TOWARD A SOCIAL HISTORY OF BEADMAKERS

Peter Francis, Jr.

An understanding of beads requires an understanding of the people involved with them. This paper examines three historical aspects of people engaged in beadmaking, especially the production of glass beads. The history of their social relations is considered in regards to the record of their physical movements, the manner in which they organize themselves and pass on their traditions, and their status within society. Information concerning each of these is arranged geographically and chronologically in an attempt to discern the patterns of the social history of beadmakers.

INTRODUCTION

Beads do not exist without people. Studying beads alone misses the point. They are artifacts, which presupposes the human element. People search out raw materials, turn them into beads, and then distribute, use and dispose of them. They are a uniquely human endeavor, and an understanding of beads must be grounded in a perception of the people behind them.

This paper focuses on beadmakers, especially (but not exclusively) glass beadmakers. It is an attempt to initiate a social history of beadmakers, defined as a historical understanding of their social traditions. Three questions, each of which illuminates some aspect of the social history of beadmakers, will be examined.

1. Why do beadmakers move? It is well documented that beadmakers shift locations. What has not been closely examined is why. Two hypotheses may be advanced. In one, beadmakers are forced to move when economic, social, health or political conditions become intolerable, or raw materials especially wood for fire and alkalis—have been exhausted. In the other hypothesis, they are enticed to move, invited to new areas, perhaps with the promise of special privileges or pecuniary gain.

Whether the movement is because of a "push" or a "pull," it is easy for glass beadmakers to do. They are not peasants tied to the land. Their chief raw materials are widespread, and special materials—such as colorants—have long been articles of commerce. They need only their skills to set up shop, giving them freedom akin to goldsmiths or jewelers. It is not clear whether it is easy for other sorts of beadmakers to move.

- 2. How do beadmakers organize themselves and learn their craft? The notion that anyone can pursue whatever occupation suggests itself is historically quite new. Perhaps in remote antiquity one could do whatever needed doing, but specialization by gender and age has been the norm for millennia. Glass is an invention of civilization, a stage of development that implies specialization. Glass beadmaking is not something that just anyone can do. It needs to be learned, and the mechanisms for teaching it are keys to the historical development of beads. Three methods of transmission may be considered: the family, a guild or a caste. People are born into a family and caste. Guilds are more voluntary and developed differently in different places.
- 3. What is/was the social status of beadmakers? The status of a producer may depend upon the status of the product. A writer of fine literature enjoys more prestige than a pornographer, though not always more recompense. Wages are not only dependent upon training, skill and utility of production, as Adam Smith (1937) would have it in an ideal world; we need only think of the salaries of schoolteachers.

BEADS 6:61-80 (1994)

Schenk (1963) attempted a sociology of glassmaking which we can adapt to beads. He asserted that while glassmakers enjoyed a monopoly and made a unique product, glass was special, even semi-magical, and glassmakers enjoyed high status. With the introduction of factories, glass became more common and workers were no more important than other hands. He pointed out that in Germany, the high status of glassmakers continued until 18th-century industrialization changed the picture. This is a working hypothesis to be tested.

One way to consider beadmakers is according to the technological level at which they work. I have suggested a division into small-scale beadmaking, industrial beadmaking and mechanical beadmaking (Francis 1982a:5-7, 1983a).¹ Schenk's hypothesis suggests that small-scale beadmakers would enjoy more status than workers in an industrial or mechanical environment.

Before proceeding, a word about references in this paper. Much of this information is based on my own work, either first-hand observation or from archival research. Some has been widely published; some small arguments here are distilled from data from many sources. Rather than add a bloated bibliography to an already lengthy paper, I have minimized citations. I shall cite only key works, especially in areas that may be unfamiliar to readers. The Asian material is to be covered in *The Asian Maritime Bead Trade*, to be published by the University of Hawaii Press. The European material is documented in Francis $(1988).^2$

SOUTH INDIA

The most dramatic movement of beadmakers was by the producers of the small, monochrome, drawn-glass Indo-Pacific beads that are arguably the most important trade bead of all time (Francis 1991). The industry began in the 3rd or 4th century B.C., at Arikamedu in southeastern India. By the 1st century A.D., beadmakers had set up shop at Mantai in northern Sri Lanka and two places in Funan (the earliest Southeast Asian state): Khlong Thom (Thailand) and Oc-eo (Vietnam). After Funan collapsed in the 7th century, its beadmakers evidentially shifted to Srivijaya, the new power which spanned both sides of the Strait of Malacca. Beadmaking was practiced at Srivijaya/Palembang (Sumatra, Indonesia), Kuala Selinsing and Sungai Mas (Malaysia) and Takua Pa (Thailand). By around 1200, the industry was extinct outside India, but Indo-Pacific beads continued to be made at Arikamedu until the beadmakers moved to Papanaidupet in Andhra Pradesh in the 16th century, where they remain today (Fig. 1).

Why did the beadmakers move? In some cases, it appears that they did so because local events made continuation of their work difficult or impossible. Funan was overrun by the Khmers, driving the beadmakers to Srivijaya. Kuala Selinsing, once an island in the estuary (*kuala*) of the Selinsing River, was apparently being degraded (it is now divided into eleven islands), forcing a move to Sungai Mas. Mantai was attacked by the Cholas in the 10th century and all but abandoned thereafter.

However, in most cases, it is likely that the beadmakers were invited to move to new locations. Mantai, Oc-eo and Khlong Thom traded with Arikamedu and apparently wanted beadmakers. Srivijaya may have invited beadmakers from the crumbling Funan kingdom. Takua Pa was apparently set up as a port by Srivijaya in the 9th century. Though recent (perhaps during the 17th century), the movement from Arikamedu to Papanaidupet is not yet understood.

Who were these beadmakers? Most likely Tamil Indians. Each of the aforementioned places is known to have had Tamilians living there. It is unlikely they would have taught the process to outsiders, and the complexity of beadmaking precludes it being easily learned. If the present state of Indo-Pacific beadmakers is anything to go on, they had low status and worked in a hot and dangerous industry.

How could they have discovered where their product was in demand and obtained the funds and permission to move to foreign places? The answer appears to lie in their guild. South Indian guilds were very important. There were both craft and merchant guilds, the latter more powerful with many privileges. These gramma (guilds) sometimes developed into nagara (towns), administering cities in which they were based. The two most powerful guilds were the Ayyavoje and the Manikgramman. Both dealt in precious stones, the former in South India and the latter overseas as well (Verma 1972).



