

JULIA BUDKA (ED.)

ACROSSBORDERS I
THE NEW KINGDOM TOWN OF SAI ISLAND, SECTOR SAV1 NORTH

ÖSTERREICHISCHE AKADEMIE DER WISSENSCHAFTEN
DENKSCHRIFTEN DER GESAMTAKADEMIE, BAND LXXXII

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Egypt, Nubia and the Levant

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JULIA BUDKA (ED.)

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The New Kingdom Town of Sai Island,
Sector SAV1 North

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Julia Budka

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CONTENTS

Preface (by Julia Budka)	13
I. Introduction: the New Kingdom town and sector SAV1 North (by Julia Budka)	15
1 The New Kingdom town of Sai Island	15
2 The excavations in sector SAV1 North	15
3 The archaeological levels of SAV1 North	17
3.1 General remarks and formation processes	17
3.2 Levels at SAV1 North	18
3.3 The heyday of use: Level 3	21
4 Contextualising SAV1 North within the New Kingdom town of Sai	22
II. The architecture of SAV1 North (by Florence Doyen)	23
A Prologue	23
A.1 The setting	23
A.2 Presentation of the architectural report of SAV1 North and conventions in use	24
A.3 The mud bricks from SAV1 North	24
A.4 The N3 bastion area	28
A.4.1 Introduction	28
A.4.2 Description of the structures from the N3 bastion area	29
A.4.2.1 The Brick Tower N3	29
A.4.2.2 The Brick Tower N2	31
A.4.2.3 The Structure N28	33
A.4.3 Coated surfaces associated with the structures from the N3 bastion area	33
A.4.3.1 On the west side of Brick Tower N3	33
A.4.3.2 On the east side of Brick Tower N3	33
A.4.3.3 On the north side of Brick Tower N3	34
A.4.3.4 Below the Structure N28	35
A.4.3.5 Below the Brick Tower N2	35
B Building unit N24	35
B.1 Introduction	35
B.2 Description of N24's perimeter walls	37
B.2.1 Wall 03S	37
B.2.1.1 Facing plasters of Wall 03S	37
B.2.1.2 Pilaster of Wall 03S: N24Pil2	38
B.2.2 Wall 03E	39
B.2.2.1 Facing plasters of Wall 03E	39
B.2.2.2 Pilaster of Wall 03E	39
B.2.3 Wall 07E	39
B.2.3.1 Facing plasters of Wall 07E	39
B.2.3.2 Pilaster of Wall 07E: N24Pil1	39
B.2.4 Wall 08N	39
B.2.4.1 Facing plasters of Wall 08N	41
B.2.4.2 Pilaster of Wall 08N: N24Pil3	41
B.2.5 Wall 08W	43
B.2.5.1 Facing plasters of Wall 08W	44

B.2.5.2 Pilaster of Wall 08W: N24Pil4	44
B.3 Description of N24 installations	46
B.3.1 Along the southern perimeter wall (03S)	46
B.3.1.1 N24B	46
B.3.2 Along the eastern perimeter wall (03E)	46
B.3.2.1 N24F	46
B.3.2.2 N24A	46
B.3.3 Along the northern perimeter wall (08N)	47
B.3.3.1 N24D	47
B.3.3.2 N24E	48
B.3.4 Along the western perimeter wall (08W)	49
B.3.4.1 N24C	49
B.4 Layout and dimensions of N24 building unit	49
B.5 The coated surfaces and floors associated with N24	51
B.5.1 Outside N24	51
B.5.1.1 To the south of N24	51
B.5.1.2 To the east of N24	51
B.5.1.3 To the north of N24	51
B.5.1.4 To the west of N24	51
B.5.2 Inside N24	52
B.5.2.1 The southeastern quadrant	52
B.5.2.2 The southwestern quadrant	53
B.5.2.3 The northeastern quadrant	54
B.5.2.4 The northwestern quadrant	54
B.5.3 Building phases of N24	57
C Building unit N25	57
C.1 Introduction	57
C.2 Description of N25's perimeter walls	60
C.2.1 Southern perimeter wall	60
C.2.2 Wall 02E	60
C.2.2.1 Facing plasters of Wall 02E	60
C.2.2.2 Pilasters of Wall 02E: N25Pil1 and N25Pil2	60
C.2.3 Wall 02N	61
C.2.3.1 Facing plasters of Wall 02N	61
C.2.3.2 Pilaster of Wall 02N	61
C.2.4 Wall 25W	61
C.3 Description of N25's dividing walls	62
C.4 Layout and dimensions of N25 building unit	62
C.5 Description of N25 installations	62
C.6 Coated surfaces associated with N25	62
C.6.1 Outside N25	62
C.6.1.1 To the south of N25	62
C.6.1.2 To the east of N25	63
C.6.1.3 To the north of N25	63
C.6.1.4 To the west of N25	63
C.6.2 Inside N25	63
C.6.2.1 The western part	63
C.6.2.2 The eastern part	64
C.6.2.3 The southern part	65
C.6.3 Building phases of N25	65

