Temple 1200 – Lion Temple 2 at Naga

Karla Kroeper

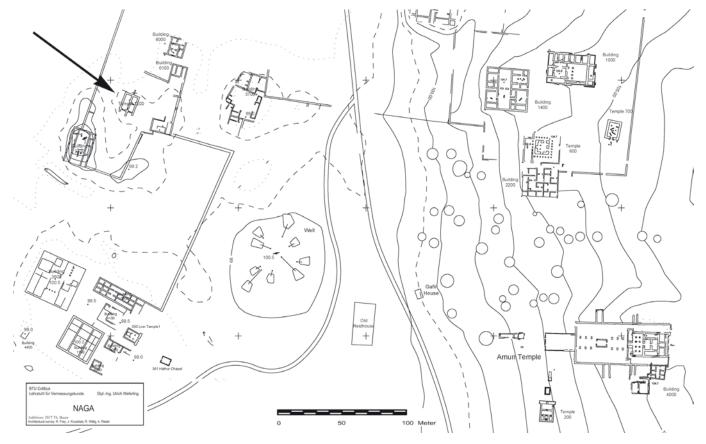


Plate 1. Site plan Naga - SW section with building 1200 marked (2017).

Introduction

The Naga Project¹ commenced work at the site in 1995, with an overall site survey registering 13 chapels/temples as well as c. 40 buildings visible on the surface (Plate 1); simultaneously, excavation of the Amun temple to the SE of the site began. Work continued in this area until 2006 and consisted of excavation, documentation, restoration and conservation. Ongoing work involves stabilising and conserving of the Amun Temple and the Lion Temple, which were excavated between 1995-1999. In the following years the so-called 'kiosk', now known as the Hathor Chapel, was excavated, partly dismantled, conserved and reassembled in order to ensure permanent stability. All three buildings date to the time of Amanitore and Natakamani or shortly afterward, *c*. 50 BC to 150 AD (Rilly 2011, 196f).

The temple, numbered 200, was located to the south and at right angle to the Amun-Temple, and was excavated from 2004, during which time the architecture and decoration of the destroyed temple and side building was recorded and analysed. The relief decoration of the inside and outside walls is of a very high artistic standard and it has been able to virtually reconstruct the scenes as well as the iconographic details from c. 1000 decorated blocks. The complete decoration scheme analysed by J. Kuckertz is at present in print. According to the inscription, the temple was built in the time of Amanikharekerema (Kuckertz 2011, 66ff; Rilly 2011, 198ff).

The Naga Project has, since 2005, successfully tested the non-intrusive 3D-structured light scanning method for the recording of objects, extensive architecture and reliefs (Bauer 2011), so that conventional documentation, has, to

¹ For a more detailed bibliography of Naga until 2016 please see Gamer-Wallert 1983; Zibelius 1983; Kroeper 2011; Kröper, Schoske and Wildung 2011; and home page: *http://naga-project.com/en/online-resources/ list-of-publications/*. The Naga Project was financed from 1995-2013 by the German research foundation (DFG) and private sponsors as part of the Egyptian Museum Berlin. Since 2013 the project has been part of the Staatliches Museum Ägyptischer Kunst in Munich, (*http:// naga-project.com/en/the-excavation-project/about-this-project/*) supported by the German foreign Ministry, private sponsors and since 2014 as part of the Qatar-Sudan Archaeological Project (QSAP), *http://qsap.org. qa/en/about-us.*





Plate 2. Drone photo of the area around building 1200.

a great extent, been replaced by 3D scans. This method of recording gives access to a 360-degree view of the objects and permits the extraction of unlimited contactless measurements, as well as the possibility of producing textured 3D polygonal models.² Conventional recording so far has always been limited to documenting a few individual views, photos, drawings and measurements of the objects. One great advantage of the scan method is that very fragile objects can be recorded without touching them, so that a first documentation can be produced before restoration or other measures are taken to safeguard the objects. Scanned images of blocks from a collapsed wall can, for example, without moving the blocks, be used to reconstruct decoration schemes, as was applied in Naga to the analyses of relief scenes of Temple 200 (Kuckertz in press).

Since 2014, documentation and recording by drone photography with measurement data was added to other recording methods in order to undertake a complete aerial survey of the whole site of Naga (Plate 2).

These pictures from the drone and high-end image analysis software facilitate the recording of the various buildings on the surface and other geological features. In addition, during the excavation of the temple, measurements can be taken of hundreds of individual blocks at different stages, recording their exact location, size, and height.

