Polhemus, Richard R.
1987 The Toqua Site: A Late Mississippian Dallas Phase Town. *Tennessee Valley Authority Publications in Anthropology* 44.

Setzler, Frank and Jesse Jennings
1941 Peachtree Mound and Village Site, Cherokee County, North Carolina. *Bureau of American Ethnology, Bulletin* 131.

Smith, Marvin T.
1989 Glass Beads from the Governor Martin Site. Manuscript on file, Bureau of Archaeological Research, Tallahassee, Florida.

Smith, Marvin T. and Mary Elizabeth Good
1982 *Early Sixteenth Century Glass Beads in the Spanish Colonial Trade*. Cottonlandia Museum Publications, Greenwood, Mississippi.

Story, C.E.
n.d. Trade Beads and Other Relics of Historical Interest Found at Fort Moore (Savannah Town) and Silver Bluff. Manuscript on file, Augusta-Richmond County Museum, Augusta, Georgia.

82. SOME OBSERVATIONS ON "FUSTAT BEADS," by Maud Spaer (1993, 22:4-11)

Although the first issue of *Beads* came out in 1989, I encountered it only recently. As a student of ancient beads, I had not expected much of interest. I was pleasantly surprised to read Peter Francis' "Beads of the Early Islamic Period." Certain trailed glass beads, with and without eyes, found at Fustat in Cairo and published by Pinder-Wilson and Scanlon (1987:71, Fig. 22) are among the bead types discussed by Francis (1989:29, Fig. 2b, PI. ID). I, too, found these beads very interesting and, in fact, questioned Prof. Scanlon about them more than a decade ago. My observations differ somewhat from Francis' and I would like to comment on the manufacturing technique, distribution, and time span of these beads.

Manufacturing Technique

The "Fustat Beads" share many characteristics which would justify considering them to be a separate type or class of beads. At the same time, however, they exhibit numerous minor variations. It is best to concentrate on specific examples, especially when discussing manufacturing techniques. Two beads in the Israel Museum collection, one with and one without eyes, suit this purpose.

Bead #1: 77.12.822 Dobkin coll. L 23, D 22, P 6 (Fig. 1). It is possible that this same bead was published by Neuburg (1949:Pl. 32, top center). The bead surface is divided longitudinally into eight fields, each with a diagonal pattern of stripes forming a non-continuous zigzag pattern. The stripes differ in width from field to field, but conform to one repeated pattern in opaque colors: white/ brownish red/yellow/green/yellow/brownish red/white/black (?). At the edges, close to the perforation openings, are some small monochrome areas of translucent grayish-green glass. The striped pattern can be seen inside the perforation, which is quite neat.

I have not had the privilege of examining the broken beads found at Fustat and discussed by Francis (1989:29). Even so, I find a multi-seamed technique of wedge-shaped sections more likely than one of fused cylindrical rods as proposed by Francis. I suggest that a flat, monochrome, grayish-green bar about 6 mm high was completely covered with trails, being left uncovered only at the sides. (A drawing process had certainly taken place previously, but it is difficult to know if the opaque trails were drawn separately or with the translucent glass; the latter seems more likely). The trailed bar, probably first cut from a larger bar, was cut diagonally in alternate directions into wedge-shaped sections. Every second section was turned upside down. Eight wedges were then fused around a rod, resembling the segments of a citrus fruit (Fig. 2). While the glass was still hot on the rod, it was tooled into its final barrel shape, exposing some of the monochrome glass at the edges.

Bead #2: 90.83.375 L 19 D 19 P 4 (Fig. 3). The bead surface appears to be divided into eight fields. Six have a pattern of stripes in white/brownish red/yellow/green/ yellow/brownish red/white, placed on monochrome grayish-green glass which forms an additional, seemingly black, stripe. Three fields have a pattern of three eyes each. The eyes have been cut from a mosaic cane having a black center and white, brownish-red, and yellow rings, and one outer ring of striped green and yellow.

Like Bead # 1, this bead is likely to have been fused from eight, striped, wedge-shaped sections. Two of the three rows of eyes were placed on top of two striped sections, completely covering them, including the monochrome ends. The third row of eyes was put on top of the junction of two striped sections, covering a little of one section and much of the second (Fig. 4).

This bead is formed with somewhat less care than Bead #1, as the stripes do not always form a zigzag pattern. The colors, although arranged in the same way–minus the added black–are more garish. We might be tempted to call this more "typically Islamic."

