## SUDAN & NUBIA

The Sudan Archaeological Research Society Volume 25 2021 Reports An inscribed basin of the 18th dynasty (reign of Amenhotep III) from the fortress of Shalfak in Lower Nubia 1 W. Vivian Davies Angareeb-bed production in modern Nubia: Documenting a dying craft tradition 11 Manuela Lehmann The biocultural heritage and historical ecology of date palm cultivation in Nubian villages, 24 northern Sudan Philippa Ryan, Mohammed Hassan, Mohamed Saad, Marcus Jaeger, Caroline Cartwright, Dorian Fuller and Neal Spencer The archaeological and heritage survey of the Northern el-Mahas region. First season's report (2020) Abdelrahman Ibrahim Said Preliminary report for the Western Desert of the Third Cataract Region Project (Wadi Gorgod -49 first season 2018-2019) Hamad Mohamed Hamdeen, Altayeb Abdalla Hassbrabo, Safa Gamal Idres, Samar Salah Mustafa, and Fatima Idris Mahmoud Starting anew at Old Dongola 67 Artur Obłuski and Dorota Dzierbicka From development displacement and salvage archaeology in Nubia to inclusive sustainable heritage 82 and development crafting in Old Dongola Peter Bille Larsen Dialogue Community Project in Old Dongola (2019-2021) 95 Tomomi Fushiya Wadi Abu Dom investigations: El Rum Oasis 108 Tim Karberg and Angelika Lohwasser Goldmines, nomad camps, and cemeteries: The 2018 season of the Atbai Survey Project 121 Julien Cooper Archaeological report on the excavation of a post-Meroitic necropolis at el-Madanab 135 (Shahid Rescue Archaeological Project) Fakhri Hassan Abdallah, Romain David and Iwona Kozieradzka-Ogunmakin The archaeological site of Damboya in the Shendi Reach. Second season 154 Marc Maillot Building E at Damboya, second season 168 Gabrielle Choimet (Re)examining the tomb of Queen Yeturow at Nuri 184 Meghan E. Strong, Susan Doll, Fakhri Hassan Abdallah, Helen O'Brien, Simone Petacchi, Abagail Breidenstein and Pearce Paul Creasman Dental insights into the biological affinities of the inhabitants of Gabati over a period of cultural transition 195 Emma L. W. Phillips, Joel D. Irish and Daniel Antoine Jebel Hawrā, a new archaeological site in Eastern Sudan 209

Enrico Giancristofaro

### **Studies**

Was the individual buried in MOG012.4 a Christian, a pagan, or both? Evidence for the appropriation of Christianity from a Late Antique-Early Medieval tumulus grave on Mograt Island Claudia Näser, Alexandros Tsakos and Jens Weschenfelder	221
After 'InBetween': Disentangling cultural contacts across Nubia during the 2 <sup>nd</sup> millennium BC Aaron de Souza	230
Skeuomorphism in Kerma metal vessels Carl Walsh	243
Heart scarabs and other heart-related objects in New Kingdom Nubia Rennan Lemos	252
Sheikh and Melik 1925: A short note Paul T. Nicholson	270
Book reviews	274
Obituaries	
Peter MacKenzie Smith (1946-2020)	279
Professor Abdelgadir Mahmoud Abdallah (1937-2021)	279
Sandro Salvatori (1948-2020)	280
George Hart (1945-2021)	283
Biographies	284
Miscellanies	289

Front cover. Cattle and two goats\gazelle from Site GRD-14 in the Wadi Gorgod (photo Hamad Mohamed Hamdeen). Sudan & Nubia is a peer-reviewed journal. The opinions expressed within the journal are those of the authors and do not reflect the opinions or views of the Sudan Archaeological Research Society or its editors.

# The archaeological site of Damboya in the Shendi Reach. Second season

Marc Maillot

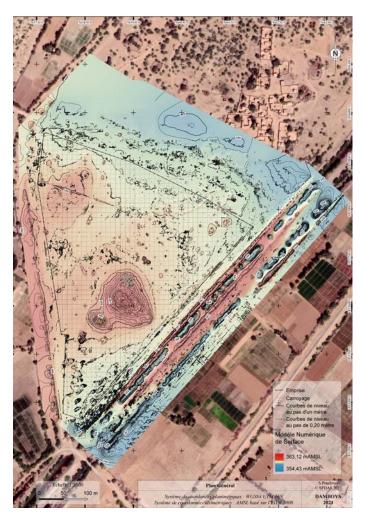


Figure 1. General map of Damboya ©SFDAS/musée du Louvre.

#### Introduction

The archaeological site of Damboya (Figure 1), identified by Hinkel and investigated in 2002 by Patrice Lenoble and Vincent Rondot (Lenoble and Rondot 2003), is located 270km north of Khartoum, near Shendi, in the concession of el-Hassa (1.7km) of which it is a component. The Louvre Museum asked the National Corporation for Antiquities and Museums (NCAM) to add this to the concession of the Louvre's Department of Egyptian Antiquities in 2020. Marc Maillot, current director of the mission, wanted to open an archaeological excavation at Damboya, as part of his programme as director of the SFDAS (French Archaeological Unit in Sudan). A scientific cooperation agreement was signed between the Louvre Museum and the Section française de la direction des antiquités du Soudan (SFDAS), so that the excavation could start in 2020 under the aegis of the SFDAS.

