ABSTRACT: The twelfth excavation season of the Archaeological Expedition to Wad Ben Naga focused on archaeological exploration of the Typhonium (WBN 200) and the Palace of Queen Amanishakheto (WBN 100), and on conservation of structures located in Central Wad Ben Naga.

KEY WORDS: Nubia – Meroe – Wad Ben Naga – Meroitic culture – Meroitic architecture

The twelfth excavation season of the Archaeological Expedition to Wad Ben Naga took place between 21 February 2016 and 4 April 2016. The archaeological works were launched on 27 February 2016 and were concluded on 29 March 2016. The field season was preceded and followed by study and documentation of objects from the Sudanese excavations at Wad Ben Naga in the Sudan National Museum.

The mission was headed by Pavel Onderka (director), Vlastimil Vrtal (chief archaeologist), Alexander Gatzsche (chief conservator), Juweriya Osman Mohamed Zain (inspector of the National Corporation for Antiquities and Museums). It further consisted of Jiří Honzl (ceramicist), Gabriela Jungová (anthropologist), and Irene Pamer (conservator and archaeologist).

The works of the twelfth season focused on [1] the archaeological exploration of the Typhonium (WBN 200), [2] the Palace of Queen Amanishakheto (WBN 100), as well as [3] the conservation of the Small Temple (WBN 400) and the tumulus WBN C101. During the course of the season, finds from previous excavation seasons, especially pottery, were processed.
Typhonium

The so-called Typhonium is a temple (or more precisely a temple complex) located in the western part of Central Wad Ben Naga. Recently, it was identified as a sanctuary of the originally Egyptian goddess Mut (cf. Onderka – Vrtal et al. 2014: 164–167). Suggested evidence shows that the architects of the temple were largely inspired by the hemispeos dedicated to the same goddess, which was inserted into the foot of the holy mountain of Jebel Barkal (B 300; cf. Onderka 2015; Dunham 1970: 12; Robisek 1989). The Typhonium began to be explored during the third excavation season in 2011. At the end of the eleventh season, the majority of the proper temple’s remains had already been unearthed, with the northeast and northwest sectors still awaiting exploration. The archaeological works yielded remains of a large multi-roomed temple (cf. Wolf 2006: 241–244) with a complex inner structure and subsidiary buildings. The temple was erected as a part of the substantial building programme of King Natakamani and Queen Amanitore of the 1st century CE.

During the twelfth season, the excavations of the Typhonium (WBN 200) focused primarily on the eastern side of the temple and the space between the Typhonium and the previously unclassified monumental structure WBN 800.

The first sounding (trench T34; 10 x 5 m; Fig. 1) uncovered the middle segment of the eastern enclosure wall of the temple. The wall was built on foundations made of flat-laid local stone slabs (such construction being previously identified in a majority of the temple). This was preserved into the maximum height of five courses of bricks (ca. 45 cm). The temple was constructed of mudbricks with a burnt brick casing on the exterior side of the wall. On both sides, the wall was plastered using two types of plaster, specifically for interiors and exteriors. The trench covered the segments of two rooms of the temple (WBN 207, WBN 208), which formed an independent system accessible from the ambulatory (WBN 205) surrounding the main sanctuary (WBN 201) and possibly also from the portico (WBN 202) in front of the main sanctuary.

The sounding revealed a passage between the two side rooms paved with a threshold. In the outer wall of

![Fig. 1 Trench T34 (Drawing: Pavel Onderka & Vlastimil Vrtal).](image)
the room WBN 207, a drainage outlet was discovered (Pl. 1). A parallel to this drainage may be found in the room WBN 504 of the Eastern Temple (Onderka – Vrtal et al. 2013: 81, Fig. 9.10) and other Meroitic temples.

Outside of the Typhonium, numerous postholes were uncovered, as well as one large vessel inserted into the floor. Among the finds was a fragment of an offering table (F16/002) similar to another specimen, which had been excavated in the main sanctuary (F14/009; Onderka – Vrtal – Gatzsche 2015: 96, Fig. 2). Evidence of secondary buildings leaning against the outer wall of the Typhonium is suggested by brick structural remains which were found on a higher level of occupation. Postholes may be seen as evidence for scaffolding used during the construction and the whitewashing of the walls.

The second sounding (trench T36; 10 x 5 m; Fig. 2) covered the northeast corner of the Typhonium, including the southeast corner of a secondary structure leaning against the northern wall of the temple. The corner and the uncovered segment of the Typhonium’s northern outer wall were built in a similar way as described above.

