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BEDE, BAEDE, BEYD, BEODE, BODE, BOEDES plural: BEDES, BEDEN, BEADIS

The Old English root of the word meant the act of praying, a prayer or a request. By around 1200 bede had been joined with other words, linked to the idea of prayer. Thus, bedern was a house of prayer or a residence of clerics. A bedehous was also an almshouse where bedefolk lived, who prayed for their benefactors. The prayer or chant was a bedesong or bedes-byding.

In time the word was transferred to an object in common use for praying: a rosary. The first recorded uses of "bede" to indicate small perforated objects are in wills. In 1351 Will York gave Thomas, "j par de bedes de corall" (1 pair of coral beads) and in 1386 Will Durham left, "ij paria de bedes de auro" (ii [2] pairs of gold beads).

The first literary mention of beads about 1387 is the description of the prioress in Chaucer's Canterbury Tales EKurath and Kuhn 1957:682-31.

Ful fetys was hir cloke, as I was war

Graceful was her cloak, as I was aware

Of smal coral aboute hir arm she bar

Of small coral about her arm she bore

A peyre of bedes, gauded at with grene,

A pair of beads, the gaud [large ones] of green

And ther-on heng a brooch of gold ful shene

And thereon hung a brooch all bright

On which ther was first writen a crowned A,

On which was first written a crowned A

And after Amor vincit omnia

And after, "Love conquers all"

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

Several recent issues have been devoted to special topics, as the next one most likely will be. Others have been more eclectic, ranging over the story of beads from many places and many times. This is one of those, covering as it does problems of stone beads in India, and glass bead manufacture and history. But we hope it emphasizes that the real history of beads is the history of people, whether it be their movements through the Middle East or Europe, the controversy over where a saint is buried, the inventiveness of the Chinese, the mechanical genius of an American, or the status of the Indo-Pacific beadmakers. Bead Research is not the study of small dusty objects, but a minor discipline among the sciences of the human race.

I would like to offer here my thanks again to many friends who were so gracious and helpful on the recent Tenth Anniversary Lecture Tour. A great many were kind enough to host me in many ways, help locate resources, and make my stay and travel comfortable. It is one of the joys of being involved in beads that one meets so many people, either renewing old ties, or forging new ones. It makes the hard work not only more pleasant but even worth it in the end.

IMPORTANT NOTICE TO OUR SUBSCRIBERS PLEASE READ THIS:

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To see if your subscription is due, look at the string of numbers on the top of your mailing label. The last two numbers separated by a colon show the last issue that you will receive with your current subscription. For example, if it reads 2:4, this is the current issue, and you will need to renew your membership/patronship with us to continue receiving the most informative bead newsletter in the world.

This issue is Vol. 2, No. 4. That indicates four years of publication, as each volume has run two years. Beginning with the next issue, we shall run only two numbers per volume, making each volume one year long instead of two. This makes no practical difference in your subscription, but it does make it easier for researchers and others seeking back issues.

As always, we are most grateful for your continued support. If you believe in our work strongly, and want to increase your help, we have added another category of membership, Supporters at \$200 for two years, who will receive the benefits Patrons receive plus copies of the new Contributions series of papers as they appear.

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 Esubscribers 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 © 1989 by Peter Francis Jr. Permission for Reproduction must be obtained in writing.

WHERE DID THEY BURY OUR SAINT?

Baba Ghor, the Jangli Pir, came from Mecca and is enshrined in Jhagadia

Baba Ghor is the most important saint in the history of beads. As an object of Muslim piety, he is the patron saint of all the workers (whether Muslim or Hindu) of the western Indian agate industry. His tomb, on a hill commonly named for him, overlooks the Ratanpur region of Jhagadia sub-district in Gujarat, which has furnished raw material for the industry for millennia. A cenotaph in his honor is featured in Cambay, where beadcutting takes place. Even a stone is named for him: the typical grey or brown and white banded agate, which for thousands of years has been used to make sardonyx and onyx. The name "babaghoria" for the agate goes back at least to 1582 when Akhbar the Great decreed its use for weights in his kingdom [Blochmann 1927:I 36].