The results of the first season enabled the team to continue its programme in the most promising sectors for long-term study of the settlement. The second campaign was between February 1<sup>st</sup> and March 5<sup>th</sup>, 2021. The

archaeological team was composed of: Marc Maillot, director of the SFDAS, responsible for Sector A and director of the mission; Romain David, SFDAS researcher, ceramicist; Gabrielle Choimet, PhD student at Sorbonne University, responsible for Sector E; Coralie Prenat, international volunteer, SFDAS; Giorgio Nogara, archaeologist, Lille 3 University and associate member of the SFDAS; Sébastien Poudroux, topographer. NCAM was represented by the Antiquities Inspector Magdi Mohamed Ahmed.

Two sectors were opened, A and E (see Choimet, this issue), chosen for their position framing the main hill of the site, itself far too extensive for a five-year programme. Sector A, which will be presented here, was mainly occupied by two Meroitic cultic structures, a temple and a chapel (Figure 2).

#### Sector A

The southern hill of Damboya has a diameter of 40m, and a preserved elevation of 1.10m above the surface level of the site. Covered with red brick fragments, small grindstones, ceramic and some scattered bones, it presents all aspects of the classical kom in central Sudan. Successive surveys indicated that the ceramics dated predominantly to the Meroitic period, which the results obtained this year confirmed ( $1^{st}$ - $2^{nd}$  century AD). A grid was put in place over the entire surface of the hill in order to spatialise the ceramics

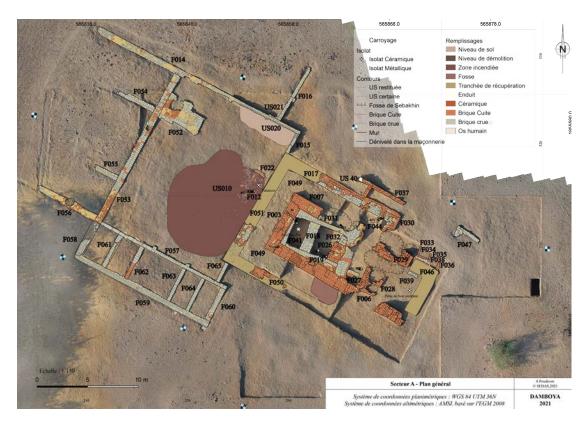


Figure 2. General plan of Sector A ©SFDAS/musée du Louvre.

and determine the extent of the underlying structures. Sixteen squares of 10x10m were established, and six squares were focused on in the centre of the hill, where the remains were potentially best preserved. After a significant surface clearance of mixed windblown sand and broken fired bricks, the first courses of the walls began to appear. The strategy established before the start of excavations – namely to obtain the most complete plan possible of the preserved structures before opening sondages – was followed. Five construction phases have been identified, mostly Meroitic in date, and three horizons are attested thus far. These construction phases are described in detail below, from the most recent to the oldest (for 2020 results, see Maillot 2020).

#### The medieval reoccupation of Sector A

A section of re-used fired brick wall was identified in Square 280/520m, east of the kom (orientated eastwest). It was not connected to other features. Founded on virgin sand, the original matrix of the area, it was only preserved to two courses high (alt. 360.08m a.s.l.) and was made of broken bricks of a third or half size from neighbouring Meroitic structures. It could represent a brief occupation dating to the Alodian period, as seen at el-Hassa at the Amun temple or the associated ceremonial palace, but as the ceramic material was not in a closed context, we cannot confirm this and it could be later.

#### The Meroitic red brick temple

The best-preserved building in Sector A is a red brick rectangular structure orientated east-west, measuring 16.30x7.20m (Figure 3). Four walls (F003, 6, 7, 46), enclose an internal space of 5x15.7m, of which nothing remains of the original occupation level. These four walls are 1.10m wide, with masonry in a header/stretcher pattern. It should be noted that many of the bricks are slightly vitrified, and some had the plaster finish facing inwards, indicating a fairly significant reuse of a previous structure that already had an official purpose. Wall F006 widens towards the southeast (to 1.30m wide), because it cuts through an earlier mud brick structure (see below) but also partially reuses it as a foundation (F026), with masonry



Figure 3. Sector A general view from the northeast ©SFDAS/musée du Louvre.

set in a herringbone pattern and broken red bricks placed at the junction between the temple and this former building. It then forms a corner with Wall F28, which is wider than the other walls (2m).

