Powdered-Glass Beads and Bead Trade in Mauritania

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Artisans in Kiffa and several other towns in southern Mauritania have produced a unique kind of powdered-glass bead for several generations. Commonly called "Kiffa beads," they generally copy the designs and forms of ancient beads, as well as more recent European examples. This article discusses their history, manufacture and relevance in Mauritanian culture. While production of the beads recently ceased for a time, several women have again begun to make them though the new varieties are not as inspiring as their predecessors.

INTRODUCTION

The Islamic Republic of Mauritania is located in northwest Africa (Fig. 1), bordered on the west by the Atlantic Ocean, on the north by Morocco and Algeria, on the east by Mali, and on the south by Senegal. It is a resource-poor Saharan nation with a population of about 2.3 million, its only notable export being iron ore. Mauritania is one of the poorest countries in the world, with a per-capita income of less than $500 a year. It is currently somewhat isolated and unknown in the international community, in part caused by troubles in the north where local independence fighters (the Polisario) once used it as a staging ground for incursions into land claimed by Morocco, and also in the south where ethnic strife and competition with the Senegalese for ever-diminishing natural resources has recently caused a great amount of friction. A lack of infrastructure makes Mauritania a challenging place to visit for the rare tourist.

The drought-plagued land within Mauritania's borders was not always as inhospitable as it is now. Intense palaeolithic and neolithic activity has been well documented, and is plainly evidenced by the widespread surface scatter of stone tools and other artifacts, including beads made from shell, stone and ostrich-egg shell (Vernet 1983:395). This indication of prehistoric human occupation attests to a time when the area had more of a savannah-like topography, when the climate was less harsh, and sufficient flora and fauna existed to support larger human populations.

Important north-south trade routes were already well established before the great cities of the Ghana Empire reached their zenith somewhere between the 8th and 11th centuries. Goods coming from the Near East and North Africa left by caravan from Sijilmassa, Morocco, terminating at the trading towns of southern Mauritania (Elfasi 1988:375). The promise of vast amounts of gold, coming from south of the Senegal River, attracted traders to the area where it was exchanged for salt and other goods, such as glass beads.
In the past, a much larger number of the inhabitants followed a nomadic way of life. Groups moved from place to place in the desert following seasonal forage for their goats and camels, and to conduct agricultural activities in oases where water was accessible on or near the surface. Today, the widespread traditional nomadic way of life, as well as the days of trading caravans, are things of the past as long-standing drought has caused many people to seek a more sedentary life in existing towns.

GLASS BEADS, TRADE AND FOLK TALES

The Mauritanians’ love affair with glass beads began in pre-Islamic times when the great cities of the Ghana Empire flourished. Located along major trade routes, these towns were settled by indigenous pastoral Berbers, Arab traders and local black populations. The barter of gold and, to a lesser extent, slaves for imported goods made this area home to the first of three great Empires that eventually expanded to beyond the Niger River situated further east. Market towns such as Tegdaoust, Kumbi Saleh and Walata, all located in the southern part of Mauritania, became home to traders, craftsmen and scholars.

Although many of the glass bead types recovered at these ancient sites can be assumed to have been imported from glassmaking centers in the Near East and Egypt, there is also compelling evidence for local glass beadmaking. Metallurgy was perfected at an early date within the Ghana Empire, including the use of the lost wax technique for making jewelry (Elfasi 1988:377), thus indicating a technical capacity that easily could have lent itself to glassworking. More specifically, bead molds and glass fragments dating to the 8th century have been discovered at Tegdaoust (Vanacker 1984:49). Among the beads that may have been locally made are small, drawn, monochrome specimens that often display a plano-convex form (flat on one side, rounded on the other). The cobalt blue variety, called nila (Pl. IIIA) in Mauritania, is found in great numbers at these sites. The beads are not uniform in size, the perforations are constricted, and most of them are flat on one side. It has recently been suggested that these and similar beads of different colors are actually "re-cooked" versions of what are referred to as "Indo-Pacific trade beads," dating to the same period (Peter Francis, Jr. 1994:pers. comm.). Whether remade or produced from imported glass stock, it would appear that the art of working glass into beads in Mauritania has its roots in very ancient times.

