

# AN ARCHAEOLOGICAL APPROACH TO UNDERSTANDING THE MEANING OF BEADS USING THE EXAMPLE OF KOREAN NATIONAL TREASURE 634, A BEAD FROM A 5TH/6TH-CENTURY ROYAL SILLA TOMB

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*An ancient bead is a document from the past—a message in a bottle—written in some lost symbolic language. Archaeologists try to understand that language by integrating scientific and technological approaches with the social, economic, political, and symbolic/religious context in which the bead was found. As an example, we use Korean National Treasure 634 (NT634), a dark blue glass bead adorned with mosaic decorations of a bird, a flowering tree, and a human face, found in a 5th/6th-century Korean tomb. This bead suggests its meaning by how and where it was made, and what its images may represent.*

## WHY STUDY BEADS?

The late Peter Francis, Jr., was famous for saying “We don’t study beads, we study people” and in many ways the question “Why study beads” is no different from asking “Why study people?” Beads have been an important part of man’s material culture from almost the very beginning of our modern human existence. There is increasing appreciation within anthropology and archaeology that the “material” aspects of our lives are inseparable from the traditionally non-material and that the political, social, and material worlds are mutually constituted—people shape material objects, but so too do the material objects shape the people. Neither people nor their material culture have full meaning when considered in isolation. For a more complete consideration of some of these theoretical issues in archaeology, *see* Meskell (2005).

Of course, in archaeology, our goal *is* to study the people. Archaeologists are anthropologists, attempting to explain and interpret “the past realities represented by the archaeological record... in terms of the social, political and economic conditions that affected the society whose artifacts we are studying” (Clark 1995:288). We try to

integrate technical, social, economic, environmental, political, and cognitive/symbolic data in order to understand how past societies functioned, and also how and why they changed over time. But it is not just the past that interests us; at the same time that we attempt to see the past through the present, we try as well to appreciate the present through the past—one of the primary concerns of today’s socially engaged archaeologists.

Beads are artifacts that cut across many aspects of human existence. We impress, we celebrate, we honor with beads. Sometimes we just have fun experimenting with new shapes, sizes, materials, and methods, and sometimes we turn to beads for communion with the things we hold most sacred in the most difficult hours of our lives. But what about in the past? How do we know what beads meant to past peoples? Beads are seldom mentioned in ancient texts, perhaps because their various roles in society were so commonly understood and accepted that no explanation was necessary, but certainly not because they were not important. This we know from archaeology. For example, the developing picture of very early bead traditions in North and South Africa and the Near East suggests that from the beginning, bead use implied a “deliberate, shared, and transmitted nonutilitarian behavior” that could not have survived were it not “intended to record some form of meaning” (Bouzouggar et al. 2007:9969). In North Africa, *Nassarius* shells to be made into beads were transported from sources up to 200 km away, implying not only their enormous cultural importance but also the formation of long-distance social and exchange networks as much as 100,000 years ago. The growth of complex societies and the availability of and desire for precious ornaments, often imported over long-distance exchange routes, went hand in glove with the rise of social stratification and specialization (Bellina and Silapanth 2006:379).

## HOW WE STUDY BEADS

From archaeology we have data on the deposition of beads from both habitation and mortuary contexts, one of the most important ways in which beads help us learn about past societies. In fact, beads, along with pottery, are among the most numerous artifacts uncovered during many archaeological investigations. Because pottery was generally produced locally, particularly the most common wares, it is very helpful in our learning about the economic and social life of early communities. Utilitarian pots seldom lasted for more than a few years, so that people always needed new pots in the latest styles. The broken potsherds, swept aside or deposited in middens, are still there thousands of years later, to be discovered by some archaeologist finding treasures in ancient trash. Beads are different and, in some ways, more difficult to study (Table 1). The thousands of archaeological

**Table 1. Methodologies to Interpret the Meaning of Beads.**

<p><b>PHYSICAL CHARACTERISTICS</b></p> <p>Material</p> <p style="padding-left: 20px;">Chemical composition</p> <p>Shape</p> <p>Dimensions</p> <p style="padding-left: 20px;">Length, width, perforation</p> <p>Color</p> <p style="padding-left: 20px;">Chemical composition of the colors</p> <p>Design</p>
<p><b>PRODUCTION</b></p> <p>Location of manufacture</p> <p>Dating</p> <p>Composition</p> <p>Method of manufacture</p> <p style="padding-left: 20px;">Drawn, wound, variations</p> <p style="padding-left: 20px;">Contemporary experimentation</p> <p style="padding-left: 20px;">Examination of wasters</p>
<p><b>EXCHANGE</b></p> <p>How did the bead get to where it was found?</p>
<p><b>CONTEXT</b></p> <p>Where was it found?</p> <p>The object's relationship to other objects at the site</p> <p>Why is the bead there?</p> <p>Iconography</p> <p style="padding-left: 20px;">Comparative</p> <p>The contemporaneous political, social, and economic milieu</p>

studies of excavated ceramics have not been matched by similar studies of beads. Rather, beads are often grouped with what are known as the “small finds” of the excavation—a chapter in the site report but often not much else. Beads were often made in one place and used up to thousands of kilometers away. Beads may also be frustratingly similar in appearance and even manufacturing technique, in spite of widely different production areas. In addition, beads could remain in circulation for long periods. On some occasions beads were handed down from one generation to the next, and then perhaps lost or given as grave offerings several hundred years later. But there they are—beads in their thousands from many major archaeological excavations. Like ceramics, beads or their fragments last for a long time. Even glass, that most fragile of materials, may decompose quite slowly depending largely on soil and burial conditions. But beads can be very reluctant to give up their secrets: they have message and meaning with the message often hidden in their structure and the meaning far below the surface.

