

*Contributions of the Center for Bead Research 6*

HEIRLOOM AND ETHNOGRAPHICALLY  
COLLECTED BEADS  
IN SOUTHEAST ASIA

A preliminary report on research into beads in current use  
in Southeast Asia, with special reference to those of  
Sarawak (East Malaysia) and the Philippines.

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## INTRODUCTION

The Indian Ocean Bead Trade Project is a long-term study involving some 50 institutions coordinated by the Center for Bead Research. It examines the trade in beads in the Indian Ocean and Western Pacific maritime regions during the period from ca. 250 B.C. to A.D. 1650. In 1988-89 a year long tour was undertaken, the latter phase of which, Southeast Asia, resulted in the publication of two reports, one on beads from archaeological contexts in the region [Francis 1989a] and one on the type collection of beads in the Philippine National Museum [Francis 1989b]. The present report is the third and final one currently generated by this work.

The focus and main source of information has been archaeological studies, supplemented by historical and other disciplines. While one can distinguish between beads found archaeologically from those gathered ethnographically, this distinction is artificial for the purposes of bead research. Beads are survivors, and those excavated may be related to those still being worn. In this paper we extend our chronological limits to the 20th century to complement the other studies, which covered an earlier period.

The archaeological data base is fairly comprehensive, but that for this study is more limited. Constraints of time and finance allowed examination of only parts of two ethnographic collections in depth, at the Philippine National Museum and the Sarawak Museum. A few other collections, private ones in Sarawak, Thailand, and the Philippines, and the National Museum and Adam Malik Museum in Jakarta, were also consulted, but were of less value either because of the lack of full documentation or inability to study the material in full.

This is not an ethnographic study per se, as only one field trip and a few interviews with the people possessing heirloom beads were conducted. It is, rather, an artifactual study offered in the hope that it may provide some guidance to field workers and museum staff. It incorporates information gained from our archaeological studies, as well as a knowledge of European bead production, which is becoming increasingly detailed [Francis 1988a]. Combining this information enables us to identify many beads in the ethnographic contexts in regards to dates and places of origin.

The methodology of the Center for Bead Research used for ethnographic collections seeks to combine data from many sources and ask questions concerning the beads, which can be grouped under four headings: 1.) What is their origin in time and space? 2.) How did the people using them obtain them? 3.) How are they used, regarded, and named? and 4.) How long and widely circulated were they before being collected? We cannot answer every question for every bead encountered, but by exploring these questions we can provide some suggestions as how to approach these collections in future.



## SECTION A:

## AGE AND ORIGIN OF THE BEADS

## The Archaeological Evidence

Beads are durable objects, and if valued they can be handed down through many generations. The question is how often this happened. Fox [1977:760] opined that heirloom beads in the Philippines are no more than 400 years old, that is, since the Spanish Period. While this is likely true in most cases, there are beads which might be somewhat older.

We are not on the surest of grounds when comparing excavated material with beads currently in circulation because of two factors. One is the persistence of certain bead types made at one place. Beadmakers usually produce a bead as long as there is a demand for it. Some types have extremely long production runs: we can cite Indo-Pacific beads [Francis 1989a], made in various centers for some 2300 years, and at Mantai, Sri Lanka alone for 1000 years [Francis n.d. a]; the powder glass decorated beads made in north India for some 2000 years [Francis 1985a]; or the chevron beads made in Venice for over 500 years [Francis 1988a:25-6].

The second caution is that a beadmaker can copy beads made by contemporary rivals or predecessors. There is at least one case of this in Southeast Asia on record [Furness 1902:118]. The most important imitator has been Jablonec nad Nisou, Bohemia, which dispatched "sample men" around the world, penetrating isolated villages and sending back samples to be copied at home. Although they could copy most anything, nearly all were made by molding and are usually distinguishable from the originals.

Keeping these two factors in mind, there are several beads currently used in Sarawak or Kalimantan and the Philippines which parallel those excavated there or elsewhere. [The designation A (archaeological) and a number is used on tables in later sections of this paper.] Two words often encountered in the text are "drawn," glass beads made by cutting a tube which has been pulled or drawn from a hollow gather, and "wound," made by winding hot glass around a rod of some sort (a mandrel).

## A1: The Let Bead of the Kelabits

The most important bead of the Kelabits of the Sarawak uplands is a dark translucent wound blue barrel glass bead with flat ends. The color varies from light to quite dark and even green.

Harrisson [1950:209-11] showed some beads from the Beck collection (now at Cambridge University) said to be 3000 years old from Damascus and Ur, to Kelabit informants, who pronounced them the same as their own Let beads. It is a bit much to believe that the Kelabits have beads of such age and from so far away. Harrisson was not so sure, but at least he did not assume that there had been ancient trade between these people. The apparent identity of these beads serves as a caution to parallels we might try to draw.

Similar beads have been excavated in the Sarawak River delta sites, dated from the 9th or 10th century at Tanjong Kubor and Sungai Jaong and at Niah sites. Analysis of these and Let beads show significant differences, in the



lead contents [Harrisson 1968:127-30]. The heirloom beads had 15.25% to about 30% lead, which the other beads contained virtually none. The most recent analysis of a Let bead shows 37.2% lead [Munan 1981:25].

Parallels are also found in the Philippines [Francis 1989b]. The Philippine National Museum type number 89-AT has concave rather than flat ends, but 143-AT has flat ends, just as Let beads do. Both have heavy lead contents; their specific gravities are respectively 3.204 and 3.650. 143-AT is a very close match for the Let beads. They were found at Calatagan, a cemetery site of ca. 1450-1600.

Historic data tells us where these beads were made, at least around 1600. John Saris, the first Englishman to sail to Japan, lived in the thriving port of Bantam (Banten), now a mere village near Jakarta. In separate documents he described a certain blue bead:

I have many times certified your worships of the trade the Flemings [Dutch] follow to Soocadanna [Sacadana, Kalimantan] which place yieldeth great store of diamonds, and of their manner of dealing for them for gold principally which comes from Beniermassen [Banjarmasin] and blue glass beads which the Chinese make and sell 300 for a [piece] of eight, and they are there worth a mas a 100 which is [3 shillings] and sometimes more sometimes less according as gold doth rise and fall. [Danvers 1896:221; emphasis mine].

[Commodities vendible and in request at Sacadana include] all sorts of small Bugles [tubular glass beads], which are made in Bantam of colour blue, and in fashion like a Tunne [a barrel], but of the bignesse of a Beane, and cost at Bantam four hundred a Riall of eight, with at Soocodanna, a Masse the hundred, the Masse beeing three quarters of a Riall of eight... [Purchas 1625:III 513-4; emphasis mine].

Saris was a keen and accurate observer discussing the same bead in both passages. It was blue, barrel shaped, the size of a (navy?) bean, and valuable in Borneo. It was made by Chinese living in Bantam, Java. It is unlikely that it is any other than the Let bead [Francis 1985b]. Munan, who had long suspected this bead was made in Southeast Asia by emigrant Chinese [1981:19-20] agrees [1986].

#### A2: The "Ghost Bead" of Sarawak

This bead is of a matte opaque reddish brown color. It is not considered auspicious, and its name "bau'u sis ada" translates into "bead of the ghost." Two uses recorded for it are to be put on a stake in the field to ensure a good crop [Harrisson 1950:212] or to be thrown out of the window when one has a bad dream [Munan 1981:21-2]. Munan says it is "globular, with some minor variations" and from 10 x 10 mm to 13 x 13 mm in size, but all of these beads she pictures are not oblates, but barrel shaped.

Very similar beads were excavated at Bukit Sandong, in Kuching division, Sarawak, ca. 14th to 16th century. They are identical in color and shape, and the three I have measured are 11.6 x 11.8, 11.8 x 11.8, and 12.3 x 12.3 mm. Other beads from Bukit Sandong are Chinese, including small "coil" beads and those that resemble "Peking glass." Munan's analysis of the Ghost Beads show them to have only a small trace (0.13%) of lead [1981:25]; the Bukit Sandong ones also seem not to be lead glass. Their manufacturing



method is hard to discern, but they were most likely wound. One with a corroded surface has most striations running longitudinally, but this may not reflect the structure of the glass.

The beads may be Chinese. If the Ghost Beads in circulation are of such age, their low esteem may be attributed to some other factor, related to the belief that they bring bad luck.

Other opaque red beads are found in the region. Some excavated at Gedong, Sarawak (13th to 14th centuries) are small wound oblates, found with lenticular or very short biconical beads of the same material, and may be lead glass. Oblates from Kalimantan can be quite large, up to 25.0 mm or more in diameter. Some are pinched beads, byproducts of the Indo-Pacific industries, while others appear to be wound. There is more than one type of bead here, though of the same glass. The opaque red color, due to cuprous oxide, is very ancient, and though often mistaken for clay, it is true glass. It was the most important color for Indo-Pacific beads for a long time. This is a class of beads which requires much more study.

#### A3: Wound Striped Beads

Black wound beads with added longitudinal colored lines are found in Sarawak and Kalimantan. Kuching collectors call these "pajama" beads; the Kayan name for striped beads is apparently "Kelem Bela" [Munan 1988:106-7].

Barrel shaped beads are found at Bukit Sandong (14th to 16th century), typically measuring 13.3 x 13.0. Similar beads are heirlooms in Sarawak [Munan 1987:91]. A longer, thinner bead is more common. One obtained from a private collection ultimately from Kalimantan measures 10.5 x 13.0 mm. The striking thing about these beads is the pattern of the stripes. It has of four red lines in two pairs. Between one pair is a bright yellow line and between the other is a white or green line. Between the pairs are two lines of greenish-white. Striped beads in the Southwell collection [Munan 1988] are not similar to these in shape or pattern.

We probably have a case of a popular bead being imitated or updated by a manufacturer. The roundish barrel ones are like those excavated, but the thin ones are not save for the pattern, which must be more than an accident. I do not recall seeing this pattern among beads from Africa, nor does Karklins [1989], and none are on the Picard charts [Picard and Picard 1987, 1988, 1989]. Does this suggest an Asian origin for this bead? There is a very close match for the barrel bead on a card of Francis Greil, a Venetian manufacturer of the late 19th century, in the Peabody Museum at Harvard University [personal observation; Brain 1989].

#### A4: Early Chevron Beads

These are drawn beads, cut from a tube with several differently colored corrugated layers. When beveled at the edges a series of alternating chevrons is seen at the sides. The corrugating was effected by successively molding a gather of glass made of two or three colored layers. Chevron beads were made in Holland in the 17th century and in Bohemia in the 19th, but the vast majority have come from Venice, where they were first invented about 1480 [Francis 1988a:13]. The earliest of these, from about 1480 to 1580 have seven layers of color, the inner one translucent, usually light green, and succeeding ones white, red, and blue. The ends were faceted.