Who was Baba Ghor? His tomb was first mentioned in 1452; apparently he was a scion of the Ghors of Malwa, who died fighting Ahmed Shah of Gujarat in the early 15th century. At first his tomb served as a counter to Hindu holy places in the region, as the Muslims consolidated their hold on the bead industry. A parallel story of an Abyssinian bead merchant and hermit who lived in the jungle and founded the bead industry was current in the last century in Cambay. In time, these persona were merged and the story elaborated by the Siddis, a generally poor and disadvantaged Afro-Indian people. Only at Ratanpur do the Siddis enjoy prestige, as they are in charge of Ghor's shrine. To enhance their status, Baba Ghor, the bead merchant, and their African origin have merged. The story of Baba Ghor is an important one on several levels, but we cannot go into all its details here Esee Francis 1982:22-27; 1986a].

What we want to discuss here is where the venerable saint is actually buried. When you visit Baba Ghor's shrine today you ascend the westernmost hill of the Satapura Mountains near Ratanpur ("the village of gems"). A walkway of cut and sometimes carved limestone blocks leads you up near the shrine, where his "sister," Mai Misra, is also entombed. After paying one's respects, wandering around the hill brings you to other sights. One is a peak which contains the remains of a brick foundation. This was the site of an earlier Hindu temple of Makkhan Devi, a goddess with whom Baba Ghor is said to have fought. Her temple has been thrown down, and the stone walkway up the side of the hill was built from its remains.

A bit further west in a hollow atop the hill is a large stone water tank. Filled only by the rain, it provides water for some months during the year, and is otherwise bone dry. At the far west, on the actual peak of the hill (387 ft./119 m. ASL), is a pile of large stones and a few bamboo posts holding ragged flags fluttering in the wind. This, the locals will tell you, is the tomb of Pir Kiste.

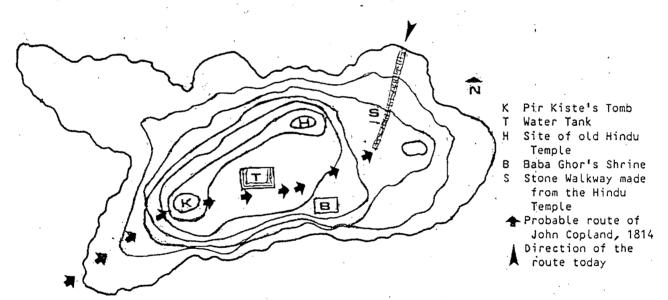
However, there has long been confusion about the exact identification of the tombs. When the finely carved Baba Ghor shrine was erected in the 1870s, the Cambay beadcutters asserted that it had been built in honor of their saint (the hermit) [Campbell 1880:206 n. 3]. Had there been a mistake? I have long looked for the first detailed account of the area written by John Copland of the Bombay Medical Establishment after his visit in 1814. The account, available to me only in summary, has proved very elusive, published as it was in a journal that lasted only three years. Now the paper has been

located, and it indicates that an error was, indeed, made. The account is here excised of material not directly related to the problem at hand:

We took a circuitous route which brought us to a hill of considerable height, which we ascended; and enjoyed a most extensive prospect... On the summit stands the tomb (in good repair) of the tutelar saint of the country, Baba Ghor... A little below the tomb is a a hollow... containing a tank of water about a hundred feet in length and fifty in breadth... We descended at the opposite side of the hill by a path paved with the fragments of temples despoiled by Mahomedan bigotry, to the extent of nearly a mile... [Copland 1819:294-5].

Copland's account confirms that a mix-up in the location of the tombs (whether purposeful or otherwise) happened later in the century. The good prospect from the hill is at the current Pir Kiste's tomb, not Baba Ghor's. Only from Pir Kiste's tomb does one pass the water tank and then descend the walkway made of temple stones on the other side of the hill (see map).