An outbuilding of monumental dimensions, possibly a contra-temple (WBN 250), and a complex ground-plan was built against the northern wall of the Typhonium still in the time before the outer wall of the proper temple (WBN 200) could have been coated with plaster. This would imply that the likely builders of the structure were still Natakamani and Amanitore. Differences in the quality of constructions between the proper temple and the outbuilding were detected (similar phenomenon may be detected in the case of the Eastern Temple [WBN 500]; cf. Onderka – Vrtal – Gatzsche 2016: 107–110). The foundations of WBN 250 were laid less carefully when compared with the temple proper. It used the outer wall of the Typhonium as its back wall.
The sounding covered parts of two rooms in WBN 250. The rear room (closer to the Typhonium) had an elevated floor. The space between the walls was filled into the height of ca. 70 cm. The fill formed a podium on which clay mud bricks were laid to pave the floor. The reason for lifting the floor might have possibly been caused by a bedrock outcrop in this area. Remains of an elevated floor have been traced also in the front room. In the corner of the room a small-size statue of a lion was discovered (excavation no. F16/003; Pl. 2). To the west of the outer wall, sandstone column drums and bases were found in a fragmentary state. Other parts of the structure had been explored during the third excavation season (cf. Onderka 2012: 127–132; Fig. 3).

The third sounding (trench T37; 10 x 5 m) was set between the temple proper and the structure labelled as WBN 800. In this area several super-imposed walls, mainly made of mud bricks were unearthed. They seem to belong to at least three phases of the site’s development. Among them, remains of the monumental structure WBN 700 are included. The excavations of this trench were not completed and its exploration continued in the following season.

**Palace of Queen Amanishakheto**

The so-called Palace of Queen Amanishakheto was excavated by the Sudanese Antiquities Service between 1959 and 1960 (Vercoutter 1962: 277–294) in the area labelled by Frédéric Cailliaud as ‘kom B’ (Cailliaud 1826–1827). The Sudanese expedition discovered a large palace building consisting of more than 60 well-preserved rooms. Since 2010, the current mission has carried out re-excavations in the structure connected to a gradual conservation of the remains of the building.
During the twelfth season, the re-excavations in the Palace of Queen Amanishakheto focused on the rooms WBN 119 and WBN 120. Trench T35 was set in the northern part of the room WBN 119 and the southern part of the room WBN 120, with dimensions of 7.0 by 3.8 m. The aim of the re-excavations in this area was for examination and evaluation of a block of material (mainly sāra) noted on the surface and very similar in composition to the baulk from the Sudanese excavations in the palace, which was excavated in the room WBN 121 by the current mission in 2014 (cf. Onderka – Vrtal – Gatzsche 2015: 98–101). The block of material in WBN 119 proved to also be a baulk preserving the original fill of the room, which was left in situ by the Sudanese mission, perhaps to serve as a reference section.
The baulk was located in the northwest corner of the room and had dimensions of ca 3.5 by 1.5 m, and maximum height of 1.8 m. Similarly to the situation in the room WBN 121, the block consisted of several clearly defined layers of material accumulated during the gradual destruction of the palace: (from top) (1) a layer of sāra-like particles, representing chemically transformed debris of lime plaster from walls, floors or roofing; (2) destruction of brick walls, consisting of two distinctive layers of clay mudbricks (above) and sandy mudbricks (below) with a few fired bricks in between the two. The wall destruction was underlined by (3) another layer of sāra-like particles resting directly on (4) a clearly defined floor (cf. Fig. 4; Pl. 3). Several pieces of burnt wood were found scattered in and under the brick debris, some probably representing wooden planks. On top of the brick debris, a fragment of a basket handle with original textile samples (SM16/222) was found.

In the rest of the trench, the rooms WBN 119 and WBN 120 were filled only with sand and mud which had accumulated following the Sudanese excavations. A simple glass bead (SM16/025) represented the only small find from this area. Pottery assemblage retrieved from this stratum included a fragmentary dish (or lid) manufactured from a reused handmade jar. The dish appeared to be decorated with a subtle incised depiction of the goddess Mut (F16/004; Fig. 5). The goddess is represented with wings and the vulture headdress. Two beams of ankh s stream from her breast(s). The composition indicates that the goddess was probably kneeling. Similar representation of the goddess accentuating her maternal qualities was recorded on a pair of ear-studs from the tomb Beg W127 (find. no. 22-2-503; Dunham 1963: 168, Fig. 122i, 123), and such a thematic composition thus might have been relatively common in the Meroitic iconography.

