

# **AcrossBorders**

## **Fieldwork 2013 on SAI ISLAND (NORTH PROVINCE, SUDAN)**



## **REPORT**

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## **1. General**

The 2013 mission of AcrossBorders on Sai Island was carried out from January 04 to March 08 2013. AcrossBorders is conducted with the approval and in cooperation with the concession holder, Prof. Didier DEVAUCHELLE, Director of the Committee of the Sai Island Excavations, UMR 8164 HALMA-IPEL (University Charles-de-Gaulle Lille 3 (France)). Permission to work in the field is kindly granted by the National Corporation for Antiquities and Museums of Sudan (NCAM), sincere thanks go in particular to Abdelrahman Ali Mohamed (Director General) and El-Hassan Ahmed Mohamed (Director of Fieldwork).

Fieldwork with workmen under the supervision of Rais Imad SHORBAGI MOHAMED FARAH was conducted from January 06 to February 14. From January 28 to February 14, 2013 the architectural survey in the Southern part of the New Kingdom Town was realized.

The inspector of NCAM of the 2013 season was Huda MAGZOUN – we would like to express our sincere thanks for her kind cooperation and support.

### **Team members of AcrossBorders 2013**

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Funds for fieldwork in 2013 were granted to Julia Budka by the European Research Council (ERC Starting Grant no. 313668) and the Austrian Science Fund (START project Y615-G19).

## 2. Excavations at SAV1E, Fieldwork Report

Julia Budka

The primary focus of this season was the opening of a new excavation area within the Pharaonic town. Fieldwork was conducted with 12 workmen under the supervision of Rais Imad Shorbagi and with the help of the following team members: Doris Köther, Jödis Vieth, Sebastian Stiefel and Julia Budka. Huda Magzoub joined us during most of the time; Nathalie Bozet and Fatma Keskha helped with taking some measurements.

### Goals and objectives

Based on the results from the geophysical survey conducted in 2011, we decided to open a new excavation area at the eastern edge – trying to understand the layout of the 18<sup>th</sup> Dynasty occupation and hoping to get a possibility to connect it with the already explored areas in the South and towards the North. An orthogonal structure, roughly measuring 15 x 10 m, is visible on the magnetometric survey results and this feature has to be investigated by means of excavation. The structure is in line with Temple A and also follows the alignment of the buildings in the Southern part suggesting a date within the 18<sup>th</sup> Dynasty.

### SAV1 East

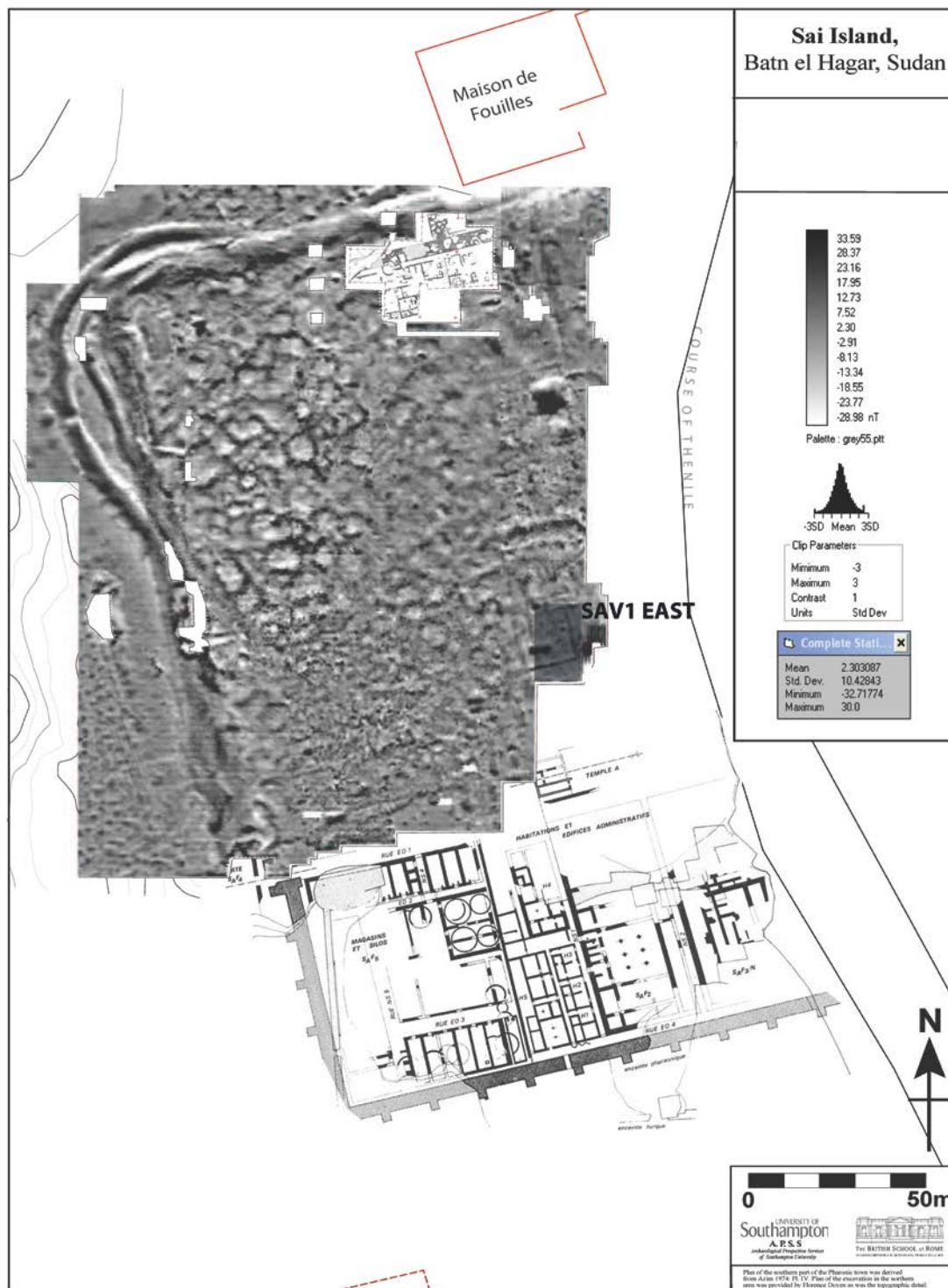
Fig. 2 shows the location of the new excavation area, SAV1 East (= SAV1E), just 30-50 meters north of the Temple A, at the eastern edge of the Pharaonic town.