Figure 1. Beadmakers with some of their tools in Papanaidupet, Andhra Pradesh, India (1986). These are the inheritors of the once-mighty Indo-Pacific beadmaking industry. Their ancestors belonged to one of the large South Indian guilds, probably the Manikgramman. No guild exists today; the workers are of various castes (all photos by Peter Francis, Jr.).

The Manikgramman is of particular interest, as its name is related to "bead;" manikya, mani, manikam, manek and manik all mean precious stones or beads in Sanskrit, Hindi, Tamil and Malay. The Manikgramman was a powerful presence at least at Srivijaya and Takua Pa. There were five craft guilds under it, of which oil-pressers alone have been identified. They or a similar guild were the only likely mechanism by which Indo-Pacific beadmakers could shift their bases of operations.

At least Indo-Pacific beads were held in high regard in East Asia during the early centuries of the current era. They appear to have been sent as tribute from Funan to Chinese courts. They were buried with royalty in the Silla and Paekche Kingdoms of Korea, and were commonly placed in the graves of Hanperiod Chinese nobility in southern China (Guangdong province) and northern Vietnam. If Schenk's hypothesis is correct, the beadmakers of Funan (and perhaps later those of Srivijaya) may have enjoyed more status than those of India. But only if the status of their product filtered back over such long distances. In sum, South Indian glass beadmakers were peripatetic, though some always remained at Arikamedu. They moved mostly because they were wanted elsewhere. That they belonged to a guild is certain and that it was the Manikgramman is most likely. It would have been this important corporation that allowed them to make moves of international scale. Their status was probably not high, even though the products of some of them may have been esteemed in distant places.

NORTH INDIA

The North Indian glass-bead industry has always specialized in wound beads, and its history differs from that of South India. Documents from a century or so ago list over 60 glass bead- and bangle-making villages, of which only Purdalpur survives.

British Imperial policy disrupted Indian villagebased industries. At first the British insisted upon the sale of only English goods or (as with glass beads)

Caste	Location, Religion	Type of Work	Population
Manihar	North India, Muslim	Glass beads, bangles	102,300
Gazula	Andhra Padesh, Sudra	Peddlers	102,000
Patra	Orissa, Hindu	Peddlers	61,400
Lakhera	North India, Muslim	Lac bangles, beads	60,100
Curihar	North India, Muslim	Glass bangles	55,500
Kancar	Deccan	Glass beads, bangles	19,100
Sankhari	Bengal, Hindu	Shell bangles, beads	14,800
Ramaiya	Punjab, Brahman	Peddlers	5,300
Bisati	Punjab, Sikh?	Peddlers	3,600
		Total	424,100

Table 1. Beadmaking Castes in India, 1911.

Source: primarily Baines (1912:96-97, 150).

Note: Sudra and Brahmin are major caste divisions among Hindus, the former the lowest (not outcasts) and the latter the highest.

goods imported in English ships. The colonists belatedly realized that India's impoverishment would inhibit future sales. Then large industrial centers were built in India (Firozabad in the case of glass), and these dealt a death blow to the old village-based industries (Gadgil 1929:46; Gupta 1960:92-94).

North Indian beadmakers consolidated. Purdalpur had been only one of many beadmaking villages, but became the refuge for beadmakers from elsewhere. Beads are made there by techniques and in styles which can be traced back 2000 years. In 1947, the Partition of India saw many northern beadmakers leave for Pakistan, where the government set up a modern glass factory at Hyderabad to supply small bead workshops (Francis 1979:9-11).

Guilds (*srini*) are recorded in North India during the last centuries B.C. as groups of workers linked by kinship which could even maintain militia. After the breakup of the Mauyran dynasty (ca. 187 B.C.), they slowly lost importance. In the Deccan (north peninsular region) they remained powerful under the Satavahannas until the 2nd century A.D., when villages became more independent and central authority weakened. The fortunes of North Indian guilds were the opposite of South Indian ones (Kosambi 1975).

The caste system takes the place of guilds. While caste was never quite as rigid as once believed (Srinivas 1962), it remains very hard to change. One is born, marries and dies within a caste, doing what one's family has always done. In the beadmaking castes, some members are peddlers who sell the products produced by their cousins.

The Census of 1911, the last to report by caste, recorded nearly half a million beadmakers—a large number—though only about 0.2% of the population. Table 1 lists the beadmaking castes in India at the time.

There are many minor bead industries and castes not on this list (Francis 1983b). The composition of modern Indian beadmaking centers is more varied than it was early in the century. Caste strictures are breaking down, especially in urban areas. Today, wherever beadmaking is profitable, non-traditional workers may join. The stone-bead drillers in Cambay (Fig. 2) and the diamond cutters in Gujarat and Maharashtra are largely Patels, an agricultural caste. The glass beadmakers of Papanaidupet, beadmakers in



Figure 2. A young member of the Patel caste drilling stones near Cambay, India (1981). The large stone-bead industry of western India has attracted workers from non-traditional beadworking castes.

many media in Benaras and the stone beadmakers of Cambay are of various castes and/or religions.

Contrasting with the glass-bead industry in India is the stone-bead industry based in Cambay. It has been controlled by Muslims for centuries, with Hindus doing most of the work. Its base of operations has shifted at least four times in the last 4000 years, but it did not move far, and the industry has always remained close to the source of stones in what is now Gujarat state (Francis 1982b).

The status of Indian glass beadmakers has traditionally been low because the status of glass is low. Indians are knowledgeable about gems, and Indian society ranks people and things minutely. Except for imported blown glass, the material had little esteem. The 1st-century *Arthasastra*, a treatise on the science of government, required a goldsmith to be "skilled in his profession, of noble birth and trustworthy," but glass was not allowed into the royal treasury (Kangle 1972:110; Shamasastri 1915:87). A 6th-century mineralogical text, the Ratnapariksha, refers to glass only as an imitation of precious gems (Finot 1896). The Hitopadesa, a book on the education of children from the early centuries A.D., includes the following aphorisms for children: "In this lineage no one is born who is devoid of virtues. How can there be the birth of a glass-gem in a mine of rubies?"; "The jewel is trodden by the feet; glass is upheld on the head. Be that as it may, for glass is glass and the jewel a jewel."; "If glass is studded in the crown and the jewel is set in a foot-ornament, it is not the fault of the jewel but ignorance of the setter." (Dikshit 1969:165-166).

