

I. INTRODUCTION

by Julia Budka

1 THE NEW KINGDOM TOWN OF SAI ISLAND

Located just south of the natural barrier at the Second Cataract represented by the Batn el-Haggar, the large island of Sai in Northern Sudan (Pl. 1) has been continuously settled from Prehistory to modern times. Nubian cultures of different periods as well as Egyptians of the New Kingdom have left evidence on the island.⁴ As the northern stronghold of the Kerma kingdom, Sai played an important role in the so-called “re-conquest of Nubia” during the early New Kingdom.⁵ The common view is that Sai was founded by Ahmose Nebpehtyra⁶ as a “bridge-head”⁷ towards the south and for the Egyptian campaigns against Kerma. Prior to the work of the French Mission from 2008–2012 this theory rested on epigraphical rather than on firm archaeological evidence.⁸

The fortified Pharaonic town was built on the eastern bank of the large island of Sai in the New Kingdom (Fig. 1, Pl. 2). The town has the shape of a fortified settlement with an orthogonal layout, measuring 238m north–south and 118m east–west, with a total of 27,600m (2.76 ha).⁹ In the southern part of the town (SAV1) different quarters were identified in the course of fieldwork by Michel Azim:¹⁰ a palatial or residential quarter (sector SAF2) with a surface area of 2,020m;¹¹ 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 from an earlier phase.¹² These quarters reflect the orthogo-

nal planning of the town being organised along the 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.¹³ Barry Kemp has stressed the importance of the religious buildings for these Pharaonic foundations in Nubia,¹⁴ introducing the label “temple town” for this specific urban layout.¹⁵ As a common feature domestic space is quite limited, but much room is occupied by storage facilities and magazines.¹⁶

2 EXCAVATIONS IN SECTOR SAV1 NORTH

From 2008–2012, fieldwork was conducted by the Sai Island Archaeological Mission (SIAM) of Lille 3 at a site named SAV1 North, along the northern enclosure wall, unearthing remains dating back to the early 18th Dynasty (see IIIH).¹⁷ Nine 10m squares were excavated in SAV1 North (Fig. 3, Pl. 3). Sections of Enclosure Wall N4 as well as several mud brick structures of Egyptian type were exposed and documented. Preliminary reports on these buildings have already been published;¹⁸ the structures of Level 3 are described here in Chapter II.

At SAV1 North, a very complex stratigraphy was encountered. Its analysis is here restricted to a certain degree because excavations were not systematically conducted down to the natural ground or earliest remains in all areas. They were partly left unfinished (see IIE.1) and all assessments of the evolution of the site are therefore limited to preliminary calculations. As nicely illustrated by a Digital

⁴ See the summaries by VERCOUTTER 1986; GEUS 2004 and YELLIN 2012.

⁵ Cf. BUDKA 2015b, 40–41 with further references.

⁶ Hereafter labelled as Ahmose II, taking into account the recent finds from Karnak; see BISTON-MOULIN 2012, esp. 66.

⁷ DAVIES 2005, 51.

⁸ Cf. DOYEN 2009a; BUDKA 2011a; GABOLDE 2011–2012.

⁹ This size is the result of recent fieldwork by AcrossBorders in 2016; for a different/larger size according to the French mission see BUDKA and DOYEN 2013, 171 with note 46; for a first modification see BUDKA 2015b, 41. For the latest description of the town in general: ADENSTEDT 2016.

¹⁰ AZIM 1975.

¹¹ See ADENSTEDT 2016, 66, fig. 19.

¹² AZIM 1975, 98, pl. 4; DOYEN 2009a, colour pl. 9. See most recently: ADENSTEDT 2016 with a detailed re-assessment of AZIM’s work and a 3D reconstruction.

¹³ KEMP 1972a, 651–653. Cf. also DOYEN 2009a; FUCHS 2009, 72–79; STEINER 2008, 151; GRAVES 2011, 55 & 61–63.

¹⁴ KEMP 1972a; KEMP 1972b, 666–667.

¹⁵ KEMP 1972b, 664. See also GRAVES 2011, 63; BUDKA 2015b, 41.

¹⁶ Cf. ADENSTEDT 2016, 54, fig. 16 and *passim*.