D Building unit N12	65
D.1 Introduction	65
D.2 Description of N12's perimeter walls	67
D.2.1 Wall 42S	67
D.2.1.1 Facing plasters of Wall 42S	68
D.2.1.2 Pilaster of Wall 42S: N12Pil3	68
D.2.1.3 Pilaster of Wall 42S: N12Pil4	69
D.2.2 Wall 42E	69
D.2.2.1 Facing plasters of Wall 42E	69
D.2.2.2 Pilaster of Wall 42E: N12Pil1	70
D.2.2.3 Pilaster of Wall 42E: N12Pil9	70
D.2.3 Wall 42N	71
D.2.3.1 Facing plasters of Wall 42N	71
D.2.3.2 Pilaster of Wall 42N: N12Pil7	71
D.2.3.3 Pilaster of Wall 42N: N12Pil8	72
D.2.4 Wall 52W	72
D.2.4.1 Facing plasters of Wall 52W	73
D.2.4.2 Pilaster of Wall 52W	73
D.3 Description of N12's dividing walls	73
D.3.1 Wall 46W	73
D.3.1.1 Facing plasters of Wall 46W	73
D.3.1.2 Pilaster of Wall 46W: N12Pil5	73
D.3.1.3 Pilaster of Wall 46W: N12Pil6	73
D.3.2 Wall 53E	75
D.3.2.1 Facing plasters of Wall 53E	77
D.3.2.2 Pilaster of Wall 53E's southern segment: N12Pil10	77
D.3.2.3 Pilaster of Wall 53E's northern segment: N12Pil11	77
D.3.3 Wall 57	77
D.3.3.1 Facing plasters of Wall 57	78
D.3.3.2 Pilaster of Wall 57: N12Pil2	78
D.4 Layout and dimensions of N12 building unit	78
D.5 Description of N12 installations	80
D.5.1 Along the southern perimeter wall (42S)	80
D.5.1.1 N12A	80
D.5.2 Along the eastern perimeter wall (42E)	81
D.5.2.1 N12E	81
D.5.3 Along the northern perimeter wall (42N)	81
D.5.3.1 N12C	81
D.5.3.2 N12F	82
D.5.4 In the southwest corner	82
D.5.4.1 N12B	82
D.5.5 The middle of N12's central section (N12/2)	82
D.5.5.1 N12D	82
D.6 Coated surfaces associated with N12	83
D.6.1 Outside N12	83
D.6.1.1 To the south of N12	83
D.6.1.2 To the east of N12	83
D.6.1.3 To the north of N12	83
D.6.1.4 To the west of N12	84
D.6.1.5 Summary	84
D.6.2 Inside N12	84

