Beads and pendants from the late Harbor Temple and harbor temenos in the Red Sea port of Berenike (seasons 2010–2013): materials, techniques, functions and affiliations

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Abstract: More than 250 beads and pendants have been registered from the Harbor Temple and its surroundings, the so-called "harbor temenos", in the Red Sea port of Berenike. The Harbor Temple assemblage is dominated by South Asian glass beads dating from the 4th through early 6th centuries AD, but the bead finds from the presumed temenos show much greater variety in both type and date, the latter spanning the centuries from the 1st to the 5th century AD. Rather than being accidentally lost, the quantity and find context of the beads support the idea of a votive offering function. Stylistic similarities of some objects found in the Harbor Temple have led to their association with South Arabia or Axum (Rądkowska, Sidebotham, and Zych 2013); yet a much closer affiliation might also be considered. Similar ritual objects, as well as beads and pendants, have been recorded at contemporary temples and shrines in Nubia.

Keywords: beads, pendants, amulets, Berenike, temple, votives, Red Sea, Nubia, Egypt, Roman, Indian trade

Between 2010 and 2013 excavations at the Harbor Temple and the surrounding harbor temenos in the southwestern bay of Berenike have documented more than 250 beads and pendants, whole and fragmentary. While the Harbor Temple dates from the 4th through the early 6th centuries AD (Rądkowska, Sidebotham, and Zych 2013; Sidebotham et al. 2015), the artifacts from the temenos are of 1st to 5th century AD date (Zych et al. 2014: 260; Sidebotham et al. 2015).

The Harbor Temple (called the "Lotus Temple" in early reports) is contained in trench BE10/12/13-61. There are two main phases: an earlier one dated to the late 4th/5th century AD and a later one dated to the late 5th century AD. Several objects of cultic significance, like a horned altar, a bronze figure and bronze head of a bull, an offering table, bronze tripod bowl and other items, such as cowry shells, painted ostrich eggs, a fragment of a bone bangle, a soapstone box, a hoard of silver

lunulae in a covered pot, wooden bowls, pottery, including vessles of Eastern Desert Ware, faunal and floral offerings, a coin of Julian II with triple perforation and a faience Bes amulet, have been recorded in the Harbor Temple (Rądkowska, Sidebotham, and Zych 2013; Sidebotham et al. 2015). Additionally, excavations have documented 150 beads and pendants. Aside from some coral and stone specimens, the over-whelming majority of these objects were made of glass.

The so-called harbor temenos, which has been referred to as a "Temple Island" in view of the ground here being slightly raised above the otherwise water-filled southwestern bay of Berenike, encompasses at least one other building. It is the Square Feature (trench BE10/11-70), fronting which to the south there is an apparent open courtyard. Trenches have been dug around the Harbor Temple, in front of the entrance (trench BE13-89), behind the back wall of the structure (trench BE12/13-81), outside the northwestern corner (trench BE12/13-87) and outside the southwestern corner (trench BE13-94). Moreover, the ground surface of the central and eastern part of the temenos was cleared (trench BE13-92). Artifacts excavated primarily from the Square Feature include a stone altar with an inscribed dedication to Domitian, a bronze toe from a large bronze figure, eye inlays, a cameo blank, a bone needle, a clay oil lamp, wooden bowls, and a few red-painted ostrich eggshell fragments, as well as various ornaments that had been burned (Zvch et al. 2014; Sidebotham et al. 2015). Beads and pendants, whole and fragmentary, 105 in all, were recorded from the trenches here. Most of them were severely eroded; many were simply burnt.

This overview of the bead and pendant collection from the said trenches lets comparisons to be made with contemporary finds from Egypt, as well as from Meroitic and post-Meroitic Nubia. The Meroitic period in Lower Nubian history lasted until the 4th century AD. Upon the withdrawal of the Romans around AD 298, the Nobadians encroached into Lower Nubia, possibly from the Western Desert, while the Blemmyes did the same from the Eastern Desert (Fisher 2012: 39). The Blemmyes appear regularly in historical sources (e.g., Dijkstra 2012; 2014; Obłuski 2014). While the ethnic term 'Blemmyes' should be used with care, it probably included a wide variety of different groups of people living between the Red Sea and the Nile Valley (Dijkstra 2012). The Eastern Desert dwellers are well recognized through the Eastern Desert Ware remains at sites between the Nile Valley and the Egyptian Red Sea ports of Berenike, Quseir al-Qadim and Marsa Nakari (e.g., Barnard 2005–2006, and references therein). In the Lower Nubian Nile Valley this culture has been dated by associated objects and coins to the middle of the 4th century AD (Ricke 1967; Strouhal 1984; Williams 1991).