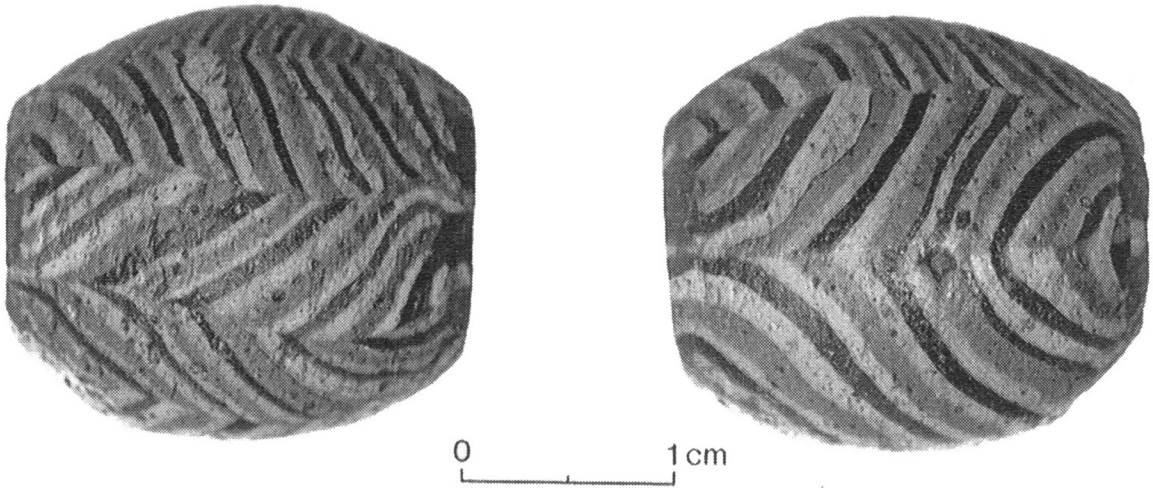

Figure 1. Both sides of "Fustat Bead" #1.

Distribution

Whole necklaces of "Fustat Beads," with and without eyes, appear quite frequently in collections and trade (Numismatic Art 1987:no. 311; Rütti and others 1981: no. 478, top third from left). They are first and foremost found in Egypt. The Fustat finds and the Petrie collection, University College, London (see also Shiah 1946:418, Pl. 4, 85b), demonstrate this fact. There is some evidence indicating that such beads were manufactured at Fustat itself (Pinder-Wilson and Scanlon 1987:71). The distribution is wide and includes Megiddo, Palestine (Lamon and Shipton 1939:Pl. 92, 36–without eyes); Hama, Syria (Riis and Poulsen 1957:68, Fig. 212A–without eyes); Corinth, Greece (Davidson 1952:nos. 2461-2462–without eyes); Torcello (Venice), Italy (Gasparetto et al. 1982:no. 4–with eyes); Yugoslavia (Andrae 1973:174, no. 113–with and without eyes); Austria (Andrae 1973:174, no. 107–without (?) eyes; Russia (Andrae 1973:167, no. 14; 176, no. 141; 177, no. 149–all without eyes (?); and probably also L'vova 1983:94, nos. 24-25–with eyes).

The beads do not belong to the common finds of Scandinavia, and although they are found in various parts

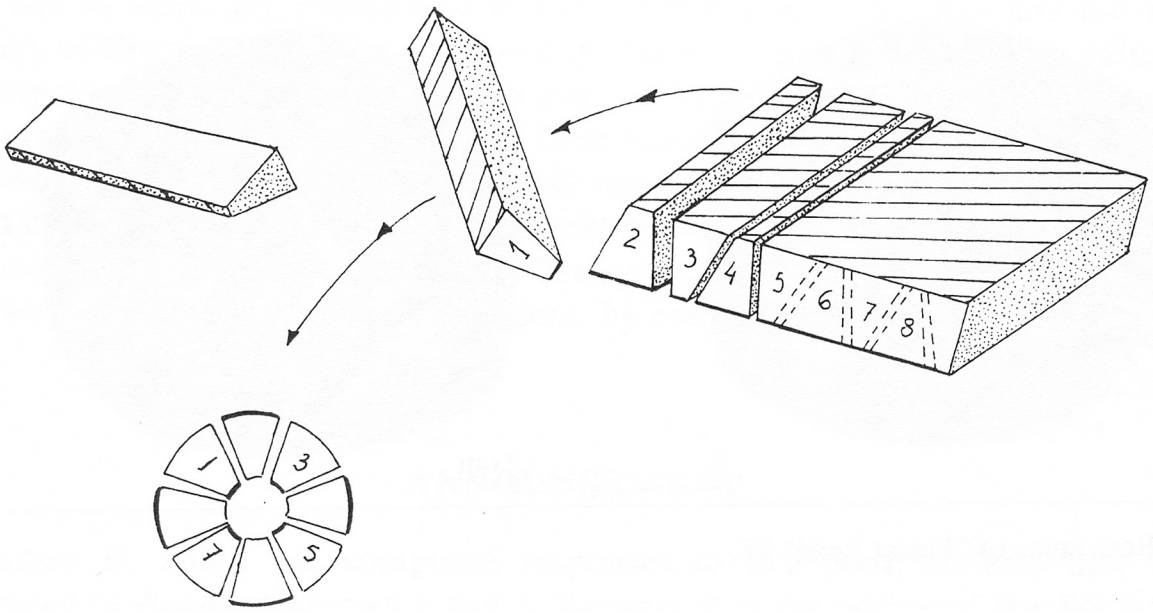

Figure 2. Schematic reconstruction of the probable method of manufacture of "Fustat Bead" #1. A bar covered with diagonal trails on both its upper and lower sides was cut into wedge-shaped sections. Eight such sections were then fused, reminiscent of the wedges of a citrus fruit.