The floor of the rooms WBN 119 and WBN 120 was located at the same level as the floor in the room WBN 121 and as the top of the ramp WBN 167WEST, i.e. ca 1.5 m above the surrounding terrain. The floor was made of a mix of clay mortar, pebbles, and lime plaster or sāra bedrock. It was disturbed at several places by shallow circular depressions of unclear function, but perhaps serving as secondarily made vessel emplacements. Further disturbance of the floor was observed along all three excavated sides of the room. The floor was irregularly, in a ca 15 cm-wide line following the walls dug through
Pl. 3 Room WBN 119 after cleaning; the remains of the baulk are clearly visible in the center (Photo: Vlastimil Vrtal).

Fig. 5 A dish/lid with the depiction of Goddess Mut (left) and pottery retrieved from the fill underlying the floor in the room WBN 120 (right) (Drawing: Vlastimil Vrtal).
and refilled with fragments of bricks and small stones. No remains of the original surface treatment of the walls were recorded, including the sections of the wall covered by the baulk. This condition perhaps indicates long-lasting exposure to erosive agents preceding the destruction of the walls, or intentional removal of the decoration of the walls.

In the room WBN 120 the floor was disturbed by erosion. The underlying fill forming a podium was cleared away and foundations of the main walls of the palace were documented at the depth of ca 1.6 m under the floor level (Pl. 4). The finds from the fill provided archaeological material complementary to the assemblage from the fill of a podium in the room WBN 121 (Fig. 5; cf. Onderka – Vrtal – Gatzsche 2015: Fig. 6), which can be used for establishing a *terminus post quem* for dating the period of construction of the palace.

Re-excavation of rooms WBN 119 and 120, in continuation of the previous works in WBN 121 and measurements of the ramp WBN 167WEST, provided new evidence on the distribution of floor levels in the northern part of the palace. Although it was ascertained that the floor in these rooms was at the same level, existence of an anticipated corridor leading from the ramp WBN 167WEST and through the rooms WBN 119 and 120 to the central part of the palace was disproved due to the absence of an opening in the wall between the latter rooms (cf. Pl 4). In conclusion, the corridor must be hypothetically placed only to a higher storey, from which the room WBN 119 must have also been accessible, by some sort of lightweight construction.

The re-excavation in trench T35 was further complemented by a survey of floor levels in other parts of the palace. Level of preserved floors and of change in the brick type (clay mudbricks for the foundations, sandy mudbricks for upper parts of walls), indicative of the floor level in the trenches T22 and T35, were documented in several areas. The survey showed that the floor levels were significantly lower in the southern part of the palace, although – unlike the northern part – considerable variability was noted.

Pl. 4 Section through the N-S axis of the trench T35 showing the floor level in rooms WBN 119 and 120, and the level of foundations of the main walls of the palace (left) (Illustration: Alexander Gatzsche).
Conservation works

During the twelfth season, conservation and restoration works focused on two structures located in Central Wad Ben Naga, namely the Small Temple (WBN 400) and the tumulus WBN C101 (which was excavated during the third excavation season; Onderka 2012: 132–133).

The main goals of the works on the remains of the Small Temple were the consolidation of its walls and preparation of the structure for presentation to visitors. The cleaned burnt brick walls were stabilized against the annual rains by means of a buffer layer covered with a cap. The present treatment served as a testing phase of future conservation treatment of other structures (preserved into a similar degree) at the site. The buffer layer and the preserved part of the temple were divided by means of geo-textile, while the buffer layer itself consisted of a course of fragments of Meroitic bricks (used for the sake of visual appearance) and a course of modern bricks capped with a layer of lime or lime with a small admixture of cement. Cement as material was used *pro tempore* to stabilize several segments of walls together. The conservation procedures were to be evaluated during the following season after the rainy season.

Conservation and partial reconstruction of the tumulus WBN C101 was carried out with the aim to protect the structure for negative impacts of the nearby earth road. It was also reconstructed for educational purposes and with the prospect of a full opening of the site for visitors. During the restoration, only the material originally employed in the ring of the tumulus was used. No additional material was brought in.

As a part of the site management, a dwarf wall of fragments of burnt bricks was created along the earth road intersecting the site between the Typhonium and the Palace of Queen Amanishakheto. The wall is fully removable and only employed spoil material from excavations.

Conclusion

The works carried out during the twelfth excavation season yielded much evidence and largely contributed to our knowledge about two main structures of the site, namely the Typhonium and the Palace of Queen Amanishakheto. During the exploration of the Typhonium (WBN 200) a drainage outlet which seems to be a standard feature of certain Meroitic temples and has functional implications, was discovered. Outlines of the structure WBN 250 were ascertained. Excavation at the Palace of Amanishakheto extensively contributed to our knowledge of the original kom’s stratigraphy, as well as of the original architectural design of the building, particularly the floor elevations in its northern part.
Literature:


