

# **Temples and Town of Elephantine**

Final Report on the 53<sup>rd</sup> Season 2024/2025

by the German Archaeological Institute Cairo

in Cooperation with the

Swiss Institute for Architectural and Archaeological Research in Cairo

# Report on the Excavations at Elephantine

by the German Archaeological Institute and the Swiss Institute Cairo

53<sup>rd</sup> Season 2024/2025\*

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## Abstract

The 53<sup>rd</sup> season October 2024 till March 2025 of the German-Swiss research project in Elephantine included excavations in the Eastern Town and in a domestic quarter south of the Khnum Temple. Measures on heritage conservation and site management were continued with the consolidation and maintenance on central monuments of the archaeological site, and on measures to improve the visitor's infrastructure and circulation. The reconstructions of the Ptolemaic Temple of Kalabsha and the Roman Temple of Osiris-Nesmeti were photographically documented. Research on blocks of a Temple building dating to Psametik II was initiated. Study of objects focused on the analyses of Archaeobotanical material, on finds from the Middle Kingdom House 169 and the New Kingdom House H55. The study of Middle Kingdom and Late Period pottery was continued.

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## 1. Introduction

The work at the archaeological site of Elephantine (fig. 1) carried out by the German Archaeological Institute Cairo (DAI) in cooperation with the Swiss Institute for Architectural and Archaeological Research on Ancient Egypt in Cairo (SIK) was continued with the 53<sup>rd</sup> season in two parts from 07/10/2024 until 28/11/2024 and from 25/01/2025 until 27/03 2025.<sup>2</sup>



**Fig. 1:** Plan of the Elephantine archaeological site (P. Kopp, O. Kassab and M. Sählhof, © DAI Cairo)

<sup>2</sup> Reports from previous seasons are available open access in the download section of the official Elephantine project homepage: <https://www.dainst.org/forschung/projekte/elephantine/2816> (last accessed 22/07/2025).



The excavations in the Early Dynastic fortified structure in the Eastern Town (section 2.1) were continued by the field directors P. Kopp and S. Döbel, supported by the Egyptologists M.-K. Schröder, F. Lozada da Silva, and the students of Egyptology and Archaeology, L. Littkopf, S. Thyen and W. Schlosser. Excavations in Area XXVIc south of the Khnum Temple were resumed by the SIK (section 2.2). The reconstructed Ptolemaic Temple of Kalabasha in the south of the archaeological site, was epigraphically and photographically documented by E. Laskowska-Kusztal and R. Łopaciuk (section 2.4).

Heritage Conservation and Site Management measures, carried out by the conservator E. Peintner, and the architects O. Kassab and M. Tschöfen, focused on the cleaning and consolidation of the Middle Kingdom Temple of Satef/Sesostris I (section 2.3.1), the maintenance of reconstructed Old Kingdom Mastaba-Tombs in the necropolis of the North-Western Town (section 2.3.2), and the general maintenance of the archaeological site with measures for the improvement of visitor's infrastructure and circulation (section 2.3.3). Additionally, the consolidation of mud brick walls of the New Kingdom House 55 was continued by the SIK (section 2.3.5). After the reconstruction of the Roman Temple of Osiris-Nesmeti was finalised in the previous season by the SIK, the surrounding area was cleaned and the building was newly documented (section 2.3.6).

Archaeobotanical material analysis, led by F. Antolín, DAI Berlin Division of Natural Sciences, focused on samples from the ongoing excavations in the Eastern Town (section 3.1). In this context, a new PhD project on plant remains from Elephantine was initiated 2024 by J. Izak with the title "*Flora Urbis: Investigating the Socio-Cultural Role of Plants in Urban Contexts*" (section 3.2). The study of blocks belonging to a temple building dating to the reign of Psametik II and stored in lapidaries in the South-Eastern part of the archaeological site was begun by J. Iwaszczuk from the Institute of Mediterranean and Oriental Cultures, PAS Warsaw (section 3.3).

The Realities of Life project (section 3.4), directed by J. Sigl, continued the study of finds and objects from the excavations in the Middle Kingdom House 169. During the fieldwork season wooden objects could be studied by G. Eschenbrenner Diemer (section 3.4.2) and textiles by A. Mérat (section 3.4.3) on site in the Elephantine find magazines. Additionally, sample analyses of wood charcoal by S. Bodin (section 3.4.1) and of insects by E. Panagiotakopulu (section 3.4.4) could be studied at the IFAO laboratories with kind permission of the SCA.

Various other object studies were continued by the SIK (section 3.5), focusing on small finds from House 55 led by M. Lehmann in support by E. Sawerthal and O. Stephan, Middle Kingdom pottery studies from Area XXXVI by B. Bader, as well as Late Period pottery studies from the wider Khnum Temple area by D. Aston.

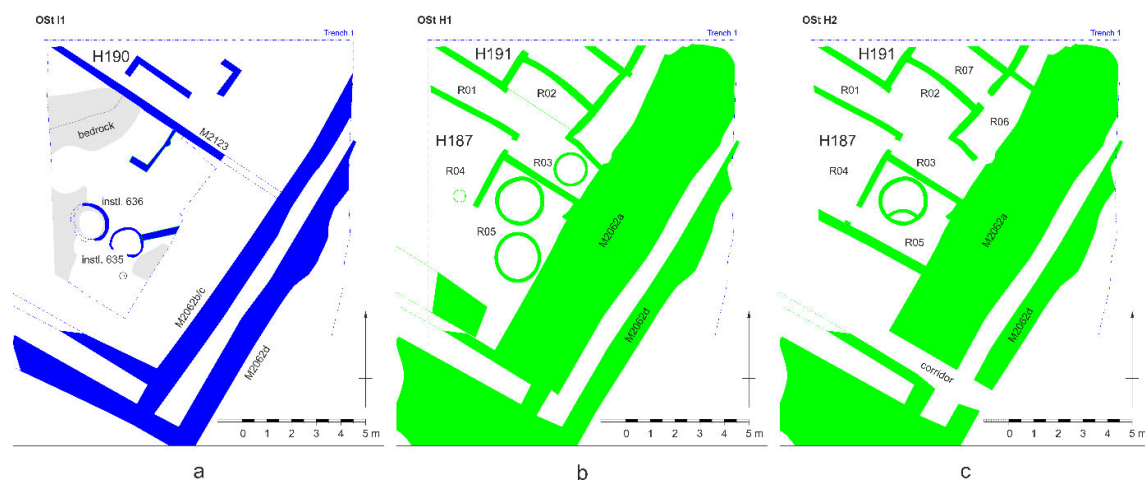
(M. Sählhof)

## 2. Fieldwork

### 2.1 Excavations in the Eastern Town

In the 53<sup>rd</sup> season, work that had begun in 2023 as part of a rescue excavation in the Eastern Town was continued.<sup>3</sup> The area under investigation is partially situated within the oldest known fortification of Elephantine. During the excavations from October 2023 to March 2025, seven main building layers were uncovered in the Eastern Town, the lowest three of which were located in the fortified enclosure.

The oldest phase of the fortification could only be investigated in a small area in the south-eastern corner of the complex (see fig. 2a, Ost I1).<sup>4</sup> This was partially covered by a later phase of the fortification wall, meaning the connection to the oldest outer wall could not be revealed. The original outer wall appears like in the north-western corner of the complex a combination of two walls (2062b and 2062d).<sup>5</sup> The gap between them was filled with mudbrick rubble. The pottery found in this building layer dates to the middle of the 2<sup>nd</sup> Dynasty what gives a *terminus post quem* for the building period of the fortified complex.<sup>6</sup>



**Fig. 2:** Development of the south-eastern corner of the fortified complex of the 2<sup>nd</sup> Dynasty (building layers Ost I1, H1 and H2; P. Kopp, © DAI Cairo)

Inside the enclosure, a long, straight wall (M2123) running from northwest to southeast can be seen, apparently dividing the space into different areas. If the area within the complex had been divided equally and wall M2123 had been part of it, the area would have been divided into five strips, each about 9 metres long.<sup>7</sup> To the north of wall M2123, some adjoining rooms

<sup>3</sup> P. Kopp, 'Excavations in the Eastern Town', in: Sählhof, *et al.*, *Report on the 52nd Season*, 5-12.

<sup>4</sup> Ost = *Oststadt* (Eastern Town).

<sup>5</sup> Ziermann, *Elephantine XVI*, fig.14.

<sup>6</sup> Elephantine pottery stage B5. For the definition of the Elephantine pottery stages and their dating see D. Raue, 'Zu den Keramikfunden der frühdynastischen Zeit und des Alten Reichs', in: Kopp, *Elephantine XXIV*, 186-198; Raue, *MAPDAIK 1*, 4-12.

<sup>7</sup> M. Ziermann, on the other hand, assumed a parcelling of 6 x 8 m. M. Ziermann, 'Älteste Baustrukturen im Inneren der frühzeitlichen Festung (STO) ', in: W. Kaiser, *et al.*, *MDAIK 51* (1995), 105.

can be seen. In the south-eastern corner of the complex, to the south of M2123, there were several circular silos in addition to individual small rooms. Some of the walls here are standing on the bedrock. One of the granaries was built around a pothole in the granite (instl. 636). Due to the varying heights of the granite ridges, several small terracing walls were constructed. This area was remodelled twice in the oldest phase of the fortified complex. However, the general layout and location of the granaries remained unchanged.

During the second main phase of construction of the fortified complex, the eastern wall was reinforced with an additional, much thicker shell (M 2062a, see fig. 2b, Ost H1). This was apparently placed in front of the inner side of the older wall, in a similar manner to the town wall in the North-East town, although this reduced the usable area inside<sup>8</sup>. The reason for this was probably the same as for the town wall in the North-East town: the bedrock in the east slopes steeply in front of the older wall. Building the wall outside would have required a lot more work. For one thing, significantly more bricks would have been needed and a flood-proof foundation would also probably have had to be constructed.

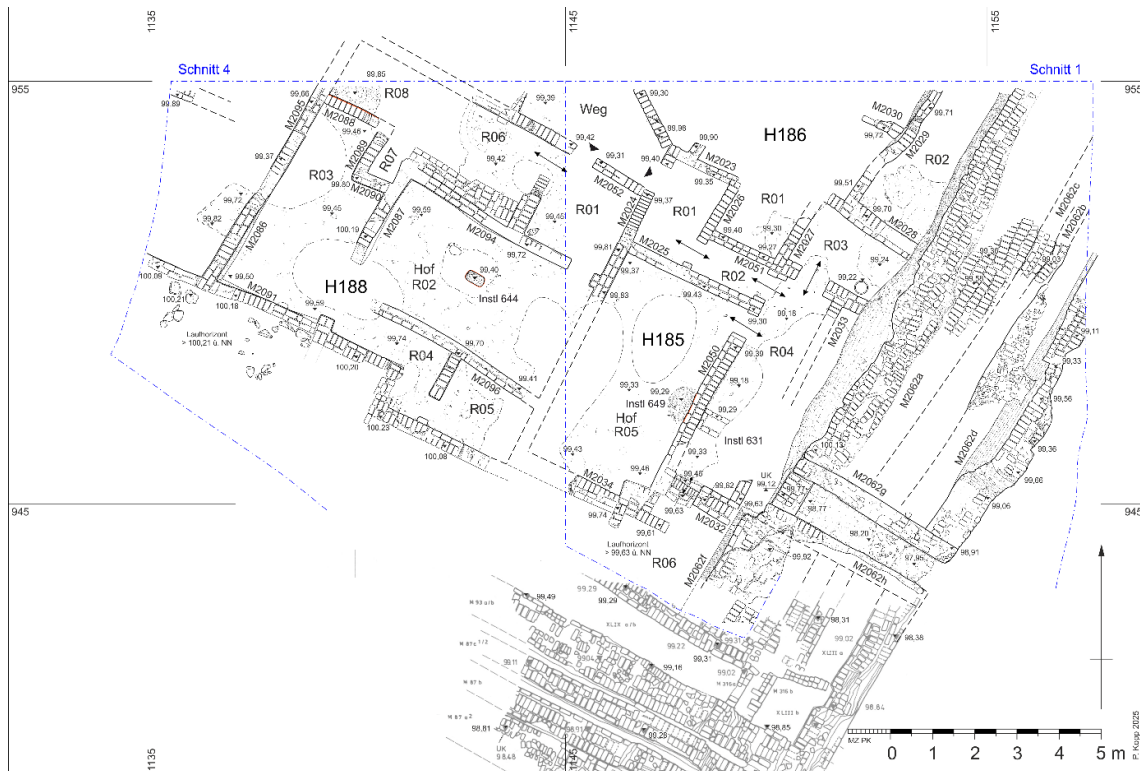


**Fig. 3:** Eastern flank of the fortified complex to the left with inner buildings (houses 187 and 191, trench 1, building layer Ost H2; photo: P. Kopp, © DAI Cairo)

Inside the complex, the general layout remained the same. In the northern part of the excavated area, the new building's layout changed little; the old walls served as foundations for the new house. Interestingly, however, the boundaries of the houses began to shift beyond the former wall M2123. Initially, only one room (R02) was added to southern house 187. Subsequently, two more rooms were taken from the northern house (H191) and added to the

<sup>8</sup> P. Kopp, *Grabung in der Nordoststadt*, in: Seidlmayer, *et al.* (2016), 202.

southern one (figs. 2c and 3; H187, R06 and R07). The area to the south of former wall M2123 is now much more densely built up (H187), but the partial utilisation of the area with up to three granaries in use simultaneously was retained. From here, a passageway to the east had now been broken through the outer wall, as could also be observed in the north-west corner of the complex.<sup>9</sup>



**Fig. 4:** South eastern corner of the fortified complex with inner buildings (houses 185, 186 and 188; trenches 1 and 4, building layer Ost G1; P. Kopp/M. Ziermann, © DAI Cairo)

The third main phase of the fortified complex was uncovered in trenches 1 and 4 (fig. 4). Now there are houses with courtyards and smaller rooms on both sides of a winding corridor leading from the centre of the complex to the eastern outer wall (houses 185, 186 and 188). Fireplaces and rectangular, small brick-framed storage devices have been found here. The houses extend right up to the enclosure wall, leaving no room for a passageway inside this wall. It is a small-scale urban development, as can also be found outside the complex. The passageway to the east through the outer wall was moved a few metres to the north.

In the centre of the court (R02) of house 188, there was an installation embedded in the floor (installation 644; figs. 4 and 5a). This was a rectangular fireplace, measuring 30 by 47 cm, with rounded corners. The side walls were coated in clay and vitrified. The upper end was not preserved, but the pit was still approximately 10 cm deep. There was a layer of charcoal pieces on the bottom.

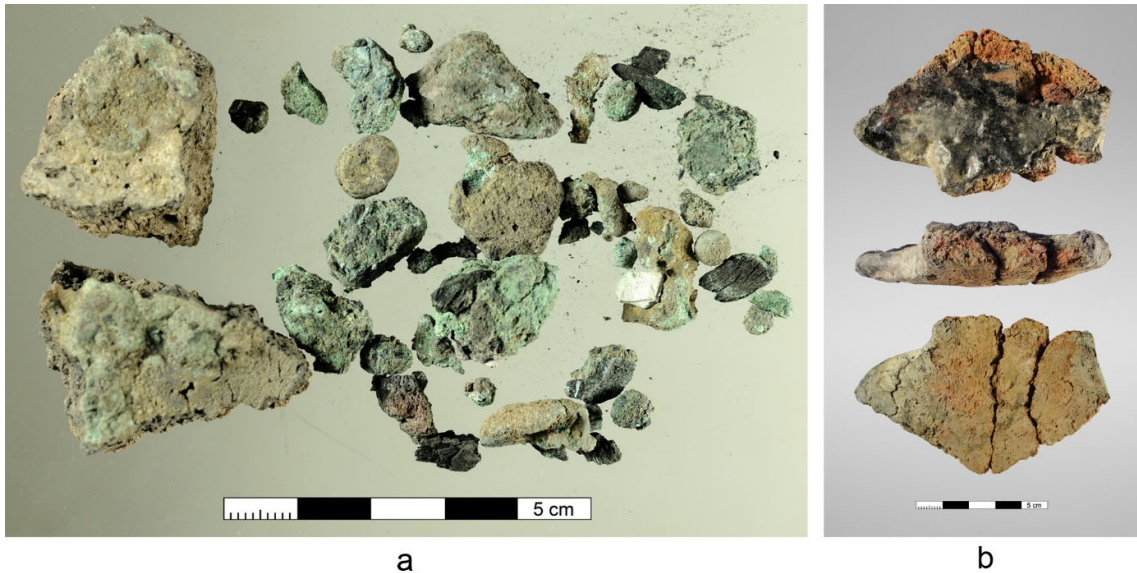
<sup>9</sup> Compare the passageways in the north next to tower A. Ziermann, *Elephantine XVI*, 66 and fig 26.





