

The 18th Dynasty on Sai Island – new data from excavations in the town area and cemetery SAC5

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Introduction

Sai is one of the most important New Kingdom sites in Upper Nubia – its significant role derives from a strong Kerma presence on the island prior to the New Kingdom (see Gratien 1986; Vercoutter 1986) and the fact that both the town and cemetery of the 18th Dynasty can be investigated (Budka 2015b; 2016). The New Kingdom town is situated at the eastern edge of the island; the largest associated Egyptian cemetery, SAC5, less than 1km further to the south. The European Research Council AcrossBorders project conducted archaeological fieldwork on the major New Kingdom sites of Sai Island from 2013 until 2017. Archaeological excavations in the Pharaonic town and pyramid cemetery SAC5 were complemented with kite aerial photography, structure from motion approaches, terrestrial 3D laser scans, geoarchaeological surveys, micromorphological soil sampling and various archaeometric analyses of diverse materials (Budka 2015b; 2017; Adenstedt 2016).

The Pharaonic settlement on Sai is one of the best preserved so-called temple towns of Kush which can, according to our present understanding, be considered as ‘elite residential, administrative and cult centres’ (Morkot 1995, 176). Sites like Sai consist of an enclosure wall with towers/buttresses and main gates, a stone temple for an Egyptian deity, large magazines, administrative buildings and typical Egyptian houses (Kemp 1972; Morris 2005, 5). An orthogonal layout is often traceable and reflects urban planning. The recent 2017 field season on Sai provided some new insights on the layout and function of the New Kingdom temple town as well as its evolution. These will be presented below, as will be the latest results from work in Tomb 26 in cemetery SAC5. This tomb yielded several burials from the mid to late 18th Dynasty with rich funerary equipment. As a family tomb, Tomb 26 has much potential to illustrate the status and corresponding material culture traceable for lower and medium-ranked individuals from Thutmoside times onwards.

The 2017 season of the AcrossBorders project on Sai

The town area

Three new sectors in parts of the New Kingdom town which have not yet been investigated – SAV1 West, SAV1 East and a small test excavation in the north-eastern corner of the city (SAV1 Northeast) – were excavated by AcrossBorders

in the last few years (Figure 1). A stratigraphic single context excavation was conducted at all sites, using structure from motion applications to document the individual surfaces (for this method and documentation technique see Fera and Budka 2016).

SAV1 Northeast

Previously, the eastern town wall could not be traced and it was assumed that it collapsed into the Nile at some uncertain point in antiquity (Geus 2004, 115, fig. 89, based on Azim 1975, 94, pl. II). Recent fieldwork and geological surveys of the sandstone cliff allowed a modification of this assessment (Budka 2015a, 60; 2015b, 41), evaluating severe erosion in this part of the island as highly unlikely. In line with this, the steep cliff at the north-eastern corner of the town, site 8-B-522, clearly functioned as a mooring area in Christian times, as is well attested by Medieval graffiti and mooring rings carved out of the rock for tying ships’ ropes at a very high level of the cliff (Hafsaas-Tsakos and Tsakos 2012, 85-87). This usage might go back as early as the New Kingdom; a Pharaonic landing place at 8-B-522, presumably at a lower level than the Christian one,¹ would result in locating the eastern town wall further towards the west.

To test the hypothesis of an alignment of the enclosure along, but above the present sandstone cliff, a 15 x 3m trench was opened in the north-eastern corner of the site in 2016, labelled as SAV1 Northeast (Figure 1).² Despite a high degree of erosion and post-Pharaonic remains close to the surface, some mud-brick remains of the mid-18th Dynasty (associated with datable ceramic sherds) were documented. Traces of the enclosure wall were found, allowing the reconstruction of the eastern side with a similar width of *c.* 4.3m. Based on this new discovery, the fortified New Kingdom settlement measures 242m north-south and only between 118-120m east-west, giving a total town area of 27,600m² (2.76ha) within the walls (Adenstedt 2016, 24, fig. 7).

SAV1 West

Excavations at SAV1 West started in 2014, locating the western enclosure wall in the same year (Budka 2015b, 45-46). The foundation level of the Thutmoside town wall was exposed in the northern part (Square 1), representing the earliest evidence in this area of SAV1 West. Until 2016, there was an absence of evidence for anything pre-dating the town wall in the sector (Budka 2015b, 46). In 2017, the focus was on investigating remaining deposits in the southern part of SAV1 West, Squares 1S and 1SE. Finding a cellar in the north-eastern corner of Square 1SE (Feature 152), it was necessary to make a small eastern extension (3 x 5m) labelled as Square 1SE_E (Figure 2). This cellar, Feature 152, is comparable

¹ The Christian graffiti are commemorating ‘exceptional high waters of the Nile’ (Hafsaas-Tsakos and Tsakos 2012, 86 with further references).

² The trench was placed above ‘negative linear anomalies’ visible on the geophysics survey map from 2011 and tentatively identified as a possible extension of the north-south street, Rue NS1 of Azim (Crabb and Hay 2011, 16); for this street see most recently Adenstedt 2016, 32.

