

# LIFE IN NEW KINGDOM TOWNS IN UPPER NUBIA – NEW EVIDENCE FROM RECENT EXCAVATIONS ON SAI ISLAND\*

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## 1. INTRODUCTION

Recent publications have stressed the elite-biased view of Pharaonic culture and especially of daily life.<sup>1</sup> Primarily based on the evaluation of texts and funerary remains of the upper classes, our comprehension of basic aspects of everyday life in Ancient Egypt is still limited. Since the 1970s the rich potential of settlement archaeology for Egyptology and the need to explore the domestic settlement sites along the Nile Valley have been addressed.<sup>2</sup> To achieve a more complete understanding of the full complexity and diversity of Pharaonic culture, we require data about substantial aspects like everyday activities and domestic architecture, preferably relating to various social classes. These issues can be investigated at their best in settlements and urban sites. Although much progress has been made in the last decades with research at sites like Amarna, Elephantine, Abydos and Tell el-Dab'a/Qantir,<sup>3</sup> Egyptian settlement archaeology is still in its infancy.<sup>4</sup>

Egyptian towns founded in the area known today as Upper Nubia in Northern Sudan during the period of the New Kingdom (c. 1539–1077 BCE)<sup>5</sup> offer the unique chance to conduct a detailed analysis of domestic life at the junction of Egyptian and Nubian culture. In direct opposition to sites located in modern Egypt, these Upper Nubian sites offer various advantages: in general better preserved,

they are also more accessible because not superimposed by modern houses or cities like in Egypt.<sup>6</sup> In addition, generous Sudanese export possibilities for all different types of samples (sediments, various kinds of materials and artefacts) allow a range of scientific analysis abroad, contributing to the archaeological recording.<sup>7</sup>

The last five years have seen an increase in archaeological fieldwork on the relevant settlement sites in the region between the Second and Third Cataracts. Excavations at Amara-West<sup>8</sup>, Sesebi<sup>9</sup> and on Sai Island<sup>10</sup> were resumed after long periods of neglect. Furthermore, work on New Kingdom activities at the key site of the Kingdom of Kush, Kerma, continues in the area called Dukki Gel.<sup>11</sup> This new boom in urban archaeology in Upper Nubia has much potential for an understanding of settlement patterns in the region. Eventually, it will be possible to assess the diachronic and regional development of the settlements in the area as well as the local properties of the individual sites at a synchronic level.

To date, there is no common understanding regarding the social interconnections and power hierarchies of Egyptians and Nubians in the Egyptian towns established in Upper Nubia during the New Kingdom. The architecture and structure of towns like Sai and Sesebi are almost unknown as is the case with their social stratification, the local relations of Nubians and Egyptians and the specific

\* For improving the written English of this paper we are very grateful to Kenneth Griffin.

<sup>1</sup> E.g. FROOD 2010 with further literature.

<sup>2</sup> E.g. KEMP 1972a, 1972b; BIETAK 1979. See also TRIGGER 1967.

<sup>3</sup> E.g. BIETAK (ed.) 1996; BIETAK, CZERNY and FORSTNER-MÜLLER 2010; KEMP and STEVENS 2010, KEMP and STEVENS 2011; KOLTSIDA 2007, 1; SPENCE 2010.

<sup>4</sup> Cf. FORSTNER-MÜLLER and MÜLLER 2011.

<sup>5</sup> For the New Kingdom occupation in this area see most recently EDWARDS 2012.

<sup>6</sup> For the current threat of Egyptian antiquities, mostly because of the rapid increase of population, see FORSTNER-MÜLLER and MÜLLER 2011, 209.

<sup>7</sup> Cf. e.g. CARRANO et al. 2009.

<sup>8</sup> E.g. SPENCER 2010.

<sup>9</sup> E.g. SPENCE and ROSE et al. 2009; SPENCE and ROSE et al. 2011.

<sup>10</sup> E.g. DOYEN 2009; DOYEN *Forthc.* a; BUDKA 2011.

<sup>11</sup> Cf. BONNET and VALBELLE 2010; RUFFIEUX 2011.

material culture.<sup>12</sup> The Egyptian “colonisation” or “reconquest” of Upper Nubia<sup>13</sup> introduced major changes for the local population as they were confronted with Egyptian culture and representatives of Pharaonic administration.<sup>14</sup> Consequently the question arises: who were the occupants of the newly founded towns as far as their cultural identity is concerned – Egyptians, Egyptianized Nubians or a mix of both?<sup>15</sup> As recent work has begun to highlight, impenetrable boundaries and prominent ethnic categorisation in New Kingdom Nubia are likely to be a modern conception and no longer tenable.<sup>16</sup> In line with modern theoretical approaches to identities, these sites can be taken as examples to illustrate the dynamic and situational character of past societies.<sup>17</sup> Other than drawing artificial border lines between Egyptians and Nubians, the aim should be to reconstruct social, economic and cultural identities at the local level of these Upper Nubian sites. Such identities are changing, interacting and merging with each other,<sup>18</sup> and will allow a more direct approach to diverse aspects of life than a stereotype perspective derived primarily from textual references.<sup>19</sup>

## 2. THE NEW KINGDOM SETTLEMENT ON SAI ISLAND

In the following paper, new evidence from Sai Island which has come to light during recent excavations by the Sai Island Archaeological Mission (SIAM) of Charles-de-Gaulle – Lille 3 University will be presented. This work at the site SAVIN

(Map 1) was directed by D. Devauchelle and headed in the field by F. Doyen.<sup>20</sup> Architectural and archaeological remains as well as some aspects of the material culture will be the focal points. Furthermore, the date of the foundation of the fortified town of Sai will be discussed. It is well known that the island played an important role in the so-called “reconquest of Nubia” during the early New Kingdom, but its details have still not been firmly established.<sup>21</sup>

### 2.1 History of research and general description

Thanks to its favourable location in Upper Nubia, just south of the natural barrier represented by the Batn el-Haggag, Sai Island in Northern Sudan has been continuously settled from Prehistory to modern times being occupied by various people throughout the ages. Nubian cultures of different periods but also Egyptians of the New Kingdom have left evidence for their occupation on the island.<sup>22</sup>

“The site of an ancient Pharaonic fortress of the empire”<sup>23</sup> was already noticed by Breasted in 1908, who also mentioned an important historical document which is unfortunately lost today: a rock inscription by Thutmose I at the eastern cliff along the fortress.<sup>24</sup> Furthermore, Breasted attributed a small Egyptian temple to Thutmose III because he had discovered its building inscription (see below). Soon after, more evidence for Pharaonic activity on Sai came up – Fairman, working at the neighbouring site Amara-West, reported in 1937 a seated

<sup>12</sup> Cf. WILLIAMS 1992, 143; TÖRÖK 2009, 189.

<sup>13</sup> See e.g. BERG 1987; DAVIES 2005; SPALINGER 2006; TÖRÖK 2009, 157–169; VALBELLE 2004, 94–99. For aspects of Sai’s possible role in this “reconquest” see BUDKA 2011a.

<sup>14</sup> SMITH 2003, 56–96.

<sup>15</sup> Case studies in Egyptian archaeology that explore possibilities and limits of tracing identities are until now primarily restricted to the funerary sphere. See e.g. MESKELL 1999; MESKELL 2001; BUZON 2008.

<sup>16</sup> See especially the work conducted at Tombos: SMITH 2003; BUZON 2008.

<sup>17</sup> Cf. e.g. JONES 1997; GRAMSCH 2009.

<sup>18</sup> See the model developed by GRAMSCH 2009.

<sup>19</sup> Cf. e.g. BERG 1987.

<sup>20</sup> The work of the Sai Island Archaeological Mission of Charles-de-Gaulle – Lille 3 University (UMR 8164 HALMA-IPEL), France is conducted with the kind permission of the National Corporation for Antiquities and Museums of Sudan (NCAM). Our sincere thanks are in particular due

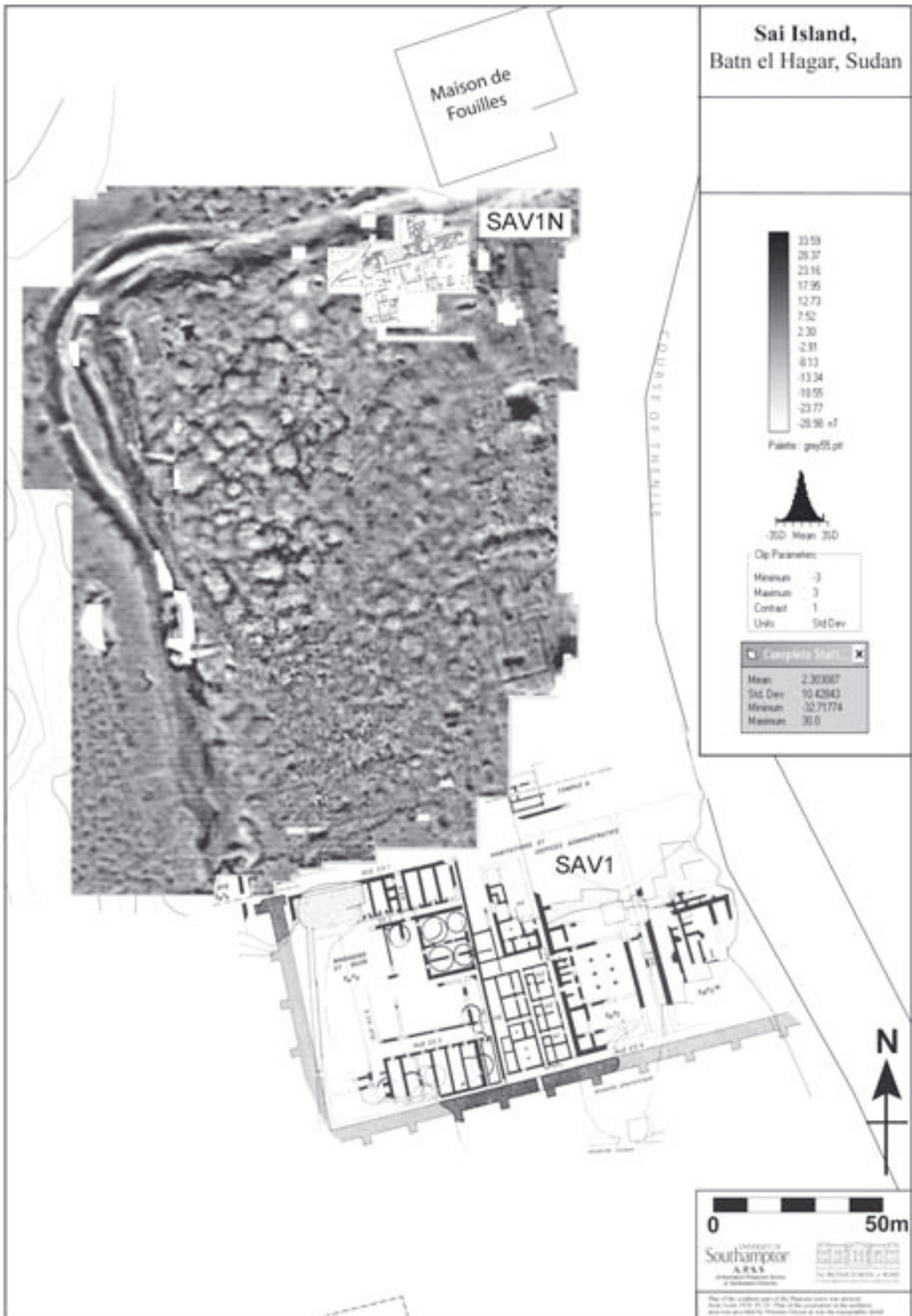
to Abdelrahman Ali Mohamed (Director General), El-Hasan Ahmed Mohamed (Director of Fieldwork) and Salah el Din Mohamed Ahmed (Director responsible for the Qatar-Sudan Archaeological Project). We also wish to thank: the Mission’s director Didier Devauchelle; the Egyptologists Nathalie Bozet and Veronika Hinterhuber as team members of the New Kingdom town project during the 2012 season; the Antiquities Inspector of NCAM Huda Magzoub for her constant support at the site and especially the Sudanese staff of the dig-house under the supervision of Sid Ahmed. Financial support for the 2012 season was granted by the Pollitzer Foundation of the Austrian Academy of Sciences; here we would like to thank first of all Manfred Bietak.

<sup>21</sup> Cf. BUDKA 2011a and the literature cited in note 13.

<sup>22</sup> See the summaries by VERCOUTTER 1986 and GEUS 2004.

<sup>23</sup> BREASTED 1908, 98–100.

<sup>24</sup> BREASTED 1908, 100; cf. SPALINGER 2006, 349 and most recently GABOLDE 2011–2012, 131.



Map 1 The New Kingdom town of Sai Island. Greyscale image of the magnetometer survey results 2011 (BSR-APSS, 2011), illustrating the main areas of excavations (SAV1 after Azim 1975 and SAV1N after three seasons of excavations 2008–2010)

statue of king Ahmose Nebphetyre.<sup>25</sup> More than a decade later, its head was found by locals in the surroundings of a small sandstone temple on Sai.<sup>26</sup> This statue of Ahmose (Khartoum SNM 3828 & 63/4/4),<sup>27</sup> and a similar representation of his son Amenhotep I (Khartoum 63/4/5),<sup>28</sup> both seated representations of the king in a *heb-sed* cloak, have been used as key evidence for the assumption that either Ahmose<sup>29</sup> or Amenhotep I founded the town at the site.<sup>30</sup> However, it has to be stressed that these prominent royal statues from the town area of Sai are associated with the early research on the island and were found prior to proper excavation.

The history of the systematic scientific exploration of Sai Island started in 1954. The first excavations of the New Kingdom fortified town and temple, located on the eastern bank of Sai Island, were led by Jean Vercoutter. Two fieldwork seasons in the mid 1950s, followed by five campaigns between 1969 and 1974, were all conducted by the architect Michel Azim as the field director.<sup>31</sup> The southern part of the ancient town, surrounded by a mud-brick enclosure wall and labelled as SAV1, was exposed at that time (Map 1). This area of the site shows a good state of preservation and ruins that are still standing; six levels of occupation were recorded by Azim. These levels were only roughly dated and assigned to the Pharaonic, Meroitic and post-Meroitic periods as well as to two phases within Medieval times and finally to the Islamic period (Ottoman fortress).<sup>32</sup>

In the context of these early excavations, the Pharaonic level (Level A) is corresponding to the Egyptian New Kingdom according to (1) the epigraphic evidence from the town site attesting almost every king of the 18<sup>th</sup> Dynasty<sup>33</sup> and to (2) the

material coming from the New Kingdom cemeteries comprising textual references including personal names besides finds and ceramics.<sup>34</sup> The two main cemeteries of the New Kingdom are located south of the town and were labelled as SAC5 and SACP1.<sup>35</sup> Another Egyptian cemetery, interestingly with strong links to the Kerma culture, is situated on the north of Sai Island, SAC4.<sup>36</sup>

Approximately 1 km to the north of the fortified town a domestic site, SAV2, was first tentatively identified by means of aerial photography and consequently investigated by fieldwork in 1969 and 1971. SAV2 was interpreted as a camp site of possibly Middle Kingdom or New Kingdom date featuring a ditch and being of roughly rectangular shape.<sup>37</sup> Nearby Christian remains and a mixture of the Pharaonic ceramics with pottery of Medieval date make a close assessment difficult at the present state. In general, the question of Pharaonic settlement activities outside of SAV1 has not yet been investigated in detail and would require new research.<sup>38</sup>

One of the focal points of the early investigation of the southern part of the town SAV1 was the small sandstone temple. Temple A, *c.* 10m in width, is a prominent building of SAV1 and finds close parallels at other Egyptian sites in Nubia.<sup>39</sup> Foundation deposits<sup>40</sup> confirm that Thutmose III built the earliest cella<sup>41</sup> of this temple as it is described in a text (S. 1) dedicated by viceroy Nehy and dated to year 25 of this king.<sup>42</sup> Other than this exact date for specific Pharaonic building activity in the case of Temple A, the diachronic development of the New Kingdom town still remains to be established. Epigraphic evidence like the statues of Ahmose and Amenhotep I or Nehy's building inscription of

<sup>25</sup> FAIRMAN 1939, 142, note 1.

<sup>26</sup> For details see GABOLDE 2011–2012, 118, note 23.

<sup>27</sup> DAVIES 2004, 103, Fig. 79; MINAULT-GOUT 2007, 280–281, Fig. 1b.

<sup>28</sup> DAVIES 2004, 102–103; MINAULT-GOUT 2007, 282, Fig. 1c.

<sup>29</sup> DAVIES 2004, 103; VALBELLE 2004, 94; TÖRÖK 2009, 159

<sup>30</sup> For a recent discussion of this evidence see: GABOLDE 2011–2012, 118–126.

<sup>31</sup> AZIM 1975.

<sup>32</sup> See AZIM 1975, 93–95; GEUS 2004, 115.

<sup>33</sup> VERCOUTTER 1973; VERCOUTTER 1986; GEUS 2004, 115; MINAULT-GOUT 2006–2007; GABOLDE 2011–2012.

<sup>34</sup> See MINAULT-GOUT and THILL 2012.

<sup>35</sup> VERCOUTTER 1986, 14; MINAULT-GOUT and THILL 2012.

<sup>36</sup> GRATIEN 1985; GRATIEN 2002.

<sup>37</sup> See HESSE 1981; for the proposed Middle Kingdom date see VERCOUTTER 1986, 11–12. See also MIELLÉ 2011–2012 for the problems connected with this dating.

<sup>38</sup> As it is the case for most Pharaonic towns in Nubia; cf. KEMP 1972a, 653–654 for the little work dedicated as yet to extramural settlements.

<sup>39</sup> For a comparison between the New Kingdom temples at Kumma, Semna and Sai see AZIM and CARLOTTI 2011–2012, especially pl. XVI.

<sup>40</sup> See THILL 1997.

<sup>41</sup> AZIM and CARLOTTI 2011–2012.

<sup>42</sup> First mentioned by BREASTED 1908, 98 and published by VERCOUTTER 1956, 74–75, doc. 13; see also GEUS 2004, 115; AZIM and CARLOTTI 2011–2012.



Temple A does not necessarily attest to the establishment of a fortified settlement on the island.<sup>43</sup> Aiming at filling this considerable lack of knowledge, excavations have resumed within the Pharaonic town from 2008 to 2012. New fieldwork along the northern enclosure (N4)<sup>44</sup> in a site called SAVIN was carried out by the SIAM.<sup>45</sup>

## 2.2 Spatial arrangement and structures in the Pharaonic town on Sai Island

The Pharaonic town (Map 1) has the shape of a fortified settlement with an orthogonal layout in a south-north direction, approximately 34000sqm in size.<sup>46</sup> Two gates are known, leading into the fortified town through the western (sector SAF4) and southern enclosure walls. Since the eastern edge of the sandstone plateau on which the town was established has nowadays partially collapsed, this section of the enclosure wall is completely lost. On the preserved western side of the town a trench was identified in front of and along the mud-brick enclosure.<sup>47</sup>

In the southern part of the town different quarters were identified during the course of fieldwork by Azim (Map 1): a palatial or residential quarter (sector SAF2) with a large columned hall (15.3 x 16.2m) and mud-brick paving in the east; a central domestic quarter H comprising a cluster of five houses; and a western quarter (sector SAF5), consisting of several rectangular storage rooms and circular silos.<sup>48</sup> These quarters reflect the orthogonal planning of the town as they are organised along north-south and east-west axes. Parallels for such a layout can be found at other New Kingdom towns, especially at Buhen, Amara-West and Sesebi.<sup>49</sup> Kemp has stressed the importance of the religious buildings for these Pharaonic foundations in Nu-

bia,<sup>50</sup> introducing the label “temple town” for this specific urban layout.<sup>51</sup>

## 2.3 Architectural remains at SAVIN

During the five fieldwork seasons of the SIAM between 2008 and 2012, nine 10m squares were excavated in SAVIN (Fig. 1). Sections of the enclosure wall N4 as well as several mud-brick structures of clearly domestic character were exposed and documented. Preliminary reports on these buildings have already been published.<sup>52</sup> New results of the 2012 season are highlighted in the following paper.

During the course of excavation, five levels have been differentiated according to various features, including the composition of the soil and layers, the character of the archaeological deposits, the stratigraphy of walls and other archaeological sequences.<sup>53</sup> The labelling “Level 1” was used for superficial remains of Post-Pharaonic date, being mostly composed of Aeolian sand, pottery sherds and loose mud-brick remains. The archaeological strata “Levels 2–5” are discussed below in their chronological order, starting with the earliest remains. The main focus of the SIAM’s closing season in 2012 was the establishment of a date for the enclosure wall N4. In addition, we searched for possible confirmation of the stratigraphical sequence within SAVIN and corresponding indications for its precise dating.<sup>54</sup>

### Level 5

As the earliest evidence of occupation in SAVIN, Level 5 was exposed in square 180/2270 just above the natural soil. It was partially excavated in a small area enclosed by the sections below the walls 18N, 18W and 26S/26W (see Fig. 1). From bottom to

<sup>43</sup> GABOLDE 2011–2012; BUDKA 2011a.

<sup>44</sup> This part of the enclosure wall, invisible from the surface, was already located by Azim by means of a sondage; see AZIM 1975, 122.

<sup>45</sup> See DEVAUCHELLE and DOYEN 2009; DOYEN 2009; DOYEN Forthc. a.

<sup>46</sup> AZIM 1975, 120 estimated the size as 238 x 140m (see note 44 for his finding of the northern enclosure wall).

<sup>47</sup> AZIM 1975, 120–122, pl. 14. For the general un-protective nature of the New Kingdom fortifications in contrast to the Middle Kingdom fortresses see KEMP 1972a, 651, 653.

<sup>48</sup> AZIM 1975, 98, pl. 4; DOYEN 2009, colour pl. 9; DOYEN Forthc. a.

<sup>49</sup> KEMP 1972a, 651–653. Cf. also DOYEN 2009; FUCHS 2009, 72–79; STEINER 2008, 151; GRAVES 2011, 55, 61–63.

<sup>50</sup> KEMP 1972a; KEMP 1972b, 666–667.

<sup>51</sup> KEMP 1972b, 664. See also GRAVES 2011, 63.

<sup>52</sup> DEVAUCHELLE and DOYEN 2009; DOYEN 2009; DOYEN Forthc. a.

<sup>53</sup> For general observations concerning the formation processes at Egyptian domestic sites with mud-brick architecture see VON PILGRIM 1996a, 18–22.