Despite the later importation of European glass trade beads, those found at sites dating to the heyday of the Ghana Empire (8th-11th centuries) are the most cherished by Mauritanian women. Internal trade in these and prehistoric stone beads — such as amazonite, which was mined and worked in Mauritania (Vernet 1983:395) — is both lively and intensive. Every market in Mauritania has at least one bead dealer (Fig. 2) whose merchandise attracts women both rich and poor. The beads are recognized locally as very ancient,
indeed, and stories attest to the reverence and esteem with which they are held.

One of these stories tells us that some 50 or 60 million years ago, before Adam, there existed entire mountains made of colored stones: "It must have been an atomic bomb that turned the world topsy-turvy, thus creating the sand and the dunes where one can now find souvenirs of these wonderfully colored stones.... these are the purest of all beads ..." (Delarozière 1985:72).

Another story gives the name koust el arf, or "imitation of the unique," to certain ancient glass beads. According to legend, the secret of making these beads was confided originally to the prophet Souleiman (Solomon). He was given the right to make only one of these beads, which became the mother bead, the noble bead, from which all others would be patterned (Opper and Opper 1989a:9).

There is a time-honored custom called il-chmar or "imitation" among Mauritanian women. It is a contest of honor among women whereby they compete with each other to establish who is the prettiest and richest as determined by their individual wealth in clothing and adornment, including ancient glass beads. One tale recounting this ceremony tells of a contest between two wealthy women, each one aided by her sister. Among the riches displayed by the sisters were gold, silver, ancient beads, sumptuous clothing, camels and maidservants. One of the women possessed a large chest full of gold jewelry and rare beads. The chest was said to have been so large that a woman could fit into it, and it was renowned throughout the country. Yet another tale mentions a competition between two other women who, to demonstrate their riches, dressed up their seven young and pure maidservants as princesses, resplendently adorned in gold jewelry and rare old beads completely covering their bodies from head to toe (Leriche and Hamidoun 1952:345-346).

According to Mauritanian women, there is undeniably strong magic contained in certain ancient glass beads. They are instrumental in protecting the owner from the evil eye, and many of them also contain curative properties. It is believed that the magic can be more quickly and effectively transmitted to the body by holding the bead under the tongue (Khadi Mint Ouma 1989:pers. comm.). Those beads considered to be the most precious are also placed in camel butter, then into curdled sugar milk (a national delicacy) to maintain them and enhance their luster (Delarozière 1985:73).

MAURITANIAN POWDERED-GLASS BEADS

It is most important to keep the preceding information in mind when describing what are now commonly referred to as "Kiffa beads" (Pl. IIIB). Located in the south-central part of the country, the town of Kiffa has been recognized historically as the principal center, though not the only one, for the fabrication of these unique powdered-glass beads (Fig. 3). Noted among the beadmakers in this area are women of the Ebel Sidi Mahmoud tribe (Opper and Opper 1989b:33). Appropriately, the town of Kiffa is located near the ruins of Kumbi Saleh, a major medieval city believed by many scholars to have been the capital of the Ghana Empire, and one of many sites where women go to search for ancient treasures.

Using visual comparisons, there is no doubt that Kiffa beads emulate the patterns and colors of ancient glass beads recovered from the area (Pl. IIIC, see also back cover). Examples of many of the ancient glass beads recovered and traded in Mauritania have been found at sites throughout what used to be the civilized world. A striking example appears in Callmer's work on 8th-10th-century glass beads in Scandinavia where

Figure 3. Known centers of powdered-glass beadmaking in Mauritania.
two beads in particular (Callmer 1977:90, 96, color plates II and IV) bear unmistakable likenesses to certain forms and motifs found among many Kiffa beads. One, which is actually of Scandinavian origin, is round with compound symmetrical designs and compound eyes (Fig. 4). The other is found throughout Europe, North Africa and even on routes heading toward China. It is cylindrical, opaque dark blue with yellow-red-white-blue striped ends and middle, and compound blue-yellow-red-white eyes with rectilinear rays, exactly resembling its Kiffa bead counterpart (Fig. 5).