Between the temple A and the new site early occupation remains with simple, workshop-like structures and storage facilities have been excavated in the 1970s. This zone around Temple A has been recently published by Azim. He was able to show that the occupation remains are Pre-Thutmose III in date (Azim 2011-2012). As was discovered during this season, the southernmost part of SAV1E is the extension of this occupation area around Temple A.

Prior to excavation, the surface was covered with pottery sherds, pebbles, stone tools and some slag (Fig. 1). The ground is uneven and in general sloping towards the East. Two squares of 10 x 10 m were completely excavated (Square 1 and 2) as well as a northern extension (2 x 10 m, Square 1a), an eastern extension (2.5 x 6 m, Square 2a) and a southern extension (2 x 10 m, Square 2b).



**Fig. 1: SAV1 East, the new excavation area, prior to excavation in January 2013.**



**Fig. 2: Location of SAV1E on greyscale image of magnetometer survey results from 2011 (British School at Rome, University of Southampton).**

### Findings at the new excavation site SAV1 EAST

A total of 33 features have been exposed and described at SAV1E of which 18 date to the 18<sup>th</sup> Dynasty. All in all, the area was strongly affected by activities in the Medieval, Ottoman and sub-recent times. Pharaonic building material was hacked away and stratigraphical information is mostly lost due to the disturbance and Post-New Kingdom pits and holes.



List of features recorded in 2013 at SAVIE

| No. of feature | Location   | Description/label   | Dating             |
|----------------|--|---|--------------------|
| 1              | Square 1   | surface layer: debris with pot sherds, mud bricks, some slag etc. | multi-period       |
| 2              | Square 2   | surface layer: debris with pot sherds, much gravel                | multi-period       |
| 3              | Square 1 + Square 2, Square 2a                               | mud brick wall (eastern wall of Building A)                       | Thutmoside         |
| 4              | Square 1, western half and Square 2, western half            | levelling layer/gravel deposit                                    | Thutmoside         |
| 5              | Square 1, west of feature 3                                  | pit   | Thutmoside         |
| 6              | Square 1, south of feature 5                                 | pit   | Thutmoside         |
| 7              | Square 1, in NW corner of square                             | pit   | 18th Dynasty?      |
| 8              | Square 1, along western profile of Square                    | pit   | 18th Dynasty?      |
| 9              | Square 1, east of feature 8                                  | pit   | 18th Dynasty?      |
| 10             | Square 1, south of feature 9                                 | post ?  | 18th Dynasty?      |
| 11             | Square 1, south of feature 10                                | post ?  | 18th Dynasty?      |
| 12             | Square 1, south of feature 13                                | remains of mud brick wall   | 18th Dynasty?      |
| 13             | Square 1 + Square 1a   | mud brick wall (part of northern wall of Building A)              | Thutmoside         |
| 14             | Square 2, Southeast area against natural gravel deposit      | storage bin, with in situ pottery vessels                         | early 18th Dynasty |
| 15             | Square 2, Northwest corner of Square                         | mudbrick structure? / domestic installation                       | ??? Post-NK        |
| 16             | Square 2, running East-West                                  | mud brick wall (southern wall of Building A)                      | Thutmoside         |
| 17             | Square 2, northern border of square                          | pit   | Thutmoside         |
| 18             | Square 2, west of feature 14                                 | remnants of mudbrick structure/wall; decayed mud bricks           | early 18th Dynasty |
| 19             | Square 2, along wall 16                                      | bedding/gravel deposit for wall feature 16                        | Thutmoside         |
| 20             | Square 2, southwestern corner of square                      | mudbrick structure with stone foundation                          | Post-NK            |
| 21             | Square 1a, running East-West                                 | negative outline of mud brick wall (northern wall of Building A)  | Thutmoside         |
| 22             | Square 1a, north of feature 13 and 21                        | floor (belonging to 13 and 21)                                    | Thutmoside         |
| 23             | Square 1a, at northern border of Square, north of feature 30 | mudbrick assemblage/ structure                                    | ?                  |
| 24             | Square 2b, 3.85-5-25 m to East, 0.85-2.05 m from North       | pit   | Post-NK            |
| 25             | Square 2b, 5-7.50 m to East, 0.20-1.45 m from North          | pit   | Post-NK            |
| 26             | Square 2b, 8.22-10 m to East, 0-2 m from North               | pit   | Post-NK            |

|    |   |  |               |
|----|---|--|---------------|
| 27 | Square 2b, 7-7.55 m to East, 0-0.50 m from North                | mud brick debris with basket ( organic)<br>foundation of mud brick building, using mixed of stones and bricks as<br>foundation | Post-NK       |
| 28 | Square 2b, 2.70-4.50 m to East, 0.65-2 m from North             |  | Post-NK       |
| 29 | Square 1a, at northern border of Square, ca. 0.5-2.25 m to East | pit  | Post-NK       |
| 30 | Square 1a, Northeast corner                                     | mudbrick structure/wall (extension 21)   | Thutmoside    |
| 31 | Square 1a, Northeast corner, south and north of 30              | foundation trench of feature 30  | Thutmoside    |
| 32 | Square 2b, south of 27, c. 7-8.20 m to East                     | pit? or mudbrick assemblage  | Post-NK?      |
| 33 | Square 2b, Southwestern corner of square                        | wall, SW corner in section/ BAULK  | 18th Dynasty? |



Fig. 3: Feature 15, an installation within Building A at the junction between Squares 1 and 2.