<sup>54</sup> The dating is mostly based on the analysis of the ceramic material; for details of the potential and limits of pottery from SAVIN as dating tool see BUDKA Forthc.



Fig. 1 General map of SAVIN, after five SIAM excavation seasons from 2008 to 2012 (field square = 10m long)

top, the following deposits belonging to Level 5 were recorded (Fig. 2):

- a thin stratum of a compact mud surface (J), comprising occasional sherds and which was used possibly as a levelling layer to adjust the sloping ground soil;
- a silty deposit, mixed with pebbles, some sherds and few bones (I);
- a thin mud floor (H) clearly illustrating the existence of domestic architecture which has not survived.

Despite the lack of any architectural remains within the test pits exposing Level 5, archaeological material from the deposits such as ceramics and some small finds allow the attribution of these earliest remains to the New Kingdom. With the earliest phase J of Level 5, set upon ground soil, the first evidence of activity in the area of SAVIN can firmly be associated with the 18<sup>th</sup> Dynasty. There is no

testimony of an earlier occupation pre-dating the New Kingdom in this sector of the Pharaonic town.

#### Level 4 (Fig. 3)

The earliest remains of mud-brick structures within the site SAVIN were exposed in squares 180/2260 and 180/2270 and can be attributed to Level 4. The buildings are preserved by short sections of their walls, namely walls 51S, 51E and 51N encompassing the structure N23 (Fig. 4), the walls 41S and 41E and the walls 54 and 56. The poor state of preservation does not allow for a precise reconstruction of the respective domestic architecture in its ground plan, but at least three domestic structures are present in what seems to be an east-west alignment. A common feature of the mud-brick structures associated with Level 4 is that they are all half a brick thick.

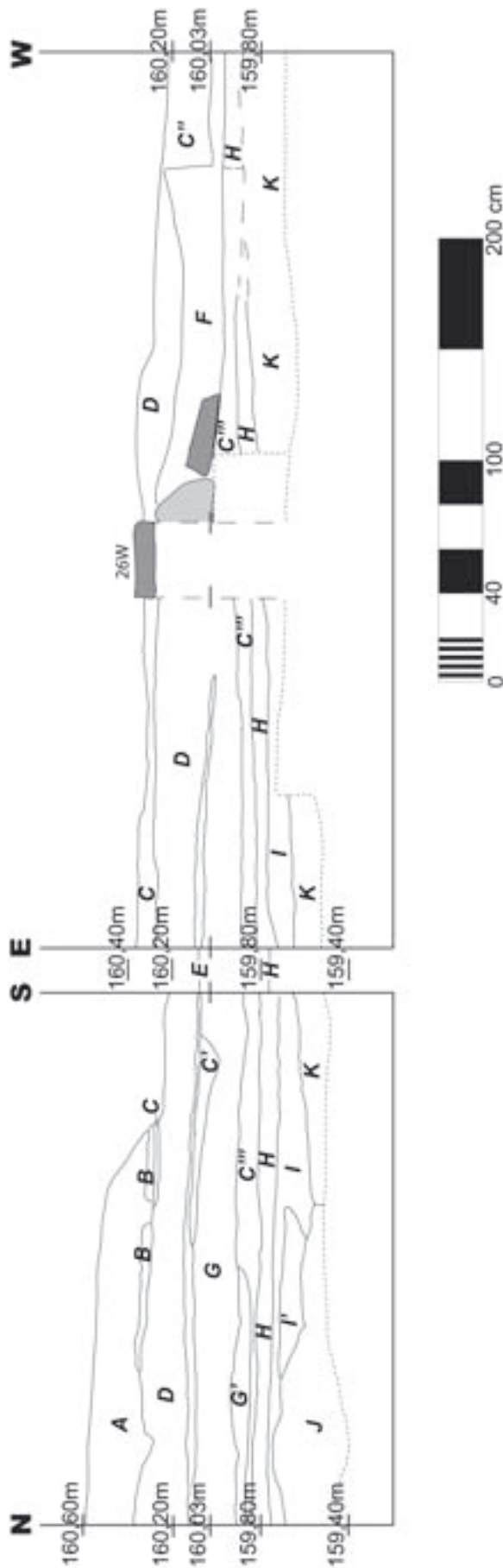


Fig. 2 SAV1N, square 180/2270, section drawing below the walls 18W (section N-S) and 26W (section E-W)

- |                     |        |   |
|---------------------|--------|---|
| Level 3             | A      | a silty deposit mixed with a large quantity of small vegetal remains, charcoal pieces and potsherds       |
|                     | B      | pieces of compressed mud-bricks   |
|                     | C      | an ashy deposit with charcoal pieces  |
| Level 4             | D      | a sandy silt deposit with abundant pebbles and sherds   |
|                     | E      | a dense grey mud floor pavement   |
|                     | C'-C'' | an ashy deposit with charcoal pieces  |
|                     | G-G'   | a layer of sandy and silty soil, rich of vegetal remains and pottery sherds and with some pieces of bones |
|                     | C'''   | an ashy deposit with charcoal pieces  |
| Level 5             | H      | a thin mud coating floor  |
|                     | I-I'   | a silty deposit, mixed with pebbles, some sherds and few bones  |
|                     | J      | a stratum of a compact mud surface comprising occasional sherds   |
| Natural ground soil | K      | alluvial pebbles mixed with some coarse yellow sand (bottom dotted line = limit of the excavation).       |

Inside a building of which only part of its rear wall and the north-eastern corner of a room are preserved (composed of walls 51E and 51N) a new installation came to light in 2012. This feature, set against wall 51E, was labelled as N23 (Fig. 4). It has a rectangular shape of a double enclosure (134 x 78cm), composed of vertically laid bricks preserved to a maximum height of 24cm. The inner partition wall of N23 was poorly preserved (only 10cm in height), but a dense mud coating covering the bottom of the northern cell (55 x 62cm) was still visible. Remains of a mud pavement were observed to the west of N23.

N23 is tentatively identified as a storage bin – similar installations were found at SAV1N, e.g. sub-rectangular bins with mud coating like N19 and N20 within the house N12, N22 in the room N11 and N8A along the wall 3E (Fig. 5); comparable features are also known from other sites.<sup>55</sup> However, the function of N23 is not certain. In contrast to the aforementioned features at SAV1N (N19,

<sup>55</sup> For bins associated with kitchen areas in Amarna and Deir el-Medina see KOLTSIDA 2007, 113, note 87; cf. also Kom Rabia, feature 583, JEFFREYS 2006, 28, Fig. 27.

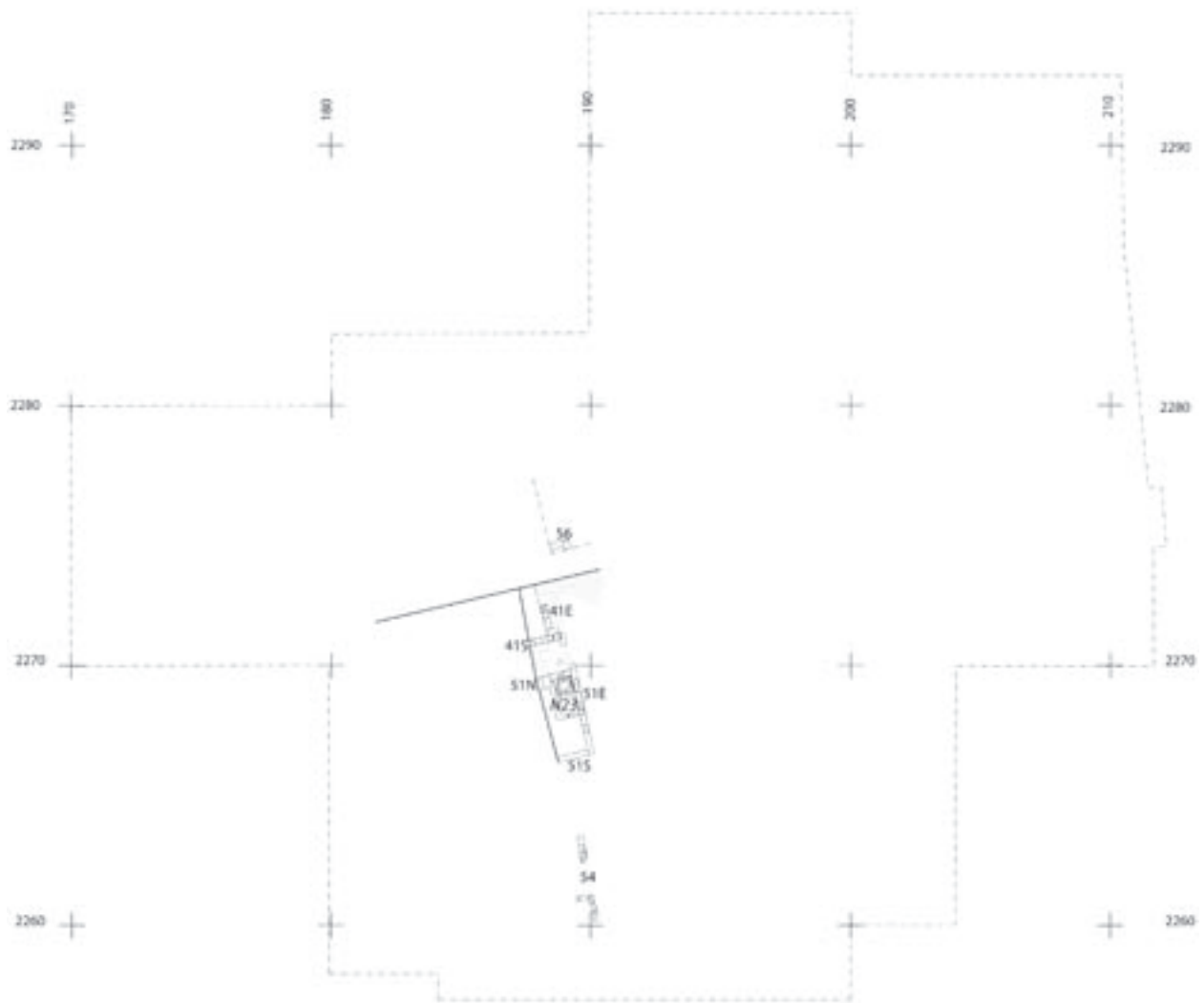


Fig. 3 Ground plan of SAV1N, showing walls and structures of Level 4



Fig. 4 SAV1N, square 180/2260, structure N23, view to East





Fig. 5 SAV1N, square 190/2270, bin N8A, view to South

N20, N22 and N8A) and e.g. storage bins from Elephantine<sup>56</sup>, N23 has a double-enclosure plan. Such a composition in two compartments is characteristic for specific installations known to have functioned as quern emplacements.<sup>57</sup> Other than in the case of N23, one of the compartments of such installations would regularly be solid. Although the technique applied to build the side walls of N23 closely parallels to one of quern emplacements at Elephantine<sup>58</sup> and is identical with the well preserved grinding installation in house N12 at SAV1N (feature N16, see below), we favour a functional interpretation of N23 as storage installation.

The archaeological deposits of Level 4 consisted, from bottom to top, of (Fig. 2):

- ashy and silty deposits with a lot of small charcoal pieces (C''' and C''–C');
- a layer of sandy and silty soil, rich of vegetal remains and pottery sherds and with some pieces of bones (G, G');
- a sandy silt deposit with pieces of broken mudbricks and sherds (F – this layer also comprised the ceramic cluster in 180/2270<sup>59</sup>);

- a dense grey mud floor pavement (E);
- a sandy silt deposit with abundant pebbles and sherds (D).

#### Level 3 (Fig. 6)

Successive dump layers and occupation deposits were attributed to Level 3. It was exposed throughout all squares of the site SAV1N and is well represented, mostly characterised by a distinctive brown colour (except for material associated with an ash-filled hearth). Level 3 is mainly composed of a silty deposit mixed with a large quantity of small vegetal remains, charcoal pieces and potsherds (A, Fig. 2).

There is also abundant evidence for architectural remains of Level 3. The earlier Level 4 walls have been levelled, and a new set of structures were built. Most of these walls of Level 3 are still half a brick thick. This new building phase at SAV1N followed a clear spatial arrangement – Level 3 walls are consistently oriented north-south towards the enclosure wall N4. The remains attributed to Level 3 (Fig. 6) comprise

<sup>56</sup> E.g. VON PILGRIM 1996a, 80, Fig. 23 (“trogartige(r) Installationen”) and 214 (“Futtertröge”).

<sup>57</sup> EL-SAIDI 1987, 6; KOLTSIDA 2007, 113.

<sup>58</sup> At Elephantine, the settlement of the Middle Kingdom to Second Intermediate Period yielded several houses with quern emplacements: H 14, H 25a, H 47, H 49, H 70 and H

93b, see VON PILGRIM 1996a, 183, Figs. 65, 81, pls. 21d, 33a; VON PILGRIM 1996b, pl. 1b. The best parallels for N23 are structure 25 in H 49a and the quern emplacement in H 25a, VON PILGRIM 1996a, Figs. 78, 81.

<sup>59</sup> See BUDKA 2011a.



Fig. 6 Ground plan of SAV1N, showing walls and structures of Level 3

the following: the walls 23, 25 and 26, the walls 8N, 8W and 8S, the walls 3E and 3S along with the structure N8A, the wall 7, the house N12, the compound including the walls 33N and 33W, the walls 39 and 38, as well as the structures N8, N9, N11, N13 and N15. The compound represented by the walls 44W, 47S and 45, including the structures N18 and N21, also belongs to Level 3.

All in all, a minimum of five structures can be reconstructed in the excavated part of SAV1N

for Level 3. House N12 is one of the better preserved buildings of this phase (Fig. 7). It was fully excavated in 2011 and attests the presence of typical Egyptian tripartite houses on Sai.<sup>60</sup> With a size of about 29sqm, N12 is a medium sized building within SAV1N and considerably smaller than for example tripartite houses at Elephantine<sup>61</sup> or from the workmen's village at Amarna.<sup>62</sup> Within Nubian fortresses, however, tripartite houses of small size are at-

<sup>60</sup> For tripartite houses see VON PILGRIM 1996a, 190–196; VON PILGRIM 1996b, 258–260. For a closely comparable layout cf. H 12 of the Middle Kingdom at Elephantine, VON PILGRIM 1996a, 45–46, Fig. 9; VON PILGRIM 1996b, Fig. 4.

<sup>61</sup> Cf. VON PILGRIM 1996b, Fig. 4.

<sup>62</sup> For an approximate size of 50sqm at the workmen's village see EL-SAIDI and CORNWELL 1986, Fig. 1.1 and KOLTSIDA 2007, 6.



Fig. 7 SAVIN, square 190/2260, house N12, view to Northeast

tested since the Middle Kingdom (e.g. Uronarti, Buhen).<sup>63</sup>

Three major types of installations are well preserved within N12<sup>64</sup>: a quern emplacement for a grinding stone, N16, in the rear part; a circular storage pit, N17 (see below, 3.2), in the central room or court<sup>65</sup> and two rectangular storage bins with coated surfaces, N19 and N20, which are of a different type than N23 (see above). N19 was built against the dividing wall of the south-eastern compartment in the rear part of N12 (which possibly functioned as an oven room, see below). N20 is set again the northern wall of the central room of N12 (Fig. 6).

Quern emplacements like N16 find many parallels, especially at the Egyptian sites of Elephantine (see above) and Amarna.<sup>66</sup> Circular silos or storage pits are common features at settlement sites as well.<sup>67</sup> All of the features within N12 seem to be related to the preparation of bread, particularly flour – the (long-term) storing of grain (N17), the temporary storing of grain ready to be processed (N19 and N20)<sup>68</sup> and finally the grinding implements to produce flour (N16).<sup>69</sup> Ashy deposits in the south-eastern compartment in the back part of N12 indicate an oven area within the building as well.<sup>70</sup>

<sup>63</sup> Cf. BIETAK 1996, 38–39, Fig. 16 (Uronarti and Shalfak); EMERY, SMITH and MILLARD 1979, pl. 23 (Buhen, Block C, southern part).

<sup>64</sup> Cf. DOYEN Forthc. a.

<sup>65</sup> For comparable locations of circular silos in tripartite houses at Elephantine see VON PILGRIM 1996a, 214 (H 10 and H 53).

<sup>66</sup> EL-SAIDI and CORNWELL 1986, 3–5; EL-SAIDI 1987, 5–6; BOMANN 1995, 17–19, Figs. 2.11–2.12; KOLTSIDA 2007, 113.

<sup>67</sup> E.g. at Elephantine, see VON PILGRIM 1996a, 214, pls. 3c, 7b. Cf. also the large size, circular granaries at Amarna, most recently KEMP and STEVENS 2010, 103–107.

<sup>68</sup> Cf. a similar interpretations for bins at Elephantine (VON PILGRIM 1996a, 214) and Amara-West (SPENCER 2009, 52–53).

<sup>69</sup> As a very well preserved example villa E12.10 at Amara-West can be named; see SPENCER 2009, 52–53, Fig. 4, pl. 11, colour pl. 18 (storage bins in room 7) and pl. 12. (grinding installations in room 9).

<sup>70</sup> Similar compartments can be found at Elephantine, see VON PILGRIM 1996a, 177.

*The enclosure wall N4*

The enclosure wall of SAV1N, labelled N4, is ten bricks thick (4.26m), aligned north-south. N4 displays a regular bonding of brick courses, composed of headers and stretchers in alternate layers, steadily interrupted by bricks laid out in various positions, enabling them to follow the undulating substratum. The massive structure N4, partly preserved to a height of 2m, is in some areas badly damaged by large holes dug into it. The 40m long section of the town enclosure at the north side of the town is not opened with any gate device. This is another indication that the town's orientation is south-north, featuring the most important structures and also the main entrance in the south.<sup>71</sup>

As already observed by Azim, the Sai New Kingdom enclosure wall is equipped with bastions in regular distances and of uniform sizes.<sup>72</sup> Projecting from the northern enclosure wall N4, a small square brick-tower is of the same type and proportions as those towers along the southern enclosure wall. The dimensions of this bastion, labelled N3, are 2 x 2.4m. On its eastern side a wall curving westwards was exposed. This feature 1W is possibly a curtain wall surrounding the original bastions of the town enclosure – parallels are known from the Middle Kingdom fortress of Buhen.<sup>73</sup>

As previously suggested by Azim in the 1970s, the northern part of the enclosure wall suffered from several destructions, but also restoration phases in its use-life.<sup>74</sup> In SAV1N this is clearly traceable not only in the western part of the site by means of demolishment and Post-Pharaonic secondary walls<sup>75</sup>, but especially by an enlargement of the bastion N3. A larger brick-tower, labelled N2 and slightly trapezoid in shape with dimensions of 7.95 x 5.20 x 7.55 x 5.10m, superimposes the smaller, earlier structure N3. This later tower is abutting against the enclosure wall N4 and by surrounding its predecessor, it is enlarging N3 significantly. N2 is clearly standing above N3 and wall 1W. To clarify the precise phasing, a trench through N2 was opened. On a low level between N3 and wall 1W, some remains of a

circulation floor were exposed. Once out of use, wall 1W was levelled and the gap around it was filled with pebbles – within this filling also some sherds of Ramesside date were documented. The levelled structures N3 and 1W were consequently used as a base for the foundation of the larger structure N2. Given the Ramesside ceramics, it seems tempting to suggest a restoration phase of Sai's enclosure wall in the late New Kingdom, maybe in connection with the new status of Amara-West and corresponding changes at Sai. However, the sherds only give a *terminus ante quem non* and a Post-Pharaonic date for N2 cannot be ruled out.

The restoration of the bastion N3/N2 is intriguing for assessing the building phases of N4, but first of all it is important to establish the date of the erection of the enclosure wall (N4) itself. In 2012, we were aiming at clarifying the foundation of N4 and its date, thus hoping for stratigraphical connections with datable structures within the town area. As Azim has already pointed out, the natural surface of the area represents a challenge for archaeological fieldwork. Full of pebble stones by nature, the natural sandy soil of SAV1N is often hard to distinguish from man-made gravel fillings.<sup>76</sup> Furthermore, especially in the eastern part of the site towards the cliff the ground soil is uneven and sloping. Within a distance of 40m, the lower base of the enclosure wall N4 differs 1.5m in height. Our fieldwork demonstrated that some works of levelling were carried out in ancient times in this area, especially by dumping pebbles as a backfill.

Aiming to answer the question of the foundation of the structure N4, three small sondages were carried out within the squares 170/2270 and 190/2270, along the southern facing of the town wall, in the area of the wall street. In each case, the base of the enclosure wall was exposed and documented. During the course of digging, a common feature appeared in all of the three sondages. These are broken or complete mud-bricks dumped into the foundation trench along the inner facing wall of the enclosure, obviously to hold back the filling of the trench.<sup>77</sup>

<sup>71</sup> Similarly, at Amara-West the main entrances are giving access to the governor's residence and to the temple, cf. KEMP 1972a, Fig. 1.

<sup>72</sup> AZIM 1975, 120.

<sup>73</sup> See EMERY, SMITH and MILLARD 1979, 36, Fig. 21, pls. 83, 90, E–F; VOGEL 2004, 234–235; DOYEN Forthc. a.

<sup>74</sup> For these early observations on the basis of a sondage see AZIM 1975, 122.

<sup>75</sup> See esp. walls 28 and 40, DOYEN Forthc. a.

<sup>76</sup> AZIM 1975, 95–99.

<sup>77</sup> Even if some of the bricks were well preserved and complete, it is not possible to conclude a serpentine wall as attested at Buhen (Middle Kingdom), see EMERY, SMITH and MILLARD 1979, 67, Fig. 37.





Fig. 8 SAV1N, square 170/2270, sondage CW, west of wall 22

On the two sections east and west of sondage B (square 190/2270) the form of the foundation trench could be observed; it was progressively filled with different sorts of debris such as compressed mud-bricks and pebbles. This backfill covers up to 4 or 5 of the lowest layers of the mud-bricks of the enclosure wall. West and east of the Post-Pharaonic wall 22 (sondage CW and CE, square 170/2270), another feature of the building technique of N4 appeared (Fig. 8). The two to four lowest layers of bricks of the enclosure wall are set as projecting 6 to 8cm – composing a foundation step.<sup>78</sup> This step was not observed eastwards, maybe because of the above mentioned problem of the irregular and sloping substratum.

