BOOK REVIEWS

Ornaments from the Past: Bead Studies after Beck.

Ian C. Glover, Helen Hughes Brock, and Julian Henderson (eds.). The Bead Study Trust, London, England. 2003. 160 pp., 34 b&w figs., 151 color figs., index. \$32.00/£19.95 (paper cover).

As proclaimed on its cover, "this volume comprises eleven papers on glass and hard stone ornaments surviving from ancient societies, and those made and worn by some traditional communities in the modern world." It is primarily intended for archaeologists, jewelry historians, and collectors. The papers derive mostly from the symposium *Bead Studies after Beck* which was organized by the Bead Study Trust at Cambridge University in 1997.

Preface. Flora Westlake (née Beck), 1914-1998 – In Thanks and Appreciation, by Marjorie Hutchinson. This provides a short biography of Horace C. Beck's daughter who was instrumental in the foundation of the Bead Study Trust in 1980, and subsequently served as the Trust's secretary and newsletter editor until 1993.

Chapter 1. Horace C. Beck and His Influence on Non-Academic Bead Research and Collecting, by Robert K. Liu. Reflecting on the last half of the 20th century, Robert Liu describes the enormous rise in the interest in beads by collectors, archaeologists, and researchers. In the 1970s, literally tons of antique beads from Africa entered the western market, as well as huge quantities of artifacts and beads from the Peoples Republic of China and other places. Bead references were few at that time, and Horace C. Beck's pioneering works on beads from the 1920s and 30s were among the few studies available to people to help classify and identify their beads. Beck himself was a self-educated bead researcher.

Some of our best bead researchers who began their work in the 1970s and 1980s were certainly well educated but not associated with universities. These non-academic bead researchers—among them Jamey D. Allen, Kirk Stanfield, and Jürgen Busch—have contributed enormously to the body of knowledge about beads.

Liu addresses the recent proliferation of replicas of historic beads. Some are made to deceive the unwary, while some are made to take the pressure off the market in ancient beads. There has been some experimental interpretation of ancient beadmaking by modern beadmakers who want to figure out how the work was done in the past. Many of these new beads are excellent copies. Wonderful color photos illustrate old and replicated beads.

Chapter 2. The Mycenaean Greeks—Master Bead Makers: Major Work Since Beck, by Helen Hughes-Brock. This chapter covers Mycenaean Greeks who lived a thousand years before the classical Greeks in the period known as the Late Bronze Age (ca.1650-1100 B.C.). They were prolific beadmakers and beads were hugely important in the lives of these people. They used a wide range of materials, including bone, ivory, glass, faience, gold, lapis lazuli, Baltic amber, shell, and stone. Jewelry made of relief beads is typical of this culture, some made of gold and many made of glass. The glass beads were cast in stone molds in a variety of styles. This facilitated the production of numerous beads of the same form. Blue was a favorite color.

After World War II, archaeological work in the Aegean region yielded magnificent finds, both on the mainland and on the adjoining islands, especially Crete. Hughes-Brock mentions sites where beads were abundant, and lists the museums where many of these beads are housed. Greek museums have the largest collections and best displays of Mycenaean and Minoan beads.

Dates for the Bronze Age temporal divisions are given for three periods and for three regions: Early, Middle, and Late periods, and Helladic (mainland Greece), Minoan (Crete), and Cycladic (islands) regions. The time period is approximately from the late 4th millennium to the end of the second. When the *Ulu Burun* shipwreck was discovered off the coast of Turkey in 1983, beads were found among the cargo. That ingots of raw glass were also recovered reinforces the notion that glass working was a secondary craft in Mycenae and that the glass itself was made elsewhere. So far there have been no raw glassmaking sites recorded in Mycenae.

There are remains of Late Bronze Age workshops where beads were made from glass though, both in the Aegean and in Egypt. Both of these places have yielded crucibles, molds, and glass wasters. Judging from the huge numbers of glass beads excavated, the crafting of them had to have been an important industry.

The island of Thera (Santorini) in the Cyclades is likened to Pompeii in that a volcanic eruption buried it and preserved many cultural features. Walls with frescos survived, some depicting how beads were worn. It is so difficult to determine how various bead materials functioned as social markers or what their significance was. Frescos give us a tiny window into the past.

