

VII INDIA AND CHINA

Spice Island mariners, which included our Gallo-Romans and Breton Jews, were able to traverse vast ocean distances by following the fast-flowing warm currents coming out of what oceanographers call the West Pacific Warm Pool. They sailed with these currents west to Madagascar, east to Africa, north to Japan, Hawaii and America and south to New Zealand. In the Northern Pacific, trade and colonization to the Americas was facilitated by the Kuroshio or Japan Current, whose speed and surface temperature protected voyagers against hypothermia. Such a combination of favorable conditions supported transoceanic exploration, trading and movement of peoples in both the Indian and Pacific Oceans. On the return trip, merchants introduced at least forty useful Western Hemisphere plants to India before 1000 A.D. During our time period, trans-Pacific ships typically transported religious trade items, weapons and tools, slaves, prisoners, criminals and refugees on the outward-bound voyages and high-value-per-weight cargoes of drugs, gold, silver and gems on the return trip. A Hindu merchantman carved in relief at Borobudur, Java could have carried 1000 tons of freight. Marco Polo mentions ships in India that held 700 people. Chinese junks were even larger.

Ship captains, often in conjunction with a syndicate of shareholders, owned their own ships (as in Daniel Defoe's *Further Adventures of Robinson Crusoe*) or booked whole ships or space on ships for different segments of the voyage. The entire length of the journey might be interspersed with off-loadings involving land travel or change of ships and warehousing. The most profitable operators minimized the number of ports of call and transfer points so as not to pay double duties. It was traditional for Jews never to pay customs to other Jews, to form partnerships with other Jews and extend them credit (as the Cairo Genizah documents testify in abundance).

Climate change around 900 caused by a strong El Niño Southern Oscillation event reversed the direction of the trade winds and currents. This precipitated a cascade of droughts, floods, mud slides, volcanic eruptions, tsunamis, persistent cloud cover, crop failure, famines, starvation, plague, conflict over land and resources, regime change, extinctions and migrations.

The affected area
North Mexico.

In the case of
on, what ports
the New World
outbound, per
imports were
drugs. Maize
in an ivory car
cities, like Ca
in gold bullion
for imports v
the Persian
expansion in
gold and sil
For spices th
and others
supplied th
Carolingian
One of the
in China.

A ninth
Island bet
of Srivijaya
between
straits, w
recovered
China. A
Kaichen
the ceiling
for expo
iron cro
aromat
trade ex

In a
Dani, y
up a ca
coins a
Caliph
an int

The affected areas were Polynesia, New Zealand and all around the Pacific Rim, including North Mexico. (See Pearce and Pearce, *Oceanic Migration*, 2010.)

In the case of our Calalus colonists, or Rhadanites, it is not known what ships they arrived on, what ports they called at around the Pacific or what they might have been transporting to the New World. It is likely their cargo was human on the in-bound side and metal on the outbound, perhaps also maize. Along the way, various small bulk, high-cost exports and imports were opportunistically traded—turquoise, macaw feathers, bells, beads, spices and drugs. Maize grain is known from Indian temple representations and has been found depicted in an ivory carving from the Archbishop's Palace in Ravenna as early as 550. Chinese trading cities, like Canton, allowed foreign merchants to pay for silk, porcelain and other prized goods in gold bullion or coinage only, so the Romani may have exchanged some of their metal there for imports which they carried further west in the regional trade systems. "The sea route from the Persian Gulf to Canton was the longest in regular use by mankind before European expansion in the 16th century" (Hourani). Certainly, the focus of the Calalus operations was gold and silver and spices, particularly spices used as incense in temple services and churches. For spices they held a monopoly in Western Europe from their inception until the Venetians and others broke it up in the tenth and eleventh centuries. The Rhadanites appear to have supplied the overwhelming bulk of the incense and costly ecclesiastical vestments used by the Carolingian church, an irony which many Jewish responsa ruled and railed against in vain. One of the main ingredients of incense was cinnamon from China. Silk also originated only in China.

A ninth-century Arab or Indian shipwreck was discovered in 1998 in the waters off Belitung Island between Borneo and Sumatra. This territory was ruled by the powerful Indic city-state of Srivijaya. With its capital at Palembang on Sumatra, Shaivite Srivijaya long dominated trade between India and China, guaranteeing protection from the Malay pirates who infested the straits, while exacting relatively low port fees and taxes. From the Belitung Wreck, divers recovered a mostly ceramic cargo of wares traced to the Changsha kilns of Hunan Province, China. A Tang red oxide inscription on the earliest piece proclaimed "the third year of Kaicheng," equivalent to AD 838. Also observed were lead ingots used for ballast, stacked on the ceiling planks the full length of the ship as well as placed in green-glazed jars from Canton for export. Further were a bell-shaped anchor (cf. 7A, The Josephus and Saul Cross) with cast iron crossarms, Chinese coins, fine Yue, *sancai* tri-colored, blue-and-white and white ware, aromatic resins and spices (star anise). Some of the objects are marked with Tang-era seal script trade emblems similar to those on the Tucson Artifacts.

In addition to the Srivijaya shipwreck, we have the record of the Jewish merchant Eldad hadani, who completed the West-East Rhadanite routes in both directions about 880 and ended up a captive in China on one of his voyages. Here he was ransomed by a fellow Jew for 32 gold coins and returned to their home country, the northern mountains of Khorasan in the Eastern Caliphate. The fact that Eldad was rescued by another Jew demonstrates that he was part of an international merchant brotherhood, according to Rabinowitz (pp. 179-81).

Jewish merchants were so common in India that a whole book called "The India Book" was published focusing on them in the Cairo Genizah documents. One was David, the brother of Maimonides who lost his life in the Indian Ocean in 1161. Robert Heine-Geldern estimates that voyages from India reached directly into America from as early as the 2nd century C.E., in other words already in Roman times. According to Sorenson and Johannessen, a short list of plants with decisive evidence for movement from the Americas to India during the ensuing centuries includes agave, amaranth, milkweed, annatto, chili pepper (by 800 C.E.), certain squashes, arrowroot and basil. It was a Golden Age for world exchanges, those of a biological nature as well as cultural. Their book reproduces several pictures of Indian temple sculpture from about 800 C.E. clearly showing American maize held in the hands of male and female divinities. Perhaps then as now, the New World offered exotic foodstuffs to the countries around the Pacific and Indian Oceans.

1. Imports of India and China

From a ninth century Arabic work titled The Investigation of Commerce comes this interesting list of imports at about the same time as the merchant adventurers of Rhoda. This was a period of great prosperity under the Abbasid caliph Harun al-Rashid (Aaron the Just, ruled 786-809), who was very commercially minded. Harun al-Rashid established the House of Wisdom in Baghdad, became the ally of Charlemagne and sponsored active trade missions to Tang China by land and sea. Robert S. Lopez and Irving W. Raymond, Medieval Trade in the Mediterranean World (New York: Norton, n.d.), pp. 28-29; translated from the French text in J. Sauvaget, Historiens arabes, pp. 10-12.

From India are imported tigers, panthers, elephants, panther skins, rubies, white sandalwood, ebony and coconuts.

From China are imported silk stuffs, silk, chinaware, paper, ink, peacocks, racing horses, saddles, felts, cinnamon, Greek unblended rhubarb. Also are imported utensils of gold and silver, imperial dinars of pure gold, drugs, brocades, female slaves, knickknacks with human figures, fast locks . . . hydraulic engineers, expert agronomists, marble workers and eunuchs.

From Arabia: Arab horses, ostriches, pedigreed she-camels, bow wood and tanned skins.

From Barbary and the borders of Maghrib: panthers, tanning leaves, felts and black hawks.

From Yemen: collyrium (eyeshadow), tanned skins, giraffes, cuirasses, colored gems, incense, tanning leaves called *khitr* and curcuma.

From Egypt: trotting donkeys, suits of fine cloth, papyrus, balsam and—from its mines—topazes of superior quality.

From the land of the Khazars: slaves of both sexes, coats of mail, helmets and camails of chain mail for the neck.

From the land of Khwarizmi: musk, ermine, marten, miniver and fox furs; and very sweet sugar cane.

From Sama
From Balk
From Bush
From Mer
From Gur
soft wool, ex
From Ami
From Dan
From Ray
qussiyat liner
From Ispa
soda, white-
From Qu
From Kir
From Gh
From Ba
From Ni
From Fa
ointment a
From Fa
From O
From A
girls . . . ex
From S
packsaddl
From M
quail.
From I
From A
and wood

In the m
around
the fame
of Cher
(Peutin
mart" i
invento

From Samarkand: paper.

From Balkh and its region: sweet grapes and *ghawshana* truffles (morels).

From Bushanj: candied capers.

From Merv: zither players, valuable zithers, carpets and Merv suits.

From Gurgan: grapes of various sorts, pheasants, excellent pomegranate grains, cloaks of soft wool, excellent raw silk.

From Amid: brocaded suits, scarves, fine curtains and woolen veils for the head.

From Damawand: arrowheads.

From Rayy: prunes, mercury, woolen cloaks, weapons, fine suits, combs, 'royal' bonnets, *qussiyat* linen cloth and pomegranates.

