⁵⁾ At any rate, our materials

concerning this trade increase in the course of the Hellenistic age and it seems possible to trace its development to some extent.

V

Concerning the trade of frankincense and myrrh, Greco-Roman writers state the various accounts about it. Strabo, after Eratosthenes, says that merchants arrive at the producing district in seventy days from Aelana, situated in the innermost part of the Red Sea.⁽³⁶⁾ But, in this respect, the most detailed account is Pliny's description which was possibly written on the basis of the Hellenistic sources. As for the transportation of frankincense he says:

“Frankincense after being collected is conveyed to Sabota on camels, one of the gates of the city being opened for its admission; the kings had made it a capital offence for camels so laden to turn aside from the high road. At Sabota a tithe ... is taken by the priests ... and the incense is not allowed to be put on the market until this has been done ... 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 Tomna, which is $1487\frac{1}{2}$ miles distant from the town of Gaza in Judaea on the Mediterranean coast; the journey is divided into 65 stages with halts for camels.”⁽³⁷⁾

Here we can take a glance at the features of the transportation of frankincense on the land route to Gaza.

According to this description, frankincense seems to have been carried by camels from Dhofar, its producing area, to Sabota, and thence to Tomna. Sabota is supposed to be the *Periplus*' Sabbatha, the capital of Eleazus who governed the Frankincense Country,⁽³⁸⁾ and it is identified with Shabwa. While Tomna (Timna') was proved to be the capital of the kingdom of Qatabân through the excavation at its ruin of Hajar Kohlân in Beiḥân. The route thence probably passes through Mârib, the capital of the kingdom of Saba', then, el-Jauf and Nejrân, to Gaza. That is, it runs through the territories of the kingdoms of Hadhramaut, Qatabân, Saba', and Ma'în one after another and thence through the land of the Nabataean kingdom to Gaza. In any case, this route seems to be a main route of frankincense.

Yet there are some problems more to examine. One of them is about the transportation between Dhofar and Shabwa. Pliny writes that frankincense is

carried by camels between the two places. The *Periplus* also says that it is brought by camels to Sabbathath to be stored.⁽³⁹⁾ Though it is difficult to trace in detail the above land route, there seems to be little doubt that it might have passed through Wadi Masîla (Wadi Hadhramaut).

The *Periplus*, however, says further that frankincense is also carried on rafts floating on inflated skins after the manner of the country and by boats to Cana.⁽⁴⁰⁾ This raft is presumed to be the traditional one which had probably been used from time immemorial. Hence the sea transportation in this way between Dhofar and Cana must have been made from the earlier times. While between Cana and Shabwa or Timna' there might have run also several land routes.⁽⁴¹⁾ Therefore, it seems probable that frankincense, disembarked at Cana, might have been carried along these routes to Shabwa or directly to Timna'. Moreover, Bowen points out that now a land route exists between Shihr and Tarîm in Wadi Masîla and that near Tarîm some ancient ruins are found with Himyalitic inscriptions. Thus he assumes that frankincense might have been carried from Shihr to Shabwa via Tarîm rather in the earlier times.⁽⁴²⁾

The route from Shabwa to Gaza via Timna', Mârib, el-Jauf, and Nejrân, as mentioned previously, might be a most important one for conveying frankincense, but this seems to be by no means the only route. Besides this, Bowen suggests two other routes: the one is that from Shabwa to Mârib without passing through Timna', and the other is that from Shabwa directly to el-Jauf, running through sandy Ramlet Sabatein without passing through Timna' as well as Mârib, over which Philby travelled by car in 1936. Bowen also points out that besides these there is another considerably rough route. It runs along the eastern verge of Ramlet Sabatein and then, turning to the west, passing the south of the great desert of Rub el-Khali, and thus comes to Nejrân. He assumes that all of these routes must have been used in ancient times.⁽⁴³⁾ At any rate, there seems to have been not one route, but several ones for conveying frankincense.

VI

Turning to myrrh, it was produced in a considerably wide range and there were several varieties, as already mentioned. Among these varieties that of Hadhramaut might have possibly been carried through the above-mentioned routes. While as to myrrh produced in the western part, especially in Qatabân

and 'Ausân, it is not easy to trace its routes.