As for the makers of inferior jewels, Arungzeb (died 1707) converted the Manihar and Lakhari (lac worker) castes to Islam (Gode 1949:13). Muslim converts in India commonly began as low-caste or outcastes; an attraction of the Faith of the Prophet is that it has no caste. The low status continues. The beadmakers of Purdalpur are not admired by the Hindus of neighboring Sikandra Rao, who insist on using the Hindu form of the village name. The highest-paid industrial workers in India are the men who feed glass onto a roller to make a "spring" to be cut apart into bangles (Fig. 3)(Development Commissioner 1980:4). But their social standing does not match their income; Firozabad is controlled by a nexus of corrupt politicians and local dacoits (bandits), run like the worse of the old American "company towns." The workers are encouraged to drink, smoke and gamble their wages away, and are constantly in debt (Pal 1986).

One more observation may be appropriate. The status of those who furnish raw materials to beadmakers is often lower than that of the beadmakers. Many people make bangles (and sometimes beads) from lac and use it to color objects, including wooden beads, but the raw lac is gathered by tribals, outcastes not prohibited from taking the life of the lac insect. The diggers of agates and carnelians in the Ratanpur area, who furnish Cambay lapidaries, are outcaste tribal Bhils (Fig. 4); the *Garuda Purana* of the 5th century or so referred to them as "communities of vile caste" (Shastri 1968:207).





Figure 3. The man who produces glass "springs" in the production of bangles is (or was in 1981, when this picture was taken) the highest-paid industrial worker in India. Despite his high wages, he saves nothing because of the rigged nature of business in Firozabad.

The movements of North Indian beadmakers were more from necessity than invitation. Caste, rather than guilds, controls what people do and remains very important. It is breaking down in urban areas and affecting the composition of beadmakers in cities. The status of North Indian beadmakers is low within the larger community and, in the case of glass, reflects the traditional low esteem in which glass was held.

CHINA

Our understanding of the internal movements of Chinese beadmakers is rudimentary, though we can identify various beadmaking regions at different times (Francis 1990a). There are references in Chinese annals to kings inviting glassmakers to work in their realms (Francis 1986:10-12). Glass beadmakers no doubt joined the flood of refugees from the Mongol invasion, setting up in Suzhou, Huangzhou and Guangzhou (Canton) to produce beads for export to Southeast Asia.

Two Chinese bead industries left the Middle Kingdom. In the 14th century, some people making small "coil" beads plied their trade at Tamasik, a settlement on Fort Canning Hill, Singapore. Around 1600, Chinese beadmakers lived in Bantam, Java, Indonesia, and made beads for export to Borneo. Though we do not know where they originated, we can see why they left China. The Mongols of the Yuan dynasty (1260-1368) appropriated the best craftsmen for the palace and separated them from the rest of the population. The Ming (1368-1644) extended this policy, leading to a decline in craftsmanship. Many craftsmen emigrated to Southeast Asia with the government's blessing.

Chinese guilds were formed to protect members from government interference and reduce competition. They regulated trade and aided their members, operating on democratic principles. The term for



Figure 4. Two Bhil tribal members sort raw stones from a Ratanpur mine in western India (1981). The hardest work—the mining of agates and carnelians—often devolves on the lowest members of society.

guilds was *kung-so* (public office) or *tang* (hall), while merchants from another city were grouped in a *hwei-kwan* (club house) (Morse 1967). They were minutely organized. Both merchants and producers had their own guilds. There were guilds for rice merchants and crab sellers, glue makers and jewelers, as well as soothsayers and scavengers, thieves, beggars, and both male and female prostitutes (Gernet 1962:87, 98-99). We can assume that there were glass beadmaking and other beadmaking guilds as well.

The Intrigues of the Warring States, a collection of droll psuedo-historical tales set in the period 453-221 B.C. and written by at least 100 B.C., contains a story about a bead-stringer giving advice to a king (Crump 1964:84-85). Bead-stringing was thus a recognized occupation, perhaps with its own guild. Even so, its status may not have been high. Part of the spice of the Intrigues is that the lowliest people give good advice to the highest. The bead-stringer was at the bottom of society, not near the top.

The position of beadmaker may have been different. Glass was valued, especially in the early

years, and never despised. The magnificent beads of the Late Zhou period must have been prized. As a substitute for jade, glass had status; the 2nd-century inscription on Emperor Wu-liang's tomb reads: "[Glass pi]³ come to the hands of a king who does not try to conceal his own faults" (Harada 1962:104-105). The invitation of kings to glassmakers to enter their realms suggests esteem. The name of a Sui (580-617) glassmaker, Ho Zhou, has been recorded. Wang Ch'ung, a 5th-century Taoist alchemist said of glassmaking: "This is the climax of Taoist learning and a triumph of their skill" (Needham 1962:109, 112). High praise, indeed. During the Qing dynasty (1644-1911), glass court beads ("Mandarin chains") were popular for all but the very top ranks which were required to wear jewels.

Movements of Chinese glass beadmakers were occasioned by attraction (kings inviting them) and repulse (external emigration). Guilds were important, no doubt, and a search of their records could well be rewarding. Status seems to have been high for glassmakers and their products, and though the Chinese used glass beads primarily as a jade substitute, beads obtained considerable esteem during the Qing (Manchu) period.

JAPAN AND KOREA

The Japanese likely learned glassmaking from the Chinese, but soon went their own way. Hereditary guilds (be) were operating by the 3rd century A.D. The tamatsukuri-be included jewelers and beadmakers. At least by 702, it was merged with the metalworkers be into a state organ called the Casting Office. But the Casting Office was downgraded late in the century and for the next millennium, beadmaking was in private hands, especially monks'. The guild system was revived in the Kamakura period (1186-1334) as za, but there is no known glassmakers' guild. During the Edo period (1603-1868) and after, beadmaking was entirely in private hands, and gained considerable prestige (Blair 1973). Guilds in Japan were less important than in China or Korea.

The status of Japanese glass beadmakers rose and fell with the strength of the industry. During the Tomb period (A.D. 250-552), they were prominent and held in honor. Skilled craftsmen moved up in rank during the 8th century if they belonged to the Casting Office, and a slave who was a master stone beadmaker was freed because of his skill. After the revival of glassmaking from 1603, skilled beadmakers were well paid and honored (Blair 1973:49, 93-94, 201-202).