Chapter 3. Mycenaean Glass Beads: Technology, Forms, and Function, by Kalliopi Nikita. It is obvious to archaeologists that beads were extremely important to the people of Late Bronze Age Mycenae. They loved and used glass beads in particular, and great numbers of them have been found in their burials. Jewelry was the main glass working product, rather than blown glass vessels which came later. Besides glass beads, glass plaques were made to be used as inlay decoration in furniture.

Typically, Mycenaean glass is a soda-lime-silica type with a high magnesium content, a kind of glass used over a long period of time and over a large geographical area. Nikita thinks the dark blue glass of Mycenae is similar to that of the 10th-Dynasty Egyptian blue glass used in coreformed vessels. Before glass became a useful material, faience was used for a very long time. On Crete, faience beads were found at Knossos in pre-palatial tombs.

Artisans used both open and closed carved stone molds to cast glass objects. The open molds were commonly used to produce unperforated plaques. Tools used by jewelry craftsmen have been found in palace settings and include stone celts, bone handles, and bone chisels. Glass was cold worked as well in such lapidary techniques as grinding, cutting, and polishing. Some workshops employed craftsmen working in a variety of media. After casting relief beads, the beads were sometimes covered with gold foil.

It is a curious fact that, numerous as they are, Aegean glass beads are rarely found in Mesopotamia or Egypt in the Late Bronze Age. It is also interesting to note that the Mycenaeans were quite indifferent to Egyptian and Mesopotamian amulets and beads. This could stem from very different religious beliefs as well as the properties attributed to the beads. It will probably never be known just what those properties were; maybe protective, maybe health-restoring, but certainly ornamental. Beads used as burial offerings had symbolic meaning and the styles were very carefully chosen. Beads can show wealth or differences in rank, they can have cultic or religious significance, but most aspects of their function are lost in the mists of time.

Chapter 4. Beads in Scandinavia in the Early and High Medieval Periods, ca. AD 400-1200, by Johann Callmer. This chapter describes a period in Scandinavian history in which local beadmaking grew from a relatively

small craft to an important trade that supplied a growing demand. Glass beads are plentiful finds in Scandinavian graves from the Early to High Medieval periods, although they have been largely overlooked by Scandinavian archaeologists. Callmer relates that little research has been done on the symbolic language of these bead assemblages.

Beads were closely connected with women, their clothes and their metal jewelry, all of which probably defined their social role. Men wore beads too, but usually less of them, and they were probably used as amulets. Early on, imported Late Roman period beads were utilized. As local Scandinavian beadmaking grew in importance, the quantity of locally made beads increased well into the High Medieval period after which beadmaking declined. The quality of bead crafting varied widely as did the quantity produced. Eventually itinerant glass beadmakers began to make regular visits to places where people tended to congregate and made beads on the spot. But beads from other parts of Europe and the Middle East were also imported and mixed into the strands adding variety and interest.

The traveling beadmakers shared techniques and aesthetics. This may be one reason Scandinavian beads are recognizable through various time periods. They were highly skilled craft specialists who made something dearly wanted by the population. Scraps of glass were saved, sorted, traded, and used by the artisans as beadmaking material. Besides scrap glass, imported raw glass cakes or ingots were also utilized. The millefiore canes which provided off cuts for eye inlays for beads were both imported and locally made.

Chapter 5. Viking Age Glass Beads from Ribe, Denmark, in the Light of Ethnographic Research, by Torben Sode. Ribe, the oldest city in Denmark, was an organized trading center even before the city was established some time before A.D. 800. During the Viking period, traveling craftsmen made beads for people at the market in Ribe. In the mid-20th century glassworkers still made their rounds in the Middle East to places where their skills were in demand. That this phenomenon still exists after hundreds of years is what is documented in this chapter.

The earliest glass beads found at Ribe are blue and white monochromes which were preferred for about 20 years. They were made by the process of furnace winding which Sode describes as it is still used today in India, Turkey, and Egypt. About A.D. 720, there was a style change in the beads which lasted for another 40 years. Sode calls this The Blue Period in which mostly dark transparent blue glass was used. These beads were often decorated with dots, mosaic eyes, and contrasting colored threads. Sode describes the processes used now in Turkey and in Purdalpur, India, for applying such decorative elements.