The stylistic features of some of the objects suggest South Arabian and Axumite affiliations for the Harbor Temple (Rądkowska, Sidebotham, and Zych 2013; Sidebotham et al. 2015). Taking into consideration the association of offering tables known from Berenike with the cultic activities of indigenous desert dwellers (Sidebotham et al. 2015), combined with other objects from the Harbor Temple and the votive function of bead adornments, this discussion will focus on a much closer connection, namely with the shrines and temples of the Lower Nubian Nile Valley.

OVERVIEW OF BEADS AND PENDANTS

MOLLUSK SHELLS

A few perforated mollusk shells came from trench BE12/13-81, the area north and behind the back wall of the Temple (BE12-81/011/PB017, BE12-81/013/PB019, not seen by the author). A mollusk shell worked into a bead was found as well [Fig. 2:24]. There are many Red Sea mollusk shell species recorded at Berenike and only one species from the Mediterranean (Then-Obłuska 2015b). Perforated Red Sea shells are also recorded from post-Meroitic sites in Nubia (e.g., Then-Obłuska in press: Fig. 2).

CORAL

Coral beads are made of the *Corallium rubrum* species of Mediterranean origin. A fragment of coral bead was recorded in the temenos (BE13-87/013/PB003). Two beads were found inside the Harbor Temple. One bead is a simple short cylinder and the other is a collared one [Fig. 2:65,71].

Coral beads have been recorded in a contemporary trash pit of late 5th century date (Then-Obłuska 2015b). Alongside the drawn and rounded glass beads of Indo-Pacific provenance (compare below), coral beads appeared in large quantities at the contemporary royal cemeteries of Qustul and Ballaña (Emery and Kirwan 1938: Pls 43–44) and other Nubian burial sites (Kirwan 1939: 3, 6; Then-Obłuska 2016d and references).

FOSSILIZED CORAL

Fossilized coral is a common building material at Berenike, especially in the late period in the 4th through 5th century AD (e.g., Rądkowska, Sidebotham,

and Zych 2013). Small perforated objects made of this material were found in the late Berenike trash deposits dated to this period (Then-Obłuska 2015b), and one bead has been recorded from the harbor temenos [Fig. 1:3].

STONE

White/cream and brown banded-agate beads [Fig. 1:22, 32] represent Ptolemaic and early Roman stone bead types (Then-Obłuska 2015b) and two specimens have been recorded from the temenos. A cream hexagonal bicone has also been documented from the Harbor Temple [Fig. 2:35].

A small cornerless cuboid, 3 mm in width, found in the temenos, was made of garnet. It was perforated from both ends [Fig. 1:45]. Other faceted beads are larger in size and made of carnelian. They were found in the Harbor Temple: a standard hexagonal bicone [Fig. 2:70] and long rectangular bicones [Fig. 2:68]. The latter shape is recognized in post-Meroitic Nubian assemblages (Then-Obłuska 2014b; 2016d). One of the long bicones from the Fourth Cataract region was decorated with an "etched" pattern, allowing it to be considered as an Asian import (Then-Obłuska 2013).

FAIENCE

Simple disc and short cylinder beads of blue and green faience are of Egyptian production. Such beads dominate the Ptolemaic and early Roman contexts in Egypt and Meroitic ones in Nubia (Then-Obłuska 2015a; 2015b). A few eroded examples have been recorded from the late Harbor Temple [Fig. 2:28].

Fig. 1. Sample of beads and pendants from the Harbor Temenos (not to scale), recorded by trench, locus and PB number; all measurements in mm, in the following order: diameter/thickness/length/hole opening (PCMA Berenike Project/photos and recording J. Then-Obłuska; No. 45 A. Dzwonek)