Modern glass beadmaking in Korea began when five youths were taken to Japan to learn the craft in 1927. Park Che Chung returned in 1934, to open a factory at the age of 20, making beads mostly for top-hat strings (Francis 1985:31). The Japanese still buy Korean beads and repackage and label them "Made in Japan;" they apparently did this with Chinese beads as well.⁴

During the Yi dynasty (1392-1910), the makers of men's top hats were among the most esteemed artisans, and their guild jealously guarded their rights (X.Y.Z. 1896:266). Almost the only use for beads at this time was for top-hat strings, and beadmakers may have shared some of this honor. The Koreans adopted the guild system from China, and their records are better than those of the Chinese, some going back 2000 years (Crane 1926:12), though they have not been searched for information on bead guilds. Data on the movements of Japanese and Korean beadmakers are scanty. Guilds were more important in Korea than Japan, and the status of beadmakers rose and fell with the status of their products in both countries.

THE MIDDLE EAST

We have yet to trace the movements of early beadmakers. An earlier article (Francis 1990b) documented movements of beadmakers from Early Islamic centers to modern locales. Many of these shifts were under the Ottomans, who encouraged craftsmen to spread their work throughout the empire. I have nothing to add, except that I now think the beadmakers of Herat left Bokhara in 1920 (not 1917) when the Emir, fleeing the Soviets, went to Afghanistan.

Guilds, including glassmakers, may have existed in Old Babylonian times (Oppenheim 1964:79-83), but certainly were formed in Mesopotamia early on (Weisberg 1967). Asia Minor and Greece had guilds (Rostovtzeff 1964:1049-1087). This spread into the Roman Empire, though labor forced by the state may have been more important (Rostovtzeff 1957:384-387; 1964:298).

The Islamic world had fewer social strictures. Although Islamic law regulates commerce, it is to keep it honest. Since the establishment of the Caliphate, there has been no attempt to regulate labor (Levy 1969: 255-256, 298), in accordance with the ideal that each person is directly accountable to Allah. Local structures existed for crafts; Olin (1846:293) reported each quarter of Cairo worked on its own trade, with a "sheik" in charge. To be admitted to a trade, one had to be apprenticed.

The openness of work rules resulted in fruitful cooperation. In Fustat (Old Cairo), Jewish and Muslim glassmakers lived side by side in an area assigned to them and formed partnerships. The great Spanish Rabbi of the 12th century, Maimonides, was asked if the Jews could work with Muslims since their jointly owned tools would be employed on the Sabbath—it was permitted. In these cases, everything was shared, but Friday's profits went to the Jews alone and Saturday's to the Muslims (Goitein 1973:24).

Several early Islamic glassmakers, dealers or scions of these families, became renowned scholars. Cohen (1973) noted a dozen or so learned men with a



Figure 5. Glass beadmaking centers of the Middle East around A.D. 1000. Fustat and Tyre are confirmed centers; Damascus is a possibility (drawing by D. Kappler).

nisba⁵ connected with glass. For example, in the 10th century, Ibrahim ibn Sirri ibn Sahal al-Nahwi al-Zajjaji⁶ wrote: "I used to make glass. Later on I started to learn grammar." He became a Khalif's scribe (Cohen 1973:34). In the Muslim world, being a glassmaker carried no stigma, but neither did it impart

any particular esteem. The ability to change occupations at will was a strikingly modern aspect of early Islamic society.

The movements of glass beadmakers in the Middle East (see Figs. 5-10) happened mostly because of large-scale catastrophes (the Crusades, Mongol



Figure 6. By 1400, the Crusaders had destroyed glassmaking at Fustat (Old Cairo) and Tyre. Tyre glassmakers evidentially went to Hebron (El-Khalil) and Armenaz (in modern Syria). Tamerlain took glassmakers to Samarkand in 1402, and a bead workshop opened there shortly thereafter (drawing by D. Kappler).





Figure 7. By 1600, Hebron had become the dominant glassmaker and glass beadmaker for the Arab world, and its products penetrated into what are now Sudan and Chad in Africa. The shaded area was supplied by Hebron (drawing by D. Kappler).

invasions, the coming of Communism) and personal events (family feuds [Fig. 11], falling in love [Fig.12]). No guilds were involved. If Kurinsky (1991) is right about the monopoly that Jews once had on glassmaking, Muslim glassmakers were converts. Glassmaking did not confer either high or low status.

AFRICA

I seriously doubt if the beadmakers of Bida, Nigeria, came from Egypt, though they regard themselves as distinct from the other Nupe around them and have a tradition of having moved into Bida.



Figure 8. By 1880, some beadmakers had gone from Hebron to Izmir, Turkey. Samarkand was all but abandoned and the beadmakers apparently left for Bokhara (drawing by D. Kappler).



Figure 9. There were more changes by 1930. The Soviet invasion pushed Bokhara beadmakers to Herat. Armenaz stopped making beads. A glassworker from Cairo went to Hebron, married and returned making glass beads like those currently being made in Hebron. The beadmakers of Izmir were forced to go to Gorece by neighbors who complained about smoke and fire from their furnaces (drawing by D. Kappler).

They have a secret guild, the Massaga, and members may not stop working or set up in another town. They receive raw materials from the guild master and deliver finished goods to him. Guild members are considered high in status, traditionally with good incomes. Their privileges allow them to change the



Figure 10. By 1980, there had been another change in bead styles in Hebron. The Afghan War likely drove out the Herat beadmakers, perhaps to Iran. Personal feuds caused a few Gorece beadmakers to go to Kemalpasa and Bodrum (drawing by D. Kappler).



Figure 11. Two beadmakers in Gorece, Turkey (1978). Their ancestors moved from Hebron to Izmir, Turkey, about 1880. The beadmakers were subsequently forced to move to Gorece around 1930, their neighbors in Izmir having asked them to leave because of the smoke and the threat of fire from their furnaces.

shop they work for, and to work overtime in the master's shop and keep what they earn (Frobinius 1913:434-437; Meek 1925:157; Nadel 1951:274).

The Hausa have long been organized into exclusive hereditary guilds; they are bead sellers rather than beadmakers. The Yoruba Lantana beadmakers of Ilorin are known to have come from Old Oyo. Their beads are high in status, but many of them are said to have been slaves (O'Hear 1986).

