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2. THE NORDIC GLASS BEAD SEMINAR: A REVIEW, by Jamey D. Allen (1993, 23:4-10)

The Nordic Glass Bead Seminar was a three-day event held just outside the town of Lejre, west of Copenhagen, Denmark, from October 16th to 18th, 1992. The event was sponsored by The Historical-Archaeological Experimental Centre–a private institution with the goal of conducting practical experiments to explore, reconstruct, and explain the crafts, buildings, and physical conditions of the past. The centre is located on a large tract of beautiful, unspoiled land, and features a reconstructed Iron Age village, complete with domestic and farm-use buildings, agricultural fields, and workshops for weaving and pottery, as well as an iron forge. In addition, the grounds feature a cultic dance labyrinth, a sacrificial bog, and megalithic tomb (all constructed in areas of great beauty, with thought given to the nature of such Stone Age monuments).

In all, 18 papers or presentations were given, and some 36 participants attended–many of whom were from the European archaeological community. This reviewer was the only American in attendance, and was quite grateful that all papers were given in English. In most respects, the Seminar was conducted as an archaeological conference, and seemed very similar to the various bead conferences that have been held in America during the past ten years. However, this was the first opportunity that European researchers have ever had to gather together for the purpose of sharing information about bead studies.

The theme of the seminar was to consider the occurrence of glass beads that were prevalent during the Viking Era in Scandinavia (from ca. A.D. 700 to 1100), although papers were given that concerned earlier and later beads, and beads from outside Scandinavia proper. Some of the highlights will be mentioned below.

The seminar was opened by Morten Meldgaard, director of the centre, who introduced Ulf Nasman, a Danish archaeologist from Arhus University. Dr. Nasman gave an introductory talk related to the general topic of why it is helpful and necessary to study beads–but with the concern that possibly it might not be a good idea to accomplish this apart from traditional archaeology. He expressed the opinion that he was not entirely in favor of conferences that segregated beads from other artifacts in archaeological assemblages, though he welcomed the opportunity to perform such an experiment, and was pleased to be in the company of his interested peers.

Dr. Johan Callmer, the author of *Trade Beads and Bead Trade in Scandinavia, ca. 800 - 1100 A.D.*, was introduced as the moderator of the first-day program, and first presenter. He spoke on the subject of the inundation of oriental beads into Scandinavia in the 8th century. Dr. Callmer is regarded as the father of Scandinavian bead studies (particularly because of his well-researched and thorough dissertation, named above), and led the session with authority and with the respect of those in attendance. In his talk, he discussed the proposition that beads provide data for five points of archaeological interest: 1) beads are chronologically significant and crucial; 2) they are technological indicators, and indicate both technological diffusion and cultural preference; 3) they provide socio-economic considerations; 4) within grave finds they are a “display of wealth,” and had magical functions; and 5) they indicate exchange and trade

patterns between Europe and the Orient. He also discussed the problems resulting from lack of information regarding Middle Eastern beads and their technology. He proceeded to show slides of examples of various glass beads recovered from Scandinavian graves, including millefiori and gold-foil specimens. He characterized the trade in glass beads as proving that "cheap products" were concurrent with more important "luxury" goods, such as silks, precious metals, and pharmaceuticals. This reviewer engaged him in a lively discussion regarding the veracity of proposing that glass beads should be considered separate from other "luxury goods."

Mr. Per O. Thomsen of the Svendborg Museum discussed the possibility of local Danish glassworking as early as A.D. 200, showing specimens of both simple monochromatic and complex polychrome beads, the latter looking much like imports from the Middle East to this reviewer. He reported on sites in Denmark where various craft workshops have been excavated, and suggested that common remains of bronze and iron scraps (for remelting and reuse) and silver sheets may have provided products to be used for trade with the Roman Empire. The circumstances of recovered glass fragments and scraps may suggest the reuse of glass for beadmaking. Though it is difficult to conclude that glassmaking may have been so early in Denmark, crucible fragments with intact glass have been recovered and indicate glassmaking in the 7th century.