Together with the foundation step, a very distinctive, dense packing of mud-bricks within the foundation trench of N4 appeared. The filling goes up to the height of the brick layer above the projecting ones, matching precisely with the inferior limit

of the plaster surface coating<sup>79</sup> covering the southern facing of the enclosure wall. Within the squares 180/2270 and 190/2270, along the northern wall street, the lowest limit of this coating is corresponding and related to a mud floor attested in the street.<sup>80</sup> This pavement is preserved within a sequence of walls and set between various occupation layers – it is clearly attributable to Level 3. Its association with N4 allows us to connect the erection of the enclosure wall with this level.

#### Level 2 (Fig. 9)

Exposed in all squares of the fieldwork, Level 2 consisted of a destruction layer characterised by numerous collapsed walls and piles of broken and complete mud-bricks which were sometimes burnt.<sup>81</sup> Furthermore, fragments from mud-plaster associated with hearths were found as well as a number of architectural sandstone blocks. The latter were discovered always in disturbed contexts or

<sup>78</sup> For a parallel see the Middle Kingdom fortification at Buhen, EMERY, SMITH and MILLARD 1979, 67, Fig. 37.

<sup>79</sup> See the definition by KEMP 2000, 92.

<sup>80</sup> Cf. the Middle Kingdom pavement of the south wall street at Buhen, EMERY, SMITH and MILLARD 1979, 67, Fig. 37.

<sup>81</sup> Cf. the note by VERCOUTTER 1958, 162 that there were traces of burning at the enclosure wall in the southern part. It is unclear whether these burnt bricks are of the same type as the ones of Level 2 at SAV1N.

fillings, both in complete and fragmented condition. They comprise a range of functions as it is well attested at other Egyptian settlement sites – in general, the doorways and columns are commonly fashioned in stone within mud brick buildings.<sup>82</sup> SAV1N yielded among others column bases (e.g. a well preserved example from the filling of N12 with a diameter of 45cm and a thickness of 18cm), thresholds and fragments from door-pivot stones. A number of grinders were also found in Level 2 (see the quern emplacements from Level 3 mentioned above). Since all of these stone blocks cannot be

linked to specific structures of Level 2 at the moment, it is possible that they have been partly re-used from Level 3. Such a recycling of stone architectural elements is well attested at other sites.<sup>83</sup>

Apart from some incomplete structures,<sup>84</sup> two similar features, N6 and N7, belong to the phase of Level 2 (Fig. 9). N6 and N7 are two storage pits cut into the natural ground soil and of a square to rectangular shape. The pits are carefully lined with mud-bricks, plastered at their interior, obviously a scheme to preserve the pit contents.<sup>85</sup> Whereas in the case of N7, no surrounding architecture was

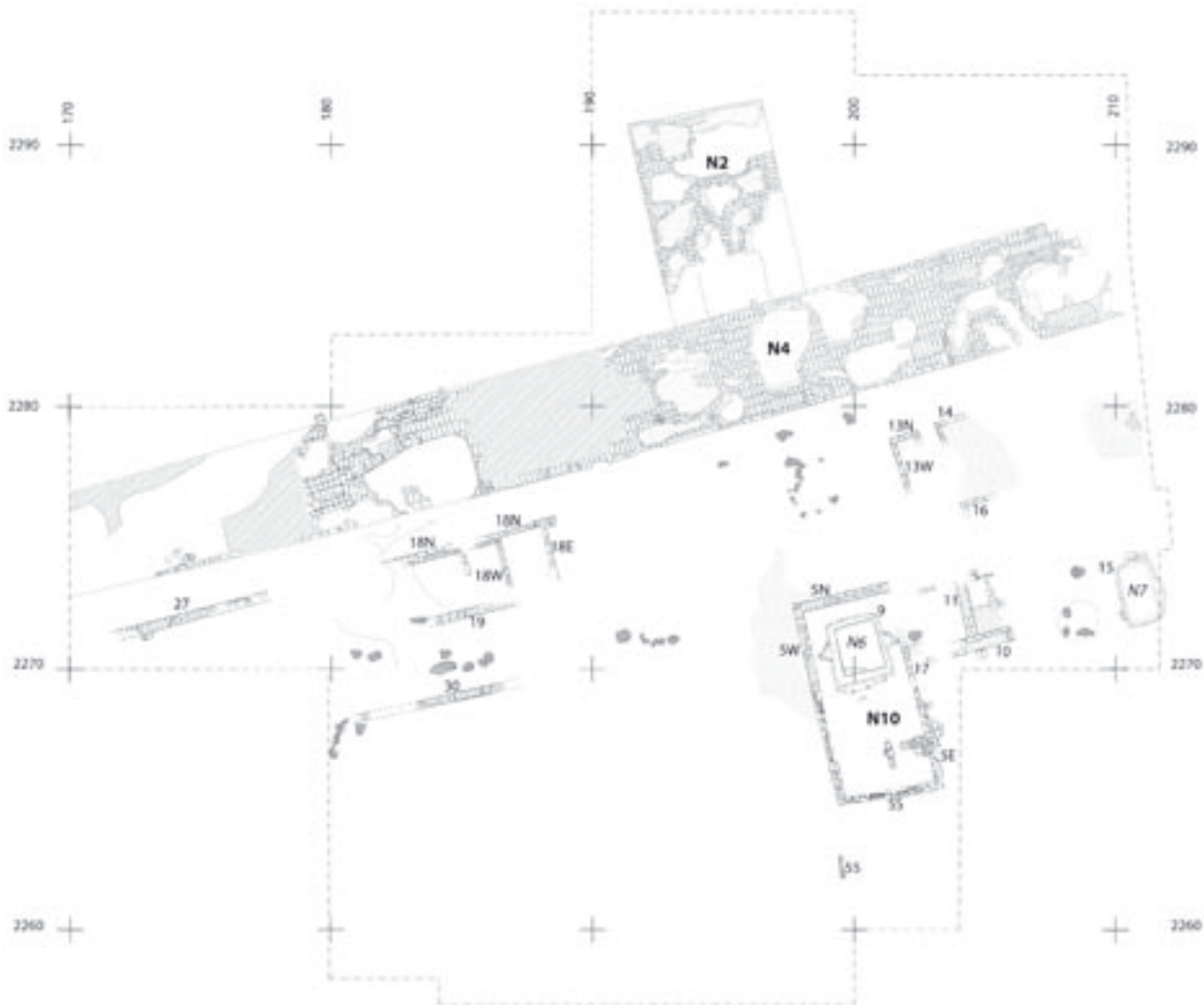


Fig. 9 Ground plan of SAV1N, showing walls and structures of Level 2

<sup>82</sup> Cf. e.g. good examples from Elephantine (VON PILGRIM 1996a, *passim*) and Amarna (e.g. BORCHARDT and RICKE 1980, pls. 11, 14, 26–27).

<sup>83</sup> At Elephantine the re-use of stone blocks/architectural pieces is attested from the Middle Kingdom throughout the New Kingdom and Third Intermediate Period; see e.g. VON

PILGRIM 1996a, H 46, 165–170, Figs. 70–72, pls. 29c, 30a.

<sup>84</sup> The Level 2 comprised the walls 10, 11, 27, 18N, 18W, 18E, 19 and 30.

<sup>85</sup> For comparable plastered, rectangular storage pits cf. e.g. VON PILGRIM 1996a, 77–80, H 86.

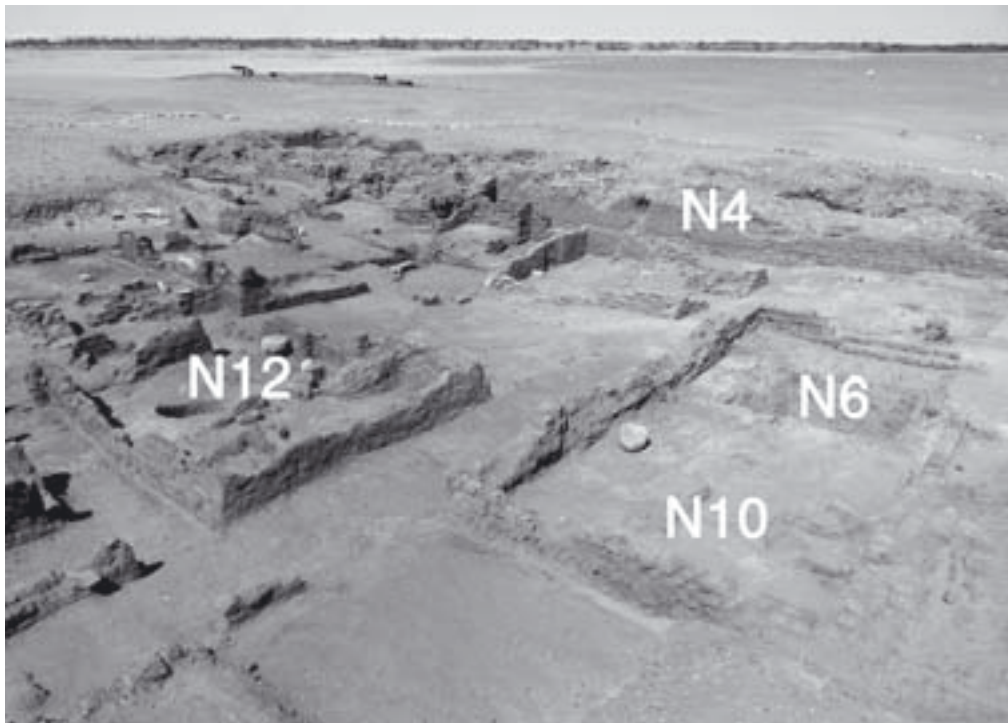


Fig. 10 General view of SAVIN from Southeast  
(structures N12 and N10 with storage pit N6; enclosure wall N4 in the background)

found, N6 is located within a building, in the front part of structure N10 which is orientated north-south along a narrow lane (Fig. 10). As is the case with this structure N10, most of the preserved walls from buildings of Level 2 are one brick thick. Some bricks display marks on their large rectangular surface, such as double, triple, oblique and parallel lines, single diagonal lines or depressions made with two, three, four or five fingertips.<sup>86</sup>

The alignment of the structures associated with Level 2 (Fig. 9) seems to follow the general ground plan and spatial organization of Level 3. Markedly is the overall increase in the thickness of the structures – an indication that also the enlargement of the bastion of the enclosure wall N4 might be associated with the phase labelled as Level 2.

#### 2.4 The evolution of the Egyptian town on Sai

Given the ephemeral architectural remains in the earliest strata at SAVIN (Levels 5 and 4), the sequence of the beginning of Egyptian occupation on Sai is hard to reconstruct. It is clear that the Pharaonic settlement was built in stages. Substantial remains in Level 3 present the major building phase

at the site. At present, three main phases of occupation can be reconstructed at SAVIN, highlighting the evolution of the town during the period of the New Kingdom:

1) The described structures of Level 4 constitute the first phase of a Pharaonic type settlement with traceable architectural remains. These earliest relics might already be characterised by an orthogonal planning following a north-south orientation, but the state of preservation of the structures does not provide a clear ground plan of the site. The walls attributed to Level 4 share the common feature in that they are half a brick thick. At the present state of knowledge, it is not possible to locate an enclosure wall at SAVIN (Fig. 2) for this phase. There is also negative evidence for an earlier mud-brick temple below Temple A, associated with Level 3 (see below). The dating of Level 4 mostly derives from the analysis of the ceramics.<sup>87</sup> In general, this phase of occupation can be associated with the early 18<sup>th</sup> Dynasty, pre-dating Thutmose III.

2) The foundation of the fortified town with the bastioned enclosure wall already observed by Azim

<sup>86</sup> Cf. AZIM 1975, 105.

<sup>87</sup> See BUDKA 2011a; BUDKA 2011b; BUDKA Forthc.

dates to Level 3 (Fig. 3). It is part of a large undertaking to model (or remodel?) the Pharaonic town according to a characteristic design, including a new stone temple dedicated to Amun, built by Thutmose III (Temple A). The orthogonal organization of this phase of the settlement, reflected especially in the southern part with the different quarters (cultic, palatial, domestic and economic), displays the main features of a “temple town”<sup>88</sup>, as attested at other New Kingdom settlement sites in Nubia like Buhen.<sup>89</sup> According to the ceramic evidence, the occupation layers labelled as Level 3 can be dated from Thutmose III to at least the reign of Amenhotep III.

3) The successive structures composed of walls of the Level 2 occupation (Fig. 9) clearly follow the planned spatial organization of Level 3. As a main difference, the structures are built with enlarged walls, regularly one brick thick (preserved as two stretchers). The enlargement of the bastion of the enclosure wall (N3) also most probably belongs to Level 2. The dating of Level 2 is harder to establish than for the earlier levels. Most of the material from this level (ceramics, tools and small finds) derives from fillings and debris, resulting in a mixed character of the material. A dating of Level 2 to the Ramesside Period seems possible, but will have to be investigated further.

In conclusion, the buildings excavated in SAVIN attest to the successive occupation of the site throughout the New Kingdom. It is only in its major phase, Level 3, when characteristic features of a *mnnw* like the fortified enclosure wall N4 are traceable. Thus, the building inscription of Temple A, mentioning for the first time a “Fortress of Shât” (*mnnw n Šꜣꜥ.t*)<sup>90</sup> might actually refer to a new building project by Thutmose III on Sai. At the moment it is not possible to reconstruct the ground plan of earlier settlements at the site and to establish whether they would also fit to the category of a *mnnw*. However, it is important to stress that Egyptian occupation on Sai Island started already in the earliest phase of the New Kingdom, as became apparent by the ceramics associated with Levels 4 and 5, pre-dating Thutmose III. Activities by the early kings

attested by textual records such as Ahmose, Amenhotep I and Thutmose I rest now on firm grounds thanks to the new archaeological evidence. The precise nature of the earliest Egyptian occupation, however, still has to be established by future excavations.

### 3. MATERIAL CULTURE IN THE PHARAONIC TOWN ON SAI ISLAND

As observed at other Egyptian Nubian towns, e.g. at Buhen<sup>91</sup> and Askut<sup>92</sup>, objects of Egyptian type dominate the material assemblage at Sai. At present, only preliminary remarks on these finds are possible. A detailed contextual analysis, presenting associations and the specific percentage of object types from both a synchronic and diachronic point of view, will be conducted in the near future.

As mentioned above, questions of the identity of the occupants can be tackled by the analysis of the material remains.<sup>93</sup> Does the strong Egyptian appearance of SAVIN mean that its occupants were also Egyptians? Here, evidence coming from the New Kingdom tombs on Sai Island has to be taken into account. Some of the individuals buried there have administrative or religious titles and appear to be Egyptians and/or Egyptianized Nubians. The funerary equipment is of classic New Kingdom style and comparable to finds from other contemporary Nubian sites (e.g. Aniba, Tombos).<sup>94</sup> Possible processes of adaptation and/or acculturation of the people buried at Sai need to be assessed further. The main question is whether projected images of the identity of the occupants of Sai differ or are consistent in life and death.

In the following section, we will highlight some aspects of the material culture from the town that support the complex nature of archaeological cultures on Sai during the New Kingdom, most probably illustrating dynamic settings, shifting identities and permeable borderlines between Egyptian and Nubian lifestyle on the island.<sup>95</sup>

#### 3.1 Objects from SAVIN

A total of 2378 objects have been recorded in the database for SAVIN (Table 1). Of high interest is

<sup>88</sup> KEMP 1972b, 664. See also STEINER 2008, 249.

<sup>89</sup> MORRIS 2005, 81.

<sup>90</sup> VERCOUTTER 1956, 75.

<sup>91</sup> MILLARD 1979.

<sup>92</sup> SMITH 2003, 101.

<sup>93</sup> Cf. SMITH 2003, 99, 101–135.

<sup>94</sup> See MINAULT-GOUT 2004; THILL 2004; MINAULT-GOUT and THILL 2012.

<sup>95</sup> See SMITH 2003, 97 for Askut.



the reconstruction of the circumstances which led to the entry of the objects into the archaeological record – whether they attest a primary function as *in situ*-deposits, as primary refuse of activities or as evidence for other discard criteria.<sup>96</sup> Deliberate refuse of objects is often the case, occurring in several variants.<sup>97</sup> Most of the objects from SAVIN were recovered from Level 2, from disturbed contexts and fillings.<sup>98</sup> The corpus of objects therefore

includes Post-Pharaonic material as well. The precise dating and a more concise grouping of the items will be established in the near future. Here, the variability of finds derived from SAVIN will be illustrated. Preliminary thoughts about their significance for establishing the function of structures and activities at the site with possible thoughts about its occupants will also be presented.

Level	1	2	3	4	5	Total
Number of objects	660	1309	318	76	15	2378
Percentage	27.8	55	13.4	3.2	0.6	100

Table 1 The distribution of objects from SAVIN according to levels

All in all, the material which can be safely dated to the New Kingdom,<sup>99</sup> represents a typical assemblage as attested from other Egyptian settlements, both in Egypt (e.g. Elephantine, Memphis, Amarna) or in Nubia (e.g. Askut, Buhen, Quban).

#### *Main categories of finds*

The six main categories of finds established for finds from SAVIN follow a modified system as developed by Giddy for Memphis:<sup>100</sup>

A) Figurines and statuettes: Manufactured in clay and mud, Figurines in both human and animal shapes are attested. Especially noteworthy is a group of a dozen female Figurines in low-fired clay or mud, finding close parallels in both, Egypt and Nubia.<sup>101</sup> Rudimentary Figures in the shape of simple sticks with an incised or dotted area representing the pubic region and sometimes with

dotted circles resembling breasts (e.g. SAVIN 589)<sup>102</sup> as well as bed Figurines (SAVIN 613) are of a common Egyptian style.<sup>103</sup> The simple hand-modelled clay sticks with representations of the female genitalia (Fig. 11) are already attested in the earliest level of SAVIN, Level 5 (SAVIN 2306). They can clearly be dated to the early–mid 18<sup>th</sup> Dynasty, both by the archaeological context of SAVIN and by numerous parallels.<sup>104</sup> Other than at Askut where Smith labelled a group of female Figurines as of distinctive “Nubian style”<sup>105</sup>, the majority at SAVIN represents classical Egyptian types. However, the incised decoration of one of the stick Figures (SAVIN 2186) raises associations with Nubian style surface treatment of objects<sup>106</sup> and ceramics.<sup>107</sup> Similar rudimentary Figurines with a comparable decoration were found at Buhen.<sup>108</sup>

<sup>96</sup> Cf. ROSEN 1989, 564.

<sup>97</sup> Cf. KEMP and STEVENS 2011, 4–5.

<sup>98</sup> For the most common circumstances under which objects entered the archaeological record in settlements cf. KEMP and STEVENS 2011, 4–5.

<sup>99</sup> Cf. EMERY, SMITH and MILLARD 1979, 94: “While some object-types can be dated from other sites with relative security, others cannot; and the pottery record is not very helpful.”

<sup>100</sup> GIDDY 1999.

<sup>101</sup> DOYEN Forthc. b.

<sup>102</sup> Cf. DOYEN Forthc. a, pl. 7 (SAVIN 589).

<sup>103</sup> Cf. Elephantine (KOPP 2005a, 88–90); Amarna (STEVENS 2006, 85–91, Figs. II.3.7, II.3.10–11); Memphis (GIDDY

1999, 28–31, pls. 8–12); Askut (SMITH 2003, 131–133). For more parallels and a typology of the Figurines from SAVIN see DOYEN Forthc. b.

<sup>104</sup> See KOPP 2005a, 89, note 291 with further parallels from domestic contexts. Examples from Amarna (STEVENS 2006, 89–91, Figs. II.3.10, II.3.11) date to the late 18<sup>th</sup> Dynasty.

<sup>105</sup> SMITH 2003, 131–133, Fig. 5.30.

<sup>106</sup> See, e.g., a net weight found at Elephantine in Nubian fabric and with un-Egyptian incised decoration; see VON PILGRIM 1996a, 276, Fig. 120b.

<sup>107</sup> Cf. RZEUSKA 2010 who convincingly argues for a Nubian influence of the zigzag and wavy line-style of the incised decoration of Middle Kingdom Marl clay vessels.

<sup>108</sup> E.g. MILLARD 1979, no. 747, pl. 53.



Fig. 11 Rudimentary female figure SAVIN 2209

The fragmentary preserved bed Figurine (SAVIN 613)<sup>109</sup> represents a nude woman with her left hand crossed over the chest in typical Egyptian style.<sup>110</sup> This mould-made pottery Figurine seems to be a bit later in date than the rudimentary ones, probably

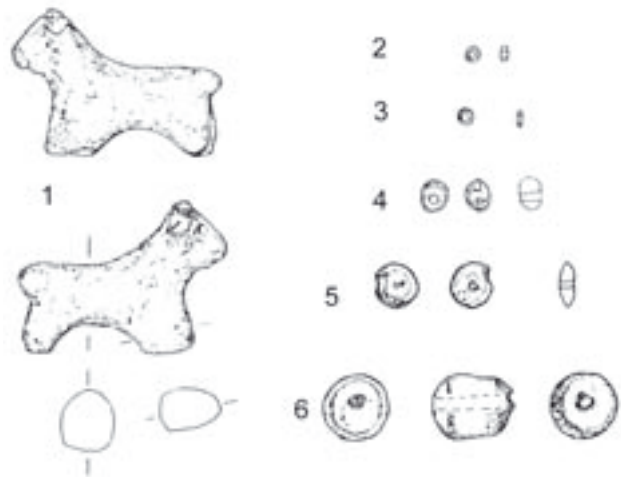


Fig. 12 Animal figurine (SAVIN 588) and selected beads from SAVIN. Scale 1:2

belonging to the late 18<sup>th</sup> Dynasty or the Ramesside era.<sup>111</sup>

Among the hand-modelled animal Figurines of poorly fired clay,<sup>112</sup> small ram statues appear, possibly depicting the god Amun (SAVIN 2221).<sup>113</sup> Clay Figurines of bulls might fall into a well attested Nubian tradition of representations of cattle (e.g. SAVIN 588, Fig. 12.1).<sup>114</sup>

B) Personal adornment: Beads (Figs. 12.2–6) are attested in various shapes (disc/ring, conical, drum-, barrel- and tube-shaped) and in a range of materials (49 in faience; 30 in other materials, including clay and bone).<sup>115</sup> Some are quite large and of irregular shape, possibly representing pendants (Fig. 12.6). At present, all of these beads seem to be Egyptian in style.<sup>116</sup> A small number of amulets recorded from SAVIN probably postdate the New Kingdom.

C) Household items: Supports as household items appear at SAVIN primarily as pottery vessels and are very common (see below, 3.2 Ceramics). Large

<sup>109</sup> DOYEN Forthc. a, pl. 6.