### Measurement, Classification

Attributes such as size, shape, and color can be quite useful in comparing beads from one place with those from another or, perhaps more so, in comparing beads from different contexts within a single archaeological site. Horace Beck presented his “Classification and Nomenclature of Beads and Pendants” in 1926, to be published two years later (Beck 1928), and in many ways it is still the standard, if almost never used, reference work. Peter Francis, Jr., revised Beck's work, adding the important category of how the beads were made, but even Peter came to believe that there was no one classification system broad and detailed enough to encompass the infinite variety of beads.

There is the additional issue that many types of morphological variation may not really translate into differing archaeological meanings. For example, among the most common types of beads at many sites in Asia and elsewhere are the small, drawn monochrome glass beads that have come to be called Indo-Pacific, using the term suggested by Peter. These Indo-Pacific beads vary in size, shape, and color. It takes a long time to carefully measure the beads for length, diameter, and perforation dimensions, to describe the shapes, and to match the colors to some accepted standard like the Munsell color charts. Even at thirty seconds per bead, if you have 10,000 beads, you are still talking about several months time. Is it worth it? Perhaps not, particularly as much of the variation is due to rather random production variability beyond the control of the beadmaker. For Indo-Pacific beads the bead diameters depend largely on how fast the cane is drawn, and it is likely

that even the same cane could have a variable diameter, so that small changes would have no real meaning. Bead shape was determined by how long the beads were left in the ovens used to round off the sharp edges of the broken canes and, because of variable conditions in the oven, even beads from exactly the same production lot might have quite different morphologies.

The colors of glass beads depended on a number of factors, many of which could not be strictly controlled. Not just the coloring agent itself—often a metallic oxide of copper, iron, or cobalt—but also the intimate conditions within the bead furnace helped to determine the final color: red, blue, green, or one of the thousands of shades in between. So what to do? The simplified and straightforward suggestions of Robert Brill at the Corning Museum of Glass: maybe ten shapes, a few size ranges, and color descriptions that correspond to actual production differences seem expedient (Brill 1999, 1:13-17). We have used this system to catalog the numerous glass finds at Khao Sam Kaeo, an early glassworking—and perhaps glassmaking—center in southern Thailand, and it is both quick and flexible. Brill's emphasis on "what the glassmakers were trying to make" (Brill 1999, 2:9) provides a very useful reminder for anyone who wants to study beads. What these measurements often don't tell us is where the beads are from or how they got to the place where they were recovered—the details of production and exchange.

### Production and Exchange

What if we want to know more? Certainly any information we can find on how the beads were made is extremely important. In this case, both macroscopic and microscopic examinations are critical. For glass beads, the most common processes were drawing and winding, with a big difference between the two in terms of the type of production, technical processes, and the craftworkers involved. For stone beads, differences in technique may be traced to different beadmaking traditions, often practiced in different geographical areas and certainly having different cultural meanings in both production and consumption.

One of the most fascinating issues in archaeology is how ancient people repeatedly and preferentially sought out materials and objects with exotic origins. As suggested above, long-distance exchange routes developed at least in part to provide access to these coveted materials and objects, often ornaments and beads. In Southeast Asia, long-distance trading networks developed very early, first for shell ornaments important to inland communities, and then, by the mid-first millennium B.C.E., for new luxury goods such as glass and carnelian beads and nephrite

earrings (Bellina and Glover 2004). Local production, using either local or imported raw materials, sometimes replaced foreign goods in these networks. Although the people who lived in these distant times may be beyond memory, goods they coveted have their own lost languages or messages waiting to be deciphered. For glass and stone beads, such things as method of manufacture, size, shape, and color are part of this language, but we can also look at the chemical compositions of the beadmaking materials. While useful work in analyzing chemical composition to source such stones as carnelian is still in the early stages, for glass the situation is quite different and our knowledge of early glass compositions has increased greatly over the past 20 years. Thousands of published chemical analyses of ancient glass are now available, and can be compared with new data to help answer questions about manufacturing traditions and exchange patterns, although this work, done in many centers and designed to answer many different questions, often leaves us comparing oranges with apples, both in terms of the analytical methods and the types and sources of the material analyzed. During the past five years emphasis on trace elements present at less than one-tenth of one percent has led to real benefits in helping to understand where and how early glass was made. In the future, the measurement of different forms of the same chemical element, allowing the calculation of isotope ratios for such elements as lead, silicon, strontium, and neodymium, will play an increasingly important role.

