

# PYRAMID CEMETERY SAC5, SAI ISLAND, NORTHERN SUDAN AN UPDATE BASED ON FIELDWORK FROM 2015–2017

Julia Budka\*

**Abstract:** *The paper gives a first assessment of the newly discovered Tomb 26 in pyramid cemetery SAC5 on Sai Island (Upper Nubia). In 2017, undisturbed burials of the mid – late 18<sup>th</sup> Dynasty were exposed and yielded high-quality burial items of Egyptian style (wooden coffins, funerary masks, faïence and stone vessels, heart scarabs, a stone shabti, steatite scarabs and a number of intact ceramic vessels). The importance of these finds for reconstructing both daily life and death on New Kingdom Sai, an Egyptian temple town and administrative centre, is highlighted.*

**Keywords:** *Sai Island, New Kingdom, pyramid tomb, pyramidion, Nubia, shabti*

## Introduction

Located just south of the natural barrier represented by the Batn el-Haggar in Northern Sudan, thus in a favourable position, Sai Island has been continuously settled from Prehistory to modern times. Nubian cultures of different periods and the Egyptians of the New Kingdom have left plenty of evidence on Sai (Fig. 1).<sup>1</sup> The island is one of the key sites to understand the settlement policy of New Kingdom Egypt in Upper Nubia, being a “bridge head” into the realm of Kerma.<sup>2</sup> Because of this significant role, Sai has been the focus of the European Research Council project AcrossBorders since 2013.<sup>3</sup>

A well preserved Egyptian settlement like the temple town on Sai offers data of various quality and character to recreate a snapshot of everyday life in New Kingdom Upper Nubia.<sup>4</sup> Most impor-

tantly, not only is the town of Sai exceptionally well preserved, but several cemeteries of the New Kingdom are also located close by. Combining data from settlement and funerary archaeology has much potential, not only for reconstructing daily life, health and diet, but especially for understanding the ancient population – one of the main goals of the AcrossBorders project for Sai. In addition to the analysis of finds and architecture from the settlement, the mortuary evidence helps investigate social aspects of past occupants, including the coexistence of Egyptians and Nubians on the island and the evolution of power hierarchies.<sup>5</sup>

## SAC5, the major pyramid cemetery on Sai Island

The pyramid cemetery SAC5 (Fig. 2), located approximately 800 m south of the Pharaonic town, was discovered in the 1972–73 season by the French mission and represents the most significant Egyptian cemetery on the island.<sup>6</sup> Its size and qualitative data underline the importance of Sai as administrative centre of the 18<sup>th</sup> Dynasty in Upper Nubia.<sup>7</sup>

Similar to other Egyptian sites in Nubia, Pharaonic style tombs had been built at SAC5. This cemetery was in use for a long period of time, covering almost the entire New Kingdom and into the Pre-Napatan and Napatan periods.<sup>8</sup> Its rock-cut tombs with mud brick chapels and mostly pyramidal superstructures find close parallels at Aniba, Soleb and Amara West but also in Egypt, e.g. in the Theban necropolis.<sup>9</sup> The results from

\* Ludwig-Maximilians Universität München/Austrian Academy of Sciences

<sup>1</sup> See the summaries by VERCOUTTER 1986; GEUS 2004; YELLYN 2012; BUDKA and DOYEN 2013, 168–171.

<sup>2</sup> DAVIES 2005, 51; BUDKA 2015a, 40.

<sup>3</sup> See BUDKA 2014a; BUDKA 2015a; BUDKA 2017a.

<sup>4</sup> See BUDKA 2017b, 436–444.

<sup>5</sup> See BUDKA 2015c, 69–80. For other sites see, e.g., BINDER 2017; SMITH and BUZON 2017.

<sup>6</sup> For the history of research at SAC5 MINAULT-GOUT and THILL 2012, 3. See also BUDKA 2014a; BUDKA 2015b.

<sup>7</sup> Sai was probably the residence of the Viceroy of Kush prior to Soleb during the 18<sup>th</sup> Dynasty, see MINAULT-GOUT and THILL 2012, 418; BUDKA 2014a; BUDKA 2015a, 51; BUDKA 2015c, 77–80.

<sup>8</sup> THILL 2007, 353–369. See also BUDKA 2014a; BUDKA 2015b.

<sup>9</sup> See BUDKA 2015b, 56–58. For dating such tombs with pyramidal superstructures not before the mid-18<sup>th</sup> Dynasty and most likely from the reign of Amenhotep III onwards, see most recently NÄSER 2017, 560.

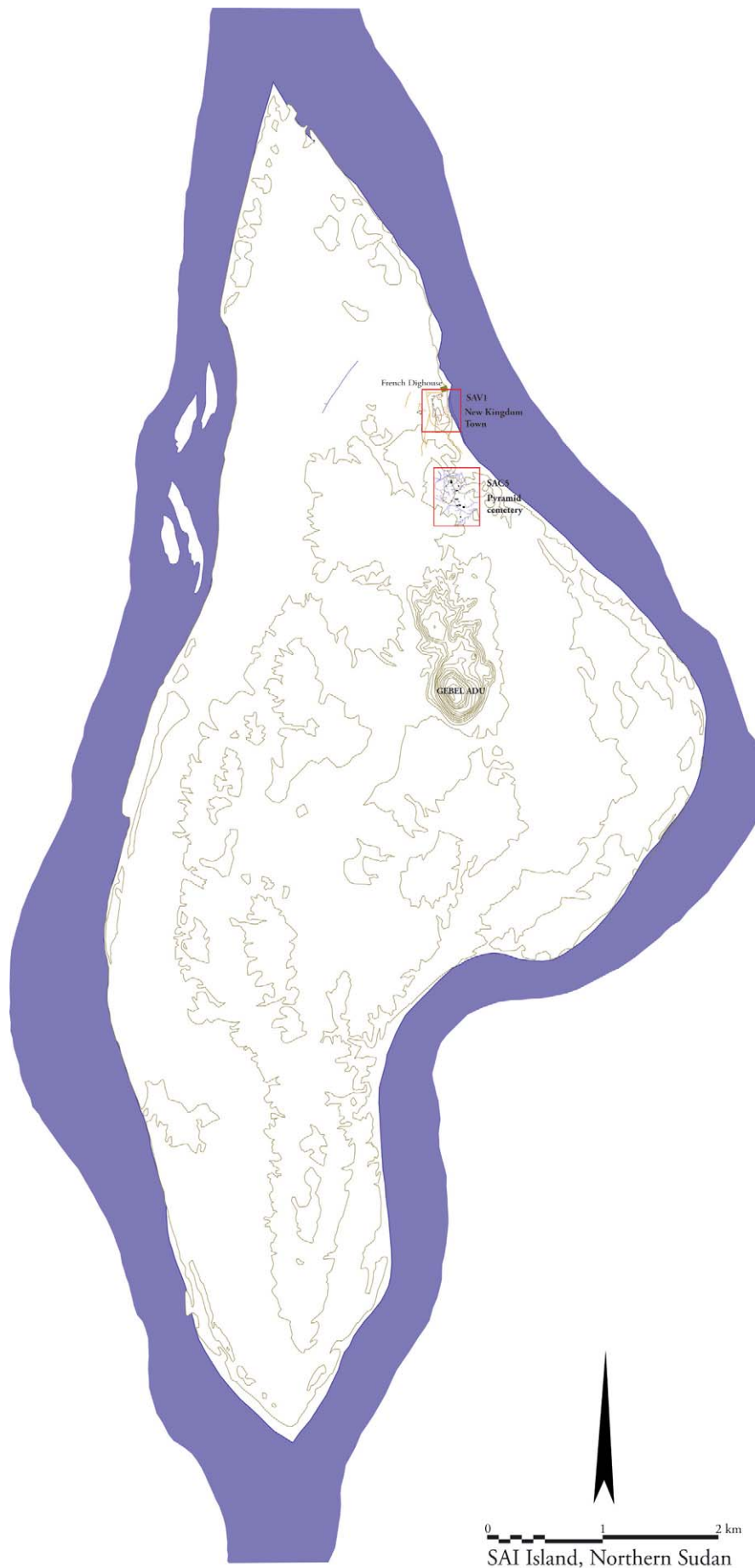


Fig. 1 Map of Sai Island with location of New Kingdom town and cemetery SAC5. © AcrossBorders 2017.

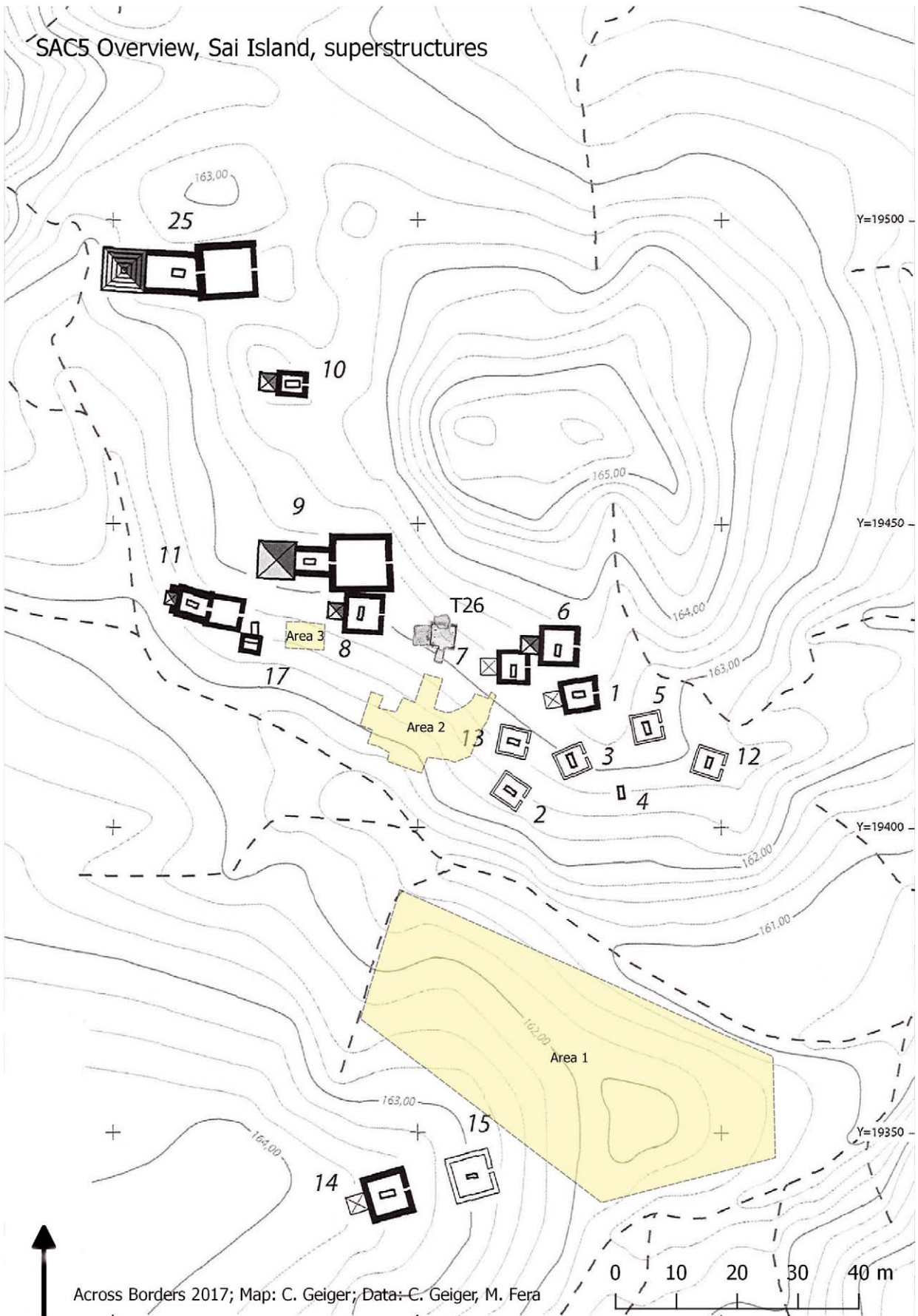


Fig. 2 Southern part of SAC5, overview of superstructures with location of Tomb 26 and excavation areas by AcrossBorders.  
© AcrossBorders 2017, based on MINAULT-GOUT and THILL 2012, vol. 2, pl. 8.

the French mission in SAC5, comprising data from 24 tombs, were recently published as a substantial two volume monograph.<sup>10</sup>

The mortuary evidence from SAC5 supports the findings from the New Kingdom town (based on an assessment of the material culture) that there was a multifaceted community on Sai Island, including both Egyptians and Nubians.<sup>11</sup> This corresponds to recent studies of the biological identities of people buried at other Nubian sites; for example, research at Tombos and Amara West has shown a complex social diversity during the New Kingdom.<sup>12</sup>

As one of the main goals of the AcrossBorders project is to improve our understanding of the population on the island, fieldwork in SAC5 was planned for three seasons, starting in 2015. Taking into account earlier work and publications,<sup>13</sup> new material from AcrossBorders excavations offers fresh data. Besides information about the past occupants, the questions of dating the phasing of the cemetery were of key importance. For the evolution of the New Kingdom town, distinctive phases were recently proposed by the author<sup>14</sup> – does the mortuary evidence support this model or does it show inconsistencies? Furthermore, does it correspond to the assessment of SAC5 as previously proposed by Ann Minault-Gout and Florence Thill?