From Ispahan (Isfahan): refined and raw honey, quinces, China pears, apples, salt, saffron, soda, white-lead, antimony sulphide, beds of several decks, extra fine suits and fruit syrups.

From Qumis: axes, saddle felts, parasols and woolen veils for the head.

From Kirman: indigo and cumin.

From Ghur: cuirasses and psyllium.

From Barda'a: fast mules.

From Nisibin: lead.

From Fars: *tawwazi* and *saburi* linen suits, rose water, water-lily ointment, jasmine ointment and syrups.

From Fasa: pistachios, various sorts of fruit, rare fruit and glassware.

From Oman and the seacoast: pearls.

From Ahwaz and the surrounding region: sugar and silk brocades . . . castanets, dancing girls . . . extract of grapes, various sorts of dates and sugar candy.

From Sus (Susiana, ancient Elam): citrons, violet ointment, basil, horsecloth and packsaddles.

From Mosul: curtains, striped cloth, francolins (birds, closely related to partridges) and quail.

From Hulwan: pomegranates, figs and vinegar sauces.

From Armenia and Azerbaijan: felts . . . packsaddles, carpets, fine mats, cordons for drawers and wood.

2. Trade Goods of the Tamil Coast

In the mid-first century, a Greek sea captain left detailed descriptions of all the ports and sea lanes around the known Red Sea and Indian Ocean. Excerpted here are portions of this guide relating to the famed Pepper Coast around Cochin in South India, seat of Tamil civilization and the kingdoms of Chera (Kerala), Pandya and Kottayam. Revealingly, a map from the time of the Roman Empire (Peutinger Table) shows a Temple of Augustus in Cranganore, called Mouziris, "the first port or mart" in South India, and Roman coins have been excavated in all these trading towns. As the inventory of imports and exports shows, South India served as an international entrepôt for spices,

MERCHANT ADVENTURER KINGS OF RHODA

metals and silk. Later, Jews, Syrians, Persians, Arabs and Nestorians stepped into the shoes of Roman and Egyptian merchants. We can well imagine our merchant adventurers from Gaul passing through Egypt, Constantinople, Syria and Baghdad with metals and money to exchange for goods from China and the Spice Islands in these ports. In early modern times, the Portuguese established forts in the same places. The Periplus of the Erythraean Sea, trans. & ed. by G. W. B. Huntingford (London: Hakluyt Society, 1980), chapters 53-56.

After Kalliena (Kalyana near Bombay on west coast of India) there are other local marts: Sēmulla (Chaul, 20 miles south, later a Portuguese station), and Mandagora (Bankot at mouth of Savitri river), and Palaipatmai (Dabul), and Melizeigara, and Busemention, Toparon and Errannoboas (Malvan?). Then are the islands called Sēsekreienai (Burnt Islands) and Of the Aigidioi (Anjediva south of Goa, "Goat Islands") and Of the Kaineitai ("New Islands"), opposite what is called the Peninsula—places where there are pirates; and after the last, the White Island (south of Karwar in Karnataka). Then Naoura (Kannur, Cannanore in Kerala) and Tundis (Tanur, once a small kingdom on the Malabar Coast), the first marts of Limurikē (corruption of Damurikē, as in Ptolemy, meaning Tamil Country, including the kingdom of Chera or Kerala and Cochin); and after them Mouziris (Godungallur, Cranganore, one of earliest Jewish and Christian settlements in India, just northwest of Cochin) and Nelkunda (Kottayam in the Pandya kingdom, capital Kaorkai/Kolkai, the cradle of South Indian civilization on southeast coast opposite Ceylon on Bay of Bengal), which are now busy places.

Tundis is in the kingdom of Kēprobotos (Pliny: Celebothros, Dravidian kingdom of Kerala, ancient capital Vanji), and is a well-known village beside the sea. Mouziris (Cranganore), belonging to the same kingdom, is a flourishing <place> with ships from Ariakē (Indus Valley states in West India and Pakistan) coming to it, and also Greeks. It stands on a river (Periyar), and is 500 stades (62.5 miles) distant from Tundis (Tanur on Malabar Coast) by river and by sea, and 20 stades (2.5 miles) from Mouziris (Cranganore, 18 miles northwest of Cochin), and likewise the same distance by river or by sea. It belongs to another kingdom, that of Pandion, and it too stands on a river (actually lake Vembanad), about 120 stades (15 miles) from the sea.

At the mouth of this river there lies another village <called> Bakarē (Vaikkarai, frequented by Greek merchants), to which they send down the ships from Nelkunda (Kottayam, capital of Kulasekhara Empire in the ninth century) before putting out to sea; and they lie in the roadstead for loading cargoes, since the river is full of mud-flats and the channels between them are shallow. The kings of both marts (Tanur and Kottayam) live inland. And to those coming in from the open sea a sign of the approach of land is <the sight of> snakes coming out to meet them, black in color but shorter <than those near Barakē (Dwarka, in northwestern India)>, and with dragon-like heads and blood-red eyes (crocodiles or alligators?).

Large ships sail to these ports on account of the large quantity of pepper and malabathron (cinnamon). Imports to this (Tamil Coast) are principally:

Large quantities of coinage.

Chrysolith (peridot).

Unlined clothing, but not much.

Damasks.

Antimony.

Coral.

Crude glass.

Copper.

Tin.

Lead.

Wine, but not much.

Red orpiment (arsenic dye).

Yellow orpiment.

Wheat enough for a ship's crew, since the merchants do not stock it.

The exports are pepper, grown in quantity only in one place near these marts and called *kottanaric* (around Kottayam and Quilon, the "pepper coast"). Also exported are pearls, in some quantity and of excellent quality. Also:

Ivory.

Chinese cloth.

Gangitic (Ganges) spikenard.

Malabathron from the interior, brought to the same port.

Precious stones of all kinds.

Diamonds.

Sapphires.

Tortoiseshell both from Khrusē (Burma through Sumatra, Southeast Asia as a whole) and from the islands lying off Limurikē (Tamil Coast) itself.

The season for sailing to here, for those coming from Egypt, is about the month of July, that is Epiphi (eleventh month in Egyptian calendar).

3. Silk and Cinnamon from China

In the ancient world and during medieval times, the supply of silk and cinnamon originated in China and nowhere else. Foreign merchants could only pay for these imports in gold. Southeast Asian, Indian, Persian, Jewish, Arabian and African middlemen all played their parts in carrying these luxuries to western markets. There was a general knowledge about the sea-lanes and winter and summer monsoons, currents and trade winds in the Indian Ocean. Ships could sail from Yemen or Aden on the Red Sea to Daybul at the mouth of the Indus or to Quilon in India with the northeast-blowing monsoon in July in about forty days. They could voyage from India to the east coast of Africa, which formed a major destination of the triangular trade in spices, ivory and gold, with the southwesterly monsoon between the end of December and the beginning of January. Because of lateen sails and tacking, dhows could sail at slight angles and often traveled at will. Although

Pliny the Elder had but a vague notion of where China lay, was ignorant of the true nature of silk and thought cinnamon came from Africa instead of Vietnam and South China, the first-century Roman encyclopedia writer was well informed about the importance and value of the Far East trade, claiming it created a significant gold drain on the whole empire's economy. Pliny's Natural History, ed. John Bostock and H. J. Riley (London: Taylor and Francis, 1855), Book 6, Chapter 20, Book 12, Chapters 41-42.

The first people that are known of (beyond Tibet) are the Seres (Chinese), so famous for the wool (silk) that is found in their forests. After steeping it in water, they comb off a white down that adheres to the leaves; and then to the females of our part of the world they give the twofold task of unravelling their textures, and of weaving the threads afresh. So manifold is the labor, and so distant are the regions which are thus ransacked to supply a dress through which our ladies may in public display their charms. The Seres are of inoffensive manners, but, bearing a strong resemblance therein to all savage nations, they shun all intercourse with the rest of mankind, and await the approach of those who wish to traffic with them. The first river that is known in their territory is the Psitharas, next to that the Cambari, and the third the Laros; after which we come to the Promontory of Chryse (Malaysian Peninsula), the Gulf of Cynaba, the river Atianos, and the nation of the Attacori on the gulf of that name, a people protected by their sunny hills from all noxious blasts, and living in a climate of the same temperature as that of the Hyperborei (people of the Extreme North, which was believed to be temperate). Amometus has written a work entirely devoted to the history of these people, just as Hecataeus has done in his treatise on the Hyperborei. After the Attacori, we find the nations of the Phruri and the Tochari, and, in the interior, the Casiri, a people of India, who look toward the Scythians, and feed on human flesh. Here are also numerous wandering Nomad tribes of India. There are some authors who state that in a northeasterly direction these nations touch upon the Cicones (Thracians) and the Brysari.