The seminar was scheduled to feature several speakers from former Soviet Bloc countries. Unfortunately, circumstances prevented many of them from attending at the last moment, to the disappointment of those present. However, Dr. Evalds Mugurevics of the Institute of Latvian History did attend, and presented a paper on Latvian glass beads from the 13th century–many recovered from areas around Riga. He presented slides of beads, discussing them in order of color frequency–the most common being yellow, followed by blue. He remarked that colors and compositions changed over time, and that red glass had been made with copper as a colorant. Professor Mugurevics proposed that soda-glass beads were imported, while potash-glass beads were probably of domestic manufacture.

Dr. Veronica Tatten-Brown of the British Museum spoke on small glass objects and pendants of the Roman Period in the museum–a collection which will be published in the near future. She reported that although the BM housed considerable collections of ancient glass beads, they were not organized or classified, and would not be included in plans for publishing. Nevertheless, a few pendants and beads were included and discussed. Among them were pieces that had been pressed in two-part molds, giving them relief designs such as a seated goddess, a child, a bunch of grapes, a dove, and an eagle.

Lars G. Hendricson of Stockholm, Sweden, spoke on the reuse of glass fragments from vessels in beadmaking. He showed examples of turned rims from bowls (which are already "perforated" from manufacture), and a segment from the claw of a claw beaker–all of which could function as beads. Although the reuse of broken glass products as beads is not exactly common, several persons present remarked that they too knew of similar instances where this reuse had occurred.

The second session began the following morning with Mr. Torben Sode who spoke on Islamic glass beads and their use as amulets and for protection against the evil eye. He noted specifically use by women and children, who are thought to be particularly vulnerable to negative influences, as well as on livestock. He reported that in several areas (i.e., Spain, Italy, and parts of Africa) glass itself is considered amuletic. Certain colors were associated with helping cure specific illnesses, or served specific functions. In addition, he mentioned that even vehicles such as taxis and trucks were protected by beads.

Mr. Kjeld Hansen gave a very interesting presentation on the use of imported beads by the native people of Greenland, screening photographs of people in regional costumes from different areas. He noted that East Greenland folk prefer color combinations featuring red, white, and blue, while West Greenland folk like to use all colors available to them. All these people were/are very proficient at making complicated beadwork constructions (often collars), traditionally strung on sinew and (now) nylon thread.

Dr. Julian Henderson of Sheffield University, an expert on ancient glassmaking, discussed the scientific investigation of glass, generally, and how to distinguish between primary glassmaking and secondary glassworking. He also talked about the interpretation of analyses to indicate relative age or period. Dr. Henderson showed slides of an archaeological dig at Frattesine in northern Italy, of quite early context (ca. l0th to 8th centuries B.C.), where glass crucibles have been recovered, as well as translucent greenish-blue wound-ring beads (often left connected as segment beads) and striped and eye beads. He made the rather controversial proposal that certain ancient British beads dating from between the 5th and 2nd centuries B.C., with precise spiral-line decorations in opaque yellow glass, had been made by a molding process. He believes he has found a bead within such a mold, intact.

Dr. Barbara Sasse-Kunst, assisted by Dr. Claudia Theune-Vogt, both of Germany, presented a paper concerning their scheme for classifying Merovingian Period glass

beads of the 6th to 8th centuries. These particular Frankish beads (recently the topic of two short articles in *Ornament* magazine) form a fairly distinct group within Medieval European beads–widely known in Germany and France, but appearing in other countries as well. The classification scheme is too complicated to discuss in any detail here, but provides another view of how bead researchers might approach creating a "universal classification system" for all glass beads.

Per Ethelberg, a doctoral candidate associated with the Sydsjaellands Museum in Denmark, discussed a cemetery at Skovgarde that was excavated in 1988. Eighteen graves were investigated from the Roman period between A.D. 180 and 250. The 1,313 recovered beads included intricate millefiori specimens with checker and Greek-wave patterns. It was apparent that beads were worn by women as hair decoration attached to pins. Necklaces were symmetrically composed from bronze and glass beads. Other pectoral arrangements were not necklaces, exactly, but rather strands that hung from bronze shoulder fibulae (or possibly attached to clothing under the fibulae). These were mainly composed of larger, complicated, spheroidal millefiori beads. Amber beads and pendants were also recovered.