Temple 1200

Many buildings and temples at Naga were noted in 1822 and superficially recorded by Linant de Bellfond and Frédéric Cailliaud; *c*. 20 years later the Lepsius expedition mapped the site in much greater detail (Gamer-Wallert and Zibelius 1983). Building 1200, located *c*. 200m north of the Lion Temple, was noted by all three of them and the visible surface walls were sketched in outline in Lepsius' plan.

The building is quite prominent in the field since it is located on the top of a hill, consisting of collapsed stones and partially standing walls as well as visible reliefs on the east wall of the largest room (Plate 3). Since the building is



Plate 3. Location of Temple 1200 in the field, view from the SW.

situated on the low ground of Naga, where flooding had to be expected during the rainy season, it was built on a podium, as was another very large building numbered 3400 situated

² All 3D scans, analysis and models were produced by Bauer Praus GbR; Berlin. info@objekt-3d.de; *nnnn.trigonart.com*

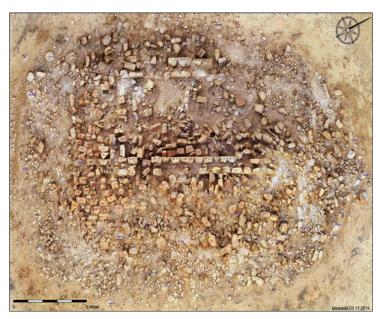


Plate 4. View of the hill before excavation with exposed walls on top.

behind 1200 (Plate 2).

When the Naga Project began its work in 1995, the view of the hill had not changed substantially from the unpublished photos taken by the Butana expedition in 1958 (Hintze 1959; 1960). The 'hill' was 'created' by complete and fragmentary sandstone blocks from the double shell walls of the temple, which had collapsed over time, and these obscured most of the podium on which the temple itself was built (Plate 4). Only on the west side (Plate 5) was part of the podium visible, where a simple panel articulation was noted. The south, north and east sides were completely obscured by sandstone blocks and rubble (Plate 6).

Condition

In general, the collapsed blocks were extremely



Plate 5. Temple 1200 view from the west before excavation.

friable, having been exposed over the years to sun, wind and erosion and, especially at the bottom of the wall, by flooding in the rainy season. Animals, especially goat herds belonging to the local inhabitants, passed over the hill frequently, the goats being particularly interested in using the top of the walls as a vantage point on the way to the nearby well.

During four campaigns c. 900 blocks of different sizes were removed around the podium of Temple 1200, which mostly belonged to the collapsed walls of the temple building on top and to a lesser degree to the podium itself, which had been pushed outwards in several places.

Large numbers of creatures had settled in this ecological niche including snakes, masses of scorpions and spiders. An interesting phenomenon was discovered during the removal of the stones which may also be worth considering at other sites. Many almost perfectly round holes especially in the west façade of the podium stones were noted before excavation (Plate 7).

At first it remained uncertain if they were produced deliberately; and to what purpose? Some suggested that



Plate 6. Temple 1200 view from the east before excavation.

these holes, which might have been invisible after the building was covered with plaster, were made for some kind of lifting mechanism to move stones, scaffolding or perhaps to fix some kind of decoration.

During the continued removal of several of the blocks with these holes, one block split in half exactly at the hole. This brought to light a long tunnel through the stone and at its end a large conical nest *c*. 200mm in diameter with clear horizontal striations, similar to impressions that would be made by drilling lines (Plate 8). Inside the nest, still at work, was found a large spider of the type *Solifugae* of the class Arachnida known variously as camel spiders, wind scorpions, sun spiders and other names.

These spiders live in the soft sandstone and, as we could observe first hand, hollow out the blocks by making round holes on the surface, sometimes even



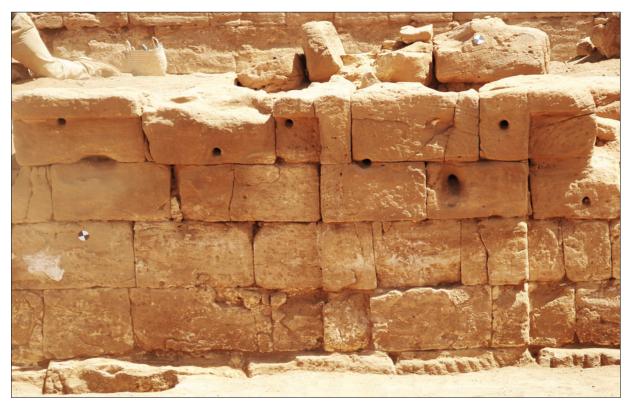


Plate 7. View of the exposed west side of the podium with holes.

reclosing them from the inside. Many of the holes in blocks, especially on the west wall of the podium, proved to not be in anyway connected to the structural or decorative features of the temple.

