

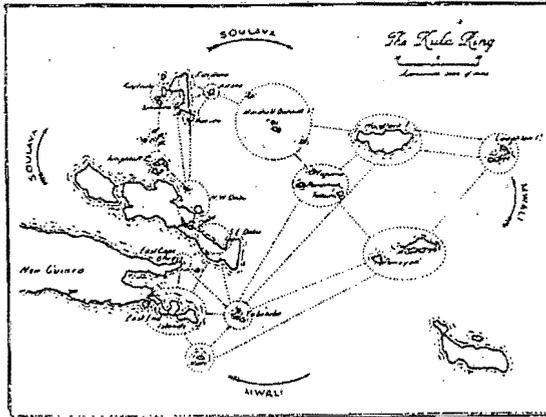
# The Margaretologist

The Journal of the Center for Bead Research

Volume Four. Number Two

1991

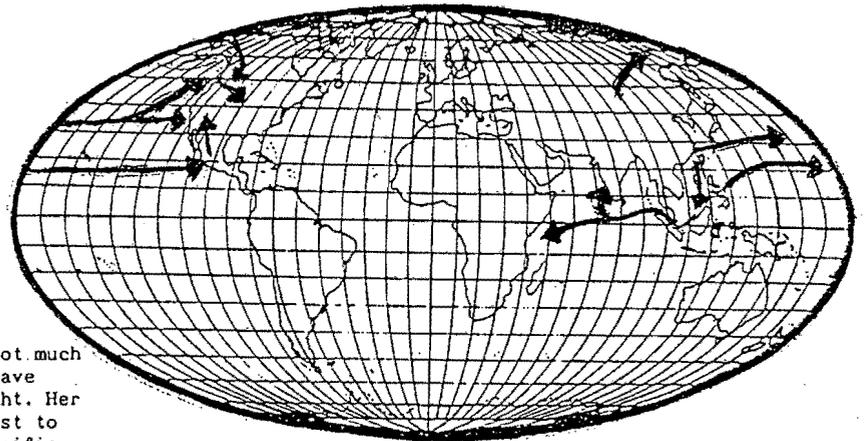
## SOME THOUGHTS ON THE BEAD TRADE



BEAD TRADING WITHOUT BUYING OR BARTER: The Kula Ring of the Trobriand Islands (Malinowski 1922). Beads (Soulava) go clockwise; armlets (Mwali) go counter-clockwise.



MYTHS ATTACHED TO THE BEAD TRADE: Buying Manhattan Island for a few beads seems a great idea; too bad the Dutch didn't think of it or at least there is no evidence that they did.



THE GLOBAL BEAD TRADE: China, once thought not much of a beadmaking power, has been proven to have been far more important than had been thought. Her glass beads were traded throughout Asia, west to the East Coast of Africa, and across the Pacific via the Spanish Galleons, the Russian trade, and Anglo-American trade with the American West Coast.

The Editor's Page . . . . .	2	The Altering of Beads . . . . .	6
Introduction . . . . .	3	Geography of the Trade . . . . .	7
Motives of the Bead Trade . . . . .	4	Conclusions . . . . .	11
Mechanics of the Bead Trade . . . . .	5	References . . . . .	11

THE CENTER FOR BEAD RESEARCH 4 Essex Street Lake Placid, N.Y. 12946  
 Peter Francis, Jr., Director (518) 523-1794

ISSN 0892-1989

### Through the Eye of a Needle: The Editor's Page

This issue, like the last one, was prepared ahead of time so that you would continue receiving your subscription even when I am not at the Center. It is devoted to a single topic: the bead trade. Unlike other numbers of the this journal, it does not contain several more or less closely related articles. Rather, this entire number is a single article, or perhaps it would be better to say a single speech.

The speech which forms the text of this issue was delivered at the Second International Bead Conference held in Washington, D.C. in October 1990. The theme of the conference was Beads: Trade and History. While few speakers seemed to have paid much attention to the theme, I took it as an opportunity to explore some of the problems involved in the bead trade.

The trade in beads is one of their more important aspects, because without trade, in whatever guise, beads would remain entirely in the hands of the person who made them. In such a case they may still be cultural artifacts of interest, but their interest is greatly enhanced by the fact that beads travel vast distances and have for a long time been part of the interactions between peoples. Their portability, the values placed upon them, and their durability make them ideal objects for the study of ancient relations, commerce, and travel. It is for these reasons that interest in beads is growing at an exponential rate among historians, anthropologists, and archaeologists.