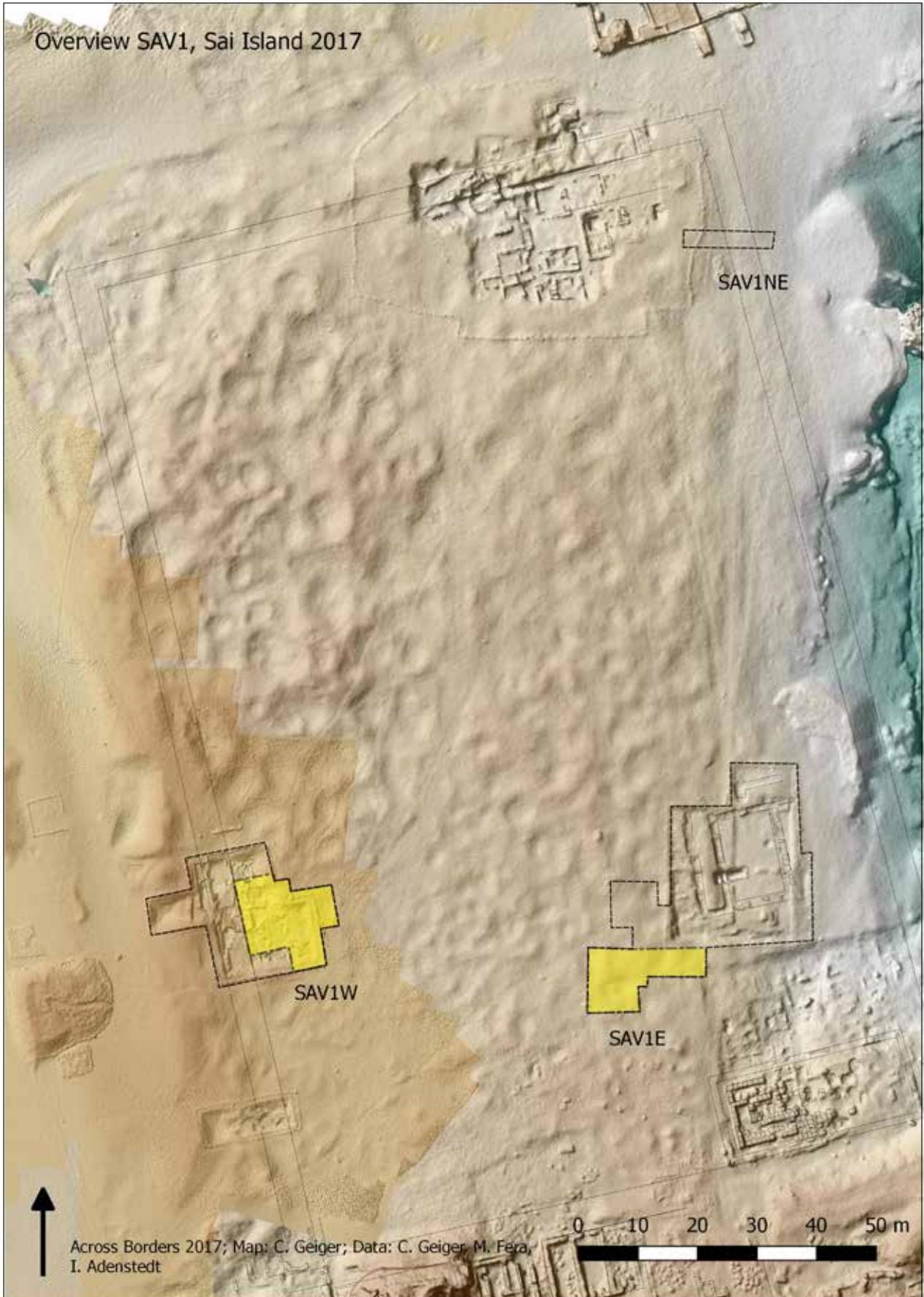


Figure 1. Location of *AcrossBorders* excavation sectors in the New Kingdom town of Sai (© *AcrossBorders*).

to a well preserved rectangular cellar with a vaulted ceiling (Feature 115) in Square 1 (Budka 2015b, 46). The vault of Feature 152 has collapsed and only the mud-lined side walls were preserved.

The remains of several small mud-brick buildings were exposed and mapped in Squares 1S and 1SE during the 2017 season. Most important is the stratigraphic confirmation that a building unit in the southern half of Square 1S belongs to a phase predating the building of the town wall. This information was received from cleaning selected areas within the 'wall street' and from walls overbuilding this earlier structure. As could be shown by a section in the street along the town wall, in this southern part of SAV1 West, the foundation of the Thutmoside enclosure clearly rests on settlement refuse from earlier activities. A small amount of pottery from these strata suggests, for what is now the first evidence at SAV1 West, a date in the early 18th Dynasty. This earliest phase of occupation at SAV1 West seems to be contemporaneous to the one at SAV1 North (see Budka and Doyen 2012-2013, 172-175). Similar to the northern sector, only scarce remains of this early 18th Dynasty occupation at SAV1 West have survived, with the major phase of the sector from the mid-18th Dynasty partly overlying earlier structures and lasting well into the late 18th Dynasty.

SAV1 East

Fieldwork in sector SAV1 East continued based on the results from 2013-2016 (Budka 2017). Work focused in 2017 on remains in the new Square 4D, aiming to test anomalies visible on the map of the geophysical survey conducted in 2011 and to contextualise *in situ* remains of a schist pavement unearthed in 2016 in Square 4C (Figure 3).

The upper levels of the new Square 4D (6.5 x 9m) were dominated by a substantial amount of collapsed mud bricks and schist and plaster fragments. Obviously these are the remains of a large area originally covered by a schist pavement, heavily disturbed during later times. The material is of a mixed character and although most of the ceramics date to the 18th Dynasty, medieval material is also present. The large percentage of 18th Dynasty ceramics indicates that the later destruction sits directly on the Pharaonic remains, as it was well attested in other parts of SAV1 East. A sandy depression was soon noticed in the southern part of the new square. During excavation, it was identified as a large, rectangular cellar with an east-west alignment (Feature 83), filled with mixed material, especially mud bricks, worked stone and schist slabs in its upper part. The structure measures 3.3 x 1.8m and has a preserved height of 2m. Feature 83 was cut into the natural ground, which consists of pebble terraces. Its rectangular outline was lined with mud bricks, the roof formed by a vault. Of the latter, the lower part and the negative of the eastern narrow side have survived. A substantial amount of collapsed bricks was found in large piles on top of the floor. Interestingly, most of the bricks show marks (parallel longitudinal grooves), known from other contexts in

the New Kingdom town.³ Interestingly, these can all be dated to Thutmoside times (the northern enclosure wall, building units of Level 3 at SAV1 North and from the southern sector, see Azim 1975, 102, pl. VI; Budka *in press*, 24-26). Below the collapsed bricks from the vault of Feature 83, some smashed pottery vessels were found on the floor (Plate 1). They clearly belong to the latest phase of use of the structure and can



Plate 1. Pottery fragments *in situ* on the floor in the eastern part of Feature 83 (photo: J. Budka).

be dated to the mid-18th Dynasty. Feature 83 is comparable to the considerably larger Feature 15 (5.6 x 2.2m) in Squares 2 and 4 of SAV1 East, also with regard to its phases of use (see Budka 2015b, 43-45).