Arabia produces neither cinnamon nor cassia; and this is the country styled "Happy" Arabia! False and ungrateful does she prove herself in the adoption of this surname, which she would imply to have been received from the gods above; whereas, in reality, she is indebted for it far more to the gods below. It is the luxury which is displayed by man, even in the paraphernalia of death, that has rendered Arabia thus "happy," and which prompts him to burn with the dead what was originally understood to have been produced for the service of the gods. Those who are likely to be the best acquainted with the matter, assert that this country does not produce, in a whole year, so large a quantity of perfumes as was burnt by the Emperor Nero at the funeral obsequies of his wife Poppæa. And then let us only take into account the vast number of funerals that are celebrated throughout the whole world each year, and the heaps of odors that are piled up in honor of the bodies of the dead; the vast quantities, too, that are offered to the gods in single grains; and yet, when men were in the habit of offering up to them the salted cake, they did not show themselves any the less propitious; nay, rather, as the facts themselves prove, they were even more favorable to us than they are now. But it is the sea of

Arabia that has even a still greater right to be called "happy," for it is this that furnishes us with pearls. At the very lowest computation, India, the Seres and the Arabian Peninsula, withdraw from our empire one hundred millions of sesterces every year—so dearly do we pay for our luxury and our women. How large a portion, too, I should like to know, of all these perfumes, really comes to the gods of heaven, and the deities of the shades below?

Fabulous antiquity, and Herodotus more particularly, have related that cinnamomum and cassia are found in the nests of certain birds, and principally that of the phoenix, in the districts where Father Liber was brought up (Far East); and that these substances either fall from the inaccessible rocks and trees in which the nests are built, in consequence of the weight of the pieces of flesh which the birds carry up, or else are brought down by the aid of arrows loaded with lead. It is said, also, that cassia grows around certain marshes, but is protected by a frightful kind of bat armed with claws, and by winged serpents as well. All these tales, however, have been evidently invented for the purpose of enhancing the prices of these commodities. Another story, too, bears them company, to the effect that under the rays of the noon-day sun, the entire peninsula exhales a certain indescribable perfume composed of its numerous odors; that the breezes, as they blow from it, are impregnated with these odors, and, indeed, were the first to announce the vicinity of Arabia to the fleets of Alexander the Great, while still far out at sea. All this, however, is false; for cinnamomum, or cinnamum, which is the same thing, grows in the country of the Æthiopians, who are united by intermarriages with the Troglodytæ (Sudanese, Berbers). These last, after buying it of their neighbors, carry it over vast tracts of sea, upon rafts, which are neither steered by rudder, nor drawn or impelled by oars or sails. Nor yet are they aided by any of the resources of art, man alone, and his daring boldness, standing in place of all these; in addition to which, they choose the winter season, about the time of the equinox, for their voyage, for then a southeasterly wind is blowing (monsoon); these winds guide them in a straight course from gulf to gulf, and after they have doubled the promontory of Arabia, the northeast wind carries them to a port of the Gebanitæ (Arabs), known by the name of Ocilia (in Yemen). Hence it is that they steer for this port in preference; and they say that it is almost five years before the merchants are able to effect their return, while many perish on the voyage. In return for their wares, they bring back articles of glass and copper, cloths, buckles, bracelets, and necklaces; hence it is that this traffic depends more particularly upon the capricious tastes and inclinations of the female sex. The cinnamon shrub is only two cubits in height, at the most, the lowest being no more than a palm in height. It is about four fingers in breadth, and hardly has it risen six fingers from the ground, before it begins to put forth shoots and suckers. It has then all the appearance of being dry and withered, and while it is green it has no odor at all. The leaf is like that of wild marjoram, and it thrives best in dry localities, being not so prolific in rainy weather; it requires, also, to be kept constantly clipped. Though it grows on level ground, it thrives best among tangled brakes and brambles, and hence it is extremely difficult to be gathered. It is never gathered unless with the permission of the god, by whom some suppose Jupiter to be meant; the Æthiopians, however, call him Assabinus. They offer the entrails of forty-four oxen, goats, and rams, when

they implore his permission to do so, but after all, they are not allowed to work at it before sunrise or after sunset. A priest divides the branches with a spear, and sets aside one portion of them for the god; after which, the dealer stores away the rest in lumps. There is another account given, which states that a division is made between the gatherers and the sun, and that it is divided into three portions, after which lots are twice drawn, and the share which falls to the sun is left there, and forthwith ignites spontaneously.

The thinnest parts in the sticks, for about a palm in length, are looked upon as producing the finest cinnamon; the part that comes next, though not quite so long, is the next best, and so on downwards. The worst of all is that which is nearest the roots, from the circumstance that in that part there is the least bark, the portion that is the most esteemed: hence it is that the upper part of the tree is preferred, there being the greatest proportion of bark there. As for the wood, it is held in no esteem at all, on account of the acrid taste which it has, like that of wild marjoram; it is known as *xylocinnamum* (cinnamon wood). The price of *cinnamomum* is ten denarii per pound. Some writers make mention of two kinds of cinnamon, the white and the black: the white was the one that was formerly preferred, but now, on the contrary, the black is held in the highest estimation, and the mottled, even, is preferred to the white. The most certain test, however, of the goodness of cinnamon is its not being rough, and the fact that the pieces when rubbed together do not readily crumble to powder. That which is soft is more particularly rejected, which is the case, also, when the outer bark too readily falls off.

The right of regulating the sale of the cinnamon belongs solely to the king of the Gebanitæ, who opens the market for it by public proclamation. The price of it was formerly as much as a thousand denarii per pound; which was afterwards increased to half as much again, in consequence, it is said, of the forests having been set on fire by the barbarians, from motives of resentment; whether this took place through any injustice exercised by those in power, or only by accident, has not been hitherto exactly ascertained. Indeed, we find it stated by some authors, that the south winds that prevail in these parts are sometimes so hot as to set the forests on fire. The Emperor Vespasianus Augustus was the first to dedicate in the temples of the Capitol and the goddess Peace chaplets of cinnamon inserted in embossed gold. I, myself, once saw in the temple of the Palatium, which his wife Augusta (Livia) dedicated to her husband the late emperor Augustus, a root of cinnamon of great weight, placed in a patera of gold: from it drops used to distil every year, which congealed in hard grains. It remained there until the temple was accidentally destroyed by fire.

4. Three Royal Grants to Jewish Merchants in Kerala

There has been a lot of confusion about these three South Indian cheppeds or royal grants. Reliable descriptions and transcriptions of the original copper plates on which they were written are hard to find.

By way of background, let it be recalled that in the Middle Ages Jewish settlements dotted the

Malabar
Maravel,
the Arab
(see VII.2
and Coch
by the hu
merchant
Malabar
In 82
in Crang
Abraham
and aut
centers
time of
Ext
one oth
Malabi
and in
Christi
of Ch
71). A
given,
in the
make
earlie
or Jew
faith
U
land
garr
cent
anja
The
Ma
Fre
me
fig
(p
be

Malabar Coast of Southwest India. These included Quilon (Kollam), Mount Dolly, Flandrini, Maravel, Shalyat, Kunjar-Kari and Shinkali (Cranganore). They are mentioned by writers such as the Arab Al-Idrisi, the Jew Benjamin of Tudela and the Christian Marco Polo. Out of Cranganore (see VII.2) emerged the modern communities of Ernakulam, Parus, Chennamangalam, Calicut and Cochin, the last mentioned the most famous. Kollam or Quilon was the only Indian port visited by the huge Chinese junks on their way to the Persian Gulf. It was the chief port of call for Chinese merchantmen during the Tang Dynasty. A Persian merchant, Soleyman of Siraf, who visited the Malabar Coast in the ninth century, found Quilon to be the most important port of India.

In 823, a Syrian Christian or Nestorian merchant prince named Mar (master) Sapir Iso arrived in Cranganore and received a grant witnessed by four Jews, Hassan, Ali, Isaac ben Michael and Abraham. Thus, Jewish merchants are documented as having been present and in positions of honor and authority on the Malabar Coast since at least 823, before others. One of the thriving trade centers during the medieval period was Cochin, whose Jewish community claims to go back to the time of King Solomon.

Extravagant claims have been made about the Tharisapalli Chepped. It is preserved along with one other in the St. Thomas Catholic Church in Kodungallur (formerly called Cranganore). Syro-Malabar Christians believe that St. Thomas landed nearby in 52 A.D. in a place called Tharisapalli and introduced Christianity to India. But as a recent historian points out, "There is nothing Christian about the document except its possession by its present owners" (Stephen Neill, *A History of Christianity in India: The Beginnings to AD 1707*, Cambridge: Cambridge UP, 2004, p. 71). A date of 849 is generally agreed upon for it. The dates of the other two cheppeds are variously given, though the Joseph Rabban grant, the only one specifically Jewish on its face, and continuously in the keeping of the Jews of Cochin, has traditionally been dated to just before 1000. We believe it makes more sense, however, to assign it to about 861. Whether the chief merchant named in the earliest of the grants, dated here to 774, was Syrian, Persian, Nestorian, Arab, Hindu, Christian or Jewish, remains unclear. The foreign merchants in India and China seem to have been of mingled faiths and multi-national orientation.

Until recently, the names *manigramam* and *anjuvannam* were believed to refer to parcels of land. They are now recognized to be formal corporate names for two trade guilds with their own garrisons of soldiers that operated in Tamil Country and as far away as Malaysia over a number of centuries. In maritime India and Southeast Asia, the terms *hamyamana*, *anjuman* and *anjavannam*, meant "foreigners, specifically Jewish merchants."