<sup>110</sup> Cf. STEVENS 2006, 85–88, Fig. II.3.7. Such figurines have been found at Quban, see EMERY and KIRWAN 1935, Fig. 32.

<sup>111</sup> Cf. KOPP 2005a, 89 for stratified examples from Elephantine (oldest examples from the late 18<sup>th</sup>–19<sup>th</sup> Dynasty; but more common in the 20<sup>th</sup>–21<sup>st</sup> Dynasties); for Memphis see GIDDY 1999, 31 (mid 18<sup>th</sup>–20<sup>th</sup> Dynasties).

<sup>112</sup> Cf. GIDDY 1999, 307–315, pls. 68–70. See also some figurines from Buhen, MILLARD 1979, 146–148, pl. 52.

<sup>113</sup> Cf. STEVENS 2006, 61, 110.

<sup>114</sup> Cf. cattle representations from Quban: EMERY and KIRWAN 1935, Fig. 33 and Askut: SMITH 2003, 132, Fig. 5.32. At Amarna, over 70 figurines were unidentifiable, but might have included cows as well (STEVENS 2006, 110).

<sup>115</sup> For cylindrical pottery beads see GIDDY 1999, pl. 25.

<sup>116</sup> Cf. SMITH 2003, 106–110 who differentiated a Nubian from the Egyptian style for the personal adornments at Askut. For a selection of Egyptian beads from New Kingdom funerary contexts in Nubia with parallels for SAVIN see WILLIAMS 1992, 123–130, Fig. 17.

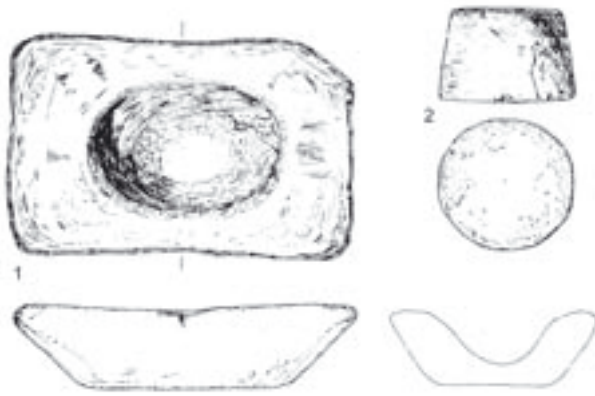


Fig. 13 Cosmetic instruments from SAVIN. Scale 1:3

rectangular stands and basin-like installations are present as well (e.g. SAVIN 2313, Level 3, in burnt clay). One fragment of a small table or another piece of furniture in unfired clay has survived (SAVIN 720).<sup>117</sup> Some pieces of large, tubular-shaped ovens with a circular diameter, in a coarse, low fired Nile silt ware, were found, unfortunately not in closed contexts but within fillings.<sup>118</sup> Eleven mud stoppers for various vessels were recorded and are mostly of the common conical type.<sup>119</sup> A comparable small number of fragments of un-inscribed sealings were documented and might have been primarily used for sealing small boxes (27 pieces, including uncertain fragments).

D) Tools and instruments: The largest group of tools at SAVIN is represented by stone tools and comprises weights, querns, grinders, hammer stones, pounders and pestlers, multi-purpose tools, polishers and burnishers, a small number of possible whetstones and finally miscellaneous and/or multifunctional stone tools.<sup>120</sup>

The large number of hammer stones (315 pieces) from SAVIN finds close parallels at Qantir<sup>121</sup> and at Amarna<sup>122</sup>. The functional use of these hammer stones was recently discussed by Tillmann:<sup>123</sup> an industrial use in relation with metal production seems possible for material found at Qantir, but for SAVIN another function is more likely – hammer

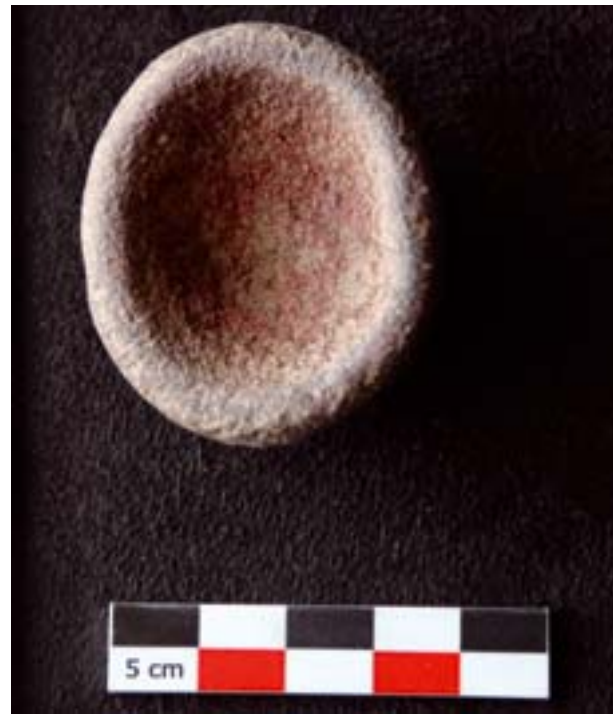


Fig. 14 Cosmetic dish SAVIN 1655

stones were also used for the surface napping of smoothed grinding stones.<sup>124</sup> At SAVIN, this functional use might explain the large quantity of pounders, their association with numerous grinding stones/querns (557 pieces)<sup>125</sup> and their provenance from domestic structures with silos and grinding emplacements (cf. above, 2.). Hammer stones are close in shape to grinders circular or semi-circular stones with traces of grinding instead of hammering (409 pieces from SAVIN). 15 pieces might be labelled as mallets.

Another small category of tools are cosmetic instruments, especially small palettes, grinders and dishes, of typical Egyptian types (Fig. 13). A completely preserved example of a small dish in granite with strong traces of use is SAVIN 323 (180/2270, Level 2). A New Kingdom date of this rectangular palette (Fig. 13.1; 13.1 x 8.4 x 3cm) is

<sup>117</sup> Cf. the more common stools and tables in stone, see GIDDY 1999, pls. 31–34; PRELL 2011, 94–95.

<sup>118</sup> For examples of ovens of this type see Elephantine (*in situ* evidence) and South Abydos (BUDKA 2006, 114 with references for Elephantine).

<sup>119</sup> Cf. e.g. SEILER 2005, 118–119, Fig. 58.

<sup>120</sup> Cf. GIDDY 1999, pls. 39–50 and PRELL 2011, *passim*.

<sup>121</sup> TILLMANN 2007, 50–55; PRELL 2011, 31–40.

<sup>122</sup> BOYCE 1995.

<sup>123</sup> TILLMANN 2007, 50–55.

<sup>124</sup> TILLMANN 2007, 55 (“Aufrauung glattgeschliffener Mahlstein-arbeitsflächen”) with literature and parallels. Cf. also PRELL 2011, 31 for various functions of hammer stones.

<sup>125</sup> Cf. PRELL 2011, 72–79.



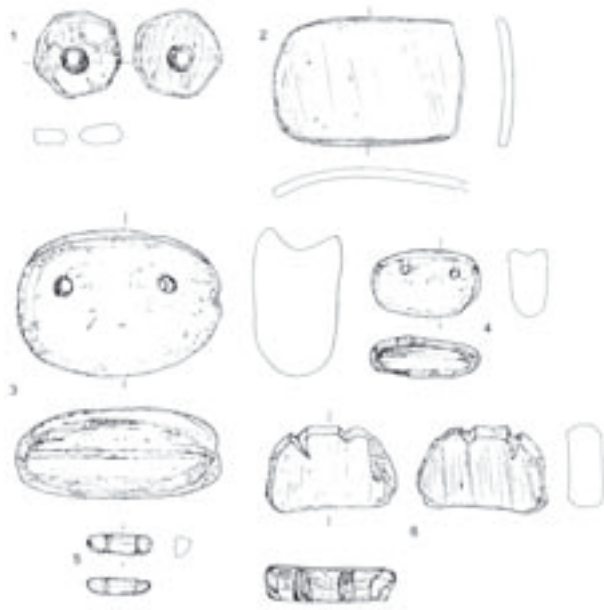


Fig. 15 Re-cut pot sherds and selected weights from SAVIN.  
Scale 1:4

likely. It finds parallels at Elephantine<sup>126</sup> and Askut<sup>127</sup>, but there is a slight variation: its inner depression is not rectangular like in the case of the cited comparisons, but ovoid. Such a shape as the outline is also attested for another cosmetic dish at Sai, SAVIN 1655 (Fig. 14). It is much smaller in size than SAVIN 323 and might be more of a local Nubian style as proposed for similar pieces from Askut.<sup>128</sup> A possible device to grind material on palettes or dishes like SAVIN 323 is SAVIN 761 (Fig. 13.2) which finds again analogies at Askut.<sup>129</sup>

38 objects were classified as weights (Fig. 15), most of them are made of baked clay or represent re-used pottery sherds (20 objects, Figs. 15.3–4). At Elephantine, these objects were interpreted as net weights<sup>130</sup> – from our point of view also the most likely classification for the pieces from SAVIN.

However, at other sites such items were labelled as loom weights or as multi-functional devices.<sup>131</sup> One of the rare weights in stone from SAVIN is the longitudinal piece SAVIN/1173, made in steatite (Fig. 15.5). No dating can be proposed since it derives from Level 1, but it falls into von Pilgrim's type B of net weights.<sup>132</sup> Von Pilgrim's type C of net weights is represented by three pieces of re-cut pot sherds from SAVIN (e.g. Fig. 15.6).<sup>133</sup>

Of the group of 46 artefacts classified as re-used pot sherds, most were probably used as scrapers (Fig. 15.2). Re-cut pot sherds are common tools with multiple functions at New Kingdom domestic sites, attesting to material-saving recycling processes in Pharaonic culture (e.g. at Qantir<sup>134</sup> and Elephantine<sup>135</sup>). Such a re-use of ceramics is also attested in Nubian cultures, e.g. for cosmetic palettes.<sup>136</sup> For three examples of the 46 re-cut sherds from SAVIN, Nubian wares were used. SAVIN 594 (Fig. 15.2) is a body sherd from a Canaanite amphora, recycled as scraper at Sai. The sherd selected for this piece probably held some advantages for both its future use and the production as a tool (a hard fabric with low porosity, a thin wall thickness and a handy bending for a good grip of the scraper).

Further re-shaping of ceramics is noticeable and will be mentioned below since these objects are not authentic tools but still fit into the category of pottery as lids of vessels (3.2): as it is commonly known from Egypt, dishes and plates were sometimes re-cut to be used as lids or covers (see Fig. 20.5).

E) Non-ceramic vessels: A small number of stone (12) and faience (11 + 49 fragments of Nun-bowls) vessels were excavated in fragmented condition in SAVIN. Especially noteworthy is a small calcite beaker with a ledge (SAVIN 0064) which finds both parallels in Egypt and at Egyptian sites in Nubia.<sup>137</sup> Six lids of small cosmetic vases

<sup>126</sup> VON PILGRIM 1996a, 171–172, Fig. 74, pl. 30b (from House H 46a, larger in size than SAVIN 0323).

<sup>127</sup> SMITH 2003, 111, Fig. 5.15E.

<sup>128</sup> See SMITH 2003, 111, Fig. 5.15A citing parallels from Adindan.

<sup>129</sup> SMITH 2003, 111, Fig. 5.15F.

<sup>130</sup> See VON PILGRIM 1996a, 275–276, Fig. 120 (type A).

<sup>131</sup> E.g. GIDDY 1999, 193: “identification of these pieces as net-weights remains tentative, and their use as weighing-down devices for a variety of other purposes is possible.” See also artefacts from Buhen that have been labelled as “pottery

axe-head”, MILLARD 1979, 127 and pl. 103. For loom weights which are different in shape see e.g. KEMP and VOGELSANG-EASTWOOD 2001, 392–403.

<sup>132</sup> VON PILGRIM 1996a, 276–278, Fig. 121, especially Fig. 121c.

<sup>133</sup> VON PILGRIM 1996a, 278, Fig. 121.

<sup>134</sup> RAEDLER 2007; PRELL 2011, 92.

<sup>135</sup> Cf. KOPP 2005b; see also BUDKA 2010c.

<sup>136</sup> See WILLIAMS 1993, 45 with note 49.

<sup>137</sup> SMITH 2003, 111, Fig. 5.15B.



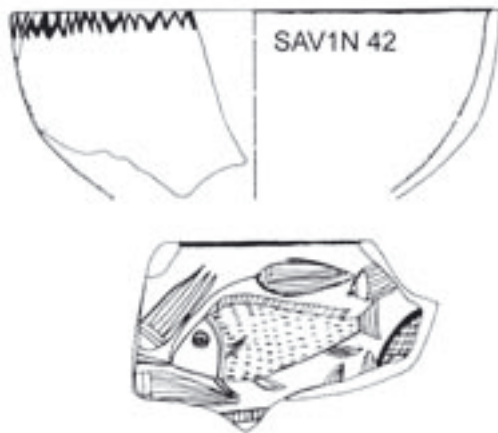


Fig. 16 Marsh-bowl SAVIN 42, reconstruction of shape and decoration of its interior. Scale 1:2

(kohl-vases) were recorded.<sup>138</sup> Within the group of faience vessels, several fragments represent Nun- or marsh-bowls (Figs. 16–17). 49 pieces were documented, unfortunately almost all coming from the uppermost Levels 1 and 2. A single piece derived from Level 3 and is clearly of 18<sup>th</sup> Dynasty date (SAVIN 465, a small body-sherd with a geometric pattern). The best preserved rim sherd is SAVIN 42, regrettably coming from Levels 1 and 2 in square 190/2270 (Fig. 16). However, together with e.g. SAVIN 571 (Level 1, square 180/2260, Fig. 17), this bowl attests the New Kingdom tradition of these vessels connected with regeneration at SAVIN.<sup>139</sup> Other pieces (e.g. SAVIN 535, Level 1, square 170/2270) might be already later in date and are possibly connected with Post-New Kingdom activities at the site.

F) Models, games and unidentified pieces: Small tokens or pottery discs of unclear function (16



Fig. 17 Marsh-bowl SAVIN 571, decoration of its interior

pieces)<sup>140</sup> and 12 miniature balls in both fired and unfired clay, possibly to be identified as game stones, fall into this category.<sup>141</sup>

The indications of the most common objects for reconstructing activities at Sai, especially for weaving, fishing and grinding corn, will be discussed below. In conclusion, an interesting aspect seems to be related to the location of Sai in Upper Nubia: this is the scarcity of textual evidence within the categories of small finds. Jar docketers are extremely rare<sup>142</sup> (see below, Fig. 29) as are traces of a sealing practice – no seal impressions were documented so far and only four scarabs represent a small amount of objects which are usually numerous at Egyptian domestic sites during the period.<sup>143</sup> Furthermore,

<sup>138</sup> Such cosmetic items are common burial gifts; see on Sai SAC4 (GRATIEN 1985, pl. IVa) and SAC5 (MINAULT-GOUT 2004; MINAULT-GOUT and THILL 2012). For further kohl-pots in New Kingdom tombs in Nubia see e.g. WILLIAMS 1992, *passim*.

<sup>139</sup> For the domestic context of marsh-bowls cf. GIDDY 1999, 267; STEVENS 2006, 178–180. For Nun-bowls in New Kingdom tombs in Nubia see e.g. WILLIAMS 1992, 131.

<sup>140</sup> Cf. GIDDY 1999, pls. 72–73.

<sup>141</sup> Cf. a large number of model balls from Amarna, of which some are similar to the ones from SAVIN; STEVENS 2006, 112–115.

<sup>142</sup> Cf. also the small amount of only two docketers in the complete set of material from the The Scandinavian Joint Expedition to Sudanese Nubia (both from the cemetery of Fadrus, site 185), see HOLTHOER 1977, 58, 82.

<sup>143</sup> Cf. GIDDY 1999, 54–76, pls. 15–17, 64. Cf. the comparable small number of scarabs (4) found in New Kingdom levels at Askut (SMITH 2003, 113). Smith proposed a direct link between this phenomenon and changing organisational patterns of Egyptian control in contrast to the Middle Kingdom and the Second Intermediate Period. For some scarabs from tomb contexts on Sai, see: pieces of the Second Intermediate Period from cemetery SAC4, GRATIEN 1985, pl. IV; New Kingdom and Napatan pieces from SAC5, THILL 2004.



Fig. 18 *Schaelbecken*/fish dish N/C 944, decoration of its interior

other than at main residential sites in Egypt like Memphis and Amarna, no signs for faience production were found. Moulds for small faience objects, commonly attested at Egyptian sites,<sup>144</sup> are missing in the material culture of SAVIN.<sup>145</sup>

### 3.2 Ceramics

In general, the character of the ceramic material from SAVIN strongly attests to its identification as Egyptian town, finding ready parallels not only in other Egyptian foundations in Lower and Upper Nubia,<sup>146</sup> but also at various sites in Egypt,<sup>147</sup> especially at Elephantine<sup>148</sup>, Abydos<sup>149</sup> and Deir el-Ballas<sup>150</sup>. However, a local component and site-specific features are present on Sai Island.<sup>151</sup>

### *Production techniques and provenience studies*

The majority of the material from SAVIN is wheel-made pottery in Egyptian style, produced in Egyptian Nile clay variants and imported to Upper Nubia.<sup>152</sup> Most of the vessels were either wholly or partially made on a simple wheel. Small open forms are usually thrown on the wheel in one piece, whereas large storage vessels frequently show traces of joints because they were produced in more than one piece.<sup>153</sup> Egyptian handmade pottery is rare and the examples are restricted to bread moulds, bread plates and so called *Schaelbecken* or bread trays (see below, Figs. 18–19). Indigenous Nubian pottery, which appears quite regularly within the material and shows relations to the local Kerma corpus<sup>154</sup>, is handmade as a rule and very often decorated with impressed and/or incised patterns. Nubian pottery comprises mostly cooking ware, but also fine ware (cups, dishes and beakers in Black topped style) and storage vessels. Nubian storage vessels at SAVIN have in general a larger capacity than Egyptian vessels and show often traces of repair (repair holes).<sup>155</sup>

The site-specific fabric corpus of SAVIN finds close parallels in the Egyptian material from the New Kingdom town of Elephantine<sup>156</sup>, but includes also local Upper Nubian fabrics for Egyptian vessels as well as a number of Nubian wares.<sup>157</sup> As it is the case in early New Kingdom levels at Elephantine, Nile silt fabrics form by far the most common group of fabrics.<sup>158</sup> Marl clays are rather rare and mostly restricted to closed vessel types in Marl B and Marl A3;<sup>159</sup> some imported pottery (Canaanite, Levantine and Cypriote) as well as few sherds in Oasis ware are also attested at SAVIN.

Some Nile clay pottery vessels from SAVIN have been modelled on Egyptian types but were

<sup>144</sup> Cf. GIDDY 1999, 243–250, pls. 53–54 with diverse parallels.

<sup>145</sup> Only a single mould, SAVIN 1823, was recorded from level 2 and is of unclear date, most probable Post-Pharaonic.

<sup>146</sup> Cf. HOLTHOER 1977.

<sup>147</sup> Cf. BUDKA 2011a; BUDKA 2011b.

<sup>148</sup> SEILER 1999; BUDKA 2005; BUDKA 2010a.

<sup>149</sup> BUDKA 2006; BUDKA 2010b.

<sup>150</sup> BOURRIAU 1990.

<sup>151</sup> See BUDKA 2011a; BUDKA 2011b; BUDKA Forthc.

<sup>152</sup> For the import of Nile silt vessels cf. ARNOLD 1993, 78, Figs. 90B–C and SMITH 2003, 117.

<sup>153</sup> For a concise summary of shaping techniques see HOLTHOER 1977, 42–43.

<sup>154</sup> See GRATIEN 1986, passim.

<sup>155</sup> Cf. the almost complete vessel N/C 650 with four repairing holes, BUDKA 2011a, 27 (citing parallels from the local Kerma tombs, cf. GRATIEN 1986). In general, in various periods and diverse Nubian cultures, the repairing of pots is very common, see e.g. WILLIAMS 1993, Fig. 4 and passim.

<sup>156</sup> BUDKA 2005, 91–95.

<sup>157</sup> Cf. in detail BUDKA Forthc.

<sup>158</sup> Nile silt fabrics dominate in general pottery corpora from settlements, cf. e.g. for Amarna ROSE 2007, 12–13.

<sup>159</sup> Cf. BUDKA 2005, 91.

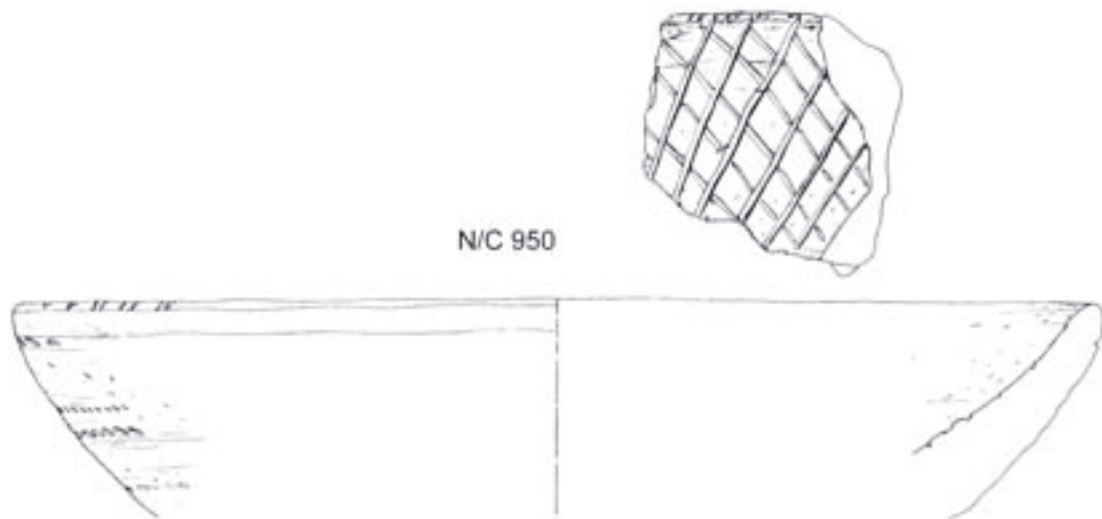


Fig. 19 Reconstruction of *Schaelbecken*/fish dish N/C 950. Scale 1:3

locally produced, sometimes with a “Nubian” influence as far as the surface treatment, production technique or decoration is concerned (e.g. Fig. 20.7). The appearance of such hybrid types – e.g. Egyptian types made of Nubian fabrics, shaped by hand or with a Nubian surface treatment like ripple burnishing<sup>160</sup> and incised decoration<sup>161</sup> – is very significant, but not straightforward in its explanation.<sup>162</sup> It remains to be investigated whether such pots are products of a temporary or local fashion, whether they refer to the cultural identity of their users or whether they are the results of more complicated processes.<sup>163</sup> In addition to related research on material from Lower Nubia<sup>164</sup>, a comparison is also possible with the Late Bronze Age Southern Levant which was partly under direct influence of New Kingdom Egypt. Similarly, as on Sai, both imported Egyptian vessels and local imitations were found at sites like Megiddo and indicate various contacts and ties with Egypt.<sup>165</sup>

Petrographic analysis and provenance studies (by neutron activation analysis) have the potential

to add important information on the exact nature of Nile clay wares and can contribute to their archaeological interpretation. As recently illustrated by a case study for Ancient Nubia, chemical characterization methods may elucidate regional pottery production.<sup>166</sup> Petrographic (MI), mineralogical (X-Ray Diffraction) and chemical (X-Ray Fluorescence) analysis on pelitic and ceramic samples from Sai Island have already provided interesting results for the Prehistory<sup>167</sup>, promising similar insights for future analysis of material from the period of the New Kingdom.