¹⁷ DOYEN 2009a, 17–20; DOYEN 2014, 367–375; BUDKA and DOYEN 2013, 168–171.

¹⁸ DEVAUCHELLE and DOYEN 2009; DOYEN 2009a; BUDKA and DOYEN 2013; DOYEN 2014.



Fig. 1 Map of the New Kingdom town of Sai, including field work results up to 2016 (©AcrossBorders, Ingrid Adenstedt)

Surface Model of SAV1 North with topographical features and heights (Pl. 4), the site differs in levels; Post-Pharaonic structures presumably superimposing earlier remains are not always the highest features, but appear partly also in great depths, below the levels of Pharaonic features, when deep pits were cut into existing structures.

The earliest strata at SAV1 North (Levels 5 and 4, see I.3.2), which would be essential for identifying the founder of the town, are only scarce architectural remains and some occupational deposits. The initial sequence of Egyptian occupation on Sai is therefore hard to reconstruct in this area and mostly relies on the ceramic evidence.¹⁹ However, the results from SAV1 North clearly mirror the outcome of Azim's work in the southern sector and attest that the Pharaonic settlement was built in stages. Substantial remains in Level 3 represent the major building phase at the site when the bastioned enclosure wall was built thanks to the ceramic data this level can be dated as mid-18th Dynasty, to the reign of Thutmose III and later.²⁰

Beside the crucial question of the founder of the Egyptian town on Sai, of much importance is the significance of sector SAV1 North for reconstructing the general layout of the town. The ERC project AcrossBorders has conducted excavation within the town since 2013, aiming to achieve a more complete understanding of the layout of the 18th Dynasty occupation at Sai.²¹ In line with this, the present volume intends to contextualise SAV1 North, highlighting its meaning for reconstructing life in New Kingdom Sai.

3 THE ARCHAEOLOGICAL LEVELS OF SAV1 NORTH

3.1 General remarks and formation processes

Like the island of Sai as a whole, the Pharaonic town is also a multi-period archaeological site. As is well known from the southern part of the town, located partly below the Ottoman fortress, the 18th Dynasty town site of Sai experienced an intense use

in Post-Pharaonic eras, with six levels of occupation recorded by Azim. These levels were only roughly dated and assigned to the Pharaonic, Meroitic and Post-Meroitic periods, as well as two Medieval phases and finally the Islamic era (Ottoman fortress).²² Similar phases of use were observed in sector SAV1 North, where New Kingdom mud brick structures have partly survived, but the archaeological deposits within the structures are mostly formations of later phases of use, destruction and abandonment. The re-use and function as later middens explain why 18th Dynasty pottery dominates the ceramics of the site, even in the upper and mixed layers.

In general, both cultural and natural formation processes affected the archaeology of SAV1 North.²³ Whereas the natural ones are comparable to other mud brick sites in arid climate,²⁴ cultural formation processes require a site-specific approach and may differ considerably throughout SAV1 North and from square to square. In some squares of SAV1 North, pits and disturbances cut through until the natural ground (Pl. 4). Large holes filled with mostly Christian pottery were cut into Enclosure Wall N4 (see Fig. 3).²⁵ That the Sai fortification suffered from several destructions as well as restoration phases was already observed by Azim.²⁶ This was not only confirmed by work at SAV1 North, but also at the new sector SAV1 West.²⁷ From SAV1 West, clear evidence shows that the Pharaonic town wall was partly used as basis for the construction of shelters and other short-lived structures, including stables for animals. The same seems to be true for SAV1 North and probably explains the presence of organic-rich fill deposits between the ancient brickwork. Pharaonic mud brick architecture was partly re-used as standing architecture and partly as building material, resulting in the removal and recycling of mud bricks.

The archaeology of each building in SAV1 North therefore displays a minimum of three and more often four phases of use: A) original phase of

¹⁹ BUDKA 2016b.

²⁰ BUDKA and DOYEN 2013, 178–179.

²¹ BUDKA 2015b.

²² See AZIM 1975, 93–95; GEUS 2004, 115. For recent finds of the Meroitic epoch see: FRANCIGNY 2014; FRANCIGNY 2015. For Christian (Medieval) sites: HAFSAAS-TSAKOS and TSAKOS 2010; HAFSAAS-TSAKOS and TSAKOS 2012 and the Ottoman fortress: ALEXANDER 1997.