We believe all three Kerala grants come from the same period as our Rhoda colony, 775-900. They all focus on a community of politically powerful Gallo-Roman Jews and their partners on the Malabar Coast, the meeting place of East and West. The links are apparent. Joseph Rabban (a French Jewish name) may be identified with the Joseph mentioned as Oliver's learned father, whose memory of historical events extended back more than 500 years (Josephus Cross, 5AB). The same figure evidently is commemorated on the Josephus and Saul Cross (7AB). Here he is called a Levite (priest of the Temple) and his bust appears in profile wearing a kufiyah (Arab or Jewish headdress) beneath a miter, with a spice spoon symbol, Neptune's trident, Frankish axe and a distinctive

MERCHANT ADVENTURER KINGS OF RHODA

trademark in Tang Dynasty seal script. Everything seems to fit. If these correspondences are correct, Joseph died before 895, the date on the Josephus Cross. The Cochin Jews have continued to honor him.

We have been unable to find a better or more complete English translation than that of the Rev. Hermann Gundert (1814-1893), although we have updated some of his language, omitted some portions that are too confusing for the lay reader and added some of our own explanations in parentheses. Gundert was the author of an English-Malayalam dictionary and, incidentally, the grandfather of German writer Hermann Hesse. H. Gundert, "Translation and Analysis of the Ancient Documents Engraved on Copper in Possession of the Syrian Christians and Jews of Malabar," *Madras Journal of Literature and Science* 13, no. 30, pt. i (1844), pp. 115-46.

a.

Privileges Granted to Ravi Korran, Sovereign Merchant of Kodungallur (Cranganore), 774 (large copper plate with Tamil letters in Malayalam)

Hari Sri Adoration to Ganapati

The blessed rule having devolved from the earth-ruler Manlord Chacravarti (*Perumal*, or grand person, or monarch) Vira Kerala (the first of the line, title of Cochin rajas) thro' regular succession upon Sri Vira Raghava Chacravarti, now wielding the scepter for many 100,000 years (in the year) Jupiter in Capricornus, the 21st of the Mina month, Saturday, Rohani asterism, the following grant was made in the Royal palace (of the Perumal)—

We have given to Iravi Corttan (Ravi Corran) of Mahodéverpattnam (the old name of Coḍunrīlūr, or Coḍungalur, or Cranganore, coming from Sanskrit *Mahas* "worship," residence of the Perumals or Sovereign Rulers and first resort of western shipping), (henceforth to be called Grand Merchant of the Chéramán world, that is, Kerala), the Lordship of Manigrámam (i.e., head of this trade guild, believed to be named after Mani, literally "Colony of Mani"). We also have given to him (the right of) the feast-cloth (?), house pillars (or pictured rooms), all the revenue, the curved sword (or dagger) and in (or with) the sword the sovereign merchantship, the right of proclamation, the privilege of having forerunners, the five musical instruments, the conch, the light (or torch burning) by day, the spreading cloth, litter, Royal umbrella, Vaduca drum (drum of the Telagu's or of Bhairava?), the gateway with seats and ornamental arches, and the sovereign merchantship over the four classes (or streets, the four types of foreign merchants, such as Concanese, Guzarattis (Gujaratis, West Indians), Chinese and Arabs or Jews)—also the oilmakers and the five kinds of artificers (goldsmith, carpenter, founder, ironsmiths, coppersmith) we have subjected to him (or given as slaves to him)—We have given as eternal (literally "water"—referring to pouring water over hands in investment ceremony) possession to Iravi Corttan the lord of the town, the brokerage and due customs of all that may be measured by the para, weighed by the balance, stretched by the line, of all that

may be counted or
be—namely within
the four Talis (templ
We have given it by
world (Chera Kingd
and clear and herita

Witnesses are:--

With the knowle
we given it; with
Cayanculam) and
time that sun and
Chaḍayan grand g

Tharisapa
(Travancore) Ki

Hail!—In the tim
years, treading ur
Excellence the A
and of Punnatta
Adigal to the T
Collam.

...and I also
Ílakeyar (Sihala
from the same s
tax for the eleph
the harvest go
sharestaff and
free and unres

Maruwán S
that these fou
family of carp
being Cárálar
do their duty
ceremonies s
Tarisá Churc
Decreed w
ceremony of

may be counted or carried, contained within salt, sugar, musk, and lamp oil, or whatever it be—namely within the river-mouth of Codungalur (Cranganore) and the tower, or between the four Talis (temples of the deputy Brahmans) and Gramams (colonies) belonging to them—We have given it by an unreserved tenure to Iraví Corttan Grand Merchant of the Chéramán world (Chera Kingdom, Kerala) and to his sons and son's sons in proper succession (viz., free and clear and heritable in perpetuity).

Witnesses are:--

With the knowledge of the two, Brahman divisions of Panniyúr and Chowaram village have we given it; with the knowledge of the Vénádu (Travancore) and Ódunádu (Onadu, Cayanculam) and Valluwa (Eranadu, Tirunavai) nádu (rulers) have we given it; given for the time that sun and moon shall last; with the knowledge of the above, written by Nambí Chaḍayan grand goldsmith of the Chéramán world (Chera Kingdom).

b.

Tharisapalli Grant by Commissioner Sthanu Ravi Gupta in Behalf of Venadu (Travancore) King to Maruwán Sapír Ísó, 849 (five copper plates in Kufic and Hebrew)

Hail!—In the time of Perumál Sthánu Ravi Gupta, who now rules floriously for many 100,000 years, treading under foot hostile heads, in his 5th year, this year under the concurrence of His Excellence the Ayyan-Adigal, governing the Vénádu (the Travancore King) of Anjuwannam and of Punnattala's Lord the following grant of a freehold has been given by H.E. the Ayyan Adigal to the Tarisá Church (and Community) established by Isodáta Virái of Curakkéni Collam.

...and I also of the four families of Ílawar (Islanders, Simhalese) and of the eight families of Ílakeyar (Sihala low casts or slaves?) belonging to them, and one family of washermen coming from the same stock as these, all these being entitled to the fetter-right and ladder right; to the tax for the elephant feeder and to the wash-gold, which the Chàdàn is wont to get as well as to the harvest gold, to the nightly meal of rice and to the pot-measure, I, possessed of this sharestaff and of the Cavván (tribute?) and of those 5 Kandis (shares?)—have given them by a free and unrestricted transfer.

Maruwán Sapír Ísó who has received the hereditary possession of this town, having arranged that these four families of Ílawar (with their servants and washerman), two families of --, one family of carpenters, and four families of Vellállar (Tamil agriculturists or farmers), the latter being Cárálar (ploughmen, temple trustees) of the Alavé (or Aladeiya) land, that all these may do their duty to God, the planter by planting, the setter by setting trees, so that the required ceremonies such as the oil for the Church suffer no diminution, has enacted and given to the Tarisá Church the land now to be described.

Decreed with the sanction of the Mayor of Palace Vyaráka Dévar and power given with the ceremony of waterdrops for seizing and possessing, under the concurrence of H.E. the Ayyan

MERCHANT ADVENTURER KINGS OF RHODA

Adigal, H.E. the second Raja—Ráma, his officers and ministers, and of the 600, also of the neighboring lords of Punnattala and Púlacudi—the Land bounded so that the E. border be Vyalcádu (Wasteland)—and the backwater included; the S.E. border be the wall near the little door gate (?); the W. border the sea; the N. border the Tórana garden; the N.E. border the garden of the unapproachable of Punnattala; the land enclosed within these four borders I have empowered to take and by executing this copper deed have given, for the days that earth, moon and sun exist.

And it has further been settled with the concurrence of H.E. the Ayyan Adigal, H.E. Rama, and the Mayor of the Palace—that the Palliyár alone have power to punish the heathen families of this land for any offence whatsoever and receive the fines, expenses, headprice and breastprice—mine own relations whoever they be, whatever the charges be, shall never have the right there to speak as heads of the land dealing with subjects—Let the 600, the Anjuwannam and the Manigramam (Jewish and Christian authorities) be the protectors. Let them, even Anjuwannam and Manigramam, act both with the Church and the Land according to the manner detailed in this copper deed for the times that earth, moon and sun exist. Ordered with the sanction of the Mayor of the Palace Vyaráka Dévar, and with the sanction of H.E. the Ayyan Adigal, and H. E. Rama and free tenure granted to these Palliyar as follows:

—There being 61 citizens, the number not to be increased nor to be diminished; no personal tax to be received for the slaves they buy;—for admitting any conveyances or letting them out (i.e., customs, tolls) they are to receive 8 coins; in the case of elephants and of boats whether for letting in or letting out they are to receive 4 coins; merchandise belonging to the citizens to be disposed of by them with the cognizance of the above; and that they the Palliyar do all the business of a Lord (Swami), on the place of packing the wares and elsewhere, only after deliberation with the above mentioned Anjuwannam and Manigramam; that the Anjuwannam and Manigrammam protect the citizens in every coming generation; that in the space within the four gates and on the spot where land for sale is given in trust, the Palace having received the King's tithe, the Anjuwannam and Manigramam receive the Lord's tithe with the sanction of the Mayor of the Palace Vyaraka Devar, who has given to these Palliyar the 72 jenmi rights such as for marriages, the elephant's back, the earth, the water etc., all marks of nobility, and with the concurrence of H.E. the Ayyan Adigal, H.E. Rame, the ministers and officers, the 600 and the Lords of Punnattala and Púlacudi, let the Anjuwannam and Manigramam carry out this unrestricted possession-right in the manner described by this copper deed for the time that earth, moon and sun exist.