## The southern part of SAV1East (southern half of Square 2 and Square 2b)

### *Feature 14*

Making a trench through the presumed gravel deposit in the Southern area of Square 2, we found a small plaster coated installation, set directly against the gravel (Fig. 4). It is a well preserved small storage bin (1.20 x 1.82 m) which was concealed by debris. It still held two complete pottery vessels in situ as well as some broken ceramics. The beaker (find no. 40/2013) and the small red burnished vessel (find no. 39/2013) are both datable to the early 18<sup>th</sup> Dynasty, definitely prior to the reign of Thutmose III (see below, Fig. 9).



**Fig. 4: Feature 14 with in situ vessels of the early 18<sup>th</sup> Dynasty.**

### *Other features*

The material to the south of this bin in Square 2b was characterised by mud brick debris and mixed pottery, also comprising a lot of 18<sup>th</sup> Dynasty material. Between fallen and collapsed mud bricks, a small basket was found in feature 27. This basket can be well dated to Post-New Kingdom times as its sewn-plaits technique is unknown for Pharaonic basketry, but especially common in Nubia until nowadays.

In the remaining part of Square 2b, several circular, sandy pits were observed between the dense settlement debris with numerous mud bricks, containing mixed material (features 24, 25 and 26). Feature 26 showed a lot of ashy remains and some charcoal at its base – so there might have been some use of ovens at SAV1E.

Feature 28 is a Post-New Kingdom foundation for a structure set against the sloping gravel at SAV1East, using both stones and mud bricks for its foundation.



## **The northern part of SAV1East (northern half Square 2, Squares 2a, 1 and 1a)**

### *Building A*

In Squares 1a, Square 1, Square 2 and Square 2a we uncovered mud brick remains which all belong to one structure and confirm the image derived from the magnetometric survey results (Fig. 2). This major building at SAV1E was labelled as “Building A”.

Very soon below the surface, we found linear outlines filled with sand – it soon became clear that we have here the negative outlines of the building visible on the geophysical survey map. The original brick work was largely completely destroyed and taken out. What confirms the alignment of the former walls are the remains of foundation trenches which we were able to document in same places – the foundation trench of the walls of Building A is filled with loose gravel material and with scattered mud bricks which were thrown into the trench and not laid properly.

The best preserved parts of Building A are located in the Northeast corner of SAV1E. The Northern wall (features 13 and 21) runs roughly from East to West and extends beyond the eastern wall (feature 3) towards the Nile (feature 30). Unfortunately the corner between walls 3 and 30 is heavily disturbed by a later pit, probably dug in Medieval or Ottoman times. Despite this disturbance, three layers of brick have remained in place. The bricks all belong to the foundation of the wall and included an undisturbed foundation trench. A painted rim sherd of a pottery vessel found in this foundation trench gives us an important dating indication for the Building: mid 18<sup>th</sup> Dynasty, not earlier than Thutmose III.



**Fig. 5: Detail of foundation trench (feature 31) south of wall 30, with painted rim sherd in place.**

The northern wall of Building A is only 75 cm wide, whereas the eastern wall is more solid with a thickness of 106 cm, thus fitting nicely to a measurement of two Egyptian cubits. The southern wall (feature 16) is very badly damaged and has almost disappeared – its foundation



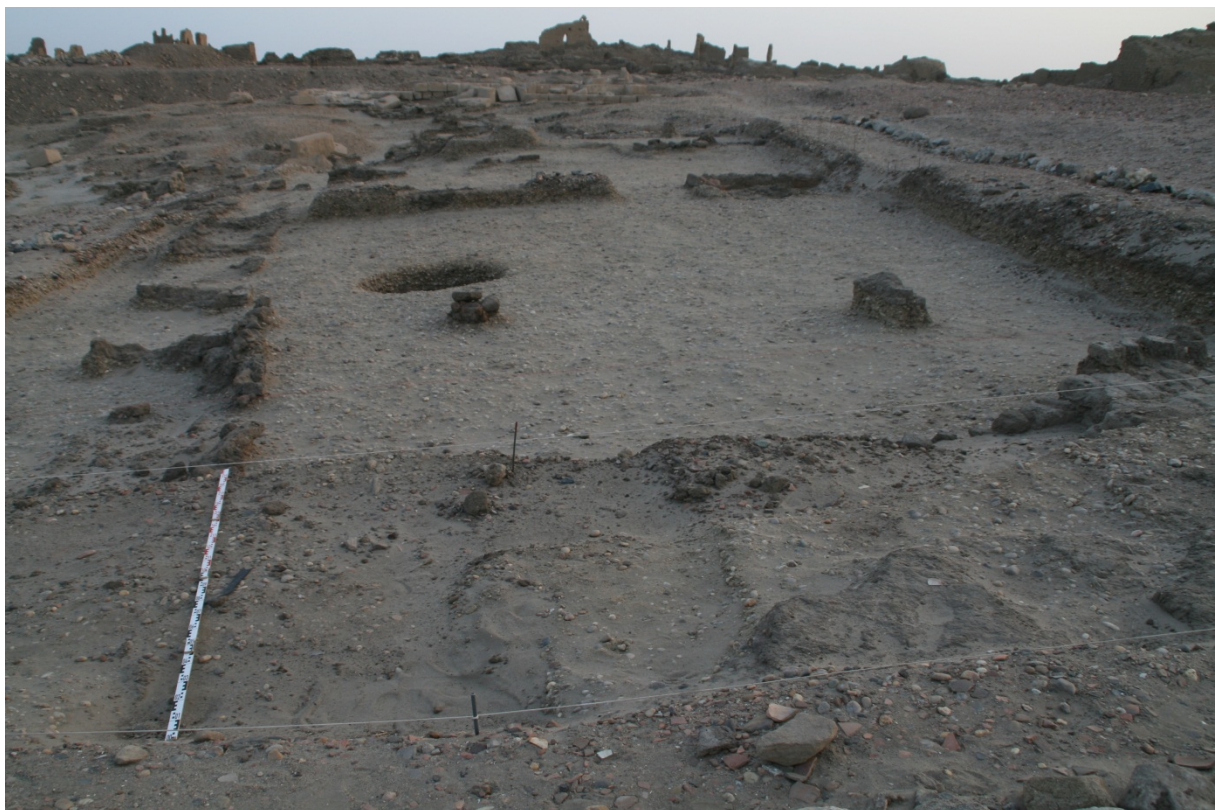
trench was exposed in some parts, adjacent to the negative outline of the wall. In one area we still have a layer of bricks in place and they confirm the same width like the Northern wall – 75 cm, built with two stretchers respectively with two headers and one stretcher in between.