Today a caravan route leads from Aden (the *Periplus*' Eudaemon Arabia) to Beihân. After leaving Aden, it runs along the seacoast for sometime, then turns to the north, and, passing through the mountainous region, enters Beihân. Now, in a country where the land is rugged and the climatic conditions have changed little during these several thousand years as in the case of the Arabian Peninsula, the ancient routes seem not to have made a great difference from the present tracks. Bowen assumes that the Aden-Beihân route might certainly be applied to this case.⁽⁴⁴⁾

According to the *Periplus*, Aden had occupied a position as a commercial junction between East and West, before the Western merchants proceeded from the Red Sea to the Indian Ocean.⁽⁴⁵⁾ As no ruins, large enough to show its ancient bustling business, are found in Aden, some scholars have doubts about this part of the *Periplus*' account.⁽⁴⁶⁾ But it should not be rejected outright. Viewing it from its geographical position, it seems to be rather natural to think that part of the commodities from India and Africa should have reached there. If this assumption is correct, then, after having been disembarked there, these commodities might have probably been conveyed through Beihân to Gaza. Under these circumstances, there seems to be little doubt that an Aden-Beihân route would have existed in the ancient times. And myrrh produced in 'Ausân and Qatabân would have been gathered to this route by paths from the forests, and then conveyed to Beihân.

Now a route runs from Beihân to Mârib, without passing Timna'. On this route there is a narrow and steep, but paved pass, called Mablaqah, which is situated to the west of Timna'. At the top of this pass is opened a deep cut through the solid rock — 15 to 20 feet wide, 40 feet deep, and 100 feet long. The expedition to Beihân by the American Foundation for the Study of Man investigated this cut and found two dedicatory inscriptions on the rock walls; and they assumed that this cut was made by the Qatabanians. There is another route to Mârib via Timna', too. Bowen assumes that the caravans from Hadhramaut would have followed the latter route, and that those from Aden would probably have passed through the Mablaqah pass.⁽⁴⁷⁾

VII

If the camels laden with myrrh and the Eastern commodities had passed the

Mablaqah route as was assumed by Bowen, it seems that we can see there the intention of the Qatabanian rulers to control the caravans. This may not be the only case with this route; it may be the same with the routes of frankincense mentioned previously.

According to Pliny's description of carrying frankincense cited previously, not only were levied tithe and dues on the way, but to turn aside from the high road was a capital offence. The passing of the caravans would have brought a great amount of revenues to the ancient states of South Arabia through levying dues on them as well as supplying lodging, fodder, water, and others to them. Accordingly, there seems to be little doubt that these states were so seriously concerned with the transportation of the caravans that they tried to control their passage in various ways. At the same time, the rulers would have made efforts to attract the caravans to the routes under their rule.

The archaeological excavations by the American Foundation for the Study of Man at Timna' and Mârib brought to light the ruins of ancient cities and temples and various artifacts of alabaster, limestone, and bronze, all of which showed the close contact with the Hellenistic world. Through these excavations it became clear that they had been prosperous to a considerable degree. It may not be too much to say that their prosperity would have owed much to the exportation of frankincense and myrrh as well as the lucrative transit trade of the Eastern commodities.

At any rate, because of the large profits gained in these trades, disputes and wars might have often arisen between the ancient states of South Arabia. It is regrettable that the political history of this district should be too obscure to trace their struggles for the possession of this incense-producing regions and its trade routes. But it may be found from the inscriptions that they frequently waged wars on each other. For instance, the inscriptions of Karib'il Watar in the middle of the fifth century B.C., who was the last mukarrib and the first king of Saba', reveal that he marched on all sides and won many victories;⁽⁴⁸⁾ and Waraw'il, the mukarrib of Qatabân, who was his contemporary, was obliged to be his vassal.⁽⁴⁹⁾ According to W. F. Albright, about fifty years after, cir. 400 B.C., Qatabân probably appeared in turn as a kingdom and Ma'in also seems to have become a kingdom in those days.⁽⁵⁰⁾ Therefore they would have been free from the rule of Saba' at that time. Afterwards Saba' became weak and in the third century B.C. it fell into a disordering condition. While Qatabân began to rise in the middle of the fourth century, and since then for three hundred

years it might have been most powerful, and for some time during this period Ma'in as well as Saba' might have been subject states to this kingdom. At any rate, the excavation at Beihân made it plain that the kingdom of Qatabân had continued its prosperity till the first century B.C.⁽⁵¹⁾

Under these circumstances, the trade route from Aden to Beihân might have been bustling under the rule of Qatabân during its prosperous days, and the frankincense-route from Shabwa to Gaza via Timna', among all others, would have been much used as well. Pliny's account about the transportation of frankincense cited above seems to reflect some of the conditions existing during this period — probably not long before the last days of the kingdom of Qatabân.