Wall F28 is particularly interesting even if poorly preserved (sometimes only a single brick in height), as it may correspond to an internal wall of a tripartite temple. Indeed, Wall F029, also badly damaged by *sebakhin* pits, was possibly bonded to F28 to form a single foundation wall, although any connection is now lost. The F29 wall, 1.20m wide, no longer shows any internal or external facing and its foundation was in the original matrix of the sector, yellow hardened sand, devoid of any material. A *sebakhin* pit full of debris (F043) – also cut into the original matrix – is visible and aligned with the southeast extension of Walls F028 and F029, and indicates, in negative, the location of a corner now missing. A similar pit is not visible in the section to the north of Wall F28, which implies that the corner of F28 was a simple right angle. Finally, the F28 wall is the only one with an offset of 200mm from its foundations. This may suggest an earthquake, as in Sector E (see Choimet, this volume), which is not the case for the other preserved elements, all of which were subject to construction defects (i.e. vertical joints creating cracks).

One of the questions that arose in the 2020 season, namely the reason for the extension of Wall F029 by a metre, thus extending the temple towards the east, was solved this year. F029 and F006, of which an additional wall section was discovered in one of the new squares explored this year, meet at right angles thanks to Wall F046, which forms the eastern facade of the red brick temple. More precisely, it is a negative of a wall, because only the bottom of the foundation trench, containing fragments of broken bricks in a black indurated sandy matrix, could be found (alt. 359.65m a.s.l.). Even if it was completely robbed down to the foundations, this discovery is paramount. It allows us to plan the complete temple to the east, and to confirm that the facade of the latter was at right angles, with a width identical to the

<sup>&</sup>lt;sup>1</sup> Square 270-500, maximum alt. 360.31m a.s.l.



Figure 4. Facade of the temple, DAM21-A-F046 ©SFDAS/musée du Louvre.

others (1.10m), was founded at the same level, and lacked a pylon. Wall F046 confirms the tripartite plan of the temple, with, from east to west: a first narrow room (3.80x4.01m), then a second central room (2.76x3.97m), and finally the sanctuary, closed by Wall F003 (4x5.02m). The facade of the temple was simply at a right angle, just like the first temple at Naga, at the foot of the eponymous Jebel (Wildung and Kroeper 2006, 16; Figure 4).

The central space of the building was probably coated with mud plaster, painted white with black sickle patterns and unspecified floral motifs with yellow, red, blue pigments, but with an absence of green. We were able to collect in the surface material, unfortunately not *in situ* but inside the central space, a small number of mud plaster fragments. The internal facing of Wall F003 bore, just above its foundations (alt. 360.45m a.s.l.), the negative of the plaster. However, this was not the case for Walls F006 and 007, which is unsurprising given the predominant position of Wall F003 right on the main axis of the temple.

On the other side of this wall (F003) towards the west and at the limit of Square 260/510, a circumscribed destruction level comprising a large number of fragments of lime plaster (179), a concentration of gold leaf, faience, and fragments of boxes of glazed ceramic tiles, was present. This context (US10) is remarkable beyond this particular concentration of material, as it includes a large amount of charcoal sealed by a destruction level, fragments of vitrified brick, and evenly burnt sand. There is every reason to believe that a fire partially damaged the temple in this crucial area just west of its outer wall, where most of the preserved decoration has been found. A sample of the charcoal was taken in 2020 for C<sup>14</sup> analysis, which allowed us to obtain an absolute date for this first destruction of the temple in the second half of the 1<sup>st</sup> century AD. A second round of dating indicated the presence of wood from the 2<sup>nd</sup> century BC, potentially implying the reuse of wood from earlier structures. Context US10, after excavating the squares to the west of the red brick temple, was found to be much more extensive than thought in 2020, with a semi-circular outline and a maximum radius of 1.40m. A third campaign will provide an opportunity to excavate this destruction level and to better understand the nature of the fire.

To follow the comments on US10, a second phase of destruction of the red brick temple may be considered, based upon two walls, F022 and F017, which share the same orientation as the temple and its walls AF003, 6, 7, but do not appear to be contemporary. F022 has burnt bricks in its masonry and cuts US10 in a straight line; however we will have to verify this hypothesis next year. It will require a complete dismantling of this level of destruction, as a line of white plaster is contiguous to the foundation trench of Wall F022 and abuts its exterior.

Wall F017 (northwest-southeast; 1.20m wide) follows the same orientation as Wall F007 and is separated from it by a passage 1.90m wide, forming a sort of corridor around the exterior walls of the temple (13.02x12.31m maximum, Figure 5). This wall, set in fragments of mudbrick and fired brick (some of which are totally vitrified), had deep foundations (alt. 359.71m a.s.l.) in its western section. A strip of whitewashed clay floor remains connected to its internal facing (alt. 360.28m a.s.l.) and seals a first level of destruction (US40, alt. 360.26m a.s.l., broken bricks cover the foundation trench of F006). F017 is therefore later in the construction sequence of the main building formed by Walls F003, 006 and 007, but, considering its orientation, is contemporary with the use of the temple itself. This hypothesis is confirmed by F030 (north-south, 1.20m wide). F030 had higher foundations (alt. 359.86m a.s.l.) than Wall F017 and was simply placed on a brick pit (F044), whose contents probably came from the mudbrick chapel. In addition, the external fired brick facing of the corner formed by the junction of F030 and F017 is not quite straight, and is made of broken bricks, contrasting strongly with the very regular arrangement of Walls F003, 006 and 007.