Mosaic beads of a type called checkerboard were locally made. It was previously believed that these beads were imported or at least the checkerboard canes, but Sode feels that the techniques needed for making these checkerboard canes were within the capability of the Ribe glassworkers. In Purdalpur in the 1990s, glassworkers had different ways of making both mosaic canes and mosaic beads. These are clearly described with accompanying photos.

Toward the end of the 8th century, more and more imported beads came into use, including various segmented beads as well as those with gold and silver foil. Sode believes they were made in Arabia and the drawn beads found at Ribe probably were as well. Evidence for the production of drawn glass beads is not found in Scandinavia.

To see an ancient process for making drawn beads, Sode went to Papanaidupet in southern India in the 1990s. He describes the process that has changed little in the past 2,000 years, with the team of glassworkers and furnace stokers coordinating their moves like a well-timed machine. This production method is close to disappearing, Japanese seed bead machines having been installed in Firozabad, India.

Chapter 6. Sasanian Beads: The Evidence of Art, Texts, and Archaeology, by St. John Simpson. The Sasanian Dynasty began about A.D. 223, and the empire lasted for over four centuries until the Arabs conquered it in the 7th century. Simpson tells us how the people defined their social status with clothing, headgear, and various accessories. This article focuses on the beads people wore. Bead materials include precious stones, semi-precious stones, metals, natural organic materials, and artificial materials such as faience, ceramics, glass, and gypsum plaster. As Sasanian archaeology is relatively undeveloped, much is still unknown about what bead colors meant to the people, or what properties were attributed to the beads.

Beads from Sasanian graves at various sites are described, some of which can be broadly dated on the basis of the associated grave goods. A five-page appendix relates which beads are found at specific Sasanian sites and what materials they are made of. Simpson speculates that there was probably a local Mesopotamian glass bead industry associated with known glassware manufacturing places but so far there is no real evidence for this. No lapidary bead workshops have been found yet either.

Two very interesting misconceptions concerning purported Sasanian beads are corrected here. One relates to stamped glass pendants depicting classical mythological, Christian, or Jewish motifs. The other has to do with white quartz beads glazed with blue. Neither turn out to be Sasanian.

Chapter 7. Size Does Not Matter — The Nature of Celtic Bead-Making Sites, by Chris Robinson. It was previously believed that only larger fortified Celtic settlements (oppida) of temporate Iron Age Europe were home to specialized craftsmen, some of whom worked hot glass and made bracelets and beads for the community. Smaller nearby settlements have been largely ignored by archaeologists as far as these craftsmen are concerned. Robinson believes it is hard to ignore the growing body of evidence for smaller settlements hosting glassworkers and other craftsmen as well, and that they began working in their industrial media several hundred years before the emergence of the oppida.

Robinson's aims are to examine the evidence for glassworking at a smaller settlement called Le Patural and to relate this to other possible Celtic glassworking sites in this part of Europe. His second aim is to examine the evidence for glassworking as a kind of industrial specialization with special reference to the beginnings of urbanization in Late Iron Age Europe. The time period is the 3rd to 2nd century B.C.E.

The Celtic people produced soda-lime-silica glass of very high quality in a large range of colors. Their wares show an unusual degree of originality and invention. Translucent cobalt blue glass was a hands-down favorite for beads and bracelets. Translucent purple and opaque yellow were common as well, as was colorless glass. Possible sources for the colorants are explored.

The writer tells us that manufacture and distribution of products became more and more complex in Late Iron Age Europe, a time when the oppida came into being. Highly specialized industries with highly specialized craftsmen using specialized raw ingredients became a force in this period, with iron working and glassworking especially.

Chapter 8. Alkaline Etched Beads in Southeast Asia, by Ian C. Glover and Bérénice Bellina. Horace Beck's article on decorated carnelian beads published in the Antiquaries Journal in 1933 is still relevant and remains an important reference for anyone studying etched carnelian beads. Ernest Mackay published findings on these beads the same year. Since that time, more of these beads have been found extending their geographical range and increasing our understanding of dating and archaeological contexts.