Early chevrons were excavated at Calatagan in the Philippines (PNM 45, 63, 64-AT). It was thought that this cemetery was abandoned before the Spanish came, but early chevrons and Nueva Cadiz beads (see A6 below) are markers of early Spanish contact, and were brought also to Florida, Mexico, and Peru [Francis 1986a].

Old style chevrons from southern Sumatra in the National Museum, Jakarta were not made by the Dutch. They must have been brought during the 16th century, before Dutch production. New style chevrons (with fewer than seven layers and a variety of finishing at the ends, but not faceting) are known throughout Southeast Asia.

#### A5: False Chevrons

These are wound beads with white cores and blue coats and red and white wavy lines around the ends, looking very much like real chevrons. One excavated from Batanes, the Philippines [PNM 184-AT] is paddled on the ends to nicely resemble early chevrons. Its heavy lead content, its locale, and a similar bead from Taiwan [Chen 1968:pl 78F] suggest a Chinese origin, most likely in the 16th century. These are heirloom beads of the Kayans of Sarawak [Munin 1988:410] and the Kalingas of the Philippines [Abellera 1981:171].

Other false chevrons, made in the same way, but larger and more oblate are found in Sarawak [Hose and McDougall 1912:pl. 130 J, K; Beck 1930:179]. These resemble newer (post 1580) chevrons with rounded ends. False chevrons are not known from any African sources nor on any Venetian sample cards; they were most likely made in China.

#### A6: Nueva Cadiz Beads

These beads are named after the site at which they were first recognized: Nueva Cadiz, Cubanga Island, Venezuela. They have multiple layers, usually a thick dark blue core, a thin white ring, and a thin dark or light blue exterior. They are square in section, and sometimes twisted. Along with early chevrons, they are markers of early Spanish contact [Francis 1988a: 55]. Two of the small types (PNM 69, 70-AT) were excavated at Calatagan, the Philippines, reinforcing the evidence of the chevrons that some burials there post date Spanish contact. Philippine collectors tell me that the longer, more spectacular type is also found in the country. I know of no Asian occurrences outside of the Philippines.

There is no general agreement on where these beads were made. Venice, Holland, and Spain have all been put forward as possibilities, though Holland made similar beads, they are later than the early Spanish trade.

#### A7: Wound Gold-glass Beads

Gold-glass beads, in which a foil of gold is sandwiched between two layers of glass, have been a world-wide favorite for 2000 years. Most were made of a drawn tube, slipped into another tube, and crimped along their lengths to make bulges to be cut apart into beads. Thus far only in the Philippines has a wound version of this bead been seen; it is a short cylinder.

This bead is an heirloom type among the Bontoc and Ifugao of northern Luzon, called a pang-aw [Legarda 1977:64-5]. It has also been excavated at Bolinao, Luzon, a 14th-15th century burial site [Francis 1989b; PNM type



31AT]. The excavated one has a high specific gravity, perhaps due to the presence of lead. This and the date suggest a Chinese origin.

#### Ethnographic and Heirloom Beads: The Philippines

My study of the ethnographic collection in the Philippine National Museum (PNM catalogue numbers are used in the descriptions) was not comprehensive, due to the lack of time, but included the cataloging of all beads and simple forms of human adornment made available to me from a number of ethnic groups in the archipelago, listed in Table 1:

T A B L E 1:

#### Philippine Ethnic Groups Included in this Study

Group	Province	Island
Ata	Davao del Sur	Mindanao
Badjao (Bajau)	Zamboaga del Sur	Mindanao
Bagoba	Davao del Sur	Mindanao
Bontoc	Kalinga-Apayao	Luzon
Gaddang	Isabela, etc.	Luzon
Glangan	Davao del Sur?	Mindanao
Hanunou (Hanunoo)	Mindoro del Oriente	Mindoro
Ilongot	Nueva Viscaya	Luzon
Kalinga	Kalinga-Apayao	Luzon
Manobo	Augusan del Sur	Mindanao
Manide	Camarines del Norte	Luzon
Mansaka	Davao del Sur	Mindanao
Negrito	scattered	Luzon
Subanum	Zamboaga del Sur	Mindanao
Tagakaolo	South Cotabato	Mindanao
Tinguian	Abra	Luzon
Tiruray	Cotabato	Mindanao
Yakan	Basilan	Basilan

#### Natural Materials

Isolated ethnic groups use whatever is at hand for making ornamental objects. Many of these predate the use of trade beads, and before moving on to glass beads traded into the Philippines, it may be of interest to consider those of traditional natural materials. Some have been imitated in glass, while others may have been inspired from glass prototypes.

Shell is a common ornamental material, recorded amongst the Bontoc, the Manobo, the Gaddang, the Manide, and the Ata. Conus shell tops ground into discs are used by the Manobo (MANO 18) and Gaddang (GAD 12), and bracelets of large Conus shells by the Ata (ATA 38), and the Manide (E-5897). A Conus shell lime container was gathered from the Ata (ATA 21). A "lightening belt" of the Tinguian (E-7197) has a Conus shell top disc ring on it.

The Bontoc use many heavy beads cut from a large mollusc (Tridacna?), often with two parallel holes in a variety of shapes, especially flat square tubes, square tabulars, and hourglass shaped tabulars (BON 14, 97, 96).



There are also single holed bicones and flat bicones (BON 13, 383). In private collections I have seen glass imitations of these, probably late 19th century Bohemian, but have noted only one, of the hourglass variety, in the Museum collection on a Bontoc necklace (BON 48).

Plant parts are very important in traditional ornament. Many fibers, including rattan (Calamus spp., etc.), acaba (Musa textilis), and nito (Lygodium spp.) are widely used for ornamental cum dress purposes. Here we shall concentrate only on plants used for beads.

Of these, the most important is Job's tears (Coix lacryma-jobi), known as Adlay in the Philippines. The fruit (commonly miscalled the seed) of this grain has been widely used for beads, the earliest recorded use is before 3000 B.C. on Timor [Glover 1979:18]. The plant is indigenous to southeast Asia or northeast India and provides a nutritious flour; its cultivation may have preceded that of rice. The fruit used for beads is from the wild plant; the cultivated variety has a soft coat. I am convinced that the use of this plant is connected with the slash-and-burn method of agriculture, which allows for growing the cultivated variety and harvesting the feral variety (the plant quickly reverts to the feral state) upon return to a previously used plot. The plant is now spread around the world and the use of its fruit for beads is almost universal [Francis 1984:194-5].

Job's tears in several sizes, colors, and shapes, are used as beads among the Bontoc, the Subanum, and the Negritos. The Bagoba (BAG 92) and Ata (ATA 30) have a most interesting variation in which the coat is carved into zig-zag or wavy lines. These appear to have been inspired from imported (Venetian?) glass beads, and are most attractive. The collection dates for Job's tears range from 1903 to 1956, while the carved ones seem to come from early in the century. Brown [1951:I 139] mentions the use of these fruits in the Philippines, and Fox [1952:251] notes their use among the Negritos.

Next most common among plant beads is a hard red seed, which may be Adenanthera spp., a member of the Caesalpinia family, widely used for beads. These are found among the Bontoc (BON 1, 52) and the Manobo (MANO 64), collected before 1914. Seeds identified as a member of the Rubiaceae (the Madder family, which includes coffee) (TIR 22, GIA 22) and others as being leguminous have been identified with the help of Dominigo Madulid of the Botany Division of the National Museum. Brown [1951:I 286] notes the use of Corypha elata, a palm nut cut into beads sometimes called "vegetable ivory." Rocero [1982:23] records Leucaena leucocephala, a small, shiny brown seed, about the size of a rice grain, being widely popular for beads.

#### Glass Beads

Turning now to glass beads among the material in the National Museum, we find a relatively small variety. Descriptions and presumed origins follow:

##### A. Southeast Asian Indo-Pacific beads.

Indo-Pacific beads were the most common trade item over a wide area for 2000 or more years [see Francis 1989a]. What may be heirloom examples of these beads are shiny opaque red beads on a Kalinga necklace (E-6382). If they are Indo-Pacific beads, they are probably at least 800 years old, and would be the oldest beads recorded in this survey. They might also be later Venetian beads, but short of analyses it is impossible to tell.



### B. Chinese "Peking glass"

The popular term "Peking glass" refers to glass actually made in Boshan or Guangzhou (Canton) and made into beads there or elsewhere. They have unusual hues, large holes, bubbly glass, uneven shapes, and often white powdery perforation deposits and small peaks at the end. Similar beads have been made for about 1000 years in China, and production continued into this century; they were available until the late 1970s in Kuching [Munan 1989].

These beads are found on pieces from the Bontoc (BON 23, pinkish brown ellipsoids; BON 45, flat bright yellows, ellipsoidal violet, red, and blue; BON 48, ellipsoidal brown, red, blue and green) and the Kalinga (E-6382, ellipsoidal blue and green). The three pieces with collection dates noted in the catalogue are from 1970.

### C. Venetian beads

Venice, Italy, probably contributed the largest number of beads seen in the collection. The biggest group are the so-called "seed" beads, small drawn glass beads made by cutting a tube of glass into short segments and reheating the segments to round them off.

The occurrences of these beads are too common to enumerate, but they are found among the Manobo, the Bagoba, the Kalinga, the Subanum, the Ata, the Bontoc, the Gaddang, the Tiruray, and the Tagakaolo. The white and blue ones may be divided into two groups. White ones with thin coats of clear glass were made from about 1580 to 1890; afterwards they are solid white. Blue ones regular in size, shape, and hue, can be dated to after ca. 1867, when automatic cutting and sorting machines were invented in Venice and experiments in glass lead to more uniform colors.

The older white beads have been noted on 18 pieces; the older blue ones on two. The collection dates for the older white beads is significant. Three pieces were collected after 1970, one in 1948, three have no dates in the register, and the other eleven were collected before 1915. This will be discussed in Section D.

Another Venetian (also Czech) bead is called "cornaline d'Allepo," in the trade, but has nothing to do with the Syrian city. It has a red coat over cores of other colors. The only old example, opaque red over a translucent green core is on a Kalinga armband (E-6382); production stopped about 1830.