#### *Storage pits 5, 6 and 17*

Circular features within the court formed by the outer walls of Building A have been visible on the geophysical map. They also showed up in reality: three circular pits were discovered along wall 3, filled with sandy material and with differing measurements. They are more or less in line with each other but with irregular intervals between them and of diverse sizes. The largest one is storage pit 6 (1.25 x 1.35 m, with a depth of 0.45 m cut into the gravel). It was found filled with mixed material, including Thutmoside ceramics but also Ottoman pottery and possibly even more recent material, suggesting a sub-recent disturbance.

#### *Floor feature 22*

North of feature 13 and 21 the remains of a coated floor surface were discovered immediately under the modern surface. This floor clearly belongs to Building A, attesting a roofed area towards the north of wall 13 and of the presumed courtyard. Unfortunately it is partly cut by a later pit (feature 29) and also destroyed in most areas.



**Fig. 6: Overview of Squares 1a, Square 1 and Square 2 from the North during excavation.**

Remains of the floor 22 are visible to the right of the picture; pit 6 lies in the courtyard and one can make out the northern, eastern and southern wall of Building A.

### *Reconstructing Building A*

Despite of the fragmentary state, a tentative reconstruction of parts of Building A is possible: In Square 1a, we have an area covered by a floor north of wall 21. This floor was partly cut by later pits filled with dump material. Feature 13 has an obvious corner towards the West – we might interpret this as an entrance situation, a possible doorway into the courtyard. The eastern wall 3 allows calculating the North-South extension of this part of Building A as 16.3 m; the East-West extension is still not fully exposed, but was traced as up to 10 m.

All in all, Building A finds a very close parallel with the so-called residence SAF2 in the Southern part of the New Kingdom town. A northern room for the area with the floor and a possible eastern side room can be reconstructed. The western part of Building A is not yet excavated – a series of small entrance rooms similar as in SAF2 seem possible.

The functional interpretation of Building A must stay open for the moment, but we might have unearthed another administrative building within the Pharaonic town of Sai, with possible links to Temple A and/or SAF2.

### **Summary**

To conclude, the first field season at SAV1 East resulted in very important insights: it has been confirmed that the geophysical survey is reliable – thanks to the map based on this survey a previously unknown, major building of New Kingdom date, Building A was discovered. The fieldwork conducted in 2013 at SAV1E adds therefore important aspects to the understanding of the Pharaonic Town of Sai Island:

- (1) The earliest remains at SAV1E are dating to the early 18<sup>th</sup> Dynasty; there is nothing of the Kerma period prior to the New Kingdom. The area can therefore be safely interpreted as part of the newly founded Egyptian town.
- (2) The southern part of SAV1E with feature 14 can be linked with the domestic zone excavated around Temple A by M. Azim – it is characterized by small structures with single-brick walls and storage facilities (Azim 2011-2012). It is an early occupation phase comparable to Level 4 at SAV1N, of pre-Thutmose III date (cf. Budka 2011).
- (3) The northern part of SAV1E yielded so-called Building A – a not yet fully exposed mud brick structure with an orthogonal layout and striking parallels to the so-called residence SAF2 in the Southern part of the Pharaonic Town (Azim 1975). Pottery from the foundation trench provides us with a *terminus ante quem non* for Building A – the time of Thutmose III, suggesting that it belongs to the major remodelling of Sai during the reign of this king, fitting into the grid-pattern with roughly north-south and east-west aligned streets and contemporaneous with Temple A and the mud brick enclosure wall.