Wall F017 extends towards the northwest in a straight line (total length 13.02m). This is only now visible – despite its partial destruction by a *sebakhin* pit dug up to its foundation in Square 260/520 – through the negative that cuts through the neighbouring contexts, and in particular through the construction level of Temple AF049, which will be discussed below. The connection to Walls F014, 15 and 16 cleared last year is therefore established, the latter being contiguous with Wall F017. F017 then formed a right angle with



Figure 5. 'Corridor' around the exterior walls of the temple, DAM21-A-F050-51 ©SFDAS/musée du Louvre.

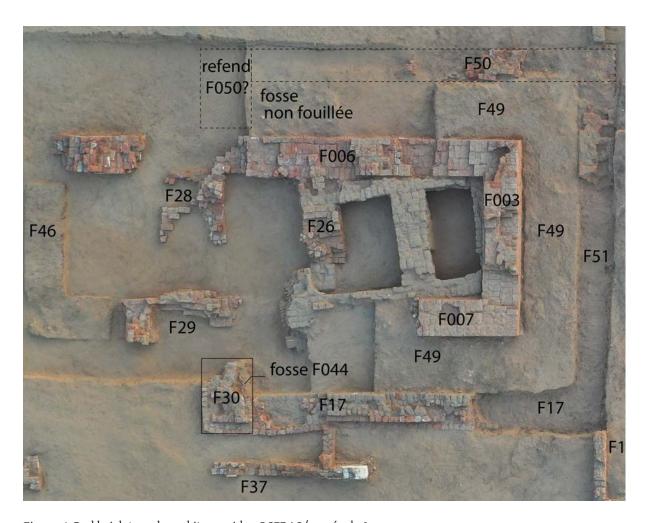


Figure 6. Red brick temple and its corridor ©SFDAS/musée du Louvre.



Figure 7. Side entrance and uncovering of Wall AF037, DAM21-A-F037 ©SFDAS/musée du Louvre.

another wall orientated south-north, F051,<sup>2</sup> so as to enclose the western part of the temple and more particularly Walls F007 and F003. The location of F022 is therefore suspicious, as it is well situated to form a later return to the west (contemporary with AF17?), both in the planning and in the construction phase.

The corridor surrounding the temple is also symmetrical on the south, as demonstrated by the discovery of Wall AF050,³ parallel to Wall F006. It is also striking to see in section the location of the F043 sebakhin pit, which is very close to the surface, to the south of Sector A. Positioned in a straight line with Wall AF050, this is certainly the location of the southern counterpart of Wall F030 to the north, which has now disappeared due to the digging of the pit (Figure 6). Wall F050 must therefore have a returning wall that enclosed the corridor to the south, at the intersection of the line of Wall F030 and Wall F050, the location of the sebakhin pit (F043). This corridor encloses the temple until it reaches Wall F028. Wall F028 was largely destroyed by a pit and only a foundation course remained. The corridor therefore, enclosed the outer walls of the red brick temple for over two-thirds of its area (13m). Wall F030 and its southern counterpart were then joined to the walls of the temple F007 and 006, unless a passage was created from the east, which cannot be verified due to the state of preservation. Finally, and in the same way as Wall F030, it is not insignificant that a still unexcavated pit, full of broken mud bricks, is visible to the west of this missing wall, which would imply foundations similar to F030, i.e. built upon an earlier destruction level, like that of Pit F044.<sup>4</sup>

In the construction level (F049, alt. 360.15m a.s.l.), the surrounding walls of the red brick temple were all cut into indurated clay, with a foundation trench width of 100-150mm. Wall F003 is an excellent example of this, which can be observed on its west side. As such, it is interesting to note the presence of a foundation footing of two bricks at the corner of F003 and F007. With a relatively high level (alt. 360.09m a.s.l.), this could correspond to the departure of vertical torus bricks, so as to form an engaged column at the north-west corner of the temple. The foundation trenches of the corridor were also cut into this construction floor (AF049), including a mortar preparation pit still bearing traces of the masons' feet. This attests to the contemporaneity of use of the entire construction, in addition to its perfect symmetry.

The 2021 season also revealed the presence of a side entrance staircase on the northeast of the hill, with the full uncovering of Wall AF037 (5.15m, Figure 7). The latter, of which only a small section had been discovered in 2020, has a northwest-southeast orientation and is joined to Wall AF017. 350mm wide, it was built in a stretcher/header pattern, and like AF017, was made of reused bricks, sometimes broken in halves or thirds with a lot of added *mouna* (mortar). It forms, in its south-east section, a narrow passage with the AF017 wall, 1.13m wide,<sup>5</sup> then turns inside the corridor surrounding the temple. It was fully coated with white lime mortar, similar to that found at el-Hassa. The top of the northwest section of F037 was also plastered, which indicates that it did not rise any higher and opened onto an exterior area, the level of which, judging by the curve at the base of the plaster coating, corresponded to the natural topography to which is added about 300mm (alt. 360.29m a.s.l.). This plaster is laid upon a dense destruction level (US40, alt. 360.06m a.s.l.), just like the foundation of the wall, which indicates that the area was not leveled before the construction of the temple.