The development of this speech cum article may be interesting or at least amusing. The Conference committee in charge of speakers asked the participants to name a topic well over a year before the Conference. My head was still very much in Southeast Asia at the time, and I thought a summary of the vast story of Indo-Pacific beads would be of interest. So, I choose "Mali to Bali: 2000 Years of the Bead Trade." But in time I considered the speech in larger contexts and the nuances of trade occurring in West Africa, and my thoughts turned elsewhere.

The result is an initial attempt to identify some of the problems inherent in the question of the bead trade. It is only a beginning, but at least for me has been most instructive and enlightening. I hope you find it so as well. Having been a speech, it reads somewhat like a speech. Being an article, it has been altered, especially by adding some of the more obscure references. Here's hoping you enjoy it.

Yet another reminder: this is Volume 4, Number 2. If your mailing label reads 4:2 at the end of the string of numbers at the top, it is time to renew. If you enjoy our work and want to help it expand, and receive new publications as they are prepared, consider upgrading to Patron or Supporter.

The Margaretologist, the official journal of the Center for Bead Research, is published twice a year for Members, Patrons, and Supporters of the Center. Members (\$25 for two years), Patrons (\$75 for two years) and Supporters (\$200 for two years) also receive other benefits [subscribers outside the U.S.A. add \$5]. Patrons are sent new books as we publish them; Supporters also receive the Contributions series. Contents of the Margaretologist are copyright © 1991 by Peter Francis, Jr.

Permission for reproduction must be obtained in writing.

## SOME THOUGHTS ON THE BEAD TRADE

We are in the midst of a revolution. A revolution which traces its roots to the work of antiquarians, who were more concerned with rarity and romance than real significance. A revolution whose first hero was a somewhat eccentric Englishman who retired early, moved his family to a house in the country without running water or lights, and made the world's great archaeologists come to him -- Horace C. Beck.

The Revolution was sidetracked after Beck's death in 1941, or more exactly the beginning of his terminal illness in 1938. He went to pieces when he heard of the news of the invasion of Czechoslovakia, and like everything else in the world, bead research was never the same. It was fragmented and decentralized. There were people interested in beads, but they were hardly in touch with one another. Few, very few people even attempted to look at beads from a global perspective.

Now that is changing, and changing rapidly. In the last ten or fifteen years we have seen the growth of interest in beads on several levels. If you don't believe me that collectors have become more aware of beads, just look around you. And, believe me, the interest among professional students of the past is growing very fast. I see it everywhere I go, whether on university campuses or in museums. I am constantly being asked: How do we study beads? What can they tell us? How do we let them teach us?

The study of beads is a complicated process. To do it properly, one must catalogue those at hand, which requires a good knowledge of beads in general. It is also necessary to understand the background of the culture associated with the beads: the archaeology, history, ethnography, geography and even linguistics, biology, and mineralogy of a given place.

Once these are mastered, we can ask many questions of the beads, all of which fall under four general rubrics: Where did they come from? How did they get to where they were used? How were they used? and How did they leave the living context of a place to join a museum, university, or private collection?

Each general question has many sub-questions. For example, when we talk about the origin of a bead it is no longer adequate to say that a certain bead came from China or Africa. We want to know what the source of the raw materials were, who discovered and who exploited them, and how they got to the beadmakers. Who were the beadmakers? How many people were involved in making a bead? How did they learn to make beads, and what are their guild and family associations? What tools did they use? What are the names of the tools and what do those names mean? What was the status of the beadmakers, and how did that affect the value and handling of the beads?

Each of these questions should make it clear that bead research is not the study of small perforated objects, but the study of people. This is because it is people who make, transport, use, and ultimately lose beads.

Here we will consider the second of these great questions: how did the bead get to where it was used? This involves the bead trade. I would define the bead trade as everything that happens to a bead and everyone involved with it from the time it left the hand of the manufacturer to the time that it reached its final customer.

The story is not easy, just as the bead story is not easy. If I leave you with one thought after reading this, I hope that it is an appreciation of the complexity of the bead trade.

## THE MOTIVES OF THE BEAD TRADE

The bead trade is virtually as old as beads. As early as we find beads, "exotic" (non-local) materials were being used for them; whether shell at inland sites [Francis 1980a], or amber [Francis 1985:10] or fossils [Dance 1975] far from their sources. While ancient people could have picked up these materials and brought them "home" to make beads, it is at least as likely that the beads or raw materials were traded considerable distances.

Trade in prehistoric times probably was not conducted by bartering one object for another [Sahlens 1972]. It is more likely that things were traded for other reasons: out of pure friendship, to secure an alliance, or to increase one's prestige. Such trade is still with us.