D.6.2.1 Front section N12/1	84
D.6.2.2 Central section N12/2	84
D.6.2.3 Rear section N12/3	86
D.6.3 Building phases of N12	88
E Building unit N26	88
E.1 Introduction	88
E.2 Description of N26's perimeter walls	89
E.2.1 Wall 47S	89
E.2.1.1 Facing plasters of Wall 47S	90
E.2.1.2 Pilaster of Wall 47S	90
E.2.2 Wall 45E	90
E.2.2.1 Facing plasters of Wall 45E	90
E.2.2.2 Pilaster of Wall 45E	90
E.2.3 Wall 43N	90
E.2.3.1 Facing plasters of Wall 43N	92
E.2.3.2 Pilaster of Wall 43N	92
E.2.4 Walls 44W and 47W	92
E.2.4.1 Facing plasters of the western perimeter walls	92
E.2.4.2 Pilaster of the western perimeter walls	92
E.3 Description of N26's internal walls	93
E.3.1 Wall 43E	93
E.3.1.1 Facing plaster of Wall 43E	93
E.3.1.2 Brick structure associated with Wall 43E	94
E.3.2 Wall 44E	94
E.3.2.1 Facing plaster of Wall 44E	94
E.3.2.2 Pilaster of Wall 44E	95
E.3.3 Wall 44S	95
E.3.3.1 Facing plaster of Wall 44S	95
E.3.3.2 Pilaster of Wall 44S	95
E.3.4 Wall 47E	95
E.3.4.1 Facing plaster of Wall 47E	96
E.3.4.2 Pilaster of Wall 47E	96
E.3.5 Wall 47N	96
E.3.5.1 Facing plaster of Wall 47N	96
E.3.5.2 Pilaster of Wall 47N	96
E.4 Layout and dimensions of N26 building unit	96
E.5 Description of N26 installations	97
E.6 Coated surfaces associated with N26	97
E.6.1 Outside N26	97
E.6.1.1 To the south of N26	97
E.6.1.2 To the east of N26	97
E.6.1.3 To the north of N26	97
E.6.1.4 To the west of N26	98
E.6.2 Inside N26	98
E.6.2.1 Courtyard/larger room N26/1	98
E.6.2.2 Side room N26/3	98
E.6.2.3 Side room N26/2	99
E.6.2.4 Room N26/4	100
E.6.3 Building phases of N26	100
F Building unit N27	102
F.1 Introduction	102

F.2 Description of N27's perimeter walls	103
F.2.1 Wall 34S	103
F.2.1.1 Facing plasters of Wall 34S	103
F.2.1.2 Pilaster of Wall 34S	104
F.2.2 Walls 35W and 36E	104
F.2.2.1 Facing plasters of the eastern perimeter walls	104
F.2.2.2 Pilaster of the eastern perimeter walls	104
F.2.3 Wall 33N	104
F.2.3.1 Facing plasters of Wall 33N	105
F.2.3.2 Pilaster of Wall 33N	105
F.2.4 Walls 33W and 31E	105
F.2.4.1 Facing plasters of the western perimeter walls	107
F.2.4.2 Pilaster of the western perimeter walls	107
F.3 Description of N27's internal walls	107
F.3.1 Wall 38E	107
F.3.1.1 Facing plaster of Wall 38E	107
F.3.1.2 Pilaster of Wall 38E	107
F.3.2 Wall 39W	107
F.3.2.1 Facing plaster of Wall 39W	107
F.3.2.2 Pilaster of Wall 39W: N27Pil1	107
F.3.3 Wall 34N	108
F.3.3.1 Facing plaster of Wall 34N	108
F.3.3.2 Pilaster of Wall 34N	108
F.3.4 Wall 34E	108
F.3.4.1 Facing plaster of Wall 34E	108
F.3.4.2 Pilaster of Wall 34E	108
F.3.5 Wall 36N	108
F.3.5.1 Facing plaster of Wall 36N	109
F.3.5.2 Pilaster of Wall 36N: N27Pil2	109
F.4 Layout and dimensions of N27 building unit	109
F.5 Description of N27 installations	111
F.5.1 Courtyard N27/1	111
F.5.2 Side room N27/2	111
F.5.3 Side room N27/3: N27A	111
F.6 Coated surfaces associated with N27	111
F.6.1 Outside N27	111
F.6.1.1 To the south of N27	111
F.6.1.2 To the east of N27	112
F.6.1.3 To the north of N27	112
F.6.1.4 To the west of N27	114
F.6.2 Inside N27	114
F.6.2.1 Courtyard N27/1	114
F.6.2.2 Side room N27/2	114
F.6.2.3 Side room N27/3	115
F.6.3 Building phases of N27	115
G Concluding remarks on the architecture at SAV1 North	116
H Annex: Dates and team members of SIAM missions at SAV1 North	117
III. The pottery from SAV1 North (by Julia Budka)	119
1 General remarks	119
1.1 Recording and numbering system	119

