BEYOND THE NUBIAN GOLD: MEROITIC BEADS BETWEEN THE FIFTH AND SIXTH NILE CATARACTS

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More than 2,300 beads and pendants were excavated from 16 graves at the Berber Meroitic cemetery (BMC) during the 2009-2013 seasons. The site lies between the Fifth and Sixth Cataracts, some 150 km north of the kingdom's capital, Meroe. The cemetery has been dated to between the 2nd century BC and the 3rd century AD. Next to some ostrich-eggshell, stone, and silver beads and pendants, the bead assemblage is dominated by faience, glass, and metal-in-glass, with the latter type (gold-in-glass and silver-in-glass beads) constituting a quarter of the finds. Some of the metal-in-glass specimens belong to one of the most sophisticated bead types, being decorated with an impressed lozenge motif on one side and the figurative motif of Harpocrates on the other. In general, the diversity of the bead types makes the Berber assemblage comparable to other Meroitic collections from Lower Nubia to the north and from the Meroe royal cemetery to the south. It also contributes new bead types to Meroitic beadwork.

INTRODUCTION

Nubia had the ancient world's richest supply of gold and the ancient Egyptian word for gold, *nub*, might be the origin for the name (Fisher 2012). Nubia encompasses the southern end of Egypt and northern Sudan where it is divided into Lower Nubia and Upper Nubia. Different regions within Nubia are separated by a series of cataracts with the First Cataract being south of Aswan and the Sixth Cataract north of modern Khartoum. From the 3d century BC until the 3rd century AD, the Meroe Kingdom probably extended as far south as the confluence of the Blue and White Nile and beyond, while in the north Lower Nubia became the intermediary with Egypt. Meroe was the center of a kingdom whose elites participated in the religious, political, and economic life of Egypt and the greater Mediterranean world (Yellin 2012:258).

Berber lies between the Fifth and Sixth Cataracts, some 150 km north of Meroe (Figure 1). The Meroitic cemetery at Berber (BMC) has been the object of systematic rescue operations since 2009 by the National Corporation for Antiquities and Museums (NCAM), with logistic support from the Section Française de la Direction des Antiquités du Soudan (SFDAS) (Bashir 2010, 2014, 2015; Bashir and David 2011, 2015). ^{14}C dates and an important review of the ceramic material have revealed a development of the necropolis from around the 2nd century BC to the 3rd century AD (Bashir 2015; Bashir and David 2011, 2014, 2015) (Table 1). The cemetery thus dates to about 2,000 years ago, a period when the Meroitic (Kushite) Kingdom controlled a large territory and exerted a great deal of power there. Although the Kushites often built pyramids to bury their dead (Dunham 1957, 1963), the Berber graves are mostly underground. It is, however, likely that some tombs were covered by a low mound of gravel, a common feature in some Meroitic cemeteries (Bashir and David 2015). The Berber graves contain impressive artifacts, comparable with finds in Meroe cemeteries (Bashir 2015). The presence of such items stems from the important geographical location of the Berber region which served as a corridor linking the Nile and the Red Sea and the southern part of the kingdom of Kush with its northern part, making it a crossroad for trade caravans. This is supported by archaeological evidence which includes ancient routes passing by Berber and some way stations located along the desert route to Berber (Bashir 2015).

About 2,320 beads and pendants, including some fragments, were collected from 15 of the tombs excavated between 2009 and 2013. The beads were mostly found dispersed in the graves. Some were found around the necks (BMC 16-267) or forearms (BMC 31-260) of the deceased. In a few cases, beads and pendants were found threaded on string fragments (BMC 02-20, BMC 12-96, BMC 31-258, BMC 32-254) or attached to each other (BMC 01-12). An overview of the bead materials and types is provided below, as well as the arrangement of beads on preserved strands.