### Context and Dating

A frequent question is "can we date beads?" No and yes are perhaps the best answers. No, because there are no techniques currently in use for beads that are analogous to such standards as radiocarbon dating (that is, unless the beads contain enough carbon to permit radioisotope measurement). But also yes, since many types of glass were made for relatively short periods and, to the extent that the production period is known, we can say that the bead was probably made during a particular span of years. More often, this type of knowledge can be very helpful in dating not the beads but the site. Information about use or, in archaeological terms, consumption, comes from knowledge of the various contexts in which the beads were excavated. Obviously, such knowledge is lost when beads are without their original context, either because of careless work during the archaeological process, being misplaced in museum or university storerooms, or, most commonly, when the beads were obtained through uncontrolled digging, whether legal or illegal. When beads are found in archaeological excavations we know that a particular context cannot be older than the most recently made objects found there. Unfortunately, the

same is not true when a very old bead is found at a site, since both finished glass beads and raw materials were often either reused or deposited long after initial manufacture.

### KOREAN NATIONAL TREASURE 634

Let us now see how the concepts and methods just outlined help us to determine the message and meaning of a very special bead, Korean National Treasure 634. It is shown in Plate IVA along with the carnelian, rock crystal, and jasper beads with which it was found and is probably the best known bead in Korea. The arrangement of the beads as shown in the plate is speculative but all the beads were found together.

On display at the Gyeongju National Museum, NT 634 was excavated in 1973 from a royal tomb of the Silla Kingdom, dating to the late 5th to early 6th centuries. With the same burial was a pair of superb gold earrings surely fit for a Silla princess. Unfortunately, no human bones remained, most likely the result of the same acidic soil conditions that led to the excellent preservation of NT 634. The comma-shaped bead, or *goguk*, is a form seen earliest in the 7th-8th centuries B.C.E. and while no one is completely sure what the form represents, *gokok* are found only in very high prestige contexts.

NT 634 is of medium size, a little less than 2.0 cm in diameter, but its unusual design attracts immediate attention. The bead is unique—it is the only one of this design ever found in a known Korean context. On the surface of this dark blue glass bead are four birds, possibly ducks or geese, four trees or branching flowers, and four faces. These designs are actually slices of mosaic glass cane applied to the surface of the bead in millefiori technique, then partially melted together so that the edges of the mosaic slices are no longer visible. Although there is some slight distortion in the patterns, it seems likely that each group of designs came from a single cane; in other words, the beadmaker had available a bird cane, a tree cane, and a face cane. NT 634 has been assigned many origins, most commonly Roman (e.g., Francis 2002:89), and has been compared to the “Roman” mosaic face beads of both the early 1st century C.E. or so and the late 4th century, although the similarity to either of these groups is marginal at best.

NT 634 was found in association with other highly prestigious offerings, perhaps representing ornaments that the deceased wore during her lifetime. Not only is NT 634 a treasure now, it was probably a treasure then as well. Even more, because the tomb was in southeastern Korea, an area not associated with either glassmaking or mosaic glassworking, the bead was most likely imported, possibly

along the long-distance routes of either the overland or maritime Silk Road. There is stylistically Roman glass in both northeastern China and Korea during the 4th to 6th centuries, so why cannot NT 634 be from Roman territory as well? And if not, where is it from? Korea, sitting out there in northeast Asia, was a great distance from practically everywhere.

What does the bead itself tell us? We know the diameter, and know by inspection that the two ends of the perforation appear to be about the same size so that the basic bead may have been drawn rather than wound. The most dramatic aspect is the mosaic design. Rather than being exact replicas of one another, the four versions of each mosaic pattern are all slightly different. This may be the result of each slice being removed from the same cane at a slightly different angle. Close comparison of the mosaic face canes in Pl. IVA, b and d, reveals that one cane slice was applied with one face upward while the next one was flipped over with the result that the two faces are mirror images of each other.

The distortion of the mosaic slices on NT 634, shown in Pl. IVA, follows a specific pattern, with the designs pulled toward the ends of the perforation in a symmetrical way. If the mosaic slices had been placed on the surface of a heated bead and then marvered into place, they would not show this distortion pattern, so what could cause this?

Sometimes we can learn how ancient peoples made things by contemporary experimentation. Jamey Allen has studied Jatim beads which are most associated with Jawa Timur, far-eastern Java (Allen 1998). Several years ago he proposed a mechanism for making the millefiori Jatim beads wherein mosaic slices were applied not to a finished bead, but to a glass tube. After the designs were marvered into place, the tube was then pinched off into individual beads. The result of this “pinching” process, whether accomplished by an actual pincer or by rolling the hot decorated tube over some type of sharp metal edge, would be that the millefiori decoration was symmetrically distorted toward the perforation at the pinched ends. While Allen demonstrated this process using polymer clay, Patrick Stern, a glassworker based in London, was able to replicate many of the features of Jatim beads in hot glass using techniques very similar to those that Allen had suggested. So now we have a possible explanation for the mosaic cane distortion pattern observed on NT 634, as well as a suggestion regarding where such a technique might have been practiced: far-eastern Java.