²³ For general aspects of formation processes affecting the archaeological record see SCHIFFER 1972; SCHIFFER 1987; RENFREW and BAHN 2001, 52–70; WARD and LARCOMBE 2003; TASSIE and OWENS 2010, 445.

²⁴ Cf. RENFREW and BAHN 2001, 57–59; VON PILGRIM 1996a, 18–22.

²⁵ See DOYEN 2009a, 17–20.

²⁶ AZIM 1975, 122.

²⁷ BUDKA 2014, 63–65.

construction and use; B) phase of filling; C) phase of abandonment and D) re-use/re-occupation/reconstruction work. As will be demonstrated in Chapters III and IV, the documentation during the French excavations at SAV1 North does not always allow for differentiating between these distinct phases. Most material was collected as belonging to the same phase as the building unit, when it is actually part of the filling or abandonment phase. Post-excavation re-assignment of such finds must be treated with caution and was not undertaken for all contexts during the processing of the SAV1 North data by AcrossBorders.

Furthermore, as pointed out by Manfred Bietak and others, stratigraphic sequences within Bronze Age sites using mud brick architecture are generally very complex and, e.g., younger walls may appear contemporaneous to older structures.²⁸ Mud brick walls were frequently levelled and overbuilt, sometimes representing challenges for archaeologists in the field to reconstruct the sequences. As a rule, it becomes more difficult to attribute walls to specific phases if the stratigraphic units overlying and surrounding the architecture are not documented in detail. At SAV1 North, the focus of the excavators was on the architecture only; in combination with the complex stratigraphy of the site, this approach was insufficient for providing a solid sequence in all parts of the excavation.

Because of the long re-use period of the New Kingdom site, pavements and deposits from the original building phases of SAV1 North have been heavily truncated. In most cases, there are no joints of floors or occupation phases across rooms or over longer distances in general. A concise interpretation of the formation processes would rely on a detailed stratigraphic excavation, as is currently undertaken at SAV1 West. At SAV1 North, however, this was not recognised in the field, and it was only in 2014 that remaining New Kingdom deposits and pieces of floors were documented post-excavation. It goes without saying that the interpretation of these scarce leftovers of 18th Dynasty stratigraphy must remain tentative, especially as their formation processes were not studied with the same details as the standing architecture. Despite this, the results pre-

sented here will be compared in the future to the full documentation of SAV1 West, where essentially the same formation processes were observed and recorded in detail as single contexts with a running matrix. It needs to be stressed that the processing of the architecture and phases of use for the buildings at SAV1 North (Chapter II) is the outcome of a detailed post-excavation study which provided important new information on the site, but cannot adjust all the shortcomings conducted during excavation.

In general, much potential for the analysis of complicated sites with multiple formation processes like SAV1 North lies in the implementation of a micromorphological sampling programme and geochemical analyses.²⁹ The first soil samples were taken at SAV1 North as part of AcrossBorders' geoarchaeological research in 2014 and some of the results will be presented here for building unit N12 (V.1), illustrating certain *caveats* for the architectural interpretation in the present publication, but also the rich potential of the site itself and for future work.

3.2 Levels at SAV1 North

(Fig. 2)

During the course of excavation of the SIAM, five levels were differentiated by the excavator Florence Doyen based on a variety of features, including the composition of the soil and layers, the character of the archaeological deposits, the stratigraphy of walls and other archaeological sequences.³⁰ 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 "Levels 2–5" are discussed below in their chronological order, starting with the earliest remains. Dating of the individual levels derives from the study of the ceramics,³¹ but due to the lack of a stratigraphic matrix throughout the site, the attribution of some contexts to certain levels remains unconfirmed. According to the processing of the ceramics, the "Levels" attributed to phases throughout SAV1 North cannot be treated as uniform stratigraphic sequences of layers, but are slightly diverse depending on context/location/building units (see III.1).³²

²⁸ BIETAK 1976; see also VON PILGRIM 1996a, 18–22.

²⁹ Cf. SPENCER 2014a, 202; MALLOL and MENTZER 2015.