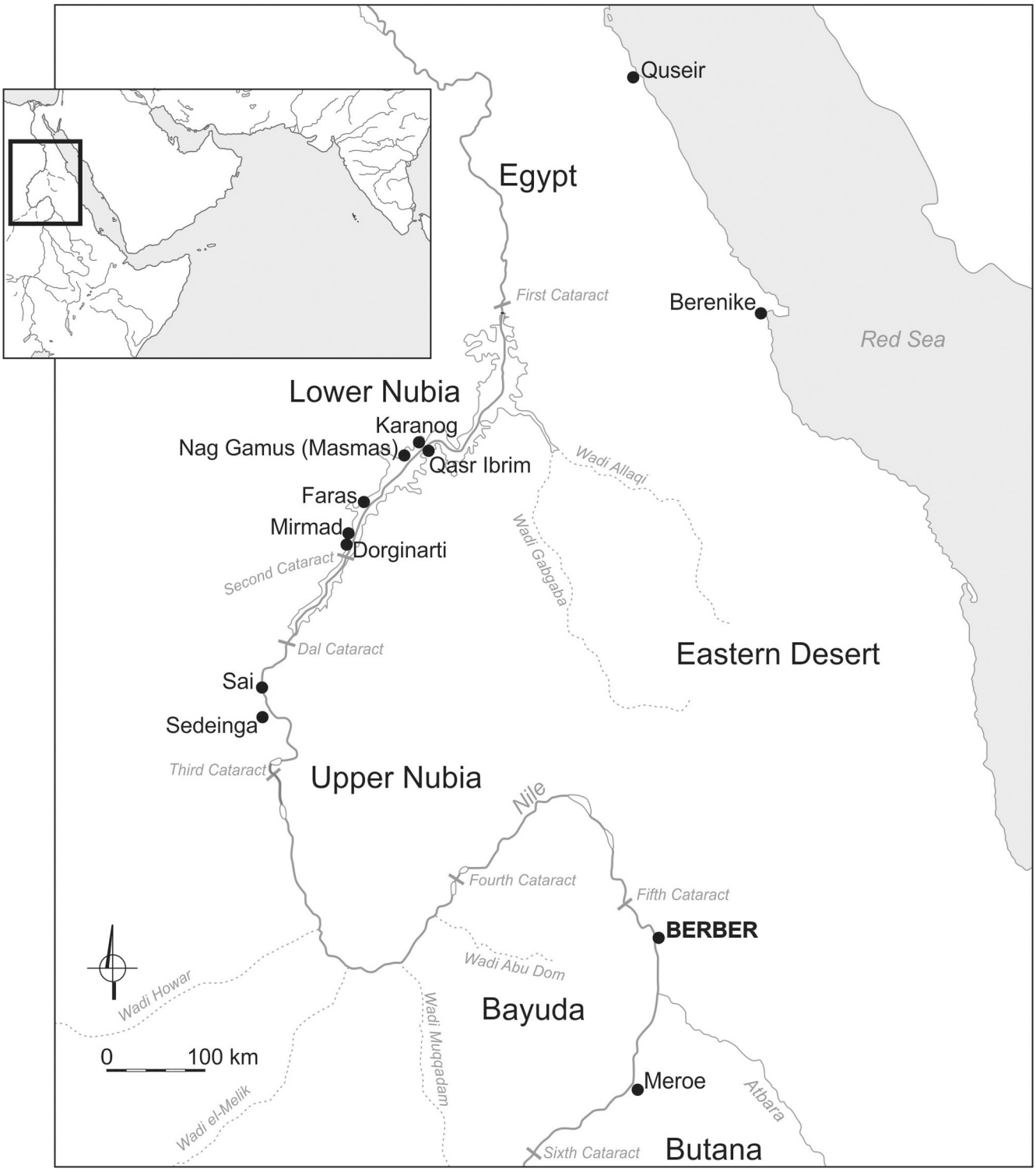

Figure 1. Nubia showing the locations of the sites mentioned in the text (drawing: Szymon Maślak).

THE BERBER BEADS AND PENDANTS

The recovered beads (central perforation) and pendants (off-center perforation) are made of organics (ostrich eggshell, bone), stone (carnelian, quartz), metal (silver), and man-made materials (glazed composition/faience, glass, and metal-in-glass).

Table 1. Berber Tomb Chronology.

Chronological Sequence	Tombs with Beads	BMC Bead Numbers
Second half of 1st c. - beginning of 2nd c. AD / 2nd c. - beginning of 3rd c. AD	BMC23	BMC23-268
Second half of 1st c. - beginning of 2nd c. AD	BMC01, BMC10, BMC31	BMC01-12, BMC10-97, BMC31-258, BMC31-259, BMC31-260
2nd c. - beginning of 3rd c. AD	BMC04, BMC16, BMC27, BMC32, BMC33	BMC4-35, BMC16-267, BMC27-266, BMC32-254, BMC32-255, BMC33-256
3rd c. AD	BMC12	BMC12-20p, BMC12-22, BMC12-23p, BMC12-96, BMC12-144p
Undated	BMC02, BMC05, BMC09, BMC17, BMC30	BMC02-20, BMC02', BMC05-39, BMC9-87, BMC17-253, BMC30-263
Based on Bashir and David (2011: Figure 6, 2015:99).		

Organic Materials

The Berber collection contains four ostrich-eggshell beads found in Tomb T05 (Figure 2: BMC 05-39 b) and six tiny wedge-shaped pendants made of the same material (Figure 3: BMC 33-256f; Figure 4: BMC 33-256 a; Figure 5: BMC 33-256 l). This shape was usually reserved for glass or stone materials. The use of ostrich eggshell in the manufacture of these tiny pendants is rather surprising and there are no parallels as yet.

In contrast to the Napatan period, ostrich-eggshell beads are rare finds in Meroitic bead assemblages. Still, they were recorded at some Meroitic sites in Lower Nubia (Griffith 1924: Plate LXIII:19; Then-Obłuska 2016), in the region between the Second and Third Cataracts (Then-Obłuska 2015a, 2016), and in the Fourth Cataract region (Then-Obłuska 2014: Plate 2.138, cat. 144).

One long tubular bead is made of bone (Figure 2: BMC 05-39 a), possibly the phalanx of an animal.

BMC 04-35 ***BMC 05-39***

Figure 2. Beads from graves T04 (BMC 04-35) and T05 (BMC 05-39) (modern stringing) (all photos by author).