1-BE10-70/010/PB017	Glass 17.7/14.6/5.3	
2- BE10-70/011/PB026	Glass 4.6/4.2/2.1	
3-BE10-70/013/PB022	Fossilized coral	
4-10 - BE10-70/013/PB022	Metal-in-glass approx.7.0/5.0-24.0/2.3-2.9	
11- BE10-70/ <i>013</i> /PB022	Glass 3.9/3.4/1.4	
12- BE10-70/ <i>013</i> /PB022	Glass 10.6/6.0/6.0/5.5	
13-14 - BE10-70/ <i>015</i> /PB 023	Glass 16.2/15.0/5.0 hole opening	
15-16 - BE11-70/ <i>028</i> /PB 028	Metal-in-glass 6.3/4.1-5.6/1.6	
17- BE11-70/ <i>029</i> /PB029	Gold-in-glass 10.4/4.35/min. 10.84/2.3	
18-19 - BE11-70/ <i>029</i> /PB029	Glass 2.9/0.8/0.9	
20- BE11-70/ <i>029</i> /PB031	Metal-in-glass 2.6/2.1/0.9	
21- BE11-70/ <i>030</i> /PB032	Metal-in-glass 7.0/5.3/2.1	
22- BE11-70/ <i>030</i> /PB037	Banded agate 5.0/6.9/1.2	
23- BE11-70/ <i>030</i> /PB044	Glass 17.9x18.4/24.3/3.5x3.6; 11.5x8.3 loop	
24- BE11-70/ <i>030</i> /PB044	Metal-in-glass? 7.4/5.9/1.5	
25- BE11-70/ <i>030</i> /PB045	Metal 21.8x19.4/min. 17.05	
26- BE11-70/ <i>030</i> /PB046	Glass 18.65/min. 15.2	
27-28 - BE11-70/ <i>030</i> /PB046	Glass 19.9x17.0/15.1, 17.0/15.0	
29- BE11-70/ <i>030</i> /PB046	Metal-in-glass? 7.7/5.7/2.4	
30- BE11-70/ <i>030</i> /PB046	Metal-in-glass? 7.7/6.3/1.8	
31- BE11-70/ <i>030</i> /PB052	Glass approx.19.0/15.7	
32- BE11-70/ <i>030</i> /PB052	Banded-agate 6.6x6.1/4.3/1.4; 1.2	
33- BE11-70/ <i>035</i> /PB043	Metal-in-glass 8.54/5.6/2.7; 2.3	
34- BE11-70/ <i>035</i> /PB043	Glass 2.6/2.16/1.2	
35- BE11-70/ <i>040</i> /PB047	Glass 10.8/5.9/3.6	
36- BE11-70/ <i>044</i> /PB058	Glass 7.2/7.3	
37-BE12-81/002/PB004	Faience 4.5/2.0/2.5	
38- BE12-81/ <i>003</i> /PB003	Glass 3.7/2.1/1.2	
39- BE12-81/ <i>008</i> /PB009	Faience 4.1/1.6/2.0	
40 – BE12-87/ <i>006</i> /PB004	Metal-in-glass 5.8/4.0/2.3; 2.0	
41 – BE12-87/ <i>006</i> /PB004	Glass 5.0/4.5/1.6; 2.0	
42-BE12-87/006/PB008	Glass 6.6/6.7/2.6	
43-BE12-87/006/PB009	Metal-in-glass 10.6x approx.5.5/13.0/2.0	
44- BE13-89/003/PB011	Glass data not recorded	
45-BE13-89/ <i>010</i> /PB013	Garnet 3.1/4/.1/0.7	



Fig. 1. Sample of beads and pendants from the Harbor Temenos (not to scale)

Fig. 2. Sample of beads and pendants from the Harbor Temple (trench BE10-61) (not to scale), recorded by locus and PB number; all measurements in mm, in the following order: diameter/thickness/hole opening (PCMA Berenike Project/photos and recording J. Then-Obluska)