According to the material published by the French excavations, SAC5 cannot be associated with the foundation of the Egyptian settlement on Sai in the very early 18<sup>th</sup> Dynasty (reign of Ahmose or Amenhotep I).<sup>15</sup> The cemetery was not in use prior to Thutmose III and flourished until the late 18<sup>th</sup> Dynasty, reflecting the general heyday of the 18<sup>th</sup> Dynasty on Sai Island.<sup>16</sup> SAC5 is con-

temporaneous to the extensive building activities in the town, traceable in all town areas with a stone temple, an enclosure wall, magazines and cellars as well as the governor's residence.<sup>17</sup> The necropolis is “de type complètement égyptien”,<sup>18</sup> with a preferred extended position for burials, the only attested hypogea at Sai, pyramid superstructures resembling the New Kingdom Theban model and typical Egyptian installations for funerary offering cult.<sup>19</sup> The assumption that Egyptian administrative staff and their families<sup>20</sup> have been buried here is very likely and seems to be reflected in high quality objects like heart scarabs and stone shabtis.<sup>21</sup> By contrast, whether the “mixed” cemetery SAC4, located to the north of the Egyptian town, was used by Kerma people in contact with the Egyptians living on the island, still needs to be verified.<sup>22</sup> It is also not yet proven that SAC1, a graveyard with about 20 chamber tombs, predates SAC5 and was used by occupants prior to the flourishing time under Thutmose III.<sup>23</sup>

### Fresh Fieldwork in SAC5 2015–2017

In 2015, AcrossBorders resumed work in the large New Kingdom cemetery SAC5 (Fig. 2). Anomalies visible on the geophysical survey map<sup>24</sup> suggested that more tomb monuments were present in the necropolis than had been excavated. Based on the state of preservation at the surface, it was obvious that any possible superstructure is less well preserved than the previously studied monuments. Two areas were opened by AcrossBorders in 2015, aiming to clarify zones definitely void of tombs or with still unexplored tombs.

Area 1 indeed did not yield any tombs, although little New Kingdom surface material was

<sup>10</sup> MINAULT-GOUT and THILL 2012.

<sup>11</sup> BUDKA 2015c, 68–69. Cf. also SMITH 2003.

<sup>12</sup> See BUZON 2008; SMITH and BUZON 2014; BINDER and SPENCER 2014; SPENCER, STEVENS and BINDER 2014; BINDER 2017; SMITH and BUZON 2017.

<sup>13</sup> THILL 2007; MINAULT-GOUT 2012; MINAULT-GOUT and THILL 2012. See also CRESSENT and RAIMON 2016.

<sup>14</sup> BUDKA 2015a; BUDKA 2017a.

<sup>15</sup> For the discussion of the foundation see DAVIES 2005; BUDKA 2011; GABOLDE 2012; BUDKA 2015c, 77–80.

<sup>16</sup> See MINAULT-GOUT and THILL 2012, 403–418; BUDKA 2014a. Cf. also BUDKA 2011; BUDKA 2015b; BUDKA 2017a.

<sup>17</sup> AZIM 1975; BUDKA and DOYEN 2013; ADENSTEDT 2016. See also BUDKA 2015a and 2017a for corresponding results in new excavation areas investigated by AcrossBorders.

<sup>18</sup> MINAULT-GOUT and THILL 2012, 406.

<sup>19</sup> BUDKA 2014a.

<sup>20</sup> MINAULT-GOUT and THILL 2012, 413–414 for titles attested at SAC5 from French excavations.

<sup>21</sup> However, as illustrated by the example of the Deputy of Kush Hornakht (see BUDKA 2015a, 49–50), this also has to include “Egyptianised” Nubians, born in Nubia and fulfilling a role as Egyptian official.

<sup>22</sup> See GRATIEN 1985; GRATIEN 2002.

<sup>23</sup> This cemetery will be published shortly by Brigitte Gratién.

<sup>24</sup> The magnetometer survey was conducted in 2011 by Sophie Hay and Nicolas Crabb, British School at Rome and the University of Southampton; I am grateful to the Sai Island Archaeological Mission and here especially to Didier Devauchelle and Florence Doyen for the possibility to use these data for AcrossBorders' fieldwork.



Fig. 3 Ground plan of the substructure of Tomb 26. © AcrossBorders 2017.

present. Thus, a sector void of burial monuments is now confirmed in the southern part of SAC5 (Fig. 2). Area 2, located to the north of Area 1 and immediately adjacent to various 18<sup>th</sup> Dynasty monuments (Fig. 2), proved more efficient for our search of new tombs. 13 tombs were excavated here by the French mission, including those with the richest burial equipment like Tomb 8. A very similar new structure was discovered by Across-Borders in 2015 with Tomb 26. However, it is important to stress that a complete surface cleaning conducted in 2016 over a large area towards the south and east of this new Tomb 26 proved that this part of the cemetery is otherwise void of tombs. The surface material collected in Area 2 covers all periods attested for the use of SAC5 as a burial site mid- to late 18<sup>th</sup> Dynasty, Ramesside, Pre-Napatan and Napatan.<sup>25</sup> It has to be noted that early 18<sup>th</sup> Dynasty material is missing.

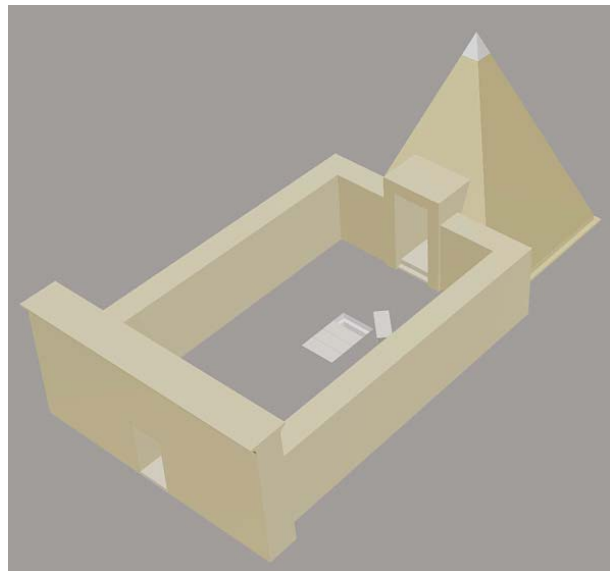


Fig. 4 Reconstruction of the lost superstructure of Tomb 26. Ingrid Adenstedt 2015, ©AcrossBorders.



Fig. 5 Section of lower part of Tomb 26. ©AcrossBorders.

Area 3 of AcrossBorders excavation in SAC5 was opened in 2016 to the west of Tomb 8 (Fig. 2). No mud brick features were found and almost no pottery sherds, but the natural ground featured a number of irregular pits of unclear function. These vary in dimensions and depths and might be connected to the Pharaonic building activity at SAC5. Interestingly, in the courtyard of Tomb 11 (further to the west, Fig. 2) very similar pits were observed directly within the mudbrick architecture of the structure.

All in all, AcrossBorders recent fieldwork in SAC5 confirmed that not all New Kingdom tombs have yet been located, but that there are definitely certain areas along the edge of the southern hill of the necropolis that remained empty of tombs throughout the time, including Post-Pharaonic eras. Most importantly, the discovery of the new tomb, Tomb 26, identifies a cluster of similar structures in one particular part of the cemetery.

<sup>25</sup> See BUDKA 2015a, 47; cf. also THILL 2007, 353–369.

## Tomb 26

A new shaft tomb new shaft tomb, christened Tomb 26, with very scarce remains of a superstructure was located in 2015 within a depression dug into the bedrock between Tombs 8 and 7 (Fig. 4).<sup>26</sup> Excavation work in this remarkable tomb continued in 2016 and was completed in 2017. The following is a first assessment, not taking into account the detailed report on physical anthropology and without the results from current analyses to trace isotopes, ancient DNA and C14 dates.<sup>27</sup> A detailed study of some objects discovered in 2017, including faience vessels and funerary equipment, still needs to be undertaken in Khartoum, the current storage place of the finds from Tomb 26.<sup>28</sup>

Although scarce remains of mud bricks were found around the shaft opening (especially to the west), the superstructure of Tomb 26 is lost. Its reconstruction with a chapel and a pyramid (Fig. 4) is based on comparisons with contemporaneous tombs in Aniba and Soleb, but remains tentative. The subterranean parts of Tomb 26 were completely excavated and comprise a shaft, a central burial chamber and two side chambers (Figs. 3 and 5).<sup>29</sup> All of these rooms seem to belong to one planning phase and thus, although the possibility of restoration phases will be discussed below, a division in secondary and primary chambers is not possible.

### Shaft – Feature 1

The rectangular shaft of Tomb 26 is aligned north–south and measures *c.* 2.6 × 1.8 m, with a depth of more than 5.2 m. A set of eight foot-holes was noted on each of the lateral walls towards the south (eastern and western shaft facing).<sup>30</sup>

Removing upper levels of windblown sand and faint traces of several flood levels, a layer with a number of stone fragments was reached at a depth



Fig. 6 *In situ* situation of pyramidion of Hornakht in shaft (Feature 1), orthophoto. ©AcrossBorders 2017.

of 2.5 m, together with many fragments of pottery vessels and a large quantity of human bones. Obviously one of the original roofing slabs of the shaft, a large schist slab (1.3 × 0.76 × 0.1 m) was set against the northwestern corner.<sup>31</sup> It probably fell into the shaft during the last phase of plundering before Feature 1 was left open for some time. The ceramics from the debris layer suggest as a date for this incident sometime after the Napatan period.

The filling material of the shaft just above the base was highly interesting: a number of complete vessels were found and several worked stones (architectural pieces). Three almost complete, decorated Marl clay pilgrim flasks<sup>32</sup> were assembled

<sup>26</sup> See MINAULT-GOUT and THILL 2012, vol. 2, pls. 6–8.

<sup>27</sup> To be published elsewhere; for some preliminary remarks see BUDKA 2016.

<sup>28</sup> Accomplished in October 2017.

<sup>29</sup> Within AcrossBorders' nomenclature, each individual part of the subterranean structure is called "Feature" and received a consecutive number. The fillings and deposits within Tomb 26 were excavated according to stratigraphical units (SU; see FERA and BUDKA 2016) – the corresponding Harris Matrix is not yet completed and will be published together with the final results.

<sup>30</sup> BUDKA 2015a, 47. Such foot-holes are regularly found in SAC5, see MINAULT-GOUT and THILL 2012, vol. 2, *passim* within the plans/sections of individual tombs.

<sup>31</sup> BUDKA 2015a, 47, pl. 7.

<sup>32</sup> The fabric is a Marl A4 variant. Marl clay pilgrim flasks are common in SAC5, see MINAULT-GOUT and THILL 2012, vol. 1, 354. Close parallels for the ones from Tomb 26 are T5 18 from the nearby Tomb 5, as well as T7 30 and T7 33 from the also nearby Tomb 7, see MINAULT-GOUT and THILL 2012, vol. 2, 163, pl. 157. Marl clay pilgrim flasks are popular until Pre-Napatan times, see VINCENTELLI 2006, *passim*. For a Ramesside example similar to the ones from Tomb 26 VINCENTELLI 2006, 147, fig. 2.91, no. 581. A close parallel was also found in Tomb 15 at Soleb SCHIFF-GIORGINI 1971, 194–196, fig. 346, T15 p13.