From the base of the plaster orientated towards the outside with the opening onto the corridor is a difference of 240mm (alt. 360.53m a.s.l.). This indicates that the floor level within the staircase should be slightly higher than that outside, but not noticeably. It is hardly higher than the restored floor level within the temple itself (alt. 360.45m a.s.l.), as derived from the base of the mud plaster above the foundation of

<sup>&</sup>lt;sup>2</sup> Wall F051: 12.30x1.10m alt. min./max. 359.91m/360.1m alt.

<sup>&</sup>lt;sup>3</sup> Wall F050: 6.74x1.10 m; alt. min./max. 359.96m/360.15m.

<sup>&</sup>lt;sup>4</sup> Pit F044: bottom alt. F030, 359.86m; alt. of the appearance of the unexcavated pit 360.03m, i.e. 170mm.

<sup>&</sup>lt;sup>5</sup> Wall AF017: alt. 360.20m a.s.l., equivalent to construction Floor AF049.



Figure 8. Sector A, general view from the southwest ©SFDAS/musée du Louvre.

Wall AF003, that is to say 80mm; in other words negligible for a building of this size. On the other hand, a slight depression is noticeable within the corridor, alt. 360.15m a.s.l. on average, of 300mm. One has to keep in mind, however, that the AF049 floor was for construction and not the occupation surface. If we add to this the hypothetical 200mm of a whitewashed clay floor that must have covered it, as it is customary in Meroitic official settlements, we find an identical floor level.

The foundation level of Wall AF037 (359.99m a.s.l.) is within 30mm of Wall AF050 (359.96m a.s.l.), the southern counterpart of the corridor, thus confirming that this operated with the rest of the temple. The foundation of AF050 rests, as with AF037, upon a dense pit of demolished mud bricks belonging to a previous structure, still unexcavated (alt. 360.03m a.s.l., equivalent to US 40). The discovery at the north face of the foot of Wall AF037 (towards the outside) of a fragment of sandstone and a complete ceramic vessel, within the virgin sand matrix of the sector, originating from the progressive collapse of the temple, is of note.

#### The western complex

As indicated above, a group of three walls (F014, 15,16), identified in 2020 in the 260-520 square directly below the surface level, did not show a connection, allowing them to be associated with any phase of Sector A. Made of mud brick and one brick in width (i.e. 350mm), they were built in a header/stretcher pattern. Orientated respectively northwest-southeast (F014), with a return northeast-southwest (F015) and a later unbonded addition attached with *mouna* (mud mortar) orientated northeast-southwest (F016), they are connected to a floor level of indurated clay (F020) created by spreading water to form successive screeds, as is usual in Meroitic settlements. This floor level, equivalent to the occupation level of the temple (alt. 360.30m a.s.l.), is only present in a few areas and disappears under a layer of virgin sand near the red brick temple. Such structures were identified in the Amun temple at el-Hassa, where similar walls, one brick in width, with regular buttresses of an additional mud brick along the wall line, were associated



Figure 9. The entrance damaged by sebakhin pits, DAM21-A-F052 ©SFDAS/musée du Louvre.

with the cult structure.<sup>6</sup> The three walls (F014, 15 and 16) continued in the adjacent squares opened in 2021, respectively to the north-west and north-east. This made it possible to verify the chronology of this unit and to link it to a larger complex associated with the red brick temple to the middle of the 1<sup>st</sup> century AD (Figure 8).

This complex (22.78x21.05m) is accessed by a ramp (F052)<sup>7</sup> of which unfortunately only one brick in the foundation remains, the whole structure being heavily damaged. Similar to the ramp in Sector E but smaller, two steps near Wall F053 delimit an entrance square (2.80m wide, i.e. 1m greater than the rest of the ramp) of which the masonry is comprised of mud bricks laid on edge with a large amount of ash on the top (alt. 359.99m a.s.l.). This entrance was then extended by the ramp itself, where mud brick facing in headers frames a fill of broken red bricks set into a huge amount of *mouna*. Like the whole complex, it was badly damaged by two *sebakhin* pits, not to mention natural erosion, the particularly flat topography encouraging undermining by sand and wind (maximum altitude of the area: 359.86m a.s.l., Figure 9).

This ramp abuts a long wall (F053) delimiting a building of 16.52x6.53m where best preserved, composed of mud and fired bricks, the latter being vitrified and appearing to confirm the occurrence of a fire in the area. It forms a right angle with the F014 wall that continues towards the west, but which then disappears at the edge of the kom where the preservation of the remains is precarious. Wall F053 is flanked by three other walls, F054-55 and 56, which delimit a tripartite plan with three series of rooms (3.71m, 7.10m and 3.86m in width from north to south) enclosed to the south by Wall F056, which shows red bricks on edge at the southeast corner, marking the presence of an external corner. This corner is in the immediate vicinity (1m to the west, possibly the location of a door?) of another part of the complex, orientated eastwest, which seems to correspond to a row of storerooms (14.86x4.53m).