The blocks were generally very soft, often broken, and sometimes so badly disintegrated that only a shadow of white powder remained; notably, many had a rather solid looking outside surface but consisted of powder on the inside (Plate 9).

With few exceptions the blocks were in such a fragile state that some were unable to be saved while others could not



Plate 8. Tunnel and nest of a spider in a block from the west side of 1200.

be moved and needed immediate conservation *in situ*. Some remained at the site even after the season's end, in order to permit the conservation materials to dry completely, before attempting to move them to the magazine.

Architecture

Plate 7).

It was clear from the beginning that the rectangular hill, oriented NE-SW and with a visible size of c. 19x12m, consisted of a podium c. 1.7m high with the remains of a temple on top.

The walls of the podium were built (as was seen by various sondages) in a rather unstable shell manner, with the outside part of the wall built of large cut sandstones, whereas the inside wall was made up of unworked irregular flat stones. The space between the two walls was filled with rubble. Some articulations in the form of wide recessed niches followed by a flat section of the wall was applied to the outside walls of the podium (see

> The remaining walls of the temple on top of the podium consisted of a central wall with a maximum preserved height of *c*. 1.2m. This wall, running across the length of the hill from south to north, divides the building into two parallel sections. This central wall is connected to several short cross walls in the east and the west section forming smaller rooms arranged asymmetrically (Plate 10). All the outside walls of the temple



Plate 9. Condition of the blocks, inside and outside during excavation.

were set on top of the podium walls, about 100mm from the edge of the podium. Since the building method used for the podium walls was not very stable, it is not surprising that when a break occurs in the walls the rubble inside pushes outward and so causes more damage to the casemate podium walls.

The largest room, 1202, on the temple's west side, is faced by small rooms at either end. On the temple's east side three rooms are present which, however, are not aligned with the rooms to the west. At the beginning of the excavation one doorway (B) was visible leading from Room 1202 to 1205. During the course of the excavation, four further doorways with preserved doorsills of varying sizes (1201 to 1202; 1202 to 1203; 1204 to 1205; 1205 to 1206) were discovered made of harder sandstone than the rest of the temple blocks. All walls and reliefs had been covered with lime plaster preserved in varying amounts and very small remnants of blue and yellow colouring were also noted.

During the removal of over 850 numbered stones around the podium, various architectural elements were uncovered, which could be used to reconstruct the plan of the temple on top. Several well-preserved blocks, such as loose column drums, were found on top of or near to Gate A. Blocks found in the rubble in front of the south podium wall were shaped like screen walls with panels and mouldings, as well as column drums (Plates 11 and 12). The original location of these blocks was easily reconstructed since on top of the highest stone level of the podium, their placement was indicated with set marks in low relief (Plate 13).

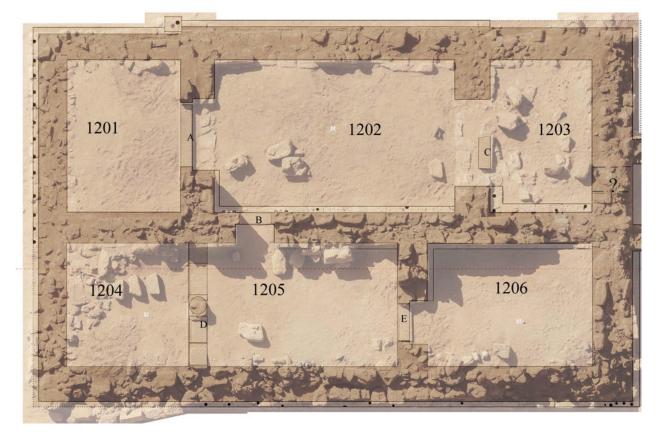


Plate 10. Plan of 1200 based on scan measurement data and drawing, with room and gate numbers.



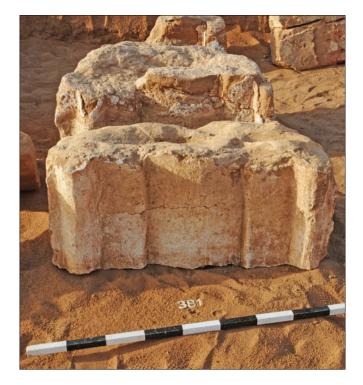


Plate 11. Block found on the south side of 1200 showing the column in the centre flanked by panels and mouldings like those found in the kiosk of the Amun-Temple.