In Ghana, master powder-glass beadmakers —especially the late Osie Kwame of Dabaa, guru of all current Asanti beadmakers—are honored. However, beadmaking does not impart high status (Fig. 13). Krobo beadmakers are considered by urban Accra dwellers to be dangerous and wild people, as are all Krobo.

Generalizations are hard to make about the varied beadmakers in sub-Saharan Africa. All have some tradition of moving, but beadmaking does not seem to have been a motive. The Nupe of Bida have a guild, the beadmakers of Ilorin teach their children, as do powder-glass beadmakers of Ghana, though in Asanti one man is credited with spreading the craft. High status outside the local community does not seem to go with beadmaking.

EUROPE

The mercantile and craft guilds of medieval Europe may have developed by the 8th century from religious associations created to aid members when in trouble and their families after the member's death, though Roman guilds fulfilled these functions (Rostovtzeff 1957:190). Birenne (1937:140-188) traces the explosive growth of guilds in the 10th century to several factors: wealth generated from export income, the legal authority of the state setting



Figure 12. A glass beadmaker working at a furnace in Cairo (1988). The local bead industry in Fustat (Old Cairo) was wiped out during the Crusades. Beadmaking resumed there only after a member of the Al-Daour family reintroduced it after being apprenticed in Hebron and marrying his master's daughter.

up guilds and the voluntary association of guild members. They initiated new members, fiercely guarded their monopolies, fined members and tried to keep foreign competition out (Young 1913:31). They were chartered by the king, and grew in independence and social, economic and political importance.

In England and northern Germany they were called gild, derived from geld, a tax or tribute. In southern Germany they were *znuft*. In France they were metier, synonymous with craft or trade. The Spanish word is gremios: craft, brotherhood or congregation. A modern Italian dictionary lists corporazone, associazione and maestranze (master), but in Venice the common term was arte. Universario was also used in and outside Italy. Beadmaking guilds were formed wherever the craft was important enough to warrant it, often developing from related guilds.

The guild system reached its apogee in the 12th century, and was still powerful when Europe became beadmaker to the world. In time, guilds became obstructionist and monopolistic, reflecting the mercantile economic system. The prophet of free enterprise, Adam Smith (1937:118-123), railed against the "Policy of Europe" in 1776, especially apprenticeship, branding it a seven-year stint of unpaid labor. It was an unnecessary drain on economic growth; a bright youth could even learn to make clocks in a few weeks.

Smith was writing at the twilight of the system. Signs of trouble were already visible by the 14th century (Birenne 1937:200-219). By the 17th century, guilds were so weak in Holland that bead factories were operated by glassmakers and traders, foreigners and Dutch (Francis 1988: 45-46), in line with the early "capitalistic spirit" that propelled Dutch development. The French Republic abolished guilds and, though restored by Napoleon, they never recovered (Engle 1981:42). Their formal abolition in England in 1853 was long after they were obsolete (Gross 1942:967).



Figure 13. Attah Gyaafi of Asamang, Ghana (1988). Gyaafi has achieved some local status and was even featured on a Ghanaian television program. The status comes not from simply being a beadmaker, but his shrewd business sense; he owns all the powder-glass operation in this village, unlike other villages with many small entrepreneurs.

France

The enameler's guild at Neveres was permitted to make fancy beads in 1565 and 1577. The Paternoteier was organized by 1593, to enable its members to prepare their own raw materials and "paternosters and buttons of enamel and of glass, chains, collars and bracelets... by the fire and furnaces" (Barrelet 1953:91-92).

The French crown offered a guarantee of citizenship, the right to set up shop and other privileges to any glassmaker who settled in France (Scoville 1950:82-83). Bernard Palissy (ca. 1510-1569) declared: "The art of the glassmaker is noble and those who work therein are noble" (Sauzay 1868:47). It is unclear whether these gentilshommes verriers were noble because they made glass or despite their occupation. Sauzay (1868:50-52) suggested that since glassmaking was permitted to the nobility, impoverished members took to it. However,

Scoville (1950:83) said: "The true reason why French nobles could blow glass and yet did not have the right to engage in any other industry (save agriculture) before 1600 will probably never be known." He cites various other theories, including the role of glass in church windows made "to the glory of God," and the facetious suggestion that it was apt that such gentlemen made bottles and glasses for wine.

French glassmakers, whether high or low born, enjoyed many privileges of the nobility, but it was a mixed blessing. Gentlemen glassmakers had constantly to guard against upstarts without proper pedigrees. Daughters always married glassmakers because their fathers would not have a plebe for a son-in-law and no other noble would have her hand. They struggled hard to keep their place in society. An 18th-century parish priest of Languedoc ended his daily prayers with the petition: "God maintain the noble glassmakers in their present poverty, for, if they become rich, they will become insufferable" (Scoville (1950: 84-87).

French glassmakers and glass beadmakers were free to move, and outside glassmakers were always welcomed. The relationship with the king was their political association. As for their status, despite recognition from the crown, they had a hard time maintaining their position in the eyes of others. This is a false high status, defended by the glassmakers, but not recognized by their contemporaries.

Italy (Venice)

Despite many prohibitions, Venetians spread their craft far and wide. Sometimes they were harshly punished by their government for doing so; at other times they came and went with impunity. They were often invited.

In 1486, Venetians helped start a rosary factory in Germany (Jackson 1927). During the 16th and 17th centuries, beadmaking was spread to England and significantly expanded in Holland by Venetians. The most peripatetic beadmaker was Zuan Antionio Miotti of the famed family. He managed a factory in Middelburg, Holland, in 1606, owning it by 1610. He went to England in 1619, and to Brussels and Namur in Belgium about 1622. In the mid 18th century, Venetian bead- and glassmakers established new industries or trained workers in Florence, Rome, Bologna, Naples, Torino, Pisa, Loreto, Marseilles, Innsbruck, Graz, Amsterdam, Spain and Portugal (Francis 1988:44-45, 55).

More recently, some migrated to Venezuela (named after Venice) and settled near Caracas; beadmaking there has since ceased (R. Corbin 1989: pers. comm.). The full relationship between the southern French and Venetian industries is still to be learned, but at least some Venetians moved to the Lyon area to make beads.

