

The Margaretologist

The Journal of the Center for Bead Research

Volume Five, Number One

1992

BEAD MYSTERIES SOLVED!

BEADY - EYES

WARNING: THOSE PRETTY
LITTLE BEADS AREN'T
WHAT YOU THINK

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NOTORIOUS MUTISALAH
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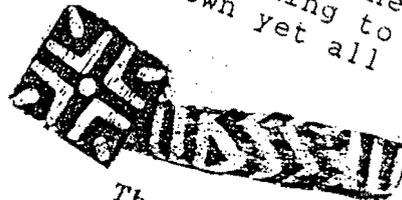
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TRUE ADVENTURES

WANTED: PUMTEK BEADS
DEAD OR ALIVE

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The sheriff department today issued a huge reward for anyone who could give information leading to the capture of the well known yet all too elusive



The Pumtek Gang



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ISSN 0892-1989

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

This issue was mostly written during my Asian research tour from December 1990 to February 1992. It brings you some of the news from that tour (more in the next issue), full of exciting developments. As bead research expands and the broad outlines of bead history are drawn, we begin to fill gaps and answer questions. Herein we address several "bead mysteries." Some, such as the Mutisalah, have been around for a long time. Others, such as the Pumtek beads, surfaced only in the last few years. Still others, such as the identification of Indo-Pacific beadmaking sites and the dates of Chinese coil beads, have only become questions as we have learned about the history of Asian beads.

While on the road one has time to reflect about the progress made and the goals ahead. The Center is now well into its second decade, and by the end of the century will have served more than 20 years. As we are more than half-way there, it is high time to take stock and consider the future. To do so, I have sketched an outline called "2/2000" or "To (Towards) the Year 2000," to see where we've been and where we need to go.

In the past decade plus we have traced the story of the major and most minor European beadmakers; outlined bead history in the Middle East and South, East, and Southeast Asia; traced the origins of beads from pre-historic times in several regions; documented the colonial and some of the pre-colonial bead trade in North America and West Africa; developed a protocol for bead studies; and helped make bead research a vital part of the social sciences.

Physically, we have established the world's largest bead library, the best documented bead study collection, the most extensive documentation of living beadmakers, and collections illustrating bead tools, uses and raw materials. Our publication program has been prodigious. Through lectures and workshops, we have taken the story of beads not only to collectors, but also to archaeologists, historians, and ethnographers around the world, establishing a global network of correspondents, many of whom have visited us.

This may be impressive, but where do we go from here? There are areas not yet covered: much of Africa (East Africa being our next goal), South America, and Oceania. We need to explore the relationship between the Classical Mediterranean beadmaking and its successor in the Islamic West; and do more field work in China and East Europe. In practical terms, we need a laboratory for testing facilities, one or more sustaining grants to ensure that the work continues, a full time secretary, and an eventual depository so that the progress the Center has made in Bead Research will not be lost.

All of this will take time; all of it requires money. All our resources are committed to our goals. Our involved Members, Patrons, and Supporters are helping to reach our goals for the Year 2000. For your backing we are most grateful. For any further sponsorship we would be most delighted.

An apology: in my absence our subscription records have been confused. This will not happen again. If you have been affected by this and have not yet been reached to clear up your problem, PLEASE LET US KNOW.

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THE PUMTEK BEAD: WHAT IS ITS STORY?

Beads popularly called "Pumtek" (see cover) were imported to the U.S. from India in the mid-1980s. Indian dealers had acquired them from the Northeast, a mountainous region with a great variety of linguistic and ethnic groups. The stone beads have patterns similar to those on soda-etched carnelians, "dZi," and related beads. Their material was identified by the Center and later other institutions as a petrified wood, in which the wood was replaced by common opal. Allen [1986] compiled a few ethnographic works to show the cultural significance of the beads, especially among the Chin of Burma (Myanmar) and their relatives.

Shortly afterwards, a second type of "Pumtek" bead was available. Visually identical to earlier ones, they were not made of the same petrified wood. Again, they were bought from Indian dealers who acquired them from the Northeast, but they were much less expensive than the others and were acknowledged as imitations; there were rumors that they were still being made by one old man in Myanmar.

Many questions are now been raised about Pumtek beads. What was their origin in time and space? How were they made and for what purpose? How did they come to the Chin and their neighbors? What is the relationship between the two types? Who made the imitations and why?