Another cellar, Feature 85, is situated in the northern part of Square 4D, next to Feature 83 (Figure 3). It is much better preserved than the southern cellar, but with the same east-west alignment, similar dimensions (3.7 x 1.5 x 2.05m) and the same building technique. Whereas the upper part of Feature 83 was extensively disturbed, Feature 85 is clearly situated below the schist pavement unearthed in Square 4C – a large amount of collapsed schist slabs was recovered in its eastern part (Plate 2), complementing the slabs still *in situ* within the pavement above. Its central part is still intact including the vault, but the eastern and western ends have collapses, including the sidewalls. The corresponding mud bricks filled in particular the western part, and again featuring the parallel longitudinal grooves. Feature 85 is, according to the preliminary assessment of the pottery from its undisturbed

³ In the case of the slightly curving finger grooves on bricks from Feature 83, a specific function to improve the bonding of the bricks of the vault is very likely (well attested also in Medieval times, pers. comm. D. Welsby). However, finger grooves are known from various contexts within the New Kingdom town of Sai and are not restricted to vaulted ceilings (see Budka *in press*, 24-26).



Figure 3. Map of SAV1 East with recorded features 2017 (© AcrossBorders).

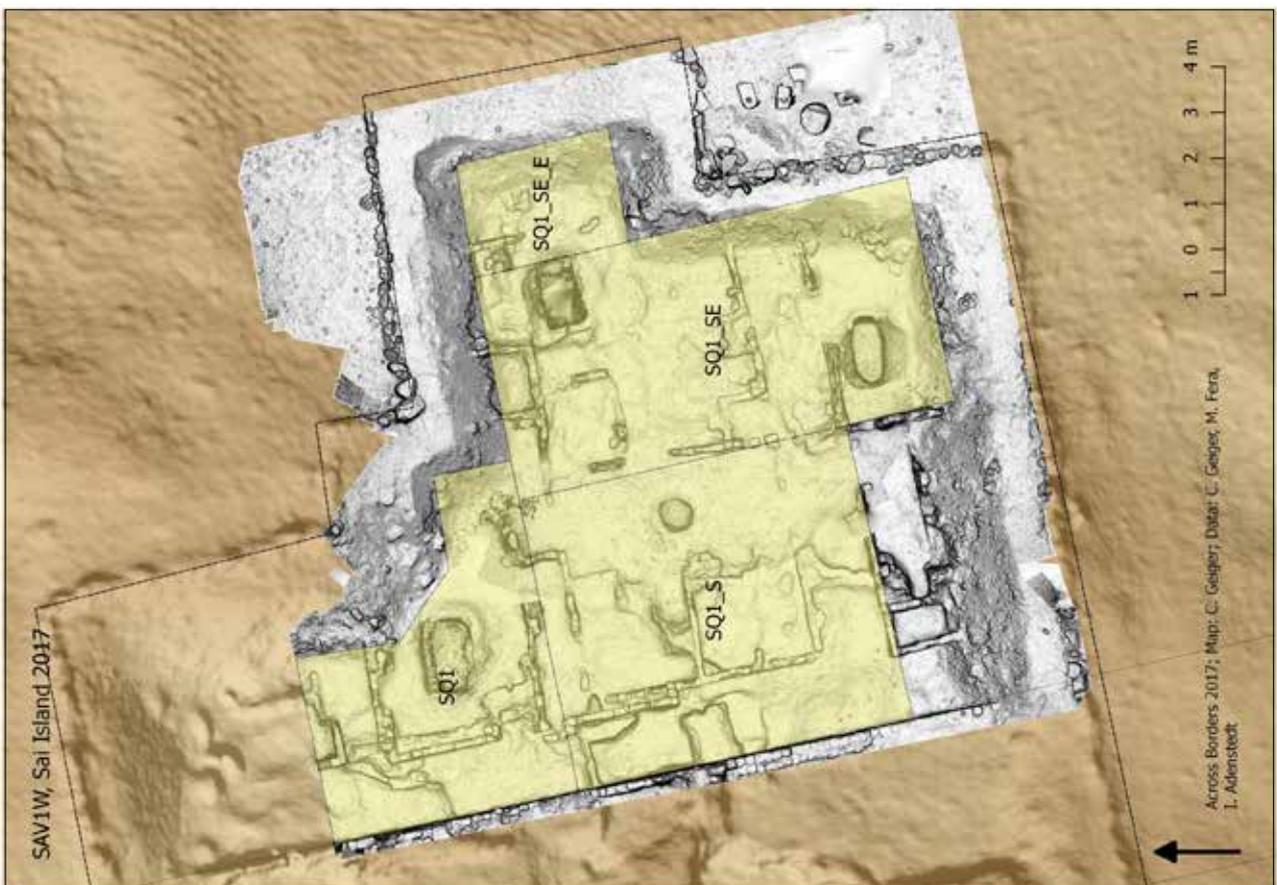


Figure 2. Map of SAV1 West with recorded features 2017 (© AcrossBorders).