<sup>&</sup>lt;sup>6</sup> This remains unpublished at this time.

<sup>&</sup>lt;sup>7</sup> F052: alt. 360.08m a.s.l., 1.82x4.09m.

This row has a rectangular plan divided into five parts (from west to east, 2.02x3.46m; 2.07x3.51m; 4.25x3.45m; 1.7x3.52m; 1.73x3.51m) including a larger central room with only one course preserved. On the southwest edge of the hill, it is entirely mud brick. One of its surrounding walls (AF057), has like Walls AF014-16, small buttresses two bricks wide in headers, every 4m. Partition walls are one header brick or two stretcher bricks wide, i.e. 350mm. Finally, the resurgence of red bricks on edge at the southwest corner of this row (AF058) is of note. This row is attached to the corridor of the red brick temple through the F065 wall (350mm wide of mud brick), attached to the F050 wall. It is also on the north-south alignment of the F015 wall, to form a sort of rectangular mud brick enclosure (12.77x16.25m or 208m²) attached to the corridor of the red brick temple, within which is the US10 destruction layer that contained the concentration of faience material and gold leaf discovered last year.

To conclude, this complex located behind the temple on the west edge of the hill, which, to the best of our knowledge, is unparalleled in the Meroitic period, continues northward, to achieve symmetry with the storerooms located to the south, with the extension of Wall F016. Next year surface clearing will be extended to the north, to verify this hypothesis, despite a probable poor state of preservation.<sup>8</sup>

#### The mud brick chapel

This previous occupation is confirmed by the presence of four mud brick walls, F041, 18, 19 and 31 (the latter, orientated east-west, was initially faced in mud brick stretchers, and measured 1.10m wide), which form a rectangular space  $(2.94 \times 1.51 \text{m})$  unfortunately cut to the west by Wall F003. A second rectangular space  $(2.95 \times 1.88 \text{m})$  is bounded on the east by the same walls, in addition to Wall F026. The latter, a composite, is the result of destruction and partial reuse during the construction of the red brick temple. It has an exterior facing in fired brick and internal masonry of mud brick, to which is attached in the north a section of wall in mud brick on edge founded on sand, much higher than the rest of the wall (alt. 360.30 against 360.05m a.s.l. for the rest of the wall). The red brick fragments, as well as the herringbone pattern and heavy, thick *mouna* joints observable in the connection with Wall F006, correspond to the reuse of this wall for the red brick temple, so as to maintain stable foundations.

The angle formed by Walls F026 and F031 provides the key to understanding this strange arrangement. With deep foundations (alt. min. 359.19m a.s.l.) with a fired brick on edge foundation course, this corner corresponds to the north half of a pylon, and its symmetrical southern counterpart is attached to the

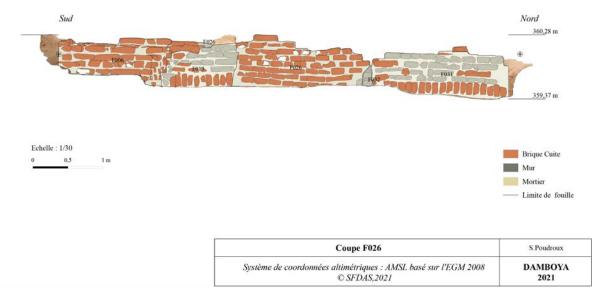


Figure 10. Cross-section of Wall F026 ©SFDAS/musée du Louvre.

<sup>&</sup>lt;sup>8</sup> AF016: alt. min./max. 360.41/359.90m a.s.l., i.e. 510mm is lost in the north section of the kom.

section of the wall by mudbricks on edge, which certainly served as a support for a rectangular ferruginous sandstone threshold of similar dimensions (800x600mm). The discovery of a stone threshold on the surface corroborates the hypothesis, although it may belong to a later occupation phase. We therefore have a double-chambered mud brick chapel (3.88x7.02m at most, the external space is cut on all sides) with an entrance pylon of mudbricks faced in red bricks and an access from east to west with a coated and painted threshold placed on the axis. This axis is confirmed by the mudbricks laid on edge appearing in Wall F018, exactly in line with this first threshold, opening onto the second, western room.