³⁰ For general observations concerning the formation processes at Egyptian domestic sites with mud brick architecture see VON PILGRIM 1996a, 18–22.

³¹ For details of the potential and limits of pottery from SAV1 North as dating tool see BUDKA 2016b.

³² For a general definition of "Level" (German "Bauschicht") see VON PILGRIM 1996a, 16 with references.

Level	Dating	Remains	Remarks
1	Post-New Kingdom	mud brick debris; slag; red bricks; pottery	mixed material from uppermost layers – approx. 30–40 % Post-Pharaonic, mostly Christian (majority still 18 th Dynasty)
2	late 18 th Dynasty – Ramesside?	Building unit N10; N7?; N2?; debris; filling deposits	19 th Dynasty present in small quantity; very few late New Kingdom (20 th Dynasty) to Napatan pieces are present; considerable Post-Pharaonic material
3	Thutmose III – late 18 th Dynasty	Building units N12, N24, N25, N26, N27; Enclosure Wall N4; occupation and filling deposits	clearly covering reign of Thutmose III and those of later kings (Amenhotep II–Thutmose IV well attested; also Amenhotep III and possibly later)
4	early 18 th Dyn.: pre-Thutmose III	walls in Square 180/2260; occupation deposits with charcoal and organic remains	nothing later than early Thutmoside; latest possible date: reign of Hatshepsut/early Thut. III
5	early 18 th Dyn.	occupation deposits with charcoal and organic remains	Ahmosé II to Thutmose I (in general: material of Second Intermediate Period character is present until Level 4!) NB: Level 5 cannot be separated from Level 4

Fig. 2 Archaeological levels from SAV1 North

In 2012, the earliest level in SAV1 North, Level 5, was identified already as early 18th Dynasty in date, thus confirming the foundation of the town in the New Kingdom.³³ No architecture has survived, with only occupation deposits attesting to a period of settlement. One has to assume that the mud brick walls of this phase were all subsequently levelled or have completely decayed. From Level 4, also datable to the early 18th Dynasty, first architectural remains of modest size and quantity were documented. The present publication focuses on Level 3, the heyday of Sai under the reign of Thutmose III up to Amenhotep III with the construction of several building units. Some sherds from Level 2 attest to early Ramesside activity, but as yet they cannot be associated with structures.³⁴

Level 5

As the earliest evidence of occupation in SAV1 North, Level 5 was exposed in Square 180/2270 (Fig. 3) just above the natural soil.³⁵ It was partially excavated in a small area enclosed by the sections below Walls 18N, 18W and 26S/26W (see Fig. 3).³⁶ Despite the lack of any architectural remains, archaeological material from the deposits such as ceramics and some small finds allow the attribu-

tion of these earliest remains to the New Kingdom. Although the ceramic material did not allow for a clear distinction from material associated with Level 4 (see III.4.1), Level 5 can firmly be associated with the early 18th Dynasty. In the excavated areas at SAV1 North, there is no testimony of an earlier occupation pre-dating the New Kingdom in this sector of the Pharaonic town. Altogether, the deposits attributed to Level 5 attest to the foundation of an Egyptian settlement in the early New Kingdom on Sai, in an area void of any clear traces for earlier occupation and thus also of Kerma remains.

Level 4

The earliest remains of mud brick structures within SAV1 North were exposed in Squares 180/2260 and 180/2270 and can be attributed to Level 4 (see below Fig. 48).³⁷ Sitting partly on deposits of Level 5, they are not the first structures built at the site, but the ones traceable by architecture. The buildings are preserved by short sections of their walls. The poor state of preservation does not allow for a precise reconstruction of the respective 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

³³ See BUDKA 2016b.

³⁴ BUDKA 2011a, 24. For now, the precise history of Sai in the 19th and 20th Dynasties and its relation to Amara West remains uncertain; new evidence was recently unearthed in sector SAV1 West and pyramid cemetery SAC5, see BUDKA 2015b.

³⁵ BUDKA and DOYEN 2013, 171–172.

³⁶ BUDKA and DOYEN 2013, 173.

³⁷ See BUDKA and DOYEN 2013, 172–175.