In accordance with the “Egyptological” understanding of “pottery fabric”, as defined in the classification of the Vienna System<sup>168</sup> (“a group designation for all significant physical and chemical properties of the clay and the non-plastic inclusions in a fired ceramic material, as well as all relevant technological features of the finished product”<sup>169</sup>), the production technique will be included in our assessment.<sup>170</sup>

<sup>160</sup> Cf. ARNOLD 1993, 85.

<sup>161</sup> Cf. ARNOLD 1993, 90.

<sup>162</sup> Cf. BUDKA 2011b.

<sup>163</sup> Cf. e.g. MILLER 1985, 204 (and *passim*) for the fact that pottery is “suited to a role of considerable significance in the construction of culture.”

<sup>164</sup> E.g. SMITH 2002; SMITH 2003, 114–127.

<sup>165</sup> MARTIN 2009; MARTIN 2011.

<sup>166</sup> For a first case study see CARRANO et al. 2009. Petrographical analysis is also conducted at Amara-West, personal

communication Marie Millet (Jan. 2012) and MILLET and SPATARO 2012.

<sup>167</sup> MUNTONI et al. 2011.

<sup>168</sup> See NORDSTRÖM and BOURRIAU 1993, 168–186.

<sup>169</sup> NORDSTRÖM and BOURRIAU 1993, 162.

<sup>170</sup> The same approach is followed for the study of material from Amara-West (M. Millet, personal communication and see MILLET and SPATARO 2012. For the general importance of the production techniques for ceramic analysis see MILLER 1985, 34–50.

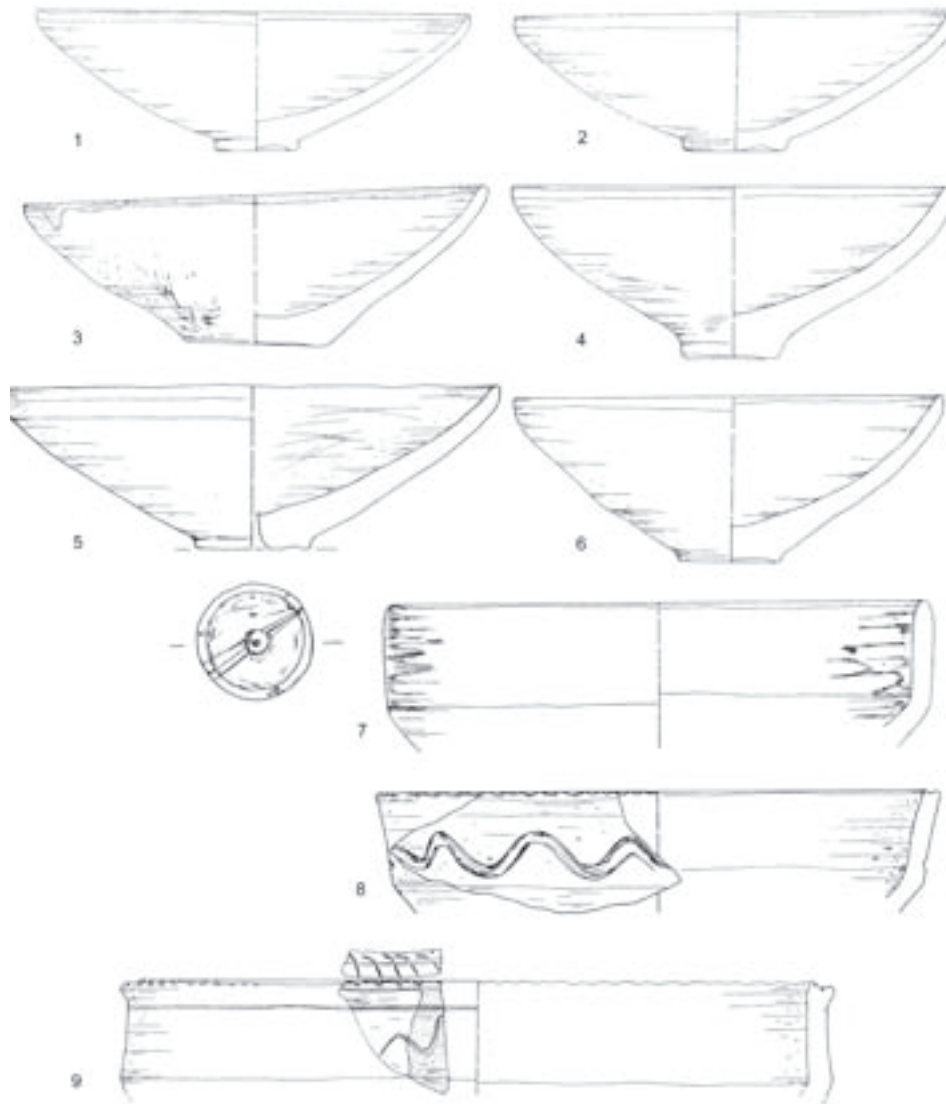


Fig. 20 Simple and carinated dishes from N17. Scale 1:3

### *Study of functional aspects of the ceramic material*

In general, ceramics can be used as indicators for the site-specific preparation, storage and serving of food.<sup>171</sup> Especially in settlement contexts, the functional aspects of ceramics are broad and cover various activities. At SAVIN, a considerable amount of the ceramic material was classified as

functional vessels, comprising typical Egyptian types as bread plates and moulds, spinning bowls, so called *Schaelbecken*/fish dishes<sup>172</sup>, pot stands<sup>173</sup> and cooking pots.<sup>174</sup> It is of great interest that these utilitarian shapes appear both as pieces directly imported from Egypt and as their locally produced variants, thus reflecting obviously specific needs within the microcosm of Sai. The group of the *Schaelbecken* illustrates this very

<sup>171</sup> Cf. WOOLF 1998, 185–193.

<sup>172</sup> This type of vessel is frequently found in Egyptian settlements, already from the 13<sup>th</sup> Dynasty onwards (see BADER 2001, 81–83; ASTON and BADER 2009) until the early New Kingdom (e.g. NORDSTRÖM and BOURRIAU 1993, 182,

Fig. 26); on the possible function of these peculiar objects see SEILER 2005, 120–121.

<sup>173</sup> Cf. the large corpus of similar pot stands at Buhen: EMERY, SMITH and MILLARD, pls. 70–71.

<sup>174</sup> Cf. already BUDKA 2011b.



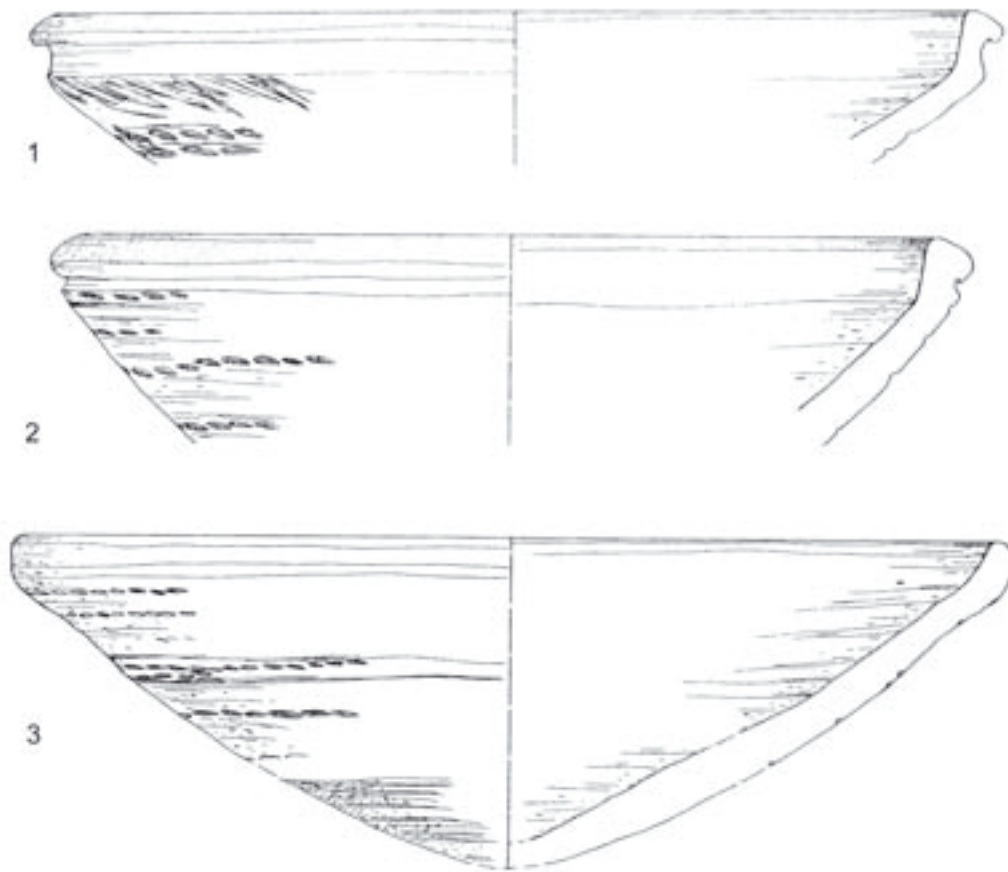


Fig. 21 Carinated bowls and deep plate from N17. Scale 1:3

clearly: These large thick walled trays with an oval-shape and incised geometric pattern on the interior occur both in Egyptian Marl clay (Marl E) and in local Nile clay variants (e.g. N/C 944 and 950, Figs. 18–19) – the shapes and decoration patterns are in both cases the same. Parallels for the Marl clay examples are known from early 18<sup>th</sup> Dynasty contexts in Egypt (e.g. Deir el-Ballas<sup>175</sup>, South Abydos<sup>176</sup> and Elephantine) and also from Lower and Upper Nubia (e.g. Buhen<sup>177</sup> and Sesebi<sup>178</sup>). Within the Egyptian settlement at Elephantine, a number of Nile clay *Schaelbecken* were found in strata of the 18<sup>th</sup> Dynasty.<sup>179</sup>

Various domestic structures, partly with storage facilities, ovens and grinding implements, have been excavated during the five seasons of work by

SIAM (see above, Figs. 4–5, 7).<sup>180</sup> Especially storage pits and silos (Figs. 7 and 10) have yielded large amounts of ceramic material.<sup>181</sup> These material remains from closed contexts give the opportunity to study everyday life of the occupants of Sai at the level of the individual houses and units, with a micro-spatial approach.<sup>182</sup>

#### *Material from silo N17*

In 2012, the material from storage pit N17 in structure N12 (square 190/2260) was analysed as a case study to illustrate the character of pottery from distinct units within SAVIN, aiming at reconstructing possible activities and the usage of the ceramics before their disposal.

<sup>175</sup> BOURRIAU 1990, 21–22.

<sup>176</sup> BUDKA 2006, Fig. 1.1.

<sup>177</sup> EMERY, SMITH and MILLARD 1979, pl. 73.

<sup>178</sup> SPENCE and ROSE et al. 2011, 37.

<sup>179</sup> Unpublished material, courtesy of Julia Budka.

<sup>180</sup> Cf. DOYEN Forthc. a.

<sup>181</sup> For preliminary results, based on the 2011-season, see BUDKA 2011a and b. For material documented from 2008 to 2010 see MIELLÉ 2011–2012.

<sup>182</sup> Cf. TRIGGER 1967, 149; ROSEN 1989, 564.

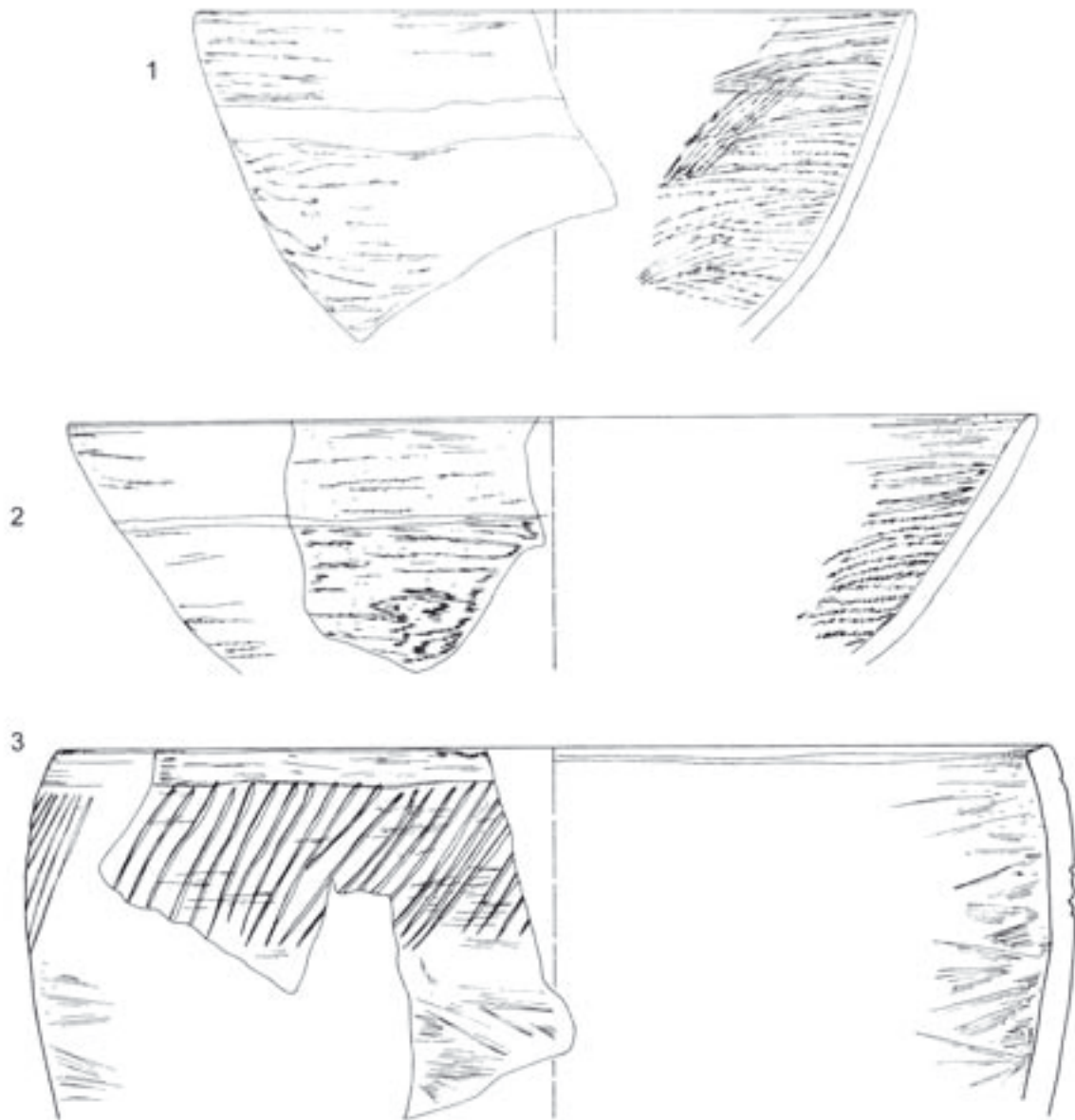


Fig. 22 Selected Nubian wares from N17 (Kerma tradition). Scale 1:2

The circular silo N17, 78cm deep and with a diameter of 110cm, is situated in the front part of structure N12, in a room which might once have been an open courtyard (Fig. 7). The silo, excavated in 2011, belongs to Level 3 of N12 and its ceramic material spans the time from the late Second Intermediate Period/early 18<sup>th</sup> Dynasty<sup>183</sup> until the reign of Thutmose III. The pottery is a typical

household assemblage, but with a large repertoire of forms, and illustrates common types and wares of Level 3 in SAV1N.<sup>184</sup> It supports the assessment that Level 3 can be predominately associated with the later reign of Thutmose III.<sup>185</sup>

In total, 1,049 sherds were studied from N17. From this amount, 222 were diagnostic pieces from the New Kingdom, 740 undiagnostic pieces from

<sup>183</sup> Cf. the similar material from Kom Rabia/Memphis, BOURRIAU 2010, 5 and passim.

<sup>184</sup> The material finds, among others, close parallels at Askut, see SMITH 1995, Figs. 6.4–6.5.

<sup>185</sup> BUDKA 2012, 60, Fig. 7.

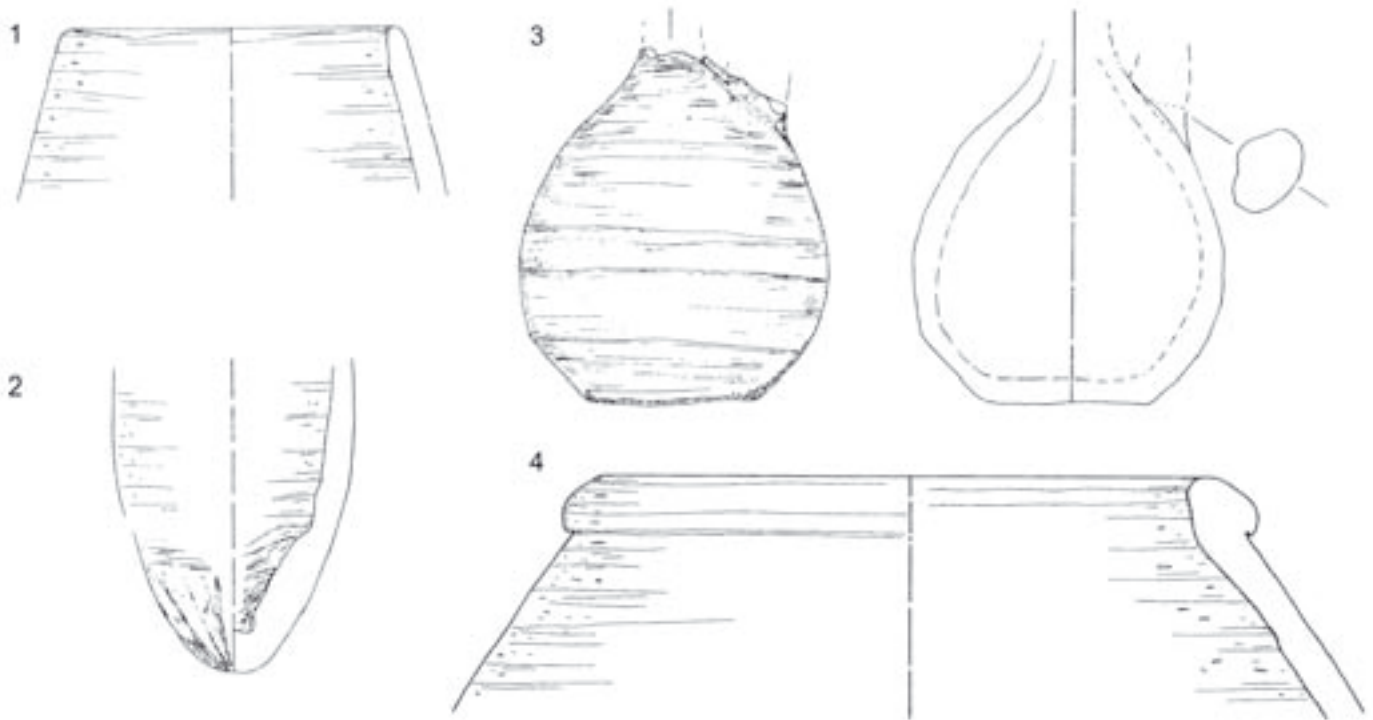


Fig. 23 Various vessels from N17. Scale 1:2

the New Kingdom and 87 fragments of Post-New Kingdom date. Despite this small amount (8 %) of Post-Pharaonic material, the silo seems to be a closed context from Level 3 since no New Kingdom sherds of later periods were found. The appearance of some late Second Intermediate Period and early 18<sup>th</sup> Dynasty material might illustrate a long life span of the respective vessels – a picture that was already observed in square 180/2260.<sup>186</sup> Most of the material from N17, however, can be dated to the era of Thutmose III which makes the corpus significant for the study of material associated with Level 3.

Silo N17 comprised a corpus of vessels with a clear household character. Small and medium-sized dishes with preferably ring bases, various plates, pot stands, storage vessels, cooking pots, beer jars, beakers and bread plates dominate in general the corpus of ceramic types from SAV 1N, and this also holds true for N17 (Figs. 20–25). A lot of open shapes (various dishes and plates as well as deep

bowls, Figs. 20–21), some storage vessels and *zirs* (Fig. 24.5 and Fig. 25), pot stands (Fig. 24.6), beer jars (Figs. 24.1 and 4) and other closed forms were documented as well as a considerable amount of Nubian cooking pots and some Kerma black topped cups (Fig. 22).<sup>187</sup> Figs. 20–25 illustrate the main groups and types which find, again, close parallels at Elephantine (Level “Bauschicht” 10).<sup>188</sup> Interesting is an almost complete dish (N/C 761, Fig. 20.5), which was partly re-cut for a secondary use: its ring based was cut along the edge and a central perforation through the base enabled the fixing of a string to the dish. It was most probably used as a lid/cover which would explain thin scratching marks on the interior.