If any injustice be done to the Anjuwannam and Manigramam they may withhold the tribute and remedy themselves the injury done to them. Should they themselves commit a crime, they are themselves to have the investigation of it. And let whatever the two chieftains of the Anjuwannam and Manigramam who have taken possession as trustees for this town may do in unison be counted for one act. And let Maruwán Sapír Ísó who [was invested with] this town, since he acquired the sharestaff and those 5 pieces (?) which formerly were the property of the Palliyar pay for the full price to the Church (?). This also I have given over by

unrestricted to
every kind of
Those llav
The washer-
ruler (or Tiy
any charges
them.

I have giv
and sun do

The perso
the Ayyan A

To those
of Ayyan...

Signed in
"courageou

Names o
Ali, Osm
Ibrahim S
Ismael So

Grant

Hail! Sri
Varman
against
says "in

We l
jenmi r
landho
litter, t
and si

We
land a

An
to the
"And
inhal
G

unrestricted transfer—I have ceded to the Tarisá Church people by full and unrestricted tenure every kind of revenue by this copper deed for the time that earth, moon and sun do last.

Those Ilawar are permitted to follow out their occupations (?) in the bazaar and on the wall. The washer-man may come and do his work in the bazaar and on the wall. Nor have the Island ruler (or Tíyar headman) and the Wall-officer or whoever it be, any power to stop them on any charges whatsoever. Though they should commit a trespass the Palliyár alone have to try them.

I have given this in the manner detailed in the copper deed for the time that earth, moon and sun do last by full, free and unrestricted tenure.

The person who made this full, free and unrestricted transfer to the Tarisápalli through H.E. the Ayyan Adigal, is Maruwán Sapír Ísó.

To those who keep this and care to see it observed let God himself be gracious. The writing of Ayyan... Rule victoriously!

Signed in Hebrew by four Jews belonging to the Anjuwannam: Hamush, or Hamish (Arabic "courageous"; others read Hassan), Isaac ben Michael . . . Abraham, (and Ali).

Names of Arab witnesses: Meimun Son of Ibrahim, Muhammad Son of Mania, Tai Son of Ali, Osman Son of Ali Hazramat (?), Mohammad Son of Yahia, Omru Son of Ibrahim, Ibrahim Son of ***, Bakr Son of Mansur, Alkasim Son of Hamid, Mansur Son of Eesa and Ismael Son of Yakub.

c.

Grant of Privileges to Joseph Rabban, 861 (copper plates and pages of translations in Hebrew in Cochin synagogue)

Hail! Sri—The King who has taken the Supreme Rule, King (Perumal) Srí Bháskara Ravi Varman, wielding the scepter and ruling for many 100,000 years, in his time, in the 36th year against the second year on the day when he was pleased to sit in Muyiri-códu (Hebrew copy says "in Cranganur or Codungalur"), he was pleased to grant this favor.

We have given to Joseph Rabban (the headship of the) Anjuwannam, along with the 72 jenmi rights such as going with elephants and other conveyances, tribute from subordinate landholders and the revenue of the Anjuwannam, the light by day, the spreading cloth, the litter, the umbrella, the Vaduca drum, the trumpet, the gateway with seats, ornamental arches and similar awnings and garlands and the rest.

We have remitted to him the tribute to the Supreme Government ("and the revenue of the land and balances their hires he remitted," according to the Jewish version).

And we have enacted with this copper deed that when the other Town inhabitants pay taxes to the Palace he shall not have to pay, when they receive, he shall also receive. (Jewish version: "And he shall be chief to the rest of the Cities in which there are Synagogues and Jewish inhabitants").

Given to Joseph Rabban of the Anjuwannam, and to his posterity, sons and daughters,

MERCHANT ADVENTURER KINGS OF RHODA

nephews and sons-in-law for the time that earth and moon exist.

Thus do I know Góvardhana Márttandan, owner of Vénádu (or Travancore). Thus do I know Kotei Sri Candan, owner of the Vénaváli province (Bembali, Cottayam).

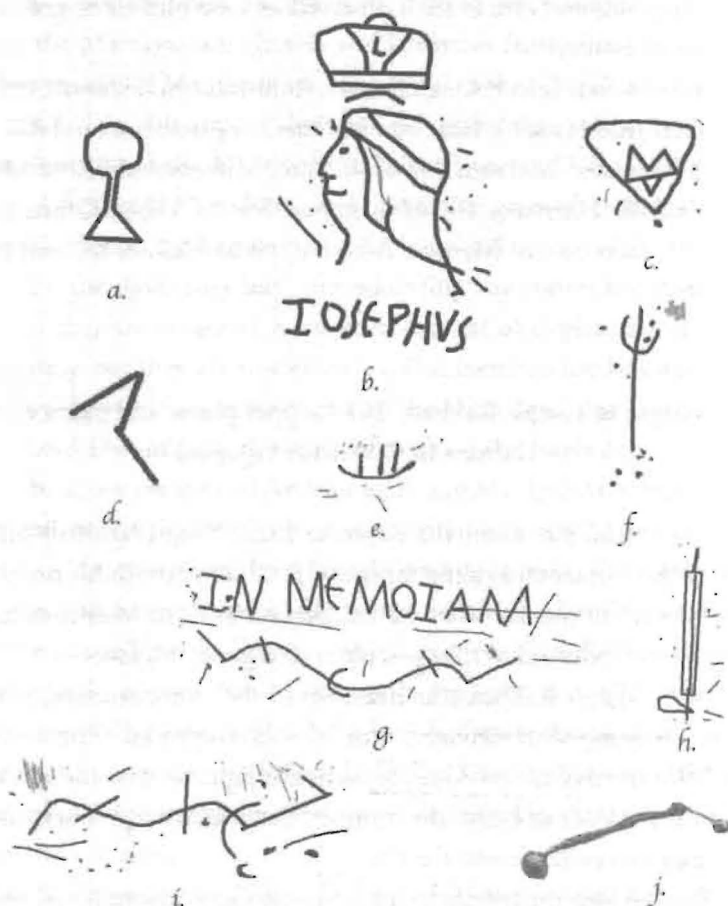
Thus do I know, Mána Vépala Mána Víyan, owner of Erála province . . . thus do I know, Ráyan Cháttan, owner of Valluwa province.

Thus do I know, Cotei Ravi, owner of Nedumpureiyúi district.

Thus do I know, Múrkhan Cháttan, commanding the Eastern army.

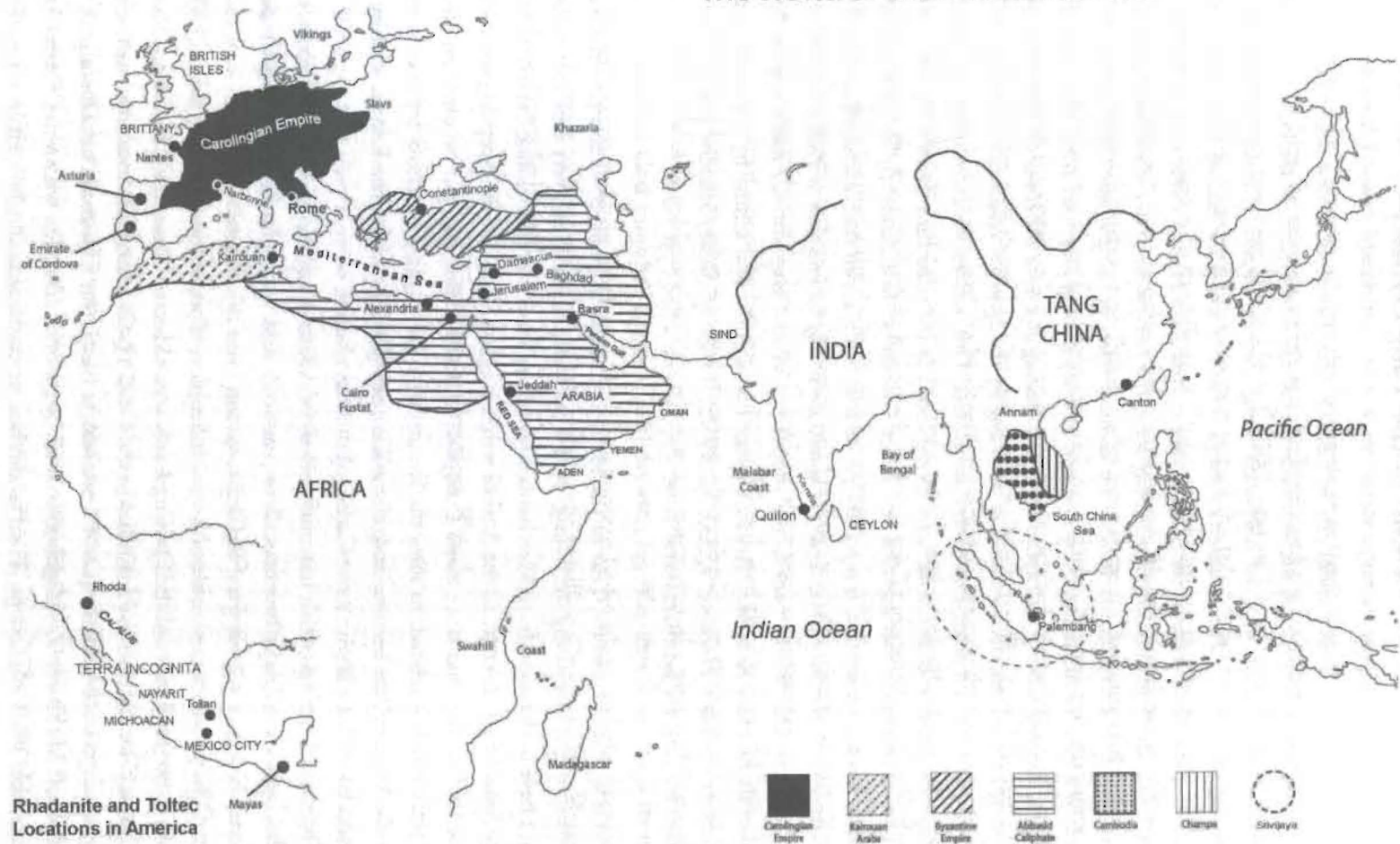
Candan of Great Taleicheri Kil-way the mountain-splitter.—The writing of Kelappa.