### NT 634 as a Jatim Bead

The identification of NT 634, the Gyeongju face bead, as a Jatim bead rests on how the bead was made as much



as on its actual physical appearance. Moreover, NT 634 is not the only Jatim bead found in Korea. There are at least ten other examples in more classic Jatim styles, including both *pelangi* and millefiori beads, and all of those from controlled excavations have been found in high-status Silla tombs in the Gyeongju area, with dates ranging from the late 4th to the mid-6th centuries (Lankton et al. 2005). Pl. IVB illustrates three of these Jatim beads found in Korea: a small *pelangi* bead in yellow and green and three millefiori mosaic beads. For each of these, the characteristic cane distortion is visible at one end only, suggesting that the original tube may have been rather short, with as few as two or three beads being made from each decorated tube. The full story of Jatim beads is clearly beyond the scope of this article but, for our purposes here, let us just say that the association of Jatim beads with far-eastern Java as the production area is quite strong, with evidence ranging from misshapen and partially melted examples found near Jember, to the fact that the vast majority of Jatim beads have been found in a rather limited area in eastern Java (Adhyatman and Arifin 1996; Francis 2002:135). Jatim beads were recovered from megalithic tombs by Dutch archaeologists working in eastern Java at the turn of the 20th century (Heekeren 1958:46), and have been found as well in the Indonesian excavations conducted since then. Prehistoric archaeology in far-eastern Java is still in its infancy, however, and although little is known about the people who produced these exquisite glass beads, we can attempt to reconstruct some of their technology by working backwards from the finished products. What the chemical analyses of a number of Jatim beads tell us is that the glass types used were those current throughout Southeast Asia during the 4th to 7th centuries. At the Jatim production sites, however, the glassworkers made technological choices quite distinct from those at other beadmaking sites. In particular, the Jatim workers appeared to preferentially blend together different types of glass, creating mixed compositions found almost exclusively in Jatim beads. Because of this, we also know that the mosaic canes themselves were also made by these same, or closely allied, craftworkers: the decorative canes were also made from this mixed glass, essentially ruling out any exotic source for the mosaic work (Lankton et al. 2008). Although NT 634 itself has not been studied chemically, its morphological and technological similarity with analyzed Jatim beads makes it very likely that the glass compositional types are similar as well.

Based on the archaeological and archaeometric investigations mentioned above, we know quite a bit about the technological milieu in which NT 634 was made, and these too are ways that this bead tells its story. We have gone from Korea to eastern Java in one quick jump. We know there were Javanese beads in Korea in the 5th to 6th centuries, but do we know how they got there, or why?

Although the archaeological study of far-eastern Java is rather limited, the area was mentioned in Chinese texts as early as 443 C.E., and continued to be mentioned into the 7th century as the kingdom of Po-li. The exact location of Po-li is not known, although somewhere in far-eastern Java, perhaps extending into Bali, is a strong possibility (Wolters 1967:160-161). This location for Po-li is shown in Fig. 1, along with possible maritime trade routes within Southeast Asia and extending to China, Japan, and Korea. It is likely that the early polities in far-eastern Java were quite wealthy, with links both to the West and to China, since they were strategically located to control the trade in such luxuries as nutmeg and cloves from the Moluccas. Although we think of such products as spices for the table, in the first millennium, nutmeg and cloves were important pharmaceuticals and may be what is mentioned as the “perfumes and drugs,” along with manufactured articles, sent from Po-li to the Chinese court in 522 C.E. (Wolters 1967:18). In fact, Po-li sent at least five “embassies” to China between 473 and 639 C.E. (Wolters 1967:164), although the apparent goal of these visits was more related to the shared Buddhist faith of the rulers of Po-li and the Chinese court, rather than to commercial enterprise (Wolters 1967:166).

Were the Jatim beads made in Po-li? The timing is right, the location is right, but what about a connection with Korea? Here there are, in fact, several possibilities. Jatim beads were not the first, nor the only, Southeast Asian products on the Korean peninsula. Earlier Korean tombs, particularly in the southern kingdoms of Gaya and early Silla, contain hundreds of glass beads. On the basis of compositional and technological study, these appear to have been made in South or Southeast Asia, beginning in the first century C.E. (Lankton et al. 2006). By the 7th century there are Japanese records documenting the purchase of Southeast Asian ivory and aromatic woods through the services of Silla middlemen (Holcombe 2001:189), although Silla trade, either direct or indirect, with Southeast Asia may have begun much earlier.

The second possibility is that Koreans traveled to Southeast Asia. The Chinese pilgrim I-Ching, writing in the 7th century, mentions that two Korean monks had died in an Indonesian harbor, evidently waiting for a ship to take them to Buddhist pilgrimage sites in India (Wolters 1967:185). This anecdote is similar to the stories of many monks from the Far East wanting to visit the land of Buddha’s birth, and tells us as well about the dangers they faced. Although these particular Korean monks lived in the 7th century, they were probably not the first to travel to India, and others before them may also have passed through Indonesian kingdoms on their travels.