Figure 3. Beads from grave T33 (BMC 33-256) (modern stringing).

Stone

The 63 stone beads and pendants are made mainly of carnelian. There are tiny, highly polished carnelian beads drilled from one end (Figure 5: BMC 33-256 d; Figure 6: BMC 02-20 a; Figure 7: BMC 17-253 e; Figure 8: BMC 27-266 c; Figure 9: BMC 32-255 e), as well as wedge-shaped pendants made of carnelian and steatite (Figure 4: BMC 33-256 e, f). While stone beads are present at many Meroitic sites, pendants of this material were found at Faras in Lower Nubia (Griffith 1924: Plate LXX:7). Another stone pendant, of a shape usually described as "poppy" (Reisner 1910, I: Plate 70) or "lotus seed-vessel" (Beck 1928), is smaller than its slender New Kingdom forerunners (Figure 4: BMC 33-256 g).

The ends of a long cylinder fashioned from carnelian were simply cut off and left unpolished (Figure 3: BMC 33-256 a). Drilled from one end, the perforation has a truncated-cone shape. Carnelian cylinders are a well-recognized type during the Meroitic period (Then-Obłuska 2015a: Figure 4: T293 c1 – Sedeinga; OIM E24324 – Dorginarti; Museo Arqueológico Nacional, Madrid 1980.98.59 – Nag Gamus). The Berenike port site on the Red Sea is another find site (BE00/33/019#21).

Teardrop pendants with globular bases are made of carnelian, white quartz, and black stone (Figure 9: BMC 32-255 k-m). They are among the most characteristic features of the Meroitic assemblages. When found strung, they alternate with a few tiny beads of glass, metal-in-glass, faience, or carnelian (Then-Obłuska 2015a: Figure 10 T196 d1 – Sedeinga; Then-Obłuska 2016: Figure 9.1, 10.1 – Saï).

Metal

Almost 60 beads and pendants are made of sheet silver. Tiny pendants are made of two soldered metal sheets (Figure 4: BMC 33-256 h; Figure 5: BMC 33-256 j), each of which was shaped on a form to produce a convex surface, leaving the interior hollow. The threading holes run horizontally through the non-soldered upper part. Objects of a similar shape from the Meroitic site at Faras are said to be made of shell. They are described as flower beads suspended through the upper hole (Griffith 1924: Plate LXX:5, object 564).

Six long fusiform beads are made of folded sheet metal, most probably silver (Figure 6: BMC 02-20 e).

Faience

Faience beads, numbering almost 1,130, constitute half of the Berber assemblage. A few types can be distinguished. Small blue and green cylinder discs predominate (Figure 3: BMC 33-256 e; Figure 5: BMC 33-256 f; Figure 7: BMC 17-253 a; Figure 9: BMC 32-255 g; Figure 10: BMC 09-87 a; Figure 11: BMC10-97; Figure 12: BMC 12-20 d, BMC 12-96 a; Figure 13: BMC 16-267 f; Figure 14: BMC 31-258 b). Some faience beads are similar in size, although they are more oblate in shape. These are green (Figure 5: BMC 33-256 g) or blue in color (Figure 8: BMC 27: 266 b; Figure 14: BMC 31-258 h).

Blue short cylinders appear to have been glazed resting on one end (Figure 6: BMC 02-20 b); while one end is flat and lacks glaze, the other is rounded. The round end and the sides are covered with a thick layer of blue glaze. Large, long, blue cylinders were found in Tombs T05, 30, and 27 (Figure 2: BMC 05-39 c; Figure 8: BMC 27-266 a, BMC 30-263).

In general, all the faience bead types are well known in Nubian Meroitic assemblages (Then-Obłuska 2015a, 2016). Still, large long cylinders are almost absent at Meroitic sites in the region between the First and Third Cataracts. A few long faience beads are, however, illustrated from graves at Sedeinga (Then-Obłuska 2015a: Figure 6:T255 d1, T238 c17) and some were observed in Faras (Griffith 1924: Plate