Plate 2. Eastern part of Feature 85 at SAV1 East with collapsed schist slabs from pavement against preserved part of the intact vault. View to west (photo: J. Budka).



Plate 3. Remains of burials in Trench 4 of Tomb 26. Note that one individual is situated below the entrance to Chamber 6 (photo: J. Budka).

lower fillings, contemporary with Feature 83 (and Feature 15), with material from the abandonment phase datable to the mid-18th Dynasty.

The large cellars and magazines at sector SAV1 East illustrate that, as is a common feature of the so-called ‘temple towns’, domestic space was quite limited, but much room was occupied by storage facilities, magazines and cellars (see Adenstedt 2016, 54, fig. 16). Similar cellars like Features 83 and 85 were documented frequently in late 18th Dynasty houses in the temple town of Sesebi (Fairman 1938, 152).

Cemetery SAC5: Tomb 26 (Figure 4)

Excavation work in Tomb 26, discovered in 2015, was completed in 2017. Its final plan (Figure 5) includes six features: Feature 1 (shaft), Feature 2 (central burial chamber), Feature 3 (doorway between Features 1 and 2), Feature 4 (trench along the northern wall), Feature 5 (western burial chamber) and Feature 6 (lowest, original burial chamber towards the north). While Features 1 and 2 were excavated in 2015 and 2016, yielding among other objects the pyramidion of the deputy of Kush under Ramesses II, Hornakht (see Budka 2015b, 47-50; 2016), Features 4-6 were only investigated in 2017 and will be discussed below.

Feature 4

In 2017, a systematic, stratigraphic excavation of Feature 4, completely filled with Nile silt from flood levels, was conducted. Remains of several individuals, a minimum of five, were documented (Plate 3). 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. Faint traces of pigments in red, yellow, blue and white testify that the individuals were once placed in painted wooden coffins, probably equipped with funerary masks (see below).

Ceramics from the lower levels date to the mid-18th Dynasty; from the upper levels to the late 18th Dynasty. For one vessel, conjoining pieces from Chamber 2 were found, illustrating the disturbed character of the upper part of Feature 4 which suffered from plundering prior to the late New Kingdom.⁴

Feature 6

At the bottom of Feature 4, a small room (2.13 x 1.35 x 0.92-95m) which is most probably the original burial chamber, opens towards the north (Figure 5). It was found completely filled with flood deposits and obviously was undisturbed since ancient times. This can be further narrowed down to the late 18th Dynasty because Trench 4 concealed Feature 6 and was itself filled before the late Ramesside period.

Feature 6 held two burials, equipped with wooden painted coffins and funerary equipment of Egyptian style (Plate 4): scarabs, faience and pottery vessels and one stone shabti were



Plate 4. Burials within Chamber 6 (orthophoto: C. Geiger, ©AcossBorders 2017).

⁴This is securely dated by a late Ramesside amphora set in the silt above the trench, sealing the lower levels; see Budka 2016, 64.