Newer examples, with translucent red over white cores are common among the Manobo, the Bagoba, the Subanum, the Bontoc, the Ata, the Gaddang, and the Hanunou. Some were colored red with gold and some with the more garish selenium, used first about 1890, but abandoned in a few years as it is even more costly than gold. On some pieces (ATA 33; GAD 13) both types are found. On a Hanunou headband (HAN 190) gold ones are on one side and selenium ones on the other. If these beads were used as currency among the Hanunou [Fox 1977:766], they may have had a good eye for such details.

### D. Bohemian (Czech) Beads

The foremost rival to Venice as beadmaker has been Jablonec nad Nisou in Bohemia, now in Czechoslovakia. Several beads made there have been identified in this collection.

A bead made from a tube drawn with a hexagonal cross section and then cut and ground off at the twelve corners is popular around the world. These cornerless hexagonals are usually blue, but were also made in other colors from ca. 1820 to 1900. They are found on Bontoc (BON 23, 48, 383) and Kalinga (E-3682) pieces collected in 1970.



Thomas and Richard Prosser in 1840 and 1841 patented devices to press beads from a porcelain-glass mixture in a machine. These "Prosser" beads were made in several European countries, most notably France and Bohemia; it is difficult to separate their precise origins. One type is a sphere with a raised equatorial zone. It (and all Prosser beads and buttons) has one shiny end and one pitted end. These are on pieces from the Negritos (NEG 134) and the Bontocs (BON 383). Another type is called a "tile bead" in the trade and is a short, very slightly tapered cylinder. These are especially popular in yellow, and I have seen many in private collections. At the National Museum they were favored by the Bontoc (BON 23, 41, 45, 48).

Another Bohemian bead is made of a reddish-orange glass resembling carnelian and made around 1880 to 1900. Octagonal barrels are found on a Bontoc necklace (BON 48). We noted above that white glass imitations of the large Bontoc shell beads with two parallel holes shaped like an hourglass is also on this necklace. It is likely Bohemian as well.

A blown rectangular prism bead with raised crosses on its faces was made in the late 19th century in Bohemia, and possibly also in post-war Japan [Blair 1973:294]. Examples are found on a Gaddang fan-like ornament (GAD 13). Poorly pressed beads of opaque selenium red beads with multiple facets are also likely Bohemian; they are on two Bontoc pieces (BON 41, 45).

In general, the beads in the ethnographic collection at the Philippine National Museum are not particularly old nor seem to be especially valuable. It could be argued that owners of "good" beads are reluctant to part with them and that ethnographers are not inclined (and do not have the resources) to pay heavily for them; on the market heirloom beads fetch high prices. In one large private collection I viewed most beads were not of any great age nor particularly scarce. This collection had been formed recently by a man who is not, I was told, very discriminating. Older and more valuable beads in private hands which I saw were mostly from looted (annoyingly called "excavated") contexts.

We are fortunate in having an excellent report on the heirloom beads of one village, Lubo, Kalinga-Apayao, northern Luzon [Abellera 1981]. The Kalingas, sometimes called the "Peacocks of the Philippines," have some of the most fancy and varied bead collections, each village often naming them differently [Legarda 1977:64]. Only seeing the report is a disadvantage, as it is not possible to identify all beads from the drawn plates alone. Many can be identified, however, and the photos in Abellera [1986] are helpful.

The most valued beads at Lubo are made of stone, onyx and carnelian. As was noted elsewhere in this series [Francis 1989a], we know less about stone beads than glass ones for several reasons, including their relative scarcity in the archaeological record and their smaller variability. To deduce something about their age and origin requires close examination. As this is not presently possible with the Lubo beads, our remarks center on the glass beads. It is interesting that of the material examined in the Philippine National Museum, no stone beads, save a milky quartz hourglass double perforated bead resembling shell beads (BON 14) was encountered. It may be that the Lubo valuation of stone beads is widespread in the Philippines and too costly for collection by ethnographers.

In Lubo, bead values are calculated against articles of local commerce: carabaos (water buffalos), pigs, chickens, and rice [Abellera 1981:85-6]. They are judged on several criteria: beauty, durability, rarity, size, and



age [Ibid.:59-60]. The greater durability of stone is one factor affecting their high price. A single large and fine onyx bead is worth a carabao. The four next most valuable stone beads are worth two to five per carabao, a large boar, or large sow. The next three are worth a small pig and equal in value to the most valuable glass beads. Even the cheapest stone bead, a carnelian oblate, is worth a large hen and outvalues many glass beads.

Table 2 lists the heirloom glass beads of Lubo which can be identified from the plates more or less securely. Along with the local name, its Western identification, and probable origin and date, is the valuation of the bead in Lubo.

T A B L E 2

## Glass Heirloom Beads from Lubo, Kalinga-Apayao

Local Name	Modern Reference
Worth a Small Pig:	
Binukkawan	Venetian "squiggle" ca. 1725-1850
Paraggi	Venetian chevron, 1600 to present (large one needed)
Camping	Venetian lamp "eye" bead, early 19th century
Kinubar	Opaque red Indo-Pacific or later European copy
Morda-u	Yellow Indo-Pacific or later European copy
Tumpiyak	Yellow disc
Dumat	False chevron, Chinese 17th century
Magataboy	Onyx or onyx imitation, Bohemia, 19th century?
Galliyak	Crumb bead
Pagatpat	Long orange tube (if opaque) Indo-Pacific to ca. 1200
Worth 2 to 3 Roosters or Large Hens:	
Samling	Onyx imitation, Bohemia, 19th century?
Dinugdugwan	Translucent blue or green melon, Chinese? 19th C.?
Kinotban	Onyx imitation, Bohemia, 19th century?
Worth a Large Hen:	
Abullilikki	Venetian feather combed barrel, late 19th century
Goryagoy	Venetian drawn striped, probably 20th century
Bayangao	Venetian drawn striped, probably 20th century
Pisao	Venetian drawn striped, probably late 20th century
Worth a Large Hen for Many Beads:	
Silliyan	Newer cornaline d'Allepo, 1830-present, Venice/Bohemia
Karakalat	Opaque orange tube

It is significant that the beads judged to be the oldest are generally those worth the most in Lubo. The Indo-Pacific beads were so widely popular in the Philippines for 1000 years [Francis 1989b] that it is not inconceivable that some survived as heirlooms; such beads may be the oldest



ones in the National Museum collection, but it is very difficult to tell from the plates whether these are Indo-Pacific beads. Onyx imitations are hard to place because they are relatively simple to make and have been made by many beadmakers. Most I have seen in private collections are Bohemian. The true chevron has never quite gone out of production, but production has been limited this century.

While there are several criteria for evaluating beads in Lubo, two are age and scarcity, presumably related to age. All the glass beads worth a small pig which we can date are older than 1850, except perhaps the onyx imitation (if it is an imitation). The beads worth a couple of chickens are likely 19th century in date, while those worth less are newer (assuming that the Karakalat is not an Indo-Pacific bead). In sum, this suggests that "bead lore" in this village has some validity as far as the criteria of age and scarcity go. Confirming this is that the small false chevron is as valuable as a larger (and perhaps more attractive) true chevron, no doubt due to its greater age and rarity.

#### Ethnographic and Heirloom Beads: Beads in Borneo

Borneo, the world's third largest island, has a profusion of heirloom beads, and there are few places in the world where they play such an important role in society. Our information is almost entirely restricted to western Borneo or Sarawak. According to Harrisson and Harrisson [1969:261] beads are not highly valued in north Borneo, Sabah, though the Muruts are an exception [Ley 1967:358; Harrisson 1967a]. In the Indonesian sector, Kalimantan, beads are an essential part of living cultures, but our knowledge of bead use there is limited. Since most Sarawak people who value beads ultimately came from Kalimantan, and form a cultural continuum with relatives across the watershed [Harrisson 1967b], our remarks here are probably applicable to similar groups on the Indonesian side.

A few observations of beads from Kalimantan made in the National Museum, Jakarta, may be in order. An interesting feature is that several types are known from Venetian sample cards, but are relatively rare in Africa, the largest single customer of Venetian beads over the centuries. This suggests that some beads were sold to one region and not necessarily to another. How this choice was made is not apparent, whether it was the decision of the trader or the demands of the final customers. But it is no surprise to find that only part of the large output of Venetian beads went to one region, and distributions of particular beads may say little more than the chance selection of a trader.

One bead in the Museum's collection is common enough in Africa but has not been noticed elsewhere in Southeast Asia. It is a glass annular (ring with large hole) in dark or light blue found on a Kalung necklace from Tanah Merah (# 15535). These are German made, the dark grey-blue ones from before ca. 1850 and the others from ca. 1850-1900 [Francis 1988a:53].

The beads in the Adam Malik Museum were also examined and photographed. All are said to come from "Kalimantan Dayaks," but there is no supporting data on them. Many strands may have been restrung, and some of the beads clearly come from illegal excavations. Most of the others are similar to the Sarawak assemblages.



For an overview of Sarawak beads a representative group has been selected from three published collections: those shown by Hose and McDougall [1912] and later again by Hose [1926]; a strand of beads owned by Rane Margaret Brooke and published by Beck [1930]; and the collection gathered by Hudson Southwell in 1964/65 at the request of Tom Harrisson and published by Munan [1988]. These collections were obtained from the Kayans and Kenyahs, Southwell's only from the former. These groups have the most spectacular heirloom beads in Sarawak. The Kelebits, whose Let bead we discussed in the archaeological section, are fond only of monochrome beads, as are some other groups. The Bidayuh (Land Dayaks) use beads primarily for magical and ceremonial purposes (see Section C). The Ibans (Sea Dayaks) are not especially interested in beads.

Table 3 lists the beads found in these three collections, with very brief descriptions, published references, and my comments on their origins and dates. The one bead not described is the Lukut Sekala, the most famous bead of Sarawak. It is a suboblate of dark translucent blue with striped cane and twisted rosettes on the sides and striped cane rosettes around the perforations. There are beads similar to the Lukut Sekala but with "chain rosettes," though none are represented in this collection. I imagine that these are the copies of the Lukut Sekala referred to by Furness [1902:118], who said they were made in Germany upon the order of Chinese traders, and though they did not fool the Dayaks, were bought by them.

Notes on the likely origins of these beads follow. In the case of several, especially those published by Beck, I have not examined them, and must base my comments on the plates and Beck's notes.

1. Indo-Pacific. Beck noted that these beads were similar to those found at Kuala Selinsing, which he also examined in the same paper [1930:176-8]. These were Indo-Pacific beads, and are quite common at Sarawak archaeological sites up until ca. 1200. From about that date the various Indo-Pacific beadmakers in Southeast Asia stopped production, and though it continued in India, it is likely that most of these beads came from the older Southeast Asian trade.