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### 3. Processing finds and pottery from the New Kingdom Town

Julia Budka

#### *Objects from SAVIE*

Nathalie Bozet and Julia Budka worked on the registration of the objects and finds from the new excavation site. The File Maker database comprises all objects excavated in 2013. 321 finds have been registered so far as coming from SAVIE – these are mostly stone tools, grinding stone fragments, re-used sherds but also some faience beads and clay objects. The database gives some basic information, a short description and all measurements of the individual finds. Each piece was recorded by digital photographs; selected finds were also drawn in 1:1. 15 drawings of small finds from SAVIE were realised in 2013 by N. Bozet. One of the main problems while excavating in the Pharaonic Town of Sai is the multi-period use and the long occupation. This also holds true for SAVIE – especially in the upper levels we have a lot of mixed material, mostly Medieval and Ottoman in date, but also some Post-Meroitic, Meroitic and Napatan remains occurring together with New Kingdom material. All in all, a total of 19 of the 321 pieces were securely dated to the 18<sup>th</sup> Dynasty. This includes two fragments of Nun-bowls, one clay weight and 16 re-used sherds, mostly scrapers.

The clay weight SAVIE 119 (Fig. 8) measures 5.8 cm in length and has a height of 2.3 cm. Such objects, resembling axe-heads in clay, have been found in quite large number and in varying sizes at SAVIN, in the northern part of the Pharaonic town of Sai Island. Close parallels from the Egyptian town at Elephantine allow us to interpret them as net weights for fishing (see von Pilgrim 1996). However, such objects might have been also used as weights for several purposes (see Giddy 1999 for objects from Memphis/Kom Rabia). SAVIE 119 is a rather small and thus light example of this type of weighing-down device.

A small faience amulet in the form of a squatting frog came up while cleaning around feature 28, the Post-New Kingdom stone foundation in Square 2b (SAVIE 294). Unfortunately, the archaeological context – found in dense mud debris with mixed ceramic material, filling material of the depression south of feature 28 – does not provide any glue for dating. In Ancient Egypt, frogs were primarily associated with fertility and birth – they are common amulets used during a long time span, both for the living and in funerary contexts.



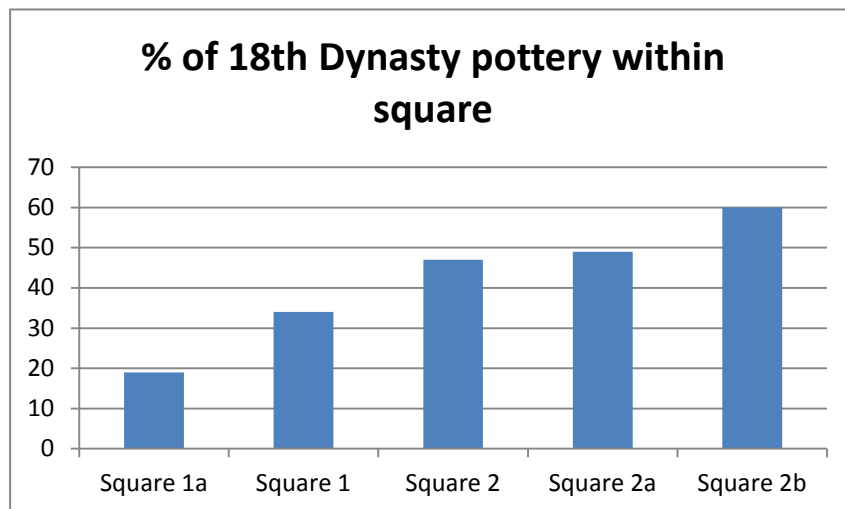
Fig. 7: Clay weight SAVIE 119.



### Statistical analysis

A total amount of 300 baskets of sherds was processed from the 2013 mission at SAVIE – out of 32.199 sherds, 18.327 pieces were assessed as Post-New Kingdom (57 %) and the remaining 13.872 as New Kingdom (43 %). Rim and base sherds, handles and decorated/painted sherds are regarded as diagnostics and were processed according to ware and vessel type (a total of 4.360 pieces). The basis of the 18<sup>th</sup> Dynasty corpus from SAVIE has been established in 2013 and the material compares well to Levels 4 and 3 at SAVIN, ranging in date from the early 18<sup>th</sup> Dynasty to Thutmose III/Amenhotep II.

The percentage of Post-Pharaonic material is changing from one square to another at SAVIE: following the sloping ground, the shallow deposits in Square 1a to the North are mostly Post-Pharaonic, whereas the deep depression south of Building A, especially in Square B to the South comprised 60 % of 18<sup>th</sup> Dynasty material.



### Selected vessels

The two vessels (P39 and P40) which have been found *in situ* and intact in the small storage bin (feature 14) are significant for dating this context to the early 18<sup>th</sup> Dynasty, as pre-Thutmose III. They are both wheel-made and represent well known types from Pharaonic Egypt.

**Fig. 8: The two early 18<sup>th</sup> Dynasty pottery vessels from storage bin 14 (P 39 and P40).**



Among the most important pottery vessels found in 2013 are also the two rim sherds recovered from the foundation trench of the northern wall of Building A. Especially relevant is the fragment of a decorated Marl clay vessel (Fig. 5). P57 is made in a so called Marl A4 according to the Vienna System. Its mouth diameter measures 10.6 cm and 48 % of the rim of this nice jar thrown on the pottery wheel are preserved. An irregular band in dark brown is painted along the top part of the rounded lip; the beginning of a slightly flaring neck is partly preserved. Such vessels are known from other contexts in Egypt from the Thutmoside era onwards (mid-late 18<sup>th</sup> Dynasty) – P57 as found within the otherwise undisturbed section of the foundation trench of wall 30 provides therefore a good dating indication for Building A.

### **Nubian presence at SAV1E**

Similar as at SAV1N, we encountered a small percentage of Nubian wares within the 18<sup>th</sup> Dynasty material. It is especially intriguing that within the storage bin 14 and in its surroundings there have been several fragments of Kerma vessels in the local Nubian tradition, mostly cooking pots but also fine wares.