In the Trobriand Islands in Melanesia, the "kula" circle operates with two trade items, shell beads and shell armbands. The beads circulate around the islands in a clockwise direction, while the armbands circulate counter-clockwise. When an item is given to a partner, it is not meant to be kept. Rather, it has to circulate continuously throughout the islands. This "trade" brings all sorts of other benefits: it encourages shipbuilding, promotes certain festivals, and allows for trade in more mundane materials to go on at the same time. Above all, it fosters a sense of community harmony among the islands, though no single individual was aware of the wide distribution of the trade [Malinowski 1922].

Another example was demonstrated by Quarm [1989]. In Ghana, West Africa, men and women of all ages wear imported and locally made glass beads and the seeds of a particular tree. Only young women wear plastic and bamboo beads. Plastic beads are available in the markets, but one cannot buy bamboo beads there. However, most young men know how to make them; several gave me some when they learned I was interested in beads. What do they do with them? Why, they give them to their sweethearts, of course. Again, this is part of the bead trade, lacking any notion of bartering, buying or selling.

Looking at the early years of European exploration, many early explorers -- Columbus, Verazzano, Cortez, and Bering among them -- began their encounters in the "New World" by giving away beads. As Columbus put it on the day he landed, "In order to make them more favorably disposed to us, because I knew that by love rather than by fear we would bring them into our holy faith... I gave them little glass beads which they hung on their necks." [Morison 1963:64-5]. The operative word was "give" and this was the same for early explorers in America, the Portuguese along the West African coast, or the Spanish in the Philippines.

Beads were given away for many reasons. In addition to those cited by Columbus, there was a hidden agenda: the Europeans knew they could build up a demand for their beads. Soon after giving away beads they began to barter them for food and other necessities and for the valuable materials they desired [Francis 1986a:33-6]. This reached a farcical climax when de Grijalva's expedition landed on the shores of Mexico. The Mexicans were wearing miniature axes with golden heads. The Spanish immediately began bartering for them with green glass beads, which the Mexicans thought were jade. But by the time the Spanish got back to Havana, the 600 tiny axes they had bartered for had begun to corrode, and the traders were the laughing stock of the Spanish colony [Diaz 1956:28].

Bartering with beads is very much a part of our mythology, but it may be exaggerated. We shall not here belabor the tale of beads buying Manhattan Island. The fact, now widely acknowledged, is that there is no proof for that

story, begun only in 1877, some 250 years after the event [Francis 1986b]. Another "beads as barter" myth which needs consideration is whether beads were ever worth a particular product. The famous sample cards of the Levin Company deposited in the British Museum in 1863 [Karklins 1982] are marked "Beads employed in the African Trade for ivory," and similarly for gold, slaves, and palm oil. I think these may have been misinterpreted. Certainly the card marked "Beads employed in the African Trade for gold" contains beads which were popular in the Gold Coast, where the gold was. Large yellow bicones, for example, imitate the Bodom bead, the most valuable bead in the land [Francis 1990:8-9]. Was it not that particular beads were desired by particular people for aesthetic reasons of their own and that they had access to certain materials, rather than such and such a bead being worth so much in gold, oil, ivory, slaves, or whatever?

Certainly, the right bead in the right place was crucial. Lewis and Clark, for example, took the wrong beads with them when exploring the Louisiana Purchase. Wampum was fine until they got to the Rocky Mountains, and then they couldn't give it away. The same was true with the other beads they took. Only the Tia comoshack was in demand, the "chief bead," the chief among all beads. Since they didn't have it, they nearly starved on their homeward journey, and would have, had it not been for trading for this bead or finding an occasional few that had been forgotten in their luggage [Francis 1986a:45-7].

A similar experience happened to George Lyon in Africa. Coming from Tripoli and going into the generally forbidden territory of Bornu, Wadai, Darfur, and Nubia, he took lots of beads. But in his account of the trip he included a long description of the beads to take to the region, ending by saying, "I have been thus particular for the information of future travellers, as the beads we took with us were unsaleable." [Lyon 1821:152]

#### THE MECHANICS OF THE BEAD TRADE

We tend to think of the bead trade as being a well-oiled machine in which beads are bought from the manufacturer by a large trading company that sends them down the pipeline to its men at the front to be exchanged for some valuable commodity which is sent home for a huge profit. Sometimes it worked more-or-less like this. Traders on the spot knew what beads were needed and requested them. Issack de Rasiere, secretary of the New Netherlands, wrote home in 1628 to the board of the Dutch West India Company and sent one string of black and one of white beads, asking for 200 to 300 pounds of each because these were the ones wanted in the trade [Van Laer 1924:132]. George Baranov in Alaska lamented to the head of the Russian American Company that, "we have no trading goods here, only beads, and even they are of the small size" [Shelikov 1981:32], the implication being that the large ones (mostly from China) would have much better. John Ebbits, a factor of the American Fur Trading Company wrote to the headquarters when he was at Canton, "The beads that answer Columbia's River are plenty here." [Porter 1931:461] Later John Jacob Astor, the head of the Company, told C.C. Cambreling going to Canton to buy "blue pound beads... which are very good for the coast." [Ibid.:539].