The Nubian cooking pots from N17 show clear traces of use; their surface is smoked and sooted. A number of these cooking pots feature small and medium sized impressed basketry (cf. Figs. 27.2–3).<sup>189</sup> One large fragment (N/C 849, Fig. 22.3)<sup>190</sup> displays an incised decoration pattern, commonly

<sup>186</sup> BUDKA 2011a.

<sup>187</sup> Besides almost hemispherical cups of Kerma black topped ware also the classical black topped tulip beakers are present in SAV 1N (see also SAC4, GRATIEN 1985, pl. V); these types are well known from other Egyptian sites, cf. e.g. the Nubian types at Buhen, MILLARD 1979, pl. 78

or at Sesebi (SPENCE and ROSE et al. 2011, 37; ROSE 2012, Fig. 3).

<sup>188</sup> Cf. BUDKA 2005.

<sup>189</sup> Very close parallels come from 18<sup>th</sup> Dynasty strata at Sesebi, see SPENCE and ROSE et al. 2011, 37; ROSE 2012, Figs. 4–5.

<sup>190</sup> BUDKA 2012, 60–61.

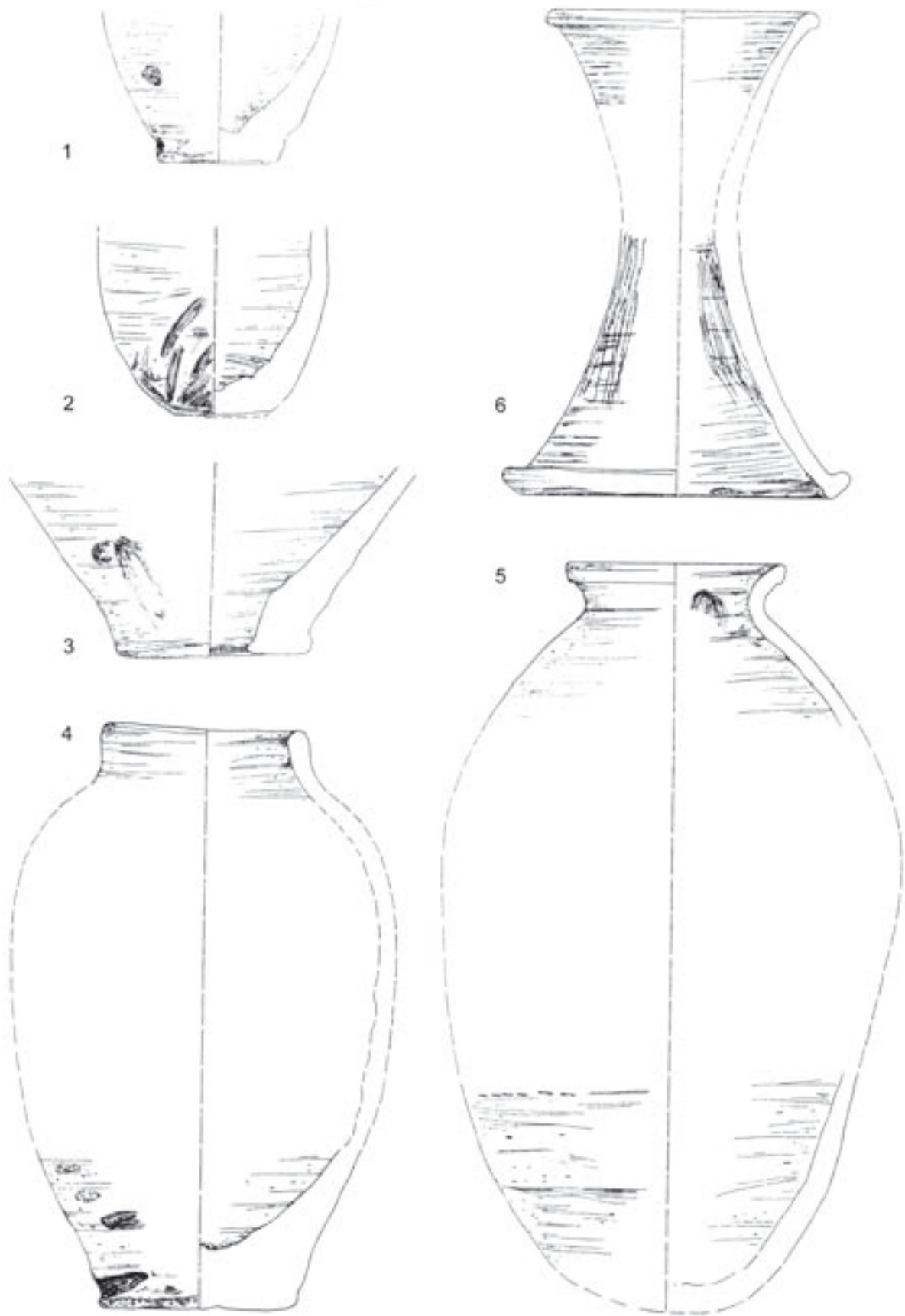


Fig. 24 Beer jars, flower pot, pot stand and jar from N17. Scale 1:3



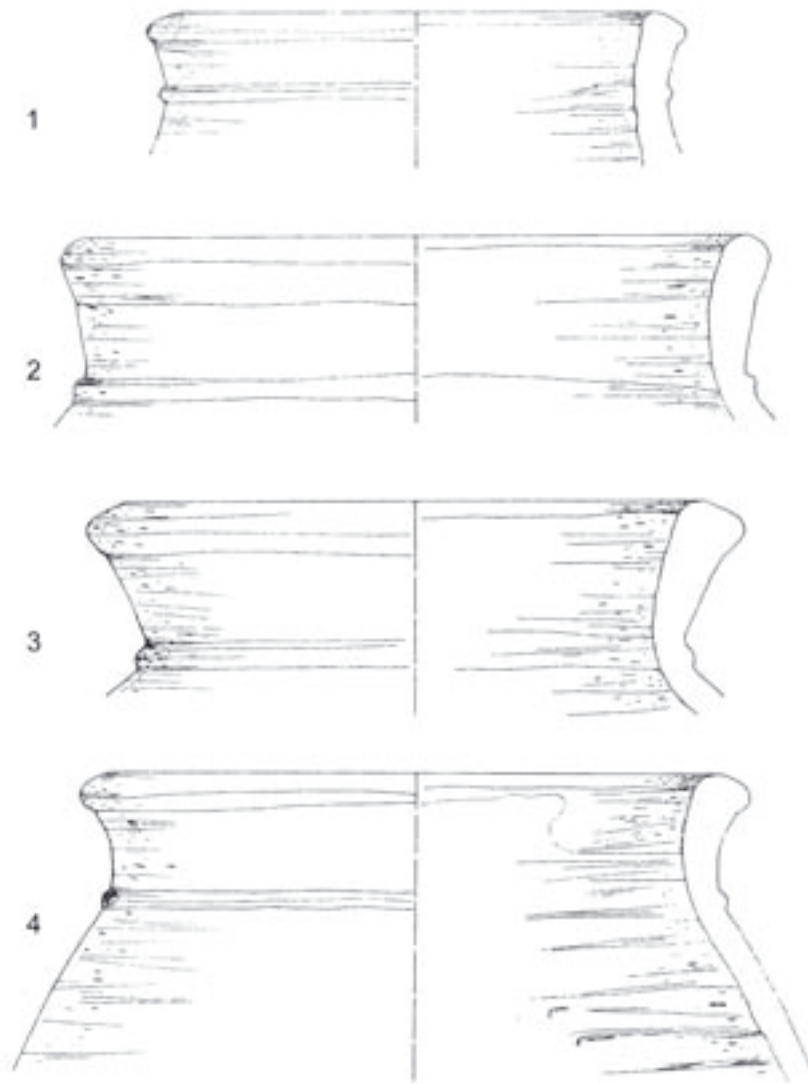


Fig. 25 Variants of *zirs* from N17. Scale 1:3

known at Upper Nubian sites as well as in the early New Kingdom levels at South Abydos and Elephantine.<sup>191</sup>

Especially remarkable among the ceramics from N17 are fragments from three Canaanite amphorae, one amphora fragment in Oasis ware, a small black burnished one-handled jug (Fig. 23.3) and the shoulder and neck part of a Marl B vessel with incised decoration comprising horizontal and wavy

lines.<sup>192</sup> The black burnished jug N/C 763 (Fig. 23.3) belongs probably to the category of Black Lustrous Wheel-made Ware, well attested in the Levante, in Egypt and Nubia.<sup>193</sup> On Sai Island, it is the first time to document this Cypriote Ware,<sup>194</sup> being most common during the reign of Thutmose III.<sup>195</sup> Together with a Mycenaean stirrup jar fragment (N/C 616) documented in 2011<sup>196</sup>, N/C 763 illustrates that Sai was fully integrated in the Egyp-

<sup>191</sup> Cf. BUDKA 2006, 86, Fig. 1.1. The Nubian pottery from Elephantine is currently studied by Dietrich Raue.

<sup>192</sup> Cf. close parallels from the Ahmose complex at South Abydos, BUDKA 2006, 94–95, Fig. 6.2. Very common is this style of decoration already on Marl A3 jars from the Middle Kingdom, see RZEUSKA 2010.

<sup>193</sup> See HOERBURGER 2006; HOERBURGER 2007.

<sup>194</sup> For imports from the cemetery SAC5 see GOUT, in: MINAULT-GOUT and THILL 2012, 369–370. We would like to thank Florence Thill and Anne Gout for sharing this information prior to publication of their study.

<sup>195</sup> Cf. HEIN 2007.

<sup>196</sup> Cf. BUDKA 2011b, 31. A complete stirrup jar was found in tomb 21 in SAC5, see GOUT, in: MINAULT-GOUT and THILL 2012, 369 (inv. 1344).

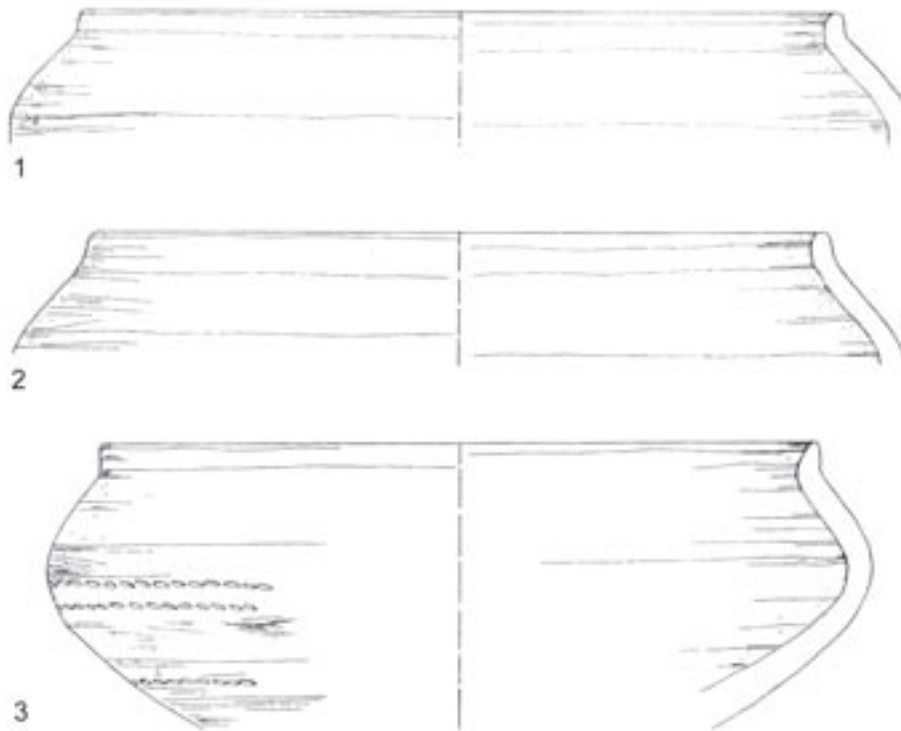


Fig. 26 Egyptian cooking pots of the 18<sup>th</sup> Dynasty from SAVIN. Scale 1:3

tian trade network with the Eastern Mediterranean, at least from Thutmose times onwards.<sup>197</sup> Correspondingly, the variability of the ceramic material and the quantities of decorated wares increased markedly at this time. This might be interpreted as reflecting increasing occupation of the site, as well as the new construction of temples and adjoining structures in Level 3.

#### *Cooking wares & food preparation*

Household activities like food preparation offer much information in respect of life style and therefore the functional wares associated with cooking have to be studied in particular.<sup>198</sup> One of the preliminary results of the analysis of the cooking pots from SAVIN which has to be tested further is the interesting observation that besides typical storage jars, amphorae and decorated closed forms, also common cooking ware were imported from Egypt.

As early as in Level 5, a characteristic Egyptian cooking pot type in a distinctive, sandy Nile clay appears in SAVIN, corresponding exactly to the cooking pot fabric found at Elephantine during the early 18<sup>th</sup> Dynasty (Fig. 26).<sup>199</sup> Besides the Egyptian wheel-made cooking ware, Nubian handmade wares are consistently present in SAVIN, mostly as cooking pots of various sizes with basketry impression and sometimes with incised decoration (Fig. 27, cf. above, N17, Fig. 22.3). Nubian storage vessels are attested too, but in rather small quantities.<sup>200</sup>

Food was obviously prepared in the 18<sup>th</sup> Dynasty town on Sai Island in both Egyptian style vessels and Nubian cooking pots.<sup>201</sup> Especially in Levels 5 and 4, the Egyptian type of cooking pot seems to be more common. Another specific Egyptian device connected with the preparation of food are the so called “fire dogs” (Fig. 28).<sup>202</sup> Although the functional use of these vessels is not precisely

<sup>197</sup> Cf. also the preliminary observations by MIELLÉ 2011. Fragments of Red Lustrous Ware were even found further south, at Sesebi, see SPENCE and ROSE et al. 2011, 37.

<sup>198</sup> E.g. SMITH 2003, 117–124; cf. also WOOLF 1998, 173–181.

<sup>199</sup> BUDKA 2011a, 26; BUDKA 2012, 60.

<sup>200</sup> Cf. the most common type represented by N/C 650, BUDKA 2011a, 27, pl. 5; see also SMITH 2003, 116, Fig. 5.19.

<sup>201</sup> Cf. SMITH 2003, 113–124.

<sup>202</sup> BUDKA 2011b; BUDKA 2012, 60–61, Figs. 9–10.

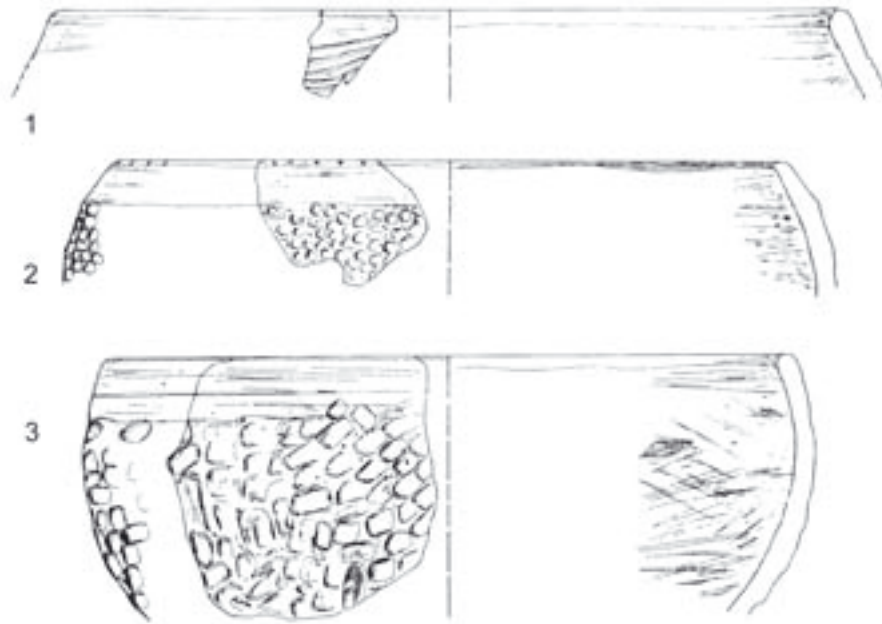


Fig. 27 Nubian cooking pots from SAVIN. Scale 1:3

known<sup>203</sup>, they were connected with processes involving fire and burning, most likely cooking.<sup>204</sup> At SAVIN, usually the “legs” of the vessels are at least partly smoked. “Fire dogs” might therefore indicate that some inhabitants at Sai used a typical Egyptian tradition of food preparation, despite the presence of Nubian cooking pots.<sup>205</sup> Until now, no other site in Upper Nubia has produced early 18<sup>th</sup> Dynasty cooking pots in original Egyptian Nile clay;<sup>206</sup> the large quantity of Egyptian “fire dogs” from SAVIN is also unique.<sup>207</sup> It has to be tested further whether this indicates a distinctive, highly Egyptianized tradition of food preparation during the 18<sup>th</sup> Dynasty on Sai Island or has another reason.<sup>208</sup> Since the production technique of the “fire dogs” from SAVIN differs in some aspects from typical Egyptian examples, e.g. the pieces from Elephantine, a modified use of these devices and/or a multifunctional use seems possible.<sup>209</sup> A



Fig. 28 Example of fire dog from SAVIN (N/C 5)

<sup>203</sup> Cf. GIDDY 1999, 251.

<sup>204</sup> See ASTON 1989. Add here GIDDY 1999, 250–253 (29 “fire-hogs”), pl. 54, nos. 84 and 797.

<sup>205</sup> In the Nubian tradition, there are also cooking pots with triple feet attested; see WENIG 1978, 161, no. 69, Boston MFA S 14-2-1213 from the Kerma Great Deposit K XXXIII A. In view of such cooking devices as indigenous African tradition, a use of Egyptian “fire dogs” for Nubian cooking pots seems rather unlikely.

<sup>206</sup> Note a “fire dog”, similar to the material from SAVIN, from Askut; see SMITH 1995, Fig. 6.4, H.

<sup>207</sup> These issues were discussed at an on-site pottery workshop in January 2012 at Sai. We would like to thank the participants Pamela Rose, Marie Millet, Philippe Ruffieux and Aurélie Masson for sharing information and thoughts.

<sup>208</sup> Cf. e.g. the study by WOOLF 1998 for “Romanization as a change in patterns of consumption” (op. cit., 171).

<sup>209</sup> See BUDKA 2012, 60–61.

large number of “fire dogs” found at Buhen were tentatively associated with copper production processes.<sup>210</sup>

Functional ceramics associated with bread are quite rare at SAVIN. Conical bread moulds, more common for temple and ritual contexts,<sup>211</sup> are almost not present, whereas the amount of flat bread trays is a bit larger, but – e.g. compared to the New Kingdom settlement at Elephantine – still quite small.<sup>212</sup> This seems to contradict the abundant evidence for grinding at SAVIN (see above). All in all, a number of questions related to the food preparation and production remain still open.

#### 4. FIRST STEPS TOWARDS RECONSTRUCTING LIFE ON SAI ISLAND DURING THE NEW KINGDOM

Pottery, small finds, tools and various devices have been briefly presented in relation to their associated finds, architecture and past human actions.<sup>213</sup> Although a more detailed study is planned for the near future, some preliminary remarks on the everyday life of the occupants of Sai are possible.

For the assessment of the domestic architecture within the New Kingdom town of Sai, it has to be stressed that SAVIN yielded small sized buildings, significantly different in character than the ones in the residential quarter of the southern part. A common aspect of these diverse dwellings is, however, that they are of typical Egyptian architecture. The corresponding brick making and buildings at Sai is most likely linked to Egyptian workmen or at least to workmen familiar with Egyptian brick architecture.

At the level of the individual houses and units of SAVIN, several household activities are attested, most prominently grinding processes and other activities connected with food production.<sup>214</sup> Ovens and installations for food storage were found at SAVIN, again of typical Egyptian style with a number of parallels in settlements within Egypt.

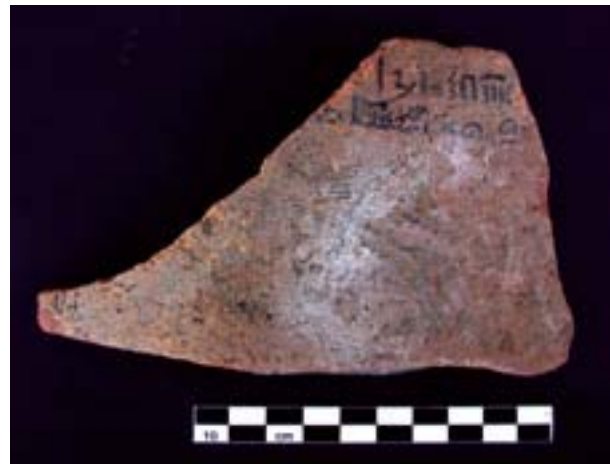


Fig. 29 Shoulder fragment of *zir* with hieratic docket (N/C 740)

The potential of the analysis of the material culture for the question of Nubian vs. Egyptian life style in New Kingdom fortified towns in Upper Nubia like Sai was briefly discussed. Although primarily Egyptian in appearance (as with the architectural remains), some of the finds and of the pottery vessels belong to an indigenous tradition. Especially the ceramics from SAVIN indicate that there was a complex mixture of life styles, resulting in a great variability and also in hybrid forms that have both Egyptian and Nubian features. Products of typical Egyptian life-style were imported to Sai but also produced locally, testifying a local demand (e.g. *Schaelbecken*, spinning bowls and “fire dogs”).

A very intriguing document, contributing to the question of import of Egyptian vessels and goods to Sai Island, is N/C 740. On this body sherd of a large *zir* a hieratic docket is preserved fragmentarily (Fig. 29). Since it is one of the rare written records coming from SAVIN, it is presented here although the reading is still partly uncertain.<sup>215</sup> Deriving from square 190/2260, Level 1, its dating to the 18<sup>th</sup> Dynasty is based on the distinctive ware (chaffy variant of a Nile C2 with a thin white wash) and on the shape of the vessel (Fig. 30).<sup>216</sup> Two lines of a

<sup>210</sup> Cf. MILLARD 1979, 123–126, pls. 43, 103.

<sup>211</sup> Cf. ROSE 2007, HC 2, 288. Note, however, also the scarcity of bread moulds in certain ritual contexts, e.g. at the tomb of Osiris at Abydos, see BUDKA 2010b.

<sup>212</sup> Cf. BUDKA 2005.

<sup>213</sup> Cf. the recent publication of material from Amarna: KEMP and STEVENS 2011.