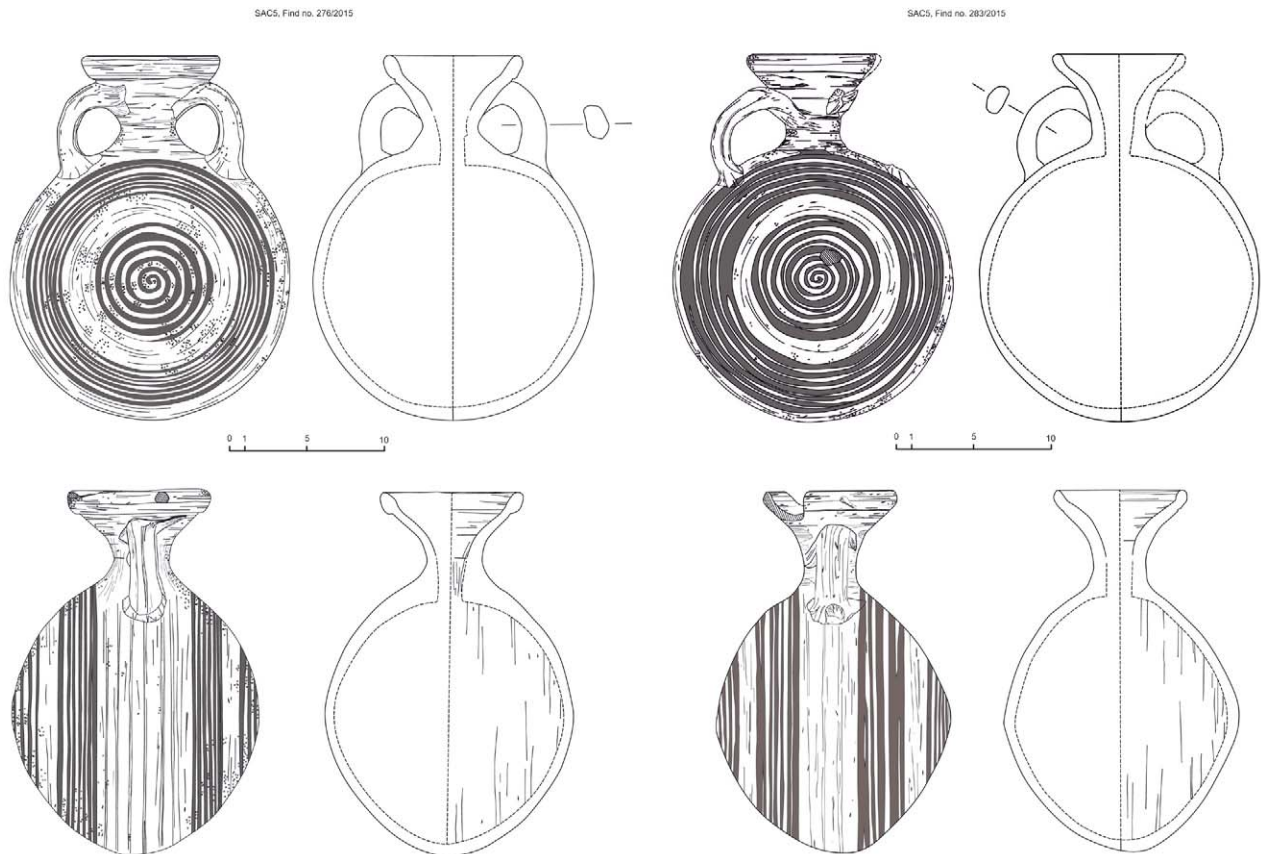


Fig. 7 Pilgrim flasks from bottom of shaft of Tomb 26.

(Fig. 7), associated with other pottery vessels, especially storage vessels and amphorae<sup>33</sup> (Fig. 8). Since these remains were clustered along the eastern wall of the shaft and in the southeastern corner, the most likely explanation is that remains of a Ramesside burial were removed from the central chamber (Feature 2) and left in the shaft during one of the phases of reuse (or possibly plunder?).

The most important objects from the shaft filling are three sandstone fragments (Fig. 6) giving the name and title of the Deputy of Kush (*jd<sup>n</sup>w n K3š*) Hornakht, who is attested from the reign of Ramesses II.<sup>34</sup> SAC5 083 is a fragment of a sandstone lintel, while SAC5 122 describes three pieces of a door jamb. SAC5 215 is a pyramidion inscribed with Hornakht's name and title, thus clear proof that he was buried somewhere in SAC5.<sup>35</sup> Not only the inscribed stones but also the

ceramics from the base of the shaft indicate (one or several) Ramesside burials in Tomb 26. This is also supported by a steatite scarab (SAC5 121), found in the filling just above the base of the shaft, with the motif of a seated Ma'at, a recumbent sphinx with a double-crown and a winged cobra.<sup>36</sup>

Altogether, the material from the shaft comprises objects and ceramics from the mid- to late 18<sup>th</sup> Dynasty (ceramics), the early and late Ramesside period, the Pre-Napatan era and the Napatan era.<sup>37</sup> Illustrating the high quality of the inventory is a remarkable but fragmentary preserved vessel in the shape of a baboon (SAC5 214). This monkey vessel finds a close parallel at Soleb, probably datable to the late 18<sup>th</sup> Dynasty.<sup>38</sup> SAC5 214 is only partly preserved and can be reconstructed from fragments found in the shaft as well as in the central burial chamber, Feature 2. Thus, New King-

<sup>33</sup> The fabric is a Marl A2 and these amphorae date to the Ramesside period, most likely the 20<sup>th</sup> Dynasty; see ASTON 2004, 198–199.

<sup>34</sup> KITCHEN 1980, 117–118; BUDKA 2001, 210–212; BUDKA 2015a, 48.

<sup>35</sup> BUDKA 2015a, 48–50.

<sup>36</sup> BUDKA 2015a, 48, pl. 10.

<sup>37</sup> Especially the Post-Pharaonic material is very fragmented; pottery types represent Marl clay amphorae, beakers and dishes. Cf. MINAULT-GOUT and THILL 2012, vol. 2, pls. 146–147.

<sup>38</sup> SCHIFF GIORGINI 1971, 194–195, T15 p2, fig. 345.



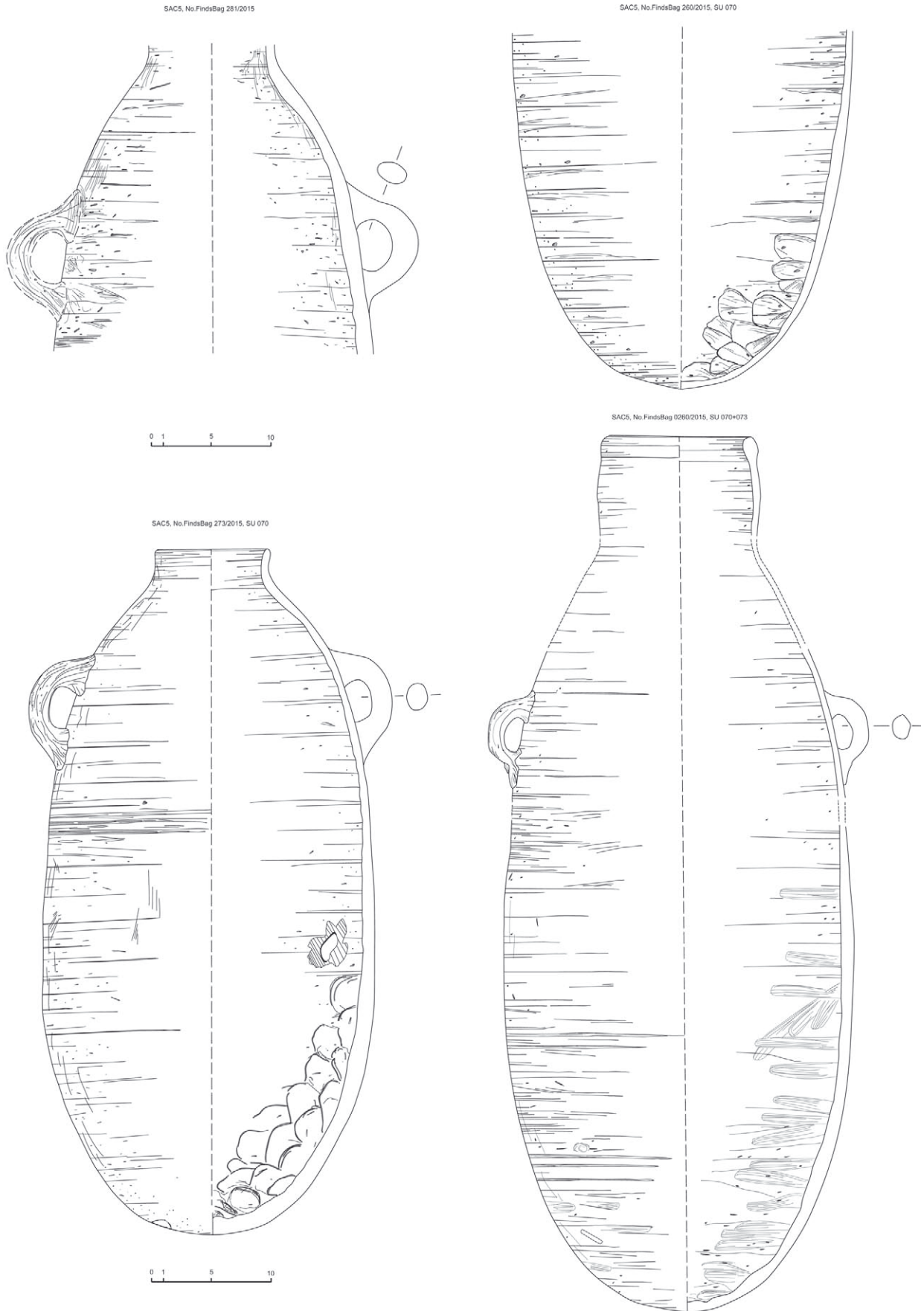


Fig. 8 Amphorae from bottom of shaft of Tomb 26.

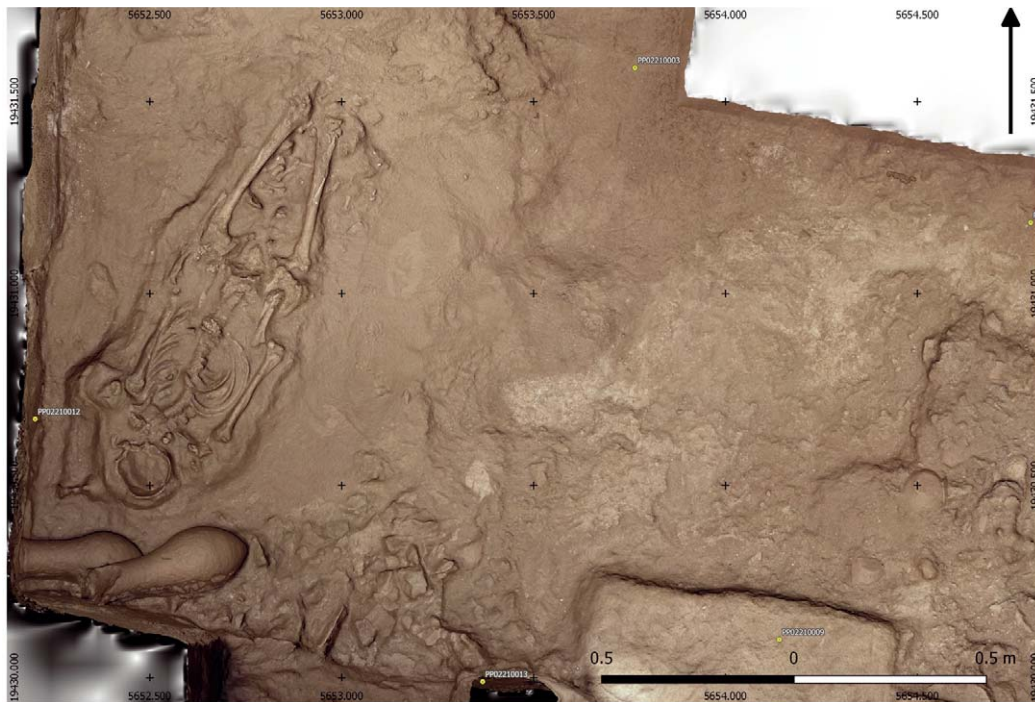


Fig. 9 Burial in southwestern corner of Chamber 2 (Individual 10), orthophoto. ©AcrossBorders 2016.

dom burials of both the late 18<sup>th</sup> Dynasty and the Ramesside era were disturbed in antiquity and their contexts distributed throughout Tomb 26.