### **Documenting pottery and small finds from SAV1N**

Additionally to processing the find from SAV1E, we continued documenting material which was excavated in SAV1N in the last years (see Budka 2011). This season's focus was on the recording and drawing of 18<sup>th</sup> Dynasty pottery as well as the recording of various kinds of small finds, especially of re-used sherds. Functional wares like cooking ware, particularly the Nubian style cooking pots and the so-called fire dogs have been investigated in detail. 100 so-called fire dogs from SAV1N, devices probably connected with cooking (see Budka 2012), were studied by Nicole Mosiniak for her MA thesis at Humboldt University Berlin.

A total of 444 drawings of pottery and 34 drawings of small finds from SAV1N were produced in 2013 (drafts persons: Fatma Keshk, Huda Magzoub, Sebastian Stiefel, Victoria Grünberg, Nicole Mosiniak, Nathalie Bozet and Julia Budka).

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#### 4. Preliminary classification of the 18<sup>th</sup> Dynasty Nubian wares from the New Kingdom Town

Giulia d'Ercole (photos by Nathalie Bozet)

During three weeks (February 16-March 7) of the 2013 season a macroscopic analysis of the Nubian ceramic assemblages from both SAV1N and SAV1E was realized in order to elaborate a preliminary classification of the fabrics and organize the sampling strategy for the future laboratory analyses (OM, XRPD, XRF, INAA).

The observation of the wares was conducted using a lens with 20x magnification (TM 20 Eschenbach) and four different fabrics were recognized, based on the content and the typology of the main non-plastic inclusions present in the paste. This classification is intended to be flexible: distinctions between fabrics are never sharp and sometimes the boundary between one group and another one is only subtle.

Fabric 1 – Fine wares, dung tempered: fine wares characterized by a rather dense and homogeneous sandy-silt matrix, containing numerous micaceous inclusions, a variable amount of very small (< 0,5 mm) angular mineral grains and some small white particles (micritic calcite aggregates?)<sup>1</sup>. Ceramics comprised in this group are tempered with a limited proportion of fine tubular organic inclusions (possibly herbivore dung or finely crumbled straw remains) (**Fig. 9, 10**).

Occurrence: Very fine and small open shapes: Kerma beakers and small bowls with well-polished and shiny-micaceous surfaces, completely black or red/black in color, sometimes showing the typical Kerma Classic silvery-white band or just a dark grey painted (?) band below the rim; black-topped vessels (**Fig. 16**).

Comparisons: Fabric SH4 (Rose 2012: 14, fig. C, F); Types CII, 2, CIII, 1-2, CIV, 1 (Gratien 1986: 430-433, fig. 320-322); uncertain parallels: Fabric II (Forstner-Müller 2012: 63, fig. 5).



**Fig. 9: Fabric 1 – SAV 1N, N/C 803a**



**Fig. 10: Fabric 1 – SAV 1N, N/C 803b**

<sup>1</sup> The occurrence – among non-plastic inclusions – of “*nodules de carbonates, vraisemblablement du calcaire, plus o moins gros*” is mentioned by B. Gratien (1978: 226) as a common trait of the Kerma pastes. It is more likely that they are natural inclusions of unsorted or poorly sorted clay rather than tempers added by the potter. Since at Sai their presence is attested also in the Nubian Abkan (c. 5000-4000 BC) and Pre-Kerma assemblages (c. 3000- 2600 BC), it may likewise represent a marker of a selection of a local raw material. Typical – especially during the Kerma Recent phase – is also the presence of wares (“*tulips a pâte fine, rouge à bord noir et à tranche noir*”) containing large proportion of mica (Gratien 1978: 62).



Fabric 2 – Medium wares, straw-dung tempered: medium-fine to medium wares characterized by a sandy-silt matrix, containing common very small (< 0,5 mm) angular to sub-rounded minerals grains, mica and a variable amount of white particles (micritic calcite aggregates?). Organic tempers are common and include both fine tubular inclusions (dung and/or chopped straw remains) and some larger flat fibers (straw and chaff remains). The consistence of the paste can range from relatively compact and homogeneous to quite porous and friable. Based on the frequency and the size of the non-plastic inclusions, possible sub-groups can be recognized (**Fig. 11, 12**).

Occurrence: Mainly open shapes with medium-fine to medium textures: black-topped and black-topped red slipped vessels; bowls with burnished or wet-smoothed surfaces showing incised or impressed decorations<sup>2</sup> (**Fig. 17**).

Comparisons: Fabric SH2 (Rose 2012: 14, fig. A-B).



**Fig. 11: Fabric 2 – SAV 1N, N/C 881.1**



**Fig. 12: Fabric 2 – SAV 1N, N/C 1010**

Fabric 3 – Coarse wares, chaff tempered: medium-coarse to coarse wares characterized by a sandy-silt matrix, containing common very small (< 0,5 mm) angular plus rare medium ( $1 \leq 2$  mm) rounded mineral grains, mica and a variable amount of white particles (micritic calcite aggregates?). Ceramics belonging to this fabric are tempered with abundant proportions of organic inclusions (mainly flat straw and chaff remains), easily recognizable to the naked eye and usually displaying an orientation strongly parallel to the surfaces. The consistence of the paste looks porous and friable (**Fig. 13, 14**).

Occurrence: Both open and restricted shapes with medium-coarse to coarse textures and wet-smoothed or scraped surfaces: bowls and globular vessels; cooking pots often showing basketry or matting impressions (**Fig. 18**).

Comparisons: Fabric SH1 (Rose 2012: 14-18); questionable parallels: Fabric III (Forstner-Müller 2012: 63, fig. 6).