Sometimes these large companies could take advantage of the bead trade which was already established. The British East India company found it quite profitable, after setting up a factory at Surat, India, to obtain Indian agates from Cambay and send them on ships going to the Arabian peninsula and as far as Madagascar, where a single bead would buy a half dozen oranges and ten or so an entire beef [Francis n.d.]. John Saris in Java wrote home to report that

to trade with Borneo for gold and diamonds one only needed to buy the blue glass beads made by the Chinese immigrants there; the bead is now an heirloom among the Borneans [Francis 1985b].

No matter how much of the bead trade was carried on by large European companies, much of it, perhaps even most of it, was done through local networks. Meriwether Lewis described one such network which reached from the Pacific Ocean to the Great Plains, along which preserved food and herbs traded, later were added used European clothes, brass tea kettles, and glass beads [Lewis 1814:56-7]. Captain Cook was surprised at Prince William Sound in Alaska to see blue beads being worn by the inhabitants. He had some trouble buying a few to "satisfy my self whether they were glass." [Beaglehole 1967:365] because he knew the Russians had not gotten that far south yet. The beads, traded through local networks, had outpaced the explorers.

Much of this trade was carried out on a very small scale. Gregg [1844:54] described Mexican traders early in the last century working their way through what is now the American Southwest. They began with some \$20 in capital of beads and other trinkets, trading from village to village. If by the end of the season they returned with a new mule, they had done well. Whether it be the Hausas of Africa, or the Malays of Southeast Asia, these local traders were very important. And they persisted after the Europeans came. De Morga in Manila in 1609 described the important Galleon trade of the Spanish that linked Asia, the Americas, and Europe, but revealed that the local trade was in the hands of the Chinese, as only they knew every island and inlet, and what to buy and sell at every village, though he suspected more base motives of most of them [Cummins 1971:315].

Wherever a local bead trade exists, it conforms to local custom. In India, for example, one cannot buy beads just anywhere. You must go where Indians go to buy beads: at weekly village markets or places for pilgrims or tourists. Go to the Taj Mahal, the Ajunta Caves, Benaras, Puri, Kanyakumari, or Marine Beach in Madras and you will see shop after shop selling beads. The bead peddlers are cousins to the beadmakers in a land in which nearly everything is controlled by caste. In time, beadmakers often settled where business was good, and it is no surprise to find major bead industries at Benaras, Puri, Ramaswarum, Kanyakumari, and such places [Francis 1983].

The complexities of trade grow when we consider that the bead trade is not a simple one-way street. The story of the Mongur beads (the "Kano" beads recounted in the last issue) illustrates that. Here is a bead made in one place, traded through several networks into a region in central Africa isolated from the rest of the world. But the story does not end there. Fifty years or so after the bead had lost its cachet, women gave it up. Hausa traders from Nigeria were willing to buy it for a song, took it home, ground the ends down smooth, and a generation or so later their grandchildren returned with the beads to the Sudan to sell them to the granddaughters of the women who had given them away 60 years before. One might say that "Old Beads Never Die: They Just Get Restrung."

#### WHAT HAPPENS TO BEADS IN THE TRADING NETWORKS

Beads don't merely get restrung, they also get altered by various processes. One of these is by grinding them. The Mongur or "Kano" beads were obviously treated this way, and it appears that the work was done in Nigeria. Mongur in the Center's collection bought in Egypt and those shown by Arkell [1937: Pl. XXIII] from Darfur have rounded ends. Those called "Kano" beads had their ends

ground down flat, so that they would fit together nicely on a strand. Only in this sense were the beads "made in Kano."

As reported recently [Francis 1990b:7-8], the trading family at Teshi House in Accra, Ghana, which has been dealing in beads for at least a century and a half, alter a number of beads. They grind them on the ends to bevel them and make them fit better on a strand, grind them along the sides to make them the same size and all smooth, and "cook" the Koli and other beads to give them a different appearance. Some of these processes had been reported 400 years ago by Peter DeMarees.