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1 - BE10-61/001/PB001
                             Glass 4.6/2.8/1.2
 2 - BE10-61/001/PB016
                             Glass 3.4/2.7/1.4
 3 - BE10-61/002/PB003
                             Glass 3.6/2.6/1.2
 4 - BE10-61/003/PB031
                             Glass 5.8/3.3/1.8
 5 - BE10-61/003/PB035
                             Glass 3.5/4.2/1.6
 6 - BE10-61/003/PB035
                             Glass 7.8/3.8/1.1; 2.1
   - BE10-61/005/PB037
                             Glass 5.3/2.8/1.5
   - BE10-61/005/PB037
                             Glass 5.0/3.0/1.4-1.6
 9 - BE10-61/013/PB041
                             Glass 6.7/8.0/1.8
10 - BE10-61/013/PB043
                             Glass 4.1/2.4/1.1
11 - BE10-61/013/PB042
                             Glass 4.0/2.9/1.2
12 - BE10-61/019/PB047
                             Glass 6.1/7.3/1.6
13 - BE10-61/021/PB046
                             Glass 4.1/2.6/1.1
14 - BE10-61/021/PB046
                              Glass 17.1/12.4
15 – BE12-61/019/PB001
                             Glass 4.8x4.1/3.3/1.7
16 - BE12-61/019/PB003
                             Agate 4.1/3.4/0.8; 0.7
                             Glass 3.6-4.6/1.7-2.8/1.2, 1.1
17-19 - BE12-61/019/PB003
                             Glass 3.0/1.8/0.7
20 - BE12-61/032/PB006
                             Glass 4.1/3.0/1.1
21
   - BE12-61/032/PB006
22
   - BE12-61/032/PB006
                             Glass 2.4/1.5/0.6
23 - BE10-61/032/PB011
                             Glass 4.6/2.4/1.3
24 - BE12-61/032/PB012
                             Mollusk shell 9.5/7.6/1.1
25 - BE10-61/032/PB012
                             Glass 3.4/2.2/1.3
                             Glass 3.2/2.8/1.3
26 - BE12-61/033/PB007
27
   - BE12-61/033/PB007
                             Glass 4.9/2.9/1.1
                             Faience 4.6/1.9/1.9
   - BE12-61/033/PB009
29
   - BE12-61/033/PB010
                             Glass? 7.1x6.5/8.7/0.8
30 - BE12-61/033/PB010
                             Glass 4.2/2.5/1.7
   - BE12-61/033/PB010
                             Glass 4.3/3.2/0.9
   - BE12-61/033/PB010
                             Glass 6.3/4.3/1.2; 1.8
   - BE12-61/033/PB010
                             Glass 1.7/1.4/0.8
   - BE12-61/033/PB010
                             Glass 1.7/1.7/0.6
35 - BE12-61/033/PB021
                             Agate 4.3/3.6/1.4; 1.2
36-40 - BE12-61/033/PB021
                             Glass 2.6-5.5/1.7-4.6/0.8-2.3
41 - BE10-61/033/PB025
                             Glass 3.8/3.4/1.1
   - BE12-61/038/PB008
                             Glass 6.0/4.5/0.9
43-46 - BE12-61/038/PB008
                             Glass 4.5-4.8/2.0-2.7/1.5
47 - BE12-61/038/PB014
                              Glass data not recorded
48-51 - BE12-61/038/PB014
                             Glass 2.2-4.3/1.5-2.8/0.6-1.0
52-53 - BE12-61/045/PB016
                             Glass data not recorded
                             Glass 4.1/1.3/1.2
54 - BE12-61/048/PB019
55-56 - BE10-61/048/PB024
                             Glass 3.0, 3.9/2.1, 2.8/1.2, 0.6
                             Glass 4.1/1.7-2.8/0.6-1.2
57-58 - BE12-61/050/PB022
                             Glass 2.7-4.5/1.9-2.7/0.7-1.3
59-63 - BE12-61/056/PB033
                             Glass 3.0/1.8/0.9
64 - BE12-61/056/PB037
                             Coral 4.3/7.3/1.1
65 - BE12-61/059/PB038
                              Glass 6.4/6.7/2.9; 2.6
66 - BE12-61/059/PB038
67 - BE12-61/059/PB038
                              Glass 3.8/2.8/1.2
68 - BE12-61/064/PB047
                              Carnelian 5.4x5.4/12.7/1.4
69 - BE12-61/065/PB072
                              Glass 4.5/1.9/1.4
70 - BE12-61/071/PB076
                              Carnelian data not recorded
71 - BE12-61/082/PB060
                              Coral 2.7/1.9/0.8
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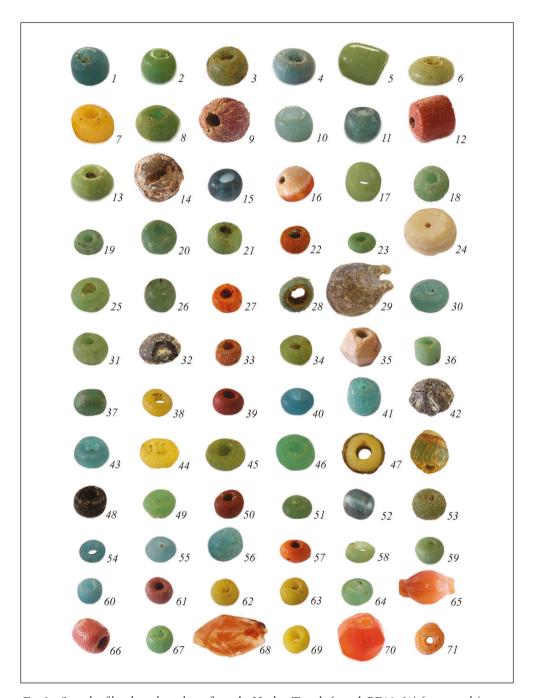


Fig. 2. Sample of beads and pendants from the Harbor Temple (trench BE10-61) (not to scale)

A fragment of a faience biconical bead was also registered from the harbor temenos [Fig. 1:39]. Similar beads have been recorded from other contexts in early Roman Berenike and Quseir al-Qadim/Myos Hormos (Then-Obłuska 2015b;



Fig. 3. Faience Bes amulet (BE13-61/125/006) from the Harbor Temple (PCMA Berenike Project/photo K. Braulińska/ Berenike Project)

personal observation of Quseir material at Oriental Institute Museum, Chicago).

A blue-glaze faience Bes amulet was found in the Harbor Temple (BE13-61/125/006) [*Fig. 3*]. It is double-sided, formed almost identically on the front and on the back, perforated laterally through the neck for suspension. The figure has bandy legs and hands resting on his hips. Four holes separate his arms and legs from the body. He wears a quadruplefeather headdress. The eyes, nose, cheeks, tongue and beard details are schematically underlined projecting elements. as A raised wavy line along the eyebrows with rolled up terminals, each end forming the earlobes, is a characteristic feature of the type. Some traces of yellow glaze can be discerned on part of the right hand.