2. White with Purple Zone. Beck said this may be early Mediterranean, as it is similar to a small bottle from that context. As the case for "Roman" beads in Southeast Asia weakens [Francis n.d. b], this seems unlikely.

3. Black tube with Red and Blue Zones. This bead, as with several others, is so simply executed as to defy any suggestion as to its origin at the moment.

4. False Chevron. This was discussed in the archaeological parallels section. The one in Munan is likely 16th century; the one in Beck likely 17th century.

5. Green Mosaic Cane Eye Beads. These are paralleled best by finds in Malaya at Sungai Mas and elsewhere, where they are almost certainly of Islamic origin. This design appears in Callmer's H and J groups, which he attributes to the "central Caliphate" [1977:99]. Somewhat similar beads found in Java, and probably made there around the 10th century have distinctive cores and Beck mentions no core on this bead.

6. Fused Cane Eye Bead. These beads are such in large numbers at Sungai Mas (ca. 10th-11th century), Malaysia, nearly all of which are fragments, that they may have been made there. Similar beads are found in Indonesia. If they are not Islamic in origin, the canes were probably from the Muslim world and assembled into beads at Sungai Mas or elsewhere.



T A B L E 3: Heirloom Beads in Sarawak

Description	R. Margaret (Beck 1930)	Hose & Mc- Dougall 1912	Southwell (Munan 1988)	Comments
1. Indo-Pacific	K11, 12/p. 178			Malaysia to ca. 1200
2. White with purple zone	K15/p. 178			Beck says Roman; very unlikely
3. Black tube, red, blue zone	K16/p. 178			
4. False chevron	K17/p. 179	J, K	410/p. 106	Chinese, 16th, 17th century
5. Green fused mosaic cane	K18/p. 178			Possibly Muslim, 10th-12th C.
6. Fused eye cane	K19/p. 179	H		Possibly Muslim, 10th-12th C.
7. Blue fused mosaic cane			407/p. 106	With core; Muslim?
8. Multi-combed	K20	G	424, 425/p. 109	Chinese? European?
9. Checquer bead	K21/p. 179		413/p. 107	Medieval Europe/Mid East?
10. Double strip folded eye	K22/p. 179			Medieval Islamic
11. Single strip folded swirl	K23/p. 179			Medieval Islamic
12. Mosaic eye cylinder	K24/p. 179			Medieval Islamic
13. Zone and multi-lines	K25/p. 179			Venice, early 19th century
14. Single strip folded eye	K26/p. 179			Medieval Islamic
15. Combed	K27/p. 179			
16. Crumb bead	K28/p. 180			
17. Lukut Sekala	K29/p. 180	A	406/p. 105	Most likely Venetian
18. Twisted rosettes	K30/p. 180		415/p. 107	Venice, ca. 1830-1870
19. Same	K31/p. 180		409/p. 105	Venice, ca. 1830-1870
20. Stratified eye	K32/p. 108			Venice, 1800-1920
21. Onyx imitation	K20, 21, 22/p. 180			Possibly Bohemian, late 19th C.
22. Spiral decoration	L23/p. 180			Venice, 19th century
23. Black and white stripes	L24/p. 180			
24. Black/blue & white stripes	L25/p. 180			Possibly Malaysia, 9th-10th C.
25. Bent thread eye bead	L26/p. 180			Venice, early 19th century
26. Twisted square	L27/p. 180			Dutch, ca. 1680-1750
27. Yellow, stratified rosette	L28/p. 181			
28. Black, stratified rosettes	L29/p. 181			
29. Ring and dot tubes			418/p. 108	Venice, early 19th century
30. True chevron			419/p. 108	Most Likely Venice, 19th C.
31. Floral spray			422, 426/p. 108-9	Venice, late 19th century
32. Fused crumb			2555/p. 109	
33. Polychrome stripes			408, 414, 416/ pp. 106-7	Venice, 19th century
34. Barrel with ring/dot eyes			421/p. 108	Venice, 19th century
35. Septagonal tube with rosettes			423/p. 109	
36. Zoned tube			420/p. 108	
37. Green with yellow rings		I	412/p. 106-7	
38. Zoned suboblate			411/p. 106	
39. Crumb bead with clear coat			417/p. 108	Possibly Japanese, 20th C.
40. Tube, central floral		C		



7. Blue Fused Mosaic Cane. The canes of these beads are similar to those imported into Sungai Mas; though this one has a core and those do not. The design is in Callmer's H001 group, attributed to the "central Caliphate" [1977:99].

8. Multi-combed Beads. These are also found in Taiwan [Chen 1968:fig. 77M]. Some beads from Africa in the Center for Bead Research study collection come close to this pattern without exactly matching it. As the beads in Taiwan (Paiwan group) are so distinctive, a non-Venetian origin might account for them. They might be Chinese, later than the 17th century, as none of this type have been excavated.

9. Checquer Bead. This is a difficult bead to track down. The design is made by fusing square glass canes, pulling them out to form a long cane, then slicing this into plaques. The Sarawak checquer beads were made of five plaques, with monochrome stripes on top and bottom. Checquer beads were made in late Roman times [Stout 1986], but they are most common in Medieval times. Of the many in Callmer [1977], only a few approach the Sarawak design (the G040 group), and these are not as large as the Sarawak beads, nor have bands of color on the ends. Those that have bands of color on the ends (groups G001 and G002) have very different designs. One figured by Graham-Campbell and Kidd [1980:pl. 76] is similar to the Sarawak beads in the way it was made (large hollow tube of fused plaques with bands on the ends), but again has a different design.

Callmer was not certain about the origin of checquer beads, suggesting the Rhine Valley or south France/north Italy [1977:98-9]. They are common in Scandinavia. The Persian Muslims traded heavily with the Vikings, avoiding western Europe [Francis n.d. c]. They also traded heavily with western Southeast Asia from the 10th century [Francis 1989a]. Checquer glass elements are known from 9th century Samarra (Iraq) [Jenkins 1986:54], and it may be that the Muslims made the Sarawak beads.

10. Double Strip Folded Eye. This was made by bending two strips of glass around a wire and fusing them. This was an Islamic technique, although also known earlier.

11. Single Strip Folded Bead. This was made by bending a single glass plaque around a wire and fusing the ends, again, primarily an Islamic technique. Another swirled single-strip folded bead has been found at Sungai Jaong, from ca. 10th-11th centuries (S 7/6, 24-30", 1/2/57). Other beads at Sungai Jaong resemble contemporary Islamic imports in Malaysia.

12. Mosaic Eye Cylinder. Although difficult to tell from the plate, this appears to be very like beads found at Sungai Mas, Takua Pa, and other Malaya sites from the 10th-11th century and attributed to the Muslim world. It parallels Callmer's G050 group from the "central Caliphate" [1977:99].

13. Zone and Multi-lines. Beads like this are found on Venetian sample cards, dated to the early 19th century [Francis 1988a:27].

14. Folded Eye Bead. These are commonly Medieval Muslim.

15. Combed Bead. I know of no parallels for this bead, and the plate figure is not too clear.

16. Crumb Bead. These are made by putting bits of different colored glass on the surface of a bead and reheating it to melt them in. It is an ancient and common technique.

17. Lukut Sekala. No precise parallel for these is known either from African or American sites or on Venetian sample cards. The parallel from Egypt cited by Seligman and Beck [1938:15 pl. III 6] is not at all similar,



and it is rather surprising that they would equate the two, unless they were only working with Hose and McDougall's plates (they do not cite Beck 1930). The "striped cane" rosettes resembles a technique developed in Venice in the late 16th century for decorating many glass objects [Hughes 1970:69]. The canes used on the Lukut Sekala are quite simple, and could date from the beginning of this period. Lamp-winding, of which this bead is an example, has a long history in Venice, gradually growing in importance and reaching its zenith in the mid 19th century [Francis 1988a:13, 20]. These beads could have been made elsewhere in Europe or conceivably in Japan or China, but there is no indication of that. The best guess remains Venice, but dating them is most difficult.

It may be that we find no parallels because very few were ever made. There are said to be only 20 to 40 in Sarawak, having come from Kalimantan [Munan 1988:105]. Perhaps the few made caught the fancy of some people in Borneo, and due to their scarcity they have been valued ever since.

18, 19. Twisted Rosette Beads. These are to be seen on sample cards of Francis Greil of Venice in the Peabody Museum, Harvard University. The other beads on these two cards suggests a date of ca. 1830-1870 for them.

20. Stratified Eye Bead. These, usually with white eyes and blue and red "pupils" were a very popular Venetian product, found on cards ranging from ca. 1830 to 1920 [Francis 1988a:27]. These are apparently the beads used by the T'boli on Mindanao, the Philippines [Fox 1977:761; Legarda 1977:67] and imitated in plastic (see below).

21. Onyx Imitation. These are quite widespread, and it is difficult to tell where they may have been made. The barrel ones [Beck 1930:L 21, 22] look like late 19th century Bohemian onyx imitations [Francis 1988a:40].

22. Spiral Decoration. This decoration is found on beads of virtually the same shape on several Venetian sample cards, including one of M.L. Levin, to be dated 1851 to 1893 [Karklins 1982:8] in the Pitt-Rivers Museum at Oxford [Springett and Springett 1987:20].

23. Black and White Stripes. This is a decoration difficult to pinpoint. The Venetians made beads like these, but so did many others.

24. Striped Beads. From the plate, it looks as those small drawn beads might have been the type made as a subsidiary to the Indo-Pacific beads [Francis 1989a]. The doubles may have occurred because some of these beads were pinched rather than cut from the tubes, at Takua Pa. The black and white combination was most common at Sungai Mas.

25. Bent Thread Eye Bead. Such beads were common products of the early 19th century Venetian industry [Francis 1988a:27].

26. Twisted Squares. These are no longer regarded as Roman. They occur from ca. 1680 to 1750 and are most likely Dutch, though they could have been made elsewhere in Europe, such as Germany [Francis 1987a; 1988:46].

27. Yellow, Stratified Rosette. The pattern originated in the Halef culture, ca. 5500 B.C. and has been used, especially in the Middle East, ever since. It is also a popular Chinese motif. I cannot cite parallels for this bead, which I have not seen.

28. Black, Stratified Rosettes. Beck [1930:181] and Harrisson [1950:211] both cite Evans as having found these beads in Santubong (Sarawak River Delta sites). I did not see this bead in the Sarawak Museum, either from the Santubong sites or Gedong or Bukit Sandong. Beck assumed the beads in Renee Margaret's strand were copies of the older ones, and ones I have seen in private collections look relatively new. They could possibly be Chinese, but no specific parallels are known to me.