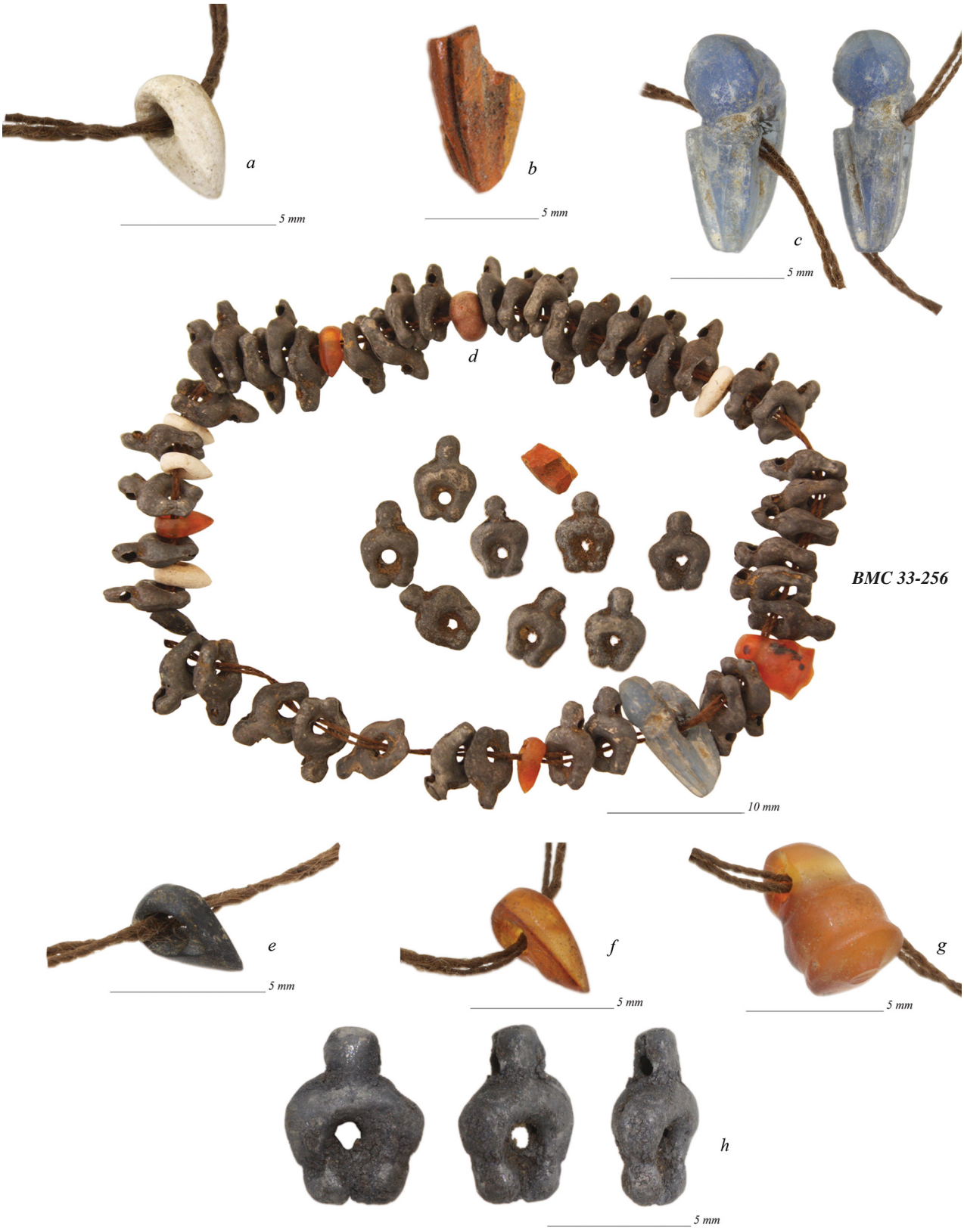

Figure 4. Beads from grave T33 (BMC 33-256) (modern stringing).

Figure 5. Beads from grave T33 (BMC 33-256) (modern stringing).

Figure 7. Beads from grave T17 (BMC 17-253).

LXIII:21). There, several such beads were found strung together on the left arm of a burial (Griffith 1924:174). Long blue cylinders were recovered from the Meroe Cemetery W at Begrawiyya; e.g., they were found in Tomb 179, but associated with a subsidiary burial (Dunham 1963:178, Beg. W 179, object 22-2-564c, d, MFA 22-2-564). Others were found in thieves' debris (Dunham 1963:155, Beg. W 453, MFA 23-2-303f) and in the completely plundered Grave Beg. W 464 (Dunham 1963:280, MFA 23-2-329a).

Figure 6. Beads from grave T02 (BMC 02-20) (original and modern stringing).

Drawn Glass

Almost 450 beads are made of glass. The majority of the drawn specimens consist of single- and multiple-segment beads which are usually small and oblate. They are monochrome, mostly translucent dark blue (Figure 5: BMC 33-256 h; Figure 8: BMC 27-266 d; Figure 9: BMC-255 j; Figure 14: BMC 31-258 d; Figure 15: BMC 01-12 e, BMC 12-20 b, BMC 12-23 a, BMC 12-96 c, BMC 12-144p c, BMC 16-267 c), opaque red (Figure 4: BMC 33-256 d; Figure 5: BMC 33-256 a; Figure 9: BMC-255 f; Figure 12: BMC 12-20 c, BMC 12-23 c, BMC 12-96 b, BMC 12-144p a; Figure 14: BMC 31-258 b) and translucent green (Figure 5: BMC 33-256 m; Figure 9: BMC-255 h; Figure 12: BMC 12-20 a; Figure 14: BMC 31-258 e; Figure 16: BMC 23-268 b). Others are yellow (Figure 8: BMC 27-266 h) and translucent red and amber (Figure 13, BMC 16-267 a). A few are slightly larger and opaque orange (Figure 5: BMC 33-256 b; Figure 14: BMC 31-258 a). Monochrome segmented beads are well known at other Meroitic sites in Nubia and

Figure 8. Beads from grave T27 (BMC 27-266) and T30 (BMC 30-263).