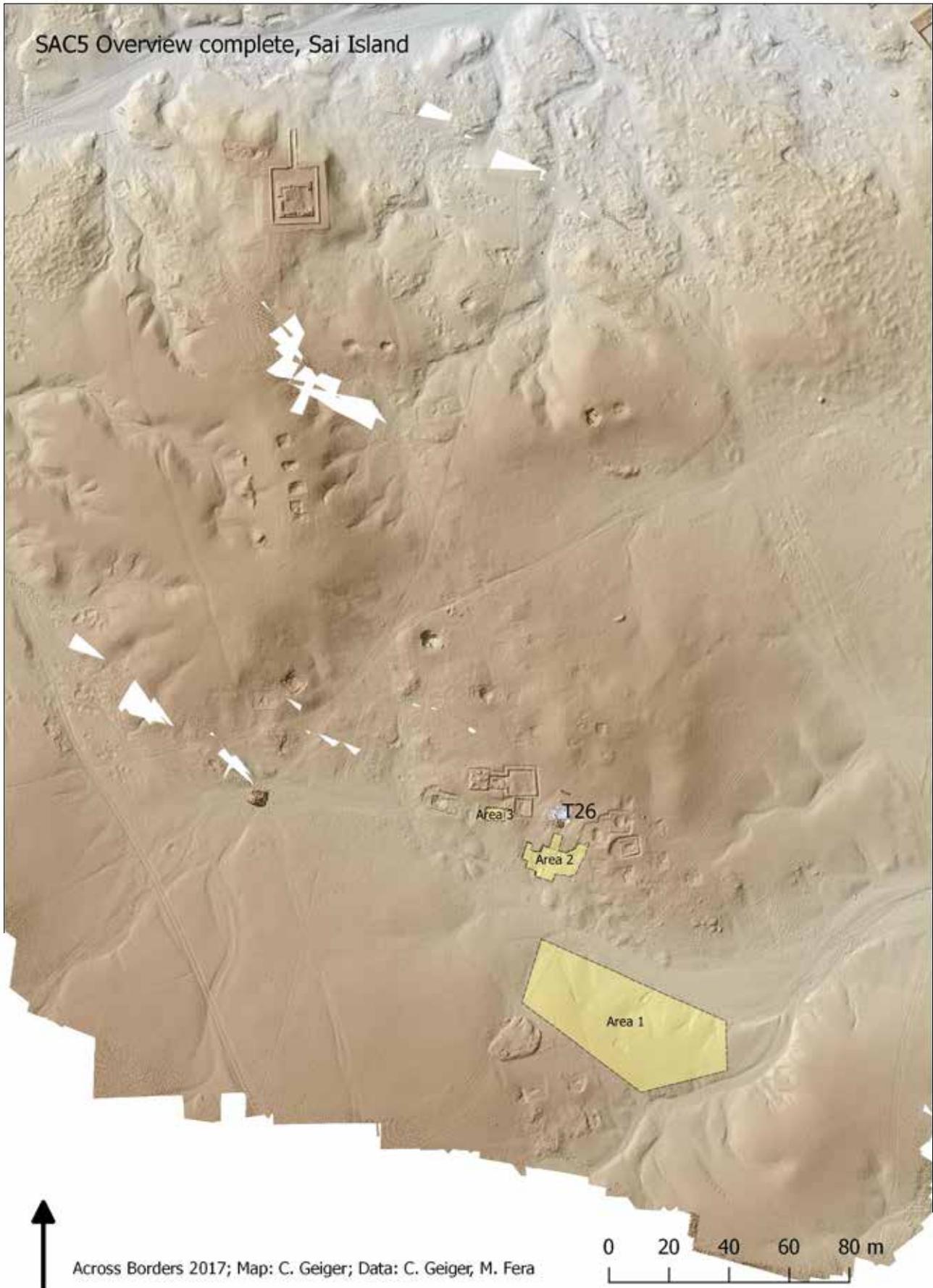


Figure 4. Location of Tomb 26 in cemetery SAC5 (© AcrossBorders).

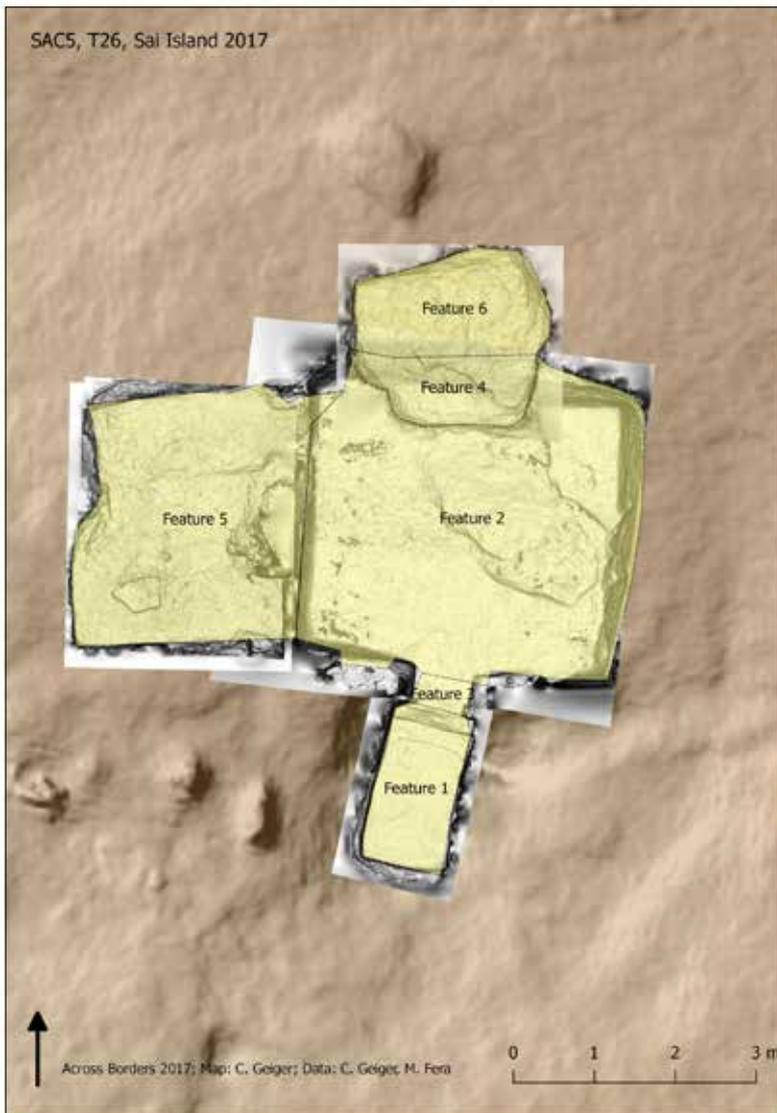


Figure 5. Ground plan of tomb 26, status 2017
(© AcrossBorders).

used as burial goods. A small set of pottery vessels – all flower pots – were positioned both at the feet (two) and the head (one vessel) of the coffin parallel to the north wall of the chamber. Next to the head, to the south, some other objects were found: three small faience vessels of which two were inscribed with the name and title of the deceased as well as a large inscribed stone shabti (SAC5 350, Plate 5). In the area of the chest, to the south of the skeleton, presumably outside the coffin, a high-quality heart scarab (SAC5 349) was found. A faience scarab with floral decoration, found *in situ* resting on the left hand, complements the finds associated with this burial (SAC5 351). Traces of the funerary mask, particularly inlaid eyes and gold foil, also survived (Plate 6).

The second interment in Feature 6 was placed directly below the entrance (Plate 4). A pottery dish holding four miniature pottery jugs as well as two faience vessels was placed next to the coffin, to the south of the burial. A flower pot and a round-based beaker at the feet complement the assemblage. Traces of painted wood, pigments and plaster as well as remains of the funerary mask (eye inlays) were documented.

According to the inscribed finds and the human remains, the double burial in Feature 6 can be identified as the master of gold workers Khnummose (main burial along the north wall) and an anonymous female, presumably his wife (second burial in the entrance area). The titles of Khnummose, preserved both on the shabti and the faience vessels, are *nbtj* (gold worker) and *hrj nbtjw* (master of gold workers) (see Müller 2013, 185; Davies, this volume, 61, n. 21). Especially the stone shabti (SAC5 350), but also the heart scarab (SAC5 349), are real masterpieces and of high quality craftsmanship. The stone shabti falls – based on stylistic and palaeographic features – into a homogenous group of five stone shabtis from Egyptian officials, found at Aniba, Toshka and Sai, but identified by Ann Minault-Gout as originating from one workshop, dating from the mid-18th Dynasty (Minault-Gout 2012). A common origin might explain one specific detail on SAC5 350: the name of Khnummose was inscribed by a different hand from the remaining text which comprises Chapter VI of the Book of the Dead. Obviously, this piece was not made for Khnummose, but was acquired with its inscription already in place and was then finished with the name



Plate 5. Shabti of Khnummose from Chamber 6, SAC5 350
(photo: M. Gundlach, ©AcrossBorders 2017).