The final session of the seminar dealt with practical technology, and began with a presentation by Professor Önder Kücükerman, from Mimar Cinan University in Istanbul, Turkey. He spoke on the subject of beadmaking in Anatolia, in ancient and, primarily, modern times. Professor Kücükerman learned about glass and beadmaking through a 25-year association with Venetian glassmakers. Much of the information he reported is published in his recent book, *Glass Beads: Anatolian Glass Bead Making*, a Turkish publication dealing with the modern beadmaking industry. The author attempted to connect ancient glass beads with those currently made, not by direct and continuous manufacture, but rather by the spirit of the continuing desire to possess these traditionally favored objects. Among the interesting facts he reported was the belief that there are beaches in Turkey where the sand can be collected and used as-is for glassmaking. The reason blue is the most common color is because it is the cheapest to make (albeit also quite popular). Red and yellow are expensive colors, and white is difficult to make. Often, colored glass bottles and jars are used to provide colors. He also showed the traditional kit used by beadmakers, consisting of 14 tools. Melon beads are formed by rolling a plastic bead across a corrugated surface (as also practiced elsewhere). The most interesting part of the presentation concerned his description of the furnace where beads are made (carefully described in his book). The furnace is fueled only with pine-tree roots since other fuels do not burn hot enough. A temperature of 900 degrees can be reached in as few as 40 minutes. Amazingly, the furnace is not vented and remains cool to the touch around its circumference! The inner top of the furnace is domed, which acts as a reflector of the heat, focusing it at the working apertures where the beads are made. At these ports, the temperature is 900 degrees, making glassworking possible. Professor Kücükerman reported that glass beadmaking is somewhat in decline due to the growing popularity of plastic beads. He hopes his book will encourage interest in Turkish beads, and proposed that future conferences might take place in Turkey.

Torben Sode presented a second paper pertaining to the contemporary manufacture of glass beads in India. His premise was that through investigations of modern but fairly primitive small industries it may be possible to come to a better understanding of the nature of ancient Scandinavian glassmaking. His discussion strongly mirrored the prolific writings of Peter Francis, Jr., who has often discussed Indian glass-beadmaking industries in the pages of *Ornament* so little more will be said here.

Partners in studio glassworking, Pete Hunner and Mai-Britt Jönsson, discussed the ancient manufacture of gold-glass beads, and demonstrated one of the possible methods by which such were made (Fig. 1). Participants found all this quite interesting, engendering much discussion.

In the absence of Rosmarie Lierke, Tine Aschenbrenner presented a paper asking the question, "Should we believe in experiment?" She suggests that researchers may not always be on the correct track when they suggest certain techniques for particular glass products. She mentioned specifically bowls that are thought to have been cast, which she has been able to duplicate in about 25 seconds on a spinning wheel. She also objected to suggestions of bead molding (as per Henderson, above) when no mold materials exist that allow easy separation of the product and maintain fineness of detail. She proceeded to present an alternate method of manufacture that would allow for precision of detail, and would be technically more simple and undemanding than molding. Ms Aschenbrenner presented her own thoughts regarding approaches to glass beadmaking, reporting on several experiments she conducted to see if it were possible to work glass apart from a furnace with a crucible of molten glass–working with small quantities that are melted and used in-process. Such practices would negate the archaeological expectation of finding actual crucibles at glassworking sites.

This reviewer was quite surprised to discover that the European bead researchers present were almost entirely unfamiliar with the substantial progress made in bead studies