From the blocks found there, it became evident that this part of the temple was previously a portico decorated very similarly to the pronaos of Temple 500 (at the foot of Jebel Naga) and the 'kiosk' of the Amun Temple in Naga (Plate 14). What the capitals on top of the panelling and columns of the portico on the south side might have looked like is unclear as none were preserved.

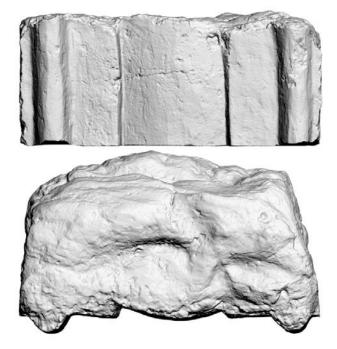


Plate 12. Scan of the portico block (381), Front and top view. Size: width 826mm; height 370mm; depth 503mm.

From the blocks and the markings on the top ledge of the podium, it became clear that there was no direct entrance from the south, since no opening was marked between the panelling blocks. The archaeological evidence, therefore, indicates that room 1201 was a portico only accessible from 1202.

The loose blocks found over and around the northern part of the west side (Room 1203) further indicate that a similarly decorated portico existed here, parallel to the south room 1201.

The east part of the temple consists of three sections, the southern end of which is perhaps a continuation of the portico already seen in Room 1201. From the badly destroyed area of 1204, a large passage consisting of two doorsills separated by a column led to a larger room (1205). Whether this indicates an open court in this area is not clear (see Plate 10). From here a doorway (door opening inwards) connects this room to the main decorated room to the west (1202); a third doorsill connects to Room 1206. The walls of the three rooms on the east side were covered with lime plaster on which some small remnants of blue and yellow paint was noted. No traces of reliefs were found there, however, traces of charring and reuse of the area, such as the arrangement of collapsed stones in a square, was noted.

The whole length of the east wall of the temple has collapsed outward, but evidence showed that originally it had been decorated with different features not arranged symmetrically. Various projecting articulations of various shaped pillars were found, possibly even with a palace façade decoration at the northern end where fragments of blocks with this decoration were found.

At the SE part of the podium, buried under many other blocks, a collapsed layer of stones from the temple forming a pilaster of unusual shape was found more or less *in situ* on the floor. The pilaster had an asymmetrical curvature which connects to a straight wall section (Plates 15 and 16). Unfortunately, the capital was not preserved.

At the northern part of the east wall another pilaster of a simpler shape was found. There, additionally, a convex

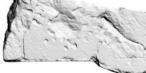


Plate 13. Set marks on the top level stones of the podium, collapsed forward.

SUDAN & NUBIA







Block 443 front

Block 443 from the top

Plate 16. Block from the SE pilaster, photo and scan. Block 443, width 610mm; height 403mm; depth 433mm.



Plate 14. Screen walls of the kiosk walls of the Amun-Temple at Naga.



Plate 15. View of the pilasters in situ, east wall.

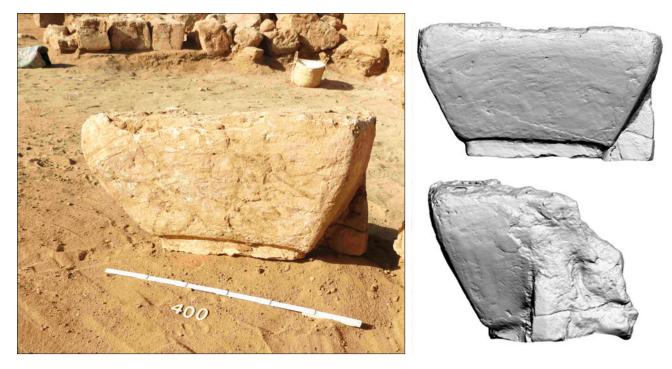


Plate 17. Photo and scan of the capital of the pilaster from the NE. Photo and scan. Block 400: Width 654nm; height 373mm; depth 480mm.





Plate 18. Fragment of a filigree capital from the east side of the temple. Block 109: Width 372mm; height 25m; depth 285mm.

shaped block with a preserved joint to connect with the next stone was found. This block indicates that the other convex stones found in different parts of the temple are also to be placed, most probably, on the top of the wall, representing a continuous upper decoration like a cornice (Plate 17).