**Fig. 5:** a) Installation 644 in house 188, room 02; b) installation 643 (photos: P. Kopp, © DAI Cairo)

Another, very similar fireplace can be assigned to a building layer that was part of the subsequent use of the area after the abandonment of the fortified complex (fig. 5b).<sup>10</sup> This was also a rectangular pit with rounded corners and an interior measuring 70 x 38 cm. The interior had a layer of clay up to 5 cm thick containing chaff, but this had almost completely fallen away. The pit was lined with 18 vertical bricks made of slightly sandy clay and approximately 25 cm deep. Due to the heat, the upper half of these bricks ranged in colour from black to orange. The floor was not specially prepared and covered by a layer of charcoal pieces.



**Fig. 6:** a) Crucible fragments and metal pieces from installation 644 (find no. 53304N/a-3); b) crucible fragment (find no. 53301B/i-11; photos: P. Kopp, © DAI Cairo)

Small pieces of copper alloys and fragments of crucibles were found in or near both fire places (fig. 6a). The crucible fragments are pieces of greenish to black vitrified Nile clay pottery. A

<sup>10</sup> Late 2<sup>nd</sup>/early 3<sup>rd</sup> Dynasty.

larger crucible fragment was found in an ash layer in room 02 of house 187, showing that the vitrified layer is inside (fig. 6b).<sup>11</sup> It can be assumed that the fireplaces had a function in the manufacture of copper utensils such as awls, needles or fishhooks, which were also found here. Several large pieces of slag from this area can probably also be seen in this context. As copper alloys were not melted in furnaces, but by embers applied from above, these two fire places are possibly the places where the crucibles were placed and heated. This would provide some protection against uncontrolled wind and prevent the spread of hot charcoal and ash into the courtyard. The main source of heat for melting the metal would have come from above. For this purpose, glowing pieces of charcoal were placed on top of the metal and the embers were intensified by blowing with a blowpipe. Significantly, the bottoms of the pits are not vitrified, unlike the side walls. Such fire places are possibly not shown in illustrations because the crucibles are the more important element and could not be depicted or recognised from the side when standing within a pit.<sup>12</sup>



**Fig. 7:** Cylinder seal copy (find no. 53304G/o-1; photo: P. Kopp © DAI Cairo)

Another find, made of unfired clay, dates back to the period when the fortress was overbuilt with a representative building in the late 2<sup>nd</sup> or early 3<sup>rd</sup> Dynasty (fig. 7).<sup>13</sup> What initially appears to be the impression of a cylinder seal is actually an imprint of a piece of clay bearing a seal impression. Cylinder seals from the Early Dynastic Period have inscriptions in recessed relief, making the impression appear raised. In this case, however, the relief is recessed, as on

<sup>11</sup> For Egyptian crucibles see Claes, *et al.*, *JEA* 105 (2019), 29-42.

<sup>12</sup> Compare the depictions in Chr. Davy, 'Old Kingdom Metallurgy in Memphite Tomb Images', *OLA* 214, 85-107.

<sup>13</sup> House 183, see P. Kopp, 'Excavations in the Eastern Town', in: Sählhof, *et al.*, *Report on the 52nd Season*, 8-11.



an original seal, suggesting that it was taken from an imprint. As it is located all around a clay cylinder, it appears to be a copy of a cylinder seal.

(P. Kopp)

## **2.2 Additional Excavations in the Domestic Quarter South of the Khnum Temple (Area XXVIc)**

In the context of further construction work to reinforce the visitor paths on the antiquities site, a limited excavation was conducted south of the Temple of Khnum. It was carried out in preparation for the completion of the retaining wall that stabilizes the path to the gate of Amenhotep II on its western side. The aim of the investigation was to determine which features lay in the course of the wall in order to examine and document them before they have to be built over or removed for the retaining wall to be built next season (fig. 8).



**Fig. 8:** View on excavation area before cleaning (photo: C. von Pilgrim, © SIK)

The approximately 3m x 5m wide excavation area lies directly south-east of the Roman house K19 (fig. 9). From an archaeological point of view, this area is significant in that it provides a stratigraphic link between the two areas investigated in the 26<sup>th</sup> and 27<sup>th</sup> season below house K19 (Area XXVIb) and directly east of it (Area XXVIc).