Bes amulets of similar style are known as Roman-dated objects (Petrie 1914: 40, Pl. XXXIII, 188 l, =UC52806, Pl. 188 w 2, =UC52817 back plain; Whitehouse 2009: 104, The Ashmolean Museum, Queen's College loan 327). The Bes amulet from Berenike also has a parallel in a fragment found and reused at the Christian site of Bab Kalabsha in Lower Nubia (Habachi 1967: 68, Oriental Institute Museum University of Chicago [=OIM] E42044A, personal observation, width 17.7 mm, thickness 8.5 mm, height preserved 18.0 mm, HD 2.6). The Bab Kalabsha specimen was blue-glazed with some details decorated in green, which is a characteristic feature of early Roman and Meroitic faience (e.g., Meyer 1992: Pl. 14 No. 366; Whitcomb and Johnson 1982: Pl. 59g, OIM E45910, personal observation: Then-Obłuska 2015a:

See similarly executed, but not affiliated, Bes figure amulets and Bes head amulets: MFA [=Museum of Fine Arts, Boston] 02.557; MFA 02.560; MFA 72.2096; MFA 72.2100.

Fig. 14; Silverman 1997: 302–303 and Penn Museum, Inv. E7925).

GLASS AND METAL-IN-GLASS

Rod-formed and wound glass

Three bichrome beads belong to the so-called "date" bead type. They are made of a green or striped yellow and green body, and an attached yellow collar. It is rather reminiscent of a lotus bud and is one of the most recognizable Egyptian beads from the 2nd through 5th centuries AD (e.g., Then-Obłuska 2015b). Two specimens have been recorded from the temenos (BE13-94/011/PB014, BE12-87/004/PB006), one of which is very eroded [Fig. 1:41]. Another bead comes from the Harbor Temple [Fig. 2:47].

A fragment of elongated bead from the temenos was made of a striped yellow and green section and a red one at one end [Fig. 1:44]. The fragment bears traces of drawing, but it was most probably rodpierced. Similar mosaic glass, yellow and green with red centers, was found shaped into tabular beads. It came from late Meroitic Karanog in Nubia (Woolley and Randall-MacIver 1910: Pl. 40:7906).

One large bead was made by winding glass around a metal mandrel [Fig. 2:66]. It is of a long oblate shape, made of glass of an opaque red color.

Large pendants and their remains [Fig. 1:1, 12–14, 23, 25–28, 31, 35–36] are the most outstanding features found in the temenos, specifically in the fill of the Square Feature. They consist of a large slightly conical base and an attached loop. A complete example measures 17.9–18.4 mm in thickness, 24.3 mm in length and its loop measures 11.5 mm by 8.3 mm [Fig. 1:23]. Like the metalin-glass beads found in the same context

(compare below), all were discovered heavily burnt. Objects similar in shape have been recorded in Spain, Syria, Jordan and Nubia, and date between the 3rd and 5th centuries AD (Then-Obłuska 2015b references therein). Moreover, a similar pendant was documented recently from trench BE15-103 to the west of the Harbor Temple (locus 030), which is generally dated mid-4th to mid-5th century AD; however, it is more likely to be in the 4th century AD range (Roberta Tomber, personal communication). Additionally, such a pendant is recorded from the post-Meroitic Isis shrine at Qasr Ibrim in Nubia (Adams 2013: Pl. 29c).

Drawn glass and metal-in-glass

Some beads were made by drawing glass tubes. Next, the tubes were rolled over ribbed molds as found in the early and late Roman/early Byzantine workshops in Alexandria (Rodziewicz 1984; Kucharczyk 2011). Such molded tubes could be either broken or cut into single-or multiple-segment beads. Drawn segmented beads are one of the most recognizable Eastern Mediterranean bead types, especially in Egypt and Nubia (e.g., Then-Obłuska 2015a; 2015b). Two beads of opaque red from the Harbor Temple are of a larger size [Fig. 2:9, 12].

Three glass specimens from the harbor temenos are the inner layers of metalin-glass beads [Fig. 1:2, 20, 40]. Metalin-glass beads comprise two layers of transparent glass and metal (gold or silver) foil in-between. Two of the beads are collared and have flattened, tabular bodies [Fig. 1:17, 43] (e.g., Alekseeva 1978: Pl. 26: 70, Type 25, 1st to 3rd century AD). Similarly as in the case of other drawn and segmented beads, molds for producing

collared beads have been found in Alexandrian workshops (compare above). Almost all the metal-in-glass beads came from trenches in the harbor temenos. Like the remains of the large pendants, they were badly preserved bearing traces of burning [Fig. 1:4–10, 15–17, 21, 33, 43].

Other glass beads were drawn tubes cut into shorter pieces and then heat-rounded in some container (Francis 2002). Most of them are monochrome semi-translucent blue and green beads; there are some that are opaque yellow and orange, and a few are red and black in color. Almost all the glass beads recorded from the Harbor Temple in seasons 2010 and 2012 were drawn and rounded [Fig. 2:1-5, 7-8, 10-11, 13, 15, 17-23, 25-27, 30-31, 33-34, 36-41, 43-46, 48?, 49-64, 67, 69]. A few specimens came from the temenos trenches [Fig. 1:18, 19, 34, 38]. Those from trench BE13-87 are red in color (BE13-87/013/PB003).