29. Ring and Dot on Tube. A popular early 19th century Venetian type, with many variations [Francis 1988a:27].

30. Twisted Chevron Tube with a Red and Yellow Strip. These seems to have no archaeological parallels in the Americas, where the type would receive Kidd # IIIInn' [Karklins 1982]. The bead has been bought in Africa [Picard 1986:# 218, 219]. Munan [1988:108] assumed it was Dutch, but the Dutch did not make this style [Karklins 1974, 1983, 1985]. It is far more likely to be recent Venetian.

31. Multi-combed Floral. These are typical products of late 19th century Venice [Francis 1988a:27].

32. Fused Crumb. I know of no parallels for this bead.

33. Polychrome Stripes These are all wound beads with applied stripes, in patterns different from the one discussed in the archaeological parallel section. The motif is simple and widespread, but # 414 at least seems to be duplicated on a card of M.L. Levin of London to be dated 1851 to 1893 in the Pitt-Rivers Museum [Springett and Springett 1987:20].

34. Barrel with Ring/Dot Eyes. Beads with similar motifs are found in the African trade and are most likely Venetian. See Picard 1988:# 315, 512, and most especially 303, 420, which are very close, although not the same color combinations.

35. Septagonal Tube with Rosettes. I know of no parallels for this bead; the twisted rosette design is not uncommon, but the seven sided shape is.

36. Zoned Tube. Again, a common device. I am certain that the center grooves were not done locally but resulted from the glass stripes falling out, which is why natives knew the bead, but without the grooves [Munan 1988:108].

37. Green with Yellow Rings. This is a very crudely made bead, and I know of no parallels. Munan [1988:107] suggested that the works at Tandjong Seilor could have made it, but the production there was based on the entirely different technology of molding beads [Tillema n.d.], and not winding them, as this bead was made.

38. Zoned Suboblate. Another bead with a very widespread design.

39. Crumb with Thick Clear Outer Coat. The Japanese make many beads with a clear glass core, coated with a variety of motifs and covered with a thick layer of clear glass. Several such beads are in the Center for Bead Research study collection, obtained in the last decade from American shops dealing with Japanese exporters. Although there is no precise parallel, the technique is the same.

40. Tube with Central Floral Design. It is difficult to make out this bead from the plate. The floral design was used extensively in Venice, but I have not seen a bead of this type decorated with it.

It is instructive to consider these beads as we did those of Lubo in the Philippines. With the Southwell collection, we have the purchase price in 1964 and 1965 and the testimony of Datin Nyipa Bato and other Kayans interviewed by Munin in 1988 as to their current value (in Malaysian dollars). The beads and their values at these times are listed in Table 4. The "Change" is the factor of multiplication (not a percentage) of change.



T A B L E 4

## Value of Beads in the Southwell Collection

Description/Munan Number/Comments	Value: 1964	1988	Change
4. False chevron # 410 Chinese, 16th, 17th century	20	10	-0.5
7. Blue fused mosaic cane # 407 Muslim, with core	30	8000	266
8. Multi-combed # 424 Chinese or European	10	50	5
# 425 Chinese or European	10	50	5
9. Checquer bead # 413 Medieval Europe/Mid East?	10	5000	500
17. Lukut Sekala # 406 Most likely Venetian	100	10000	100
18. Twisted rosettes # 415 Venice ca. 1830-1870	20	100	5
Same # 409 Venice ca. 1830-1870	10	100	10
29. Ring and dot tubes # 418 Venice, early 19th C.	10	20-30	2.5
30. True chevron # 419 Venice, probably 19th C.	12	100+	8
31. Floral spray # 422 Venice, late 19th C.	12	30	2.5
# 426 Venice, late 19th C.	10	50	5
32. Polychrome stripes # 408, 416	10	50-70	6
# 414	10	10	0
33. Barrel with ring/dot eyes # 421	13	50	3.9
34. Septagonal tube, rosettes # 423	10	20	2
35. Zoned tube # 420	12	40-50	3.75
36. Green with yellow rings # 412	10	100	10
37. Zoned suboblate # 411	10	50	5
38. Crumb bead, clear coat # 417 Japanese, 20th C.	20	30-40	1.75

As can be seen, there has been considerable fluctuation in the prices of beads, which is common in Sarawak [Munan 1988:15]. The average value of all beads increased 44.8 times in a quarter century. The Lukut Sekala rose in value 100 times, the blue fused mosaic cane bead 266 times, and the checquer bead 500 times. The only bead which lost value was the false chevron, which for some inexplicable reason has gone out of fashion.

The two beads of highest value at both times are the Lukut Sekala and the fused mosaic bead. Number three in 1964/5 was the false chevron, while the current number three is the checquer bead. All of these, save the as yet undated Lukut Sekala, are very old beads.

The average change in value of the beads, excluding the Lukut Sekala, the checquer bead, and the fused mosaic bead was 4.1 times. Beads which underperformed this are the common ring/dot bead from Venice, the plainer floral design Venetian bead, the Japanese bead, and several most likely relatively recent Venetian. Those which did significantly better than average are the chevron (this sort is unusual), one of the twisted rosettes, which is early or mid-19th century, and the poor quality green glass bead with yellow rings, which may have been produced regionally.

On balance, we see the same sort of correlation between the local value of beads and their age, presumably related to scarcity, as we did with the beads from Lubo, the Philippines. In a few cases we see other factors at work. The difference in value between the two types of floral spray beads (our number 31) may be related to "beauty," as the current more valuable one is the more handsome.



## Some Other Beads

A few other beads in the region merit discussion. They are not in the collections discussed above, but are among the ethnographic and heirloom beads of Borneo and the Philippines.

Monochrome wound glass beads, commonly translucent green, blue, and amber and opaque black, turquoise, white, and yellow, are predominant among the Bidayuh. They are in several sizes from around 0.8 x 0.7 cm to 1.5 x 1.5 cm, oblate or suboblate in form. They are fairly numerous and were available in Kuching shops until a few years ago [Munan 1989]. They are commonly called "Peking glass," though their colors are not so lovely as traditional glass of this sort. They are no doubt Chinese. These beads were encountered in the Philippine National Museum collection (see above).

The Kenyahs and Kayans have a bead common among them, currently valued at about \$12, which resembles the Lukut Sekala in several ways. It is a small suboblate of dark blue glass with chain rosette designs on the sides and around the perforation. This is likely to be the bead referred to by Furness [1902:118]:

Once on a time, some astute Chinese traders, counting on an assured fortune, sent a Lukut Sekala to Germany, where it was copied with really marvelous fidelity. With these faultless imitations they were certain that they could deceive the natives, but the latter detected the counterfeit beads at once, and although willing to purchase the forgeries, would pay but a pittance for them.

Opaque yellow and brick or Indian red short cylinders are found in the Philippines and to a lesser extent in Sarawak and wide diameter discs in Sarawak and to a lesser extent in the Philippines. Both groups are drawn, and Europe is their likely source. They recall Indo-Pacific beads in color, if not in size. In later years, the Philippines imported many similar looking yellow "tile" beads, made by the Prosser technique from Bohemia or France. These are used as substitutes for the short cylinders, but are easily spotted.

## Locally Made Beads

It remains to discuss a few beads whose origins are local. These are made of other than traditional natural materials, which were discussed in the section on the Philippine National Museum collection.

The only glass bead known to be made in the region was produced at Tanjong Selor (Tandjung Seilor) in northeastern Kalimantan. H. Mohammed Saleh, an Indonesian or Malay, crushed European glass beads in a mortar, placed the powder in clay molds, and baked them in the oven, piercing them while still molten. This made wide diameter yellow disc beads, similar to those discussed above. The product from T. Seilor is easily distinguished from European beads, as it mottled in color, full of bubbles, and with a rough perforation. The dates of operation are not known, but two reports on it were published in the early 1930s [Tillema n.d.]. These beads have found their way to Sarawak.

Bead 36 discussed above has been suggested to have been produced locally, perhaps at T. Seilor [Munan 1988:107]. It is certainly very crude, of low quality light translucent glass with opaque yellow rings for eyes. It is



doubtful that it came from any established glassmaking center in China, Europe, or Japan. I have never encountered it outside of Sarawak, and it may have been made in Borneo or Indonesia. It is technically different from the beads from T. Seilor, but could possibly have been an experiment there.

The newest material from which beads can be made is plastic, now so ubiquitous that articles of this synthetic polymer have penetrated every village and longhouse in the region. The thermolabial types will melt and reform, which if done carefully, preserves their color and other characteristics. One such industry has been reported, and perhaps another has also operated in this region.

The most celebrated native plastic bead industry is of the T'boli of South Cotabato, Mindanao, first reported in 1977 [Fox 1977:761; Legarda 1977:67; McCulloch 1989]. Plastic combs, rulers, pens and other objects are melted and formed by hand around a wire. The eye designs are made by poking holes into the body of the bead and filling them with plastic of a contrasting color. These beads are not unattractive, and are sold as tourist items. It may be that they were first hawked as antique beads, but not for long. Several Manila dealers told me that they were once common, but today they are sold exclusively through T'boli Arts & Crafts.

A snake vertebrae necklace of the Bontoc (BON 66) suggests that the making of plastic beads is not confined to the T'boli. The centerpieces of this necklace, which was collected in 1969, are three large biconical beads, one of green, one of white, and a pentagonal bicone in carnelian color. They were not extruded, molded or cut, but all but certain were handmade, perhaps by the Bontoc.

In Indonesia there are various attempts at making beads with the hopes of selling them to gullible collectors and tourists. I have seen some apparently made of a fine cement and others of ceramic marked with the "VOC" (Dutch East India Company) logo. It is said that a bead industry is operating somewhere in central Kalimantan. The beads are made of some sort of grainy, probably woody composition and coated with what appears to be a thin layer of plastic. They are opaque and have a soft, waxy feeling. They are tubes, oblates, and discs, with off-centered, rough perforations. I do not personally find them attractive, but some visitors to the Center do. They were widely available in Jakarta in early 1989, with dealers desperately trying to convince buyers that they were ancient stone beads.

## SECTION B:

### THE ACQUISITION OF THE BEADS

Beads may travel many circuitous routes before being coming into the hands of their ultimate owners. It is possible to trace the routes that some beads took through a combination of historical, ethnohistorical, and ethnographic evidence.

#### The Philippines

The picture in the Philippines is the more simple, as we have the least number of old beads to consider. In prehistoric times the Philippines were more of a hinterland area than Borneo. The first possible mention of the



Philippines in Chinese sources is dated A.D. 982, when traders brought commodities from the islands to Guangzhou (Canton) [Hirth and Rockhill 1911:160 n. 1]. Chau Ju-kua's Chu-fan-chi of 1225 is considered the first "detailed" account of the archipelago [Fox 1967:42]. But there was no state formation by the time the Spanish arrived.