<sup>214</sup> Cf. DOYEN Forthc. a.

<sup>215</sup> For comments on and help with the docket we would like to thank Stéphanie Facon, Didier Devauchelle, Ghislaine Widmer, Claus Jurman and Hans-Werner Fischer-Elfert.

<sup>216</sup> For an almost complete example of this type of *zir* see BUDKA 2011a, 27, pl. 4 (N/C 642).

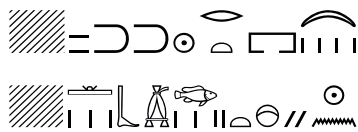




Fig. 30 Reconstruction and facsimile of N/C 740. Scale 1:2

hieratic inscription give a day date and commodities; traces of another docket/line are visible (but not

readable) at the lower left side of the sherd (Figs. 29 and 30).



3bd 4 prt sw 22 ...  
hrw n psd.tjw rm.w (m) db3.w...


4<sup>th</sup> month of the prt-Period, day 22 [...] day of the New moon (?)<sup>217</sup>, fish (as) compensation/payment [...]

Unusual, should our reading be correct, is the second day date in line 2, possibly referring to a lunar date. In any case, the jar obviously once contained a commodity that had to be consumed within a certain time span; otherwise a day date on a storage jar would be redundant.<sup>218</sup> The word “fish” (*rm.w*) seems certain and raises some questions. The import of Egyptian fish to Lower Nubia was briefly discussed for Buhen, where a number of Egyptian jar sealings and dockets were found, recording transfers of goods. Although in one case the reading as “fish” was indicated by the writing, the reading was rejected by context since the author estimated an import of fish as highly unlikely.<sup>219</sup> Here it is noteworthy that recent scientific analyses of cooking pots from Egyptian sites in Nubia have produced interesting results: the fatty acid signatures of Nubian style cooking pots at Askut attest to deer and cattle, whereas only the Egyptian style pots contained residues that can be connected with the

consumption of fish.<sup>220</sup> Therefore the question arises whether N/C 740 might indeed refer to a special delivery of (Egyptian) fish for Egyptians living on Sai who were maybe conservative in their diet. Further open issues of interest are: is this single docket indeed an exception and just an accidental find or could it also be part of the organization system of a sophisticated goods transport from Egypt to Upper Nubia which is almost invisible in the archaeological record?<sup>221</sup>

#### Grinding, fishing and spinning

For some of the common domestic activities, like grinding, fishing and spinning, the tools and installations involved are typical Egyptian. Utilitarian pottery shapes appear both as imported pieces from Egypt and as locally produced variants, thus reflecting obviously specific needs within the microcosm of Sai. Local products replaced original imports from Egypt when they were no longer functional.

<sup>217</sup> The reading of this word is still unclear – an alternative might be .

<sup>218</sup> Cf. SMITH 1976, 182.

<sup>219</sup> See SMITH 1976, 182: “That fish was imported seems dubious in the extreme; I prefer to interpret type 28 as a wine label.”

<sup>220</sup> See SMITH 2003, 119–124, Figs. 5.21–23.

<sup>221</sup> The high correspondence between pottery wares from Elephantine and Sai suggest direct links between the sites, see BUDKA 2011a, 25–26 and above.

Objects like spinning bowls and *Schaelbecken* (Figs. 18–19), foreign to the local Nubian culture, underline the Egyptian character of the community at Sai. Typical Egyptian functional types like spinning bowls (dishes with two handles attached to the interior of the base)<sup>222</sup> were primarily produced on site in local fabrics – attesting both a local pottery manufacture in Egyptian style<sup>223</sup> and textile production.<sup>224</sup> These spinning bowls from SAVIN find close parallels both at Elephantine and Sesebi.<sup>225</sup> Another group of objects possibly linked with spinning at SAVIN are re-cut sherds with a disc-shape and a central perforation (Fig. 15.1). Some of these might have functioned as spindle whorls.<sup>226</sup>

Common activities in settlements like grinding have left a large quantity of stone tools at SAVIN – querns, pounders and hammer stones find comparisons in Egypt, but are also known in the indigenous tradition. The attested quern emplacements at SAVIN are typical Egyptian as is the case for the surrounding architecture (see above, 2.).

As attested at other Egyptian sites in Nubia, fishing played a role in daily life at Sai. A number of net weights attest to local fishing by the occupants; the discussed hieratic docket (Fig. 29) might suggest even the import of fish – or the Egyptian type of administrative registration of products which had to be consumed within a certain time span. What remains to be investigated in the future is a notable difference regarding the net weights from Elephantine. One finds close parallels for SAVIN at Elephantine, but the distribution of the specific types differs. For Level (*Bauschicht*) 10 at Elephantine, which is contemporaneous to Level 4 and partly Level 3 at SAVIN, von Pilgrim observed the following percentages: 75.9 % of the net weights are type C (re-cut sherds) and 24.1 % type A (clay object with perforations).<sup>227</sup> The evidence from SAVIN is almost reversed: 17 weights are of type A (= 85 %) and only three (15 %) of type C. Is this an accidental finding, due to the small number of weights from SAVIN, or does it reflect marked

differences between the fishing equipment in Egypt and Upper Nubia? One might speculate that at Elephantine type C is the cheap and *ad hoc* product for individual needs,<sup>228</sup> whereas at Sai the distribution of net weights was primarily organized at a higher level. Type A might have been imported to Sai from Egypt and fulfilled the local demand for the most part. The need for an *ad hoc* production of type C would have been consequently less common than at Elephantine. Such a “centralized system of food production”<sup>229</sup> as a reflection of the use of net weights of type A was already suggested by Smith for the Middle Kingdom phase at Askut.

In general, food-ways at Sai display an intriguing mixture of Nubian and Egyptian tradition – as mentioned above, imported Egyptian cooking pots were used side by side with Nubian style products. It remains to be tested whether a distinction was made regarding the specific food to be prepared and/or if the choice was dependent on the cooking pot’s user and his/her identity. Another possibility is that local products were simply integrated in the material culture of the Egyptian occupants.

#### *Private religion*

Multi-faceted and variable private religious practices are to be expected in an Egyptian town of the New Kingdom, as was recently demonstrated by Stevens with Amarna as a case study.<sup>230</sup> Especially creative aspects, regeneration and rebirth formed important issues not only in funerary and cultic contexts, but also within settlements and daily life. Several categories of objects from SAVIN fall into this category – e.g. the rudimentary female figurines and other figurines, the faience Nun-bowls (Figs. 16–17) and also specific ceramic vessels like duck bowls<sup>231</sup> and feminoform vessels.<sup>232</sup>

To date, no domestic shrines have been discovered in the New Kingdom town of Sai – parallels from Nubia (e.g. Askut and Mirgissa)<sup>233</sup> and Egypt suggest however, that such installations have been present and are still to be discovered. Pot

<sup>222</sup> See ROSE 2007, 60–61, SD 6, 202–203.

<sup>223</sup> At Amarna, the fabric of some spinning bowls suggests a production at the Workmen’s village, see ROSE 2007, 60.

<sup>224</sup> For the precise possible function of the bowls see KEMP and VOGELSANG-EASTWOOD 2001, 291–306; ROSE 2007, 60.

<sup>225</sup> Personal communication Pamela Rose. See also some spinning bowls in the Egyptian corpus of Buhen, EMERY, SMITH and MILLARD, pl. 68, nos. 143–144 and 148.

<sup>226</sup> Cf. KEMP and VOGELSANG-EASTWOOD 2001, 277, Fig. 8.6.

<sup>227</sup> VON PILGRIM 1996a, 279, Fig. 123.

<sup>228</sup> Cf. already VON PILGRIM 1996a, 275–278.

<sup>229</sup> SMITH 2003, 101.

<sup>230</sup> STEVENS 2006. See also SMITH 2003, 133 for Askut.

<sup>231</sup> N/C 870; for such vessels see STEVENS 2006, 172–173.

<sup>232</sup> Two fragments are known to date: N/C 685 and N/C 621.04; for possible functions of such vessels see SEILER 2006. Cf. also WODZIŃSKA 2010, 59, New Kingdom 2 with references.

<sup>233</sup> See SMITH 2003, 124–133.

stands and footed bowls from SAVIN with a gypsum-coating might be related to such shrines. Parallels for such a surface treatment can be found in temples and tombs in Egypt,<sup>234</sup> and both at Amarna and at Askut similar vessels are attested in the domestic ritual sphere.<sup>235</sup>

In sum, the material remains from SAVIN illustrate that life in an Egyptian town of the New Kingdom in Upper Nubia included a variety of activities besides dwelling and common household tasks like cooking, bread making, fishing and spinning. Artefacts and pottery cover a large spectrum of functions, from personal items, games, cosmetic instruments and tools to storage, food production and consumption, but also references to fertility, regeneration, feasting and religious acts involving white-washed offering vessels are present.

## 5. SUMMARY AND OUTLOOK

The most important result of the 2012 season is the confirmation that the earliest level in SAVIN, Level 5, is already early 18<sup>th</sup> Dynasty in date and does not pre-date the New Kingdom. There is now archaeological proof for the assumption derived from textual sources that the Egyptian town has been a new foundation of the 18<sup>th</sup> Dynasty, although the identity of its founder still remains to be assessed. As another major result of recent fieldwork by the SIAM, the erection of a fortified wall for the town at Sai can be associated with Thutmose III (Level 3). “Thutmose III’s consolidation of the empire in c. 1450 BC”<sup>236</sup> has clearly left marks at Sai – with a sandstone temple, domestic and palatial buildings and an enclosure wall he set up a typical “temple town” according to Kemp.<sup>237</sup> The assumption that Sai was “the first of a new breed of Upper Nubian

fortress-towns”<sup>238</sup> seems, however, rather unlikely in light of the new findings from 2012 – there is no fortified wall attested prior to Thutmose III.

Kush (Upper Nubia) was previously assumed to have been un-Egyptianized in comparison to Wawat (Lower Nubia).<sup>239</sup> The material remains from Sai and their strong Egyptian appearance challenge this picture. The artefacts and ceramics testify to an obvious coexistence between the Egyptians and Nubians from the foundation of the town in the early 18<sup>th</sup> Dynasty throughout the New Kingdom. We expect new insights on the occupants and their cultural identities from the evaluation of the material culture from SAVIN in a broad regional perspective. Other sites in Upper Nubia (especially ones that are currently under excavation like Sesebi and Dokki Gel) as well as Elephantine in proper Egyptian territory offer closely comparable material and these analogies will allow for addressing questions of the social stratification at Sai.

Further work is still necessary before a full assessment of the history and nature of the Pharaonic town on Sai Island can be made. The recent results of the SIAM have demonstrated the need to combine all kinds of evidence for a detailed evaluation of the site – epigraphic, archaeological, architectural and material sources all have to be considered and equally valued. The present state of research enables us to reconstruct already some patterns of the lifestyle and living conditions on this key site of Upper Nubia. The recent archaeological fieldwork at SAVIN can be viewed as an important step forward to a closer understanding of Sai Island and of settlement patterns during the New Kingdom in the region.

<sup>234</sup> See BUDKA 2010b, 46, 62 and Fig. 40.

<sup>235</sup> For Amarna: HULIN 1984; STEVENS 2006, 193–194; for Askut: SMITH 2003, 127, Fig. 5.25.

<sup>236</sup> SMITH 2003, 8–9.

<sup>237</sup> KEMP 1972b, 664.

<sup>238</sup> MORRIS 2005, 81.

<sup>239</sup> See TÖRÖK 2009, 282–283 with references.

SAVIN	Object/label	Material	Findspot	Date	Illustration
2209	rudimentary female figure	clay, low fired	190/2250, lev. 2, south of 47S	18 <sup>th</sup> Dynasty	Fig. 11
588	bovine figure	clay, low fired	180/2260, lev. 1	New Kingdom?	Fig. 12.1
2153	bead, disc	faience	190/2260, lev. 3, west of 52 and east of 33E	18 <sup>th</sup> Dynasty	Fig. 12.2
1439	bead, disc	faience	180/2270, lev. 4, north of 26S and east of 26W	early 18 <sup>th</sup> Dynasty	Fig. 12.3
1903	bead, rounded	faience	190/2260, lev. 3, from the interior of N12	18 <sup>th</sup> Dynasty	Fig. 12.4
2200	bead, disc/convex	faience	190/2260, lev. 3, from the interior of N17	mid 18 <sup>th</sup> Dynasty	Fig. 12.5
2155	bead, irregular barrel	clay, low fired	190/2260, lev. 3, from the interior of N12	18 <sup>th</sup> Dynasty	Fig. 12.6
323	cosmetic dish	granite	180/2270, lev. 2	New Kingdom	Fig. 13.1
761	grinder/pestle	quartzite	180/2260, lev. 3, north of 31N and west of 33W	mid 18 <sup>th</sup> Dynasty	Fig. 13.2
1655	cosmetic dish	sandstone?	200/2260, lev. 2, from the interior of 5W and 5S	New Kingdom	Fig. 14
2175	re-cut sherd (spindle whorl?)	pottery	180/2270, lev. 4, west of 26W	early 18 <sup>th</sup> Dynasty	Fig. 15.1
594	scraper (re-cut sherd)	pottery	180/2260, lev. 2	New Kingdom	Fig. 15.2
2045	weight	clay, low fired	190/2260, lev. 3, from the interior of N12	early-mid 18 <sup>th</sup> Dynasty	Fig. 15.3
388	weight	clay, low fired	190/2270, lev. 2, south of 8N, east of 8W	18 <sup>th</sup> Dynasty?	Fig. 15.4
1173	weight	steatite	190/2260, lev. 1	New Kingdom	Fig. 15.5
695	weight	pottery (re-used)	180/2270, lev. 4	early 18 <sup>th</sup> Dynasty	Fig. 15.6
42	marsh-bowl	faience	190/2270, lev. 1 and 2	18 <sup>th</sup> Dynasty	Fig. 16
571	marsh-bowl	faience	180/2260, lev. 1	18 <sup>th</sup> Dynasty	Fig. 17

Table 2 Details of the illustrated small finds from SAVIN (in order of their appearance)



N/C	Type/label	Ware*	Findspot	Date	Illustration
944	<i>Schaelbecken</i>	C2localUC	190/2250, lev.1, south of 44	18 <sup>th</sup> Dyn.	Fig. 18
950	<i>Schaelbecken</i>	C2localUC	180/2260, lev. 3, north of 33N, south of 30, west of 37	early-mid 18 <sup>th</sup> Dyn.	Fig. 19
921	dish	B2RBall	190/2260, lev. 3, from the interior of N17	early-mid 18 <sup>th</sup> Dyn.	Fig. 20.1
918	dish	B2RWallRBin		mid 18 <sup>th</sup> Dyn.	Fig. 20.2
1021	dish	B2 red rim	200/2260, lev. 2, south of 5S	mid 18 <sup>th</sup> Dyn.	Fig. 20.3
920	dish	B2RWallRBin	190/2260, lev. 3, from the interior of N17	mid 18 <sup>th</sup> Dyn.	Fig. 20.4
761	dish; re-used as lid (see marks on base and interior)	B2RWallRBin		Thutmoside	Fig. 20.5
919	dish	B2RWallRBin			Fig. 20.6
866	carinated dish, hybrid form	B2sandy/localRBall		early-mid 18 <sup>th</sup> Dyn.	Fig. 20.7
1185.6	carinated dish with wavy lines	C2RWall			Fig. 20.8
1185.7	carinated dish with wavy lines	C2RWall + white paint			Fig. 20.9
1185.12	carinated plate/bowl	B2UCRW			Fig. 21.1
1185.11	carinated plate/bowl	UCRW			Fig. 21.2
1184	plate/bowl with string impressions	B2UC		Thutmoside	Fig. 21.3
848.1	Kerma cup	Kerma Black topped, fine		early-mid 18 <sup>th</sup> Dyn. (up to Thut. III)	Fig. 22.1
848.1a	Kerma cup		Fig. 22.2		
849	Nubian cooking pot	NubianC2var incised	Fig. 22.3		
1185.5	drop pot/beaker	B2UC	early-mid 18 <sup>th</sup> Dyn.	Fig. 23.1	
1185.2	drop pot/beaker	B2RW		Fig. 23.2	
763	jug	Black Lustrous WM	up to Thut. III	Fig. 23.3	
1185.8	neckless storage jar	C2chaffyWW	early-mid 18 <sup>th</sup> Dyn.	Fig. 23.4	
1185.4	beer jar	C2UC	mid 18 <sup>th</sup> Dyn.	Fig. 24.1	
1185.3	drop pot/beaker	B2UC	early-mid 18 <sup>th</sup> Dyn.	Fig. 24.2	
1185.1	flower pot	B2UC	Thutmoside	Fig. 24.3	
993	beer jar	D2UC	Thutmoside	Fig. 24.4	
897	jar	B2RW	early-mid 18 <sup>th</sup> Dyn.	Fig. 24.5	
854	tall pot stand	D2RB	Thutmoside	Fig. 24.6	
1181.3	<i>zir</i>	B2UC	early-mid 18 <sup>th</sup> Dyn.	Fig. 25.1	
1181.1	<i>zir</i>	B2WW	190/2260, lev. 3, from the interior of N17	Fig. 25.2	
1181.2	<i>zir</i>	B2UC		Fig. 25.3	
1180	<i>zir</i>	C2WW		Fig. 25.4	
894.2	Egyptian cooking pot, smoked	E2UC	180/2270, lev. 4, west of 41E, north of 41S	early 18 <sup>th</sup> Dyn.	Fig. 26.1
894.3	Egyptian cooking pot, smoked	E2UC		Fig. 26.2	
845	Egyptian cooking pot, smoked	E2UC	180/2260, lev. 3, north of 31N, west of 33W + 30	early-mid 18 <sup>th</sup> Dyn.	Fig. 26.3
1141.2	Nubian cooking pot, incised decoration	Nubian coarse var.	180/2270, lev. 5, south of 18N, west of 18W, north of EW section	SIP-early 18 <sup>th</sup> Dyn.	Fig. 27.1
1141.1	Nubian cooking pot, impressed basketry	Nubian coarse var.		Fig. 27.2	
853.4	Nubian cooking pot, impressed basketry	Nubian coarse var.	190/2260, lev. 3, west of 53, from the interior of N12	mid 18 <sup>th</sup> Dyn.	Fig. 27.3
5	fire dog	C2UC var.	190/2270, lev. 1	18 <sup>th</sup> Dyn.	Fig. 28
740	<i>zir</i> with hieratic docket	C2WW	190/2260, lev. 1	early-mid 18 <sup>th</sup> Dyn.	Fig. 29, Fig. 30

Table 3 Details of the illustrated ceramic vessels from SAV1N (in order of their appearance)

\* The abbreviations of the ware include the label of the site specific fabric (in analogy to the Vienna System, but with local variations) as well as the surface treatment (UC = uncoated; UCRW = uncoated out, red washed in; RW = red washed; RW all RBin = red washed in and out, burnished inside; RB = red burnished out; WW = white wash).

## Bibliography

- ARNOLD, Do.  
1993 *Fascicle 1. Techniques and traditions of manufacture in the pottery of Ancient Egypt, 7–141*, in: Do. ARNOLD and J. BOURRIAU (eds.), *An Introduction to Ancient Egyptian Pottery*, SDAIK 17, Mainz am Rhein 1993.
- ASTON, D. A.  
1989 Ancient Egyptian “Fire Dogs” – A New Interpretation, *MDAIK* 45, 27–32.  
ASTON, D. A. and BADER, B. with a contribution by Karl G. KUNST.  
2009 Fishes, ringstand, nudes and hippos – a preliminary report on the Hyksos palace pit complex L81, *E & L* 19, 19–89.
- AZIM, M.  
1975 Quatre campagnes de fouilles sur la Forteresse de Saï, 1970-1973. 1<sup>ère</sup> Partie: l’installation pharaonique, *CRIPPEL* 3, 91–125.  
AZIM, M. and CARLOTTI, J.-F.  
2011–2012 Le temple A de l’île de Saï et ses abords, *CRIPPEL* 29, 11–65.
- BADER, B.  
2001 *Tell el-Dab’a XIII, Typologie und Chronologie der Mergel C-Ton Keramik des Mittleren Reiches und der Zweiten Zwischenzeit*, UZK 19, Vienna.
- BERG, D. A.  
1987 Early 18<sup>th</sup> Dynasty Expansion into Nubia, *JSSEA* 17, no. 1/2, 1–14.
- BIETAK, M.  
1979 Urban Archaeology and the “Town Problem” in Ancient Egypt, 97–144, in: K. WEEKS (ed.), *Egyptology and the Social Sciences*, Cairo.  
1996 Zum Raumprogramm ägyptischer Wohnhäuser des Mittleren und des Neuen Reiches, 23–43, in: M. BIETAK (ed.) 1996.  
BIETAK, M. (ed.)  
1996 *Haus und Palast im Alten Ägypten. Internationales Symposium 8. bis 11. April 1992 in Kairo*, UZK 14, Vienna.  
BIETAK, M., CZERNY, E. and I. FORSTNER-MÜLLER (eds.)  
2010 *Cities and Urbanism in Ancient Egypt*, UZK 35, Vienna.
- BOMANN, A.  
1995 The excavation of house P46.33, 1–43, in: B. J. KEMP (ed.), *Amarna Reports VI*, EES, London.
- BONNET, C. and VALBELLE, D.  
2010 The Classical Kerma Period and the Beginning of the New Kingdom, 359–365, in: M. MARÉE (ed.), *The Second Intermediate Period (Thirteenth-Seventeenth Dynasties). Current Research, Future Prospects*, OLA 192, Leuven, Paris and Walpole, MA.
- BORCHARDT, L. and RICKE, H.  
1980 *Die Wohnhäuser in Tell el-Amarna*, Ausgrabungen der Deutschen Orient-Gesellschaft, Vol. V, Berlin.
- BOURRIAU, J.  
1990 The Pottery, 15–22 and 54–65 [Figs.], in: P. LACOVARA, *Deir el-Ballas, Preliminary Report on the Deir el-Ballas Expedition, 1980-1986*, ARCE Reports 12, Winona Lake, Indiana.  
2010 *The Survey of Memphis IV. Kom Rabia: The New Kingdom Pottery*, Excavation Memoir 93, London.
- BOYCE, A.  
1995 Report on the 1987 excavations. House P46.33: The finds, 44–136, in: B. J. KEMP (ed.), *Amarna Reports VI*, EES, London.
- BREASTED, J. H.  
1908 Second Preliminary Report of the Egyptian Expedition, *The American Journal of Semitic Languages* 25, 1–110.
- BUDKA, J.  
2005 XII. Zur Keramik des Neuen Reiches – erste Beobachtungen anhand des Materials aus der Oststraße B II, 90–116, in: G. DREYER et al., *Stadt und Tempel von Elephantine*, 31./32. Grabungsbericht, *MDAIK* 61, 13–138.  
2006 The Oriental Institute Ahmose and Tetisheri Project at Abydos 2002-2004: The New Kingdom pottery, *E & L* 16, 83–120.  
2010a The New Kingdom pottery from Elephantine, 350–352, in: D. RAUE et al., *Report on the 37<sup>th</sup> season of excavation and restoration on the island of Elephantine*, *ASAE* 84, 343–362.  
2010b V. Die Keramik des Osiriskults: Erste Beobachtungen zu Formen, Datierung und Funktion, 35–69, in: U. EFFLAND, J. BUDKA and A. EFFLAND, *Studien zum Osiriskult in Umm el-Qaab/Abydos – Ein Vorbericht*, *MDAIK* 66, 19–91.  
2010c Review: *Die Keramik des Grabungsplatzes Q1 – Teil 2; Schaber – Marken – Scherben*. Forschungen in der Ramses-Stadt, Die Grabungen des Pelizaeus-Museums Hildesheim in Qantir – Pi-Ramesse 5, ed. by E. B. Pusch & M. Bietak, Hildesheim 2007, *Orientalische Literaturzeitung* 105/6, 676–685.  
2011a The early New Kingdom at Sai Island: Preliminary results based on the pottery analysis (4<sup>th</sup> Season 2010), *Sudan & Nubia* 15, 23–33.  
2011b Neues zur Siedlung des Neuen Reiches von Sai Island: Splitter einer pharaonischen Lebenswelt im Sudan, *Isched, Journal des AegyptenForum Berlin e.V.* 2/2011, 29–39.  
2012 Neue Arbeiten in der Siedlung des Neuen Reiches auf Sai Island (Nordsudan), *Sokar* 24, 54–63.