Plate 6. Remains of funerary mask and pigments from the coffin of Khnummose from Chamber 6, with the heart scarab *in situ* (photo: J. Budka).

of the person whom it would accompany for eternity. A number of questions about the manufacturing and trading of funerary objects in New Kingdom Nubia can be raised based on this example (see also Minault-Gout 2012). In general, ‘off the shelf’ purchases rather than specific orders from workshops might include ‘slow sellers’, potentially causing dating problems. Pottery vessels are, therefore, important evidence to be considered when dating burials in Kush with Egyptian funerary objects like the one of Khnummose. The ceramics from Feature 6 speak clearly for a mid-18th Dynasty date: late in the reign of Thutmose III at the earliest, but more likely the reigns of Amenhotep II and Thutmose IV (and definitely no later than Amenhotep III), nicely coinciding with the date proposed for the group of shabtis by Minault-Gout (2012; Amenhotep II to Thutmose IV). Especially relevant are the so-called flower pots, deep conical bowls with perforated bases and of uncertain function, which are very common 18th Dynasty types both in Egypt and Nubia (Williams 1992, 34-35 with references). On Sai, flower pots are known from the Egyptian town as well as SAC5 from mid-18th Dynasty contexts. In general, flower pots are not attested prior to the reign of Hatshepsut when they became very common; by the reign of Amenhotep III, the type was no longer popular (Williams 1992, 34-35). Three flower pots accompanied Khnummose’s burial (Plate 4), another one was placed next to the female adult below the entrance of the chamber. They all fall into the category ‘FP2’ as defined by Holthoer, a variant with a modelled rim (Holthoer 1977, pl. 18), well-attested also in Feature 5 of Tomb 26 (see below) and at other tombs of SAC5 on Sai (Minault-Gout and Thill 2012, vol. 2, pl. 132).

Other vessels from Feature 6, especially the miniature jugs accompanying the female burial and the faience vessels of Khnummose, find very close parallels in Soleb, in particular from Tombs 15 and 11, dated by Schiff-Giorgini to the mid to late 18th Dynasty (Schiff-Giorgini 1971, 166, figs 268 and 270; 194, fig. 344 and 196, fig. 348).

Feature 5

In 2017, a new discovery was made in the north-western corner of the central chamber (Feature 2): the entrance to a hidden room, concealed by a plastered stone wall was revealed. A comparable wall separating rock-cut chambers from each other was documented in the neighbouring Tomb 7 (Minault-Gout and Thill 2012, vol. 1, 48-50, vol. 2, pls 27a-b).

This new western chamber in Tomb 26, labelled Feature 5 (Plate 7), yielded nine adult and two infant burials. The burial equipment comprises a remarkable signet ring made



Plate 7. Earliest burials within Chamber 5 (orthophoto: C. Geiger, ©AcossBorders 2017).

of gold and silver (Plate 8), several faience scarabs, jewelry and amulets (extraordinary is a necklace with crocodile pendants in various materials) and pottery vessels, as well as a few traces of the funerary masks and coffins (comparable to Feature 6). A substantial amount of flakes of gold foil, especially from the head areas and upper body, suggests the use of gilded masks (see Minault-Gout and Thill 2012, vol. 2, pl. 88 for a well preserved mask found *in situ*).

The oldest burials, being located on the chamber floor and sealed by debris from the roof as well as flood levels, were found in the southern part (Plate 7). Two extended burials of probably male adults yielded several objects, including canopic jars in clay, scarabs and pottery vessels, all of which are unfortunately without personal names or titles. Another female individual, with pottery datable to a similar period,



Plate 8. Gold ring SAC5 388 from Chamber 5, in situ (photo: J. Budka).

was found closer to the entrance, in the northern section of Feature 5 (Plate 7).

Of particular interest is a cluster of pottery vessels positioned in the south-eastern corner of Feature 5, at the feet of the individual lying along the south wall (Plate 9). This cluster comprises six flower pots, all piled up, partly upside down, one large dish with a red rim and a small lid. A completely preserved stone vessel (SAC5 398) of a type well-attested during the reign of Thutmose III (Aston 1994, 151, type 173) complements this assemblage. Interestingly,



Plate 9. Deposit of pottery vessels, mostly flower pots, in the south-eastern corner of Chamber 5 (photo: J. Budka).

a comparable deposit of flower pots is attested in the one tomb which shows the architectural parallel for a wall separating the subterranean rooms. In the main burial chamber of neighbouring Tomb 7, a cluster of vessels was found in the south-eastern corner, including five flower pots (Minault-Gout and Thill 2012, vol. I, 49).

According to the pottery, the early burials from Feature 5 seem, therefore, almost contemporaneous to the interments of Khnummose and his wife. It is tempting to assume that they represent family members buried during the mid to late 18th Dynasty. This needs to be tested further, by trying to correlate C¹⁴ dates with our archaeological dating and

especially by tracing ancient DNA from the skeletons.⁵ It is of special interest to get more information about the burials in the northern part of Feature 5 (female adults and two infants) – they appear to be slightly later in date, being located closer to the entrance.

To conclude, with the new finds from 2017, Tomb 26 provides new data for a family residing on Sai during the mid to late 18th Dynasty. The inventory of the tomb compares well to other tombs in SAC5 (Minault-Gout and Thill 2012, *passim*), but also to tombs in Soleb (Schiff-Giorgini 1971, *passim*). The remarkable close matches between Tomb 26 on Sai and especially Tomb 15 at Soleb need to be explored further. The parallels are probably based on a similar social stratigraphy and the almost identical status of both sites as Egyptian administrative centres in Kush.