The third possibility is less direct, but perhaps better documented. Like the kingdom of Po-li, Silla also sent

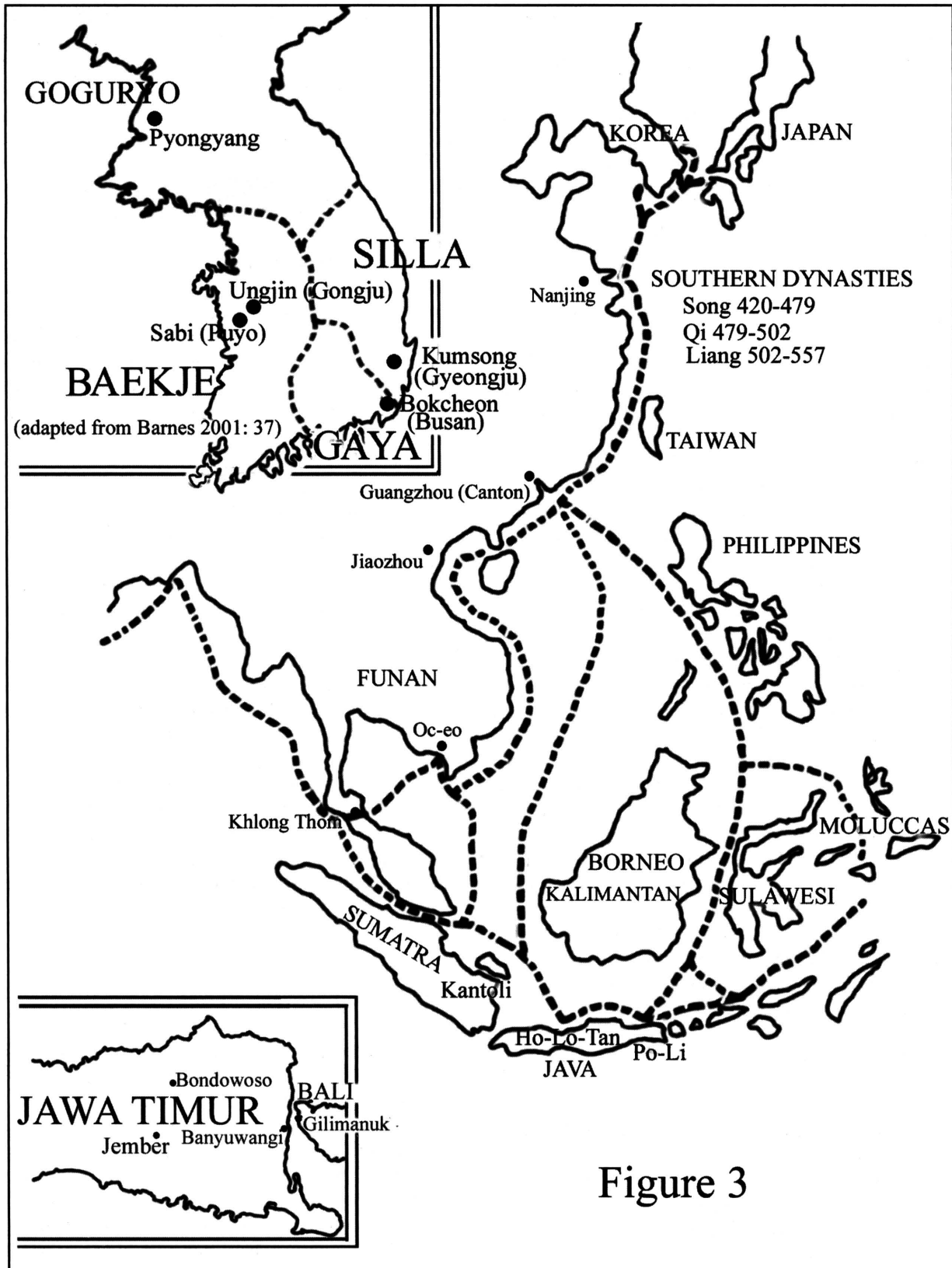


Figure 1. Southeast Asia, East Java (Jawa Timur), and Korea in the 5th and 6th centuries, with possible maritime trade routes (partially adapted from Glover and Henderson [1995:142]).

embassies to the Chinese court. In the year 521, a Silla envoy accompanied a group from the neighboring kingdom of Baekje to the Liang Dynasty court near Nanjing. Recalling that a Po-li embassy to this same court has been dated to 522, is it possible that some sort of Silla–Po-li connection was made at this time? A connection strong enough to involve the gift or purchase of a number (perhaps more than a dozen but less than one hundred) of Jatim beads—precious gems to be distributed to the members of the Silla royal family, including our princess of NT 634, buried with her beads and golden earrings?