Mauritanian powdered-glass beadmakers have also borrowed from other sources, most notably older Italian millefiori beads. The resemblance between the imported “trade beads” and Kiffa copies is striking (Fig. 6), indicating a high regard for millefiori which goes back several generations.

Kiffa beads were first brought to the attention of the general public by the noted French archaeologist, Raymond Mauny, in 1949. Subsequent books by Gabus (1976) and Delarozière (1985) shed further light on this remarkable beadmaking industry. Although derived from what is said to be an ancient tradition, fabrication of Kiffa beads probably began sometime in the 19th century, continuing into the 1970s. To our knowledge, no beads of this type have been reported from an archaeological context, nor have there been any reports of Kiffa beads being recovered from ancient sites. Only a handful of Mauritanian women currently carry on the tradition of making powdered-glass beads, and the shapes and techniques have changed somewhat. The industry was actually spread throughout southern Mauritania, and it is said that the technique originally came from Tichitt, a village near the ancient site of Tegdaoust which existed during the 8th-15th centuries (Gabus 1982:121). In the past, Kiffa beads were traditionally made for and worn by lower caste women who could not afford to buy the very expensive ancient beads.

The classical method of making a triangular, polychrome, powdered-glass bead, as reported by Mauny (1949:116-117), demonstrates the mastery of a relatively simple technique, using a minimum of materials. These include pieces of common colored
glass or monochrome beads; a stone mortar and pestle; mollusc shells or other objects serving as containers; stiff grass or twigs; saliva; gum arabic; a tin sheet and can; sand; firewood or charcoal; a razor blade; and a needle.

With these materials, the bead is made thus:

1. Pound any ordinary glass into a fine grayish powder in a stone mortar. This will become the core of the bead upon which colors will be applied (Pl. IID, top).
2. Select common monochrome glass beads or other glass of the desired colors. Pound this into a fine powder and place each color in its own container.
3. Wash each powder separately with water and allow to dry.
4. Make a support for the future bead by fastening two blades of stiff grass together in the form of a cross (Fig. 7). The longer blade forms the perforation and also acts as a handle during the fabrication process.
5. Moisten a small quantity of the grayish powder formed in step 1 with saliva and, occasionally, a bit of gum arabic. Place the resulting paste onto the grass support and work it into a triangular form.
6. Smooth the paste with a razor blade and let it dry.
7. Use saliva and gum arabic to make pastes of different colors. Apply these to the grayish core using a needle.
8. Place a small amount of cleaned, moistened sand on a thin flat piece of metal (usually from a tin can), and allow it to dry.
9. Prepare a fire and wait until it consists of glowing embers.
10. Delicately place the bead on the bed of dried sand and set it on the embers. Because of this, the side resting on the sand will come out flatter, less brilliant and not as smooth as the rest of the bead.
11. Cover the bead with another piece of metal, such as an empty sardine can, to create an enclosed oven. Cover it with embers.
12. Bake for about 40 minutes, tending the fire to keep it consistently hot. In this way, a beadmaker could produce up to three beads a day.

Variations of this method exist. Beadmakers are increasingly using inexpensive European beads of monochrome glass to serve as the core onto which the other colors and designs are applied. Old trade beads, such as compound 18th- or 19th-century “green-hearts” with a brick red exterior and a transparent green core, have also been used on occasion, as have ground and smoothed pieces of bottle glass (Mauny 1949:116)(Pl. IID, bottom).