Early Roman sites in Egypt (Then-Obłuska 2015a, 2015b, 2016). Some yellow beads are cone shaped (Figure 14 BMC 31-258 f) with parallels in Nubia (Silverman 1997:302-303; Penn Museum, Inv. E7925).

Other beads are compound, made of two layers, usually red over colorless glass (Figure 5: BMC 33-256 k; Figure 8: BMC 27-266 e; Figure 9: BMC-255 d). Such beads have been found at the Early Roman Red Sea port site in Berenike (Then-Obłuska 2015b: Figure 4.18; Zych 2011, cat. no. 72, figures 12-69) and at Meroitic burial sites of the 1st-3rd centuries in Nubia (Then-Obłuska 2015a: Figure 13: S041/l – Sedeinga; Then-Obłuska 2016 – Saï). Some larger drawn beads have applied decoration in the form of "eyes" (Figure 10: BMC 09-87 b, d). The eyes are made of mosaic glass cane sections. One bead is made of striped glass (Figure 5: BMC 33-256 e). A few beads were made by cutting a drawn glass tube. The ends of some blue beads appear to have been fire polished (Figure 13: BMC 17-253 b).

Drawn Metal-in-Glass

About 600 drawn metal-in-glass beads were found at Berber. Also called sandwich beads, they are made of two layers of glass with gold or silver foil in between. While some production tubes were straight, others were segmented on grooved open-face molds after being heated to facilitate their being snapped into single or multi-segment beads.

Some large globular (Figure 10: BMC 09-87 e) and barrel-shaped (Figure 7: BMC 17-253 d) gold-in-glass beads have fire-polished ends, as do small, globular silver-in-glass beads (Figure 7: BMC 17-253 c). Silver-in-glass tubes were simply cut into long cylinders (Figure 15: BMC 01-12 b). Gold-in-glass beads consisting of single and multiple globular segments are small (Figure 5: BMC 33-256 c; Figure 8: BMC 27-266 g; Figure 9: BMC 32-255 c; Figure 13: BMC 16-267 d, e; Figure 14: BMC 31-258 g; Figure 15: BMC 01-12 c, BMC 02-20 d, e; Figure 16: BMC 23-268 c;) and large (Figure 3: BMC 33-256 b; Figure 8: BMC 27-266 j; Figure 12: BMC 12-23 b; Figure 14: BMC 31-259; Figure 15: BMC 01-12 a). Some segmented gold-in-glass beads are long tubes (Figure 12: BMC 12-22 a, BMC 12-23 e) or spindle-shaped with collars at both ends. The latter beads come in both long (ca. 20 mm) (Figure 3: BMC 33-256 c; Figure 14: BMC 31-260) and short (ca. 10 mm) forms (Figure 12: BMC 12-23 d). Tabular beads were made of gold- and silver-in-glass (Figure 8: BMC 27-266 f; Figure 9: BMC 32-255 a; Figure 12: BMC 12-23 b, BMC 12-96 d).

Whereas the metal-in-glass beads described above are common finds at other Meroitic sites, Tomb 32 yielded several that are exceptionally rare. These include tabular gold-in-glass beads that exhibit a pressed decoration in the form of a lozenge pattern on both sides (Figure 9: BMC 32-255 b). A similar bead with a lozenge pattern on one side and protruding dots on the other was found in Tomb 75 at the Lower Nubian site of Mirmad (Presedo Velo et al. 1970: Type 169; MAN T75.1980.96.431.169).

Larger, long, tabular gold-in-glass beads found in the same tomb have a lozenge net pattern on one side and a figurative motif on the other (Figure 9: BMC 32-254). The figure that appears on at least 12 specimens and their fragments represents the deity Harpocrates, a boy with a finger to his mouth and a horn of plenty at his side, wearing a crown over the lunar disk. Luxurious gold-in-glass beads with diverse figurative motifs and dotted or lozenge patterns are rare on the whole. They have been found primarily in Nubia (Dunham 1957:108, Figure 73, Plate 66F – Meroe; Shinnie and Bradley 1980: Item 2515, Figure 68 – Meroe; Woolley and Randall-McIver 1910:75 – Karanog; Egyptian Museum in Cairo, JE 40103; Pamela Rose 2016: pers. comm.; British Museum object 86.2.5/20 – Ibrim), but also in Egypt, southern Russia, and Iran (Spaer 1993:16, 2001: cat. no. 234-5; Whitehouse 2005: cat. 72; Metropolitan Museum, NY, MET 10.130.2479_EGDP017279, MET 10.130.2476, 10.130.2477). Beads decorated with figurative