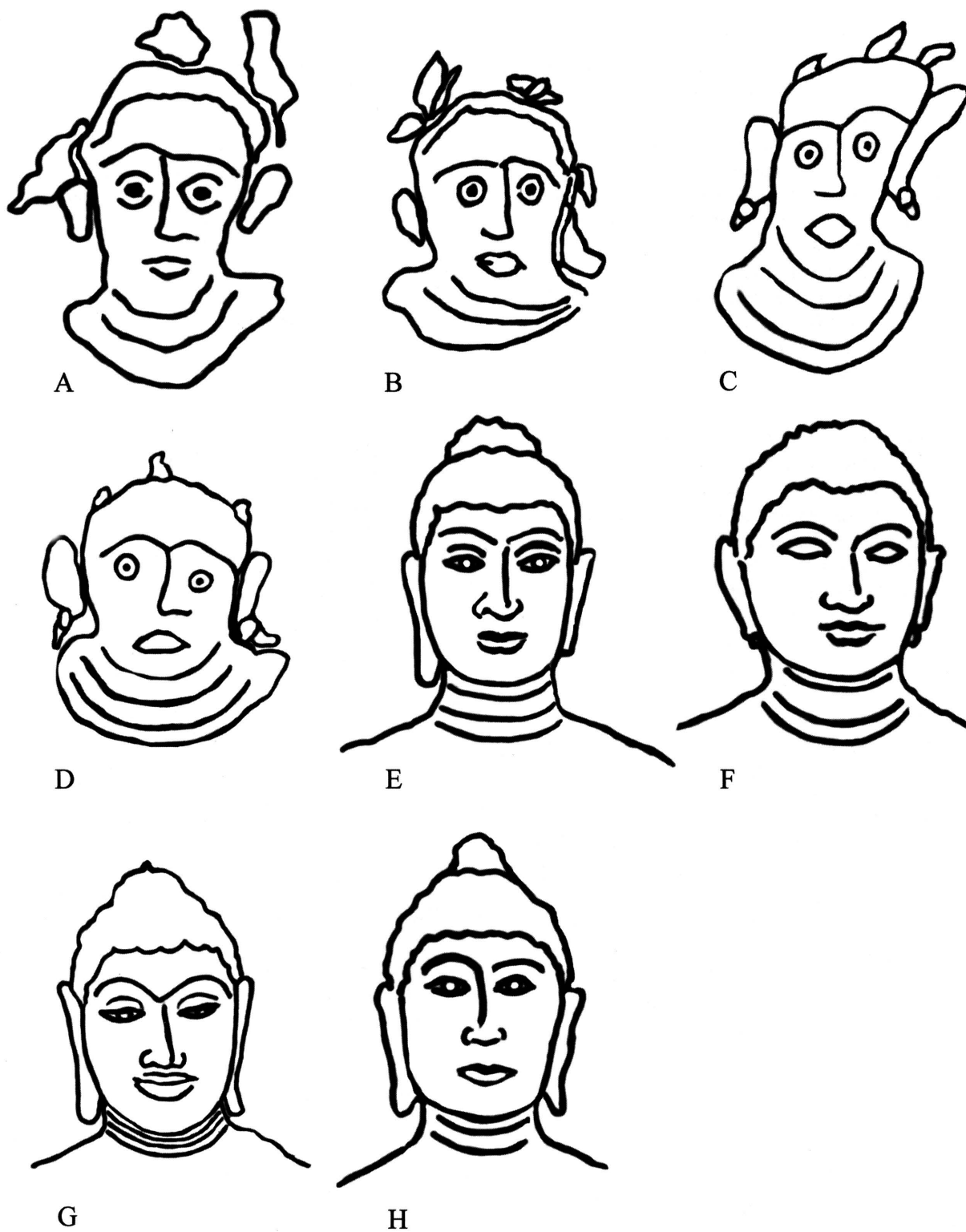
### The Face

NT 634 reveals its messages in several ways but perhaps the most fascinating of all is the message in the faces of the bead. The face cane decorating NT 634 is very distinctive, as are the flower and bird canes. While somewhat similar bird canes are found on a few other Jatim beads (although none with an archaeological provenance), Lankton has seen a similar face cane only once—on a Jatim bead (Pl. VA) in the Liese Collection at the Bead Museum in Glendale, Arizona. The faces on the two beads are very similar, but are not from the same cane, since the colors are different. In addition, the Bead Museum specimen appears to have some type of ear ornament, a detail not found on NT 634. The Bead Museum bead also includes several bird canes which, again, are similar to but not identical with those on NT 634. Furthermore, there are fragments of other, non-figurative mosaic canes, all found on a number of Jatim beads. While the original provenance of the face bead in the Liese Collection is not known, the microscopic condition of the glass and the beadmaking technology are consistent with other early Jatim beads. Chemical analysis could possibly confirm the antiquity of this bead since, as mentioned above, the glasses used in early Java are quite distinctive. One reason for concern is that this bead entered the marketplace after 1973, when NT 634 was discovered and photographs published. During a visit to study the face bead in Glendale and speaking with the museum staff, we asked the question: “So, whose face is it, anyway?” The similarity of the faces on the two beads makes it unlikely that the features were randomly selected; rather, the faces may be portraits. They incorporate specific iconography to represent someone very important when and where the Jatim beads were made. Karen Karn, Collections Manager at the Bead Museum, had thought about this before and felt the face represented the Buddha; this idea clicked right away, but how to prove it? Certainly, Po-li was a kingdom known for Buddhist devotion, and there would have been no figure more worthy of portrayal on very special versions of the Jatim beads, but what evidence do we have that NT 634 portrays the Buddha?