2 The corpus of fabrics	120
2.1 Nile clays from Egypt	122
2.2 Locally produced Nile clays (wheel-made)	123
2.3 Nubian clays from Upper Nubia (hand-made)	123
2.4 Marl clays from Egypt	124
2.5 Other imported wares	125
3 Production techniques	126
4 Corpus of types and shapes	128
4.1 Pottery types from Level 5	128
4.2 Pottery types from Level 4	130
4.3 Pottery types from Level 3	134
4.4 Pottery types from Level 2	135
4.5 Functional vessels from SAV1 North	137
4.5.1 Egyptian cooking pots	137
4.5.2 Fire dogs	138
5 Selected pottery from building units of Level 3	140
5.1 Pottery from building unit N24	140
5.2 Pottery from building unit N12	140
5.3 Pottery from building unit N26	149
5.4 Pottery from building unit N27	149
5.5 Dating of pottery from Level 3 building units at SAV1 North	150
6 Summary	152
IV. Selected finds from SAV1 North (by Julia Budka)	157
1 General remarks	157
2 Categories of finds	157
2.1 Main categories of finds	158
3 Macrolithics from SAV1 North	166
3.1 Pounders/hammers	166
3.2 Whetstones	166
3.3 Grindstones	166
3.4 Handmills	166
4 Selected objects from Level 3	167
4.1 Finds from building unit N24	167
4.2 Finds from building unit N12	167
4.3 Finds from building unit N26	168
4.4 Finds from building unit N27	169
5 Functional aspects of finds from SAV1 North	169
6 The character of the material culture from SAV1 North	170
V. Summary (by Julia Budka)	171
1 The architecture of SAV1 North	172
1.1 N12 as a case study	173
1.2 N27 as a case study	174
2 Material culture of SAV1 North	175
3 The character and function of SAV1 North	176
Bibliography	207
List of figures	217
List of plates	219
Index	221

PREFACE

by Julia Budka

The present volume is the first in a series of monographs dedicated to the results achieved within the European Research Council Project AcrossBorders. Sai Island, the prime example for settlement policy of New Kingdom Egypt in Upper Nubia, is the focus of this project. The AcrossBorders project aims to provide new insights on the lifestyle and living conditions in New Kingdom Nubia thanks to new fieldwork and multi-layered research on Sai Island. The main hypothesis tested was whether the settlement on Sai Island can be evaluated as an Egyptian microcosm, despite its location outside of Egypt and its specific topographical, environmental and cultural situation. A detailed comparison of the site with two major 18th Dynasty settlement sites located in Egypt proper (Abydos and Elephantine) allows a fresh evaluation of the material culture and architectural remains from Sai. Various approaches – from ceramic analysis to architectural studies, petrographic analysis, ethnoarchaeological approaches to Strontium Isotope Analysis and Instrumental Neutron Activation Analysis (INNA) – were utilised to investigate whether objects refer to the cultural identities of their users or reflect more complicated processes.¹

The excavation history of the New Kingdom fortified town at Sai Island goes back to the 1950s. Several sectors of the town site were explored by the French mission, particularly the southern area (SAV1) and the surroundings of the small sandstone temple (Temple A) during the 1970s.² This volume is dedicated to the sector SAV1 North, situated along the northern enclosure wall. It was excavated by the Sai Island Archaeological Mission (SIAM), directed by Didier Devauchelle and headed in the field between 2008 and 2012 by Florence Doyen. All analyses and studies in preparation for the present publication were undertaken within the framework of AcrossBorders, including a visit and final on-site adjustments to the documentation of the ar-

chitecture by Florence Doyen in 2014. Results from the scientific analyses of the various material types – especially pottery (petrography and Instrumental Neutron Activation Analysis), animal bones and micromorphological samples – as well as new approaches to reconstruct the ancient landscape of Sai Island are still ongoing and will be published in a next volume. The principal focus of the present volume is the material remains of SAV1 North: the architecture and material culture, with emphasis on the pottery and small finds.