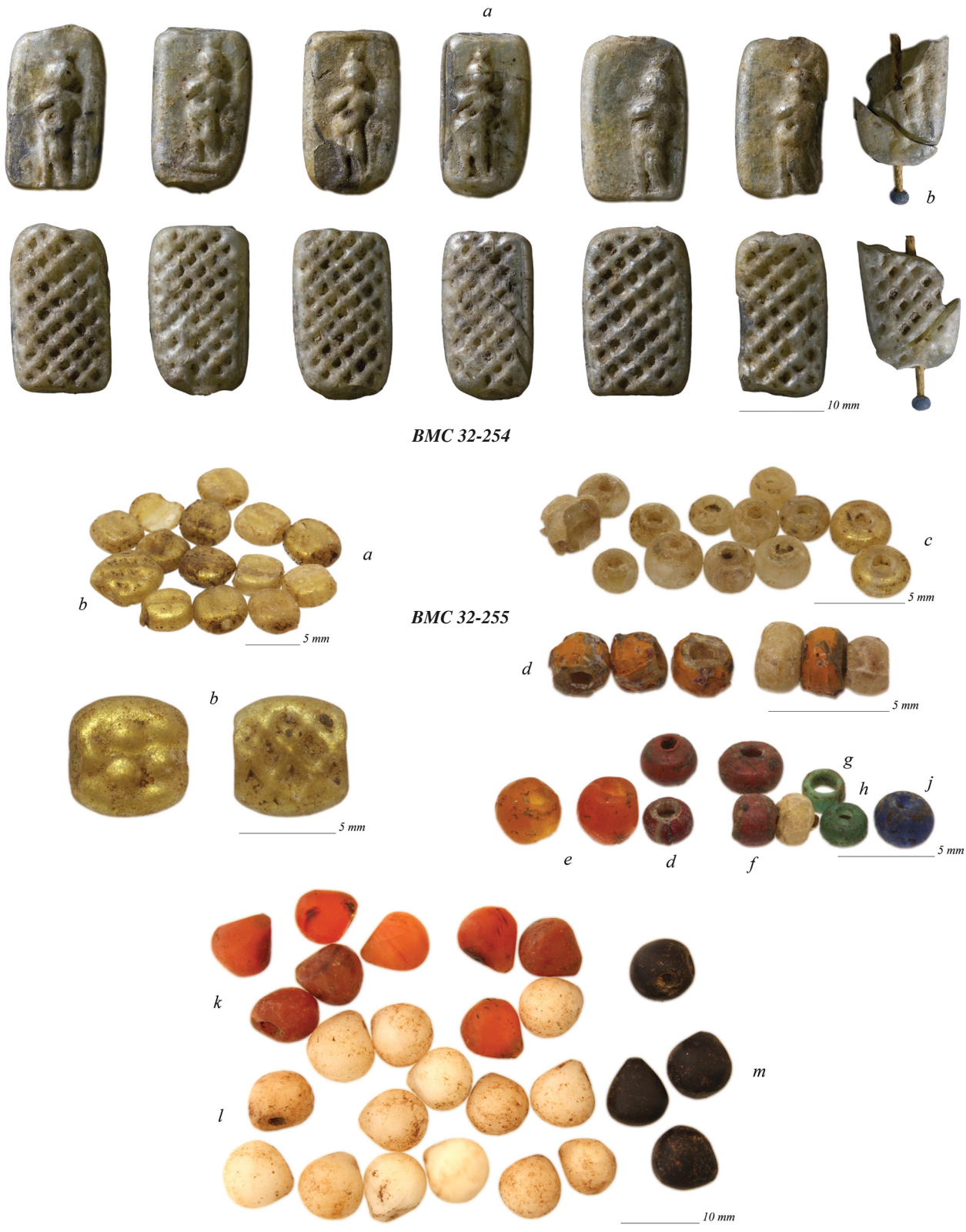

Figure 9. Beads from grave T32 (BMC 32-254, -255) (original stringing).

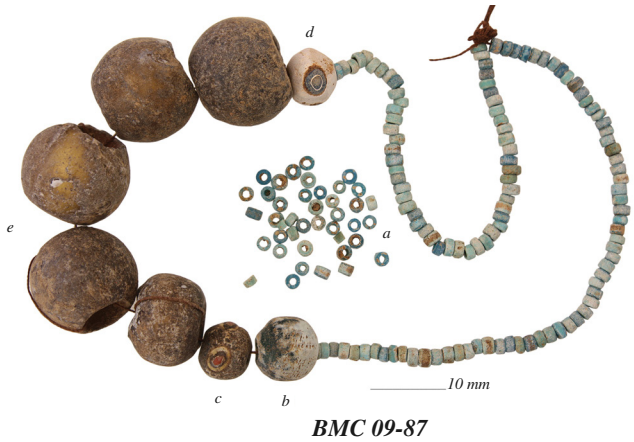

Figure 10. Beads from grave T09 (BMC 09-87) (modern stringing).

motifs are found in contexts dated between the second half of the 1st century BC to the middle of the 1st century AD (Lankton 2003:55, Figure 6.2; Spaer 1993:20).

Wound Glass

Several white globular beads appear to be of wound construction (Figure 16: BMC 23-268 a). Discernible seams next to some perforations may represent traces of a tool that facilitated removing the bead from the mandrel.