The Pumtek Bead Story

Now the remarkable story of Pumtek beads and their imitations can be told, and many questions about them answered. The key is a report by U Aung Myint, Conservator of Forests, Mandalay Division, who investigated the ancient city of Wadi in central Myanmar. The internal government paper, *A Preliminary Study of the Ancient Town of Wadi*, dated 8 August 1980, had a very limited circulation and was written in Burmese. It was acquired and translated by Virginia Di Crocco, Secretary of the Siam Society, Bangkok. A partial translation and detailed commentary will be published by us in the *Journal of the Siam Society*. Here is a summary of Myint's discovery.

Myint's interest in the ancient ruined city of Wadi led him to interview nearby villagers to see what they had found, and those of Payagyi told him a fascinating story. Early in this century some of them began picking up beads from an area of Wadi they called the "Red earth Pit." They recognized them as "Chin Padi" or "Chin Beads," heirlooms among the highlander Chin people, beads which they call Pumtek. A 1904 report cited by Myint suggests that the first finds were made around that time. Digging to find more, the villagers discovered a cemetery with urn burials, containing Pumtek beads, semiprecious stone beads shaped like elephants and other animals, and precious metals. Based on these artifacts, Myint concluded that Wadi was a center of the ancient Pyu people, a conclusion tentatively adopted here.

The Pyu dominated central Myanmar during the first millennium A.D. The first written Pyu script is from the 5th C. A.D. Hall [1960:35, 121-2] believed their kingdom was destroyed after their capital was plundered in 832. However, a quadrilingual inscription of 1297 has a Pyu passage and the Chinese referred to the Pyu Kingdom in 1369/70. The Pyu were eventually absorbed into the emerging Burmese population, but it is not clear when this happened [Luce 1985:61-2].

The Pyu adapted several traits with Indian roots, including beads, spindle whorls and pottery decoration. In addition to finished beads, the villagers found unfinished ones; the beads were being made as well as worn at Wadi.

Somehow word reached the highlands that there was a source of these beads for sale. In the 1920s the village was described as a small festival market, with shops springing up to sell the beads to the Chin, who came down from their mountain fastness annually to buy them. Because of the great demand and the lucrative nature of the trade, the villagers also finished some themselves, perforating and (it appears) polishing them.

Around 1926 the sources of the original Pumtek became exhausted. However, the people of Payagi were onto a good thing and did not want to lose it. U Ba Kyi, who was interviewed by Myint, either originated or took advantage of a solution to the problem of the diminishing number of beads; he and others began making imitation Pumtek beads.

The imitations were made in the same size and shape and with the same decorations as the original Pumtek beads, even though "prettier designs" could have been made. A characteristic which distinguishes them from the original appears to be the material on which they were made. What are probably the older Pumtek beads are made of a grainy (petrified) wood, corresponding to the toddy palm, *Borassus flabellifer*. The imitations are of a finer-grained wood, which the people call *ingyin kyauk hpyu*, or "white stone of the sal tree (*Shorea* sp.)." It seems that the fossilized wood available is actually *Dipterocarpoxyton burmense[s]*, which closely resembles the sal tree's wood [Oldham 1973:1839] as it is a close relative.

On the white stone a (white) design was painted with a mixture of lime, washing soda, and borax. Then the whole bead was covered with a black mixture of copper sulfate, potassium chlorate, orpiment, and sulfur, mixed -- it is said -- in the milk of the human breast. After being decorated, the beads were baked, cooled, and washed.

The Chin knew that these were imitations, yet they continued to buy them, though at reduced prices. Long barrel beads with many stripes were the most valuable, along with the distinctive diamond tabulars (oblates are the other common shape). Production and sales continued until the Japanese invasion in 1942, resuming in 1950 for a fading market. Though it is not certain when the work ceased, it was over in 1980 when Myint visited Payagi, having stopped some years before.

Conclusions and Implications

Who could ever have guessed the story of the Pumtek beads? They originated in the ancient Pyu Kingdom (fl. 4th to 9th centuries), made at least in Wadi. Although the technique for decorating the original beads has not been confirmed, it was probably much like onyx, dZi beads, and other light colored beads embellished with dark lines (not likely the formula stumbled upon by the Payagi villagers). As such, the work of the Pyu conformed with the contemporary Indo-Southeast Asian Cultural Sphere which produced decorated stone beads of various types.