Another form of altering is done when beads are ground in order to remove the decorations. There are people who do not care for decorations on their beads, and alter striped or other beads into monochromes. These are sometimes referred to as "worn," but an examination of such beads will often show that they were ground. Such beads are found in the West Africa trade, though it is not yet known who does this to them. The Kelabits of Borneo also do this with some beads, since they greatly prefer monochromes over polychromes [Munan-Oettli 1983:91].

Small millefiori discs were also apparently cut from larger beads in Africa, just as DeMarees reported the West Africans doing with long European glass beads four centuries earlier. Millefioris with square or other faceted cross sections may have also been ground down there. On the cards of the J.F. Sick & Co. in the University of Ghana, Legon [Francis 1990c:5-6] are beads which have been ground (not paddled) into square cross sections, but these were made in Europe. Were they imitating beads prepared that way in Africa? More needs to be known about these two ways of altering beads.

Once we realize that the altering of beads by dealers or their customers is not all that unusual, we begin looking for other examples. A strand of beads in the Rochester Museum and Science Center excavated by Charles Wray at New York's Power House site (1635-55) is of common opaque red drawn glass beads, which have been faceted, apparently to make them look more like beads of Catlinite or pipestone, an important prehistoric trade item in North America.

Another class of altered beads are etched carnelians. Blank carnelian beads, most likely from India around the Gulf of Cambay, may well have been treated by the soda-etching process elsewhere. Many etched carnelians found in Mesopotamia have designs unlike contemporary Indian beads, but Mesopotamia has no carnelian. This may well have also happened in Persia, which had an industry that extended into this century [see Francis 1980b].

The altering of beads to suit local tastes is a fascinating and hitherto rarely noted aspect of the bead trade. It may well be much more common than has been assumed, and we should be aware of the ways that beads may be changed by customers, traders, and other intermediaries.

#### THE GEOGRAPHY OF THE BEAD TRADE: BEAD TRADING NETWORKS

When we discuss bead trading networks, we can look at them from one of two standpoints. The first is through the eyes of the manufacturers. Here we would see the beads going out from the center, where the manufacturers live, to their destinations, where the customers are. The other is through the eyes of the consumers, where we would see the beads coming inwards toward us from the various directions, where the manufacturers are. We shall consider both of these in turn.

### Bead Trading Networks: the Manufacturers' View

As we have said, the trade in beads and bead materials is very ancient. We cannot expect early trade to have taken place over a very wide area, and may assume that beads would travel no more than a couple hundred miles, as we find in prehistoric times. We can call this a Small-Scale Bead Trading Network.

Such small-scale networks are still with us. The making of malas or garlands in India, commonly out of flowers or other perishable goods, including camphor at Puri and mixed spices at Thanjavur [Francis 1983] is an example of such limited trading, principally because of the fragile and fleeting nature of the beads. Another small scale bead trading network is the amber bead trade of Mexico. Though a tourist might buy amber beads there and take them home to the U.S., Japan, Spain, or wherever, the trade is still mostly confined to the state of Chiapas.

This amber bead industry is relatively complex. The amber is found by farmers around Simojovel after the rains. They sell it to villagers who make the beads [Francis 1988]. The beadmakers sell the beads to a few local shops, and dealers from Tuxtla Gutierrez or San Christobal las Casas come to buy them to sell in their shops. Men even sell them on the streets of Tuxtla Gutierrez. Despite the complexity of this example, the industry is still very small in scale. Such Small-Scale Networks typically involve only a few related people who make and sell the beads.

In Intermediate Bead Trading Networks, beads may travel thousands of miles, often as a result of improved transportation, which could not have developed until the era of civilization, when city states controlling their hinterlands were in touch with each other. Many beads at this trading level were made of rare or scarce materials. Generally, such networks were more complex than small-scale ones. Raw materials often moved considerable distances before being worked, and the customers may have lived far from the beadmakers. Examples of this stage include the lapis lazuli trade of the Middle East, the amber trade from the Baltic, carnelian beads of ancient India, jade in both China and Mesoamerica, and the northern (but not southern) Indian glass bead industry. Many intermediate networks have been well documented because the materials are easily recognizable and far from home and there is great interest in the period of the early civilizations among archaeologists.

Finally, there are networks that can be measured in tens of thousands of miles and are Global Bead Trading Networks. (Before links were established with America, "global" meant only the eastern hemisphere.) All global networks have multiple beadmaking centers and far-flung consumers. Historically, there have only been six global networks industries. They are (in no particular order):

1. Coral beads of the Mediterranean. Precious coral, *Corallium rubrum*, is fussy about where it lives, and the waters of the Mediterranean are its favorite haunts. Coral has been a desired bead for ages, and for a long time India was its greatest consumer; in Roman times, in the Middle Ages, during the period of the East India Company, and even into this century this was true.