Fragments of an unusual highly decorative capital with openwork was also found on the same side which so far could not be assigned to any particular place in the temple, but which must belong to one of the rooms on the east side of the temple (Plate 18).

On the west side, a great many different decorated architectural blocks were found. The analysis and placement





Plate 20. View of the ramp from the north.

of these are still in progress. These include features which certainly fell from the top of the doors; several blocks with sun disc and uraeus, and unusual long blocks also with a uraeus freeze, which may have been attached to the top of the long wall itself (Plate 19).

During excavations on the north side, interesting discoveries were made. Under the rubble a 10.7m long ramp was exposed, which had not been visible at the beginning of the excavations (Plates 20-22). The ramp was built of two retaining walls of plastered unworked irregular flat stones, which were filled with mud and rubble. It consisted of two sections of differing widths. At the bottom of the ramp, two large blocks with four mouldings and probably a cavetto cornice marked the entrance behind which four or perhaps originally five steps made of hard sandstone were located.

During a sondage at the upper end of the ramp where it connected to the podium, it was discovered that the lower

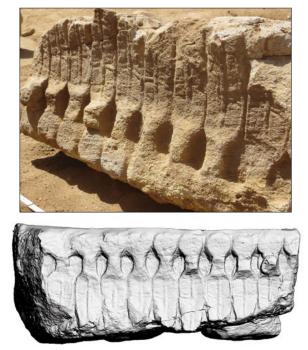
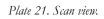


Plate 19. Blocks from doorways: Left block 222: sun disk with uraeus; height 38.1 width 835mm, depth 585mm. Right block 68: uraeus frieze; height 387mm, width 842mm, depth 547mm. Photos and scans.



_____ 5 m

View East



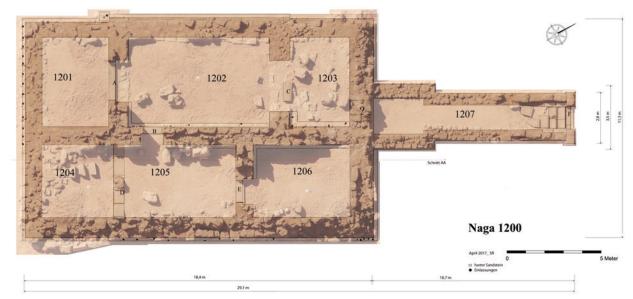


Plate 22. Plan of 1200 based on scan measurement data and drawing, including room and gate numbers and ramp, as well as indicating where relief location is marked.



Plate 23. Room 1202: south section of the wall decoration in situ, to the right seated god on feline throne with wings.



rows of stones of the podium were left unfinished, since they were intended to be covered by the connection to the ramp, indicating that the ramp was an integral part of the building plan from the beginning.

Very little of the northern temple walls are preserved *in situ* as the northern part of the temple and especially the ramp have subsided *c*. 0.5m. Ramps as such are not that unusual at Naga, although so far they have never been observed to come from the north. A very similar ramp to Temple 1200 is known, for example, from Building 2600 which has not yet been excavated.

At the top of the podium where the ramp connects to the temple wall, no remains of an entrance threshold or the like was found. It is however to be assumed that the entrance to the temple was from the north ramp into Room 1203. The question of how the entrance was placed or constructed remains unclear, especially as the ramp does not connect to the middle of Room 1203 as one would expect.

Temple-Relief

The wall of the largest room 1202 was the only one with raised relief decoration still preserved *in situ* on the lower two block levels. Additionally, a further 60 decorated blocks were found in front of, or near, the east wall of Room 1202 and therefore belonging to the relief of the east wall (Plate 22). It was possible to supplement the preserved decoration scheme with the loose blocks, some of which were directly connected to the scenes on the wall. A few decorated blocks were found further away on the west side of the temple and probably belong to the decoration of the west wall of 1200, of which only very little remains.

The relief on the east wall of Room 1200 shows a central scene representing a seated god facing left, on a throne consisting of a feline animal with wings representing a sphinx or griffon (Plates 23 and 27). Behind him stands a female figure with long gown (see Plate 27 on the right) holding an ankh sign in her left hand (found on a loose block). One of the most informative loose blocks found shows the lion head of the god Apedemak (Plates 24 and 25) with remains of the *hemhem* crown. The block can be fitted to other loose relief blocks which show the arms and hands of the seated god holding elaborate staffs. These loose blocks connect perfectly to the still preserved scene of the seated god on the wall, which therefore identifies the deity sitting on the throne as Apedemak the lion-headed god, and at the same time identifies the deity to which this temple is dedicated (Kuckertz and Lohwasser 2016, 115ff.).