The beads were favored by the Pyu themselves and became popular with the Chin, who were then friendly neighbors, not yet having been driven to the highlands by the Myanmar (Burmese). The Pyu are long gone, but the Chin continued to treasure the beads down into the early 20th century (they are apparently selling them now due to economic hardship). This makes the Pumtek beads candidates for the oldest heirloom beads thus far recorded.

Around 1900 a new source was found as Pyu graves were robbed by villagers who sold the beads to the Chin "like hot cakes." As they ran out, the people of Payagyi made imitations from a different stone, which sold, though not as well. The imitations were made from about 1925 to 1942 and 1950 to 1970. Both the originals and the imitations are now on the world bead market, but only now has their extraordinary story come to light.

There are lessons to be learned from the Pumtek bead story and the unraveling of their mystery. One is that the information on beads is available, though often obscure and often requiring considerable work. The persistence of Myint in uncovering Myanmar's past and the diligence of Di Crocco in bringing Myint's work to a wider audience are examples of the kind of devotion to the truth that is necessary to further Bead Research.

Another lesson is that the story of the Pumtek beads/Chin Padi is illustrative of the complexity of the bead trade. As we have discussed in an earlier issue [Francis 1991], to assume that the bead trade involves the smooth movement of beads from Point A to Point B is to oversimplify reality. Pumteks, anciently traded from the Pyu to the Chin, later from looted graves to the Chin, then imitations made by villagers after the graves were empty, is as elaborate a story of the bead trade as any and serves to remind us that it is complicated, indeed.

The beads are there. Their stories are there, too. We must be patient and persistent, and in time the truth will be discovered.

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MUTISALAH BEADS:

WHAT IS THEIR TRUE STORY?

Everyone interested in Asian beads is familiar with the term "mutisalah." Originally referring to heirloom beads in the Indonesian islands of Timor, Flores, Sumba and Suwa (known today as Nusa Tenggara Timur or NTT), the term has been adopted widely in the literature to refer principally to reddish-brown drawn Indo-Pacific beads.

Our readers will be aware that several years ago we abandoned this term because there was considerable confusion about what Mutisalah beads were. Two leading researchers of the 1960s, W.G.N. van der Sleen and Alastair Lamb sharply disagreed on what constituted a Mutisalah. They did agree that they were small (though how small was in dispute), of opaque orange or reddish-brown glass, and were highly valued heirlooms in NTT. But, there consensus ended. Lamb [1965a:93-7; 1965b:36] maintained that they were drawn beads with

a wide distribution [Lamb 1966:83-4]. Van der Sleen [1966:244] criticized Lamb and those using the term in this way, and maintained that they were tiny wound beads with a heavy amount of lead [see also van der Sleen 1975:98-100].

The debate may have been prolonged were it not for the death of van der Sleen. Lamb, who continued to publish on beads in the region, gained a wide audience, and won the debate by default. Writers since have referred to Lamb's version of drawn beads as Mutisalah.

But, who was right? Were different beads called Mutisalah on different islands? Were two very different beads both called Mutisalah? Or was one or both of the authorities simply wrong?

Recognizing the problems in this dilemma, I avoid using the term Mutisalah. The drawn ones Lamb considered Mutisalah are now called Indo-Pacific beads, after their wide geographic distribution, without limiting them to a few small islands or a single glass color. They are known to have been made for more than 2000 years probably by Tamil Indians, first in southern India and then later in several sites in Asia (see next story), and are found, often in large numbers, virtually everywhere in the Eastern Hemisphere.

The wound beads van der Sleen considered Mutisalah are now called "coil" beads. The term was coined by archaeologists in the Philippines to describe their coil or cut-spring shape. They are Chinese in origin, made from at least the 10th century (see p. 11). They replaced the Indo-Pacific beads in much of Southeast Asia around A.D. 1200 when Indo-Pacific beads were no longer being produced in the region.

So we have two very different types of beads, but the question remains: which is the true Mutisalah?

Tracing the Mutisalah

We are not the first to ask questions about Mutisalah. A paper by G.P. Rouffaer (1899), "Waar Kwamen de Raadselachtige Moetisalahs (Aggri-Kralen) in de Timor-Groep Oorspronkelijk van Daan?" [loosely: "From Whence Comes the Mysterious Mutisalah (Aggrey-Beads) in the Timor Group; What is their Origin?"] is actually book-length (266 pages). It not only discussed Mutisalah but is nothing short of a review of the world bead literature through the last century, ranging widely from the then mysterious chevron beads to West African Aggrey beads, Roman beads in Ireland, beads in Palau, Indian carnelians, Japanese Magatama, and ancient Egyptian glass to modern European glass (from Venice, Gablonz/Jablonec, and Germany's Fichtelgebirge region). Unfortunately, Rouffaer was not in a position to answer his question satisfactorily. He concluded that the Mutisalah came from Cambay, India, along with carnelian beads. We know now that nothing like either candidate for the title "Mutisalah" came from that region.

An important part of Rouffaer's paper is the introductory section [pp. 410-451], which discusses earlier accounts of beads in these islands. Here it is clear that the nomenclature of the Mutisalah is complex. The word "muti" (moeti in Old Dutch) is derived from the Dravidian/Sanskrit "mukta," (in Hindi "moti" and in Tamil "mutu"), which means "pearl." In modern India, as in many modern European languages, the word for "pearl" refers not only to the product of molluscs; but is used in a more general sense to mean "bead." (The same is true in Greek and Latin, where "margarite" suffices for both purposes, hence the name of our journal.) "Salah" means false, so that "Mutisalah" means "false pearl" or simply "bead."

Mutisalah is not the only word used for beads in these islands. Rouffaer noted several others, the oldest citation being from 1695 when G.E. Rumpius recorded Mutibatta (or "moetoelabatta"), which is "brick pearl," referring to the orange color of the beads (bricks are orange in this part of the world). Subsequently, Mutitanah (earth pearl, referring to the reddish-brown earth color); Mutaria (now simply pearl); Mutiraja (the Kings' pearl);, and "moetisaki" were recorded. [No one I asked could figure out what "Mutisaki" could be; the consensus is that it is probably "Mutisakti" or "magic beads."] These words clearly did not refer to the same bead. For example, the Mutiraja were always the most expensive of the lot. However, we cannot tell precisely what beads were discussed, as they were never adequately described.

The situation has not changed since; there is still a variety of Mutisalah beads. Our information comes from an interview with Prince Darius Umbu, of the royal family of Sumba. His account has been verified for Timor by Sumarah Adhyatman, curator of beads at the Adam Malik Museum in Jakarta, and for Flores by a native, Rokhus Due Awe, of the National Center for Archaeological Research in Jakarta.

There are two classes of Mutisalah. One, the Mutiraja, is owned (and touched) only by royalty. They are reddish-brown or orange, shiny, and heavy in weight. That is, they are the lead-glass Chinese "coil" beads. There are larger ones from 1.5 to 3 cm in diameter which are found only on Sumba and are very rare; the Mutiraja used all over NTT are quite small. The other class is known as Mutibatta (orange) or Mutitanah (red-brown). They are somewhat larger than Mutiraja, are dull in luster, and are not heavy. They are drawn Indo-Pacific beads and are the beads of the commoners.

Mutiraja are worn as necklaces by young princesses, and after marriage as bracelets, anklets, and rings (in the old days they were also sewn onto clothes). The bride's family gives them to the groom in exchange for 50 to 100 carabao (water buffaloes) or horses and some gold. The bride, however, wears the beads and passes them on to her daughter. The beads are worn on special occasions, but if the royal family does not wish to attend some ceremony they send a servant bedecked with the beads. The servant wears either a "Kahanga Hupu", a single strand around the neck and four long strands reaching to the ground terminated with gold coins or a "Papiarang," which is similar but a double strand. The beads, rather than the servant, seem to be the true surrogates. At death royal corpses are adorned with two bracelets, two anklets and a necklace and buried with the beads. This no doubt accounts for the story van der Sleen [1975:98] told about the beads being found on blades of grass. Awe has heard the story in Flores and Prince Darius has seen the phenomenon himself in Sumba.

In modern bead parlance, the Mutiraja are wound coil beads from China, while the Mutibatta and Mutitanah are drawn Indo-Pacific beads, made in many places. Hence, Van der Sleen was closer to the mark in reporting that the valuable Mutisalah are wound, lead-glass beads.

Mutisalah as Heirlooms

We have identified the difficulties inherent in using the term Mutisalah and the sources of confusion by earlier writers. The problem has been the lack of appreciation of the complexities of bead lore in areas where they are of great cultural significance. But a new question arises: Why did the relatively newer coil beads (the Mutiraja) become the more valued Mutisalah, while the demonstrably older Mutibatta and Mutitanah (Indo-Pacific) beads are less valuable?

The answer must lie in the patterns of trade through Southeast Asia and Indonesia in particular. Though coil beads became quite common in Sumatra, Java, and Borneo after about A.D. 1200, there is little evidence of Chinese trade to the outer, dryer, less rich islands of the archipelago. Zhao Rugua (Chau Ju-kua), a Chinese official writing in 1225 had apparently at least heard of Timor [Hirth and Rockhill 1911:83-4], but described the natives as "strong fellows, but savage.... They use no vessels in eating or drinking.... They do not know either how to write or how to count." In 1349 Wang Dayuan (Ta-yuan) mentioned Timor and possibly Sumbawa [Rockhill 1915:66], but not at any great length.

The ceramic evidence shows virtually no Chinese contact with the area until the Ming dynasty (beginning 1368), as verified by the collections and discussions with the staff of the National Museum in Jakarta and the regional office of the National Center for Archaeological Research at Denpasar, Bali.

Hence, it seems likely that opaque orangish or reddish-brown coil beads were introduced into NTT while there was still little contact with Chinese traders, who found few goods worth their time to acquire. The Indo-Pacific beads were already well established, having been brought for centuries by Malay traders and manufactured in Srivijaya (see next story). Infrequent visits with the rare exchange of Mutiraja coil beads may well explain their scarcity compared to the older Indo-Pacific beads.

The mystery of Mutisalah has now been solved. In doing so, we see once again the complexity of the bead story. Mutisalah is not a single sort of bead, but a group of beads which includes both Indo-Pacific and the Chinese coil beads. It is the latter, as Mutiraja that are the most valued, while the former as Mutitanah and Mutibatta are much more common and much less esteemed.

Mutisalah, Mutiara, Mutibatta, Mutisakti, Mutiraja, Mutitanah, Indo-Pacific beads and coil beads all had a part to play in this tangled and long standing enigma. If it all seems a paradox, it is no more so than many of the stories of beads throughout the world. And the story is bound to be complex because beads are so intimately linked with the culture of the most complicated animal on Earth: ourselves.

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WHAT ABOUT THE GAPS IN THE INDO-PACIFIC BEAD STORY?

Over the years the *Margaretologist* has detailed the story of how we have traced the history of the small, monochrome drawn Indo-Pacific beads, probably the most important trade bead of all time. Recently, two major publications have carried articles on these beads [Francis 1990, 1991], but in both it had to be admitted that there were at least two major gaps in our understanding about their production over the last thousand years or so.

They were first made at Arikamedu in southeast India from the third century B.C. or earlier, and the industry was transferred to other places, dividing into two parts: a South Asian and a Southeast Asian one.

But, two problems remained. For one, after the Sri Lankan city of Mantai was destroyed by the south Indian Cholas in the 10th century, the beads continued to be made somewhere in the area. J. Lavanaha said in 1593 that they were being imported by the Portuguese to Mozambique in East Africa from Nagapattinam, India, where they were made [Theal 1898:303]. However, I conducted an extensive surface survey of old Nagapattinam in 1988 and found no evidence of glassworking whatsoever. Where were these beads being made then? Were they already being made at Papanaidupet, where the technique is still used? Nothing suggested that, so at the time I postulated the existence of "Site X," an unidentified south Indian locale where Indo-Pacific beads were being made from the 10th century until the beadmakers moved to Papanaidupet. But, where was Site X?

The other problem revolves around their occurrence in Southeast Asia, where they were long the dominant bead. In the Philippines, where we have statistics on excavated beads, between ca. A.D. 1 and 1200, Indo-Pacific beads account for 66.2% of all beads of all kinds from all sites. However, from ca. 1200 to 1450 they are only 1.2% [Francis 1989:8-9]. We see the same pattern in Indonesia and elsewhere in Southeast Asia: they dominated until the 13th century, disappearing thereafter. But why?

New Evidence on Old Mysteries

The new evidence of the Indo-Pacific beads come from two current excavation campaigns being conducted in the region. The one, at Arikamedu, took place from 1989 to 1992 under the direction of Vimala Begley. I was a member of that team during the third and final season. The other is the excavation at Palembang, Sumatra (Indonesia), which began in 1981 under the direction of P.Y. Manguin. I was invited to work with the beads at the beginning of the last season there.

The remarkable thing about the Arikamedu excavations is that though we were not able to get down to the foundation of the city, we were able to see that the place was occupied for a much longer time than had been previously believed. At this point, there appears to be not only evidence for occupation a few centuries B.C./A.D., but also for the 4th/5th, 9th/10th and 13th/14th centuries. In these later years there is no evidence that the place was an important port as it was at the beginning; it looks as if there were periods of boom and bust. However, it does seem as though the bead industries (stone as well as glass) were operating continuously.