The manufacturing technique for drawn and heat-rounded beads has been associated with the South Asian tradition, and the beads have been called Indo-Pacific (Francis 2002). While only a few have been recorded from the early Roman layers at Berenike and Quseir al-Qadim,

a specimen from the latter site brought laboratory confirmation of its Sri Lankan/ South Indian origin (Then-Obluska and Dussubieux 2016). The presence of Indo-Pacific glass beads at post-Meroitic sites in Lower Nubia has recently been confirmed by the results of laboratory analysis (Then-Obłuska and Wagner 2017). They were also macroscopically recognized at the Blemmyan Wadi Qitna cemetery (Then-Obłuska 2016a) as well as at the tumulus cemeteries of el-Zuma and el-Detti in the Fourth Cataract region, where they have been dated to the second half of the 5th and first half of the 6th centuries AD (Then-Obluska 2016b; 2016d). Their export to East Africa continued over the following centuries (Wood et al. 2016). Interestingly, they have just been identified at Merovingian sites in Europe (Pion and Gratuze 2016).

Other glass

A few badly burnt biconical glass beads were found in the late Harbor Temple [Fig. 2:32, 42]. They can be compared to the destroyed glass pendants and metalin-glass specimens from the Square Feature in the temenos. Also badly burnt was what looks like a fragment of a large pendant [Fig. 2:14].

DISCUSSION

BEADS AND PENDANTS AS VOTIVE OFFERINGS IN EGYPT AND NUBIA

The term 'votive offering' is usually used to mean 'a gift to a deity' (Pinch 1993). Votive offerings brought to ancient shrines are commonly known. Generally, ancient

textual sources mention thank-offerings to deities as resulting from specific pilgrimages. The offerings varied from a funded library, through a silver pig, to golden statues, and they would be placed in the northern area of a sanctuary (Petsalis-Diomidis 2005).² There is a dearth of evidence for offerings

One of the two principal Christian pilgrimage centers, the healing shrines of martyrs SS Cyrus and John at Menouthis, were adorned with votive objects donated by pilgrims (Montserrat 1998: 272).

made by poor pilgrims, no doubt due to their perishable nature (Petsalis-Diomidis 2005: 210, Ref. 54). The votive objects might be presented to the image of a god or else pierced and hung on cords. They were also sometimes buried in pits within Egyptian temples (Pinch and Waraksa 2009: 7). Items of personal adornment, such as beads, pendants and amulets, formed a substantial proportion of the votive offerings in Hathor temples and shrines in pharaonic Egypt (Pinch 1993: 265-300, Fig. 16). The Graeco-Roman temples of Edfu and Dendera record ritual presentations of bracelets to Hathor. They are said to 'rejoice the heart of the goddess' (Pinch 1993: 277). According to Pinch, it seems that, in religious contexts, the intrinsic value of these objects was of little importance. The nature of the gifts, faience bracelets and necklaces, substitutes for metal jewelry, was more significant than the quality of the material from which they were made.

Rich bead and pendant adornments are characteristic features of ancient Nubian cultures, especially of the Meroitic and post-Meroitic periods. Irrespective of their sex and age, Nubian and Blemmyan individuals have been found buried with bead adornments (Then-Obłuska 2014b: Strouhal 1984; Habachi 1967). Moreover, beads also adorned many objects as well as animals (Then-Obłuska 2016d). As one aspect of rituals, beads were recorded with human figures in subsidiary graves (Then-Obłuska 2014c). A string of large globular beads belongs to the most characteristic royal and divine adornments in the Meroitic period as evidenced in Nubian iconography (e.g., Török 2011: Pls 81, 82, 87, 155, 156, 159). Napatan and Meroitic scenes from the royal stelae

show kings offering necklaces to gods (e.g., Wildung 1997: Cat. 265; Baud 2010: Pl. 223). Additionally, beads found in Nubian temples could be part of foundation deposits (e.g., Then-Obłuska 2014a), as well as being votive ornaments (see below).

Interestingly, as far as faience objects are concerned, a Bes figure was found in the Isis Temple at Qasr Ibrim (Adams 2013: 131, Pl. 60c) as well as in the Harbor Temple at Berenike. The latter finds a parallel at Bab Kalabsha. There was no temple for Bes in Egypt or Nubia, but he was a deity that appeared in many temples as he was believed to have apotropaic during childbirth (Andrews 1994: 40; Frankfurter 2000: 124-131). In the Graeco-Roman world, he was a symbol of the more basic ritual needs of domestic life, like protection of women and children, maternity and healing. Additionally, Bes was associated with the Abydos oracle. His apotropaic function continued there until late into the 5th century AD (Frankfurter 2000: 124–131). In Nubia, ceramic statues of the god Bes and his consort Beset were found associated with the shrine in Kawa (Welsby 1998: 19, Color plate IX; 2000: 7–8, Color plate VII–VIII). The presence of Bes in the Napatan period is attested by sculptured jars as well as amulets, also of indigenous Nubian shape (Petacchi 2014; Then-Obłuska 2016b). Bes in monumental architecture is also attested in Upper Nubia (Amara West and Gebel Barkal) and in the Butana region (Meroe, Naga, Musawwarat es-Sufra), particularly during the Meroitic period when Bes, under the influence of the Graeco-Roman mammisi, was engraved on temple columns and pillars (Petacchi 2014: 205). Bes was displayed on the altar stone in the post-Meroitic Sayala complex