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<sup>2</sup> According to their texture and to the content of organic tempers, incised wet-smoothed wares can be assigned to both Fabric 2 and 3. This kind of vessels is quite common in Late Second Intermediate Period-18<sup>th</sup> Dynasty Nubian assemblages (for a comparison see Ayers-Moeller 2012: 113, fig. 8). It is worth to note that some of the incised decorative patterns observed among this group of wares resemble earlier stylistic types, dating back to the Kerma Medium Phase (see Gratien 1978, 1986; Privati 1999). They show also possible similarities with Pan-Grave assemblages from Lower Nubian contexts (Gatto, Gallorini, Roma 2012; Giuliani 2006), pointing out to an intriguing continuity and melting of traditions starting from the Middle Nubian period.



**Fig. 13: Fabric 3 – SAV 1N, N/C 977**



**Fig. 14: Fabric 3 – SAV 1N, N/C 1141.1**

Fabric 4 – Very coarse wares, heavily chaff tempered: coarse version of Fabric 3. Ceramics included in this group are tempered with high proportions of large to very large flat organic inclusions, mica plus a variable amount of small to medium angular/sub-rounded mineral grains and white calcareous particles up to 2 mm in size (micritic calcite aggregates?) (**Fig. 15**).

Occurrence: Large storage vessels with very thick walls and uncoated or poorly smoothed surfaces, often decorated with comb-impressions on the rim (**Fig. 19**).

Comparisons: Type CIX, 1 (Gratien 1985: pl. 5c; Gratien 1986: 434-435, fig. 324c). See also Ayers/Moeller 2012 (p.113, fig. 8: ED 2547. N.3).



**Fig. 15: Fabric 4 – SAV 1N, N/C 803**

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**Fig. 16: Fabric 1 – SAV 1N, N/C 936a**





**Fig. 17: Fabric 2 – SAV 1N, N/C 806 (on the left) and N/C 995.2 (on the right)**



**Fig. 18: Fabric 3 – SAV 1N, N/C 1129 exterior (on the left) and interior surface (on the right)**





**Fig. 19: Fabric 4 – SAV 1N, N/C 803 exterior (on top) and interior side (below)**

## **5. The Architectural Survey in the New Kingdom Town**

Ingrid Adenstedt

### **Goal**

The survey was carried out from January 28 to February 14, 2013. The goal of this 3-week campaign was to take stock of the remains of the New Kingdom town on Sai Island, excavated by M. Azim in the 1970s, and to undergo a re-examination of the map published in 1975 and of observations made at that time. The work shall also serve as a basis for possible further steps that can be carried out in the future.

### **Working steps**

The work consisted of two main parts: Since the best way to get a clear overview and to examine the remains really closely, sketches and measurements by hand were made in a scale of 1:50. This resulted into a total of 18 DIN A3 sheets, on which the entire area could be mapped by hand. It is now possible to put the sketches, which are based on the map compiled in the 1970ies, together and thus to create a new map. The original map, although pretty accurate in measurements, lacked for example such things as construction joints and other details (thresholds, installations...). Therefore, the generation of a new map seemed necessary. It must be noted, however, that the whole mapping was done by hand measurements and thus lacks the accuracy of technical surveying methods.

The second part of the work was the compilation of a so-called room book. This is a catalogue of all the rooms, which provides detailed information, such as the overall measurements and the area of the room and the length, width and height of the walls. Specifics are listed as well, e.g. the door openings, possible thresholds, remains of floors or installations, the size of the bricks etc. Together with the plan, the room book is a basic tool for further work, as one can easily look up and compare the various details. Photographs of the different areas and rooms complement the documentation.

### **Results**

As already known previously and also described in earlier publications, the excavated part of the town consists of various, clearly separated areas. The general layout is a grid-pattern with roughly north-south and east-west aligned streets, the entire town is encompassed by a massive fortification with the main entrance gate lying to the west.

Based on the original map, the town area can be split into different sectors. The examination of the settlement followed this distribution. The names for the different areas derive from the original excavation, whereas specific room numbers were newly allocated.

The sectors are as follows:

- (1) Temple A
- (2) SAF5 – Magazines and Silos
- (3) Houses H1-H5
- (4) SAF2 – so-called palatial building
- (5) SAF3
- (6) Fortifications and entrance gate (SAF4)



In the following, I give a short overview of the various sectors and highlight some of the observations made during the examination. It is clear that some of these observations are not new, but nevertheless could be verified by the survey.

#### Ad 1) Temple A

Temple A, probably the central monument of the town, was not subject of the current examination – the sandstone temple is getting prepared for publication by the French team (L. Gabolde, J.-F. Carlotti and F. Thill). It is situated to the north of the excavated city area, on the crossing of the streets EO1 (leading from the main gate to the east) and NS1, which seems to be one of the main thoroughways of the town.

#### Ad 2) SAF5 – Magazines and Silos

The area SAF5 is situated on the western side of the town and consists of storage rooms and silos. It can be divided into three distinct sectors: a southern row of storage rooms (M1-M7), bordering the southern fortification wall and Rue EO3 in the north, the central part with storage rooms to the north and a badly preserved southern and western area, and a northern row of magazines in the north (M13-M18), which are situated between the east-west streets EO1 and EO2. The whole storage area can interestingly only be entered through a rather small passage way (NS4) in the north; to the east and therefore to the residential area, it was separated by a north-south running wall.

The southern row of storage rooms is longitudinal and was built over several round silos, of which the remains are still visible on floor level. Except for the most eastern magazine, which is separated from the others by a narrow corridor, the longitudinal rooms all have approximately the same measurements. Remains in two of the magazines attest to a former vaulting of the rooms. A staircase on the western side of this row of storage rooms led to the roof.