VIII

As already indicated, frankincense and myrrh were conveyed by sea as well. But it seems to be scarcely before the establishment of the Roman Empire in the West or a little earlier when the sea trade of this branch begins to develop.

Concerning the sea trade of frankincense and myrrh, the accounts of the *Periplus* are most detailed. The *Periplus* says that refined myrrh is exported from Muza. At the same time it describes the market-town of Muza as so crowded with Arab shipowners and seafaring men, and it also states that they send their ships to India and Africa to carry on the trade and that the Western merchants call at this place.⁽⁵²⁾ From these accounts we can see that Muza was a busy market-town and that the Western merchants visited here to bring back refined myrrh produced in South Arabia in exchange for their merchandise. While the *Periplus* also says that Avalites, a small market-town on the opposite African coast, exports a little, but refined myrrh which is brought on rafts from Ocelis and Muza.⁽⁵³⁾ Therefore the Western merchants may have gained here the Arabian myrrh, too.

Next, as to frankincense, the *Periplus* gives Cana and Moscha as its ports.⁽⁵⁴⁾ As it also states that Egypt exports to Cana such goods as those exported to Muza,⁽⁵⁵⁾ the Western merchants seem to have called at this port and brought back frankincense. But as for another port, namely Moscha, the *Periplus* says that it is a port established for receiving the Sachalitic frankincense and that ships from Cana visit there regularly,⁽⁵⁶⁾ but it does not tell us about the coming of the Western merchants except a special case which will be described later. Therefore Moscha might not be a port designated to the Western merchants,

but frankincense gathered there might have been conveyed to Cana and then delivered to them. As already indicated, the sea transportation between Moscha and Cana by rafts and boats might have been carried on from the earlier times. As these rafts and boats were probably native, the rulers of the frankincense region might have opened Cana, not Moscha, to the Western merchants as the official port for exporting frankincense. By taking this measure, the rulers might have hoped that they could keep the Western merchants away from the producing region in order to keep the secret of frankincense.

At the same time, however, the *Periplus* also says that ships returning from Damirica and Barygaza, that is, from India, winter at Moscha in the case of being late and receive frankincense from the king's officers in exchange for cloth, wheat, and sesame oil.⁽⁵⁷⁾ These ships seem to be the Western ones, because, if they had been Arabian ships, there would have been little need for them to winter there. Viewing it from this point, the Western merchants might not necessarily have been prohibited from calling at this port. But their calling there seems to have been only special such as in the case of wintering and that their trade there must have been under the strict control of the rulers.

Now the American Foundation for the Study of Man sent the expedition again to Dhofar in 1960 and excavated the site at ancient Sumhuram by Khôr Rôri. During this excavation were found several pieces of Roman red-gloss ware in the lowest level of the land just inside the north-west corner of this city wall. And they are supposed to represent the earliest occupation debris of this city.⁽⁵⁸⁾ H. Comfort, who examined these ware, assumes that these are the Roman Arretine ware and that two pieces of them are of the same ware, manufactured perhaps on the Anatolian coast or islands off its coast, probably in Samos, at about the turn of the Christian era. He also states that another one is slightly less yellow in colour and may have originated in Italy, though contemporaneous with the above two sherds.⁽⁵⁹⁾ At any rate, these pieces of ware suggest to us not only the time of establishment of this city but also its contact with the Western world. The expedition conjectured that this city had been established as a colony not long before the Christian era.⁽⁶⁰⁾

In any case, Sumhuram seems to be a new headquarters which was built by a king of Hadhramaut in order to meet the increase of the demand for frankincense at the end of the first century B.C. At the same time there is little doubt that this ruin shows the development of the sea trade of frankincense owing to the advance of the Western merchants.