mentioned above (Kromer 1967: Pl. 25, Object XII). Bes was also recognized as a decorative motif in the crafts of Meroitic and post-Meroitic Nubia (e.g., Williams 1991: 40–41, pottery; Emery and Kirwan 1938: Plate 84A, =JE70647, ivory handle; Emery and Kirwan 1938: 383–384, Plate 109, object Q.14-77).

Small faience and metal Bes amulets have often been recorded at Meroitic cemeteries (e.g., Then-Obłuska 2015b; 2016c), but they were also found as reused Napatan/Late Period and Meroitic/early Roman items at later dated sites in Nubia and in the Eastern Desert (e.g., Habachi 1963: 68, OIM E42044A, personal obser-vation of early Roman/Meroitic faience amulet found at the Christian site of Bab Kalabsha: Then-Obłuska 2016b: object D4/27, Napatan amulet from a post-Meroitic tomb at el-Detti; Kirwan 1939: Pl. XVIII: A.11/63, four faience amulets in a late post-Meroitic tomb at Firka; Meyer 2014: Pl. 34a, metal Bes amulet found at the early Byzantine mining site of Bir Umm Fawakhir, and similar to Meroitic ones in Then-Obłuska 2016c: Francis 2000:223 and Then-Obłuska 2017: Fig. 10.6, faience Bes amulet from one of the late settlement trash dumps at Shenshef). It is probable then that the early Roman faience Bes amulet found in the late Harbor Temple at Berenike was a reused item like the ones found in the Eastern Desert and Nubia. It might have been left as an offering in the Harbor Temple.

LATE ANTIQUE TEMPLES AND SHRINES IN NUBIA, THEIR AFFILIATION AND EQUIPMENT Some common features, including beads and pendants, can be recognized in the Berenike Harbor Temple and at some contemporary Nubian sites in Kalabsha, Qasr Ibrim, Sayala, and on Philae.

Drawn and rounded glass beads of South Asian origin and specimens of Eastern Desert Ware were found in the Blemmyan tombs at Kalabsha (Ricke 1967; OIM, personal observation). Kalabsha with its temple dedicated to Mandulis, Osiris and Isis was also occupied at that time by the Blemmyes and visited by pilgrims as the inscriptions on the temple walls reveal (Rutherford 1998: 254). Moreover, many table offerings, similar to the ones in the Berenike Harbor Temple, and remains of an Isis statue were recorded at the neighboring mountain sanctuary (Ricke 1967: Figs 31–32, Pl. 7D,10: e.g., BK/2, BK/4, BK/5, BK/6, BK/14). Additionally, an offering table and a horned altar, both objects similar to those documented at Berenike, were recorded from the neighboring shrine situated about one kilometer away (Ricke 1967: Figs 43, 45).

As in the Harbor Temple, many bead adornments came from the contemporary Nubian Isis shrine at Qasr Ibrim, where they were left probably as votive offerings (Adams 2013). The Qasr Ibrim Isis shrine is dated to the post-Meroitic ("Ballaña") period, although some earlier, Meroitic objects have been recorded. Apart from objects associated with farming, food and other secular activities, many cult objects, such as a small bronze figure of a soldier(?) and a deity with one arm raised and one extended (Adams 2013: Pl. 53c), offering tables (Adams 2013: Pl. 54), a simple horned altar as one of the recognized features of the Isis cult (Adams 2013: 129, Pl. 51; Witt 1971: Pl. 27), and floral remains (Adams 2013: Pl. 69c) as well as the Bes amulet (see above) can be

compared with the repertoire of objects from the Harbor Temple. Moreover, many beads were found in the Oasr Ibrim Isis shrine as well (Adams 2013: 116, 135, Pl. 67). The numerous bead finds from the shrine stand out distinctly from beads found elsewhere at the site, for the overwhelming majority is of glass (Adams 2013: 135). As in the Berenike temple, the Qasr Ibrim shrine glass specimens occur in a wide variety of colors, with blue-green or blue predominant. The large glass pendant type found in the temenos in Berenike, paralleled by objects from Jordan, Syria and Nubia (Then-Obłuska 2015b), surprisingly finds much closer parallels in post-Meroitic Qasr Ibrim (Adams 2013: Pl. 29c). Some sherds of Eastern Desert Ware have been found in different contexts in Qasr Ibrim (Barnard 2013: 103). Interestingly, a find of an Indian peppercorn has been confirmed from Qasr Ibrim (Cappers 2006: 117).