Datable to the mid to late 18th Dynasty, the so-called Level 3 was the heyday of sector SAV1 North – a time well-attested by several architectural remains, with associated finds and pottery. These are presented in the following. A summary of thoughts on the possible hints preserved in the material remains about the lifestyle and activities at SAV1 North completes this volume. All in all, the evidence from SAV1 North adds to the current understanding of Sai during the 18th Dynasty as a complex microcosm with a significant evolution, reflecting aspects of the macrohistory of New Kingdom Nubia. Together with the recent publication on the architectural assessment of the southern part of the New Kingdom town of Sai,³ this volume therefore underlines the important role Sai plays in understanding settlement patterns in New Kingdom Nubia.

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¹ Cf. BUDKA 2014, 59 and 68; BUDKA 2015b, 50.

² Cf. AZIM 1975; VERCOUTTER 1986; GEUS 2004. The label SAV1 for the town was introduced by Vercoutter and stands for "Sai Adou Ville 1".

³ ADENSTEDT 2016 (an outcome of Julia Budka's START-prize of the Austrian Science Fund: Y615-G19).

sion of the National Corporation for Antiquities and Museums of Sudan (NCAM). My sincere thanks are in particular due to Abdelrahman Ali Mohamed (Director General) and El-Hassan Ahmed Mohamed (Director of Fieldwork). I am especially grateful to the project director of the Sai Island Archaeological Mission (SIAM) of Charles-de-Gaulle – Lille 3 University (UMR 8164 HALMA-IPEL), France, Didier Devauchelle for allowing AcrossBorders to study, process and publish the results from SAV1 North. Although work on SAV1 North was mainly conducted between 2012 and spring 2014, thanks also go to the current concession holder of Sai, Vincent Francigny (SFDAS Khartoum; since fall 2015). I am furthermore very grateful for all of the support by NCAM during AcrossBorders' field seasons on Sai (2013–2016), especially to Huda Magzoub. Many thanks go also to the Sudanese staff of the dig-house under the supervision of Sid Ahmed and Abdel Fatah.

Special thanks are due to Florence Doyen who acted as the field director of SIAM's work at SAV1 North, was employed by AcrossBorders from 2012–2015 and joined the team on site in 2014. She wishes to thank Nicole Miller and Christine Horton for their assistance with regards to the first version of her written English in this volume. My own work at Sai Island and there at SAV1 North started in 2011 and was only possible through support of Humboldt University Berlin and Frank Kammerzell. Financial support for the 2012 pottery season, which resulted in important insights on the pottery presented in this volume, was granted by the Pollitzer Foundation of the Austrian Academy of Sciences and I am here

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Parts of Chapter V.1 are based on micromorphological analysis conducted within the framework of AcrossBorders, for which I would like to thank Miranda Semple, Sayantani Neogi and Sean Taylor. Ingrid Adenstedt and Martin Fera have composed detailed plans and images of SAV1 North within the context of the entire New Kingdom town. A big load of thanks goes to all of the assistants involved in documenting and analysing pottery and small finds from SAV1 North (in order of their appearance): Nathalie Bozet, Veronika Hinterhuber, Fatma Keshk, Huda Magzoub, Giulia D'Ercole, Victoria Grünberg, Nicole Mosiniak, Sebastian Stiefel, Elke Schuster, Arvi Korhonen, Daniela Wölfl, Meg Gundlach, Kenneth Griffin, Oliver Frank Stephan, Daniela Penzer, Michaela Janker and Lucia Sedlakova. The digitalising of the original drawings of pottery and objects was done by the AcrossBorders student assistants Elke Schuster, Vanessa Becker and Daniela Penzer. For the layout of the pottery figures, thanks go to Oliver Frank Stephan. Last but definitely not least, Meg Gundlach was deeply involved in the realisation of this volume, with editing the English of all chapters, much productive feedback and very useful comments.

Julia Budka
Munich, September 2016

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 “bridgehead”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.