#### *Entrance to chamber – Feature 3*

A significant aspect of the shaft of Tomb 26 is that the lateral sides of the base are partly lined with worked stones. Both the eastern and western sides contain a large stone block each, which was plastered and perfectly aligned with the rock-cut shaft. The same holds true for the opening into Feature 2 (the chamber situated to the north), where a step, a threshold and the door jambs of the entrance (Feature 3) are all set stones that were originally nicely plastered in white.<sup>39</sup>

#### *Central burial chamber – Feature 2*

A substantial rock cut room, presumably the central burial chamber of Tomb 26, is connected with the shaft by the entrance (Feature 3) and opens to the north. It is almost square in outline, measuring  $3.96 \times 3.89$  m, with a height of *c.* 1.20 m. In 2015, the chamber was found partly filled with remains of flood levels, between 20 and 40 cm in height

throughout the chamber. Heaps of looser debris and sand was documented in all four corners and especially along the north wall. In all corners, especially the northwestern one, large fragments were found of the collapsed white plaster from the side walls were found.

Feature 2 was completely excavated in 2016, with a minimum of ten individuals documented from different levels, reflecting the tomb's long span of use from the mid-18<sup>th</sup> Dynasty to the Napatan era. Some join with material from the shaft fill – especially ceramics, but also stone vessels – testify that Feature 2 was subject to multiple plundering episodes and the interments were disturbed, the burial equipment partly smashed and distributed throughout the tomb. In order to document the individual levels and phases of use as best as possible, AcrossBorders' single-surface-documentation with a Structure from Motion application was slightly adapted, resulting in detailed orthophotos and 3D models of each surface representing aspects of the use-life of Tomb 26.<sup>40</sup>

The best preserved burial was found in the southwestern corner, labelled as Individual 10 (Fig. 9). A complete Cypriote Base Ring II jug

<sup>39</sup> At Soleb, the doorways at the bottoms of the shafts are also usually set up with worked stones (sometimes including lintels with cornices), see SCHIFF GIORGINI 1971, *passim*.

<sup>40</sup> See in more detail FERA and BUDKA 2016, 22–23; BUDKA 2016.

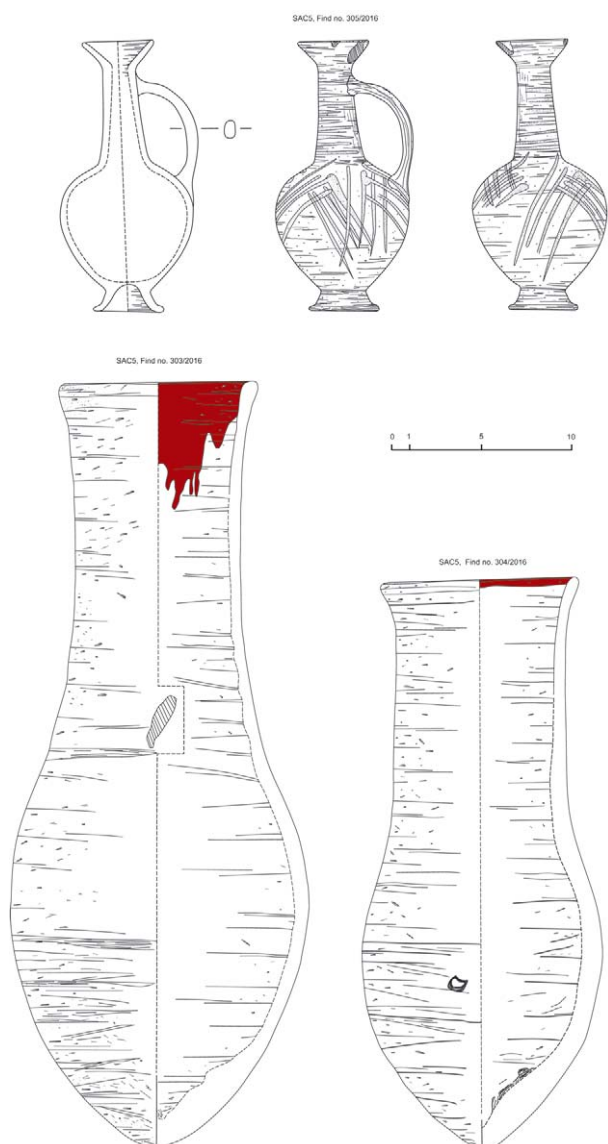


Fig. 10 Pottery associated with Individual 10 in Chamber 2, southwestern corner.

(305/2017) with a strap handle and painted white linear decoration on a burnished, black slipped surface was found next to the skull (Fig. 10), suggesting a date of the burial in the mid- or rather the late 18<sup>th</sup> Dynasty.<sup>41</sup> A scarab made in a very soft stone (possibly steatite?), found still in place along the left upper leg (where the left hand was positioned), supports this dating. SAC5 313 (Fig. 11) shows the cartouche with the prenomen of

<sup>41</sup> BUDKA 2016, 63–64, fig. 14. For a similar Base Ring II juglet from Ezbet Helmi see FUSCALDO 2003, 82, fig. 3b. For the appearance of Base Ring II ware in Egypt as being datable to largely the reigns of Amenhotep III and Akhenaten see ERIKSSON 2001, 65.



Fig. 11 Scarab SAC5 313, from upper leg of Individual 10 in south-western corner of Chamber 2. ©AcosBorders 2016.

Thutmose III, Menkheperre. Such scarabs are well attested in Egyptian tombs in Nubia, finding close parallels both in SAC5 and, for example, in Soleb.<sup>42</sup> A date from the reign of Thutmose III is not always applicable – such scarabs cover a very long time span, with the reign of the king merely as “*terminus ante quem non*”.<sup>43</sup> Two red washed, tall-necked bottles (Fig. 10), set against the southwestern corner of Feature 2, are probably also associated with Individual 10 and therefore significant for its chronology. Based on the bottles, a dating into the second half of the 18<sup>th</sup> Dynasty, most likely the reigns of Amenhotep III or Akhenaten, can be proposed according to parallels from Amarna.<sup>44</sup> Interestingly, both vessels show intentional perforation in the lower parts of the body. Together with the red colour of their surface, one might think of the Egyptian ritual “Breaking of the Red Pots”. However, evidence for breaking and “killing” vessels both in Egypt and Sudan, is diverse<sup>45</sup> and a proper contextualisation of these two vessels in Feature 2 of Tomb 26 is not possible at present.

Definitely later in date than the pots of Individual 10 is another complete vessel from Feature 2, 401/2016 (Fig. 12). This large, almost intact amphora was found along the north wall, solidly stuck in several layers of dense flood deposits and partially lower than remains of individuals in this

<sup>42</sup> For SAC5 see MINAULT-GOUT and THILL 2012, 263–264; for Soleb SCHIFF GIORGINI 1971, pl. 12.

<sup>43</sup> See BUDKA 2014a. For post-18<sup>th</sup> Dynasty examples see BINDER 2011 and LOHWASSER 2013.

<sup>44</sup> ROSE 2007, 90, type SG3, 230.

<sup>45</sup> See BUDKA 2014b with references.

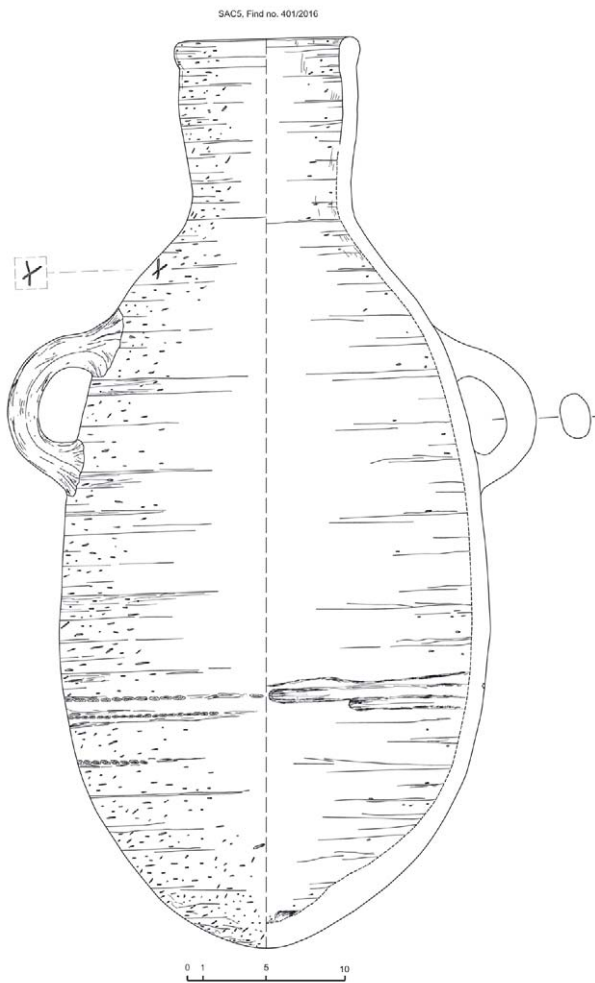


Fig. 12 Amphora along the north wall of Chamber 2, above Feature 4.

area, which are therefore likely to be younger (or not in place/re-deposited). The amphora is situated above what was later confirmed to be Feature 4, a trench along the north wall. The vessel 401/2016 finds good parallel in both Egypt and Nubia and is therefore significant for the relative dating of some interments in Tomb 26. In Egypt, this type of amphora is attested from contexts dated to the reigns of Seti II through Ramesses III<sup>46</sup> – thus, a general date in the 20<sup>th</sup> Dynasty, the Late Rameside period, can be proposed for the vessel from Feature 2.

The trench along the northern wall of Feature 2 is one of the most remarkable aspects of the chamber (see Fig. 5, section view) illustrating that, despite the fact that the chamber was used as buri-

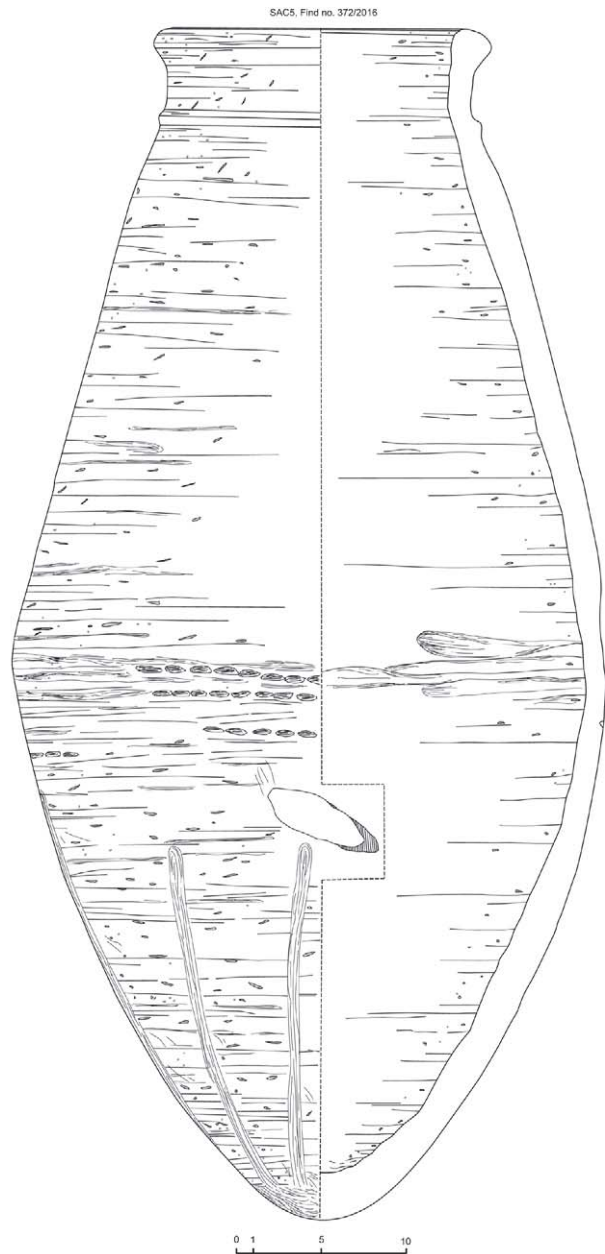


Fig. 13 Zir vessel from Feature 4.

al compartment, Feature 2 is unlikely to represent the original/main burial chamber. Rather, this central chamber was probably primarily used as a kind of circulation space, with a secondary function to also hold burials, presumably from slightly later periods than the interment of the original owner.

<sup>46</sup> ASTON 2004, 192, fig. 8b. Note, however, that this is a Marl D vessel; the one from Tomb 26 is a Nile B2 variant with a white slip (maybe a local production?). A comparable Nile

silt amphora was found in Tomb 15 at Soleb SCHIFF-GIORGINI 1971, 194, fig. 344, T15 p12.