Enigmatic remains from the post-Meroitic site of Sayala, described as a 'wine tavern' (Kromer 1967), have been recently reinterpreted and associated with Isis cult societies. We know the names of a number Blemmyan officers of these societes (Edwards 2004: 209–210). The complex comprised a series of open rooms with stone benches around the walls, and sometimes stone tables. Interestingly, many vessels, including Eastern Desert Ware (Barnard, Dooley, and Faull 2005), wine amphorae, a stone offering table in the shape of a temple pool or sacred lake with steps on four sides of its interior (Kromer 1967: 29-30, Pl. 29, Fig. 2), match those found in the Harbor Temple. Also, a bronze fragment in the form of an extended human

arm, perforated mollusk shells (*Marginella Gibberula monilis* sp.), as well as green, blue and orange glass beads were found at the site (Kromer 1967: 30, Pl. 30, Fig. 1, Pl. 36, Fig. 2, Length 6.7 cm for the bronze fragment). Both perforated *Marginella* sp. mollusk shells of Red Sea origin and monochrome glass beads have been found at late Berenike (Then-Obluska 2015b: Fig. 1:3). Thus, many objects found at Sayala can be compared with those from Berenike.

The Blemmyes benefitted from a special permission given by the emperor Diocletian allowing them to worship Isis at Philae. After Egypt became officially Christianized, the Isis Temple on Philae Island remained a pagan center visited by the Dodekaschoinos population until its closure by Justinian in AD 537 (Obłuski 2014). By the mid-5th century AD, the Dodekaschoinos was controlled by the Blemmyes and they constituted most of the visitors to the Isis Temple. However, it probably served the whole population of the Dodekaschoinos. According to votive inscriptions from the early 5th century AD found in the temple, the names represent one family whose members were officials of the cult of Isis, and the priests of Isis may have been Blemmyes as well (Takács 2005: 361–362). According to David N. Edwards (2004: 210), the officials mentioned in the inscriptions were of 'sacred dining associations,' relating to the cultic meals that were part of the rituals taking place when the Nobadians and the Blemmyes visited Philae. Similar associations may have also organized rites at Qasr Ibrim, Sayala and Berenike, at which sites discarded vessels and amphorae have been found.

CONCLUSIONS

More than 250 beads and pendants were recorded at the Harbor Temple (4th to the beginning of the 6th century AD) and the surrounding temenos (1st to 5th centuries AD) in the southwestern harbor of Berenike, which was in all likelihood the early Roman harbor, operating most probably until the late 2nd century AD.

Finds from the temenos comprised two main types of adornments, i.e., large glass pendants and metal-in-glass beads. Both groups found in Berenike were burnt. The drawn and rounded glass beads of South Asian provenance represented 4th to early 6th century AD types. Coral beads of Mediterranean origin also seemed to be late Berenike in date.

South Indian/Sri Lankan glass beads dominated the Harbor Temple assemblage, which also contained some coral beads and faceted carnelians. Beads of this sort have been recognized as adornments in all the 4th to early 6th century AD Red Sea ports and at contemporary Blemmyan and/or Nubian sites (e.g., Then-Obłuska 2013; 2014b; 2016a; 2016d; Then-Obłuska and Wagner 2017). Moreover, the early Roman faience Bes pendant was most probably a reused item. In the same way Napatan and Meroitic Bes amulets were found reused at later sites in Nubia and the Eastern Desert.

As said above, some beads found in the Harbor Temple and in the Square Feature were burnt. This suggests that they may have originally belonged to one archaeological context. They may constitute the remains of votive offerings made in the Harbor Temple, burned there and then discarded with the ashes which were dropped in the Square Feature and elsewhere. The

common presence of painted ostrich eggshell fragments and large cowries in the Harbor Temple (Rądkowska, Sidebotham, and Zych 2013: 218–221, Figs 10 and 13) as well as in the Square Feature (Zych et al. 2014: 258, Fig. 7) would also support such an assumption.

Stylistic features of the objects found in the Harbor Temple have been tentatively associated with South Arabia or Axum (Radkowska, Sidebotham et al. 2015). However, the Berenike temple finds have much in common with pagan Nubian traditions, as can be observed from post-Meroitic shrines and temples. Votive offerings, comprising beads and pendants, can be traced in Nubian iconography and archaeology. Bead finds in the Harbor Temple and its surroundings probably played the same role. The Harbor Temple contemporary with post-Meroitic cultures in the Nubian Nile Valley. The Eastern Desert people, well documented by their pottery in the Nile Valley, the Eastern Desert and the Red Sea port sites, might have been middlemen between the coast and the valley, spreading Nubian traditions in Berenike and overseas imports in Nubia.

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