One of the few artifacts found near Jember, the area in far-eastern Indonesia thought to be a production center for Jatim beads, is a bronze Buddha statue, 42 cm tall, dating possibly from the 5th to 7th centuries. This particular image is famous as representing the Sri Lankan version of Buddhism important in Southeast Asia during this early period. Peter Sharrock at the School of Oriental and African Studies in London has compared the faces on NT 634 with those of a number of Buddha images dating to this same period, and Fig. 2 compares drawings of the two face beads with published images of early Buddha statues, including that found near Jember. Similarities include the aquiline nose, the hair-line, the open eyes, the joined “swallow” eyebrows, the extended earlobes, and the beauty folds on the neck. Among the most striking aspects of these early Sri Lankan-influenced representations of the Buddha is the *siraspata* or *ketumala*, flames emanating from the Buddha’s *usnisa* or cranial bump. Sculptural representations of the *siraspata* were part of these early Buddha images found in Southeast Asia, although in most cases the *siraspata* has broken off, as in the Buddha statues shown in Fig. 2. Close inspection of both NT 634 and the face bead in the Liese Collection reveals three flame-like projections coming from the top of the head, colored red and yellow on NT 634 and red and white on the museum specimen. These are clearly not meant to represent hair, nor are they accidental. Rather, they correspond exactly with the position of the *siraspata*, often represented as a tripartite flame. The earrings on the museum specimen are unusual for the Buddha, being more associated with Bodhisattva images from the Mahayana Buddhist tradition. Although it is possible that the museum bead represents a Bodhisattva instead of the Buddha, this would be unexpected in the Theravada Buddhist tradition of Sri Lanka. Rather, one suspects that the mosaic glass artist working in eastern Java was either not fully familiar with all of the conventions of Buddhist representation, or perhaps wanted to add his own unique mark to his work.

### Buddhism in Korea and NT 634

One of the earliest Korean histories is the *Samguk Yusa*, translated as *Overlooked Historical Records of the Three Korean Kingdoms* (Kim 2006), and compiled in the 13th century by Ilyeon, a Buddhist monk of the Koryo Kingdom. The *Samguk Yusa* provides some details regarding the adoption of Buddhism in early Korea. While traveling Buddhist monks may have brought their faith to the Silla Kingdom as early as the late 4th century, the real promotion of Buddhism appears to have started in 514 C.E., with King Bopheung’s ascension to the throne. Although accepted by the royal family, the new religion was resisted by members



**Figure 2.** The mosaic face canes of NT 634 and the face bead in the Liese Collection compared to Buddha images from Southeast Asia (drawing: J. Lankton).

of the Silla aristocracy (Barnes 2001:43) until 527, with the dramatic martyrdom of Yeomchok, a minor official in the government palace. When Yeomchok, a devout Buddhist willing to sacrifice his life for his beliefs, was decapitated on trumped-up charges, blood “as white as milk” spouted from his neck, and his severed head flew to the top of a nearby mountain to mark the site of a future Buddhist temple. We can imagine that the years leading up to 527, exactly the time during which NT 634 was brought to Korea, were a period of intense belief and probable struggle over the newly introduced religious ideas. The fact that both NT634 and the other Jatim beads found in Korea were from royal tombs may be due not simply to the high value placed on these exotic and beautiful beads, but also to the meaning of these beads as religious signifiers important in Buddhist ritual and belief—a belief not yet shared by the rest of the Silla aristocracy.

Although the origins of Buddhism in Korea are often ascribed to China, the maritime routes from southern China and Southeast Asia were important as well, as supported by the many embassies to southern China from the Three Kingdoms, including Silla, on the Korean Peninsula and, in at least the 7th century if not earlier, by Korean monks going by sea to India. In the 5th and 6th centuries, international trade was strongly linked to the spread of Buddhism and it is likely that monks traveled in both directions, often on commercial ships, spreading their religious teachings throughout Asia. Among the various goods traded were Buddhist holy objects: the seven treasures from India or elsewhere that were necessary for the proper conduct of ritual ceremonies (Holcombe 2001:92). Glass beads were an excellent substitute for several of these treasures, from the blue of lapis lazuli copied in cobalt-blue glass to glass replicas of red coral and carnelian and the brilliant transparency of rock crystal. NT 634 was most likely also a Buddhist gem, with its dark blue translucence suggesting the cosmic deep of the night sky or the ocean, and the distinctive portrait faces representing the Lord Buddha himself. It is easy as well to find roles for the bird and the flower or tree, perhaps the heavenly goose *hamsa* and the Bodhi tree under which Buddha achieved enlightenment.

## SUMMARY

We have considered many ways to learn from beads, ranging from the archaeological context in which they were found to physical measurement and description, chemical analysis, and where possible, the comparative study of the iconography. For us today, NT 634 is a priceless relic, both as a symbol of the vibrant cultures present on the Korean peninsula over one thousand years ago, and as an artifact illustrating the growth of long-distance maritime exchange

during the 4th to 6th centuries; exchange both “material” and ideological, responding to and resulting in the spread of the Buddhist faith throughout Asia. In this exchange, beads and other precious objects were an essential element, helping traveling monks introduce Buddhism to new people and locations, and allowing these new adherents to practice their faith. Through such beads as these, glassworkers in far-eastern Java were intimately linked to elite groups on the Korean peninsula. These are just some of the things that NT 634 means to us today. But consider for a moment: What did it mean to the Silla princess?