Dividing it into four stages, Pliny explains the process of the development of the navigation to India. He places the way of sailing from the promontory of Syagrus to Patale, situated in the mouth of the Indus, in his second stage, which succeeds to the first stage of the seacoast navigation from the mouth of the Indus to the Persian Gulf such as was carried out by Nearchus.⁽⁶¹⁾ According to this account, the advance of the Western merchants to this sea seems to have begun comparatively earlier. Therefore, at that time, they might already have gained frankincense probably at Cana. And with the establishment of the Roman Empire in the Western world, there is no doubt that their sailing to this sea increased more and more, causing the development of the sea trade of frankincense. Under these circumstances, the previous poor facilities having become unsuitable, the king of Hadhramaut would have established a new headquarters at Sumhuram.

The conveyance of frankincense by sea seems to have been under the control of the king of Hadhramaut as well as that on the land routes. This is conjectured from the probable facts mentioned above that Cana was the only designated port for frankincense and that the exceptional trade at Moscha was carried on through the king's officers. The control by the king seems to have been executed not only for the trade but for the production, because the *Periplus* tells us that frankincense is gathered by the king's slaves and those who are sent to this service for punishment.⁽⁶²⁾ Afterwards, Marco Polo suggests that the ruler has the monopoly of the export of frankincense at Esher (Shihr) and his profit is immense.⁽⁶³⁾ This tradition may probably go back to the ancient times.

IX

It is plain that the development of the sea trade of frankincense and myrrh should have close relationship with the advance of the Western merchants. Formerly the Western world had been contented with receiving these commodities from the Arabian caravans. But the Ptolemaic Dynasty of Egypt began to make efforts to gain these goods directly in their producing regions. It is only in the latter half of the second century B.C. under the reign of Euergetes II (145–116 B.C.) that these efforts began to be remarkable. Because, the Ptolemaic Dynasty lost the territory in Asia and could not gain the incense and other Eastern commodities from the Arabian caravans.⁽⁶⁴⁾ At any rate, since then, the Ptolemaic Dynasty carried out the policy of advancing to the Eastern world

through the Red Sea, and they seem to have proceeded to the exit of this sea in its last days.

There seems to be no doubt, however, that the striking advance to the Eastern waters by the Western merchants began with the Roman occupation of Egypt. This is apparent from Strabo's accounts. For instance, he says:

“When Gallus was prefect of Egypt, I accompanied him and ascended the Nile as far as Syene and the frontiers of Ethiopia, and I learned that as many as one hundred and twenty vessels were sailing from Myos Hormos to India, whereas formerly, under the Ptolemies, only a very few ventured to undertake the voyage and to carry on traffic in Indian merchandise.”⁽⁶⁵⁾

At any rate, there seems to be little doubt that the formation of the Roman Empire in the West and along with it the recovery of peace as well as the opening of prosperous life there stimulated their Eastern commerce to a great extent, and the Western vessels more and more sailed from the Red Sea coast to the Eastern waters. And this led to their use of the monsoon on the Indian Sea which made possible their direct navigation to India across the ocean.

Thus, after the establishment of the Roman Empire, many Western merchants visited the ports of South Arabia and could obtain there myrrh and frankincense directly. This is supposed to be the greatest cause of the development of the sea trade of frankincense and myrrh.

Now, nearly contemporaneous with the political change in the Western world, there can be noticed the political fluctuations breaking out in South Arabia as well. Here the kingdom of Qatabân, which seems to have been playing an active part in the overland trade of frankincense and myrrh as well as in the transit trade of the Eastern commodities, disappeared at about the turn of the Christian era,⁽⁶⁶⁾ and the kingdom of Saba' and Dhû-Raydân and the kingdom of Hadhramaut came to the forefront. And the territory of Qatabân, at least part of it including Timna', seems to have been occupied by the kingdom of Hadhramaut for sometime after its collapse.⁽⁶⁷⁾ While the kingdom of Saba' and Dhû-Raydân possessed the western region of South Arabia and transferred the capital from Mârib to Zafar (Saphar in the *Periplus*) near the modern town of Yerim. Such is the political situation of South Arabia in the middle of the first century A.D., when the *Periplus* was written.