Fig. 3 Complete plan of the site SAVI North

associated with Level 4 is that they are all half-a-brick thick. Occupational deposits with a considerable amount of vegetal remains and ashy material were documented, associated with Level 4 walls.

Level 3

The most substantial level at SAV1 North comprises successive dump layers and occupation deposits, labelled as Level 3.³⁸ It was exposed throughout all squares of SAV1 North and is well represented, mostly characterised by a distinctive brown colour. Level 3 is mainly composed of a silty deposit mixed with a large quantity of small vegetal remains, charcoal pieces and numerous potsherds.

There is also abundant evidence for architectural remains of Level 3. The earlier Level 4 walls had been levelled and a new set of structures were built, interestingly not directly on top of the earlier walls, but slightly offset. Most of the Level 3 walls are like the Level 4 ones half-a-brick thick. This new building phase at SAV1 North followed a clear spatial arrangement, with walls oriented north–south towards Enclosure Wall N4, which was also constructed in this building phase. The architectural remains attributed to Level 3 are discussed in Chapter II.

Level 2

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.³⁹ 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 fillings, both in complete and fragmented condition, and their range of functions is well attested at other Egyptian settlement sites (e.g. doorways and columns).⁴⁰ SAV1 North yielded column bases (e.g. a well preserved example from the filling of N12, IID.5.3.2), thresholds and fragments from door-

pivot stones, amongst others. A number of grindstones were also found in Level 2. Since all of these stone blocks cannot be linked to specific structures of Level 2, 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.⁴¹

Apart from some incomplete structures,⁴² two similar architectural features (N6 and N7) belong to the phase of Level 2 (Fig. 3). N6 and N7 are storage pits of a square to rectangular shape, cut into the natural ground soil. The pits are carefully lined with mud bricks and plastered at their interior, obviously a scheme to preserve the pit contents.⁴³ N6 is located within building unit N10, which is orientated north–south along a narrow lane (Fig. 3). N10 illustrates that most of the preserved walls from buildings of Level 2 are one brick thick. Some of these bricks display marks on their large rectangular surface, well attested already in Level 3 (see IIA.3).

The alignment of the structures associated with Level 2 seems to follow the general ground plan and spatial organisation of Level 3,⁴⁴ though notable is the overall increase in the thickness of the structures. The enlargement of the bastion of Enclosure Wall N3 to N2 might also be associated with the phase labelled as Level 2 (see IIA.4.2.2).

3.3 The heyday of use: Level 3

Level 3 at SAV1 North represents the heyday of use of the Pharaonic town. It can be associated with the recently reconstructed Phase B of the town, a more advanced state than Phase A, as a simple landing place in the early 18th Dynasty.⁴⁵ In Phase B, the settlement was enlarged and equipped with an enclosure wall during the time of Thutmose III. The town became an important administrative centre with an Amun-Re temple, a governor's residence and an administrative building (Building A at SAV1 East). The enlargement of the site goes hand in hand with increasing complexity, with varied lifestyles amongst the inhabitants, suggesting a composite so-

³⁸ BUDKA and DOYEN 2013, 175–177.

³⁹ For Level 2, see DOYEN 2009a, 18–19; BUDKA and DOYEN 2013, 179–181. 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 SAV1 North.

⁴⁰ Cf. good examples from Elephantine (VON PILGRIM 1996a, *passim*) and Amarna (e.g. BORCHARDT and RICKE 1980, pls. 11, 14, 26–27).

⁴¹ 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.

⁴² Level 2 comprised Walls 10, 11, 27, 18N, 18W, 18E, 19 and 30.

⁴³ For comparable plastered, rectangular storage pits cf. e.g. VON PILGRIM 1996a, 77–80, H 86.

⁴⁴ See BUDKA and DOYEN, 179–181, fig. 9.

⁴⁵ BUDKA 2015b, 51.

cial stratification.⁴⁶ Sai Island was now the administrative headquarter of Upper Nubia and continued to flourish until the reign of Amenhotep III. The fortified town of this stage represents the common type of an Egyptian “temple town”.

4 Contextualising SAV1 North within the New Kingdom town of Sai

As presented in Chapter II by Florence Doyen, the architectural remains documented in SAV1 North are markedly different to the ones uncovered by Michel Azim in the southern part of the town.⁴⁷ Rather, the remains in the northern sector find close parallels in SAV1 West and contrast strongly with remains at SAV1 East (Fig. 1).