On the preserved wall in front of the god, facing him, stands a female figure with a long gown with tassels. The upper part of this scene can be supplemented by loose blocks with representations of voluminous wide hips, which connected with the lower part of the female figure just mentioned, and to further loose blocks from the upper part of the figure The proportions and iconography of the gown indicate that a queen is standing in front of the god Apedemak. A fragment of a block with the head of a female facing the sitting god with remains of ankh signs near the face probably belongs to this figure, even if it is too fragmentary to find a direct join (Plate 26). Around the neck of the queen can be seen the start of necklaces, as well as a streamer falling over her right shoulder which can also be seen ending just below her hips. The blocks with hands and breast of a female (see Plate 27, on the left) figure also belong to this scene and represent the queen.

The arrangement of the figures can be compared to stela 104.4 from Naga, found in the sanctuary of the Amun Temple. Here again the queen is shown in front of the sitting god Apedemak (Plate 28).

The hand position of the queen is very similar, holding a staff in the right hand and raising the left hand in front of



Plate 24. Loose block with relief of the lion headed god Apedemak from Temple 1200.



Plate 25. Right: for comparison the head of the lion headed god Apedemak as represented on the Lion-Temple 300 at Naga.



Plate 26. Loose blocks complementing the preserved wall reliefs. Head of a queen. Photo and scan.

her head, whereas Apedemak in 1200 is holding two staffs and not touching the elbow of the queen as on the stela. On the stela the goddess Amesemi is shown behind queen Amanishakheto as indicated by the inscription. Whether perhaps the female goddess behind the Apedemak on the



Plate 28. Detail from stela 104.4 Naga Amun-Temple.

east wall in 1200 is Amesemi, the companion of Apedemak, cannot be determined as further blocks from the upper part of the scene are missing.

Not so easily identifiable on the wall in 1200 is the next figure directly behind the queen, also facing to the right.



Plate 27. Initial virtual reconstruction of the scene with the seated Apedemak and queen.



Plate 29. Block 243 head of a male, scan and photo.

The male figure (barefoot) wearing a short kilt and holding a short staff can be supplemented by a loose block showing the head of a male figure (Plate 29). In front of and behind the head at the upper broken edge of the block, a row of *ankh* signs is preserved.

Behind this man, another male figure holding a staff and wearing a tail on his kilt has been placed facing left. So far, no other blocks have been identified that fit this figure. The rest of the wall is in poor condition, but another person or altar was probably placed in the large space still remaining where now only two vertical straight lines can be seen near the north corner.

The small wall next to Doorsill C (NE wall of 1202) is decorated with large plant motifs on which smaller scale figures are standing, of which only the feet with sandals facing to the right have been preserved. On the small wall (SE wall) next to the doorway between 1201 and 1203 a god can be seen facing to the right, towards the door, a typical position of a god welcoming a royal person into a temple. Facing him stands a figure, probably the queen, wearing a long gown with tassels and decorated sandals, which actually overlap with the feet of the god on the left. From the west side of Room 1202, only a few decorated blocks are preserved, but these indicate similar scenes to those on the east wall.

Oriented toward the left, a block depicts a male wearing a short kilt and carrying a staff. More interesting is a further block depicting a panther skin, similar to the panther skin worn by the king and queen on the architrave of Gate B of the Amun Temple and just inside Lion Temple 300 at Naga.

Another interesting relief block fits into the south end of

the west wall of 1202 and is identified as a queen due to the type of gown worn and voluminous hips and the extended pudgy arm holding various staffs. The queen faces left and stands very close to the corner of the room, which necessitates continuation of the scene (movement) on the small wall next to Door A, otherwise the queen would be facing into the corner of the room without any purpose (Plate 30).

Work on complementing the preserved scenes with the loose blocks available and their placement is still in progress and may in future give more details as to the interpretation of the figures and ritual movement around the temple.