These political changes in South Arabia and the development of the sea trade mentioned above must have greatly influenced on the overland trade of frankincense and myrrh. It is difficult to make it clear. But, after these political

fluctuations, the centre of the incense trade seems to have shifted from the land to the sea, and Saba' and Dhû-Raydân which ruled the myrrh-producing regions and Hahramaut which held Dhofar have probably carried on their trade with the Western merchants who visited their ports.

But, on the other hand, their profitable transit trade of the Eastern commodities may have suffered severely with the appearance of the Western merchants, and they must have lost greater part of its profit. At any rate, the Western merchants began to obtain these commodities directly from the Indian and African coasts, and for those who were sailing to India across the Indian Sea, South Arabia became only a post for anchorage and watering station.⁽⁶⁸⁾ Thus the golden age of the South Arabs came to an end.

X

Nevertheless, their commercial activities on the sea seems to have still continued. The *Periplus* tells us that the Arab merchants of Muza carry on the trade with India and Africa, as indicated previously. Besides this, it also says that Cana has the commercial relations with the African coast, the Indian ports such as Barygaza and Scythia, Ommāna on the Arabian coast of the Persian Gulf as well as the neighboring coast of Persia.⁽⁶⁹⁾ Under these conditions, it may be rather natural that myrrh and frankincense of South Arabia should have been exported to the Persian Gulf, Persia, and India, at least with the exception of Africa, where these vegetable resources were produced in Somaliland. Moreover, these commodities seem to have been carried to as far as China probably through India or Persia.⁽⁷⁰⁾

In any case, the South Arabs may have engaged in the sea trade with India and Africa from time immemorial, though their commercial activities were covered with a deep veil and we can scarcely disclose it. And though they might have greatly suffered from the advance of the Western merchants, they could still have a room for their own trade with Persian, Indian, and African coasts. Under these circumstances, it is most likely that their frankincense and myrrh have been widely prevalent in the countries of Asia in those days.

NOTES:

- (1) Philip K. Hitti, *History of the Arabs*, 1937, p. 37.
- (2) Herodotus, III, 97.
- (3) See, for instance, Diodorus, III, 47; Strabo, XVI, 4, 19; Pliny, *Nat. Hist.*, VI, xxxii, 162.
- (4) Strabo, XVI, 4, 4.
- (5) Pliny, XII, xxx, 52.
- (6) *The Periplus of the Erythraean Sea*, 29, 30, and 32.
- (7) Wilfred H. Schoff, *The Periplus of the Erythraean Sea: Travel and Trade in the Indian Ocean by a Merchant of the First Century*, 1912, pp. 116, 129, 133, and 140.
- (8) Gus W. Van Beek, "Ancient Frankincense-Producing Areas," p. 140, in Richard LeBaron Bowen and Frank P. Albright (ed.), *Archaeological Discoveries in South Arabia*, 1958.
- (9) According to Van Beek, op. cit., pp. 140-141; Bowen, "Irrigation in Ancient Qatabân (Beihân)," p. 61, in *Archaeological Discoveries in South Arabia*.
- (10) Van Beek, op. cit., p. 141.
- (11) Wendell Phillips, *Qataban and Sheba*, 1955, p. 306.
- (12) *The Periplus*, 27.
- (13) Schoff, op. cit., p. 117.
- (14) Van Beek, op. cit., p. 141; W. Phillips, op. cit., p. 306.
- (15) Van Beek, op. cit., p. 141.
- (16) W. Heyd, *Histoire du commerce du Levant au moyen-âge*, vol. II, p. 615.
- (17) F. Hirth and W. W. Rockhill, *Chau Ju-kua: His Work on the Chinese and Arab Trade in the Twelfth and Thirteenth Centuries, entitled Chu-fan-chi*, 1911 (reprinted in Peking), p. 121.
- (18) Henry Yule, revised by H. Cordier, *The Book of Ser Marco Polo*, vol. II, pp. 442 and 445.
- (19) Heyd, op. cit., vol. II, p. 616.
- (20) Pliny, XII, xxxiii, 66.
- (21) *ibid.*, XII, xxxv, 69.
- (22) According to Van Beek, "Frankincense and Myrrh," pp. 73-74. *The Biblical Archaeologist*, vol. XXIII, no. 3 (1960).
- (23) *The Periplus*, 24.
- (24) Pliny, XII, xxxv, 68.
- (25) Kentarô Murakawa, *Eryutorâkai Annaiki (The Periplus of the Erythraean Sea)*, Tôkyô, 1946, pp. 94 and 160.
- (26) Schoff, op. cit., pp. 31 and 114.
- (27) Bowen, op. cit., pp. 60 ff.
- (28) Strabo, XVI, 4, 4 and 19.
- (29) George F. Hourani, *Arab Seafaring in the Indian Ocean in Ancient and Medieval Times*, 1951, p. 21.
- (30) Van Beek, "Frankincense and Myrrh," p. 81.
- (31) W. Phillips, op. cit., pp. 167-8.

- (32) Van Beek, "A Radiocarbon Date for Early South Arabia," p. 7. *Bulletin of the American Schools of Oriental Research*, no. 143, (1956).
- (33) Bowen, "Ancient Trade Routes in South Arabia," p. 35, in *Archaeological Discoveries in South Arabia*. Van Beek asserts that the effective domestication of the camel seems to have occurred in the thirteenth or twelfth century B.C. ("Frankincense and Myrrh," p. 77.)
- (34) W. F. Albright asserts the MKRB period of Saba' from the time before 750 to cir. 450 B.C. and that of Qatabân from cir. the sixth to the end of the fifth centuries B.C. ("The Chronology of Ancient South Arabia in the Light of the First Campaign of Excavation in Qatabân," p. 6, n. 2 and p. 11. *Bulletin of the American Schools of Oriental Research*, no. 119, 1950.)
- (35) Plutarch's *Lives*: Alexander. (Everyman's Library ed. in three vols., vol. II, p. 485.); cf., Pliny, XII, xxxii, 62.
- (36) Strabo, XVI, 4, 4.
- (37) Pliny, XII, xxxii, 63-64. (translated by H. Rackham, in Loeb Classical Library.)
- (38) *The Periplus*, 27.
- (39) *ibid.*, 27.
- (40) *ibid.*, 27.
- (41) Bowen assumes that there are several possible routes between Bir 'Ali (situated by Cana) and Mârib: the shortest of them would go up Wadi Maifa', down Wadi Jirdân, and then to Timna', and a more southern route is also possible. While, according to Bowen, F. Stark assumes the route which runs from Cana to Shabwa through Wadi 'Amd and Hureidha, and Duncan suggests that the route runs from Bir 'Ali to Beiḥân via Niṣâb. ("Ancient Trade Routes in South Arabia," pp. 37-38).
- (42) *ibid.*, p. 41.
- (43) *ibid.*, pp. 38-39.
- (44) *ibid.*, p. 36.
- (45) *The Periplus*, 26.
- (46) Bowen, *op. cit.*, p. 37.
- (47) Bowen, "Archaeological Survey of Beiḥân," p. 12, in *Archaeological Discoveries in South Arabia*; W. Phillips, *op. cit.*, pp. 156-157; Bowen, "Ancient Trade Routes in South Arabia," p. 37.
- (48) Wissmann and Höffner, *Beiträge zur historischen Geographie des vorislamischen Südarabien*, 1952, pp. 10, 24, and 57-58.
- (49) W. F. Albright, *op. cit.*, p. 11.
- (50) *ibid.*, p. 6, n. 2 and p. 11.
- (51) *ibid.*, p. 11; Phillips, *op. cit.*, pp. 220-221.
- (52) *The Periplus*, 21 and 24.
- (53) *ibid.*, 7.
- (54) *ibid.*, 28 and 32.
- (55) *ibid.*, 28.
- (56) *ibid.*, 32.