SKETCH CONTOUR MAP OF BABA GHOR HILL, RATANPUR, INDIA



What happened? It may be impossible to say any more, but it is likely that the tomb was built where it was as part of the process of merging the various stories of holy men in the region into one. That process is today complete. Baba Ghor is regarded not only as a (black) Ethiopian, but as a pilgrim to Mecca, the slayer of Makkan Devi, and the founder of the bead industry. The story suits everyone involved (except nosey bead historians), and serves many purposes. It unites the whole industry into the worship of one saint. It melds the old Hindu (and perhaps other) elements into the dominant Muslim fold, the Muslims being the controllers of the industry. It provides status and a raison d'être for the Siddis, otherwise nothing but foreign outcasts. In the end, it probably doesn't really matter where Baba Ghor is buried, but it is amusing to think that he rests somewhere else.

RUBY RED GLASS

Red is a favorite color of many people and widely sought. Red body paint, red clay, and red cloth are not hard to come by, but bright red glass is something different. Opaque red (cuprous oxide) glass has been made for millennia. Unfortunately, it is not very bright (often being mistaken for terra cotta both in the past and the present). Translucent "ruby" red is what is called for, but it is rare in the history of glass.

The colors of glass are imparted by metallic salts, which need the further manipulation of proper furnace conditions (oxygenizing, muffling or oxygenstarving, and sometimes other tricks). Only five metals will yield a ruby red glass: antimony, uranium, selenium, copper, and gold. The first three have only been used relatively recently. Uranium and selenium were not even known until the last century, and antimony red requires a purer batch and more mechanized molding conditions than were available until this century. If glass cannot be colored with the proper ingredient, then it must actually be painted. Examples of such "red" glass in the Center's collection include a small Persian glass window element with red painted onto clear and clear tubular beads painted red inside on a fringe from India.

Both gold and copper produce ruby glass with a colloid suspension of the elements in the glass. A glass that is green by reflected light and red by transmitted light colored with gold was made on a limited scale in 4th century Rome [Harden 1987:246-7], but not duplicated later. True gold ruby glass, considered the best, requires a way to introduce the metal into the batch, a technique first worked out by Andreas Cassius with his invention of "purple of Cassius," and published in <u>De Auro</u> in 1685. Johann Kunckel (died 1705) developed it commercially by coating clear glass with the red. The Bohemians mastered a ruby gold glass which they called "composition" by 1715. It appears not to have been used widely for Venetian beads until around 1830, when "white hearts" (cornaline d'Allepos) appeared.

But the story of copper ruby red glass is less well known, and has proven more difficult to trace. It is a bit tricky to make clear red glass from copper. It requires the appropriate batch, including a reducing agent which turns the color from a light blue to clear, then removing the glass, letting it cool, and reheating it or "striking" it.

The process was not unknown in Medieval Europe. Cathedral windows of the 12th to 14th century had red panels colored with copper ETurner 1956: Table VIII. But the process was somehow lost. How and why this happened I have not yet been able to discover. The purusing of many works on "stained" glass have not proven very useful. Certainly the Reformation put an end to the production of such windows in protestant countries. Read E1942:2931 emphasized the effect of the Black Death of the mid-14th century in breaking up what had been a community of Christiandom's artisans and the loss of knowledge of making certain colors (possibly including the red).

The rediscovery of this art is attributed to George Bontemps, a famous French glassmaker, around 1836 [Thorpe 1935:239]. Sauzay [1871:212] said that "coloring glass" was a Bohemian monopoly (he must have meant the ruby color), and that the Societe d'Encouragement offered a prize for coloring glass, which was won by Bontemps and de Fontaney. Lardner [1832:221-2] recounted a different story about the rediscovery of this lost art by telling us that a copper ladle was dropped into a glass batch accidentally at the works at St. Gobain and ruby red glass was produced. Since Lardner

wrote his book some years before Bontemp's supposed rediscovery, the priority of the invention must be reconsidered. In any case, the first scientific investigation of copper ruby glass was made by P. Ebell, and published in 1870 [Weyl 1959:423-5].

Ruby Glass in Asia

Glass histories have for far too long been plagued by limiting themselves to the history of glass in Europe. This ignores what the rest of the world (particularly Asia) may have been doing, and this chapter is symptomatic of that. Was ruby red glass made in Asia independently of Europe?