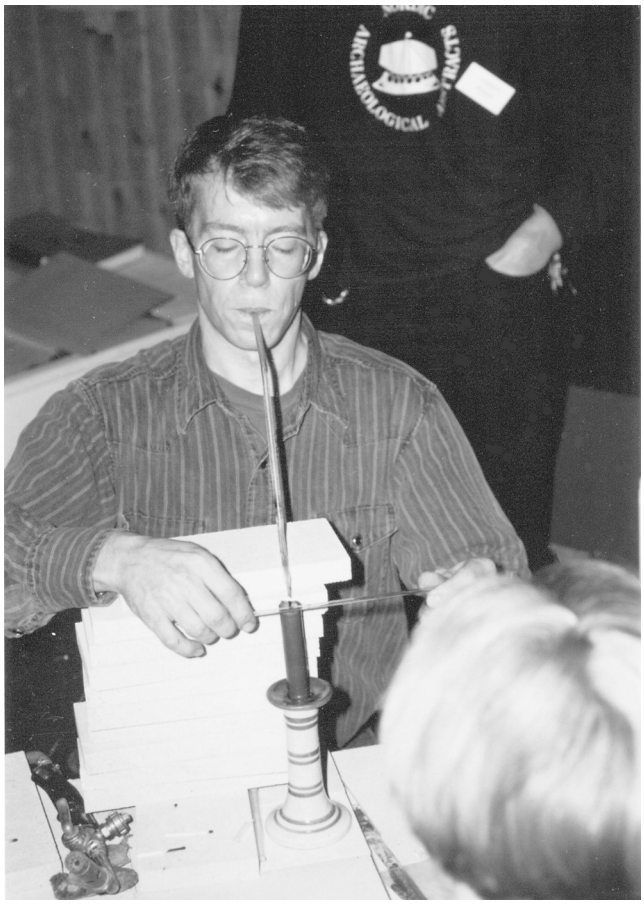

Figure 1. Pete Hunner demonstrating beadmaking using a glass blowpipe and candle (photo: J.D. Allen).

in Canada and America. They were not aware of publications like our journal *Beads* or *Ornament* magazine, nor that organizations such as the Society of Bead Researchers and the various other bead societies existed. They did not know that as many as five separate conferences had been conducted here in the past ten years. Thus, it would certainly be accurate to characterize European bead research, and researchers, as being some twenty years behind the times! This reviewer, having attended all previous American conferences, experienced many moments of frustration, listening to discussions of issues that should be considered dead or already dealt with (to at least some degree). There was much sense of *deja vu*, as participants conversed over the worth and validity of studying beads, and shared opinions about the best and most practical approaches. These, and others, were issues discussed in much the same tone and terms as long ago as 1982, during the Glass Trade Bead Conference held at Rochester, New York (and might have been considered tired old issues even then). The reviewer felt that many glassmaking terms and product names were misused or misunderstood, and that a degree of precision was lacking. Nevertheless, your reviewer held his tongue as much as possible, sat through the frustration, and lobbied for participants to become more familiar with work that has already been done. We may be sure that many European researchers will be joining their American and Canadian colleagues in the near future and will quickly catch up. Apart from this personal issue, the seminar was an outstanding success. The site was beautiful and fascinating, and worthy of a visit by anyone traveling in Denmark in the future. The food served was glorious and delicious–and no one could ask for better company among the enthusiastic participants and presenters. Director Morten Meldgaard and, especially, Seminar Coordinator Bente Draiby are to be congratulated and thanked for making this a fun and educational experience worth remembering. The seminar proceedings will be published in the near future, and will be announced in *The Bead Forum*.

3. VENETIAN GLASS BEAD PRODUCTION IN THE FIRST HALF OF THE 19TH CENTURY: RESEARCH AT THE VENETIAN NATIONAL ARCHIVES, by Alessia Bonannini (1999, 34:9-18)

While investigating the times and ways in which Venetian glass beads made it to the American Northwest, my friend and colleague Silvia Ferrari and I became convinced that it was necessary for us to look for documentary evidence at the very beginning of the trail: Venice and its archives. The first half of the 19th century, of particular interest for our research, appeared very little explored, most of the knowledge for that century being based on later publications, especially Bussolin, Cecchetti, Moschini, and Zanetti, all published from 1847 onward. While our research has proved unsuccessful as far as the trade of Venetian beads in America is concerned, it has revealed some unknown aspects of bead production and work organization in the period under study. This article presents some of the results of this research. The complementary part of the study is still in preparation by Silvia Ferrari who, it is hoped, will publish her results shortly.

The Venetian National Archives basically contain historical, political, economical, and statistical information about the glass beadmaking industry during the first half of the 19th century. Unfortunately, there is little or no information about the beads themselves. This inquiry into bead production, therefore, has resulted more in a picture of the glass beadmaking industry, its productive mechanism, and its social and economical implications rather than in the identification of the actual products, although mention of specific bead types is occasionally made.[1]