- (57) *ibid.*, 32.
- (58) Ray L. Cleaveland, "The 1960 American Archaeological Expedition to Dhofar," p. 23. *Bulletin of the American Schools of Oriental Research*, no. 159 (1960).
- (59) Howard Comfort, "Some Imported Pottery at Khor Rori (Dhofar)," pp. 18–19. *Bulletin of the American Schools of Oriental Research*, no. 160 (1960).
- (60) R. L. Cleaveland, *op. cit.*, p. 26. The expedition also excavated a small ruin at Hânûn some 26 miles north of Şalâlah (on the Dhofar coast to the west of Khôr Rôri), and they assumed that this ruin was contemporaneous with the ruin at Sumhuram and that it might have probably been a seasonal collecting station for frankincense produced in the neighboring forests. (*ibid.*, pp. 16–18).
- (61) Pliny, VI, xxvi, 100.
- (62) *The Periplus*, 29.
- (63) H. Yule, *op. cit.*, vol. II, p. 442.
- (64) The Ptolemaic Dynasty seems to have had interest in the Red Sea in various ways already in its earlier times. For instance, Philadelphus (285–246 B.C.) planned a canal between the Nile and the Red Sea (Pliny, VI. xxxiii, 165.), and at the same time opened a route from Coptos on the Nile to the Red Sea across the desert (Strabo, XVII, 1, 45.); he also dispatched Ariston to investigate the Arabian seacoast as far as the ocean (Diodorus, III, 42.). While the early rulers established colonies on the African coast of the Red Sea to capture elephants for their army (Strabo, XVI, 4, 7). Schwartz suggests that the difficulties of going up the Nile to obtain the African commodities led them to the Red Sea. (Jacques Schwartz, "L'empire romain, l'Égypte, et le commerce oriental," p. 19. *Annales: Economies, Sociétés, Civilisations*. 15, 1. 1960.) While Rostovtzeff says: "For these early kings the Red Sea route, thanks to their control of Phoenicia and Palestine, was of only secondary importance so far as Arabian commerce was concerned, while direct relations with India was of no great importance. Their attention towards the South was chiefly directed to the organization of the systematic capture, taming, and transportation of war elephants." And he further continues thus: "The effort of Euergetes II, on the other hand, were devoted principally to the development of his maritime trade relations with Arabia and Africa." (M. Rostovtzeff, *The Social and Economic History of the Hellenistic World*, 1941, vol. II, p. 924). At any rate, it was only after having lost the territories of Asia that they began to make a great and serious effort to proceed to the Red Sea. In this respect, Schwartz says: "... les Lagides, prolongeant une vieille tradition pharaonique, regardèrent plutôt vers le sud de leur pays, une fois qu'ils eurent perdu leurs possessions extérieures du bassin oriental de la Méditerranée," (Schwartz, *op. cit.*, p. 20.)
- (65) Strabo, II, 5, 12. (translated by H. L. Jones, in Loeb Classical Library.)
- (66) The excavation at Timna⁷ by the American Foundation for the Study of Man in 1950 showed that this capital had been destroyed by the violent battle. At first W. F. Albright assumed that the destruction had occurred around 50 B.C. (Albright, *op. cit.*, pp. 9–10); but during the excavation of the second season in the following year there were found several pieces of the Roman Arretine ware which were supposed to have been

- manufactured in the reign of Augustus. Then he revised his assumption and estimated the date of the destruction about the time of Christ or a few years before (Phillips, op. cit., pp. 161–162). While H. Comfort who examined these wares dated the destruction after 10 A.D. (Comfort, "Imported Pottery and Glass from Timna'," p. 200, in *Archaeological Discoveries in South Arabia*.)
- (67) W. F. Albright assumed thus, because the inscriptions which were found in Beihân name the kings of Hadhramaut, after the independence of the kingdom of Qatabân came to an end. (Albright, op. cit., p. 10.)
- (68) The *Periplus* states that Ocelis which lies to the south of Muza and faces the strait (of Bab el-Mandeb) is an anchorage and watering-place, and the first landing for those who sail into the gulf. (*The Periplus*, 25). While Pliny says that those who sail to India do not call at Muza and that the most advantageous way for them is to set out from Ocelis. (Pliny, VI, xxxvi, 104.)
- (69) *The Periplus*, 27.
- (70) In Chinese later literary sources are found the various accounts about *hün-lu-hiang* which were cited from the ancient sources. According to K. Yamada, *hün-lu-hiang* is supposed to be composed chiefly of frankincense, but at the same time are probably added to it other vegetable spices. He further examined these accounts and assumes that though most of them are doubtful, an account found in *San-kou-chih* 三国志 which was cited from *Wei-lüo* 魏略, written in the middle of the third century A.D., is at least reliable. Thus, he insists that not only the idea of *hün-lu-hiang* but the material itself may have been transmitted to China possibly in the middle of the third century A.D. and certainly in the fourth. (Kentarô Yamada, *Tôa Kôryôshi* <*History of Spices in East Asia*>, Tôkyô, 1942, pp. 125 and 128–129.)