The quality of the rock in which Feature 2 was cut resembles that of the shaft. In some parts, the sandstone was of good quality and allowed a proper alignment of the side walls; in others this was more difficult. All four sides of the chamber were originally plastered, with the southern and western walls created by worked stones lined up against the irregular rock. These stone blocks were perfectly concealed as rock-cut lateral sides – only in areas with collapsed blocks like west of the entrance and in the northwestern corner was this interesting feature noticeable in the present state.

#### *Northern trench – Feature 4*

A trench of 1.90 × 0.70 × 1.40 m is located along the northern wall, almost exactly on the central axis (Fig. 3). In the flood levels concealing it, the uppermost levels excavated in 2016, a large complete Late Ramesside amphora was found (Fig. 12) as well as the lower parts of several individuals (leg bones and feet), obviously remains of burials re-distributed due to water impact and/or plundering. The eastern part of the trench revealed a slightly different nature of material – everything was cemented in flood levels, but the negative of a former robbers' pit was traceable. At the base of this pit, a complete vessel was found standing vertically on its base within the trench. Behind it, where the northern rock-cut wall of the trench was expected, appeared an opening into another chamber completely filled with Nile soil. The vessel itself, a *zir* (Fig. 13) in a coarse Nile clay variant, is clearly datable to the mid- to late 18<sup>th</sup> Dynasty<sup>47</sup> and suggests a similar date for the lower burials within Trench 4, sealed by flood levels and the Late New Kingdom amphora on the top.

In 2017, a systematic, stratigraphic excavation was conducted of Feature 4, completely filled with Nile silt from flood levels. Remains of several individuals were documented (a minimum of five) and only the burials in the lowest levels were found (almost) undisturbed, whereas the upper levels showed traces of plundering with bodies ripped apart. Except for a small number of pottery vessels, no remains of burial equipment were found. Among the ceramics, a burnished Marl D jug with a long neck was found in the upper levels and is quite remarkable (310/2016). It can well be

dated to the late 18<sup>th</sup> Dynasty, finding parallels in Amarna and Thebes.<sup>48</sup> Furthermore, although 310/2016 was primarily found in Trench 4, additional small adjoining fragments derive from Feature 2 above Trench 4, attesting to a phase of plundering prior to the late New Kingdom.

Despite the fragmentary condition of the burials in Trench 4, faint traces of pigments in red, yellow, blue and white represent for the first time in Tomb 26 evidence that the individuals were once placed in painted wooden coffins, probably equipped with funerary masks.<sup>49</sup>

In summary, the uppermost levels of Trench 4 yielded material from the late 18<sup>th</sup> Dynasty (see 310/2016), while the lowest levels appear to be mid-18<sup>th</sup> Dynasty in date according to the pottery (flower pots of a type similar to Feature 6, see below). Ramesside material is missing from Feature 4, thus verifying that the sealing of this part of Tomb 26 with flood levels must have already happened in the late New Kingdom, after some robbery of the trench took place.

#### *Original burial chamber – Feature 6*

At the bottom of the trench along the north wall (Feature 4), a small room (2.13 × 1.35 m) opens towards the north (Fig. 5) and was probably the original burial chamber. It was found sealed and completely filled with flood deposits and was obviously undisturbed since ancient times; as stressed above, nothing later than late 18<sup>th</sup> Dynasty was found in Trench 4, which concealed the chamber below. Feature 6 is less than 1 m in height (between 92–95 cm), but held two coffins (only traces survived in the flood sediments) as well as rich burial equipment of Egyptian style (Fig. 14) scarabs, faience vessels, pottery vessels and one stone shabti (Fig. 15).

One coffin appeared parallel to the north wall and yielded only faint traces of pigments, decayed wood and, of course, the skeleton in extended position. In the head area, traces of the painted wig with blue and yellow stripes were documented. A small set of pottery vessels – all flower pots – were positioned both at the feet (two vessels) and the head (one vessel, see Fig. 16). Next to the head (to the south) other objects were found: four small faience vessels with two inscribed with name and

<sup>47</sup> For earlier variants of this type of *zir*, well attested in the New Kingdom town of Sai, see BUDKA 2011, 26–27.

<sup>48</sup> See ROSE 2007, 269, ME 2.1.

<sup>49</sup> For wooden coffins and funerary masks from SAC5 see MINAULT-GOUT and THILL 2012, vol. 1, 166, vol. 2, pl. 88 (masks).

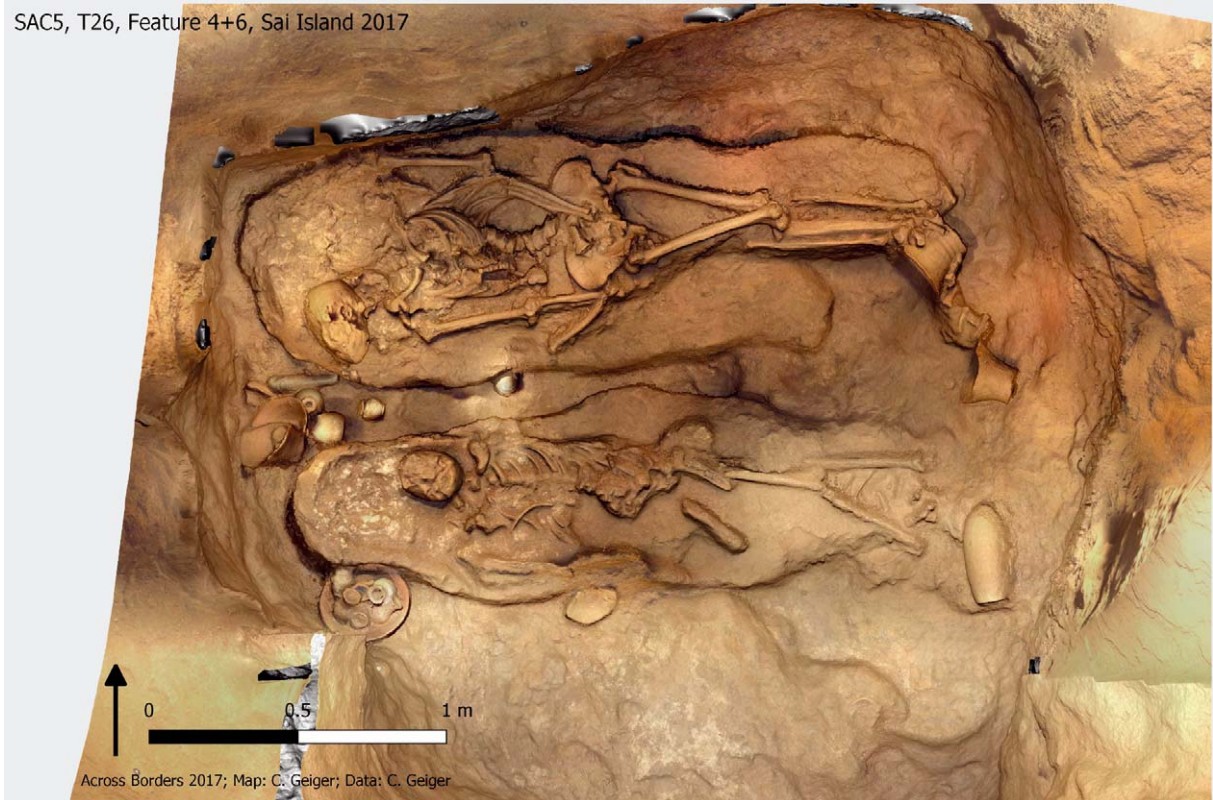


Fig 14 Burials within Chamber 6, orthophoto. ©AcossBorders 2017.



Fig. 15 Shabti of Khnummose from Chamber 6, SAC5 350. ©AcossBorders 2017.

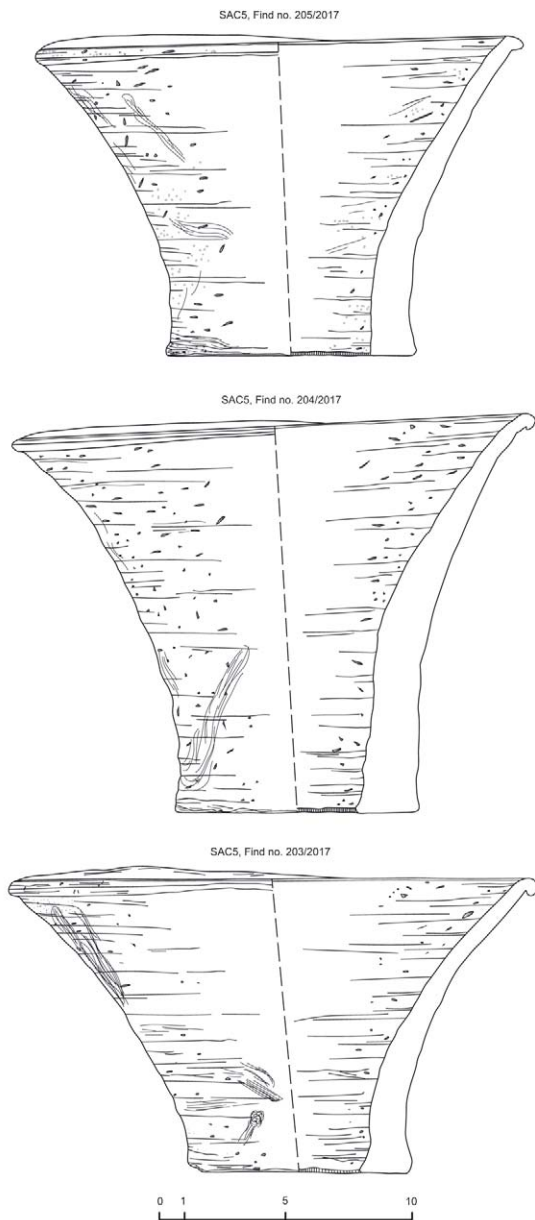


Fig. 16 Pottery from Chamber 6 flowerpots associated with burial of Khnummose.

title of the deceased, as well as a large inscribed stone shabti (SAC5 350, Fig. 15). In the area of the breast, also to the south of the skeleton and presumably outside the coffin, a high-quality heart scarab (SAC5 349) was found. A steatite scarab with floral decoration (SAC5 351), found *in situ* on the left hand, complements the finds associated with this burial. Traces of the funerary mask, especially inlaid eyes and gold foil, have also survived.

The second interment in Feature 6 was placed directly below the entrance. A ceramic dish hold-

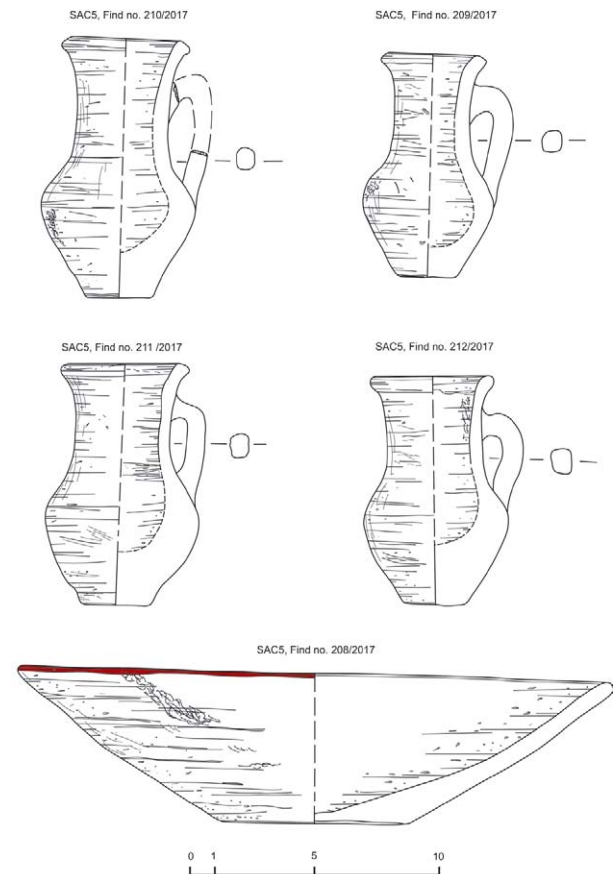


Fig. 17 Pottery from Chamber 6 dish and miniature vessels associated with female adult.

ing four miniature pottery jugs (Fig. 17) and two faience vessels was placed next to the coffin, to the south of the burial. A flower pot and a round-based beaker complement the assemblage (see orthophoto for *in situ* situation, Fig. 14). This burial is less well preserved than the one along the north wall, presumably due to its more exposed position below the entrance. Traces of painted wood, pigments, plaster, and remains of the funerary mask (eye inlays) were documented.