Pottery sherds with appropriately shaped holes drilled into them, very similar to examples excavated at Tegdaoust, have been employed to hold several beads during baking (Fig. 8, left). Certain beadmakers used a smaller sherd with only a single concave depression in it to bake round Kiffa beads. A small ball of decorated powdered-glass paste is placed in the depression (Fig. 8, right) and, as the glass begins to fuse, the ball is removed from the oven and pierced with the aid of a strong sharp needle fashioned from wire. The bead is removed and replaced several times during the process, the beadmaker taking care to cover the oven with embers each time (Gabus 1982:121-124). Once baked and cooled, the bead exhibits a smooth and lustrous appearance.

Erroneously lumped with what are referred to as Kiffa beads is a distinct group of powdered-glass beads (Fig. 9, Pl. IVA) made in the town of Oualata. Inhabited continuously since the medieval period, it is located to the east of Kiffa near the border with Mali (Fig. 3). The modern beadmakers of this town have created a style that is simpler, yet no less striking, than the actual Kiffa style. Made using the same techniques, beads from Oualata are small and always round or cylindrical. They are rarer than Kiffa beads.

**SYMBOLS AND MOTIFS**

A little bit of Saharan magic is incorporated into every powdered-glass bead made in Mauritania. Each beadmaker employs her own interpretations of the great themes of life when designing a bead. Every line, dot, circle, square and triangle contains symbolic references to man and his place in the universe. It is said that glass, in and of itself, is a great protector,
warding off evil with its reflective properties (Ouma 1989:pers. comm.).

Triangular Kiffa beads are stylized representations of the eye. Coupled with decorative dots or “eyes,” they provide a double dose of protection against bad luck and evil. Patterns, as well as shapes, can also be symbolically important. For example, the zigzag or chevron pattern of the different colored stripes found on many Kiffa beads indicates the path of running water or “the path of life.” One ethnic group in what is now extreme southern Morocco uses the chevron pattern to symbolize the path of camel urine, in turn symbolizing fertility (Opper and Opper 1989b:34).

Colors alone on Kiffa beads have the following symbolic meanings:
- gray (core): the molar of a maid servant
- white: a pure young girl
- green: ostrich bile
- yellow: termite eggs, symbol of affability
- blue: benediction of heaven
- red: color of Mediterranean coral (Delarozière 1985:85).

Colors combined with certain geometric forms other than lines symbolize the following:
- light blue circle: the infinite universe
- green circle: hope (of riches)
- red circle: a great love
- yellow circle: the sun
- different colored squares: site chosen for a camp
- small triangles: tents of a camp
- zigzag lines: water
- dot on superior end of bead: the north star
- cross on inferior end of bead: the four rivers of paradise
- large triangle: the grand tent of God, herder of the universe (Delarozière 1985:8).

Given or traded as bringers of joy and tenderness, individual beads are often bestowed with special names by their makers such as: tender (bead), sweet, happy, song, wind, tea foam, clear water, flower of the dunes, turtle shell, bright star and bird song (Delarozière 1985:10; Ouma 1989:pers. comm.). Magic and happiness are the most important non-physical ingredients incorporated into a bead during the fabrication process. Through these beads,
considered by many to be among the most alluring and beautiful of all known beads, female Mauritanian artists have left for posterity little pieces of their Saharan heritage.

CURRENT REFLECTIONS

It was around the end of the 1980s that Kiffa beads became highly desirable collector’s items outside Mauritania. As this wave of popularity grew, more and more beads began to appear for sale in the U.S., Europe and Japan. Most of them were brought out of Mauritania, one by one, by African dealers, although several full strands have appeared over the years. Prices for these beads have skyrocketed to the point where a polychrome triangular specimen (seemingly the type most sought by collectors) in excellent condition can fetch up to $60 U.S. Because of the beauty and rarity of these beads, and because the number produced is relatively small, it can be assumed that the older classical forms will continue to realize relatively high prices in the foreseeable future.