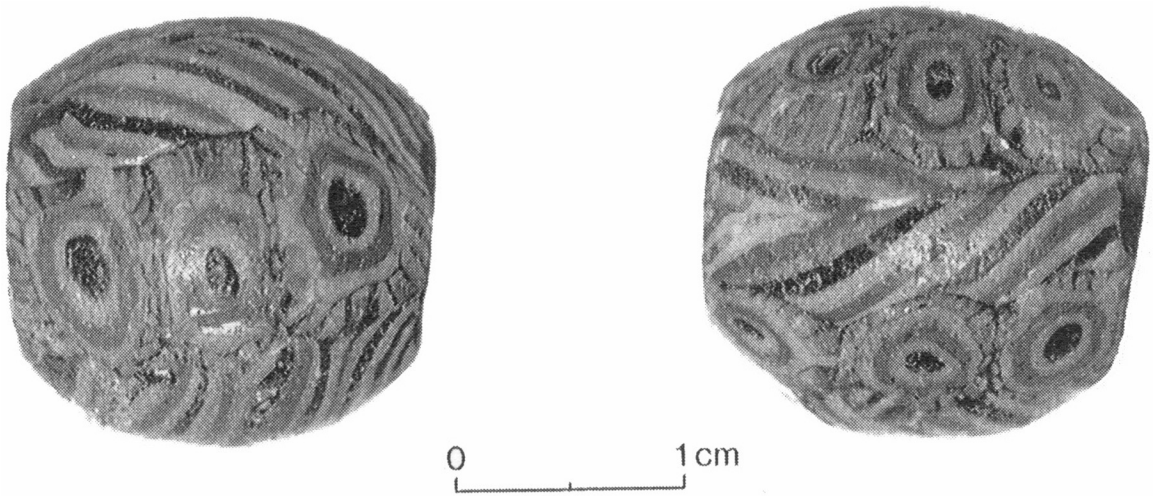

Figure 3. Both sides "Fustat Bead" #2.

of Russia, they do not reach the very north. The negative evidence is best exemplified by the absence of "Fustat Beads" in Callmer's (1977) thorough study of the beads of Scandinavia from A.D. 800-1000. I have personally gone over the Staraja Ladoga material from the 9th-11th centuries (L'vova 1968, 1970) without finding anything resembling the "Fustat Beads." Pinder-Wilson and Scanlon provide a reference to Lamm (1941:Pl. 14) implying that such beads reached Birka, Sweden. However, the "parallels" are "ordinary" mosaic beads and not the type discussed here.

Time Span

The majority of the "Fustat Beads" are from the 9th-10th centuries A.D. Pieces published by Gasparetto et al., Andrae (at least the majority), Pinder-Wilson and Scanlon, and probably also Riis and Poulsen, among others, belong to this period. Gladys Davidson (1952), on the other hand, dates the Corinth beads, similar to Bead #1, to the 5th-7th centuries. It is difficult to determine how well-based this dating is. Scanlon fixed the date of the published Fustat finds at ca. A.D. 900 (Pinder-Wilson and Scanlon 1987). When discussing these pieces, Francis (1989:29) stressed that "investigators should become aware of them as temporal indicators." I quite agree, provided that whenever we discuss "Fustat Beads" in general, we are referring to a time span of between one and two centuries, rather than "a short time around A.D. 900." This conclusion is based on the quantity of beads recovered and their many variations.

Figure 4. The eyes of "Fustat Bead" #2 completely cover sections 1 and 4 and parts of sections 6 and 7.

At most times, beads with and without eyes coexisted, but it is likely that the earliest beads without eyes predate those with eyes. Our Bead #1, which differs in color nuances and quality of workmanship from Bead #2, is likely to belong to the early stages of the 9th-10th-century time range. We must even be open to the possibility that the earliest examples predate this period and that some may have been made in Europe rather than Egypt.

At present, this suggestion is more an expression of caution than a working hypothesis. The caution is based on an awareness that many good northern-European beads of the 9th-10th centuries, such as the "checkerboard" and red-capped millefiori beads (Callmer 1977: bead group G), had precursors in Roman Egypt, but are absent from Islamic Egypt. Some Egyptian beads of the 9th-10th centuries A.D. might well have been inspired by styles which were originally non-Egyptian.