According to the inscribed finds and human remains, the double burial in Feature 6 can be identified as the Master of Gold Workers Khnummose (the main burial along the north wall) and an anonymous female, presumably his wife (the second burial in the entrance area). The titles held by Khnummose, as preserved both on the shabti and the faience vessels, are *n bj* (Gold Worker) and *h r j n b j w* (Master of Gold Workers).<sup>50</sup> Especially the stone shabti (SAC5 350) but also the heart scarab (SAC5 349) are real masterpieces of high quality craftsmanship. Interestingly, on the shabti the

<sup>50</sup> See MÜLLER 2013, 185.

SAC5, T26, Feature 5, Sai Island 2017



Across Borders 2017; Map: C. Geiger; Data: C. Geiger

Fig 18 Earliest burials within Chamber 5, orthophoto. ©AcossBorders 2017.



name of Khnummose was inscribed by a different hand than the remaining text, which comprises Chapter VI of the Book of the Dead.<sup>51</sup> Obviously, this piece was not made for Khnummose, but was acquired already inscribed and was then finished with the name of the person whom it would accompany for eternity. The method of purchasing Egyptian style funerary objects of highest quality without personal name, thus off the shelf rather than on demand, raises a number of questions for the funerary customs of New Kingdom Nubia.<sup>52</sup> It also stresses potential dating issues, in that objects like shabtis and heart scarabs might have a very long use-life, being produced in Egypt, kept in stock for an uncertain time period, then shipped to Nubia and finally used for an official and his Egyptian style burial.<sup>53</sup> All in all, the case of Khnummose underlines the importance of considering pottery vessels as prime evidence for dating burials in New Kingdom contexts. Even if vessels can also have a long span of use, they are unlikely to predate the burial itself, whereas “old” pieces within the funerary equipment are obviously possible. The ceramics from Feature 6 speak to a mid-18<sup>th</sup> Dynasty date – the late reign of Thutmose III at the earliest, but more likely the reigns of Amenhotep II/Thutmose IV and definitely no later than Amenhotep III.<sup>54</sup> Especially relevant here are the so-called flower pots. These conical deep bowls with perforated bases are very common 18<sup>th</sup> Dynasty types known from Egypt and Nubia with debated function.<sup>55</sup> On Sai, flower pots are confirmed from mid-18<sup>th</sup> Dynasty contexts at both the Egyptian town and SAC5.<sup>56</sup> In general, flower pots are not attested prior to the reign of Hatshepsut, when they became very common, and by the reign of Amenhotep III the type was no longer popular.<sup>57</sup> Three flower pots accompanied Khnum-

mose’s burial (Fig. 16), with a further example placed next to the female adult below the entrance of the chamber. They all fall into the category “FP2” in the typology by Holthoer, a variant with a modelled rim.<sup>58</sup>

The miniature jugs accompanying the female burial in Feature 6 find close parallel in Soleb, in particular from Tomb 15, dated by Schiff-Giorgini to the reign of Amenhotep III.<sup>59</sup> This also holds true for the faience vessels of Khnummose – Tomb 11 at Soleb was equipped with comparative objects, suggesting a similar dating (see below).<sup>60</sup>

#### *Western burial chamber – Feature 5*

In 2017, a new discovery was made in the north-western corner of Feature 2 when the entrance to a hidden chamber, concealed by a plastered stone wall, was revealed. Such a wall separating rock-cut chambers from each other is not unique, but is rare in SAC5 – in the neighbouring Tomb 7, a similar ground plan and a comparable wall was found.<sup>61</sup>



Fig. 19 Gold ring SAC5 388 from Chamber 5, *in situ*.  
Photo J. Budka.

<sup>51</sup> See MINAULT-GOUT 2012 for a homogenous group of five stone shabtis, closely comparable to SAC5 350.

<sup>52</sup> See MINAULT-GOUT 2012 for thoughts based on a homogenous group of stone shabtis found in different Nubian sites, but originating from one workshop.

<sup>53</sup> The only known Khnummose attested from Nubia with the title *hrj nbj* can be dated to the reign of Ramesses II (MÜLLER 2013, 185 with references) and is therefore not identical with our person from Feature 6 of Tomb 26.

<sup>54</sup> Such a dating corresponds also to the most likely date of Khnummose’s shabti it falls into the group of stone shabtis published by MINAULT-GOUT 2012 and dated by her to the reigns of Amenhotep II to Thutmose IV.

<sup>55</sup> For examples from Soleb SCHIFF-GIORGINI 1971, pl. XI, types 14 and 15. For Aniba STEINDORFF 1937, pls. 77:25 and

88:b 4. For more examples and the proposed functions see WILLIAMS 1992, 34–35 with references.

<sup>56</sup> For SAC5 see MINAULT-GOUT and THILL 2012, vol. 2, pl. 132. The flower pots from recent excavations in the New Kingdom town at SAV1 East and SAV1 West are still unpublished.

<sup>57</sup> WILLIAMS 1992, 34–35.

<sup>58</sup> HOLTHOER 1977, pl. 18. For parallels from SAC5 see MINAULT-GOUT and THILL 2012, vol. 2, pl. 132.

<sup>59</sup> SCHIFF-GIORGINI 1971, 194, fig. 344, T 15 p9 and p14 and 196, fig. 348, T15 p20.

<sup>60</sup> SCHIFF-GIORGINI 1971, 166, figs. 268 and 270.

<sup>61</sup> MINAULT-GOUT and THILL 2012, vol. 1, 48–50, vol. 2, pls. 27a–b.

This new western chamber, labelled Feature 5 (Fig. 18), yielded eleven adult and three infant burials. The burial equipment comprises a remarkable gold ring (Fig. 19), several scarabs, amulets (includ-

ing an extraordinary neckless with crocodile pendants in various materials) and pottery vessels, as well as some traces of the funerary masks and coffins (comparable to Feature 6).

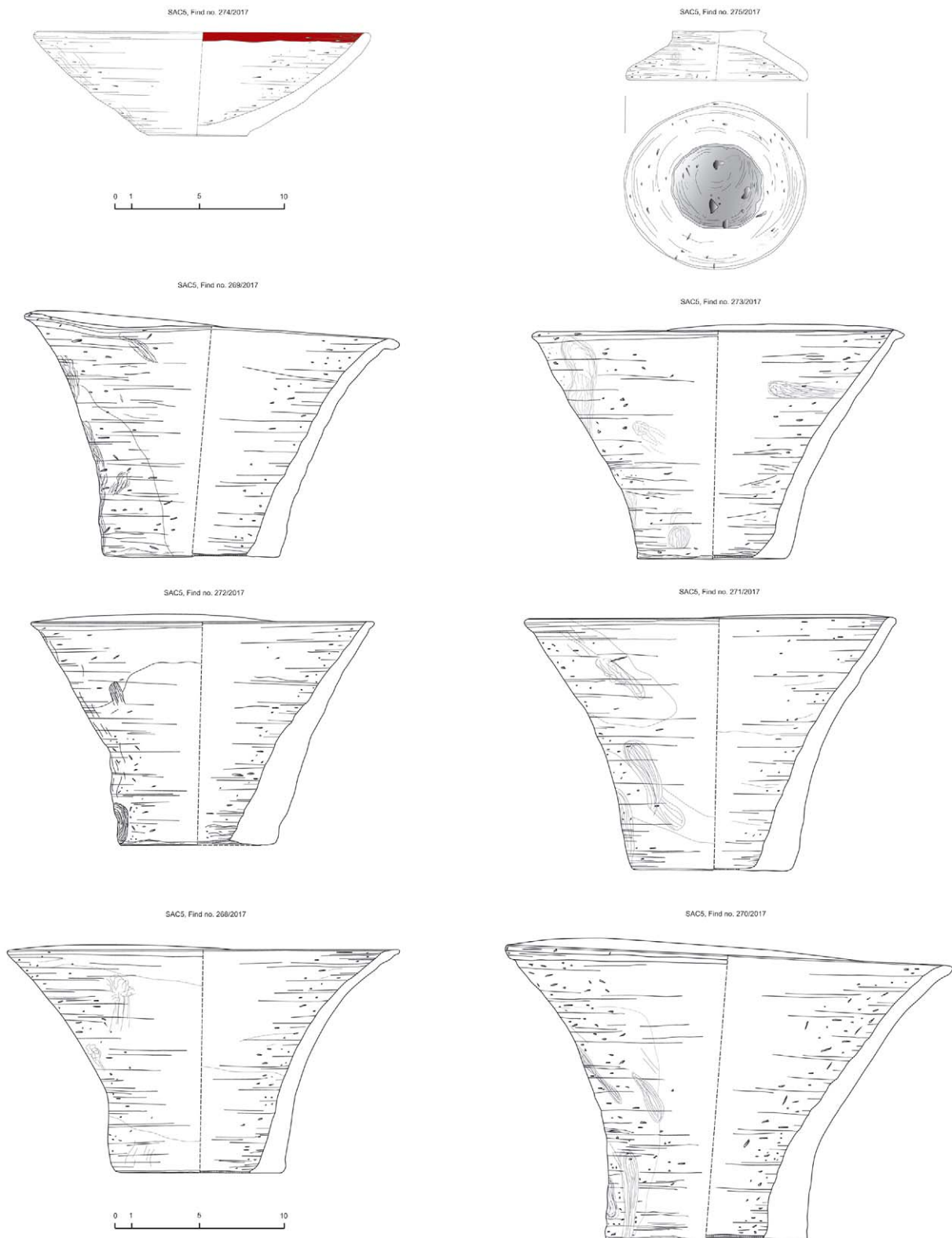


Fig. 20 Pottery from Chamber 5, cluster in southeastern corner.

As in all other parts of Tomb 26, we tried to excavate here according to individual levels and surfaces. The oldest burials, located on the chamber floor and sealed by debris from the roof as well as flood levels, were found in the southern part (Fig. 18). Two extended burials of probable male adults yielded several objects, including clay canopic jars, scarabs and pottery vessels. Another

female individual, with pottery datable to a similar period, was found closer to the entrance, in the northern section of Feature 5.

Of particular interest is a cluster of pottery vessels positioned in the southeastern corner of Feature 5, at the feet of the individual lying along the south wall. This cluster comprises six flower pots – piled with the mouth to the ground – one large

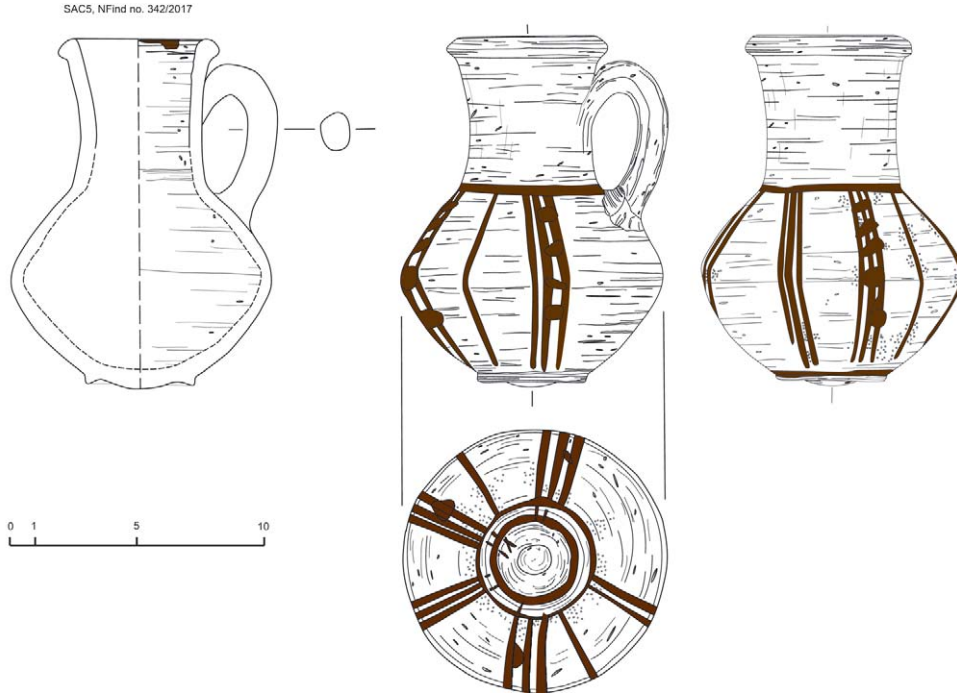


Fig. 21 Thutmoseide Marl clay jug, monochrome painted, from Chamber 5.