As far back as the 1970s, Gabus (1976:52) bemoaned the fact that he was interviewing women who were among the last of the great powdered-glass beadmakers of Mauritania. Until just recently it appeared that no new apprentices were learning the technique from an aging generation of artists, and that working powdered glass was fast becoming a dying art form (It should be remembered that Kiffa beads represent an industry uniquely internal to Mauritania, and that the style was beginning to fall out of favor at the time when their popularity was growing elsewhere in the world).

However, undisputed evidence points to a revival of the powdered-glass technique in Mauritania over the past year or so. “New” Kiffa beads (Pl. IVB) have mysteriously begun to appear on the international market. These are markedly different in appearance from the older ones, indicating the use of less-perfected techniques by beadmakers whose experience is not as profound as their predecessors. An examination of the new beads, as well as reports from dealers and collectors alike, reveals that they do not meet the standards of beauty and perfection that collectors have come to expect. The surfaces of the new beads are often mottled and lumpy, and the colors are not nearly as vibrant and striking as those of the older ones. The minute attention to detail is lacking, and the flow of forms and colors is not nearly as inspiring.

It can now be reported that a newly revived group of six beadmakers (one is experienced, the other five are apprentices), realizing the potential for external trade and profit, is currently working together in the town of Kiffa, producing beads for sale outside the country. This “cooperative” was started by and is currently being managed by a non-Mauritanian entrepreneur/bead enthusiast residing in Senegal. A strand of 20 newly made round beads was recently offered for sale in Dakar for $275 (Kirk Stanfield 1994:pers. comm.).

In addition to the new powdered-glass beads now being made in Kiffa, others of even lesser quality have been observed coming from Mali. It is altogether possible that beads are being made in this neighboring country as a branch of the Ebel Sidi Mahmoud tribe, originally from Kiffa and known for its beadmakers, is situated in western Mali (Gabus 1982:121). Most, if not all, examples of this type are small, round and even “lumpier” and less appealing than those being made in Kiffa.

This new evidence points to the revival of a unique form of self expression, this time for monetary rather than personal reasons. Whether or not this for-profit approach will influence the amount of love and magic woven into each bead remains to be seen.

CONCLUSION

The powdered-glass technique of making beads in West Africa is not unique to Mauritania. Both Nigeria and Ghana also boast similar industries. As is the case in Mauritania, recent archaeological evidence points to current practices in the region being based on traditions that are many hundreds of years old, raising the possibility that Mauritanian powdered-glass beadmaking is a recently revived activity. Historical and technical similarities among the different regional industries are compelling enough to suggest that powdered-glass beadmaking is an ancient and widespread art. Only intensive systematic research will reveal if there is a common heritage, and pinpoint the time when glass beadmaking actually began in Mauritania and, more generally, in West Africa.
REFERENCES CITED

Callmer, Johan

Delarozière, M.F.

Elfasi, M. (ed.)

Gabus, Jean
1982 Sahara: bijoux et techniques. A la Baconnière, Neuchâtel, Switzerland.

Leriche, A. and Moktar Ould Hamidoun

Mauny, Raymond

Opper, Marie-José and Howard Opper

Vanacker, Claudette

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Plate IIIA. *Mauritania:* Ancient nila beads (all photos by H. Opper).

Plate IIIC. *Mauritania:* Ancient glass beads (left) and similar Kiffa powdered-glass examples (right).

Plate IIIB. *Mauritania:* Polychrome triangular Kiffa beads, probably the most exotic of Mauritanian powdered-glass beads.

Plate IIID. *Mauritania:* Kiffa beads with paste cores (top), and cores formed of "greenheart" beads and bottle-glass (bottom).
Plate IVA. *Mauritania*: Powdered-glass beads made in Oualata, Mauritania.

Plate IVB. *Mauritania*: Old (left) and new (right) Kiffa beads.