Summary

With AcrossBorders' recent fieldwork, the town plan can be updated and fresh remarks on the internal structure and building phases are possible. Although Sai was definitely a planned Egyptian town with an orthogonal layout, Across-Borders excavations have illustrated that within the town there are several different sectors that contrast regarding their layout. Differences between SAV1 East and SAV1 West could be further highlighted with the results of the 2017 season. At sector SAV1 West, some new mud-brick buildings of modest scale and irregular outline were excavated, providing additional data for the town plan (Figure 1). Most importantly, the earliest phase of occupation at SAV1 West pre-dates the building of the town wall and can be associated with the early 18th Dynasty. There is clear evidence for several phases of use within the mid-late 18th Dynasty. All of this corresponds exactly to discoveries at SAV1 North,⁶ and compares also to SAV1 East (which was not noted in previous seasons, see Budka 2015b, 46). This first phase, now attested by scattered remains and deposits in the northern, eastern and western parts of the town, presumably reflects only a small degree of planning and can until now not be associated with a town wall. In spite of the, in some respects, very fragmented state of knowledge about Phase A on Sai (Budka 2015b, 51), it seems safe to suggest that the earliest 18th Dynasty remains are markedly different from the later 'temple town' layout; however, parallels might be drawn to early New Kingdom evidence at Mirgissa (Vercoutter 1970) and Sesebi (Spence and Rose 2014, 410).⁷ All of this sup-

⁵ Corresponding samples from Tomb 26 were handed to the Department for Archaeogenetics, Max Planck Institute for the Science of Human History, Jena, Germany in May 2017. My thanks go here to Philipp Stockhammer (LMU Munich) and Johannes Krause (Max Planck Institute). The latter is part of the researcher group who recently published Ancient Egyptian mummy genomes; see Haak *et al.* 2017.

⁶ As recently highlighted by Florence Doyen and the author; see Budka in press.

⁷ I am grateful to Christian Knoblauch and Kate Spence for pointing out these possible structural parallels during the SARS colloquium in May 2017.



ports the reconstruction of an early Egyptian ‘bridgehead’ (Davies 2005, 51) with a landing place on the island founded at the beginning of the New Kingdom, a period when the Kerma Kingdom was still the major rival to Pharaonic Egypt (Budka 2015b).⁸

At SAV1 East, further proof was gathered that this sector has much in common and shows many parallels to the southern area of the town, SAV1. In particular, *in situ* schist pavements of large magazines located to the west of Building A are now associated with large cellars with brick vaults (Feature 83 and 85). These cellars are probably related to the Egyptian stone temple close by, stressing the role of Sai as Egyptian administrative centre during the mid-18th Dynasty (see Budka 2015b, 51). The high density of cellars and magazines from Thutmoside Sai seems to be connected with tribute to Egypt, possibly also with Nubian gold and with the Egyptian administration of Upper Nubia in general.

Taken together the most recent results from fieldwork in the New Kingdom town of Sai underline my earlier assessment of the town as a changing, complex microcosm with short-lived structures and multiple building phases. Recent work has stressed the possible dichotomy between theoretical urban planning and real developments in Egyptian towns like Sai (Spencer 2014, 201-202). The past occupants represent a potentially dynamic factor, in particular if they include both Egyptians and Nubians as is the case for Sai. In this respect, the new discoveries in Tomb 26 are of much interest. Most significant is that the new burials from Tomb 26 are not only contemporaneous with the heyday of the New Kingdom town, but are also complementing functional aspects known for the temple town site: Tomb 26 yielded family members of a master of gold workers, thus of Egyptian officials involved in gold exploitation in Upper Nubia (see Klemm and Klemm 2013). Combining this new prosopographical information from SAC5 with fresh data from the town, in particular contemporaneous cellars and magazines, further steps are made towards the reconstruction of daily life and death in New Kingdom Sai, an Egyptian temple town and administrative centre.

The funerary record from SAC5 is also especially relevant in terms of better understanding the social stratigraphy: whereas gender and age are often concealed in settlement contexts and women and children are difficult to trace, particularly at Egyptian sites in Nubia (Smith 2013), Tomb 26 yielded several infants (including an unborn child) and a number of females associated with male burials which were sometimes identifiable with a name. Thus, with the most recent discoveries, our narrow window into past living conditions in New Kingdom Sai has opened significantly wider. Egyptian officials with lower and medium ranking titles were partly associated with rich equipment and high quality finds.⁹

⁸ For Sai as a ‘bridgehead’ during the period of conquering Kush in the early 18th Dynasty see, among others, Vercoutter 1986; Davies 2005, 51. Cf. also Gabolde 2011-2012.

⁹ In this respect, the various titles of official who purchased shabti

Perceptions of status differ seemingly depending on whether they are viewed from a micro or a macro perspective. Local ‘wealth’ and flourishing families on Sai Island were not holding overly significant positions within the administration, once again underlining the dynamic character of this Egyptian microcosm and its occupants in Nubia.