If we look at the coral trade in the Middle Ages, we see different areas of production supplying different customers. Italy supplied most of Europe and later the Americas. Septa (Ceuta), in Morocco supplied west and central Africa, while Alexandria and Cairo supplied the Middle East and on to India and beyond to China and the Himalayan kingdoms.

2. Quartz mineral beads from India. India, particularly the peninsula, is rich in semi-precious quartz stones. Beads were made in many places in an-

cient India, and two eventually emerged as international exporters. One was Arikamedu, of which we have often written, which supplied beads to Southeast Asia (and beadmakers, too) and to Rome.

The other is the western Indian industry, concentrated in Gujarat [Francis 1982], which began as an intermediate bead trading network, supplying beads to Mesopotamia. Later, their carnelians and agates (and its derivatives, sardonyx and onyx) came to be sold all over the globe, and were even brought to the Americas by some of the earliest explorers. For perhaps the last 2000 years it has been the leading stone bead industry of the world.

3. Glass bead industry of the Eastern Mediterranean lands. Glass was first invented here, in Mesopotamia, about 2500 BC. The Phoenicians, based in Lebanon and Tunisia, were the first to spread their products around the Mediterranean littoral and into Europe. The Romans, who inherited the Phoenician and Egyptian industries, sent glass beads far to the east -- to India, Sri Lanka, China, and as far as Korea -- but only in small amounts.

After the Early Muslim world inherited the industry its products were spread over a vast region in great numbers. As we have documented in past issues, these beads are found in sub-Saharan Africa, Sri Lanka, Malaysia, Central Asia, and beyond. Beads were made by many unusual methods: segmenting, folding, torus-folding, mosaic fusing, and fusing rods, as well as the common winding. During this period, Fustat, Egypt was a major beadmaking. Tyre and Damascus were probably as well, and Samarra, Aleppo, and Sidon are other candidates for this distinction.

4. The Indo-Pacific glass bead industry: We have documented this industry and the great spread of its beads in many earlier articles. These small monochrome drawn glass beads are found literally from South Korea to South Africa, and from Mali to Bali in the zillions.

The wasters of the unique and complex method used to make tubes for the beads allow us to identify production sites. They include the "mother" site, Arikamedu, its immediate successors in Vietnam, Thailand, and Sri Lanka, and their successors in Thailand, Malaysia, India, and perhaps elsewhere.

5. The Chinese glass bead industry. Long considered a minor industry, Chinese glass beads are now understood to have been one of the great bead industries of all times. We have not identified all the centers where beadmaking went on, but it is clear that there were several of them, since the beads were made by so many different processes.

Chinese beads did not reach the West in any quantity, but become dominant in Southeast Asia around AD 1200, even being traded to East Africa. Once the Americas were added to the world trading system, Chinese beads came to Mexico via the Spanish Galleons and to Alaska, and the Northwest coast via the Russians and other Europeans trading with Canton.

6. The European glass bead industry. The Venetians, who had long made glass, devised, borrowed, or improved upon a way to mass produce beads by drawing at the very time the Age of European Exploration opened. European drawn glass beads became the stock in trade of every explorer to Africa, the Americas, and Asia. The subsequent European economic and political dominance of the world ensured their continued success.

Every other European country wanted to emulate Venice, and cajoled beadmakers to settle there. Holland was one of the best known rivals, but Bohemia became even more important over time. There is still much to learn along these lines. France and Germany have yet to receive their full due, and other nations also contributed to the European hold on the world's trade beads for the last 500 years.

### Bead Trading Networks: The Importers' View

Examples of bead trading networks from this point of view are taken from the on-going Indian Ocean Bead Trade Project, coordinated by the Center, which has enlisted the cooperation of some 60 institutions around the world. This project traces beadmaking and trade through the Indian Ocean and the western Pacific and its tributaries. Such a large area must be broken down into smaller sectors. Here we discuss the trade around the Arabian Sea during the Early Islamic Period, from the 7th to the 12th centuries [Francis 1989a] and that of Southeast Asia from ca. 200 BC to AD 1600 [Francis 1989b, c, d], concentrating on the Philippines and Borneo.

To understand the trade of the Early Islamic world, we have investigated the beads of four sites (more will be added soon): Fustat (Cairo), Egypt; Mantai, Sri Lanka; and Siraf and Nishapur in Iran. When we look at their beads we see that five types occur at all sites: coral, lapis lazuli, carnelian, onyx, and gold-glass beads. Each of these came from the Islamic world or the edges of it: coral from the Mediterranean, lapis from Afghanistan, gold-glass beads from Egypt, and carnelian and onyx from western India. Only the latter area was not in Muslim hands at the opening of this period, but Islamic forces drove into India, almost as though they were determined to control this industry, which they did by the end of this period, and still do. Thus, the staples of the Islamic bead trade were locally available, and the trade was largely self-sufficient.

But the Muslims did not just trade their own beads with themselves. They also took beads far and wide. Glass beads made at Fustat and elsewhere went west to the western Sudan in Africa and east as far as Borneo. The Muslims were also great traders of the Indo-Pacific beads, found as far away as Mali and Ghana in West Africa. These beads, made in South or Southeast Asia, were taken mostly by Persian sailors up the Persian Gulf or Red Sea, and then by other Muslims across North Africa, through the Sahara to the Sudan, and further south to the forest zone of West Africa.

We can make some comparisons in the bead trade by looking at the two contemporary sites in Persia, Siraf and Nishapur. At Siraf, a great port for the Muslim world, over 80% of the beads were traded, either imported for local use or for re-export, or locally made to be exported. But, in Nishapur, which sat astride the Silk Roads, over half of the beads were locally made and consumed, while only some 28% were involved in trade. Thus, in this one analyses (we need to make more) it seems that the maritime route was more important to the ancient bead trade than land routes.

However, at Nishapur we can detect an unusual trade not encountered elsewhere. Nishapur had soda-etched carnelians, possibly locally made from imported beads. The Muslims continued a craft initiated during the Sasanian dynasty which preceded them [Francis 1980b]. They also continued to outflank Rome, Byzantium, and Christian Europe; trading with the Russians and later the Vikings. It is in these northern lands that we find Sasanian and Muslim patterned soda-etched beads. The bulk of the trade was silver plate from Persia exchanged for forest products, but etched carnelians were also traded north and amber beads traded south. Amber is only found at Nishapur among the four cities we are considering.

In Southeast Asia we can examine the bead trade by applying a mental tool recently developed by archaeologists: comparing core to peripheral regions. A "core" area is more developed culturally and an exporter of finished goods, while the "periphery" is less culturally developed and exports raw materials

in exchange for finished goods. 2000 years ago Southeast Asia was peripheral and the core areas were India and China. The first state in Southeast Asia (Funan) in Vietnam and Cambodia, was Hinduized with Chinese contacts. It soon became an Indo-Pacific beadmaker, producing a finished good for export. After the fall of Funan, states developed in Java, Malaysia, and Sumatra. These areas, too, became beadmakers, reaching a climax with the beautiful mosaic and other beads made in Java around the 10th century.

The most peripheral regions in Southeast Asia were the Philippines and Borneo. In the Philippines, the great bulk of beads before about AD 1 were locally made. Then Indo-Pacific beads began to flood the islands, accounting for over 60% of all beads for the next 1200 years. After Southeast Asian Indo-Pacific beadmakers went out of production (ca. AD 1200), beads in the islands were mostly Chinese, since the Chinese had become the leading traders in the region. By 1450 there was a concentration of the bead trade around Manila Bay, contrasting with its wide spread in earlier times. This is the result of an emerging market center, which, had the Spanish not come, may have developed into the Philippines' first state.

The situation was similar in Borneo, but a bit more accelerated. A market center had developed in the Santubong area around the 11th or 12th century, into which some exotic imports, including beads from the Islamic world, were brought. The center of activity drifted north, eventually to settle at Brunei, which developed into the first state of the island, and remains an independent (and wealthy) state today.

#### CONCLUSIONS

This brings us full circle to the theme of the Second International Bead Conference -- Beads: Trade and History. The analysis of the Indian Ocean Bead Trade, only summarized here, is contributing to the history of the region, thus far so imperfectly understood. These contributions come in many forms: helping to date sites, identifying sites as participants in international intercourse, highlighting trading partners and the merchants, and helping to analyze core and peripheral regions. This work is increasingly acknowledged, as my invitation to participate in the UNESCO Silk Roads Project shows.

Beads are important in unraveling the history of the past for two key reasons. For one, they are small, portable, and valued, and thus were perfect trade items. For another, save for ceramics, no trade item is as durable as most beads. The study of beads is opening new vistas to scholars of the past everywhere.

And this is how it should be, because, as I have said, the study of beads is not the study of little perforated objects, no matter how interesting they may be in their own right. Rather, the study of beads is the study of people, and the real aim of bead research is to shed light on the hopes and the fears, the joys and the sorrows, the needs, desires, and aversions, the lives and deaths of our brothers and sisters around the world and throughout time.