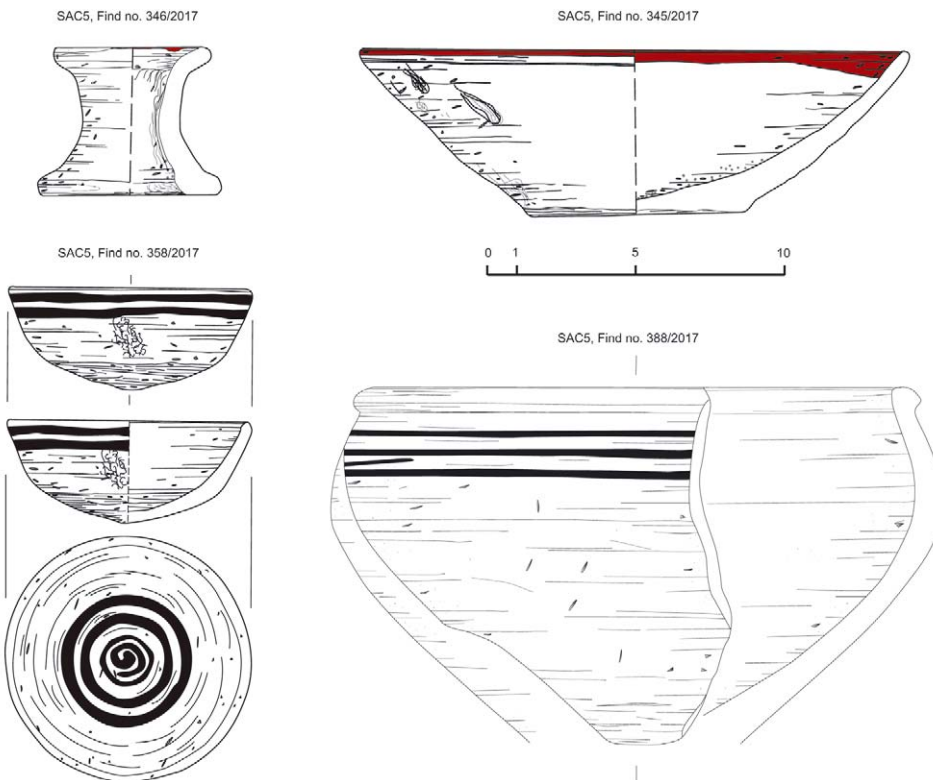


Fig. 22 Various 18<sup>th</sup> Dynasty vessels from Chamber 5.

dish with a red rim and a small lid (Fig. 20). A completely preserved stone vessel (SAC5 398)<sup>62</sup> complements this assemblage, which can be dated to the mid-18<sup>th</sup> Dynasty. A comparable assemblage of flower pots is attested in the neighbouring Tomb 7, which also shows the architectural parallel of a wall separating the subterranean rooms. In the main burial chamber of this tomb, a cluster of vessels was found in the southeastern corner, including five flower pots.<sup>63</sup>

In Feature 5, a Marl clay monochrome painted jug (Fig. 21) was found at the head of the second individual from the south and further suggests a mid-18<sup>th</sup> Dynasty date for this burial.<sup>64</sup> Various other vessels support this dating and include a small lid with a spiral decoration in black on red wash, a carinated white slipped bowl with black linear decoration, another dish with a red rim and a small pot stand (Fig. 22).

According to the pottery, the early burials from Feature 5 seem to be almost contemporary with Khnummose and his wife, suggesting that they probably represent further family members who were buried in the mid-18<sup>th</sup> Dynasty respectively during the second half of this Dynasty. This assumption will be further tested by tracing both ancient DNA from the skeletons and trying to correlate C14 dates with our archaeological dating. It is of special interest to get more information about the

burials in the northern part of Feature 5 (female adults and two infants), as they appear to be slightly later in date, being located closer to the entrance.<sup>65</sup>

### Summary of the use-life of Tomb 26

Until the 2017 field season, it remained an open question whether Tomb 26 represented the original tomb of the Deputy of Kush Hornakht, whose pyramidion, jambs and lintel were found in the shaft. With the discovery of Chambers 5 and 6, this can now be specified (Table 1) Tomb 26 was originally built in the mid-18<sup>th</sup> Dynasty (Amenhotep II to Thutmose IV) for the Master of Gold Workers Khnummose. Until the late 18<sup>th</sup> Dynasty the family of Khnummose seems to have used the tomb as burial place, with interments taking place in Feature 5 and also probably in Feature 2 (Individual 10). By the Ramesside period at the latest, the original chamber (Feature 6) was completely sealed by flood levels. Some activity must have happened in the 19<sup>th</sup> and 20<sup>th</sup> Dynasties, most probably re-using Feature 2 as burial chamber. It is also likely that the entrance to Feature 5 was concealed and that this lateral room was forgotten – part of its roof must have collapsed soon after the 18<sup>th</sup> Dynasty. Consequently, interments of the Pre-Napatan and Napatan era used primarily the central room, Feature 2, which remained open and functioning well into the 7<sup>th</sup> century BCE.

Table 1 Main phases of burials in Tomb 26; the use by Hornakht remains tentative.

Use/activities	Associated individuals	Areas within Tomb 26	Date
Original construction of tomb and primary use	Khnummose	Shaft, Feature 2, Feature 4 and Feature 6	Mid 18 <sup>th</sup> Dyn. (Amenhotep II/Thutmose IV)
Associated burial	Female adult/wife of Khnummose?	Chamber 6	Thutmose IV/Am. III
Continued use as family tomb; new Chamber 5	3 individuals, 1 infant; maybe additional persons	Chamber 5	Thutmose IV/Am. III
New burials/family members?	Individual 10; NN?	Chamber 2; possibly also Chamber 5; Feature 4	Amenhotep III/Akhenaten
Continued use as (family?) tomb	Several individuals	Feature 4	Late 18 <sup>th</sup> Dynasty to Ramesside
Restoration/new superstructure	Hornakht	Superstructure, burial in Chamber 2?	Ramesses II
New burials	Several individuals	Chamber 2	Late 19 <sup>th</sup> -20 <sup>th</sup> Dynasty
New burials; dismantling of superstructure (chapel and pyramid)	Several individuals	Chamber 2 (and Feature 1?)	Pre-Napatan
New burials	Several individuals	Chamber 2 (and Feature 1?)	Napatan

<sup>62</sup> ASTON 1994, 151, type 173 (very common during reign of Thutmose III).

<sup>63</sup> MINAULT-GOUT and THILL 2012, vol. I, 49.

<sup>64</sup> WILLIAMS 1992, 41, 86, fig. 8o.

<sup>65</sup> In upper levels of this entrance area, Pre-Napatan and Napatan pottery fragments were found.

All in all, taking into account the new finds from 2017, there are two scenarios regarding the burial of Hornakht, both of which are possible.

- 1) Considering that Hornakht was the highest official of the Egyptian administration in Upper Nubia during the reign of Ramesses II, one might argue that he should have been buried in a tomb which was specifically built for him. Since we now know that Khnummose is the earliest owner of Tomb 26, the structure cannot be interpreted as a new tomb erected for the Deputy of Kush in the 19<sup>th</sup> Dynasty. Thus, Hornakht was probably buried in a tomb close-by that has until now escaped its rediscovery. The pyramidion and fragments of the offering chapel of this still unknown tomb then ended up in the shaft of Tomb 26, probably somewhere around the end of the New Kingdom.
- 2) Considering that most tombs in SAC5 testify a phase of re-use in Ramesside and Late New Kingdom times, this modus of interment – usurpation of older structures – seems to represent the Ramesside standard on Sai.<sup>66</sup> As yet, no structure was found that was built as new tomb *after* the 18<sup>th</sup> Dynasty. Thus, it is likely that Hornakht, as Deputy of Kush, also chose his burial place according to local contemporaneous traditions. Tomb 26 would have been re-occupied, its superstructure re-designed with a pyramid (including the inscribed capstone) and a new chapel with inscribed doorways.<sup>67</sup> At the end of the New Kingdom, this superstructure was dismantled, the tomb was re-used and the stone architectural pieces ended up in the shaft. This would correspond well to other finds (pottery and scarabs) from Tomb 26 dating to the 19<sup>th</sup> Dynasty, the time of Hornakht. Furthermore, one has to consider that his burial represents a particular case: by the reign of Ramesses II, deputies of Kush were usually residing at Amara West, suggesting that the highest Nubian officials were also buried in this new administrative center. For whatever reason, perhaps because of family ties, Hornakht chose to have his tomb at Sai.<sup>68</sup> In doing so, he followed the local tradition of re-using an older tomb, but equipping it with a new superstructure illustrating his rank as Deputy of Kush.

In summary, although no material from the funerary equipment of Hornakht was identifiable as such from Tomb 26, I would propose that the second scenario – the re-occupation of Khnummose's monument by Hornakht – is more likely, taking into account the specific situation during the 19<sup>th</sup> Dynasty on Sai.

All in all, Tomb 26 is remarkable in several aspects its architecture, rich inventory and complex use-life. Regardless of which scenario for the burial of Hornakht will be the more likely in the end, after processing all finds, ceramics and human remains, Tomb 26 has yielded the first stone pyramidion from Sai, illustrating that pyramids were being built on the island in the 19<sup>th</sup> Dynasty.

The ceramics and prosopographical data from Tomb 26 are especially important for AcrossBorders' envisaged comparison between necropolis and town. The burial of Khnummose and the accompanying interments of the mid-18<sup>th</sup> Dynasty enable us to reconstruct a family whose members were engaged in gold mining, one of the main functions of Sai as Egyptian administrative centre during the New Kingdom. As Deputy of Kush, Hornakht fits in perfectly and allows stretching the period of interest until the Ramesside era.

With Khnummose, one of the occupants of the New Kingdom town was identified – according to his title it is safe to closely associate his daily activities with the large scale magazine buildings, well known from the southern part of the town, but now also unearthed at SAV1 East by recent excavations of AcrossBorders. Large cellars in this sector of the New Kingdom town (like Feature 15) were in use during the lifetime of Khnummose and possibly his offspring.<sup>69</sup> These cellars and magazines are connected with tributes to Egypt, possibly also with Nubian gold and with the Egyptian administration of Upper Nubia in general. Thus, combining the respective data with prosopographical information from SAC5 represents further steps in reconstructing both daily life and death on New Kingdom Sai, an Egyptian temple town and administrative centre.

## Outlook

As highlighted, Tomb 26 and its associated finds are of prime significance for understanding life on

<sup>66</sup> The reuse of older structures as a mode of burial is also attested at Soleb, see SCHIFF-GIORGINI 1971, 100.

<sup>67</sup> Cf. the complex phases of re-designing the superstructure of Tomb 15 at Soleb, SCHIFF-GIORGINI 1971, 186, fig. 322.

<sup>68</sup> As well as a – at least temporary – residence in the town area; see BUDKA 2015a, 49.

<sup>69</sup> See BUDKA 2015a, 45, table 1, for the phases of use of Feature 15 at SAV1 East.

New Kingdom Sai. AcrossBorders' results from fieldwork at SAC5 nicely correspond to the results of the French Mission, which could rely on a much larger set of excavated tombs with large quantities of various materials. Most importantly, the new work in SAC5 supports my reconstruction of the evolution of the Egyptian town based on excavation in the city.<sup>70</sup> During the time of Thutmose III, Sai became an important administrative centre that was equipped with a large Egyptian-style pyramid cemetery. Egyptian architecture and material culture from both the town and cemetery SAC5 testify to the presence of Egyptians, but also to the appropriation of Egyptian style though indigenous elements. This resulted in a lifestyle during the second half of the 18<sup>th</sup> Dynasty that is very similar, but not completely identical to sites in Egypt proper. Evidence from Tomb 26 is also relevant for the Ramesside history of Sai Island, together with new finds from the town site (especially sector SAV1 West), the continued importance of the island during the 19<sup>th</sup> Dynasty can be illustrated. Sai was still used by high officials as burial place, including by the Deputy of Kush. Finally, the material from Tomb 26 allows regional comparisons with other Egyptian sites in Upper Nubia. New parallels to another major Egyptian site in Upper Nubia, Soleb, can be highlighted and remarkable matches were noted between the new tomb on Sai and Tomb 15 at Soleb, implying either close connection between the sites or – maybe even more likely – stressing the almost identical status of both sites as administrative centres. In this respect, the stone shabti of Khnummose is also highly relevant; it falls into a homogenous group of funerary figurines attested for various officials of the Egyptian administration of Nubia, who were buried at major sites of the mid-18<sup>th</sup> Dynasty like Aniba, Toshka and Sai.<sup>71</sup>

The archaeological data from Tomb 26 will be complemented in the near future by various results of scientific analyses: we hope to present C14 dates to match our relative datings based on ceramics and other finds and the complete report on the physical anthropology of all burials from Tomb 26

will add figures concerning age, health, diet and sex. Ancient DNA and also strontium isotope analyses<sup>72</sup> will hopefully contribute to one of the most pressing questions – the autochthony or allochthony of the skeletal remains from Tomb 26. With all of these data, more information on the coexistence of Egyptians and Nubians on the island through the entire period of the New Kingdom will be available.