Fig. 9: Excavation of silo 0595 (photo: C. von Pilgrim, © SIK)

The latter area was last investigated in 1997, during which a stratigraphic link was successfully established with House 6 of the Second Intermediate Period on the other side of the modern path in the domestic quarter south of the Khnum Temple (HGS).<sup>14</sup>

After clearing the area of recent excavation debris, a circular silo (0595) appeared in the centre of the excavation area, the eastern wall of which has already been destroyed by the activities of the sebbakhin. To the south, west and east of the silo, all ancient layers have already been destroyed down to a high granite ridge. The original diameter of the silo is 2.2 metres, the wall on the north side is preserved to a maximum height of 1.6 metres, on the other sides only half of this. After completing a sondage inside the silo the excavation area was extended by around four metres to the north, in order to link the silo stratigraphically to the sequence of residential buildings on the north side.

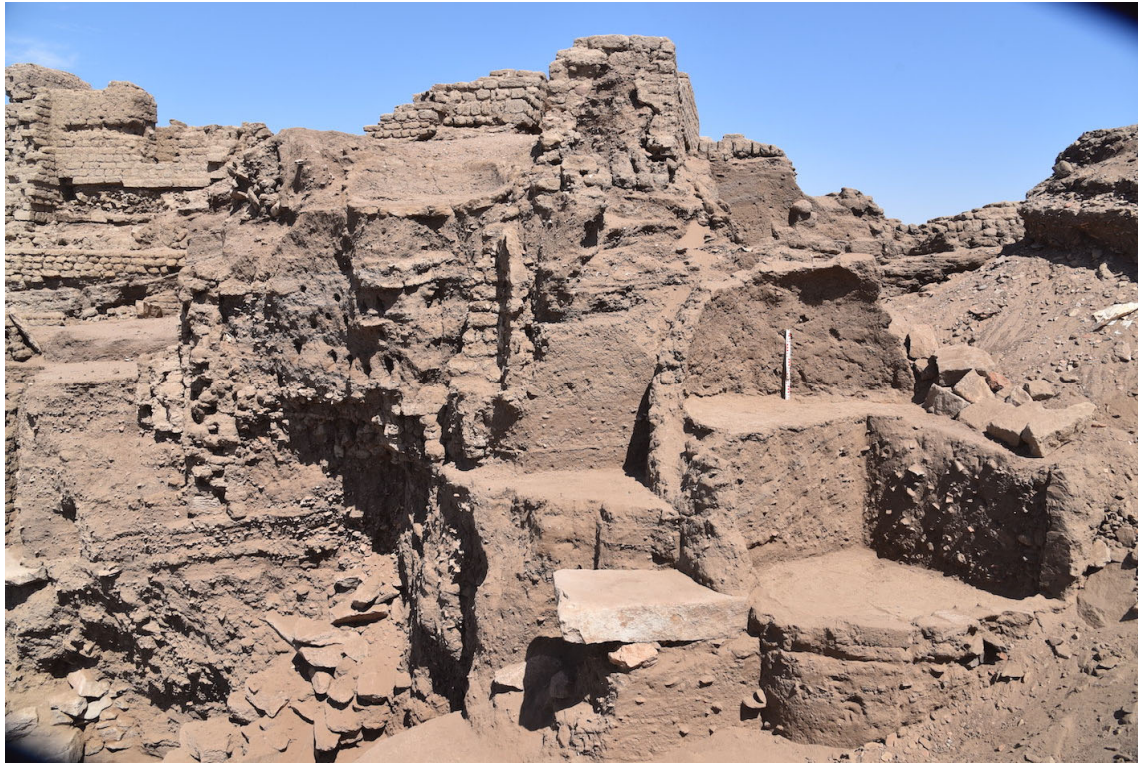
This revealed that the silo was once completely built into the floor of a house from the late Second Intermediate Period (building layer XI). It was a large house (H 206) that extended west of House 6 to a north-south street that ran above the former early town gate.<sup>15</sup> Whether the silo was built in the later phases of this house or only in a later house built above it can no

<sup>14</sup> On House 6 see von Pilgrim, *Elephantine* XVIII, 59-61.

<sup>15</sup> It is in this house that the sealing of a "Ruler of Kush" was found in an exterior ante-room that was added in front of the entrance of the house in the street running along its western side, see C. von Pilgrim, 'An Authentication Sealing of the "Ruler of Kush" from Elephantine', in Jiménez-Serrano and von Pilgrim, *From the Delta to the Cataract*, 218-226.



longer be determined with certainty. What is remarkable, however, is the fact that, according to the date of the pottery sherds in the filling, it was filled with a 0.8 m high layer of rubble in the time of Thutmose III and a new inner mud floor was made over it (fig. 10).



**Fig. 10:** Silo 0595 with raised floor above filling (photo: C. von Pilgrim, © SIK)

At least the later phase of the silo is therefore likely to belong to a house that was built in building layer X above House 6. However, only very sporadic small remains of walls and subterranean storage facilities have survived from this building layer of the 18<sup>th</sup> Dynasty in the neighbouring domestic area to the north and east. A small remnant of a mud floor just north of the silo proves that the floor level in the early 18th Dynasty in the house above House 206 was also about 0.8m to 1m higher, a difference that could have been compensated for by the raising of the silo floor.