(“Perimpadappu who is now the Raja of Cochin is here not mentioned because the Perumal made him his heir and successor.”—Jewish version)



Trade emblems from the Joseph and Saul Cross (7AB): a. spice spoon, b. bust of Joseph with miter of Levite, c. anchor, d. sextant (?), e. ship, f. trident, g. Joseph's trademark, h. Frankish axe, i. another seal (perhaps Saul's), j. waxen mark of unknown significance.

The World of the Rhadanite Jews



5. End of the Tang Dynasty

*Kaifeng may be the most famous city of Chinese Jews, but there were a dozen others with large Jewish and other Western populations including Arabs and Syrians in the early medieval period. Foremost among them was the celebrated Tang Empire seaport of South China, Guangzhou (Canton). See VII.6. "Tang Canton's Foreign Trade." During the Huang Chou rebellion toward the close of the ninth century, the Islamic traveler Abu Zaid Hassan wrote that 120,000 Muslims, Jews, Christians and Persians, representing the entire foreign merchant community of Canton, was wiped out. One commentator believes his account refers to Ganpu, not Canton, but the point is moot, for under the succeeding Song Dynasty, after a period of profound disruption, both these ports declined. Kaifeng became the capital and great trading city from the eleventh century onward. The following account describes the ruin of the Tang by the agrarian revolution of Huang Chou from the point of view of a foreign merchant about 880. This marked the interruption of "the ordinary Navigation from Siraf to China" and corresponded to the same time when Oliver was writing of the civil disturbances that overtook the Toltec Chichimecs in Calalus. By the year 905 the Tang Dynasty was utterly defunct. It is probably with this turn of events that communications with China were severed. At the same time, Israel III moved the seat of his kingdom to Tollan in Mexico. Return passage to the Old World with its old shipping lanes and long-distance trade slowed. Abu Zaid Hassan in Eusebius Renaudot, *Ancient Accounts of India and China by Two Mohammedan Travellers* (London: Harding, 1733), pp. 39-43, 44-45; cf. Sidney Shapiro, *Jews in Old China: Studies by Chinese Scholars* (New York: Hippocrene, 1984), pp. 60-61.*

I find it was written in the Year of the Hejra CCXXXVII (A.D. 851) and that the Accounts the Author gives touching the Things of the Sea were, in his Time, very true and agreeable to what I have understood from Merchants who depart from Iraq (Babylonia, Persia), to sail upon those Seas. I find also that all the Author writes is agreeable to Truth, excepting some Passages.

He told us also that since those Days the Affairs of China had put on quite another Face; and since much is related, to shew the Reason why the Voyages to China are interrupted, and how the country has been ruined, many Customs abolished, and the Empire divided, I will here declare what I know of the Causes of this Revolution.

The great Troubles which have embroiled the Affairs of this Empire, which have put a Stop to the Justice and Righteousness there practiced, and which have, in fine, interrupted the ordinary Navigation from Siraf to China, sprang from this Source.

An Officer, who was considerable for his Employ, though not of the Royal Family (Huang Chou, d. 884, sole ruler of the Qi Kingdom), revolted some Time ago. This Man's Name was Baichu, and he began with Hostilities in the Country, marching his Arms into many Places to the great Loss of the Inhabitants, till winning a Party over to him by his Liberalities, he got together a Multitude of Vagabonds and abandoned People, whom he formed into a considerable Body of Troops. His Hands thus strengthened, and himself in a Condition to undertake any Thing, he betrayed his Design of subduing the Empire to himself, and strait

[sic] marched to Canfu, one of the most noted Cities in China, and, at that Time, the Port for all the Arabian (and Jewish) Merchants. This City stands upon a great River (Pearl), some Days distant from the Entrance, so that the Water there is fresh: But the Citizens shutting their Gates against him, he resolved to besiege the Place, and the Siege lasted a great while. This was transacted in the Year of the Hejra CCLXI, and of Christ DCCCLXXVII (A.D. 877). At last he became Master of the City, and put all the Inhabitants to the Sword. There are persons fully acquainted with the Affairs of China, who assure us, that besides the Chinese, who were massacred upon this Occasion, there perished one Hundred and twenty Thousand Mohammedans, Jews, Christians, and Parsees, who were there on Account of Traffic. The Number of the Professors of these four Religions (Islam, Judaism, Nestorian Christianity and Zoroastrianism), who thus perished, is exactly known; because the Chinese are extremely nice in the Accounts they keep of them. He also cut down the Mulberry Trees, and almost all the Trees of other Kinds; but we speak of the Mulberry in particular, because the Chinese carefully cultivate it for the sake of its Leaf, wherewith they subsist and propagate their Silk-worms. This Devastation is the Cause why Silk has failed, and that the Trade which us'd to be driven with it, in the Countries under the Arabs, is quite stagnated.

From these Combustions there arose many unjust Dealings with the Merchants who traded thither, which having gathered the Force of a Precedent, there was no Grievance, no Treatment so bad but they exercised upon the foreign Arabs (and Jews), and the Masters of Ships. They extorted from the Merchants what was uncustomary, they seized upon their Effects, and they behaved towards them in a Method of Procedure quite contrary to the ancient Usages. And for these Things has God punished them by withdrawing his Blessings from upon them in every Respect, and particularly by causing the Navigation to be forsaken, and the Merchants to return in Crowds to Siraf and Oman, pursuant to the infallible Orders of the Almighty Master, whose Name be blessed.

6. Canton's Foreign Trade

An anonymous Arab author left an incomplete ninth-century treatise on trade with India and China. We learn that there were no taxes on land, only poll taxes and tariffs, the Chinese had free access to medicine, there was hardly any crime in the kingdom, and that toilet paper was invented under the Tang Dynasty. We also learn what sea-routes our Romani and other Jews in long-distance trade took from the West to Canton, the major port, and how efficiently foreign trade was managed there. The journey from the main port of the Caliphate at Siraf to the principal trading city of Tang China at Canton took five months, not an inordinately long period of time. Arab geography divides the Seven Seas as follows: the Persian Gulf ("Sea of Fars"), the Arabian Sea ("Sea of Larwi"), the Bay of Bengal ("Sea of Harkand"), the Strait of Malacca ("Sea of Kalah"), the Singapore Strait ("Sea of Salahit"), the Gulf of Thailand ("Sea of Kardanj"), and the South China Sea ("Sea of Sanji"). See also VII.5. "The Canton Massacre and End of the Tang Dynasty." The same route is documented by J. Innes Miller, The Spice Trade of the Roman Empire (with maps). The Tang

Dynasty was a military colossus, the most perfect model of enlightened government the world had ever seen, a dynamic economic power and the source of advanced technology and the most refined culture and arts. It was followed by the Song Dynasty (960-1279), whose inland capital Kaifeng replaced Canton as China's great trading center and most famous Jewish community. Eusebius Renaudot, Ancient Accounts of India and China by Two Mohammedan Travellers (London: Harding, 1733), pp. 1-26.

The third of the Seas we have to mention is the Sea of Harkand (Gulf of Bengal). Between this Sea and that of Delarowi (Maldives), are many Islands, to the Number, as they say, of 1900.

Canfu (Canton) is the Port for all the Ships and Goods of the Arabs, who trade in China; but Fires are there very frequent, because the Houses are built with nothing but Wood, or else with split Cane [Bamboo] besides, the Merchants and Ships are often lost in going and coming; or they are often plundered; or obliged to make too long a stay in Harbor; or to sell their Goods out of the Country subject to the Arabs, and there make up their Cargo. In short, Ships are under a necessity of wasting a considerable time in refitting, not to speak of many other Causes of Delay.