It is not known when the first glassmaker's guild was organized in Venice, but a guild existed there at least by 1224 (Fig. 14). There had long been guilds for beadmakers in bone, ivory and wood (for rosaries, especially for the Holy Land). The Cristalleri guild was founded in 1284, to work rock crystal, and a branch, Arte Minuta, made beads. From the beginning, they were wary of glass imitations, and their earliest rules forbade the making of glass gems and lenses (Francis 1988:12-13).

In 1308, glass beadmakers were organized into the Arte de' Margariteri and given status equal to beadmakers in bone, ivory and wood. In 1486, another glass beadmaker's guild was founded, the Paternostreri, whose rules describe chevron beads, *oldani* (whatever they were), canes and other "sorts of work newly discovered" (Gasparetto 1958:184; Morazzoni 1953:22).

On 17 February 1510, the Capitolo dell'Arte, the central ruling body of all guilds, backed the glass beadmakers, "to keep what was newly discovered twenty years ago... an invention made by our glassmakers of Murano of pure canes of common cristallo and colors of diverse sorts." So emphatic was their endorsement that Gasparetto (1958:186), dean of Venetian historians, proclaimed: "Rock crystal dies and glass beads are born."

A third guild, the Arte de' Perleri e de' Suppialume, was founded in 1528, to make wound beads "at the lamp" (*suppialume* refers to blowing into the flame of an oil lamp to increase its heat). The Paternostreri opposed them as they made a similar product. Not until 1647 did the Suppialume achieve equal status with the Margariteri and Paternostreri, sharing a technical school, a patron saint and rules, but maintaining separate governing councils and banks. In time, the Paternostreri's fears were borne out; the



Figure 14. The 12th-century Basilica of Saints Mary and Donato on the island of Murano (Venice). Inside is a chapel dedicated to St. Anthony, the patron saint of the beadmakers' guilds (Zanetti 1869: frontispiece).

Suppialume supplanted the old guild (Francis 1988:13).

Early Venetian glass- and beadmakers held high status. In 1376, the Senate permitted a nobleman marrying a glassmaker's daughter to pass his titles to their children; this was not allowed when marrying other commoners. Glassmakers could become noblemen upon payment (Francis 1988:12). But later industrial workers were not as well off. In the late 19th century, the demand for beaded dresses created high wages and many Venetians quit their former jobs to make "seed" beads. But when demand dropped, they were unceremoniously laid off (*Scientific American* 1883).

Despite many prohibitions, Venetian glass- and beadmakers often emigrated, tempted by rival countries which wanted a share in the bead industry. Guilds long played a key role in Venetian bead history, and reflected the manufacturing processes of the beads. Status was high for masters but, as the industry developed, the status of ordinary workers equaled that of other industrial workers in Europe and America.

Bohemia

The Bohemians also spread beadmaking. In 1895, Daniel Swarovski moved from the Jablonec (Gablonz) region to Wattens, Austria, to protect his inventions for faceting beads; a billion-dollar company grew from these humble beginnings (Francis 1993). In 1940, glassmakers and beadmakers went to Benaras, India, to open a glass- and beadmaking school. It closed in 1962, but spawned a considerable industry (Francis 1982c:11). More recently, Czechs have exported technology to Boshan, the traditional beadmaking center of China (Sprague and An 1990:11).

After World War II, beadmakers of German descent were expelled from Czechoslovakia (Jargstorf 1993:14) and moved to German-speaking countries. One beadmaker settled in Krimsmunster, Austria. About 4000 moved to Gmünd, Germany. Others went to Warmensteinach, Bavaria, but most of these—and probably most of those in Gmünd—ended up near Kaufbeuren in a suburb called Neu Gablonz (New Jablonec) (Francis 1988:37-38). There is also a company called Neu Gablonez in Vienna, Austria.

In Bohemia, glass guilds were organized at Chribská in 1661, the Sloup estate in 1683, and Kamenichy Senov in 1694. The garnet-cutting guild of Turnov sent Wenceslas and Franz Fiser to spy out glassmaking in Venice which was producing cheap imitations of garnets. They discovered a gold-lead ruby glass, and soon many garnet cutters were making false garnets. The work was hidden from the prying eyes of neighboring villages, and not until 1792 did the guild rules make a distinction between "hard work" or stone cutting and "soft work" or glass grinding. From this backhanded way, the great bead industry of Jablonec nad Nisou (Gablonz) developed (Francis 1988:31-32).

In 17th-century Bohemia, beadmaking was a privilege open only to free peasants. The glass melter signaled his high status by being allowed to change his apron after every batch (Francis 1988:30-33); one wonders if his wife was proud of him on wash day? There was a change during the industrial period, at least as interpreted by pre-revolutionary Czech historians. The records of the Riedl Glass Works of Nova Louka show "the bad social standing of the employed glassworkers as well as... their material dependence on the master of the glass works" (Urban 1966:176). Recent investigations have disclosed that many Czech beads were made by forced prison labor under the Communists (Henry n.d.).

Glassmakers and beadmakers in Bohemia moved to many locations. Movements outside Bohemia were voluntary (Austria), invited (India and China) and forced (Germany and Austria). Guilds were once important but, in time, capitalists and Communists became the keys to the history of the industry. The once-high status of beadmakers declined under both dispensations.

SPAIN AND MEXICO

Spain, the most autocratic country in Europe, exercised tight control over gremios (guilds) for a long time. I have been unable to learn if there was a beadmaking guild in Spain, though the importance of rosaries would suggest it. The guild system was exported to the Americas with devastating consequences, as native talent withered (only a Spaniard could be a master or officer) and the conqueror's tastes alone were satisfied (Francis 1987a, b). The classical case in Mexico is the silversmith's guild (Anderson 1941), tightly regulated and allowing no deviations.

In Mexico, guild restrictions were not lifted until after the Revolution of 1910. Only then could people do whatever they wanted. With the exception of amber working in Simojovel, Chiapas, all Mexican bead industries are *sui generis*, using *ad hoc* methods to make beads from clay, stone, shell, coral and other materials. Visiting these workshops is an interesting experience because beads are made by methods wholly invented by the living master or his/her parent (Fig. 15).

The paucity of documentation about beadmaking in Spain and pre-conquest Mexico gives us only post-conquest Mexico to consider. There, the guild system stifled initiative and beadmaking did not arise until after the system was abolished. Today there is no particular status attached to beadmaking in Mexico; it is just another way of making a living.