Other Glass Bead Manufacturing Types

In one case lapidary technology was used to manufacture beads in the shape of self-shank buttons. They are perforated through a narrow longitudinal projection on the back. Contrary to their modern function of fastening

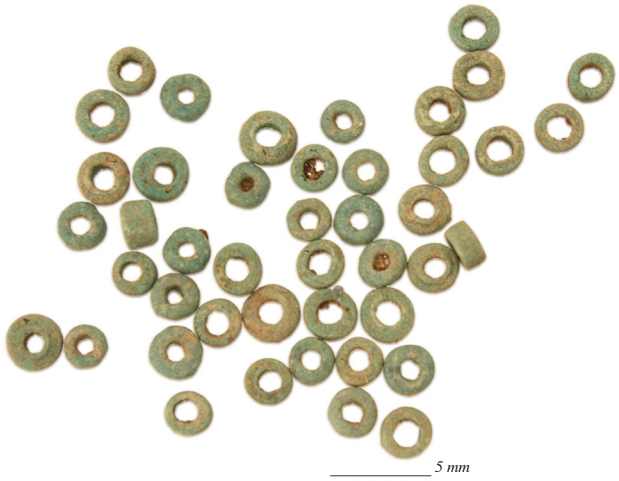

Figure 11. Beads from grave T10 (BMC 10-97).

Figure 12. Beads from grave T12 (BMC 12-20, -22, -23, -96, -144p) (modern and original stringing).

textiles, in Meroitic Nubia shank buttons were threaded on strings together with beads and pendants. The Berber finds are made of blue and orange glass. The single blue specimen represents an *Uraeus* amulet with sun disk (Figure 4: BMC 33-256 c). A decorated piece made of opaque orange glass is a fragment of a similar amulet (Figure 5: BMC 33-256 b). Self-shank buttons of blue glass in the shape of a ram's head with sun disk have recently been recorded in the treasure at Qasr Ibrim (Rose, Then-Obłuska, and Pyke 2019). At Qasr Ibrim, a scorpion bead made of nacre features a similar projection on its undecorated side (Rose, Then-Obłuska, and Pyke 2019). Nevertheless, *Ureaus* amulets made of stone and metal and perforated in a similar way have been recorded within the Saï Meroitic assemblage (Then-Obłuska 2016: Plate 2:13), in Nag Gamus (Almagro 1965: Figure 226.2, MAN 1980.98.335), and Meroe (Dunham 1963:228-229, Figures 159:3, W 120, 163, Figure 118e, W 125).

Recovered from BMC 04, 97 beads lack a whitish core which is usually discernible in faience beads (Figure 2: BMC 04-35). Therefore these tiny beads, ca. 2 mm in diameter, must have been be made of a vitreous material, but the technique of manufacture remains undetermined.

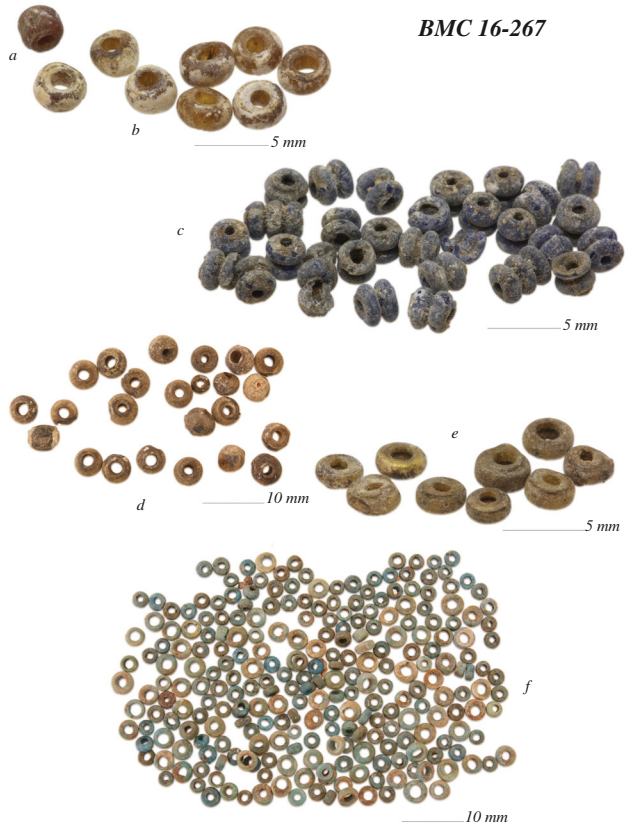

Figure 13. Beads from grave T16 (BMC 16-267).

Figure 14. Beads from grave T31 (BMC 31-258, -259, -260) (original stringing).

BEAD-STRAND PATTERNS

Many short fragments of strung beads have survived at Berber. There are two main patterns: small beads forming a uniform string and larger beads alternating with one or a few smaller ones.

The first pattern has faience beads threaded together (Figure 14: BMC 31-258h) or small tubular gold-in-glass beads alternating with collared ones (Figure 12: BMC 12-23, left).