Soliman the Merchant (Sulaiman or Soleiman al-Tajir, ca. 850) relates, that at Canfu, which is the principal Sale for Merchants, there is a Mohammedan appointed Judge over those of his Religion, by the Authority of the Emperor of China; and that he is Judge of all the Mohammedans who resort to these Parts. Upon Festival Days he performs the public Service with the Mohammedans, and pronounces the Sermon or Kotbat, which he concludes in the usual form, with Prayers for the Soltan of the Moslems, [or Musellmen.] The Merchants of Irak who trade hither, are no way dissatisfied with his Conduct, or his Administration in the Post he is invested with; because his Actions, and the Judgments he gives, are just and equitable, and conformable to the Koran [or Alcoran,] and according to the Mohammedan Jurisprudence.

As for the Places whence Ships depart, and those also they touch at; many Persons declare that the Navigation is perform'd in the following order: Most of the Chinese Ships take in their Cargo at Siraf (ancient Sassanid port destroyed around 970 CE located on the north coast of the Persian Gulf in the Iranian province of Bushehr), where also they ship their Goods which come from Basra or Bassora (main city and port of Babylonia at head of Persian Gulf where Tigris and Euphrates debouche), Oman, and other Parts; and this they do, because in this Sea (that is, in the Sea of Persia and the Red Sea) there are frequent Storms, and shole (shoal) Water in many Places. From Basra to Siraf is 120 Leagues, and when Ships have loaded at this last Place, they there water also; and from thence make Sail for a Place called Mascat (Muscat, harbor and capital of Oman on Arabian Peninsula and Arabian Sea), which is in the extremity of the Province of Oman, about 200 Leagues from Siraf. . . . From hence Ships take their Departure for the Indies, and first they touch at Kauammali (Kaucam or Kulam on the Malabar Coast in SW India); and from Mascat to this Place, it is a Month's sail, with the Wind

aft. This is a Frontier Place, and the chief Arsenal in the Province of the same Name; and here the Chinese Ships put in and are in safety

From Mascat to Kaucammali, it is, as we have said, a Month's Sail; and then, having watered at this last place, you begin to enter the Sea of Harkand (Laccadive Sea and Bay of Bengal); and having sailed through it, you touch at a place call[ed] Lajabalus (Najabalus, Nicobar Islands), where the Inhabitants understand not the Arabesque, or any other Language in use with Merchants. They wear no Cloaths, are white, and unstable on their Feet (?)

From this place Ships steer towards Calabar (Kalah isthmus on Malay Peninsula) . . . Calabar is about a Months Voyage from a Place called Kaukam, which is almost upon the Skirts of the Sea of Harkand.

In ten Days after this, Ships reach a Place called Betuma (modern Binting, or a place opposite Singapore, on the Straits of Malacca), where they may water if they please. From thence in ten Days they come up with Kadrang (Cambodia), where also they may water. It is worth the notice, that in all the Islands and Peninsula's of the Indies, they find Water when they dig for it.

In this last mentioned Place there is a very lofty Mountain, which is scarce Peopled by any but Slaves and fugitive Robbers. From thence in ten Days they arrive at Senef (Sanf, Champa in Vietnam). Here is fresh Water, and hence comes the Aromatic-wood, we call Hud al Senefi (aloe-wood); Here is a King; the Inhabitants are black, and wear two striped Garments.

Having watered in this Place, it is a ten Days Passage to Sandarfulat (Annam?), an Island where is fresh Water. Then they steer upon the Sea of Sanji (Champa, South China Sea), and so to the Gates of China; for so they call certain Rocks and Sholes in that Sea, between which is a narrow Strait, through which S[h]ips pass. It requires a Month to Sail from Sandarfulat to China, and it takes up [to] eight whole Days to steer clear of these Rocks. When a Ship has got through these Gates, she, with the Tide of Flood, goes into a fresh Water Gulf, and drops Anchor in the chief Port of China, which is that of Canfu; and here they have fresh Water, both from Springs and Rivers, as they have also in most of the other Cities of China. The City is adorned with large Squares, and supplied with all the Necessaries of Defence against an Enemy; and, in most of the other Provinces, there are Cities of Strength, fortified in the same manner.

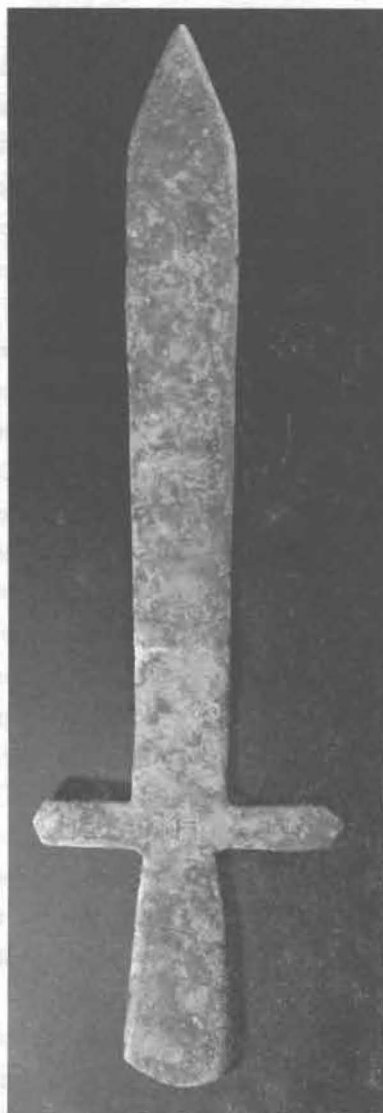
They say, that in the Kingdom of China there are above two hundred Cities which have Jurisdiction over several others, and have each a Prince or Governor, and an Eunuch or Lieutenant. Canfu is one of these Cities, being the Port for all Shipping, and presiding over twenty Towns.

When Merchants enter China by Sea, the Chinese seize on their Cargo, and convey it to Warehouses; and so put a stop to their Business for six Months, and till the last Merchantman be arrived. Then they take three in ten or thirty per Cent. of each Commodity, and return the rest to the Merchant. If the Emperor wants any particular thing, his Officers have a right to take it preferably to any other Persons whatsoever; and paying for it to the utmost Penny it is valued at, they dispatch this Business immediately and without the least Injustice. They

MERCHANT ADVENTURER KINGS OF RHODA

commonly take Camphire, for which they pay for after of rate of fifty Fakuges per Man, and the Fakuge is worth a thousand Falus or Pieces of Copper. . . .

If a Man would travel from one Place to another, he must take two Passes with him; the one from the Governor, the other from the Eunuch or Lieutenant. The Governor's Pass permits him to set out on his Journey, and takes notice of the Name of the Traveler, and of those also of his Company, the Age and Family of the one and the other; For everybody in China, whether a Native, or an Arab, or any other Foreigner, is obliged to declare all he knows of himself, nor can he possibly be excused the so doing.



Short sword (gladius) with Calalus field ensign, L.I. and leviathan or tannin discovered by A.E. Douglass with C.J. Sarle, March 28, 1925 (artifact 11). Photo Robert C. Hyde.

VIII MINING AND METALLURGY

Six metals are mentioned in the Bible, gold, silver, copper, iron, tin and lead. All are found in Eretz Israel. Moses was commemorated in Jewish legend as the founder of metal working. Ezekiel was well acquainted with the technical processes of refining and smelting silver and described how it was recovered from its ores by means of bellows and furnaces, leaving slag behind. Gold, especially important since the Tabernacle of Solomon and days of Hiram, his Phoenician contractor, was hammered and melted, and of the seven types of gold, the Talmud, interestingly, calls one of them TOV. Silver was commonly found in silver sulfides along with gold and copper and sometimes lead. Copper (*nehoshet*, a word related to *nehushtan*) was alloyed with tin and zinc to produce bronze, the metal which underlay the age called after it and made possible sharper weapons and stone-cutting tools. It was the main metal mined in Palestine or Judea, and is the only one commercially viable there today.

The Brazen Serpent or Nehushtan was fashioned in the wilderness by Moses as a symbol of leadership for the Israelites, and subsequent nehushtans, including those of the Tucson Artifacts, had military significance. The ancient sources of lead (*'oferat*) were Asia Minor and Syria, and the Phoenicians brought it from Tarshish (Tartessos in Celto-Iberia). It was used in many applications, including coins, laws, ballast, ship plating, roofing, seals (*bullae*), coffins, curse tablets, and shot for slings. It was considered to last for eternity. For unknown reasons, lead coins served as the petty currency in the Persian Gulf from about 700 to 750. Precious metals were traded by banking firms with international branches. Gold and silver were supplied to jewelers, mosaic makers and silk brocade artisans, all by-words for Jews.

In the early Middle Ages, most of the Roman mines of antiquity were closed by the barbarian peoples, who followed pagan practices in considering it sacrilegious to delve into the earth. At the same time, the Merovingian kings and others hoarded enormous amounts of gold in their treasuries. A severe currency shortage ensued after 400. Money largely disappeared from the economy. Charlemagne was faced with a dearth of gold and silver, but by the reign of Louis the Pious, new mines had been opened in Gaul, Galicia, Saxony and Britain. The Rhadanites plied trade routes that crossed national boundaries and created a free flow of metals worldwide (850-950). The operators of the mines within the Carolingian realms were

MERCHANT ADVENTURER KINGS OF RHODA

invariably Jews, just as the majority of moneyers and minters were also Jewish. Large debts and tithes, as well as trade balances, were paid in gold and silver bullion, not coins.