The continued use of subterranean storage facilities over a long period of time is not unusual. A cellar that was built into House 55 during the time of Thutmose III, for example, was evidently used until the 3rd Intermediate Period and only filled up with drifting sand in the 25th Dynasty. The successively rising floor levels above was compensated for by raising the access shaft, which kept the storage opening accessible, a construction that may also be assumed in this case.

The silo 0595 was abandoned in or shortly after the Amarna period, when it was completely filled up with rubble.

(C. von Pilgrim)

## 2.3 Heritage Conservation and Site Management

Based on the site management concept for Elephantine developed in 2020, the measures for heritage conservation and site management continued in the 53<sup>rd</sup> season with special grants from the Cultural Heritage Programme by the German Federal Foreign Office.<sup>16</sup> The focus was on cleaning and conservation measures at the Temple of Satet from the 12<sup>th</sup> Dynasty (reign of Sesostri I), the maintenance of reconstructed mastaba-tombs in the Old Kingdom necropolis, and the continuation of measures to improve visitor routing and circulation.

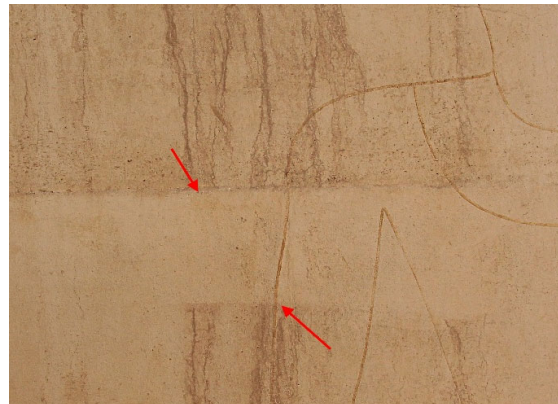
The Swiss Institute continued the consolidation of House 55, as well as a clean up of the site of the reconstructed Temple of Osiris-Nesmeti, followed by a comprehensive photographic documentation of this building using Structure-from Motion/SfM methods.

(M. Sählhof)

### 2.3.1 Conservation of the Temple of Satet (Reign of Sesostri I)

The reconstructed Temple of Satet, dating to the reign of Sesostri I (12<sup>th</sup> Dynasty),<sup>17</sup> was partially cleaned and consolidated by conservator E. Peintner between 9/10/2024 and 17/10/2024.

Following the heavy rainfall in 2021, a slurry of sediment was deposited over the original stone surfaces, resulting in widespread soiling (fig. 11).<sup>18</sup> The deterioration of the walls was further exacerbated by accumulations of bat and bird droppings, which affected the entire surface. Several reconstructed interior walls – particularly those featuring supplementary line drawings – displayed significant bleaching, leaving the contours faint and, in some instances, nearly illegible. Additionally, runoff carried films of dirt across the surfaces, contributing further to their obscuration.



**Fig. 11:** Dirt sludge on the interior walls, red arrows indicate the cleaning sample  
(photo: E. Peintner, © DAI Cairo)

<sup>16</sup> For measures applied during previous seasons see M. Sählhof, 'Heritage Conservation and Site Management', in: Sählhof, *et al.*, *Report on the 52nd Season*, 19-22; O. Kassab and M. Sählhof, 'Heritage Conservation of the Heqaib-Sanctuary', in: Sählhof, *et al.*, *Report on the 52nd Season*, 23-25; E. Peintner, 'Conservation of the 18th Dynasty Temple of Satet', in: Sählhof, *et al.*, *Report on the 52nd Season*, 25-29; A. Krekeler, O. Kassab and M. Sählhof, 'Consolidation of mud-brick buildings in the Western Town', in: Sählhof, *et al.*, *Report on the 52nd Season*, 29-33; M. Sählhof and O. Kassab, 'Heritage Conservation and Site Management', in: Sählhof, *et al.*, *Report on the 51st Season*, 7-9; M. Sählhof and O. Kassab, 'Heritage Conservation and Site Management', in: Sählhof, *et al.*, *Report on the 50th Season*, 12-19; M. Sählhof, 'Site Management Concept', in: Sählhof, *et al.*, *Report on the 49th Season*, 9-11.

<sup>17</sup> On the reconstruction of the temple, see W. Kaiser, 'Zur Rekonstruktion des Satettempels der 12. Dynastie', in Kaiser, *et al.*, *MDAIK* 44 (1988), 152-157.

<sup>18</sup> M. Sählhof and O. Kassab, 'Heritage Conservation and Site Management', in: Sählhof, *et al.*, *Report on the 50th Season*, 12-15.





**Fig. 12:** Room B, wall A before cleaning (photo: E. Peintner, © DAI Cairo)



**Fig. 13:** Room B, wall A after cleaning and repaired reconstruction drawings (photo: E. Peintner, © DAI Cairo)

Prior to treatment, all affected areas were systematically documented through high-resolution photography. After In Room B, on Wall 8, secondary sediment deposits were mechanically reduced using Akapad sponges. Encrustations and localized salt efflorescence were removed using polyurethane sponges or cotton swabs dampened with a solution of ethyl alcohol and distilled water. In areas requiring greater precision, scalpels were employed. Where necessary, painted surfaces were temporarily protected using Klucel E and methyl cellulose derivatives.

Loose mortar at the wall summit was carefully removed, and the exposed brick substrate was cleaned. A new mortar layer was applied with a slight outward slope to facilitate water runoff, thereby reducing the risk of future water infiltration and protecting both original reliefs and reconstructed wall surfaces.