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## REFERENCES CITED

- Adhyatman, Sumarah and Redjeki Arifin**  
1996 *Manik-Manik di Indonesia: Beads in Indonesia*. 2nd ed. Djambatan, Jakarta.
- Allen, Jamey D.**  
1998 *Magical Ancient Beads*. Times Editions, Singapore.
- Barnes, G.L.**  
2001 *State Formation in Korea*. Curzon Press, Richmond, Surrey.
- Beck, Horace C.**  
1928 Classification and Nomenclature of Beads and Pendants. *Archaeologia* 77:1-43. Reprinted in *Beads: Journal of the Society of Bead Researchers* 18 (2006).



**Bellina, B. and I.C. Glover**

2004 The Archaeology of Early Contact with India and the Mediterranean World, from the Fourth Century BC to the Fourth Century AD. In *Southeast Asia from Prehistory to History*, edited by Ian C. Glover and P. Bellwood, pp. 68-88. Routledge Curzon, London and New York.

**Bellina, B. and P. Silapanth**

2006 Khao Sam Kaeo and the Upper Thai Peninsula: Understanding the Mechanisms of Early Trans-Asiatic Trade and Cultural Exchange. In *Uncovering Southeast Asia's Past*, edited by E.A. Bacus, I.C. Glover, and V.C. Pigott, pp. 379-392. National University of Singapore Press, Singapore.

**Bouzouggar, A.N. Barton, M. Vanhaeren, F. d'Errico, S. Collcutt, T. Higham, E. Hodge, S. Parfitt, E. Rhodes, J-L. Schwenninger, C. Stringer, E. Turner, S. Ward, A. Moutmir, and A. Stambouli**

2007 82,000-Year-Old Shell Beads from North Africa and Implications for the Origins of Modern Human Behavior. *Proceedings of the National Academy of Sciences* 104:9964-9969.

**Brill, Robert H.**

1999 *Chemical Analyses of Early Glasses*. Vols. 1 and 2. The Corning Museum of Glass, Corning.

**Clark, J.E.**

1995 Craft Specialization as an Archaeological Category. *Research in Economic Anthropology* 16:267-294.

**Dupont, P.**

1959 Les Buddha dits d'Amaravati en Asie du Sud-est. *Bulletin de l'Ecole française d'Extrême-Orient* XLIX:633-636.

**Fontein, J., et al.**

1971 *Ancient Indonesian Art: Of the Central and Eastern Javanese Periods*. Asia Society, New York.

**Francis, Peter, Jr.**

2002 *Asia's Maritime Bead Trade, 300 B.C. to the Present*. University of Hawai'i Press, Honolulu.

**Girard-Geslan, Maud et al.**

1998 *Art of Southeast Asia*. Harry N. Abrams, New York.

**Glover, Ian C. and Julian Henderson**

1995 Early Glass in South and Southeast Asia and China. In *China and Southeast Asia: Art, Commerce and Interaction*, edited by R. Scott and J. Guy, pp.141-69. Percival David Foundation of Chinese Art, London.

**Heekeren, H.R. van**

1958 *The Bronze-Iron Age of Indonesia*. Nijhoff, The Hague.

**Holcombe, Charles**

2001 *The Genesis of East Asia, 221 B.C.-A.D. 907*. Association for Asian Studies and University of Hawai'i, Honolulu.

**Kim, D.-Y.**

2006 *Overlooked Historical Records of the Three Korean Kingdoms*. Jimoondang, Paju, Korea.

**Lankton, James W., L. Dussubieux, and T. Rehren**

2008 A Study of Mid-First Millennium CE Southeast Asian Specialized Beadmaking Traditions. In *Papers from the 10th International Conference of the European Association of Southeast Asian Archaeologists*, edited by E.A. Bacus, I.C. Glover, and V.C. Pigott, pp. 335-356. National University of Singapore Press, Singapore.

**Lankton, James W. and I.S. Lee**

2006 Treasures from the Southern Sea: Glass Ornaments from Gimhae-Yangdong and Bokcheondong, Compositional Analysis and Interpretation. In *Archaeology: Traces of Time and Space*, edited by A.K. Kim, S.W. Ahn, and S.B. Jung, pp. 329-354. Hakyeon Munhwasa, Seoul.

**Lankton, James W., I.S. Lee, and J.D. Allen**

2005 Javanese (Jatim) Beads in Late Fifth to Early Sixth-Century Korean (Silla) Tombs. In *Annales du 16e Congrès de l'Association Internationale pour l'Histoire du Verre*, edited by H. Cool, pp. 327-330. AIHV, Nottingham.

**Meskel, L. (ed.)**

2005 *Archaeologies of Materiality*. Blackwell, Malden, MA.

**Wolters, O.W.**

1967 *Early Indonesian Commerce: A Study of the Origins of Srivijaya*. Cornell University Press, Ithaca.

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