Examples of the second pattern are diverse. On one specimen, cone-shaped glass beads alternate with smaller faience, glass, and gold-in-glass ones (Figure 14: BMC 31-258). A gold-in-glass figurative bead and a tiny blue glass bead are strung together (Figure 9: BMC 32-254, right), as are tabular silver-in-glass beads alternating with green faience and red and blue glass beads (Figure 12: BMC 12-23 a-c, BMC 12-96). Another specimen consists of three tiny beads made of gold-in-glass and red-on-colorless glass (Figure 9: BMC 32-255 c-d). The latter, however, were found together with larger tabular beads (Figure 9: BMC 32-255 a-b) and it is possible they alternated with the small ones. In yet another case, long cylindrical metal-in-glass beads are attached to tiny glass and probable metal-in-glass beads (Figure 15: BMC 01-12 b-d).

Beads made of sheet metal have also been found threaded together with tiny metal-in-glass, carnelian, and other bead types (Figure 6: BMC 02-20). It is also possible

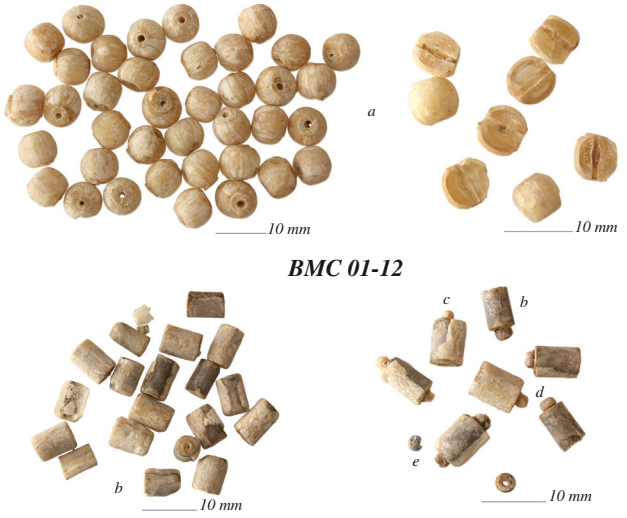

Figure 15. Beads from grave T01 (BMC 01-12).

Figure 16. Beads from grave T23 (BMC 23-268).

that stone teardrop pendants and small glass and gold-in-glass beads (Figure 9: BMC32-255) found together in grave BMC 32 originally alternated on one string.

Patterns similar to all the above-mentioned ones have been recorded at Meroitic Saï (Then-Obłuska 2016: Figures 9-10).

CONCLUSION

Lying between the Fifth and Sixth Cataracts, not far from the center of the Meroitic Kingdom at Meroe to the south and close to the Red Sea coast through the Eastern Desert wadi system, the Berber site with its cemetery is perceived as a crossroad of trade routes. Although this paper provides an overview of the beads from 15 of the graves excavated between 2009 and 2013, some comparative observations can be made. In general, manmade materials (i.e., faience, glass, metal-in-glass, and metal) dominate the Berber assemblage, with only some beads and pendants of ostrich eggshell and stone being recorded.

Many bead types found at Berber have correlatives in other regions of Meroitic Nubia. While ostrich-eggshell beads are almost absent in Meroitic graves in Lower Nubia, the region neighboring Egypt, they are present to the south, between the Second and Third Nile Cataracts, at the Meroitic cemetery of Saï. At Berber, none of the graves in which ostrich-eggshell disc beads were found could be dated. A surprising use of ostrich eggshell at Meroitic Berber was to form unusual wedge-shaped pendants. A small number of beads were made of stone, usually carnelian and red agate, and their shapes are well represented at other Meroitic sites in many parts of Nubia. These include tiny beads, long cylinders, and wedge-shaped beads, as well as teardrop and "poppy" pendants.

Interestingly, in contrast to Nubian cemeteries located below the Third Nile Cataract (Then-Obłuska 2015a; 2016) and in Meroe (Dunham 1957; 1963), no faience amulets or decorated faience beads have so far been recorded at Berber. The same holds true for mosaic glass that is practically absent in the Berber bead repertoire. The exceptions are mosaic cane sections applied as eyes on two beads from Tomb BMC 09. Still, amulets of Uraeus found at Berber are made of glass in the shape of self-shank buttons already known in Nubia.

Next to the many drawn monochrome beads, well recognized in all of Nubia, the variety and quantity of metal-in-glass beads (collared, tabular, tubular, globular, and molded) are notably high at Berber. The ones found in BMC 09 and 17 have fire-polished ends. The manufacture of gold-in-glass beads, either as short tubes or spheres, with fire-polished ends occurred at Rhodes between the 3rd and the 2nd century BC (Spaer 2001:133-134; Weinberg 1971: Plate 79d). It may be that undated graves BMC 09 and 17 belong to the earliest phase of the Berber cemetery.

A dozen or so figurative, tabular gold-in-glass beads with a Harpocrates motif on one side and lozenge-shaped decoration on the other are paralleled at Ibrim, another Meroitic site in Lower Nubia. Luxurious beads with figurative motifs and dotted or lozenge pattern are usually dated to the 1st century BC to the 1st century AD. Those from Berber, however, were found in Tomb BMC 32 which is attributed to the 2nd and beginning of the 3rd centuries AD. Thus, the Berber find appears to be one of the most numerous and latest occurrences of the figurative gold-in-glass bead type in the ancient world.

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