- Forthc. The New Kingdom town on Sai Island – establishing the date of its foundation: potential and limits of ceramic studies, *CRIPEL* 30 [2012–2013].
- BUZON, M. R.  
2008 A Bioarchaeological Perspective on Egyptian Colonialism in the New Kingdom, *JEA* 94, 165–182.
- CARRANO, J. et al.  
2009 A Chemical Analysis of Ancient Nubian- and Egyptian-Style Ceramics: Evaluating the Substance of Style, *MDAIK* 64, 35–61.
- DAVIES, W. V.  
2004 Cat. 76, Statue of Amenhotep I, 102–103, in: D. A. WELSBY and J. R. ANDERSON (eds.), *Sudan. Ancient Treasures. An Exhibition of recent discoveries from the Sudan National Museum*, London.
- 2005 Egypt and Nubia. Conflict with the Kingdom of Kush, 49–56, in: C. H. ROEHRIG (ed.), *Hatshepsut: From Queen to Pharaoh*, New York.
- DEVAUCHELLE, D. and DOYEN, F.  
2009 Retour à l'île de Saï (Soudan, 2006-2009), *BSFÉ* 175, 29–49.
- DOYEN, F.  
2009 The New Kingdom Town on Sai Island (Northern Sudan), *Sudan & Nubia* 13, 17–20.
- Forthc. a Sai Island New Kingdom Town (Northern Sudan): 3<sup>rd</sup> and 4<sup>th</sup> Seasons (2009-2010), in: J. ANDERSON and D. WELSBY (eds.), *Proceedings of the 12<sup>th</sup> International Conference for Nubian Studies, British Museum London, 1<sup>st</sup> August – 6<sup>th</sup> August 2010*, OLA, Leuven.
- Forthc. b Du trait élémentaire à la perception vitale: quelques figurines féminines de la ville pharaonique de Saï, *CRIPEL* 30 [2012–2013].
- EDWARDS, D. N.  
2012 The Third-Second Millennia B.C. Kerma and New Kingdom Settlement, 59–87, in: A. OSMAN and D. N. EDWARDS (eds.), *The Archaeology of a Nubian Frontier. Survey on the Nile Third Cataract, Sudan*, Bristol.
- EMERY, W. B., SMITH, H. S. and A. MILLARD  
1979 *The Fortress of Buhen. The archaeological report*, EEF Excavation Memoir 49, London.
- EMERY, W. B. and KIRWAN, L. P.  
1935 *The Excavations and Survey between Wadi es-Sebua and Adindan 1929-1931*, 2 vols., SAE, Mission archéologique de Nubie 1929-1934, Cairo.
- FORSTNER-MÜLLER, I. and MÜLLER, W.  
2011 Ägyptische Archäologie im deutschsprachigen Raum. Tradition, Standard, Status und Ausblick, 205–215, in: A. VERBOVSEK, B. BACKES and C. JONES (eds.), *Methodik und Didaktik in der Ägyptologie. Herausforderungen eines kulturwissenschaftlichen Paradigmenwechsels in den Altertumswissenschaften*, Ägyptologie und Kulturwissenschaft, Munich.
- FROOD, E.  
2010 *Social structure and daily life: pharaonic*, 469–490, in: A. B. LLOYD (ed.), *A companion to ancient Egypt* 1, Chichester/Malden, MA.
- FUCHS, D.  
2009 *Ägyptische Residenzen und Tempel – Eine Modellstudie*, Mphil thesis, University of Vienna.
- GABOLDE, L.  
2011–2012 Réexamen des jalons de la présence de la XVIII<sup>e</sup> dynastie naissante à Saï, *CRIPEL* 29, 115–137.
- GEUS, F.  
2004 *Saï*, 114–116, in: D. A. WELSBY and J. R. ANDERSON (eds.), *Sudan. Ancient Treasures. An Exhibition of recent discoveries from the Sudan National Museum*, London.
- GIDDY, L.  
1999 *The Survey of Memphis II. Kom Rabi'a: the New Kingdom and Post-New Kingdom Objects*, EES Excavation Memoir 64, London.
- GRAMSCH, A.  
2009 Die Gleichzeitigkeit des Ungleichzeitigen: Überlegungen zum Kulturwandel, 9–25, in: A. ZEEB-LANZ (ed.), *Krisen – Kulturwandel – Kontinuitäten. Zum Ende der Bandkeramik in Mitteleuropa. Beiträge der internationalen Tagung in Herxheim bei Landau (Pfalz) vom 14.–17. 06. 2007*, Internationale Archäologie. Arbeitsgemeinschaft, Symposium, Tagung, Kongress 10, Rahden/Westf.
- GRATIEN, B.  
1985 La nécropole SAC 4 de l'île de Saï: l'occupation Kerma, 93–105, in: F. GEUS and F. THILL (eds.), *Mélanges offerts à Jean Vercoutter*, Paris.
- 1986 *Saï I. La nécropole Kerma*, Paris.
- 2002 La fin du royaume de Kerma – la situation dans l'arrière-pays, 219–230, in: *Tides of the desert – Gezeiten der Wüste. Contributions to the archaeology and environmental history of Africa in honour of Rudolf Kuper*, Africa praehistorica 14, Cologne.
- GRAVES, C.  
2011 *Egyptian imperialism in Nubia c. 2009 – 1191 BC*, MPhil thesis, University of Birmingham [<http://etheses.bham.ac.uk/1389/>].
- HEIN, I.  
2007 The Significance of the Lustrous Ware Finds from 'Ezbet Helmi/Tell el-Dab'a (Egypt), 79–106, in: I. HEIN (ed.), *The Lustrous Wares of Late Bronze Age Cyprus and the Eastern Mediterranean, Papers of a Conference, Vienna 5<sup>th</sup>-6<sup>th</sup> of November 2004*, CCEM 13, Vienna.
- HESSE, A.  
1981 L'enclos SAV2 de l'île de Saï (Soudan), *CRIPEL* 6, 7–67.

- HOERBURGER, J.  
 2006 *Black Lustrous Wheel-made Ware in Ägypten*, MPhil thesis, University of Vienna.  
 2007 Black Lustrous Wheel-Made Ware in Egypt: The Distribution of a Cypriot Import, 107–113, in: I. HEIN (ed.), *The Lustrous Wares of Late Bronze Age Cyprus and the Eastern Mediterranean, Papers of a Conference, Vienna 5<sup>th</sup>-6<sup>th</sup> of November 2004*, CCEM 13, Vienna.
- HOLTHOER, R.  
 1977 *New Kingdom Pharaonic Sites. The Pottery*, SJE Vol. 5:1, Lund.
- HULIN, L. C.  
 1984 Pottery Cult Vessels from the Workmens' Village, 165–177, in: B. J. KEMP (ed.), *Amarna Reports I*, EES, London.
- JEFFREYS, D.  
 2006 *Survey of Memphis V. Kom Rabia: the New Kingdom Settlement (Levels II-V)*, EES Excavation Memoir 79, London.
- JONES, S.  
 1997 *The Archaeology of Ethnicity, Constructing identities in the past and present*, London & New York.
- KEMP, B. J.  
 1972a Fortified towns in Nubia, 651–656, in: P. J. UCKO, R. TRINGHAM and G. W. DIMBLEDY (eds.), *Man, Settlement and Urbanism*, London.  
 1972b Temple and town in ancient Egypt, 657–680, in: P. J. UCKO, R. TRINGHAM and G. W. DIMBLEDY (eds.), *Man, Settlement and Urbanism*, London.  
 2000 Soil (including mud-brick architecture), 78–103, in: P. T. NICHOLSON and I. SHAW (eds.), *Ancient Egyptian Materials and Technology*, Cambridge.
- KEMP, B. J. and STEVENS, A.  
 2010 *Busy Lives at Amarna: Excavations in the Main City (Grid 12 and the House of Ranefer, N49.18)*, Vol. I: *The Excavations, Architecture and Environmental Remains*, EES Excavation Memoir 90, London.  
 2011 *Busy Lives at Amarna: Excavations in the Main City (Grid 12 and the House of Ranefer, N49.18)*, Vol. II: *The Objects*, EES Excavation Memoir 91, London.
- KEMP, B. J. and VOGELSANG-EASTWOOD, G.  
 2001 *The Ancient Textile Industry at Amarna*, EES Excavation Memoir 68, London.
- KOLTSIDA, A.  
 2007 *Social Aspects of Ancient Egyptian Domestic Architecture*, BAR International Series 1608, Oxford.
- KOPP, P.  
 2005a XI. Zu den Kleinfunden: Weibliche Figurinen, 82–90, in: G. DREYER et al., *Stadt und Tempel von Elephantine*, 31./32. Grabungsbericht, *MDAIK* 61, 13–138.  
 2005b VI. Small finds from the settlement of the 3<sup>rd</sup> and 2<sup>nd</sup> millenium BC, 17, in: D. RAUE et al., *Report on the 34<sup>th</sup> Season of Excavation and Restoration on the Island of Elephantine* [[http://www.dainst.org/sites/default/files/medien/en/daik\\_ele34\\_rep\\_en.pdf?ft=all](http://www.dainst.org/sites/default/files/medien/en/daik_ele34_rep_en.pdf?ft=all)]
- MARTIN, M. A. S.  
 2009 Egyptian-type Eighteenth Dynasty Pots at Megiddo, *E & L* 19, 211–218.  
 2011 *Egyptian-type Pottery in the Late Bronze Age Southern Levant*, CCEM 29, Vienna.
- MESKELL, L.  
 1999 *Archaeologies of Social Life. Age, Sex, Class et cetera in Ancient Egypt*, Oxford.  
 2001 Archaeologies of Identity, 187–213, in: I. HODDER (ed.), *Archaeological Theory Today*, Cambridge.
- MIELLÉ, L.  
 2011–2012 La céramique pharaonique de la ville fortifiée (SAV1 N) de l'île de Saï, *CRIPPEL* 29, 173–187.
- MILLARD, A.  
 1979 Part III. The Finds, 109–188, in: W. B. EMERY, H. S. SMITH and A. MILLARD 1979.
- MILLET, M. and SPATARO, M.  
 2012 Pottery forms, macro-fabrics and petro-fabrics: correlating evidence from Amara West [Poster], in: *Book of Abstracts, Vienna II: Ancient Egyptian Ceramics in the 21st Century*, 14<sup>th</sup>-19<sup>th</sup> May 2012, Vienna [forthcoming as OLA].
- MILLER, D.  
 1985 *Artefacts as categories. A study of ceramic variability in Central India*, New Studies in Archaeology, Cambridge et al.
- MINAULT-GOUT, A.  
 2004 Cat. 97: Small cup and kohl pots, 120–121, in: D. A. WELSBY and J. R. ANDERSON (eds.), *Sudan. Ancient Treasures. An Exhibition of recent discoveries from the Sudan National Museum*, London.  
 2007 Les installations du début du Nouvel Empire à Saï: un état de la question, in: B. GRATIEN (ed.), *Mélanges offerts à Francis Geus*, *CRIPPEL* 26 [2006-2007], 275–293.
- MINAULT-GOUT, A. and THILL, F.  
 2012 *Saï II. Le cimetière des tombes hypogées du Nouvel Empire (SAC5)*, *FIFA0* 69, Cairo.
- MORRIS, E. F.  
 2005 *The architecture of imperialism. Military bases and the evolution of foreign policy in Egypt's New Kingdom*, *PdÄ* 22, Leiden and Boston.
- MUNTONI, I. M. and D'ERCOLE, G. & G. ERAMO  
 2011 Ceramic production at Sai Island (Sudan): raw materials variability and technological choices, 27, in: I. HEIN et al. (eds.), *EMAC 2011. 11<sup>th</sup> European Meeting on Ancient Ceramics. Vienna, Austria, Sept. 29<sup>th</sup>-Oct. 1<sup>st</sup> 2011*



- at the Natural History Museum, Vienna. Conference Program and Abstracts, Vienna.
- NORDSTRÖM, H.-Å. and BOURRIAU, J.  
1993 Fascicle 2. Ceramic technology: clays and fabrics, 143–190, in: Do. ARNOLD and J. BOURRIAU (eds.), *An Introduction to Ancient Egyptian Pottery*, SDAIK 17, Mainz am Rhein 1993
- PILGRIM, C. VON  
1996a *Elephantine XVIII. Untersuchungen in der Stadt des Mittleren Reiches und des Zweiten Zwischenzeit*, AV 91, Mainz am Rhein.  
1996b Elephantine im Mittleren Reich: Bemerkungen zur Wohnarchitektur in einer „gewachsenen“ Stadt, 253–264, in: M. BIETAK (ed.) 1996.
- PRELL, S.  
2011 *Einblicke in die Werkstätten der Residenz. Die Stein- und Metallwerkzeuge des Grabungsplatzes Q1*, Forschungen in der Ramses-Stadt, Die Grabungen des Pelizaeus-Museums Hildesheim in Qantir – Pi-Ramesse 8, Hildesheim.
- RAEDLER, C.  
2007 Keramikscherben aus den Werkstätten der Ramses-Stadt, 1–266, in: E. B. PUSCH (ed.), *Die Keramik des Grabungsplatzes Q I – Teil 2. Schaber – Marken – Scherben*, Forschungen in der Ramses-Stadt, Die Grabungen des Pelizaeus-Museums Hildesheim in Qantir – Pi-Ramesse 5, Hildesheim.
- ROSE, P. J.  
2007 *The Eighteenth Dynasty Pottery Corpus from Amarna*, EES Excavation Memoir 83, London.  
2012 Early 18<sup>th</sup> Dynasty Nubian Pottery from the Site of Sesebi, Sudan, 13–29, in: I. FORSTNER-MÜLLER/P. ROSE (eds.), *Nubian Pottery from Egyptian Cultural Contexts of the Middle and Early New Kingdom. Proceedings of a Workshop held at the Austrian Archaeological Institute at Cairo, 1–12 December 2010*, Ergänzungshefte zu den Jahreshften des Österreichischen Archäologischen Institutes 13, Vienna.
- ROSEN, A. M.  
1989 Ancient Towns and City States: A View from the Microscope, *American Antiquity* 54/3, 564–578.
- RUFFIEUX, P.  
2011 The pottery of Dukki Gel, *Kerma 2010–2011, Université de Neuchâtel, Documents de la mission archéologique suisse au Soudan* 3/2011, 33–37.
- RZEUSKA, T.  
2010 Zigzag, triangle and fish fin. On the relations of Egypt and C-Group during the Middle Kingdom, 397–420, in: W. GODLEWSKI and A. ŁAJTAR (eds.), *Between the Cataracts. Proceedings of the 11<sup>th</sup> International Conference of Nubian Studies, Warsaw University, 27 August – 2 September 2006, Part Two: Session Papers*, PAM Supplement Series 2.2/2, Warsaw.
- EL-SAIDI, I. M.  
1987 *Work inside the Walled Village (1): south-west corner*, 1–16, in: B. J. KEMP (ed.), *Amarna Reports IV*, EES, London.
- EL-SAIDI, I. M. and CORNWELL, A.  
1986 *Work inside the Walled Village*, 1–33, in: B. J. KEMP (ed.), *Amarna Reports III*, EES, London.
- SEILER, A.  
1999 Zur Formentwicklung der Keramik der Zweiten Zwischenzeit und der frühen 18. Dynastie, 204–224, in: W. KAISER et al., *Stadt und Tempel von Elephantine*, 25./26./27. Grabungsbericht, *MDAIK* 55, 63–236.  
2005 *Tradition & Wandel. Die Keramik als Spiegel der Kulturentwicklung in der Zweiten Zwischenzeit*, SDAIK 32, Mainz am Rhein.  
2006 „Erhebe dich, Vater! ..., deine Milch dir, die in den Brüsten deiner Mutter Isis ist.“ Zu Form und Funktion einer Gruppe anthropomorpher Gefäße aus der Nekropole in Dra’ Abu el-Naga/Theben, 317–327, in: E. CZERNY et al. (eds.), *Timelines. Studies in honour of Manfred Bietak*, OLA 149.1, Leuven.
- SMITH, H. S.  
1976 *The Fortress of Buhen: The Inscriptions*, EES Excavation Memoir 48, London.
- SMITH, S. T.  
1995 *Askut in Nubia. The economics and ideology of Egyptian imperialism in the second millennium B.C.*, Studies in Egyptology, London and New York.  
2002 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.  
2003 *Wretched Kush. Ethnic identities and boundaries in Egypt’s Nubian Empire*, London and New York.
- SPALINGER, A. J.  
2006 Covetous Eyes South: The Background to Egypt’s Domination over Nubia by the Reign of Thutmose III, 344–369, in: E. H. CLINE and D. O’CONNOR (eds.), *Thutmose III: A new biography*, Ann Arbor.
- SPENCE, K.  
2010 Settlement Structure and Social Interaction at El-Amarna, 289–298, in: M. BIETAK, E. CZERNY & I. FORSTNER-MÜLLER (eds.) 2010.  
SPENCE, K. and ROSE, P. J. et al.  
2009 Fieldwork at Sesebi, 2009, *Sudan & Nubia* 13, 38–46.  
2011 Sesebi 2011, *Sudan & Nubia* 15, 34–38.
- SPENCER, N.  
2009 Cemeteries and late Ramesside suburb at Amara West, *Sudan & Nubia* 13, 47–61.

- 2010 Nubian architecture in an Egyptian town?, *Sudan & Nubia* 14, 15–24.
- STEINER, H.
- 2008 *Ägyptische Festungen und Stadtgründungen in Nubien von der Prädynastischen Zeit bis zum Ende des Neuen Reiches (Wissenschaftsgeschichtlicher Abriß sämtlicher Darstellungen in der ägyptologischen Literatur)*, Mphil thesis, University of Vienna.
- STEVENS, A.
- 2006 *Private Religion at Amarna*, BAR International Series 1587, Oxford.
- THILL, F.
- 1997 Les premiers dépôts de fondation de Saï, *CRIPEL* 17/2, 105–117.
- 2004 Cat. 91-94: Scarabs, 118–119, in: D. A. WELSBY and J. R. ANDERSON (eds.), *Sudan. Ancient Treasures. An Exhibition of recent discoveries from the Sudan National Museum*, London.
- TILLMANN, A.
- 2007 *Neolithikum in der späten Bronzezeit. Steingeräte des 2. Jahrtausend aus Auaris-Piramesse*, Forschungen in der Ramses-Stadt, Die Grabungen des Pelizaeus-Museums Hildesheim in Qantir – Pi-Ramesse 4, Hildesheim.
- TÖRÖK, L.
- 2009 *Between Two Worlds: The Frontier Region between Ancient Nubia and Egypt 3700 BC - 500 AD*, PdÄ 29, Leiden.
- TRIGGER, B. G.
- 1967 Settlement Archaeology – its Goals and Promise, *American Antiquity* 32/2, 149–160.
- VALBELLE, D.
- 2004 Egyptians on the Middle Nile, 92–99, in: D. A. WELSBY and J. R. ANDERSON (eds.), *Sudan. Ancient Treasures. An Exhibition of recent discoveries from the Sudan National Museum*, London.
- VERCOUTTER, J.
- 1956 New Egyptian Texts from the Sudan, *Kush* IV, 66–82.
- 1958 Excavations at Sai 1955-7, *Kush* VI, 144–169.
- 1973 La XVIII<sup>e</sup> dynastie à Saï et en Haute-Nubie, *CRIPEL* 1, 7–38.
- 1986 Préface: l'archéologie de l'île de Saï, 7–17, in: B. GRATIEN 1986.
- VOGEL, C.
- 2004 *Ägyptische Festungen und Garnisonen bis zum Ende des Mittleren Reiches*, HÄB 46, Hildesheim.
- WENIG, S.
- 1978 *Africa in Antiquity II. The Arts of Ancient Nubia and Sudan. The Catalogue*, The Brooklyn Museum, New York.
- WILLIAMS, B.
- 1992 *New Kingdom Remains from Cemeteries R, V, S and W at Qustul and Cemetery K at Adindan*, OINE VI, Chicago.
- 1993 *Excavations at Serra East. A-Group, C-Group, Pan Grave, New Kingsom, and X-Group Remains from Cemeteries A-G and Rock Shelters*, OINE X, Chicago.
- WODZIŃSKA, A.
- 2010 *A Manual of Egyptian Pottery, Vol. 3: Second Intermediate Period – Late Period*, AERA Field Manual Series 1, Boston.
- WOOLF, G.
- 1998 *Becoming Roman: the origins of provincial civilization in Gaul*, Cambridge (paperback edition 2000).