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Bibliography

- Adenstedt, I. 2016. *Reconstructing Pharaonic Architecture in Nubia: the case study of SAV1, Sai Island*. Contributions to the Archaeology of Egypt, Nubia and the Levant 3. Vienna.
- Aston, B. G. 1994. *Ancient Egyptian stone vessels: materials and forms*. SAGA 5. Heidelberg.
- Azim, M. 1975. ‘Quatre campagnes de fouilles sur la Forteresse de Sai, 1970-1973. 1^{ère} partie: l’installation pharaonique’, *Cahiers de Recherches de l’Institut de Papyrologie et d’Égyptologie de Lille* 3, 91-125.
- Budka, J. 2015a. ‘The New Kingdom in Nubia: New results from current excavations on Sai Island’, *Egitto e Vicino Oriente* 37 [2014], 55-87.
- Budka, J. 2015b. ‘The Pharaonic town on Sai Island and its role in the urban landscape of New Kingdom Kush’, *Sudan & Nubia* 19, 40-53.
- Budka, J. 2016. ‘Neues zum Pyramidenfriedhof auf Sai’, *Sokar* 33, 60-67.
- Budka, J. 2017. ‘Crossing Borders: Settlement Archaeology in Egypt and Sudan’, *Near Eastern Archaeology* 80/1, 14-21.
- Budka, J. (ed.) in press. *AcrossBorders I. The New Kingdom town of Sai Island, sector SAV1 North*. Contributions to the Archaeology of Egypt,

from the same workshop like Khnumose are significant; see Minault-Gout 2012.

- Nubia and the Levant 4. Vienna.
- Budka, J. and F. Doyen 2012–2013. 'Living in New Kingdom towns in Upper Nubia – New evidence from recent excavations on Sai Island', *Egypt & the Levant* 22/23, 167-208.
- Crabb, N. and S. Hay 2011. *Sai Island, Bain el Hagar, Sudan. Geophysical Survey Report*. Unpublished report, May 2011.
- Davies, W. V. 2005. 'Egypt and Nubia. Conflict with the Kingdom of Kush', in C. H. Roehrig (ed.), *Hatshepsut: From Queen to Pharaoh*. New York, 49-56.
- Fairman, H. W. 1938. 'Preliminary report on the excavations at Sesebi (Sudla) and 'Amārah West, Anglo-Egyptian Sudan, 1937-8', *Journal of Egyptian Archaeology* 24 (2), 151-156.
- Fera, M. and J. Budka 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.
- Gabolde, L. 2011–2012. 'Réexamen des jalons de la présence de la XVIII^e dynastie naissante à Saï', *Cahiers de Recherches de l'Institut de Papyrologie et d'Égyptologie de Lille* 29, 115-137.
- Geus, F. 2004. 'Saï', in D. A. Welsby and J. R. Anderson (eds), *Sudan. Ancient Treasures. An exhibition of recent discoveries from the Sudan National Museum*. London, 114-116.
- Gratien, B. 1986. *Saï I. La nécropole Kerma*. Paris.
- Haak, W., S. Schiffels, J. Krause *et al.* 2017. 'Ancient Egyptian mummy genomes suggest an increase of Sub-Saharan African ancestry in post-Roman periods', *Nature Communications* 8, Article number: 15694 (2017), doi:10.1038/ncomms15694.
- Hafsaas-Tsakos, H. and A. Tsakos 2012. 'A second look into the Medieval Period on Sai Island', *Beiträge zur Sudanforschung* 11, 75-91.
- Holthoer, R. 1977. *New Kingdom Pharaonic Sites. The Pottery*. The Scandinavian Joint Expedition to Sudanese Nubia Publications 5.1. Lund.
- Kemp, B. J. 1972. 'Fortified towns in Nubia', in P. J. Ucko, R. Tringham and G. W. Dimbleby (eds), *Man, Settlement and Urbanism*. London, 651-656.
- Klemm, R. and D. Klemm 2013. *Gold and Gold Mining in Ancient Egypt and Nubia. Geoarchaeology of the ancient gold mining sites in the Egyptian and Sudanese Eastern deserts*. Heidelberg – New York – Dordrecht – London.
- Minault-Gout, A. 2012. 'La figurine funéraire Saï inv. S. 964 (SNM 23424) et un groupe de quatre chaouabtis de la XVIII^e dynastie de même type', *Cahiers de Recherches de l'Institut de Papyrologie et d'Égyptologie de Lille* 29, 189-200.
- Minault-Gout, A. and F. Thill 2012. *Saï II. Le cimetière des tombes hypogées du Nouvel Empire (SAC5)*. Fouilles de l'Institut français d'archéologie orientale du Caire 69. Cairo.
- Morkot, R. 1995. 'The economy of Nubia in the New Kingdom', *Actes de la VIII^e conférence internationale des études nubiennes. Lille 11-17 Septembre 1994, Vol. I – Communications principales*. Cahiers de Recherches de l'Institut de Papyrologie et d'Égyptologie de Lille 17/1, 175-189.
- Morris, E. F. 2005. *The architecture of imperialism. Military bases and the evolution of foreign policy in Egypt's New Kingdom*. Probleme der Ägyptologie 22. Leiden – Boston.
- Müller, I. 2013. *Die Verwaltung Nubiens im Neuen Reich*. Meroitica 18. Wiesbaden.
- Schiff Giorgini, M. 1971. *Soleb II. Les nécropoles*. Florence.
- Smith, S. T. 2013. 'The Garrison and Inhabitants: A View from Askut', in F. Jesse and C. Vogel (eds), *The Power of Walls – Fortifications in Ancient Northeastern Africa*. Cologne, 269-291.
- Spence, K. and P. J. Rose 2014. 'Fieldwork at Sesebi 2010', in J. R. Anderson and D. A. Welsby (eds), *The Fourth Cataract and beyond: proceedings of the 12th International Conference for Nubian Studies*. British Museum Publications on Egypt and Sudan 1. Leuven – Paris – Walpole, MA, 409-415.
- Spencer, N. 2014. 'Amara West: house and neighborhood in Egyptian Nubia', in M. Müller (ed.), *Household studies in complex societies: (micro) archaeological and textual approaches*. Oriental Institute Seminars 10. Chicago, 169-209.
- Vercoutter, J. 1970. *Mirgissa I*. Mission archéologique française au Soudan sous la direction de Jean Vercoutter 1. Paris.
- Vercoutter, J. 1986. 'Préface: l'archéologie de l'île de Saï', in B. Gratien, *Saï I. La nécropole Kerma*. Paris, 7-17.
- 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.