Translucent red glass beads have been reported from India. One is said to have come from near a Megalithic tomb in the south, but the circumstances of its find do not inspire confidence in its antiquity [Beck 1930:175]. Dikshit reported several sites with ruby colored beads on white cores [1969:58], but of those I have seen, all appear to be later Venetian products. One small drawn ruby red bead was found at Bagor, Rajasthan. It is most likely a modern intrusion, which, unfortunately, has been carelessly misplaced by the technician who was supposed to examine it [Francis and Misra n.d.].

But elsewhere in Asia there is a different story. In several sites in Southeast Asia there are wound translucent red beads. They are heavy, with a dusky red color, suggesting a high lead content and coloring by copper. This has recently been confirmed by an X-Ray fluorescence test done on two such beads by David Killick and myself at the McKay Laboratory at Harvard. These beads have been found at Sungai Mas (Malaysia), Calatagan (the Philippines), Buah Cave and Gedong (Sarawak, Malaysia), Fort Canning Hill (Singapore), and in two shipwrecks, the Royal Captain Wreck No. 2 (a Chinese junk near Palawan, the Philippines), and La Concepcion, a Spanish Galleon. In date they range from the 10th or 11th century (Sungai Mas) to 1638 (the Galleon wreck). Copper ruby beads have also been found in the East African site of Kilwa, dating from ca. 900 to 1400 [Chittick 1974:471].

Copper and Gold Ruby Glass in Europe and China

Century:	4.	5	6	7	8	9	10	11	- 12	13	14	15	16	17	18	19	20
EUROPE	Gold]						•	Со	pper			•		Go1	d	-
CHINA					L.		•	Co	pper				-		,		
													-		2	Go1d	

There is no doubt that these beads were made in China. The heavy lead content as well as their distribution in time and space suggest that. The beads from Fort Canning Hill, Singapore, were being made there in the 14th century by Chinese. A pillar found recently at Suzhou and datable to 1013 was decorated with glass beads, including ruby red ones (they was earlier erroneously reported as "opaque red") [Francis 1986b:6].

The Chinese had obviously learned how to make a ruby red glass with copper by the 11th century. These may be the "red beads" which were often included among the lists drawn up for traders to take to Malaya and Sumatra in the 13th-15th centuries [Francis 1989:20].

THE TAKUA PA INSCRIPTION AND THE INDO-PACIFIC BEADMAKERS

The small, monochrome Indo-Pacific beads, of which we have so often written, were made in India and Ceylon and many parts of Southeast Asia for a period of over 2000 years. They are the most important trade bead of all time, and though they were once largely ignored, their story as now known has become most interesting and complex.

Our earlier reports traced the production of these beads by means of examining the waste products left over from the beadmaking process. These waste products are unique to the system used to make these beads, the same system as is used today in southern India. The discovery of a sufficient range of these waste products in a number of sites has confirmed that beadmaking was carried on there. We have seen that the Indo-Pacific beads were first made in southeast India by the third century B.C. By the first century A.D. the beadmakers had moved to Sri Lanka (Ceylon), Thailand, and Vietnam. For the next 1200 years or so, the beadmakers worked in several cities in what is now Thailand and Malaysia. The Southeast Asian branch died out about A.D. 1200, while the Indian branch has survived.

Yet, we were at something of a loss to discover much about the people who made these beads. Who were they? What were their religious, cultural, ethnic, and linguistic affiliations? What was their status in the societies in which they worked, so many of them apparently foreign to their homes? Archaeology often has a hard time answering such questions. Historical references did not seem to exist.

Attention may now be directed to a piece of historical evidence which may throw some light on this problem. The evidence is an inscription found near a group of sculptures locally called Pra Narai near the town of Takua Pa in southern Thailand. We have identified Takua Pa as a site of Indo-Pacific beadmaking. The sculpture group and the roundish stone with the inscription has caused some controversy over the spot of their original placing [Lamb 1964], but this need not detain us here. What is of interest is the contents of the inscription. Sastri [1949:28-9] transcribed and translated the inscription as follows:

- 1. (ya) varmukku
- 2. ... man tan nang(u)r (n) dai(ya)
- 3. n totta kulam per sri A(vani)
- 4. naranam manikkiramattar(k)
- 5. kum Senamukattarkkum
- 6. ...patarkkum adarkkalam

(The name of a king)... "The tank built by Nangur-udaiyan (and) called Avani-naranam (is placed under) the protection of the Manikkiramam, the residents of the military camp and"

There is some question about the age of the inscription. Sastri put it in the 9th century 1949:28], while Coedes opted for the 7th [Veeraprajak 1985: 133]. Lamb is inclined to the later date, and the material evidence at the site also suggests that. Coedes reads that the tank was built near a place called (not by a man named) Nangur [Veeraprajak 1985:133, 140]. Lamb said that Sastri's interpretation had some "imaginative speculations" in it [1964:80], but did not elaborate.

What concerns us is the word "manikkiramatar(k)" or "manikkiramam." The second half of the word is no doubt "gramam" or "guild." Guilds were powerful organizations in Medieval India, and the existence of this guild at Takua Pa shows the strong presence of southern Indian commercial interests.

But what sort of guild was it? Sastri [1949:30] suggested that it was the Vanik-graman, a northern guild of traders (Vanik). However, there was also a powerful and long-lived southern guild known as "manigramam," with centers around south India, and trading interests from Arabia and Egypt to the Far East. Membership was open to traders, irrespective of their religion. The guild enjoyed many privileges, some of which seem quaint to us (a palanquin, the royal parasol, a cloth to walk on), and others which were of real rather than symbolic value such as legal and taxing powers, including the right to keep their own militia [Verma 1972:80-1].

Who were the manigramam or the manik-graman? The first part of the name is of special interest. "Manikya" in Sanskrit is "precious stone," evolving into the Hindi "mani" or "manek" meaning bead, the Tamil "manikam" meaning precious stone, and the Malay "manik" meaning bead [Wilkinson 1932:105]. This complex of terms suggest that the guild traded in precious stone and/or beads. It was not the only guild to deal in precious stones; the south India Ayyavoje also did [Verma 1972:79]. But, trade in beads, especially our Indo-Pacific beads, is well attested archaeologically at Takua Pa. Because we can trace the beadmakers' origins to Arikamedu, and because subsequent sites where they worked were primarily Tamil (such as Mantai, Sri Lanka), or had strong Tamil influences (Oc-eo, Klong Thom, Sating Pra, and Sungai Mas at least), this Tamil Indian guild with a name which means "bead" may have had associations with the Indo-Pacific beadmakers.

The traders enjoyed high prestige at home and abroad. Did the beadmakers as well? High status would explain why they were located in the region's major cities, even though glassmakers usually live in areas more suited to their craft (with plentiful sand and wood). It would also concur with the high status of these beads as recorded in Chinese annals and demonstrated by their abundance in royal Korean tombs.

BEADS TO HEAL THE TREATY OAK

Austin, Texas was chosen as the capitol by a commission in 1836 because it was the most attractive spot in the state. The surroundings are beautiful, and much of the city is quite handsome. I recently spent a week in the fine libraries of the University of Texas, but took time to see a special sight.

The 600 year old Treaty Oak was once in a grove known as the Council Oaks, named for meetings held and agreements reached beneath their ample boughs. Last spring a deranged man poison the oak, and it began to die. Rescue efforts have been underway since; the outcome will be known next spring.

Visiting this great tree is moving. It is almost never without human company. Families and friends constantly pay their tribute. The fence around it is dotted with thousands of objects: cards ("Grow Strong, Mighty Oak"), bits of ribbon, and, much to my delight, many strands of beads. Beads of all colors (mostly plastic) were interwoven into the fence in many places. They were talismans. The magical power of beads was being evoked again in this throughly modern city to heal a tree.

Notes from The World of Beads

ANOTHER FRENCH BEADMAKER

Anita Gumpert, the intrepid historian of French beadmakers, has recently returned from France with the story of yet another unrecorded beadmaking company. Presently called Ets. Salvadori, the company is located in Vaulx en Velin, a suburb of Lyon, as are two other glass beadmakers reported earlier [Francis 1988:49]. The company was founded in 1929 by two Italian beadmakers, Salvadori and Barbini. It was originally called "La Nouvelle Perle," the name which graces a sample card generously donated to us by Mrs. Gumpert. Neither Salvadori nor Barbini appear in the standard histories of Venetian glass as major producers; it appears likely that they were workers of some ability rather than owners of an established company.

Lyon, a major city of southeastern France, has long been known for many manufacturies, especially silk and other industries related to fashion. The Venetians are said to have controlled the glass bead industry in that area, which was reorganized in 1900. Here is yet another instance of a French-Venetian connection in glass beads.

The undated sample card consists entirely of small drawn beads mounted on wire (the first so mounted we have seen). The beads are not especially uniform, and the glass tends to be bubbly. The predominate colors are in the rose and violet ranges. Only one decorated bead is included, a black with white stripes made from three or so white canes. A "plomb" or "lead" bead, with a lead-colored metallic coating, is included. The sizes run from 4/0 to 2 (12/0 to 8/0 in the U.S. system).

As was emphasized in a recent publication of ours [Francis 1988], the beadmakers of France were far more important than had been previously recognized. Until a decade or so ago, Venice loomed so large in the scanty bead literature, that one would hardly have thought that any other European power made beads, except for Holland, which van der Sleen promoted, and even exaggerated. Next we learned about Bohemia, and now France and Germany are beginning to receive their just recognition.

THE WONDROUS DANNER MACHINE

Tubes for making drawn beads and other applications had always been made by hand. It was a laborious process, and as the price of labor increased, it became more and more expensive. Edward Danner put an end to all that.

Danner was an employee of the Libby Glass Company of Toledo, Ohio. In 1916 he filed for three patents for a machine which formed glass into a tube, drew it down from the mandrel on which it was formed, and pulled it along a belt to be cut into convenient sizes. In March of the next year he was granted patents No. 1,218,598; 1,219,709; and 1,220,201 Eofficial Gazette 1917]. The Danner Tube Drawing Machine was immediately put into operation by Libby, to whom the patents were assigned, for making electric tubing. It was judged a commercial success in its first year. Estimates were that it cut the cost of making tubing by two-thirds and labor costs by as much as 80 or 85%. Soon it was averaging about 2,600 pounds of tubing a day, work that would have required 90 men to do EScoville 1949:167].

The machine did not make everyone happy. The Owens Bottle Co., which had a licensing agreement with Libby, filed a suit in 1921, claiming that they had a right to use the Danner machine, as it could make containers (in the

form of test tubes). Libby, had, after all, assigned rights to a couple of other companies. The fight was so bitter that neither Michael Owens nor E.D. Libby talked to each other or with each other's men to their dying days.

The possibilities of the machine for beadmakers was not lost. Not only did it save great labor, but it also ensured tubes of standard size. In the 1920s or 1930s the Societa Veneziana per l'Industria della Conterie in Venice secured rights for the machine and applied it to their drawn beads. Today drawn beads are being made by machine at least in India (Benaras), Korea, and Japan as well. There are two other types of machines that can draw tubes: the Vello machine and the "updraw." I would appreciate knowing more about their origins and which machines are used where for making beads.

MORE ON MIDDLE EASTERN GLASS BEADMAKING

Our last issue discussed the glass beadmakers of Turkey, Egypt, and Hebron (in the West Bank), suggesting that they were linked and that Hebron was the source of glass beadmaking techniques among these related industries. Some more historical references help round out this picture.

As we noted, Fustat (Cairo) was an important glassmaker. Nassiri Khosrau, a Persian visitor in 1045-1052 said of glass made there (my translation from the French): "[At Fustat] they make also a transparent glass of great purity which resembles emeralds; they sell it by weight." [Schafer 1970]

William Browne traveled in Egypt and Syria between 1792 and 1798. He saw glassmaking at Alexandria and bead importing at Cairo: "Glass for lamps and phials is made at Alexandria, both green and white. They use natron in the manufacture instead of barilla: and the low beaches of the Egyptian coast afford plenty of excellent sand... [To Cairo] from Syria arrive cotton, silk, crude and manufactured, soap, tobacco, beads of glass.... Glass lamps [are made in Cairo] for home consumption. [Browne 1806:11, 81-3]. Browne visited Damascus, Allepo, and Tyre, but discussed no glassmaking there; he did not visit Hebron or Armenez.

A note on Hebron from the early 1800s was written by Olin [1846:II 87] "Hebron was stormed by the Egyptian army, under Ibrahim Pasha in 1834, when it was in rebellion against the government... Its trade and manufactures have suffered in an equal degree, and many of the shops are quite deserted. There are still some manufacturies of glass [left]...."

These passages do three things: 1. They give us documentary as well as archaeological evidence of the high reputation of Fustat glass, 2. They indicate importation of glass beads into Egypt from Syria (likely Hebron) in the late 1700s, and 3. They show that the Hebron glassmakers (more than one) were of some size by the 1830s.

Much more must be traced before we have the whole picture, but the one that has begun to emerge is of Egypt losing its superiority in beadmaking after the destruction of Fustat in the 12th century, to be replaced (at least eventually) by Hebron, which became the home of beadmaking and beadmakers in the Middle East.

CONTRIBUTIONS SERIES

The series Contributions of the Center for Bead Research has begun publication. These specialized works are printed on demand. At this time, the following papers are available (add \$1.00 for postage).

4. Beads and the Bead Trade in Southeast Asia \$9.75

5. The Type Collection of Beads in The Philippine National Museum \$11.75 6. Heirloom and Ethnographically Collected Beads in Southeast Asia \$9.75

NEWS FROM THE CENTER

Tenth Anniversary Celebrations

The Center's first decade was celebrated with two major events. An Open House was held on 3 September at the Center, especially for local residents to learn about our work. The party featured the exhibits "Man Makes His Mark: 7500 Years of the Seal," for which a catalogue was issued, "Recent Donations" and "How Glass Is Colored." Three times during the day a special demonstration of a short-wave ultraviolet light (blacklight) in bead studies was given. The Open House was very well attended, and people who could not come on the scheduled day visited for many days thereafter. Press releases and a radio interview were included in the publicity surrounding the event.

From October through December, director Pete Francis traveled 10,000 miles around the country lecturing, researching, and visiting many bead people. Lectures were given at the Peabody Museum (Harvard), the Wheelwright Museum (Santa Fe) and five Bead Societies. He also attended six lectures, studied ten museum collections, worked in seven libraries and two laboratories, met seven beadmakers, attended a Bead Bazaar, conducted four days of bead identifications, and contacted many private collectors and bead dealers.

National Publicity

The Center has been featured in articles in three daily newspapers recently. The one by Sue Halpern in the New York Times (19 October) created a great deal of interest in our work. It was reprinted in many other papers across the nation and internationally. Other feature articles have been written for the Plattsburgh (N.Y.) Press-Republican by Chris Mele (3 September) and the Albuquerque Journal by Anne Clancy (27 November).

African Research Tour

In January 1990 Pete Francis is scheduled to begin a tour of West Africa slated to include ten countries over four months. The tour will include major markets, universities, museums, and beadmaking sites. The three problems on which the tour will concentrate are: 1. The nature of the trans-Saharan bead trade with the early African kingdoms, 2. The ages and distribution of the European bead trade, and 3. Modern beadmaking. As always the no doubt exciting results of this work will be published first in the next issue of the Margaretologist.

Recent Donations

Again we are most grateful for donations to the Center's holdings. Gifts of literature join the world's largest library on beads, and are available to the increasing number of visiting scholars who make their way here. Beads given us are added to the study collection, and are an invaluable asset in comparative studies. Donations have come from: Melanie Alter, Robert Corbin, Penny Diamanti, Robert Dunnigan, Dr. and Mrs. Steven Dunning, Anita Gumpert, Elizabeth Harris, Michael Heidi, Howard Newcomb, Angelita Legarda, Howard and Marie-Jose Opper, Alice Sherer, Albert Summerfield, Gloria Uptain, Glenn Vincent, Joyce Whitaker, and Trish Woodbury.

REFERENCES FOR THE ISSUE

Beck, Horace C. (1930) "Notes on Sundry Asiatic Beads" Man 30:166-182. Blochmann, M.A. (1927) The Ain-i-Akbari by Abn 'L-Fazl 'Allami Oriental Books Reprint Corp., New Delhi.

Browne, W[illam] (1806) Travels in Africa, Egypt, and Syria from the Year 1792 to 1798 T. Cadell & W. Davis and Longman Hurst Rees and Orme, London.

Campbell, James (1880) Gazetteer of the Bombay Presidency, Vol. VI Bombay. Chittick, Neville (1974) Kilwa British Institute in Eastern Africa, Nairobi.

Copland, John (1819) "Account of the Cornelian Mines in the Neighbourhood of Baroach" Transactions of the Bombay Literary Society 1:289-295.

Dikshit, M.G. (1969) History of Indian Glass Bombay University, Bombay. Francis, Peter (1982) Indian Agate Beads WBMS 6, Lapis Route, Lake Placid.

-- (1986a) "Baba Ghor and the Ratanpur Rakshisha" Journal of the Economic and Social History of the Orient 29:198-205.

-- (1986b) "Glass Beads in China: Further Evidence" Margaretologist 1(3):6-7.

-- (1988) The Glass Trade Beads of Europe WBMS 8, Lapis Route, Lake Placid.

-- (1989) Beads and the Bead Trade in Southeast Asia Contributions of the Center for Bead Research 4, Lake Placid.

-- and V.N. Misra (no date) "The Beads from Bagor" in preparation.

Harden, Donald B. (1987) Glasses of the Ceasers Olivetti, Milan.

Kurath, Hans and Sherman M. Kuhn eds. (1957) Middle English Dictionary, Part Bl University of Michigan Press, Ann Arbor.

Lardner, Dionysius (1832) A Treatise on the Origin, Progressive Improvement, and Present State of the Manufacture of Porcelain and Glass Carey and Lea, Philadelphia.

Lamb, Alastair (1964) "Takuapa: The Probable Site of a Pre-Malaccan Entrepot in the Malay Peninsula" in John Bastin and R. Roolvink, eds. Malayan and Indonesian Studies pp. 76-86, Clarendon, Oxford.

Official Gazette (1917) March 6, p. 245; March 20, p. 700; March 27, pp. 909-910.

Olin, Stephen (1846) Travels in Egypt, Arabia Petraea, and the Holy Land Harper & Bros., New York (2 vols.).

Read, Herbert (1942) "Stained Glass" in Encyclopaedia Britannica Vol. 21, pp. 291-297, Encyclopaedia Britannica Inc., Chicago.

Sastri, K.A. Nilakanta (1949) "Takuapa and its Tamil Inscription" Journal of the Malaysian Branch of the Royal Asiatic Society 22(1):25-30.

Sauzay, A. (1871) Wonders of Glass-Making in All Ages Scribner, New York. Schafer, Charles (1970) Sefer Nameh: Relation du Voyage de Nassiri Khosrau Philo Press, Amsterdam.

Scoville, Warren C. (1949) Revolution in Glassmaking: Entrepreneurship and Technological Change in the American Industry 1880-1920 Harvard, Cambridge. Thorpe, W.A. (1935) English Glass Adam & Charles Black, London.

Turner, W.E.S. (1956) "Studies in Ancient Glasses and Glassmaking Processes, Part III" Journal of the Society of Glass Technology 40:39-54T.

Veereprajak, Kongkaew (1985) "Inscriptions from South Thailand" in SPAFA Consultative Workshop on...Srivijaya pp. 131-143, Bangkok.

Verma, O.P. (1972) "Organisation and Functions of Some South Indian Guilds" in D.C. Sircar, ed. Early Indian Trade and Industry pp. 76-82, Calcutta University Press, Calcutta.

Weyl, Woldemar A. (1959) Coloured Glasses Dawson's Reprint, London.

Wilkinson, R.J. (1932) A Malay-English Dictionary (Romanized) Salavopoulos and Kinderlis, Mytilene, Greece.