Please, note, however, that this assessment is preliminary and subject to revision for two reasons. As I write this, the excavation finished only a few weeks before. Though the data has been collected, neither I nor the other members of the team have had the time to enter it, collate it, and make final judgments about what it means. You are reading a very early report -- or impression -- not the final word. The site is also doubly difficult because over the years villagers mined the old city for its bricks after its abandonment, and most of the levels are greatly disturbed.

Nonetheless, there seems to be enough evidence to suggest that Arikamedu made Indo-Pacific (and stone beads) for a very long time, and that perhaps it was Site X itself. The possibility exists that there were also other Indo-Pacific beadmakers at the same time. For example, Karakaidu, some 40 km south of Arikamedu appears to have been an Indo-Pacific and stone beadmaker in the first century or so A.D., contemporary with Arikamedu. In Southeast Asia there were several beadmaking sites at the same time; it is not too much to think that a similar situation prevailed in India as well.

Turning to Southeast Asia and the mystery of what happened to the bead industry after ca. A.D. 1200, the picture is now much clearer. We had identified several Indo-Pacific beadmaking sites in the region, some of them tentatively. Work this year has eliminated Maura Jambi (Sumatra, Indonesia) and called into question Sating Pra (Thailand) as beadmakers. But a new beadmaking site has been confirmed at Palembang (Sumatra, Indonesia).

This is a critical new fact, and to understand its importance we should first say a word about Srivijaya. Early in this century historians identified an "Empire" (we now think of it as more of a loose polity) called Srivijaya which controlled the vital waterways of the Malacca Strait and the lucrative trade between India, China and Southeast Asia. Its center was said to be at Palembang, but many people questioned this. Some suggested that the center of Srivijaya was far to the north in southern Thailand. Others that there is nothing at Palembang indicating that there ever had been an ancient major city there. Though various places were acknowledged as part of the Srivijayan "Empire," including the known Indo-Pacific beadmaking sites in Southeast Asia, the structure of Srivijaya was unknown.

The recent excavations at Palembang have changed all that. Areas of occupation (including at least two beadworking areas) and foundations of monumental buildings have been found over a territory 25 sq km in extent. The dating of this material goes right back to where the early historians said it should; a seaworthy vessel had been located which is radiocarbon dated to the 7th century, and a great deal of early Tang ceramics (7th century), including much of it at Kambang Unglen, one of the beadworking areas, have been uncovered.

The significance of these finds are two-fold. One is that Palembang is now firmly identified as Srivijaya of old. The other is that Srivijaya is now confirmed as a -- if not the -- major Southeast Asian Indo-Pacific beadmaking site (other beads were made there as well; we shall discuss them later).

This being acknowledged, the problem of the appearance and disappearance of this industry is solved. The confirmed Indo-Pacific beadmaking sites (Kuala Selinsing, followed by Sungai Mas, both in Malaysia and Takua Pa in Thailand during the 9th century) were dependencies of Srivijaya. Srivijaya was the center of this industry, while its vassal states carried out the work as well, presumably to cater to different markets. When the Srivijayan "Empire" collapsed in the 13th century, due at least in part to the depredations of the Cholas of south India, the Srivijayan Indo-Pacific bead industry collapsed as too, never to be revived in the region.

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RANGE OF DATES FOR COIL BEADS

Small, often tiny, wound beads which look like sections of a spring are known as "coil" beads due to their shape. They are Chinese, but save for the 14th century colony of Temasek (Singapore) we do not know exactly where they were made. They were certainly popular. By the 13th century or so, they had replaced Indo-Pacific beads, after the fall of Srivijaya. In some areas, such as some outer Indonesian islands, they became major heirlooms (see the story of Mutisalah in this issue). We have been making progress in determining the range of dates during which these beads were made.

At Barus, South Sumatra (Indonesia) excavations by the National Center for Archaeological Research (Jakarta) uncovered both coil and Indo-Pacific beads, the former outnumbering the latter by about five to one, despite the fact that across the island at Srivijaya was a major Indo-Pacific beadmaking center. The finds are intriguing because Barus is accessible to the south coast of Sumatra, which is believed to have played a relatively minor role in the island's ancient trade. The imported ceramic material found in association with the beads are all of Northern Song date (A.D. 960-1127).