At SAV1 North, a minimum of five structures can be reconstructed in the excavated part for Level 3. House N12 (see IID) is one of the better preserved buildings of this phase (Fig. 3). It was fully excavated in 2011 and attests to the presence of typical Egyptian tripartite houses on Sai in a rather small scale.⁴⁸ With an internal surface area of about 27m, N12 is considerably smaller than examples of tripartite houses at Elephantine⁴⁹ or from the workmen’s village at Amarna.⁵⁰ Within Nubian fortresses, though, tripartite houses of small size are attested since the Middle Kingdom (e.g. at Uronarti and Buhen).⁵¹ However, the houses from SAV1, the southern sector of the New Kingdom town of Sai, are all considerably larger than N12; at a bit more than 50m, Houses H1–H3 are the smallest within this group and nicely compare to houses in the Amarna workmen’s village. Houses H4 and H5 have a surface area of more than 300m,⁵² comparable to some of the houses from the Amarna main city.⁵³

As discussed in Chapter V, other buildings units at SAV1 North like N26 and N27 do not find close parallels within Egyptian orthogonal settlements.⁵⁴

They markedly contrast in both size and ground plan to the houses in SAV1. Thus, SAV1 North nicely illustrates that within the town wall of Sai city there are several different sectors which contrast regarding their layout. Apart from functional aspects as possible reasons for these structural differences, a chronological variance has also to be considered. As was illustrated by the neighbouring site of Amara West, real developments within Egyptian towns may differ significantly from theoretical urban planning.⁵⁵ In addition, Neal Spencer convincingly argued for the important role of the individual for adjustments beyond the planning of the initial town: for shaping a house, for changing rooms/accesses of buildings or even replacing houses with new ones.⁵⁶ It is therefore likely that a dissonance of houses from “standard types” were actually common and integral parts of very dynamic worlds, traceable in both Egypt⁵⁷ and Nubia.⁵⁸

For sector SAV1 North, multiple phases of the building units within the 18th Dynasty are attested and exhibit the complex evolution of the area. Fine dating of these phases and deposits faces several problems (see I.3.1). The dating of archaeological remains from SAV1 North commenced in 2011 with the study of the ceramics, but more stratified contexts were needed to closely assess the development of the town in general. This was achieved by AcrossBorders with new fieldwork in the sectors SAV1 East and SAV1 West.⁵⁹ The present publication is the result of a meticulous study of the architecture and the inventories of some selected building units in SAV1 North. For a number of contexts the dating is still unclear and would have to be reconfirmed by continued excavations – but all in all, the information adds to our understanding of Sai Island as important administrative town during the reign of Thutmose III up to the time of Amenhotep III, with a complex microhistory.⁶⁰

⁴⁶ See BUDKA 2016c.

⁴⁷ AZIM 1975; see, most lately, ADENSTEDT 2016.

⁴⁸ 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.

⁴⁹ Cf. VON PILGRIM 1996b, fig. 4.

⁵⁰ For an approximate size of 50m at the workmen’s village see EL-SAIDI and CORNWELL 1986, fig. 1.1 and KOLTSIDA 2007, 6.

⁵¹ Cf. BIETAK 1996, 38–39, fig. 16 (Uronarti and Shalfak); EMERY, SMITH and MILLARD 1979, pl. 23 (Buhen, Block C, southern part).

⁵² See ADENSTEDT 2016, 66, fig. 19.

⁵³ For a comparison of the SAV1 houses and houses from selected outer sites see ADENSTEDT 2016, 66, fig. 20.

⁵⁴ Parallels named by Doyen to courtyard houses at Elephantine (Chapter II) are debatable.

⁵⁵ Cf. SPENCER 2014a.

⁵⁶ SPENCER 2014a, 201.

⁵⁷ Cf. KEMP and STEVENS 2010a, passim.

⁵⁸ SPENCER 2014a, 202. Cf. also BUDKA 2016c.

⁵⁹ See BUDKA 2011a, 23–33; BUDKA 2015b.

⁶⁰ BUDKA 2015b, 51.