On Wall 8, reconstruction drawings were transferred using tracing paper. Severely bleached areas were treated with a thin application of lime-based whitewash, pre-toned to visually integrate with the original wall surface. The reconstructed reliefs were then retraced, and contours were reinstated using ochre pigment applied with a fine line brush (figs. 12 and 13).

(E. Peintner)

### **2.3.2 Maintenance of Mastaba-Reconstructions**

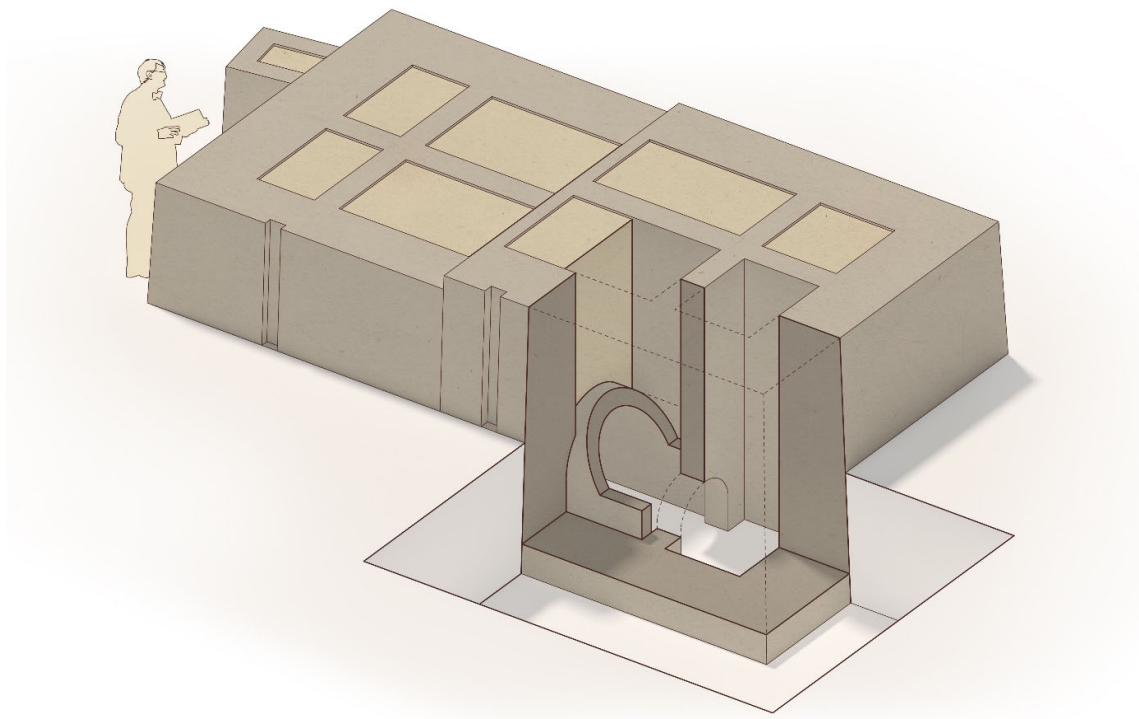
The necropolis in the North-West Town of Elephantine was excavated between 1979 and 1982, uncovering tombs dating to the Old and Middle Kingdoms.<sup>19</sup> Each tomb comprised a burial substructure – consisting of a vertical shaft and a burial chamber – and an associated superstructure in the form of a mud-brick mastaba (fig. 14).

While the substructures were well preserved, the mastaba superstructures had mostly disappeared, with only fragmentary remains surviving. Both components were originally constructed from mud-brick; the superstructures were additionally coated with plaster and finished with a whitewash. The identification of white-rendered mud-brick mastabas represents a significant outcome of the excavation. It suggests that in the provincial cemetery at Elephantine, local builders used simple materials to imitate the more elaborate stone mastabas found in the royal cemeteries of the Memphite region.

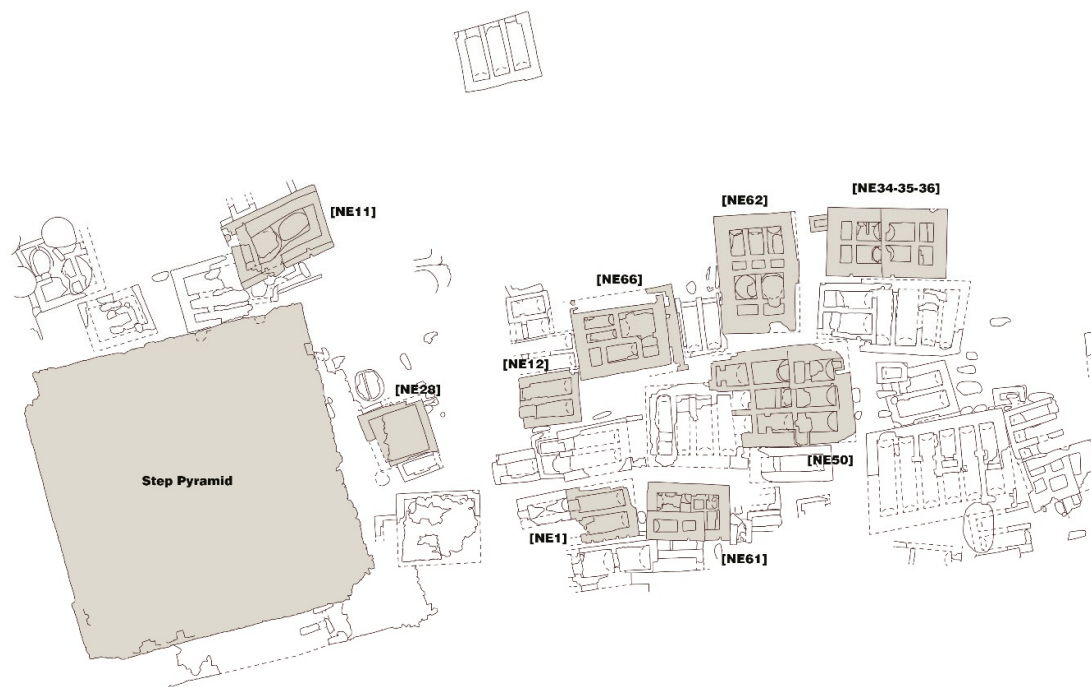
Following the excavations, the tombs were backfilled. However, portions of the tomb structures remained exposed and vulnerable to deterioration caused by wind erosion, atmospheric moisture, intermittent rainfall, as well as human and animal activities.