Date

No inscriptions have been discovered, which is not surprising since no blocks from the relief decoration of the upper part of the temple have been found, where any inscriptions might be expected. A small possibility exists that inscriptions may have been added with paint only. Without preserved inscription, the dating of the temple is somewhat problematic. Stylistic analysis of the reliefs may bring some further information later, however; since they are badly preserved and

seem not to have been worked in such fine detail as the reliefs in Temple 200, a stylistic analysis as regards chronology has so far been difficult. Until now no preserved building dating to before the 1st century BC has been discovered in Naga, so one would therefore tend to assume that 1200 also belongs to 100 BC-200 AD (Kroeper 2007, 231ff). This is confirmed by the ceramic material found in the temple (actually astoundingly

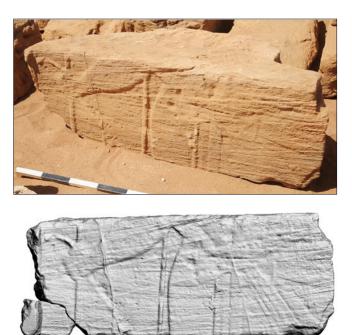


Plate 30. Block 295 with representation of a queen. Photo and scan.

little), which corresponds generally to that found at the other temple sites at Naga.

Several radiocarbon dates obtained from charcoal deposits from secure locations in the temple resulted in a date perhaps a little earlier than the Amun temple built by Natakamani and Amanitore:

Radiocarbon date of charcoal from the contents of a vessel: Poz 91532

2025 ± 30 BP

AD 53 BC-21 (probability 68%)

AD 112 BC-55 (probability 94.5%)

Radiocarbon date of charcoal from a sondage in room 1202: Poz 91533

 $1980 \pm 30 \text{ BP}$

AD 2 BC-60 (probability 61.2%)

AD 45 BC-77 (probability 95.4%)

After abandonment of the temple, small scale domestic activity at the temple is evident by the ceramic vessel found sunk into the ground directly in front of Doorway B, as well as the reuse of some of the blocks of collapsed walls in Room 1205 that had been rearranged and placed in a square. Charred and sooted walls indicate some cooking or burning activity.

Later activity at the south and west sides of the temple area was noted during excavations and confirmed by the location of two burials, which were found placed on the stylobate against the wall of the podium and later covered

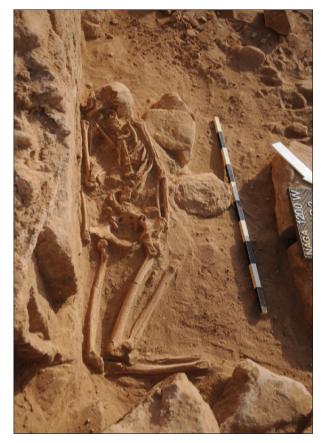


Plate 31. Burial found against the west wall.

by a mountain of fallen blocks from the temple walls (Plate 31). This indicates that at the time of burial at least part of the temple walls on top of the podium was still standing upright and only collapsed after the burials had taken place.

This is also confirmed by C¹⁴ dates from masses of charcoal and rubble found around the burials.

Charcoal from the floor level of the graves and probable date of the burials:

Poz 91534 1745 ± 30 BP AD 250-333 (probability 68.2%) AD 231-385 (probability 95.4%)

Summary

Temple 1200 was built on a podium and consists of two individual sections – one to the east, and one to the west – of a central wall. Except for the doorway from room 1202 to 1205, there seems to be no relationship between the two sections. Whether this should be called a double temple, as is known from other sites, remains doubtful. Until now, the layout is unique at Naga and perhaps elsewhere. The design indicates a deliberate statement of an individual style.

The temple was built of soft sandstone and in some cases unworked irregular flat stones, while only the doorsills were of hard sandstone. The floors of the rooms have no traces of plastering or even a stamped floor. Since many architraves are missing, it is not impossible that the floor was plastered, and the architraves have been removed at some time after the abandonment of the temple.

The ramp at the north of the podium served as an elaborate entrance way to the temple. With a total length of 29.1m (including the ramp) and a width of 11.3m, this temple is larger than Lion Temple 300 (c. 11.4m length x 10.5m in size) to the south of 1200. An entrance doorway or doorsill from the ramp to Room or Porticus 1203 is not preserved. It may have been constructed as step up with the doorsill now gone. The area of 1203 was in extremely bad condition generally, having been washed down by rain and other forces from the podium with no intact floor surface visible.

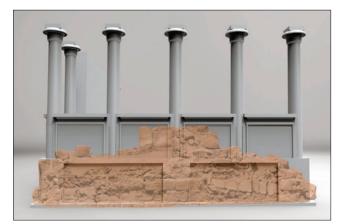
Since the only preserved relief of a god is the lion-headed Apedemak faced by a queen, the temple can be assumed to be a Lion Temple built by a queen – especially as a queen is depicted several times in the leading position, to the south on the small wall and in the SW corner of the west wall, confirming this thesis. It is possible that another god may have been represented on the west side of Room 1202; however, no evidence has been found on the few preserved decorated blocks from this area.