CONCLUSIONS

This condensed global survey of beadmakers is offered to stimulate debate and encourage more research on the topic. The survey cannot be comprehensive because the necessary data are not at hand. However, if we are to understand beads, we must understand the people behind them, including beadmakers. A review of the topics discussed here may guide further inquiry.



Figure 15. A young man drills a stone bead in Iguala, Mexico (1985). After the guild system was abolished following the 1910 Revolution, anyone who wanted to make a bead could. Those who chose to do so had to figure out how to do it. This bead is being drilled using a most unorthodox method involving a bent umbrella rib and commercial "emery" slurry.

Beadmakers (especially those working with glass) moved around a lot, though they may have stayed in one location for extended periods. Motives for movements varied. Some were enticed, a few traveled for personal reasons, but most were forced to move. These shifts were due to major economic, political and social changes going on around the beadmakers, events such as the Crusades, the Partition of India, changes in Chinese dynasties, the Mongol invasions and the coming of Communism. Such large-scale social changes affected not only beadmakers, but many other people as well. Two lessons may be drawn from this. One is that the history of beadmaking is often a microcosm of the history of a given society. The other is that the story of beadmaking must be understood in light of the larger history of humanity.

Historically, guilds were the fundamental instrument for transmitting beadmaking skills, and the beadmakers' principal sociopolitical organization. The history of many beadmaking groups cannot be understood without taking guilds into account, for better or worse. This is true for nearly all the places surveyed, the exceptions being North India (where caste takes the place of guilds), Japan, the Middle East and some sub-Saharan areas. This suggests a rich source of further data about beadmakers and beadmaking in the extant records of guilds in many parts of the world.

Schenk's (1963) hypothesis about the decline in the status of beadmakers as the industry grows and becomes more mechanized fits the West European experience best. Indian glass beadmakers were hampered by the low esteem in which glass was held due to its inferiority to gems. French glassmakers once treasured high status, but it was artificially inflated. Chinese beadmakers may have been honored in the past, while Japanese beadmaker's status fluctuated. Beadmaking does not seem to confer any particular status in the Middle East, modern Mexico or sub-Saharan Africa aside from the honor individual masters hold within their own community.

ENDNOTES

- 1. Small-scale beadmaking consists of a beadmaker working at or near home, assisted by his family and perhaps a few other hands. Industrial beadmaking began with the ability to make many beads at one time, with a clear division of labor among a large number of workers. The production of drawn beads in Venice and molded beads in Bohemia are examples of this, even though (as in the case of Venice) it preceded (or heralded) the Industrial Revolution. Indo-Pacific beadmaking in Asia may also be considered at this level. Mechanical beadmaking began with the invention of the Prosser process for producing buttons and beads from powdered components. The Danner glass-tube-drawing machine, adapted for beads by the Venetians probably in the late 1920s, was another such advance. No successful beadwinding machine has yet been introduced, but mechanization and computerization continue for drawn bead manufacture, especially in Japan.
- 2. I know some readers will think this unfair or find it annoying, but I am always ready to provide references and discuss the development of arguments with any interested party.
- 3. A *pi* (*bi* in the old transliteration system) is a flat round disc with a hole one third the diameter of the object. Commonly of jade, they served as burial offerings, and small ones were sometimes worn.
- 4. This is something that should be kept in mind by those using beads with such attributions for comparative purposes or to determine the chemical composition of beads from specific manufacturing centers.
- 5. A *nisba* was originally a designation of origin or occupation, later evolving into a surname.
- 6. Nahwi is grammar and zajj is glass.

REFERENCES CITED

Anderson, Lawrence L.

1941 The Art of the Silversmith in Mexico 1519-1936. Oxford University Press, New York.

Baines, Athelstane

1912 *Ethnography (Castes and Tribes).* Grundriss band II, haft 5. Verlag von Karl J. Trubner, Strassburg.

Barrelet, James

1953 La Verrerie en France. Librairie Larousse, Paris.

Birenne, Henri (I.S. Clegg, transl.)

1937 Economic and Social History of Medieval Europe. Harcourt, Brace and World, New York.

Blair, Dorothy

1973 A History of Glass in Japan. Kondasha, Tokyo.

Cohen, Hayyim J.

1973 Early Islamic Scholars as Glassmakers. *Readings* in Glass History 2:30-5.

Crane, Louise

1926 China in Sign and Symbol. Kelly and Walsh, Shanghai.

Crump, J.I., Jr.

1964 Intrigues: Studies of the Chan-kuo T'se. University of Michigan Press, Ann Arbor.

Development Commissioner

1980 Project Profiles on Reserved Items, I. Development Commissioner, Small Scale Industries, Delhi.

Dikshit, M.G.

1969 History of Indian Glass. University of Bombay, Bombay.

Engle, Anita

1981 The Glassmakers of Altare. Readings in Glass History 12:1-96.

Finot, Louis

1896 Les Lapidaires Indiens. Librairie Emile Bouillon, Paris.

Francis, Peter, Jr.

- 1979 Third World Beadmakers. World of Beads Monograph Series 3.
- 1982a Handbook of Bead Materials. World of Beads Monograph Series 5.
- 1982b Indian Agate Beads. World of Beads Monograph Series 6.
- 1982c The Glass Beads of India. World of Beads Monograph Series 7.
- 1983a Some Thoughts on Glass Beadmaking. In "Proceedings of the 1982 Glass Trade Bead Conference," edited by Charles F. Hayes III. Rochester Museum and Science Center, Research Records 16:193-202.
- 1983b Bead Report, Part VIII: Minor Indian Beadmakers. Ornament 6(3):18-21.

- 1985 A Survey of Beads in Korea. Occasional Papers of the Center for Bead Research 1.
- 1986 Chinese Glass Beads: A Review of the Evidence. Occasional Papers of the Center for Bead Research 2.
- 1987a Beadmaking Ad Hoc. *Margaretologist* 1(4):10.
- 1987b Bead Report: Hecho en Mexico. *Ornament* 11(2): 58-61, 66-7.
- 1988 The Glass Trade Beads of Europe: Their Manufacture, Their History, and Their Identification. World of Beads Monograph Series 8.
- 1990a Glass Beads of China. Arts of Asia 20(5):118-27.
- 1990b Beadmaking In Islam: The African Trade and the Rise of Hebron. *Beads* 2:15-28.
- 1991 Beadmaking in Arikamedu and Beyond. World Archaeology 23(1):28-43.
- 1993 Swarovski and Austrian Cut Crystals. Margaretologist 6(1):3-6.