Apart from a few rooms to the north, the central part of SAF5 is badly preserved and the area cannot be entirely reconstructed. Especially the western part lacks evidence of New Kingdom structures. What can be said, however, is that there must have been a row of magazines on the northern side of EO3 which was similar to the one to the south of the street. The northern rooms (M10-M12) have various construction phases, including overbuilt and newly erected silos and a possible reuse of the storage rooms as dwellings in later times.

The northern row of storage rooms is once again very homogeneous and encompasses 6 magazines, whereby the one bordering Rue NS4 to the west could have held a staircase. These magazines are once again similar in their overall measurements. Of note are the remains of a schist floor and wall decoration in one of the storages in the eastern part.

The original plan shows the reconstruction of the north-south-street NS5 and a row of storage rooms to the west of SAF5. The exact position and dimensions of this street could not be verified, but it can be noted that there must have been a street somewhere in this area. Perhaps an analysis of the new plan will help shed some light on this matter.

#### Ad 3) Houses H1-H5

The houses H1-H5 are located in the central part of the excavated area and are bordered by the streets NS1 in the east, EO1 in the north and EO4 in the south as well as the wall to SAF5 in the west. The rooms of the houses are for the most part rectilinear, forming building blocks which are separated by narrow corridors.

The smaller houses H1, H2 and H3 are aligned in a row and all have the same layout and size. The walls are very homogeneous and all have the same thickness (55 cm) and are made of the same brick formats (33x17x9 cm). They consist of two main rooms on the east and two smaller rooms and an entrance corridor to the west. No building phases can be made out, which could imply that the houses were not in use for a very long time. Of note is that in the otherwise perpendicular structures the dividing wall between the main rooms is always slightly crooked. The only installment that still remains is some kind of pedestal in one of the main rooms of H3, which is the best preserved of the three houses. The function of this pedestal has to be given more thought in order to make any statements about it.

H4 lies to the north of the other houses and is separated from them by a wider open area, possibly a courtyard. The northern part of this dwelling is not preserved but it probably reached to the street EO2. This house has thick wall (106 cm) on the outside which could imply that it had a second story, although evidence of a staircase could not be detected. The entrance situation cannot be made out anymore and was probably situated in the northern part. Except for one closed doorway, no other construction phases exist.

H5 is the largest house in this central part of the town. It is situated to the west of H1-H3 and shows the same brick format, building technique and wall thickness as those three dwellings.

A thorough analysis of these houses and their layouts must be carried out in the future and cannot be part of this report.

#### Ad 4) SAF2

The area SAF2 lies to the east of Rue NS1 and consists of a large residential building (another interpretation is an administrative building). Unfortunately, only the central part of this building is well preserved; the northern and eastern part are either overbuilt or destroyed and the southern part is very badly preserved as well. Nevertheless, many interesting observations could be made in this area. Of note is certainly the large central hall with formerly six columns, whereby two of the column bases are still in situ. Parts of the floor are preserved as well. It was made of bricks, which were laid into a very dense pink mortar. Two different brick formats were used and a certain pattern was created (to be reconstructed). Also in the other larger rooms, remains of a brick floor can still be seen. A row of smaller rooms is situated on the western side of the building; here are also three entrance rooms, one of these – the northern one – seems to be installed at a later date. This is, by the way, the only restructuring that could be observed within the building, as with the other dwellings this could be a sign of a relatively short usage period. Also to be mentioned is the fact that a different brick format (40x19x9cm) than in the other houses was used here. The walls are once again pretty thick (cf. H4) with the implication of a second story.

As the building is badly preserved, the original dimensions must be reconstructed, which is possible through spare remains in the east and the south. The northern part, however, is completely non-existing, but maybe one can at least say that the building reached to Rue EO1. As with the other houses, a detailed analysis is part of future work.

#### Ad 5) SAF3

SAF3 lies to the east of SAF2 and proved to be a real problem zone. Very little remains here, only five walls of the original building plan can be made out and they provide almost no information as to the former layout of this part of the town. The city map of the 1970ies depicts several walls here; however, even a thorough examination of the area could not verify this version of the plan.

The terrain in this area is sloped towards the east and then falls off sharply towards the Nile. One of the remaining north-south walls is extremely thick (180cm) and could be interpreted as a terracing wall. Especially for this area, an exact survey of the remains seems necessary so that further statements and perhaps some reconstruction can be proposed.

#### Ad 6) Fortifications and main entrance gate

The fortifications are not preserved in their entire length, but the remains in the south and the north make it possible to reconstruct them. The remaining part of the wall in the south is 3.95 m thick and 2x2.36 m large buttresses on the outer side of the wall are placed about 13 m apart from each other.

There is a narrow entrance in the southern part of the city wall, but the main city gate seems to be situated on the western side. Of this, little remains, although four thresholds, aligned from the west to east, can be made out, creating a passageway, where several gates had to be passed in order to enter the town. Here, once again, further analysis and reconstruction work must be done so that precise statements can be made.

### Summary and Outlook

As already stated above, the survey of the southern part of town proved to be very interesting. It is however clear that more work in the future needs to be done. The campaign was certainly successful for providing the basics – mainly a new, detailed map and the room book – for further analysis and possible reconstructions. One of the main points is certainly the general layout of the town, including the new excavation areas and here comparisons between the different sectors of the site. Other points of interest to be dwelled upon are certainly the various house types and the building techniques. The reconstruction of the badly preserved areas as well as of the city gate is also of special interest. Of importance is certainly a further accurate surveying of the area in order to complete the documentation. With this, maybe a few open questions can be answered. Also, with the new city map it shall be possible to virtually reconstruct the town.

### Reference to M. Azim's work:

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