Thank you.

#### REFERENCES FOR THE ISSUE

- Arkell, A.J. (1937) Hebron Beads in Darfur, Sudan Notes and Records 20(2): 300-305.
- Beaglehole, J.C. ed. (1967) *The Journal of Captain James Cook on his Voyage of Discovery* Vol. III, Part 2. Hakluyt, University Press, Cambridge.

- Cummins, J.S. (1971) *Secesos de las Islas Filipinas* by Antonio De Morga, Hakluyt Society, University Press, Cambridge.
- Dance, S. Peter (1975) *The Molluscan Fauna in H.L. Movius, Excavation of the Abri Pataud*, pp. 154-9, Peabody Museum, Harvard, Cambridge.
- Diaz del Castillo, Bernal [A.P. Maudsley trans.] (1956) *The Discovery and Conquest of Mexico*, Farrar, Straus and Cudsky, New York.
- Francis, Peter, Jr. (1980a) *Early Human Adornment in India, Part I: The Upper Paleolithic*, *Bulletin Deccan College* 40:137-44.
- (1980b) *Bead Report II: Etched Beads in Iran*, *Ornament* 4(3):24-28.
- (1982) *Indian Agate Beads*, *World of Beads Monograph Series* 6, Lapis Route Books, Lake Placid.
- (1983) *Bead Report Part VIII: Minor Indian Beadmakers*, *Ornament* 6(3):18-21.
- (1985a) *Prehistoric Beads in the Ukraine*, *Margaretologist* 1(1):10.
- (1985b) *Chinese Beadmakers in Java, ca. 1600?* *Margaretologist* 1(1):4-6.
- (1986) *Beads and the Discovery of the New World*, *Occasional Papers of the Center for Bead Research* 2, Lake Placid.
- (1988) *Simojovel, Mexico: Village of Amber*, *Lapidary Journal* 42(8):55-62.
- (1989a) *Beads of the Early Islamic Period*, *Beads* 1:21-39.
- (1989b) *Beads and the Bead Trade in Southeast Asia*, *Contributions of the Center for Bead Research* 4, Lake Placid.
- (1989c) *The Type Collection of Beads from Archaeological Contexts in the Philippine National Museum*, *Contributions of the Center for Bead Research* 5, Lake Placid.
- (1989d) *Heirloom and Ethnographically Collected Beads in Southeast Asia*, *Contributions of the Center for Bead Research* 6, Lake Placid.
- (1990a) *The Bodom Bead*, *Margaretologist* 3(2):8-9.
- (1990b) *Teshi House and the Alteration of Beads*, *Margaretologist* 3(2):7-8.
- (1990c) *The J.F. Sick & Co. Sample Cards*, *Margaretologist* 3(2):5-6.
- (not dated) *The Bead Trade of the Indian Ocean in the First Half of the 17th Century*, MS on file, Center for Bead Research.
- Gregg, Josiah (1844) *Commerce of the Prairies*, MAFS 71, Ann Arbor (2 vols.).
- Karklins, Karlis (1986) *Glass Beads, History and Archaeology* 59.
- Lewis, Meriwether (1814) *History of the Expedition under the Command of Captains Lewis and Clark*, MAFS 56, Ann Arbor (2 vols.).
- Lyons, G.F. (1821) *A Narrative of Travels in Northern Africa in the Years 1818, 19, and 20*, John Murray, London.
- Malinowski, Bronislaw (1922) *Argonauts of the Western Pacific*, Routledge & Kegan Paul, London.
- Morison, Samuel E. (1963) *Journals and Other Documents on the Life and Voyages of Christopher Columbus*, Heritage Press, New York.
- Munan-Oettli, A. (1983) *Bead Cap 64/88 in the Sarawak Museum Collection*, *Sarawak Museum Journal* 32:89-96.
- Porter, K.W. (1931) *John Jacob Astor: Businessman*, Harvard University Press, Cambridge (2 vols.).
- Quarm, K.D. (1989) *The Use of Beads in Selected Contemporary and Traditional Ghanaian Societies...*, B.A. Thesis, University of Ghana, Legon.
- Sahlins, Marshall (1972) *Stone Age Economies*, Aldine-Atherson, Chicago.
- Shelikov, G.I. [M. Ramsey trans.] (1981) *A Voyage to America 1783-1783*, *Alaska History* No. 19, Limestone Press, Kingston, Ont.
- Van Laer, A.J.F. (1924) *Documents Relating to New Netherlands 1624-1626*, In the Henry E. Huntington Library and Art Gallery, Huntington Library and Art Gallery, San Marino, CA.