Glover's main purpose for this article is to present an overview of the etched beads recovered in the last 20 or so years from excavations in Southeast and East Asia and he hopes to fill in their relationships with previously known etched beads of South Asia. Relatively recent finds from Eastern Asia are discussed.

It may be that beads were specially made in South Asia for the Southeast Asian market. At this time the authors believe all the bead types were made in South Asia and exported as finished products, giving evidence for trade between these regions in the first half of the 1st millennium B.C. The first unfinished etched beads from Southeast Asia seen by the authors came from central Burma. These are unperforated agate (and glass) beads.

The results of Scanning Electron Microscope (SEM) studies are discussed. This preliminary work has not yet allowed the identification of different manufacturing locations, but has revealed that great skill was required to produce high-quality etched beads.

The authors present an extensive discussion of the distribution of etched beads in Southeast and East Asia, including a number of archaeological sites in Thailand, Vietnam, Indonesia, the Philippines, Malaysia, Myanmar, and China. Various examples are shown. The symbolism and value of etched beads in Asian culture is also touched upon. They were likely indicators of wealth and status, but not much more can be inferred without further research.

Chapter 9. Powder-Glass Beads in Africa, by Margret Carey. The author begins her survey of powder-glass beads with an examination of Egyptian faience which, though considered a "glazed composition" as well, is different from true powder-glass. Faience beads typically have a glazed surface over a core formed by dipping the core in a slurry composed of silica, lime, an alkali, and copper, and then firing it. True powder-glass beads are not dipped.

Powder-glass beads have a long history in Africa. The first examples show up at Mapungubwe in what is now Zimbabwe in archaeological contexts dated to A.D. 970-1000. The so-called "garden-roller beads" are the earliest powder-glass beads in Africa and the only ones found in eastern and southern Africa. The bulk of the powder-glass beads made today come from West Africa, principally Ghana.

Carey then turns to the modern production of powderglass beads, starting with the distinctive Kiffa beads produced in southern Mauritania. The controversial and much-valued bodom beads from southern Ghana are discussed as are other beads produced in the Krobo region. The variety of African powder-glass beads is immense and even include striking representations of chevron beads (Fig. 9. 12).

Chapter 10. Present-Day Bead-Making in Ghana, by John Haigh. This article presents a concise description of the production of powdered-glass beads in a number of villages to the northwest of Kumasi in south-central

Ghana. The beadmakers are semi-independent craftsmen whose principal occupation is farming. Beadmaking, which purportedly was introduced to the area in 1957, is a secondary activity.

Chapter 11. Ancient Hard Stone Beads and Seals from Myanmar, by Barbie Campbell Cole. The ancient inhabitants of Myanmar, formerly Burma, utilized beads made from a wide range of materials. They are all generally locally referred to as Pyu beads, named after the people who dominated the region for the first nine centuries of the common era. Due to a lack of solid archaeological data, it is not known if any of them were produced locally, what their date ranges are, and which might be imports. As museum collections are small and poorly documented, the author has had to rely on an examination of beads in private collections in order to produce a database of the different types. Additionally, information was sought concerning the sources of the materials used in bead production to help identify local products.

The beads that have received the most attention are the etched ones of agate and carnelian, and those of decorated fossil wood. Etching is an ancient technique that has been used in South Asia for millennia, but such beads only appear in Myanmar somewhere between 500-200 B.C. Three different techniques were used to apply the decoration: etching, painting, and incising. Special attention is paid to the black and white etched pumtek beads so popular with the Chin in northwest Myanmar. While etched beads have thus far been considered imports from India, there is a growing body of evidence that suggests some were made locally. These include agate and carnelian beads carved into the form of conch shells, a number of which are etched.

Regarding local sources of beadmaking materials, especially agate and carnelian, there are numerous possible sites but it is difficult to locate them because there is little commercial interest in most semi-precious stones and their sources have become forgotten. Cole discusses the known sites and the local craftsmen who work the stone. She also covers intaglio seals and fake etched beads.

Reviewer's Assessment. This book should be in the hands of everyone who has an interest in other cultures, archaeology, and bead history. Each chapter is interesting, easy to read, and loaded with information. The writers have done a wonderful job in relating to us the stories told by the beads they have studied.

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