The archaeological outline developed in another paper in this series [Francis 1989b] shows that imported beads came to the Philippines first from Malaya by regional traders, who stopped at coastal settlements, indicated by the wide spread of Indo-Pacific beads. Chinese traders from about 1200 also traded this way, but by the 14th century three important marts had developed, at Jolo (Sulu), Cebu and above all Manila.

The two older beads identified as heirlooms in the Philippines, the false chevron, and the wound gold-glass bead, have typical trading patterns. The false chevron is found in a straight line drawn through south Taiwan where the Paiwan use it, through Batanes Island where one was excavated, into northern Luzon where it is used by the Kalinga, and on into Sarawak where the Kayans treasure it. This suggests a route of Chinese merchants from Fuzhou or Hangzhou. The gold-glass bead has been excavated at Bolinao, at the tip of Bolinao Cape, west central Luzon. The beads are heirlooms in Ifugao and Mountain provinces, not far away, but deep inland.

When the Spanish reached the Philippines the trade in Chinese beads was well established. The Spanish introduced beads themselves, though the literature is scanty on the types they brought. Pigafetta [Purchas 1625:II 97] recalled that Magellan gave the King of Butuan "Beades of Crystall," but whether they were rock crystal, perhaps akin to the rock crystal beads they brought to Florida [Fairbanks 1968], or glass is difficult to say. Magellan wanted the Filipinos to think the Spanish were not too greedy for gold: "One man offered for six threds of Crystall Beades a Crowne of massive Gold, with a Collar: but the Generall would not permit such bartering, that they should not perceive more account to be made of their Gold by the one, then by the other of the Spanish Wares." [Purchas 1625:II 98] In 1565 Legazpi found it convenient to trade beads for food at Leyte and gave them as presents at Cebu [Blair and Robertson 1973:II 115, 136]. Two types of beads which must have been brought by early Spaniards into the Philippines were the early chevrons and the Nueva Cadiz beads.

After establishing a camp at Cebu a Memorandum was sent to the Spanish Court (ca. 1565-69) asking for supplies from Nueva España (Mexico). Among the goods requested were "One thousand bundles of glass beads — green and yellow." [Blair and Robertson 1973:191]. We cannot be sure which beads were being requested, but small green and yellow beads were apparently taken by Columbus to America, and these little annulars might have been made in Spain [Francis 1985c; Brill and Hoffman 1987]. On the other hand, a glass house was begun in Mexico in 1542 which made blue and green glass, but nothing is known definitely about its beadmaking [Francis 1987b].

For a considerable time many glass beads brought into the Philippines were Chinese. The Chinese were already well established in the trade, and they continued to dominate trade in absolute terms. Manila Bay soon became the pivot of a globular trading network that stretched from inner China to the Philippines, across the Pacific to Acapulco, Mexico, across Nueva España to Veracruz, and then over the Atlantic to Spain and the rest of Europe. The Galleon trade relied on the Chinese to bring their goods to the archipelago and the Spanish did the rest. The trade was lucrative and



relatively safe for the Chinese, who continued to build upon it. About 1570 Gonzales de Mendoza reported more than 20 Chinese junks a year coming to Manila [Purchas 1625:XII 148]. In 1588 the Englishman Thomas Cavandish reported 20 to 30 junks [Purchas 1625:II 175], and in 1609 Antonio de Morga put the number at 30 to 40 [Cummins 197:305].

The Chinese junks often had glass beads. One plying the local (Southeast Asian) trade, was wrecked on a shoal off Palawan named for a later English wreck, the Royal Captain. The earlier Chinese wreck was carrying ceramics which dates it to 1573-1620. It had apparently put in at Manila and was on its way to Borneo. Among its cargo were typical Chinese beads, the likes of which have been excavated in the Philippines and elsewhere in Southeast Asia [Francis 1989b]. De Morga in 1609, enumerating the Chinese goods brought to Manila, included, "[cloths] decorated with glass beads or pearl trimmings... tacley, which are beads of all kinds, strings of cornelians, and other beads and stones of all colours." [Cummins 1971:306]. "Tacley" may be his rendering of tsau chu or tu chu, which means glass beads [Williams 1966:120]. La Concepcion, one Galleon that never made it back to Acapulco, having sunk in 1638, also had beads, both of carnelian and glass, some of which are clearly identifiable as Chinese [personal observation]. Perhaps only in the 19th century were European beads imported in numbers by the Spanish, a practice continued under the Americans.

#### Sarawak and Borneo

The import of beads to Sarawak is a bit more complex, due to the numbers of older beads and the different routes by which they could come. Again, Malay traders brought the first glass beads, first to Santubong or the Sarawak River Delta region. This region was important until the 12th century, when trading moved north, to Gedong in the 13th and 14th century and then further north to Brunei. Beads also moved (sometimes their owners bringing them with them) into Sarawak through Kalimantan. Many indigenous Sarawak groups were originally from the interior of Borneo across the border. A third source of beads is later in date, after Brooke became Rajah in 1841, when Kuching became the focus of trade.

Tome Piri, writing about 1515, described the trade of the eastern world. Among the many goods he detailed were "all sorts of glass beads," which came from Venice, were shipped to Alexandria and then to Cairo, taken by caravan to Mecca and then to Jedda, then sailed to Aden from where they were distributed to Cambay, Goa, Malabar, Bengal, Pegu, and Siam [Cortesao 1944:12-3]. At the important port of Cambay he said "[The Merchants of Borneo] take a great deal of coloured glass beads from Cambay, and pearl beads; they ask for red beads; and with these they go about the islands where there is gold and take it in exchange for the cloth, and for the beads only." [Ibid.:133] This indicates an early 16th century trade in European glass beads brought to Borneo by local traders. There may have also been Indian glass beads involved, as Cambay was such a focal point for trade; certainly the pearls were not local, and the "red beads" might be carnelian (which was cut at or near Cambay) or red glass.

In some cases we are informed about the entrepots of beads. Among those discussed in the archaeological section, the Let bead of the Kelebits was made in Java and traded initially to Sukadana in southern Borneo. From there it penetrated into central Borneo and across to Sarawak. The Lukut Sekala bead is said to have also come from Kalimantan [Munan 1988:105].



In 1882 Bock said of agate beads in interior Borneo that they were brought to the coast by Malay traders from Singapore [1882:187-8]. Singapore probably played a pivotal role in the bead trade with Borneo for a long time. The extent of its role in the bead trade during later years can be seen in Tables 5 and 6.

Table 5 shows some shipments of beads (whether glass or stone or otherwise) into and out of the port of Singapore during selected years from 1909 to 1922. Table 6 shows these shipments during selected years from 1927 to 1934. The figures for Table 6 are for Malaya as a whole, as the method of reporting was changed in the later period, and no longer done on a port-by-port basis.

In the early years only values were reported in Straits dollars. Later, weight was added, being reported in pounds (Lbs.); 2.2 pounds equal a kilogram. Sources: Government of Straits Settlements 1910, 1916, Government of British Malaya 1923, Government of Malaya 1930, 1935].

T A B L E 5:

Import and Export of Beads Through Singapore 1909-1922 (Selected Countries)  
(in Straits Dollars)

	1909	1915	1922
IMPORTS:			
Total	66,274	6,488	17,832 <sup>69%</sup>
Europe	38,127 <sup>58.5</sup>	3,620	12,300
Major Sources			
Germany	19,217	U.K. 2,230	Germany 5,900
India	18,695 <sup>28%</sup>	Italy 1,370	Italy 3,240
Italy	11,100		India 2,900
EXPORTS:			
Total	28,392	14,321	6,889 <sup>16.5</sup>
Sarawak	2,855	0	61
Brunei, Sabah	0	0	158
Borneo	10,935	2,520	1,110
Dutch Indies	20,481	7,121	4,590



T A B L E 6:

## Import and Export of Beads from Malaya 1927-1934 (Selected Countries)

## IMPORTS:

	1927		1928		1929	
	Lbs.	\$	Lbs.	\$	Lbs.	\$
Total:	30,085	29,379	35,492	34,496	72,981	71,674
Czechoslovakia	560	709	7,895	8,021	27,418	25,562
Germany	14,697	15,962	16,316	18,053	29,990	30,758
Italy	4,436	4,087	4,945	2,879	3,500	4,400
Japan	6,311	5,463	2,088	1,976	6,403	6,497
India	2,477	1,680	1,501	1,330	2,439	1,905
	1932		1933		1934	
	Lbs.	\$	Lbs.	\$	Lbs.	\$
Total:	32,254	33,977	29,829	30,057	55,682	45,806
Czechoslovakia	25,223	27,751	23,320	25,621	39,835	37,379
Germany	5,572	5,475	1,146	1,389	2,688	2,911
Italy			49	112		
Japan	2,581	474	5,063	2,811	10,483	3,537
India	640	277	240	80	2,547	2,911

## EXPORTS:

	1927		1928		1929	
	Lbs.	\$	Lbs.	\$	Lbs.	\$
Total:	4,300	3,490	3,352	1,860	4,171	4,325
Sarawak					200	15
Brunei, Sabah	1	5	1	10	2	20
Borneo	2,476	1,480	1,172	591	0	0
Java	469	620	0	0	1,165	795
Sumatra	898	1,040	200	160	556	885
China	0	0	900	349	1,926	2,260
Siam	456	345	386	275	322	350
	1932		1933		1934	
	Lbs.	\$	Lbs.	\$	Lbs.	\$
Total:	190	91	1,778	2,035	1,150	1,275
Sarawak	140	50	210	250	210	157
Dutch Indies	50	41	1,000	1,202	100	120
Java	0	0	540	580	0	0
Sumatra	50	41	460	622	100	120
Indochina	0	0	481	528	640	748



The data on Tables 5 and 6 show several trends as well as some anomalies. The great difference between the number of beads imported and exported in most years calls for an explanation. In 1915 the exported beads exceed the imported ones, but the pattern was usually the other way around, and often dramatically so. States as small as the Straits Settlements or Malaya could not be expected to have absorbed tens of thousands of pounds of beads annually.

The differences in these figures probably reflect the difference in the ease of recording imports (which were liable for customs) and the laxness in reporting exports. Imports would have come in bulk shipments, but exports could go out in small quantities carried by individual traders, who did not register their commerce with the authorities.