Frobinius, Leo

1913 *The Voice of Africa*. Vol. 2. Hutchinson and Co., London.

Gadgil, D.R.

1929 The Industrial Evolution of India in Recent Times. Oxford University Press, Bombay.

Gasparetto, Astone

1958 Il Vetro di Murano. Neri Pozza Editore, Venice.

Gernet, Jacques (H.M. Wright, transl.)

1962 Daily Life in China on the Eve of the Mongol Invasion 1250-1276. Stanford University Press, Stanford.

Gode, P.K.

1949 Notes on the History of Glass Vessels and Glass Bangles in India, South Arabia and Central Asia. Journal of Oriental Studies 1(1).

Goitein, S.D.

1973The Medieval Glass Industry as Reflected in the
Cairo Geniza. Readings in Glass History 2:18-29.

Gross, Charles

1942 Guilds. Encyclopædia Britannica. Vol. 10, pp. 964-967. Chicago.

Gupta, H.L.

1960 The Economic Impact of the West on Indian Industries. Journal of Indian History 38(1).

Harada, Yoshito

1962 Ancient Glass in the History of Cultural Exchange Between East and West. Acta Asiatica 3:57-69.

Henry, Catherine F.

n. d. Forced Labor in the Czech Glass, Bead and Jewelry Industry and the Use of Glass, Bead and Jewelry Enterprises as Fronts for Technology Transfer and Weapons Programs in the Soviet and Post-Soviet Eras. Unpublished manuscript. Center for Bead Research, Lake Placid, New York.

Jackson, Adeline M.

1927 The Glass Bead Industry in the Fichtelgebirge. Journal of the Society of Glass Technology 9:A113-4.

Jargstorf, Sibylle

1993 Baubles, Buttons and Beads: The Heritage of Bohemia. Schiffer Publishing, Atglen, Pennsylvania.

Kangle, R.P.

1972 The Kautiliya Arthasastra, Part II. Motilal Banarsidass, Delhi.

Kosambi, Damodar Dharmanand

1975 An Introduction to the Study of Indian History. 2nd. ed. Popular Prakashan, Bombay.

Kurinsky, Samuel

1991 The Glassmakers: An Odyssey of the Jews, the First Three Thousand Years. Hippocrene Books, New York.

Levy, Reuben

1969 The Social Structure of Islam. Cambridge University Press, New York.

Meek, C.K.

1925 The Northern Tribes of Nigeria. Vol. 1. Frank Cass and Co., London (reprinted in 1971).

Morazzoni, Giuseppe

1953 Le Conterie Veneziane dal Secolo XIII al Secolo XIX. In Le Conterie Veneziane, by Giuseppe Morazzoni and Michelangelo Pasquato, pp. 5-74. Società Veneziana Conterie e Cristallerie, Venice.

Morse, Hosea Ballou

1967 The Gilds of China with an Account of the Gild Merchant or Co-hong of Canton. 2nd. ed. Russell and Russell, New York.

Nadel, S. F.

1951 A Black Byzantium: The Kingdom of Nupe in Nigeria. Oxford University Press, London (originally published in 1942).

Needham, Joseph with Wang Ling and Kenneth G. Robinson

1962 Science and Civilisation in China. Volume 4: Physics and Physical Technology, Part I: Physics. Cambridge University Press, Cambridge.

O'Hear, Ann

1986 Ilorin Lantana Beads. African Arts 19(4):36-39.

Olin, Stephen

1846 Travels in Egypt, Arabia Petraea, and the Holy Land. 2 vols. 8th ed. Harper and Brothers, New York.

Oppenheim, A. Leo

1964 Ancient Mesopotamia: Portrait of a Dead Civilization. University of Chicago Press, Chicago.

Pal, Bulbul

1986 Bangle-makers: A Fragile Existence. [Indian] Express Magazine (May) 4:3.

Rostovtzeff, M.

- 1957 The Social and Economic History of the Roman World. Vol. 1. Clarendon Press, Oxford.
- 1964 The Social & Economic History of the Hellenistic World. 2 vols. Clarendon Press, Oxford (originally published in 1941).

Sauzay, A.

1868 La Verrerie depuis les Temps les plus Reculés jusqu'à nos Jour. Librairie de L. Hachette et Cie., Paris.

Schenk zu Schweinsberg, Eberhard

1963 Contributions to the Sociology of Glass—An Attempt. In Advances in Glass Technology, Part II, pp. 256-267. Plenum Press, New York.

Scientific American

1883 Venice and her Glass Bead Industry. (November) 3:275.

Scoville, Warren C.

 1950 Capitalism and French Glassmaking, 1640-1789.
University of California Press, Berkeley and Los Angeles.

Shamasastri, R.

1915 Kautilya's Arthasastra. Government Press, Bangalore.

Shastri, Manmatha Nath Dutt (transl.)

1968 *The Garuda Purana*. Chowkhamba Sanskrit Series Office, Varanasi.

Smith, Adam (Edwin Cannan, ed.)

1937 An Inquiry into the Nature and Cause of the Wealth of Nations. Modern Library, New York.

Sprague, Roderick and An Jiayao

1990 Observations and Problems in Researching the Contemporary Glass-Bead Industry of Northern China. *Beads* 2:5-13.

Srinivas, M.N.

1962 Caste in Modern India and Other Essays. Asia Publishing House, Bombay.

Urban, Stanislav

1966 The Riedl Glass Works at Nová Louka (Neuwiese) in the Iser-Mountians (English abstract). Ars Vitraria 1:174.

Verma, O.P.

1972 Organization and Functions of Some South Indian Guilds. In *Early Indian Trade and Industry*, edited by D.C. Sircar, pp. 76-82. University of Calcutta, Calcutta.

Weisberg, David B.

1967 Guild Structure and Political Allegiance in Early Mesopotamia. Yale University Press, New Haven.

X.Y.Z.

1896 The Attack on the Top Knot. *Korean Repository* 3(6):263-72.

Young, Sidney

1913 The History of the Worshipful Company of Glass Sellers of London. Geo. Barber, The Furnival Press, London.

Zanetti, Vincenzo

1869 Piccola guida di Murano e delle sue officine. P. Naratovich, Venice.

> Peter Francis, Jr. Center for Bead Research 4 Essex Street Lake Placid, New York 12946