The location of the main entrance to the east is confirmed by the presence of the returning wall of F026, F027, not bonded to it, but attached by means of *mouna* on the exterior red brick facing of the south half of the pylon. Faced with fired brick and built using mudbricks in a herringbone pattern, it is cut to the east by Wall F028 of the red brick temple. This type of wall is characteristic of the entrance staircases, similar to those discovered in the cult complex at el-Hassa, with F027 forming one of the framing walls of a staircase leading to the threshold located at the centre of the pylon. It must have had a counterpart in the north, which has now disappeared. The foundation of F027 is higher than that of the south half of the pylon (alt. 360.02m a.s.l.) and it abuts it, indicating that F027 was built after the chapel pylon. This was dismantled in 2021, in order to expose the cross-section of the F26 wall and to identify the reuse of the chapel pylon as a load-bearing wall for the later red brick temple (Figure 10). To conclude, the exterior facings of the chapel were plastered with lime mortar, as some bricks in the masonry indicate.

Unfortunately, the two internal rooms of the chapel provide little information. The first easternmost room had a destruction level in mudbrick (F008, alt. 360.28m a.s.l.), which included ceramics whose characteristics are older than that of those found in the fired brick temple (second half of the 1<sup>st</sup>century BC). Below this level, a 600mm virgin sand filling, devoid of any material, fills the space below the occupation level of the chapel, which has now disappeared.<sup>9</sup>

The second western-most room of the chapel has a similar filling, also over 600mm up to its red brick foundation laid on edge, which can be seen throughout the building at this level, except for the north half of the pylon. Of note, partition Wall F018 of the chapel has a reused brick with a yellow and blue coating in its foundation, indicating the reuse of materials from a high-status structure that predated the erection of the chapel. To confirm this hypothesis, a floor (F045) was also discovered under the sand fill in the east part of the chapel, associated with the only ancient structure preserved in the area, the F032 wall.

#### Occupation prior to the chapel

Considering the general condition of the area, which was greatly disturbed by *sebakhin* pits, the area had been extensively used as a quarry, probably from the end of antiquity. It is paradoxically thanks to this poor preservation that we were able to observe an element of the first occupation, provided that the level of virgin indurated sand on which excavation stopped is the original matrix (the Neolithic horizon at el-Hassa was present uniformly throughout the complex; it does not seem to be present at Damboya, at least in the excavated areas).

This early occupation is limited to one wall (F032), 500x700mm orientated east-west and entirely of mud brick. It continues under the north half of the chapel pylon to the east, and supports the foundation of F031. An empty space, the size of one brick, left in the centre and filled with a sandy-ashy matrix

<sup>&</sup>lt;sup>9</sup> I.e. alt. 360.30m a.s.l. for the foundation of the threshold in the middle of Walls F018 and F026, to which is added 200mm of sandstone threshold, i.e. 360.50m a.s.l.; that is to say identical to the occupation level restored inside the red brick temple, i.e. the altitude of appearance of the plaster base against Wall F003, 360.45m a.s.l.. The Meroitic builders therefore retained a similar level of circulation/floor surface between the two areas.

<sup>&</sup>lt;sup>10</sup> I.e. 359.50m a.s.l., 300mm higher than the foundation of the pylon of the chapel, alt. 359.19m a.s.l., a classic characteristic of such an arrangement, i.e. there is an additional brick on edge in the foundation of the pylon.



Figure 11. Traces of occupation prior to the chapel, DAM21-A-F032 and F045 ©SFDAS/musée du Louvre.

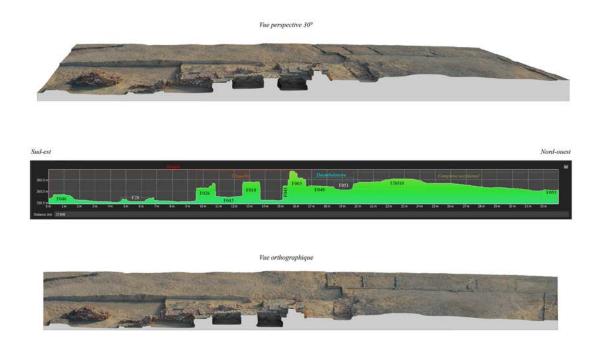


Figure 12. Cross-section of Sector A ©SFDAS/musée du Louvre.

devoid of any material, is remarkable because it does not seem to be the result of any later disturbance. Its early occupation strata status is confirmed by its slightly different orientation, and by the first fired brick foundation course of F031 (excluding the pylon), which is located at the same level as the top brick of F032 (alt. 359.84m a.s.l.). It was also preserved during the construction of the red brick temple, as the fired brick part of F026 rests against F032. The whole was then cut by two very deep *sebakhin* pits, in which the semicircular traces of hoes are still visible. The brick dimensions of F032, 350x180x80mm, argues in favour of a Meroitic date.

In 2021, we observed a floor level associated with this wall (F045, alt. 359.68m a.s.l.), which was cut by the foundations of the walls of the mud brick chapel and by the fired brick temple with the F026 wall. About 150mm thick in hardened clay, it unfortunately did not contain any material, except for a few charcoal fragments. A slight ashy spot was also noticeable at the junction of Walls F032 and F045. This group forms the only remaining traces of occupation prior to the mud brick chapel, the presence of which can be deduced elsewhere thanks to the appearance of older ceramics, but also thanks to the constant reuse of coated and painted bricks in the masonry of the later buildings (Figure 11).