In terms of imports, the total in 1909 was not met until 1929 and then not again. The early part of the century (and likely the last century) was the highpoint of the bead trade, which was slowed by two World Wars and the Great Depression. We see a steady gain in the import of Czech beads and a somewhat less steady rise in Japanese beads. The pattern for Germany is up and down, gaining at first, contracting during World War I, gaining again and contracting in the 1930s. Italy's sales decreased, as did India's. Against this must be considered the effect of price. It is surprising how long a pound of beads was valued at a (Straits) dollar. In general, the Japanese (doubtless limited to glass) and the Indian (perhaps mixed media) were the cheapest, while the Czech beads (again, all glass) were relatively more expensive.

Borneo was the major consumer of beads through Singapore until 1929. It is not reported thereafter. It would seem that all goods destined for Borneo were required to pass through a Javanese or Sumatran port. The Netherlands Indies (modern Indonesia) was the major customer throughout this period, and Borneo the most likely ultimate destination. Surprisingly, except for the early years, Sarawak ranks as only a small buyer of beads from Singapore.

Although these figures reflect the bead trade at only one port for a quarter century, they are instructive. Singapore was a major mart for this part of the world, and the data shows a lively trade in the early 20th century, continuing a commerce that had started long before.

Considering all the data available for the bead trade to Sarawak, we can suggest the origins, merchants, and Bornean entrepôts for many beads which have been discussed in this paper. Table 7 shows the beads whose origins we have tentatively deduced (those with an "A" are in the archaeological parallels section; those with only numbers are in the last section). Preliminary identification of their origins, the traders who brought them and the entrepôts through which they entered Borneo is listed for these beads.



T A B L E 7:

## The Trade of Sarawak Beads

Description	Likely Origin	Traders	Entrepôt
A1. Kelebit Let bead	Chinese in Java ca. 1600	Chinese etc.	Sukadana
A2. Sarawak Ghost bead	China?	Chinese etc.	Gedong
A3. Wound Striped bead	China?	Chinese etc.	Gedong
1. Indo-Pacific	Malaysia to ca. 1200	Malays	Santubong
4. False chevron (also A5)	Chinese, 16th, 17th C.	Chinese etc.	Brunei?
5. Green fused mosaic cane	Medieval Islamic	Malays	Santubong
6. Fused eye cane	Medieval Islamic	Malays	Santubong
7. Blue fused mosaic cane	With core; Muslim?	Malays	Santubong
9. Checquer bead	Medieval Europe/Mid East	Malays	Santubong
10. Double strip folded eye	Medieval Islamic	Malays	Santubong
11. Single strip folded swirl	Medieval Islamic	Malays	Santubong
12. Mosaic eye cylinder	Medieval Islamic	Malays	Santubong
13. Zone and multi-lines	Venice, early 19th C.	Europeans	Brunei
14. Single strip folded eye	Medieval Islamic	Malays	Santubong
17. Lukut Sekala	Most likely Venetian		Kalimantan
18. Twisted rosettes	Venice, ca. 1830-1870	English	Kuching
19. Same	Venice, ca. 1830-1870	English	Kuching
20. Stratified eye	Venice, 1800-1920	English	Kuching
21. Onyx imitation	Bohemian, late 19th C.	English	Kuching
22. Spiral decoration	Venice, 19th century	Europeans	
24. Black/blue & white stripe	Malaysia? 9th-10th C.	Malays	Santubong
25. Bent thread eye bead	Venice, early 19th C.	Europeans	Brunei
26. Twisted square	Dutch, ca. 1680-1750	Dutch/local	Kalimantan
29. Ring and dot tubes	Venice, early 19th C.	Europeans	Brunei
30. True chevron	Venice, 19th century	English	Kuching
31. Floral spray	Venice, late 19th C.	English	Kuching
33. Polychrome stripes	Venice, 19th century	English	Kuching
34. Barrel with ring/dot eyes	Venice, 19th century	English	Kuching
39. Crumb bead, clear coat	Japan, 20th century	English	Kuching

## S E C T I O N C:

## T H E U S E S O F T H E B E A D S

"Use" of beads refers to two functions. One is the physical use of beads in the decorative scheme of things: whether selected for a belt, headdress, or necklace; whether decorating baskets or pouches; whether primarily for animals. The other is their social function, how they are perceived by the owners and what aesthetic, magical, or social roles they play.

As already explained, this work is a study of artifacts in the ethnological context and not a work of ethnography. We are not equipped at this time to undertake such a study, though it is a desideratum. We must rely on our previous experience and that of others.



As to the physical uses of beads, Munan [1987] has given a summary of bead wearing in Sarawak, while Abellera [1981] has outlined Kalinga use. Papers on specific groups sometimes give details about this, but unfortunately more often do not. We are in no position here to even make a broad summary of this aspect of bead utilization.

Hence, we concentrate our remarks on the social uses of beads. This is particularly important in the regions we are considering, as beads still play vital roles in the social fabric of the people. It is this function, even more than the physical uses of beads, that is totally lost to archaeology when the society has disappeared or radically changed. A given bead can be adequately described and its origins ascertained. Sometimes its physical uses can be determined, but its social uses are all too often beyond understanding without direct input from the people who used it.

Ethnology is a key to our full understanding of beads. Unfortunately, ethnologists have paid little attention to them. The classic handbook of the field, Notes and Queries on Anthropology, devotes four pages to tattoos but only a half a page to ornaments, summarized by the well meaning but meaningless phrase "Beads of all kinds deserve attention." [1912:29; 1960:229-33]

Indeed, they do deserve attention and if attention is not given to them now, invaluable data on them will be lost forever. The social uses of beads may appear strange to a western educated researcher, but they are so interwoven with the lives of people that they are integral and harmonious parts of their culture.

#### Decoration

Why do people use beads? Certainly one use is decorative. But the common tacit assumption that this is their only use, in which even reports specifically on beads emphasize the vanity of their wearers, is a disservice. Sometimes it can be determined that the only function for an ornament is decorative, such as the large mother of pearl disc worn by the young men of the Bontoc [Ellis 1981:244] or a belt of shell beads worn by the Dayag baris (women who are subsidiary to the male healers and chant leaders) among the Jagoi Bidayuh [Munan 1985:48].

Abellera [1981] concentrates on three functions of beads, the aesthetic, the social, and the economic, arguing that they overlap, as, indeed, they do. He points out that even if beads determine social status and function during social gatherings, their status is related to the way in which they are strung, an aesthetic consideration [1981:150-4].

#### Store of Wealth

Wherever valued, beads can be a store of wealth. But they rarely become a true currency. A peculiar ethnocentric danger is to sneer at "primitive money," and this is often greatly exaggerated. In the American context the shell bead wampum is often labeled "Indian money," whereas it was never used as currency amongst the Native Americans, but only among early white colonists [Francis 1986b:22-7]. Hose and McDougall [1912:226] say the Kayans used beads as currency, but they are really only quasi-currencies. Examples of this are the Melanau use of beads for bride wealth and grave goods [Chin 1980:50], and their function in Sarawak to insure debts or as



part of an inheritance [Munan 1987:88]. Abellera gives the most succinct account of their economic use, including as a medium of exchange, but much more often, as unit of account, store of value, and a standard of deferred payment and debt [1981:151].

### Social Markers

Beads of value can serve to denote status. There may be a direct correlation between their value and their prominence in the social context. Gold played this role in northern Luzon [Ellis 1981:242], as indeed, it does in much of the modern world. The Lukut Sekala and other valuable beads denote wealth and position among some Sarawak societies.

But other sorts of status are also denoted by beads and other ornaments. The hornbill head decoration and ear pendant worn by Ilongot men symbolized the taking of a head, but among the Ifugao only showed social standing [Ellis 1981:241, 248]. The Ifugao coiled copper bands may be worn by almost anyone, but the numbers worn and their position (whether on the right or left leg or arm or both) is strictly regulated by sex and status [Ibid.:244]. Sexual status is indicated among the Kalinga, where only men wear feathers on ceremonial occasions [Ibid.:211], and among the T'boli today where elaborate bead use is now consigned to the women [Casel 1977:737]. T'boli women are said to feel naked without their beads [Ibid.:733]; precisely the reaction of Middle Eastern women when they first venture out of the house without their veil [personal observation].

The most widespread social marking that beads perform is to distinguish between groups. We already pointed this out in the case of Sarawak in earlier sections. It is just as true among the ethnic groups of Mindanao [Casino 1981:151] and northern Luzon [Ellis 1981:248] as it is for Sarawak, or, indeed, among Native Americans, Africans, Mexican villagers, and so on.

Abellera [1981:150] detailed the many functions beads play in the life stages of individuals in Lubo village, including birth, early childhood, the men's rite of passage, betrothal, marriage, acceptance of the daughter-in-law, avenging death or wounds, taking a mistress, sickness and cures, and finally death. Among the Selakaus of Sarawak suckling mothers must wear blue beads [Munan 1987:88]. An anthropomorphic ornament and its attendant beads are status symbols, used only by upper classes Ifugaos, but also marks passages, worn only at marriages and funerals [Ellis 1981:242]. In the Pangasian mountains gold chains are worn for mourning [Ibid.]. Doubtless, the long list that Abellera produced could be worked out for many other bead-loving groups, were there sufficient interest.

### Beads and Magic

Social functions of beads blend into magical functions, as I had the opportunity to learn as a guest of the Sarawak Museum on a field trip to Menah Tapuh, where we interviewed Raseh, the central character in Geddes' Nine Dayak Nights [1957]. Edmund Kurui acted as interpreter and Heidi Munan as co-interviewer. This is supplemented by Munan's [1985] observations in a Jagoi Bidayuh context.

Magical beads, especially among the Bidayuh, carry social distinctions. Men and women do not wear each other's beads, and they are not even touched by others among the Jagoi. At Menah Tapuh women could wear men's beads during ceremonies, and only then should they not be touched by others.



The beads are not magical in and of themselves, but strengthen the wearer, allowing one even to see spirits on occasion [Munan 1985]. This contrasts with bead use elsewhere. The "Ghost Bead" discussed above has some magical functions by itself. Blue beads are given to a midwife by the Selakaus to protect her [Munan 1987:88]. Among the Bagobo certain fragrant herbs worn as pendants also keep away evil spirits [Casino 1981:151]. Although I have not seen it mentioned, this might be the function of the eye beads so esteemed by the T'boli; it is certainly one of their functions in the neighboring Muslim society.