The period dating from 425 to 1125 has been designated the Asiatic Supremacy in the history of mining, metallurgy and minting by Ian Blanchard. At the beginning of the Arab conquests, and continuing until the ninth and tenth centuries, a majority of the world supply of gold came from plunder. There was a great "gold drain" from Christian lands in the West to the Muslim lands in the East. Byzantium, situated between the two blocs, maintained its gold standard thanks to captive mines in the Black Sea, Pontic and Caucasus regions. Charlemagne's wealth was land-based. It was accumulated in his *fisc* and embodied intangibly through a network of feudal obligations. It was, in other words, agrarian. The ruler nevertheless stabilized the currency of his empire and balance of trade by founding it on silver, with a fixed ratio to gold. Throughout, Carolingian monetary policy was guided by Jewish court advisors.

Accounts of native Mesoamerican metal working (see VIII.16. Aztec Metallurgy) and commerce (VI.7. Toltec Commerce and Business Practices) make it clear that the metals mined by the Romani as governors in the Toltec Chichimec province of Calalus need not have been destined for foreign markets but could all have been disposed of in the New World. Gold dust, gold bullion and pieces of copper substituted for currency throughout Mexico and Central America. Notably, soldiers were paid in gold. There was a steady demand for refined gold, silver and other metals plus precious stones, shells and coral for jewelry, ornaments, status symbols such as bells and bracelets, and art objects, to say nothing of the use of lead in paint and ceramic glazes. Such metals could also be traded westward along with spices and other carrying goods, as a Javanese shipwreck of ca. 850 demonstrates. At any rate, the portfolio of long-distance imports and exports was constantly shifting according to the opportunities and circumstances in the different markets along the trade routes. In the case of the American Southwest it is clear that the demand for and exploitation of turquoise was a driving force from about the sixth century.

Mining history is usually not regarded as a factor in the study of economic systems. In Southwestern indigenous studies, it is almost completely ignored in peoples' migrations and the diffusion or development of such cultural phenomena as maize agriculture, cremation urn burials, irrigation canals, ball play and social organization. The Tucson Artifacts offer in this respect some revealing perspectives that support world systems theory. They make possible an expanded understanding of the complexities, interrelationships and diversity buried beneath the surface of history.

No other mi
its use is rela
golden wor
turquoise. A
start until
archeologis
China (see
Blanchard
opened the
jewelry and
Chalchihua
trade rou
Today,
sites and
have bee
turquoise
Mexico,
Mounta
fraction
U.S.
Basin,

In an a
mining
gold o
were
limon
River
Dam
of tu
of re
imp
turq
hav
Me

1. Prehistoric Mining in the Southwest

a.

Turquoise Mining under the Pueblo Indians

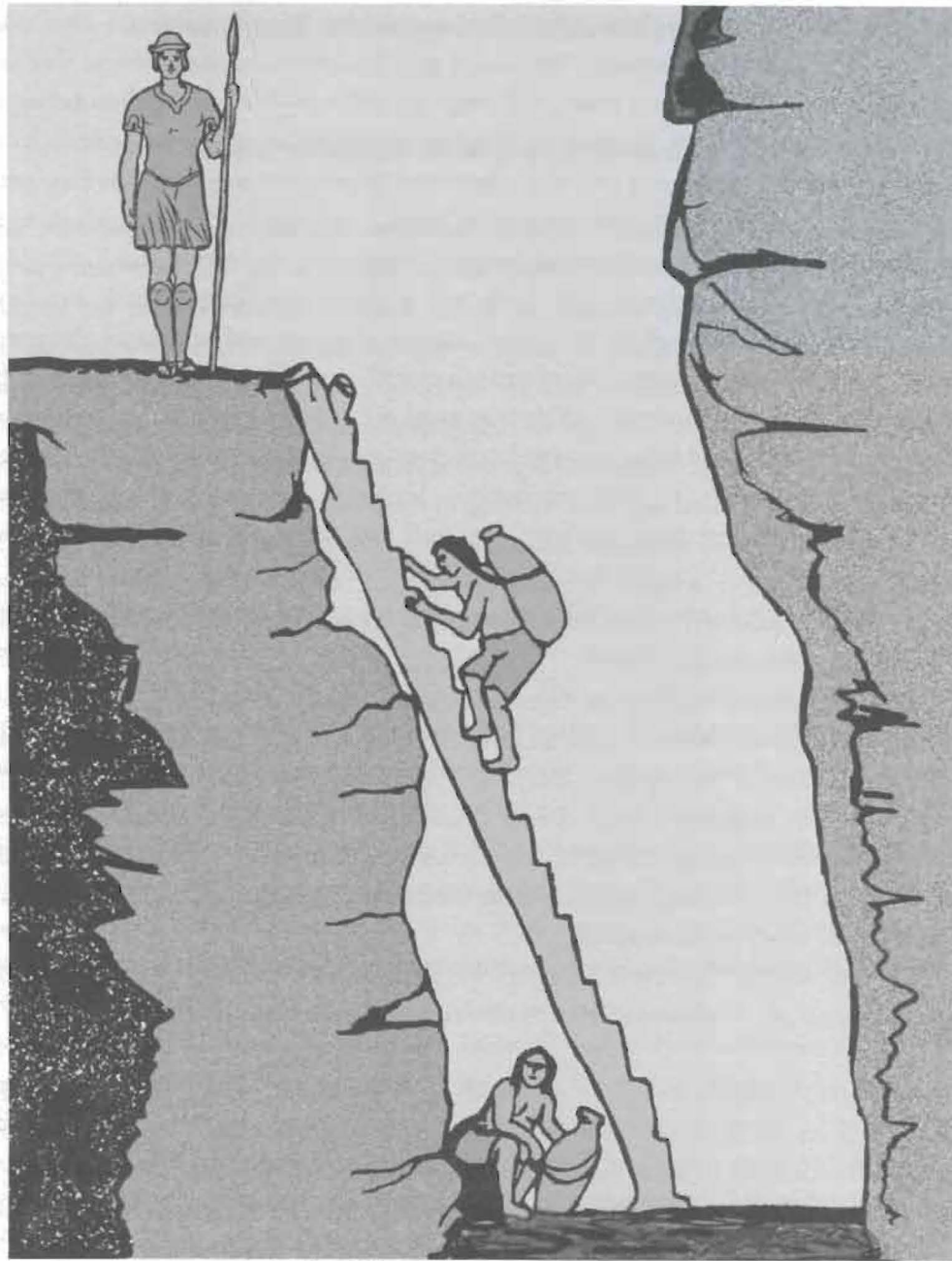
No other mineral has been valued as highly by Native American societies as the "god stone," although its use is relatively recent in the long sweep of history. Whereas in the Western tradition we speak of golden words or being silver-tongued, in Native American societies wisdom was compared to turquoise. According to this report, turquoise mining and bead production in the Southwest did not start until about 600, coincidental with the beginnings of the region's first civilization, known to archeologists as Basketmaker. This was the time of the first travelers' accounts from Afghanistan and China (see X.7. Fu-Sang). It was also the period of Asiatic supremacy in the history of mining (Ian Blanchard, Mining, Metallurgy and Minting in the Middle Ages). Could it be that Easterners opened the first turquoise mines and introduced the passion for that stone matching that of jade in jewelry and ceremony among the indigenous people? Certainly, it was the Mesoamerican Chalchihuites Tradition (Precious Stone People) from Western Mexico that developed the turquoise trade routes and production centers.

Today, archeologists have counted between one and two million pieces of turquoise from ancient sites and ruins in the American Southwest and Northwest Mexico, and that is only the ones that have been noticed or investigated (Weigand). Experts have identified more than 200 ancient turquoise mines, including those at Mount Chalchihuitl outside Santa Fe and Cerillos in New Mexico, Superior (Sleeping Beauty) in the Superstition Mountains, and Bisbee and Turquoise Mountain in the Courtland-Gleason area of southeastern Arizona. They estimate this is but a fraction of the mines that once existed.

U.S. National Park Service, A Survey of the Recreational Resources of the Colorado River Basin, Chapter IV: "Prehistory of Man in the Southwest" (Washington: GPO, 1946).

In an area that is today noted for its thousands of mines, it is interesting to record that the first mining was carried on as early as twelve to fifteen hundred years ago. However, it was not for gold or silver or other minerals we so eagerly search for today that these early miners dug. They were interested chiefly in rock salt, turquoise, and such paint materials as hematite and limonite. Numerous salt mines have been found along the banks of the Verde and Virgin Rivers, both open pit mines and natural caves being utilized. Turquoise pit mines near Hoover Dam contain pueblo potsherds and stone picks and hammers. Production of surplus quantities of turquoise and salt enabled extensive bartering to be carried on with other areas. A number of regular trade routes have been traced over the region. That the turquoise industry was an important one long before the discovery of America is shown by the hundreds of thousands of turquoise beads and products found in the ruins of the Southwest. As many as 30,000 beads have been found in one room of Pueblo Bonito in Chaco Canyon National Monument, N. Mex.

MERCHANT ADVENTURER KINGS OF RHODA



Indigenous mine guarded by soldier.