I agree with Francis (1989:29-30) that both drawn and mosaic beads belong among the products of early Islamic Egypt. The eye cane used on Bead #2 is one example of quite good mosaic work, and there are apparently other examples of good-quality mosaic beads found in the Japanese excavations at Fustat.

The beads of the 9th-10th centuries comprise an intriguing chapter in the history of beads. Particularly striking is the quantity and quality of the beads found in northern Europe. Francis' association of "Fustat Beads"

with this region is not unnatural. But the fact that a bead type known to have been made in Egypt did not reach Scandinavia is significant. European researchers have often pointed to Egypt and the eastern Mediterranean as the origin of their superior bead finds without citing sources (e.g., Andrae 1973:156-165).

It is becoming increasingly clear that it would be unrealistic to look for one source, or a very few sources, for the high-quality beads of the 9th-10th centuries. They were made in various parts of Europe, excluding the northernmost parts of the continent, where only fairly simple beads were made, but including areas north and south of the Alps and further to the east. They were also made in various parts of the Levant, in Persia, and further east.

As yet, only a few bead types can be unequivocally associated with any of these regions and the beads of the 9th-10th centuries can be seen as a difficult and largely unsolved puzzle. "Fustat Beads" are among the few pieces which can be fitted into this puzzle with relative certainty.

References Cited

Andrae, Reinhard
1973 Mosaikaugenperlen. *Acta Praehistorica et Archaeologica* 4:101-189.

Callmer, Johan
1977 Trade Beads and Bead Trade in Scandinavia ca. 800-1000 AD. *Acta Archaeologica Lundensis* 4(11).

Davidson, Gladys R.
1952 *Corinth XII. The Minor Objects*. Princeton.

Francis, Peter, Jr.
1989 Beads of the Early Islamic Period. *Beads: Journal of the Society of Bead Researchers* 1:21-39.

Gasparetto, Astone, with R.B. Mentasti, A. Dorigato, and T. Toninato
1982 *Mille Anni del Vetro a Venezia*.

Lamm, Carl Johan
1941 *Oriental Glass of Mediaevel Date found in Sweden and the Early History of Lustre-Painting*. Wahlstrom and Widstrand, Stockholm.

Lamon, Robert S. and Geoffrey M. Shipton
1939 *Megiddo I*. University of Chicago Press, Chicago.

L'vova, Zlata
1968 The Ancient Glass Beads of Staraja Ladoga I. *Arckheologicheskij Sbornik* 10. *Materialy i issledovanija po archeologii SSSR*. The Hermitage, Leningrad (Russian text).
1970 The Ancient Glass Beads of Staraja Ladoga II. *Arckheologicheskij Sbornik* 12. *Materialy i issledovanija po archeologii SSSR*. The Hermitage, Leningrad (Russian text).
1983 The Technological Differentation of Glass Beads found in the Varninsky Burial as a Basis for their Relative and Absolute Dating. *Arckheologicheskij Sbornik* 24:90-110. *Materialy i issledovanija po archeologii SSSR*. The Hermitage, Leningrad (Russian text).

Neuburg, Frederic
1949 *Glass in Antiquity*. Salisbury Square, London.

Numismatic Art and Ancient Coins
1987 *Ancient Art of the Mediterranean World, Catalogue* 5. Zurich.

Pinder-Wilson, R.H. and George T. Scanlon
1987 Glass Finds from Fustat: 1972-1980. *Journal of Glass Studies* 29:60-71.

Riis, P.J. and Vagn Poulsen
1957 *Hama Fouilles et Recherches 1931-1938. Vol. IV, 2: Les verreries et poteries medievales*. Copenhagen.

Rütti, Beat et al.
1981 *3000 Jahre Glaskunst*. Exhibition catalogue, Kunstmuseum, Lucerne.

Shiah, N.
1946 Ancient Egyptian Beads. Unpublished Ph.D. dissertation. London University, London.

83. A POSSIBLE PROSSER T-HOLE BEAD FROM JAPAN, by Roderick Sprague (1986, 8:10-11)

In the fall of 1985, a student from Nagaokakyoshi, Japan, returned to school and presented me with a gift of a necklace made of glass beads. The necklace was given to him by a former student of his and was reported to be from a "tomb." The modern appearance of both the beads and the "original" string would make this provenience very unlikely. However, one type of bead (n = 3 strung, 1 loose) is worthy of comment.

This bead type is opaque white, basically spherical but slightly flattened at the poles, and 12.5 to 15.0 mm in diameter. It has a definite equatorial ridge. The perforation is T-shaped, 12.5 mm long for the cross bore (the cross arm of