According to the C^{14} dates the temple probably dates before Amanitore and Natakamani.

After complete excavation, and despite the extremely poor preservation of the stones, the amount of material available is enormous and many questions remain unanswered. The data from this unusual temple has not yet been fully interpreted/ analysed, and we must await the results of the complete



processing of all the blocks and the data gathering in order to reconsider the date and activity range, as well as to produce a final 3D visualisation i.e. a digital reconstruction of the entire temple (Plate 32).



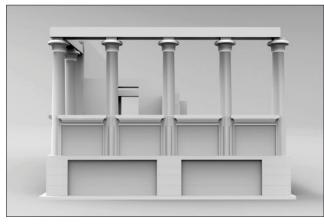


Plate 32. First virtual reconstruction of the south side of the temple.

At the end of the excavation, the temple and blocks were completely re-covered in order to prevent the walls from collapsing further, especially because the exposed walls would be subject to rain and flooding as well as animal destruction. The temple has been returned to the condition in which it was found when the excavation began in 2014.

Bibliography

- Bauer, T. 2011. 'Hightech', in Kröper, K., S. Schoske, and D. Wildung. (eds). 2011. Königsstadt Naga – Naga-Royal City. Grabungen in der Wüste des Sudan – Excavations in the Desert of the Sudan. Katalog zur Ausstellung München 15. April-31. Juli 2011, Berlin 31. August-18. Dezember 2011. München-Berlin, 153-162.
- Gamer-Wallert, I. 1983 . Der Lönventempel von Naq'a in der Butana, (Sudan), III: Die Wandreliefs, 2 vols., Wiesbaden (AEB 83.1342).
- Gamer-Wallert, I., and K. Zibelius. 1983. Der Löwentempel von Naq'a in der Butana (Sudan) I: Forschungsgeschichte und Topographie. Wiesbaden (AEB 83.1352).
- Hintze, F. 1959. 'Preliminary Report of the Butana Expedition 1958 made by the Institute for Egyptology of the Humbold University, Berlin', *Kush* 7, 171-196.
- Hintze, F. 1960. Vorbericht über die Butana-Expedition 1958 des Instituts für Ägyptologie der Humboldt-Universität zu Berlin. Forschen und Wirken 360-399, Festschrift zur 150-Jahr-Feier der Humboldt-Universität

zu Berlin. III. Berlin.

- Kröper, K., S. Schoske, and D. Wildung. 2011. Königsstadt Naga Naga-Royal City. Grabungen in der Wüste des Sudan – Excavations in the Desert of the Sudan. Katalog zur Ausstellung München 15. April-31. Juli 2011, Berlin 31. August-18. Dezember 2011. München-Berlin.
- Kroeper, K., 2007. 'The End of the Amun-Temple and beginning of Temple 200 – ¹⁴C dates from Naga', *Cahier de Recherches de l'Institut* de Papyrologie et d'Égyptologie de Lille 26, 231-242.
- Kroeper, K. 2011. 'Rediscovery of a Kushite site Naga, 15 years of excavation (1995-2010) Surprises and Innovations', Sudan & Nubia 15, 90-104.
- Kuckertz, J. 2011. Wiedergeburt eines Tempels- Rebirth of a Temple', in K. Kröper, S. Schoske, and D. Wildung (eds). Königsstadt Naga – Naga-Royal City. Grabungen in der Wüste des Sudan – Excavations in the Desert of the Sudan. Katalog zur Ausstellung München 15. April-31. Juli 2011, Berlin 31. August-18. Dezember 2011. München-Berlin. 66-85.
- Kuckertz, J. and Lohwasser, A. 2016. *Einführung in die Religion von Kusch*. Dettelbach.
- Kuckertz, J. in press. Amun-Temple Naga 200 The Wall-Decoration. Archäologie im Sudan – Archèologie au Soudan – Archaeology in the Sudan. ArS.
- Rilly, C. 2011. 'Meroitische Texte aus Naga Meroitic Texts from Naga', in Kröper, K., S. Schoske, and D. Wildung (eds). 2011. Königsstadt Naga – Naga-Royal City. Grahungen in der Wüste des Sudan – Excavations in the Desert of the Sudan. Katalog zur Ausstellung München 15. April-31. Juli 2011, Berlin 31. August-18. Dezember 2011. München-Berlin, 176-201
- Zibelius, K. 1983. Der Löwentempel von Naq'a in der Butana (Sudan). IV: Die Inschriften (Beihefte zum Tübinger Atlas des Vorderen Orients 48/4) Wiesbaden.