Another early find of coil beads are from the 9th or 10th century Seungan Temple in Kyongju, Korea; these are large examples [Francis 1985:22]. In Sarawak (on Borneo, East Malaysia) a very few coil beads were found at Kian Hitam (the Painted Cave) in the Niah complex. I was told at the Sarawak Museum it dated to the 9th century, however, two (corrected) radiocarbon dates are A.D. 825 and 1000 [Solheim 1983:49]. This site was not excavated very scientifically [Solheim 1983:42-3], and there are later beads in the assemblage, including multi-faceted carnelian oblates, not likely older than the 16th century [personal observation]. No coil beads were found at other sites in Sarawak of the 9th/10th century, and not until the 12th/13th century, nor are Chinese ceramics before the 10th century known in Sarawak [Chin 1988:8].

It seems safe to suggest that the production of coil beads began in the 10th century, some centuries before the large-scale exportation of Chinese beads into Southeast Asia in the 12th. These beads were apparently being exported to nearby Korea and as far away as southern Sumatra.

When were the last coil beads made? The wreck of a Chinese junk off the Philippine island of Palawan contained glass beads, especially coil beads. The ceramics found in the wreck were made between 1573 and 1620 [Cuevas 1985; Goddio et al. 1987]. These are the most recent ones to have been excavated.

There are some variations among coil beads. Most are quite small, 2 to 4 mm in diameter, made from one or two twists of glass, with the glass cane from which they were made being round in section. A second type is very like the first, except that the beads are much larger (up to 1 cm in diameter) and made

with several twists of the glass. The beads from the Korean Seungan Temple are of this type, and are certainly early, but similar beads are found as heirlooms among the Akha of northern Thailand, and are probably of a much later date.

A third type of coil bead is also among the heirloom beads of the Akha. It is made of a translucent blue-green glass, in a manner cruder than the other two types and often intermediate in size, around 4 mm diameter. It generally consists of several twists, and the cane from which the beads are wound are usually somewhat square, rather than round in section. Pthomrerk Ketudhat of Thammasat University, Bangkok, has reported seeing these beads in looted gravesites in the northwest of Thailand; the other finds in the graves indicate dates from the Ayutthaya period (1350-1767). As these coil beads are not known from other, earlier sites and since they are heirlooms it seems logical to put their production toward the end of this period, though we have yet to confirm such a dating.

Because the coil beads are products of China, we should consider their history in terms of the developments in the Middle Kingdom. The early large ones may have first been produced in the late Tang period, which would not be surprising, given the surge of new ideas and developments during the reign of the Tang dynasty. In the succeeding Northern Song period, small ones were exported; their presence at Barus shows that they were traveling some distance at that time. The evidence from Sarawak is not so clear, but overall favors a Southern Song (1127-1279) date for importation, matching their period of importation in the Philippines [Francis 1989:11-2]

The end of major coil bead production may coincide with the end of the Ming dynasty (1644). However, coil beads are still being made. Necklaces in the Center's collection bought in China in 1986 contain small beads that cannot be distinguished from those found archaeologically. Sprague and An [1991:8-9] bought some in a glassworking shop in Beijing, which were probably locally made. They went out of fashion (they were probably too "crude"), but they have never died out.

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PLEASE NOTE: This is issue 5:1. If these numbers appear at the end of the string of numbers on your address label, it is time to renew or upgrade your membership. If you move, don't forget to tell us. Peace.

Dear Friends,

I need to discuss several things with you, and rather than taking up space used to report our latest findings in our regular pages, I have added these two. Our next issue will include a bibliographic supplement. Please take the time to read this open letter and the trouble to comment on it. If you want to skip the information about the tours and our new books, do so, but please read the next section and the last paragraph on the other side.

HOUSEKEEPING: Subscription renewals are a hassle for everyone. We don't have the time, money or manpower to dun you the way big publishers can. We know that there were problems last year while I was gone. If these affected you, let us know, we will be happy to fix them. We also know our generous PATRONS and SUPPORTERS haven't received any bonuses lately. We will make that up with three new books this year (see next page) and likely more later. For one time only, we are sending out this issue to those whose subscriptions ran out the last time (but no books; we'll mail the first one when you renew). We assume you have just forgotten. If your mailing label ends with the numbers 4:2, you are in this category; if it ends with 5:1, this is your last issue. Please take the time NOW to renew or upgrade.

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I want to thank all our members who have been so kind recently to comment on our work. I was pleased to meet many of you at the Trade Beads in the Americas Conference at Santa Fe. I had a wonderful time there, and as I understand it, most everyone else did as well.