### Acknowledgments

Funds for fieldwork in SAC5 in all seasons were granted to Julia Budka by the European Research Council (ERC Starting Grant no. 313668) and the Austrian Science Fund (FWF START project Y615-G19). AcrossBorders was hosted by the Austrian Academy of Sciences from December 2012 to March 2015; its current host institution (since April 2015) is the Ludwig Maximilians University Munich.

AcrossBorders' fieldwork on Sai Island was conducted with the approval of the French concession holders Didier Devauchelle (UMR 8164 HAL-MA-IPEL, University Charles-de-Gaulle Lille 3, until 2015) and Vincent Francigny (Section française de la direction des antiquités du Soudan, Khartoum, since 2015). Permission to work in the field is kindly granted by the National Corporation for Antiquities and Museums of Sudan (NCAM), and sincere thanks go in particular to Abdelrahman Ali Mohamed (Director General) and El-Hasan Ahmed Mohamed (Director of Fieldwork). The NCAM inspector during the relevant 2015–2017 seasons was Huda Magzoub. Thanks go to all team members and here especially to Martin Fera, Cajetan Geiger, Meg Gundlach, Daniela Penzer, Lucia Sedlakova, Andrea Stadlmayr, Oliver Frank Stephan and Marlies Wohlschlager. The layout of the pottery plates for this paper was kindly undertaken by Oliver Frank Stephan; the plans used here are designed by Cajetan Geiger (except for Fig. 4 and Fig. 9, for which thanks go to Ingrid Adenstedt and Martin Fera). For improving the written English of this paper I am grateful to Meg Gundlach.

<sup>70</sup> BUDKA 2015a, 51; BUDKA 2017a, 19.

<sup>71</sup> See MINAULT-GOUT 2012.

<sup>72</sup> For first promising results of strontium signals in skeletal samples both from Egypt and Nubia, suggesting that distinguishing between the two areas is possible with this method, see SMITH and BUZON 2017, 618–619, fig. 5.

## Bibliography

- ADENSTEDT, I.  
2016 *Reconstructing Pharaonic Architecture in Nubia the case study of SAVI, Sai Island*, CAENL 3, Vienna.
- ASTON, B.G.  
1994 *Ancient Egyptian Stone vessels. Material and Forms*, SAGA 5, Heidelberg.
- ASTON, D.A.  
2004 Amphorae in New Kingdom Egypt, *Ä&L* 14, 175–213.
- AZIM, M.  
1975 Quatre campagnes de fouilles sur la Forteresse de Saï, 1970–1973. 1<sup>ère</sup> partie l'installation pharaonique, *CRIPEL* 3, 91–125.
- BINDER, M.  
2011 The 10<sup>th</sup>-9<sup>th</sup> century BC – New Evidence from Cemetery C of Amara West, *Sudan & Nubia* 15, 39–53.  
2017 The New Kingdom Tombs at Amara West: Funerary perspectives on Nubian-Egyptian interactions, 591–613, in N. SPENCER, A. STEVENS and M. BINDER (eds.), *Nubia in the New Kingdom. Lived Experience, Pharaonic Control and Indigenous Traditions*, BMPES 3, Leuven.
- BINDER, M. and SPENCER, N.  
2014 The Bioarchaeology of Amara West in Nubia: Investigating the Impacts of Political, Cultural and Environmental Change on Health and Diet, 123–136, in A. FLETCHER, D. ANTOINE and J.D. HILL (eds.), *Regarding the Dead Human Remains in the British Museum*, British Museum Research Publication 197, London.
- BUDKA, J.  
2001 *Der König an der Haustür. Die Rolle des ägyptischen Herrschers an dekorierten Türgewänden von Beamten im Neuen Reich*, Beiträge zur Ägyptologie 19, Vienna.  
2011 The early New Kingdom at Sai Island: Preliminary results based on the pottery analysis (4th Season 2010), *Sudan & Nubia* 15, 23–33.  
2014a Review of Anne Minault-Gout and Florence Thill, Saï II. Le cimetière des tombes hypogées du Nouvel Empire (SAC5), FIFAO 69, Cairo 2012, *Methodos* [online], 14 | 2014, <http://methodos.revues.org/3760>.  
2014b Egyptian impact on pot-breaking ceremonies at Kurru? A re-examination, 641–654, in J.R. ANDERSON and D.A. WELSBY (eds.), *The Fourth Cataract and Beyond. Proceedings of the 12<sup>th</sup> International Conference for Nubian Studies*, BMPES 1, Leuven.  
2015a The Pharaonic town on Sai Island and its role in the urban landscape of New Kingdom Kush, *Sudan & Nubia* 19, 40–53.  
2015b Ein Pyramidenfriedhof auf der Insel Sai, *Sokar* 31, 54–65.  
2015c The Egyptian “Re-conquest of Nubia” in the New Kingdom – Some Thoughts on the Legitimization of Pharaonic Power in the South, 63–82, in F. COPPENS, J. JANÁK and H. VYMAZALOVÁ (eds.), *Royal versus Divine Authority. Acquisition, Legitimization and Renewal of Power, 7th Symposium on Egyptian Royal Ideology, Prague, June 26–28, 2013*, Wiesbaden.  
2016 Neues zum Pyramidenfriedhof auf Sai, *Sokar* 33, 60–67.  
2017a Crossing Borders Settlement Archaeology in Egypt and Sudan, *Near Eastern Archaeology* 80/1, 14–21.  
2017b Life in the New Kingdom town of Sai Island some new perspectives, 429–447, in N. SPENCER, A. STEVENS and M. BINDER (eds.), *Nubia in the New Kingdom. Lived Experience, Pharaonic Control and Indigenous Traditions*, BMPES 3, Leuven.
- BUDKA, J. and DOYEN, F.  
2013 Living in New Kingdom towns in Upper Nubia – New evidence from recent excavations on Sai Island, *Ä&L* 22, 167–208.
- BUZON, M. R.  
2008 A bioarchaeological perspective on Egyptian colonialism in the New Kingdom, *JEA* 94, 165–182.
- CRESENT, M. and RAIMON, A.  
2016 Inscriptions in the name of governor Neby revealed by the restoration of miniature metal vases, *Sudan & Nubia* 20, 28–34.
- DAVIES, W.V.  
2005 Egypt and Nubia. Conflict with the Kingdom of Kush, 49–56, in C.H. ROEHRIG (ed.), *Hatshepsut From Queen to Pharaoh*, New York.
- ERIKSSON, K.  
2001 Cypriot Ceramics in Egypt during the Reign of Thutmose III: The Evidence of Trade for Synchronizing the Late Cypriot Cultural Sequence with Egypt at the Beginning of the Late Bronze Age, 51–68, in P. ÅSTRÖM (ed.), *The Chronology of Base-ring Ware and Bichrome Wheel-made Ware. Proceedings of a Colloquium held in the Royal Academy of Letters, History and Antiquities, Stockholm, May 18–19, 2000*, KVHAA Konferenser 54, Stockholm.
- FERA, M. and BUDKA, J.  
2016 Leben und Tod auf der Nilinsel Sai – GIS-gestützte Untersuchungen zu einer pharaonischen Tempelstadt in Obernubien, *AGIT – Journal für Angewandte Geoinformatik*, 2–2016, 18–24.
- FUSCALDO, P.  
2003 The Base-Ring Wares from the palace complex at Tell el-Dab'a (Ezbet Helmi, Areas H/III and H/VI), *Ä&L* 13, 68–82.

- GABOLDE, L.  
2012 Réexamen des jalons de la présence de la XVIII<sup>e</sup> dynastie naissante à Saï, *CRIPPEL* 29, 115–137.
- GEUS, F.  
2004 Saï, 114–117, in D.A. WELSBY and J.R. ANDERSON (eds.), *Sudan ancient treasures. An exhibition of recent discoveries from the Sudan National Museum*, London.
- HOLTHOER, R.  
1977 *New Kingdom Pharaonic Sites. The Pottery*, The Scandinavian Joint Expedition to Sudanese Nubia Publications 5.1, Lund.
- KITCHEN, K.A.  
1980 *Rameside Inscriptions. Historical and Biographical*, Vol. III, Oxford.
- LOHWASSER, A.  
2013 Zu den Men-Cheper-Re-Skarabäen der 25. Dynastie, 229–234, in J. BUDKA, R. GUNDACKER and G. PIEKE (eds.), *Florilegium Aegyptiacum – Eine wissenschaftliche Blütenlese von Schülern und Freunden für Helmut Satzinger zum 75. Geburtstag am 21. Jänner 2013*, GM Beihefte 14, Göttingen.
- MINAULT-GOUT, A.  
2012 La figurine funéraire Saï inv. S. 964 (SNM 23424) et un groupe de quatre chaouabtis de la XVIII<sup>e</sup> dynastie de même type, *CRIPPEL* 29, 189–200.
- MINAULT-GOUT, A. and THILL, F.  
2012 *Saï II. Le cimetière des tombes hypogées du Nouvel Empire (SAC5)*, FIFAO 69, Cairo.
- MÜLLER, I.  
2013 *Die Verwaltung Nubiens im Neuen Reich*, Meroitica 18, Wiesbaden.
- ROSE, P.J.  
2007 *The Eighteenth Dynasty Pottery Corpus from Amarna*, EES Excav. Mem. 83, London.
- NÄSER, C.  
2017 Structures and realities of the Egyptian presence in Lower Nubia from the Middle Kingdom to the New Kingdom: The Egyptian cemetery S/SA at Aniba, 557–574, in N. SPENCER, A. STEVENS and M. BINDER (eds.), *Nubia in the New Kingdom. Lived Experience, Pharaonic Control and Indigenous Traditions*, BMPES 3, Leuven.
- SCHIFF GIORGINI, M.  
1971 *Soleb II. Les necropoles*, Florence.
- SMITH, St.T.  
2003 Pots and Politics: Ceramics from Askut and Egyptian Colonialism during the Middle through New Kingdoms, 43–79, in C.-A. REDMOUNT and C.-A. KELLER (eds.), *Egyptian Pottery, Proceedings of the 1990 Pottery Symposium at the University of California*, University of California Publications in Egyptian Archaeology 8, Berkeley.
- SMITH, St.T and BUZON, M.  
2014 Colonial entanglements “Egyptianization” in Egypt’s Nubian Empire and the Nubian Dynasty, 431–442, in J.R. ANDERSON and D.A. WELSBY (eds.), *The Fourth Cataract and Beyond. Proceedings of the 12th International Conference for Nubian Studies*, BMPES 1, Leuven.
- 2017 Colonial encounters at New Kingdom Tombos Cultural entanglements and hybrid identity, 615–630, in N. SPENCER, A. STEVENS and M. BINDER (eds.), *Nubia in the New Kingdom. Lived Experience, Pharaonic Control and Indigenous Traditions*, BMPES 3, Leuven.
- SPENCER, N., STEVENS, A. and BINDER, M. (eds.)  
2014 *Amara West. Living in Egyptian Nubia*, Trustees of the British Museum, London.
- STEINDORFF, G.  
1937 *Aniba II*, Glückstadt, Hamburg, New York.
- THILL, F.  
2007 Les réoccupations « (pré)napatéennes » dans la cimetière égyptien 8B5/SAC5 de Saï, *CRIPPEL* 26, *Mélanges offerts à Francis Geus*, 353–369.
- VERCOUTTER J.  
1986 Préface l’archéologie de l’île de Saï, 7–17, in B. GRATIEN, *Saï I. La nécropole Kerma*, Paris.
- VINCENTELLI, I.  
2006 *Hillat El-Arab. The joint Sudanese-Italian expedition in the Napatan region, Sudan*, BAR/IS 1570, Oxford.
- WILLIAMS, B.B.  
1992 *New Kingdom Remains from Cemeteries R, V, S and W at Qustul and Cemetery K at Adindan*, Oriental Institute Nubian Expedition VI, Chicago.
- YELLIN, J.W.  
2012 Saï Island, 329–331, in M.M. FISHER et al. (eds.), *Ancient Nubia. African Kingdoms on the Nile*, Cairo; New York.