Obtaining magical beads is an interesting phenomenon. There is an old interest in charms in Borneo. These are primarily unusual natural objects, and in some cases eventually came to be strung, especially after trade beads were introduced [Roth 1896:238-41]. Raseh retains his beads and a group of such charms which are not strung. Natural objects, such as bear claws, are considered particularly strong. Another bead on Bidayuh magical strands are bells, used to preserve health [Munan 1985:48] and/or as peace keepers, so the other beads "will not quarrel" [Munan 1985:50 n. 3; Raseh 1989].

Beads are most often handed down through the family or occasionally given to another person who performs similar functions in society. Raseh's came from his grandfather. Broken beads are retained, as damage does not reduce their power. New beads can be added, but only during ceremonial times when they can be restrung; the stringing order is not important [Raseh 1989].

"Facts" about beads may be perceived quite differently between the interviewer (the ethnographer) and the interviewee (the owner). Raseh thought that most of his beads came from Brunei, which may have been the case. He recognized a couple of glass types as being older, this being the principal distinction he made between his beads. On his strand was both a carnelian bead and a late 19th century Czech glass imitation. He credited the carnelian bead as the older, but did not distinguish between them in any other way. Nor did it seem to interest him when we told him that one was of stone and the other of glass (or perhaps he was politely not believing that we could know anything of importance about his beads).

### The Ethnographic Study of Beads

In sum, beads can perform many functions in the aesthetic, economic, social, and magico-religious realms. The following thoughts are offered as guidelines to future researchers who may want to delve into this fascinating aspect of human culture.

In the aesthetic realm it should be determined why certain beads are considered more attractive than others. Is color, design, brightness, or another consideration foremost? The arrangement of beads is often crucial, whether in a beadwork pattern (does it resemble patterns used in weaving or on pottery?) or patterns of necklaces or other forms of jewelry. In some cases, arrangements are symmetrical or as close as possible, and in other cases it is most distinctly not. The physical uses of beads and how they relate to aesthetic sensibilities are also important data.

In the economic realm, beads serve as a deposit of value and a potential form of quasi-currency. But it is actually rare for them to serve directly as currency, though they may do this sometimes. Most people who highly value beads live in largely self-sufficient family groups and when they have to exchange with their neighbors, they barter. It is rare to exchange beads outside of the group, and they will not usually be so valued by outsiders



anyway. Abellera [1981] makes a telling point that the economic function of Kalinga beads between them and outsiders is so entirely different, that the selling of beads to collectors (or to dealers serving collectors) is destroying much of the Kalinga bead culture.

The social realm is often the most complex in bead behavior. Beads commonly distinguish between groups of people, and further between members of the same group along different lines: gender, age, life stage, and class. They often mark life stages, and if they mark one it is likely that they mark others as well, perhaps all those recognized by the culture. To dismiss beads as simply indicating class or wealth is as simplistic as to dismiss them simply as ornament, unless this can be specifically documented.

In the magical realm beads serve several purposes. Sometimes they are active participants, as charms, either amulets (which prevent harm) or as talismans (which bring good luck). They can also tell fortunes or have other powers. They may strengthen or bring out the inherent powers of an individual. They may also mark a particular sect or religious belief.

Above all, an ethnographer investigating beads must try to understand them from the point of view of the owner. If functions seem strange or barbaric, are they any more so than platinum and diamonds as marks of power; or crosses, menorah, or prayer strands indicating a religion; or marriage rings, lucky tokens; or any of a number of objects which function in the "civilized" world paralleling functions in the highlands of Sarawak, the Philippines and elsewhere?

#### SECTION D:

##### THE CIRCULATION OF THE BEADS

When discussing beads in the archaeological context, the last human act in which they participate is disposal by deposition, loss, discard, or abandonment, in which they leave the systemic (living) context to enter the archaeological. With ethnographic materials this information is already available to us, as it is usually known when, where, by whom, and for how much a bead was transferred from the systemic context to the ethnographic.

For ethnographic studies, it is possible to consider how long a bead participated in the systemic context. The state of Alaska, USA is a virtual "laboratory" for our studies due to the recent nature of its contact with the outside world (beginning in 1740) and relatively detailed documentation for the early bead trade. It has been hypothesized that we can see a deterioration of the local culture through time by noting the speeding up of the acceptance of new bead types and the much reduced time between the introduction of a bead type and its collection [Francis 1988b; n.d. c].

We are in a different situation here for two reasons. One is that Borneo and the Philippines have been receiving glass beads for 2000 years. The other is that though there have been significant changes, several groups we are investigating retain much of their indigenous culture or have changed later than the Aleuts and Eskimos of Alaska. It will be interesting to contrast this aspect of bead use between these two regions.



The first striking difference we notice between the Philippines and Sarawak is the much greater number of really old beads used as heirlooms in Sarawak. In the Philippines only the wound gold-glass beads (14th-15th century) and the false chevrons (17th century) are of any age. In contrast, Sarawak has several types of beads made in the Muslim world (fused mosaic canes, double and single strip folded beads, and probably the checquer bead) about a thousand years ago. Indo-Pacific beads are still in circulation, and they are at least 800 years old. The Ghost Bead and the wound striped bead have parallels with archaeological material from the 14th to the 16th centuries. The Kelebit Let bead was produced around 1600. False chevrons date from about the 17th century. The Dutch twisted squares are dated ca. 1680 to 1750. Some combed beads suspected of being Chinese are probably a couple of centuries old as well.

Two facts help to account for this. One is that Sarawak had more types of beads available over time. It received beads from the Muslim West, which were very rare in the Philippines, and continued to import beads as the Philippines began to receive significant numbers of Chinese beads.

The other is the difference in perception as to what should be done with beads. In the Philippines many beads were buried with the dead, and much of our information in the archaeological context comes from burial sites such as Calatagan and Bolinao. These two sites alone had no less than 129 bead types of the 178 with recorded provenience during the Middle and Late Phases of the Age of Trade and Contact with the East (ca. 1300-1600), that is, 72.5% of all the bead types in this period.

The situation is quite different in Sarawak. Although beads were not uncommon in early burial sites at Niah, in later times they become rare in burial goods. At Upiusing, Niah, possibly of early Ming date with a single radiocarbon date of A.D. 1485-1655, beads were "scarce" [Solheim 1983:47]. Two earlier sites, now believed to be of Song (960-1279) date [Ibid.:38] also have very few beads. At Tanjong Kubor in the Sarawak River delta 31,416 local and 1,383 imported sherds (not whole pots) were recovered, but only 46 beads, and in Tanjong Tegok, across the river, 1,623 imported and 43 local sherds were found, but only two beads [Cheng 1969:14-5].

Thus, in the overlapping periods of the several centuries before the arrival of Europeans, Filipinos and Borneans were treating beads quite differently, though both with respect. The Filipinos, at least in Luzon, were burying them out of piety for the dead, while the Borneans were handing them down to the next generation, just as they do today.

The Philippine pattern of burying beads with the dead was broken as the two major religions of the archipelago, Islam and Christianity, were introduced. In neither religion are burial goods encouraged, although Islam is more strict about this. Islam would have been more tolerant of heirloom beads, but early Christian missionaries were busy destroying charms and other "handiwork of the devil" [Casal and Jose 1981:90].

Islam penetrated from the south and by 1380 much of Mindanao was Muslim. It is among the non-Muslim tribes, particularly the T'boli, that beads are safeguarded and their tradition and authenticity valued [Casal 1977:736], though to my knowledge no work has been done on this subject or similar animistic groups in Mindanao.

Christianity began to penetrate Luzon as soon as Manila was founded in 1570. Conversion was fairly rapid among the lowlanders, but much more difficult in the highlands. "Pacification," if not conversion, did not



occur among the Kalingas, Bontoc, or Ifugao until the late 19th century, or even early in the 20th, after the Philippines was ceded to the United States [Ellis 1981:199-9].

We have hypothesized that beads were used as burial objects in Luzon before the coming of Christianity, and that this ceased after conversion. If this is the case, the function of beads as heirlooms might actually be relatively late, rather than many centuries old. Among the beads in Lubo, for example, we have identified only the false chevron from the 16th century. Venetian "squiggle" beads (ca. 1725-1850), chevrons (perhaps last century) "eye" beads (early 19th century), and feather combed beads (1850-1900), and Bohemian onyx imitations (1850-1900) are heirlooms, but of fairly recent vintage.

We see a tendency in the mountain provinces to hold on to recent beads for some length of time. Abellera [1981] has sounded the alarm that many people are now selling their heirloom beads out of necessity and warned against this, but up until relatively recently, there was a trend to keep beads. Table 8 shows beads among Luzon tribes selected from those in the National Museum because of the data we have on them. The period of manufacture, the date when they were first collected from a north Luzon ethnic group, and the gap in years between the time when the bead stopped being made and was collected are recorded. It should be noted that the first records of ethnographic collections are ca. 1903, gathered to be sent to the St. Louis Exposition of 1904.

T A B L E 8:

## Period of Circulation of Some Beads in Northern Luzon

	Period of Manufacture	First Collected	Gap in Years*
Clear over White "seed" bead	1580-1890	1948	58
Older blue "seed" bead	1480-1867	1910-5	45
Cornaline d'Allepo with selenium	1890-1930	1913	69
Opaque cornaline d'Allepo	1600-1830	1970	120
Cornerless hexagonals	1820-1900	1970	70
Carnelian imitations	1850-1900	1970	70
Bontoc shell imitations	1850-1900	1970	70
Blown bead with cross on face	1850-1900	1980	70

\* The gap is between the last date the bead was made and the time it was first collected.

Table 8 shows fairly long gaps between the time when beads were last available and first collected, even given that collecting did not start until 1903. In a similar study conducted on ethnographically collected beads by Russians and Americans in Alaska and Siberia, the gap between when the beads were first made and first collected averaged 65 years up until 1867, when the United States bought Alaska from Russia and only 15 years thereafter. Most of the beads were collected while they were still being produced. The average gap in the northern Philippines between when the bead



was last made and was first collected is 63 years. This is highly indicative of curating beads locally and not selling them to outsiders.

One observation highlights this effect even more. The clear over white "seed" beads are quite common, though often in small numbers, in the Museum's collection. Of 18 occurrences, 11 were collected before 1915, but all of these from groups in Mindanao. The first northerners to sell any to outsiders were the Bontocs in 1948; production ceased about 1890.

The evidence suggests that in Luzon, at least, beads did not become heirloom items until relatively recently. They had long been grave goods, and few of them passed on as heirlooms. This practice ceased with the influence of Christianity in the lowlands (and Islam in Mindanao), and even among the late converted mountain peoples, heirloom beads are not really very old. There has been a tendency to hold onto beads of any age, perhaps triggered by certain beads which were no longer available, in the last two centuries, though heirloom beads are today easily sold as long if the price is right.



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