Recursos and the Center are now planning the next conference, tentatively to be held in San Antonio, Texas in February 1994. The theme will revolve around glass beads, their manufacturing and distribution. We intend to have demonstrations of glass beadmaking techniques and to invite a whole new faculty, who will be reporting not just on work in the Americas, but around the world. We also plan to keep the symposium and the bazaar separate so that everyone has a chance to attend both in full. It should be at least as interesting as the last conference. Work on the volume incorporating the papers and panels at the Santa Fe conference is also proceeding.

Other interesting events are also being planned with the cooperation of Recursos. Two of these are Bead and Culture Tours (NOTE: we are aware of recent events, and are confident that calm and peace have been restored. We also have back-up plans in case we need to change itineraries):

SOUTHEAST ASIA: Tentatively scheduled for November 1992, includes Java and Bali in Indonesia, Thailand and the Philippines. We go to all the important sights (the Borobudur, the Royal Palace, Phimai, Imelda's closet), beadmakers, spectacular scenery, interesting people, special events, lots of fun shopping (Ermita and Makati in Manila, the Night Bazaar in Chiangmai, the amulet market in Bangkok, Jalan Surabaya in Jakarta for starters), cultural events, museums, beaches, tropical forests and who knows what else. In each country we plan to meet bead lovers (including the new Philippine Bead Society) and other locals and residents soon upon arrival so you can make friends with people who share your interests.

WEST AFRICA: tentatively scheduled for February 1993, it includes Ghana, the Ivory Coast, and Togo -- feasts for the eye, ear, mouth and mind. Buy Saharan handicrafts from traders on the beaches and shiver to the memories of slave traders' forts. Watch brass casting by the lost-wax technique and powder-glass beadmaking. Boating and bargaining, textiles and tie-dying, and much more. But the highlights will be the markets: the ultra-modern shops of Abidjan's Plateau and the unbelievable Treichville market are only the beginning -- we continue through Accra, Kumasi, a big Krobo country market, and for those last minute purchases, Lomé. And, of course, there will be meals and museums, lectures and life-long memories.

Both tours (and those to come) will be professionally operated. The one to Southeast Asia is three weeks long and the one to West Africa two weeks in duration. For more information write us or: Bead and Culture Tours, Recursos de Santa Fe, 826 Camino de Monte Rey A-3, Santa Fe, NM 87501. Details will be available soon.

We have a new publication out and are planning others. The new one is a companion for the Bead Identification Workshop I or a substitute for those who cannot attend. It is designed to cover the major points of the workshop, putting into simple language how to identify what makes up the bulk of beads in most collections. It covers major organic materials, stone beads and later European glass beads. It is short and pithy and designed especially for the beginning collector. It sold out at Santa Fe, and the participants in the workshop made good use of it. Handbooks for the Bead Identification Workshop II: Advanced and Bead Identification Workshop III: Professional are being prepared. Workshop Handbook 1: 20 Steps to Identifying Most Beads in Most Collections. 8½ x 11, 21 pp., many illustrations. Plastic Velobound \$10.00.

We are also working on a new series called "People and Beads." These will have four pages of color plates and concentrate on bead use of one type or region. The first two being prepared are *Glass Beads in Ghana* and *Heirlooms of the Hills*. The Ghana book will amplify the special editions of the *Margaretologist* on Ghana, complemented with the color plates. The other book is the first study ever done on heirloom beads, using data from 14 groups of people in Southeast Asia (most are "hill tribes," hence the title). The research work for both volumes was most interesting, and the task of putting them together has also proved rewarding.

Remember: Patrons and Supporters automatically receive our new books as they appear.

Enough fun. We need now to consider some options. Should the *Margaretologist* expand? Would you like larger issues? Should we upgrade our format, with more graphics and a snazzier look? Before immediately answering "yes," consider the costs. Paper, printing, postage, overhead and research costs have all risen up significantly since we began seven years ago, but we have not raised our fees. Should we? If we were to upgrade our look we would need new office equipment (a smarter computer, a laser printer and software to support them). That costs money, though not as much as a few years ago when we launched our own version of desktop publishing. Or should we look for some other way of raising money? Should we take in advertising? Would you be willing to advertise? Will someone co-ordinate a membership drive? Are there other things we might do? Or are we fine the way it is? I would greatly appreciate and value your thoughts and advice on these questions.