#### Conclusion

#### The chronology of Sector A

The majority of the construction phases belong to the Meroitic period; however a major question remains unanswered, after the discovery in 2021 of the western complex (Figure 12). Indeed, US10, much larger in plan than in 2020, is cut by the foundation of the red brick walls of the corridor of the temple. Then, the two mudbrick walls (F014 / F065) forming the enclosure that frames US10 to the east - (even if these are contemporary with the red brick temple) - are probably cut by the walls of the corridor, then reused, although today we only have the negative of Walls F051 and F050. Moreover, if the traces of fire are also visible in the foundation of the entrance Staircase F052, and on Wall F053 that delimits the location of a large western building, this indicates that the latter was already in a poor state of preservation when the fire occurred. To summarise, this western complex could, for its construction phase at least, be earlier than the red brick temple and its corridor, before being reused by the latter. The slight southwest shift observed for the orientation of the complex as compared to the perfectly east-west axis of the temple, tends to reinforce this hypothesis of reuse of the complex at a later period (but still Meroitic, that of the red brick temple). These preliminary observations are based only on indirect evidence. The dismantling of US10 will allow us to obtain more details concerning this point in 2022. As indicated in the introductory remarks, Sector A has five construction phases and three horizons. The five construction phases, described above, mainly belong to the Meroitic period, and no Neolithic horizon, although expected, was discovered (geological level alt. 358, 86). An additional phase of occupation of the hill should be mentioned, in addition to the Meroitic period and the occasional medieval reoccupation. The kom was reused as a medieval necropolis, probably Christian, after the abandonment of the temple. This was described in a previous article (Maillot 2021).

#### Small finds

Among the objects found in Sector A in 2021, several beads should be noted, mostly circular and small diameter, from necklaces or bracelets. Fragments of glass or faience are also well represented, some still bearing traces of mortar on the reverse, confirming their function as wall inlays. The decoration of the area's walls, probably the central space of the red brick temple (F003), is rich and varied, with fragments of painted plaster, covered with gold leaf, or even sculpted in the round. A fragment of an offering table, a very corroded seal-ring and a fragment of sandstone in the shape of a floral motif were also remarkable

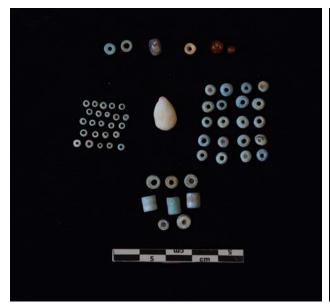




Figure 13. Bead finds, DAM21-A-008-005 ©SFDAS/musée du Louvre.

Figure 14. Carved sandstone fragment,
DAM21-A-008-003 ©SFDAS/musée du Louvre.

finds in 2021. These objects clearly indicate a ceremonial cult context, and support the interpretation outlined above.

Beads are the most represented find with a total of 66, of which 61 were found in Square 260/510 within the destruction level of mud bricks (F008), contemporary with the mud brick chapel, and five were found at surface level of the 260/500 square. The majority of beads are faience with various types present. Using the methodology described by Joanna Then-Obłuska in the chapter about Gereif East (David *et al.* 2020), we followed Horace Beck's classification of beads: first, globular, then tiny cylindrical, long tubular, and discoid or short cylinder beads. Next are three disc-shaped ostrich eggshell beads, two drop-shaped white quartzite beads with a globular or rounded base, two tiny globular-shaped carnelian beads, and two glass beads. These beads were part of bracelets or necklaces. A badly corroded iron seal-ring was also discovered in the surface level (Figure 13).

As a logical continuation from the other objects found in Sector A last year, a piece of a terracotta offering table, very damaged, was recovered. A piece of ferruginous sandstone carved in the shape of a cup, whose function is unknown, is also notable. A fragmentary and isolated yellow sandstone floral motif was also found but is not particularly informative. These elements may have been part of the architectural decoration, or later reuse (Figure 14).

Fragments of coating on mud brick were found in F008. They were part of the wall decoration of the chapel. Likewise, fragments of mud plaster and a piece of faience were discovered in US040. Faience was the most common material discovered in the first campaign at Damboya. Finally, two objects, probably tools, should be mentioned: a barbed punch carved from bone and an oval-shaped stone lithic tool.

#### References

David, R., E. Jadot, M. Routhiau and J. Then-Obłuska 2020. 'Gereif Est et le Méroïtique méridional', in M. Maillot and O. Cabon (eds), SFDAS, l'édition du cinquantenaire. Paris, 189-252.

Lenoble, P. and V. Rondot 2003. 'À la redécouverted'el-Hassa. Temple à Amon, palais royal et ville de l'empire méroïtique', Cahiers de Recherche de l'Institut de Papyrologie et d'Égyptologie de Lille 23, 101-115.

Maillot, M. 2020. 'The archaeological site of Damboya in the Shendi reach. First season', *Sudan & Nubia* 24, 181-189. Wildung, D. and K. Kroeper 2006. *Naga, Royal City of Ancient Sudan*. Berlin.