II. THE ARCHITECTURE OF SAV1 NORTH

by Florence Doyen⁶¹

A PROLOGUE

A.1 The setting

During five excavation seasons by the Sai Island Archaeological Mission (2008–2012) more than one hundred brick wall segments were exposed within the nine 10m squares of the SAV1 North sector (Fig. 3).⁶² The stratigraphic evidence here provided significant new information concerning the development of the town's northern sector, where five occupation levels were subsequently identified (I.3). The dating of these levels is the result of Julia Budka's study of the ceramic material from this area (see Chapter III).⁶³ The particular phase known as Level 3 – dated to the mid to late 18th Dynasty – attests to the period of the construction of Enclosure Wall N4⁶⁴ and five distinct building units, N24, N25, N12, N26 and N27. The latter are all described in further detail in the Sections B to F.

Within the SAV1 North area the buildings are modest in size, ranging from 23 to 30 square meters. None of the five identified structures complies with a standardised size, type of plan, design or arrangement of the rooms. These structures are thus not part of a modular plan, instead showing a loosely planned and individualised accommodation organisation. Despite this, each of the building units runs fairly parallel to the Enclosure Wall N4; this alignment indicates that their layout falls into the pattern of the settlement grid displayed in the southern sector of the Pharaonic town.

The lack of available space for a staircase and the narrowness of the mud brick walls, mostly half-a-brick thick, call into question the presence of an additional story. No ceiling features were unearthed, though this need not imply that smallest rooms were not, at least lightly, roofed. A facing of plaster covers some of the walls, but no decoration was apparent. Inside the building units, well-known installations such as storage bins, grinding equipment or fireplaces can be found, but there is no sign of mastabas⁶⁵. Together, these features suggest that SAV1 North's compounds were intended as temporary domestic spaces for the purpose of production/food-processing tasks, rather than for permanent residential housing.

Overall, the walls of the Level 3 structures are preserved to less than 1m in height, eliminating potential evidence for windows.⁶⁶ In most cases the walls were not set in foundation trenches,⁶⁷ instead built directly onto the natural gravel ground or over an earlier layer of occupation, made of backfill pebble or earlier brick courses. At Sai, it is usual for the narrow walls to be reinforced with pilasters.⁶⁸ Most of the half-a-brick thick walls were constructed using layers of staggered mud brick stretchers in the traditional running bond pattern, yet irregularities in the bricklaying are not uncommon in SAV1 North,⁶⁹ especially in the massive masonry of Enclosure Wall N4 or the bastions N3 and N2.

The site SAV1 North illustrates several aspects of the interrelationship between Pharaonic mud-

⁶¹ Université Libre de Bruxelles (ULB). The present study was undertaken from 2012–2015, while working as a researcher for AcrossBorders (Austrian Academy of Sciences).

⁶² See preliminary reports: DOYEN 2009a; DEVAUCHELLE and DOYEN 2009; BUDKA and DOYEN 2013; DOYEN 2014.

⁶³ BUDKA 2011a, 29–31 and Table 3; BUDKA and DOYEN 2013, 182, 192–193, 201.

⁶⁴ See BUDKA and DOYEN 2013, 178–179.

⁶⁵ The lack of staircase and mastaba is particularly relevant to the interpretation of a building as a house or a workshop. See the discussion of “house versus workshop” in KEMP and STEVENS 2010a, 492–496, esp. 492.

⁶⁶ However, it has to be stressed that a window in the considerable low height of 0.26m above ground level was documented in House H3 in SAV1, the southern part of the New Kingdom town; it is the only known example from Sai; see ADENSTEDT 2016, 49.

⁶⁷ See parallels at Amarna: KEMP and STEVENS 2010a, 299, or at Deir el-Medina: BONNET and VALBELLE 1976, 320.

⁶⁸ KEMP 2000, 88.

⁶⁹ KEMP 2000, 88–92. Stretcher and header bricks are laid on their bed while bull headers are laid on edge. Occasionally, bricks are laid on end; see TASSIE and OWENS 2010, 254, fig. 96; MONNIER 2013, 27–36.