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<sup>19</sup> St. J. Seidlmayer, 'Nekropole, Keramikwerkstatt und königliche Anlage in der Nordweststadt', in Kaiser, *et al.*, *MDAIK* 38 (1982), 284-306; St. J. Seidlmayer, 'Nordweststadt: Friedhof', in Kaiser, *et al.*, *MDAIK* 36 (1980), 280-289.



**Fig. 14:** Reconstruction drawing of tomb NE 34-35-36 (O. Kassab, © DAI Cairo)



**Fig. 15:** Site plan of the necropolis highlighting the 2002 reconstructed mastabas in grey (O. Kassab, © DAI Cairo)





**Fig. 16:** Mastaba reconstruction NE 34-35-36 before maintenance (photo: O. Kassab, © DAI Cairo)



**Fig. 17:** Mastaba-reconstructions NE 50 (left) and NE 34-35-36 (right) after maintenance (photo: M. Sählhof, © DAI Cairo)

In 2002, nine of the mastaba superstructures (fig. 15: NE1, NE11, NE12, NE28, NE34-36, NE50, NE61, NE62, NE66) were reconstructed with two primary objectives: to ensure the long-term preservation of the architectural remains for future generations and to present the tombs' significant features in a clear and comprehensible manner to visitors of the Elephantine archaeological site. To achieve these aims, surviving sections of the superstructures were consolidated using mud-bricks, and the mastabas were partially reconstructed to varying heights based on archaeological evidence. In order to convey their original appearance, the reconstructed mud-brick walls were coated with mud mortar and subsequently whitewashed. Importantly, this white rendering was applied exclusively to reconstructed elements; no original architectural fabric was treated in this manner. These reconstructions have since become an integral part of the archaeological landscape at Elephantine and have remained so for over two decades.

The heavy rainfall in November 2021 led to accelerated erosion of the reconstructed surfaces of the mastabas (fig. 16). In addition, the two-layer plaster used 2002 in the mastaba reconstructions unintentionally encouraged vandalism, as visitors often carved their names into the white finishing layer. In autumn 2024, maintenance measures were undertaken to repair the reconstructed mastabas. As part of this intervention, damaged and rain-eroded surfaces were replastered in accordance with archaeological evidence concerning the historic appearance of the structures, using a multi-layer plastering system consisting of four successive coats (fig. 18).

Layer	Composition	Notes
1 Base Mud Coat	1 part mud (rinsed multiple times to reduce salt content) 0.25 part fiber Minimal water	Applied directly to prepared surface Water added only to achieve workable consistency and minimize shrinkage
2 First Lime Coat	2 parts sand (sifted through 4 mm sieve) 1 part hydrated lime (sifted through 4 mm sieve) 0.25 part fiber	Applied while base coat is still moist, pressing lime into the mud Promotes adhesion between mud and lime layers
3 Second Lime Coat	2 parts sand (sifted through 2 mm sieve) 1 part hydrated lime (sifted through 2 mm sieve)	Applied while first lime coat is still moist Surface kept moist during drying to support carbonation; covered with damp blankets and intermittently sprayed
4 Finish Coat	1 part lime putty 4 parts water	Applied after second lime coat is completely dry Final thin wash to unify and protect surface

**Fig. 18:** Recipes and application methods of plasters used for maintenance (O. Kassab, © DAI Cairo)

The newly applied plaster coating improves resistance to rain and wind erosion (fig. 17). In addition, its multi-layer structure offers enhanced protection against vandalism, as the robust composition makes it more difficult to scratch names or inscriptions into the surfaces. The measures applied during maintenance adhere to internationally recognized standards for the conservation and preservation of mud-brick architecture, in accordance with ICOMOS guidelines.

(O. Kassab and M. Sählhof)

### 2.3.3 General Maintenance of the Site, Visitor's Infrastructure and Circulation

#### Relocation of Foundation Blocks of the 18th Dynasty Temple of Satet

As part of the reorganisation of the open-air museum, a total of 56 foundation blocks of the Satet Temple from the 18th Dynasty were relocated in February 2025. These undecorated blocks had been stored in the immediate vicinity of the temple foundation exhibition. Their placement next to reconstructed houses obstructed both access to these structures and the display of architectural elements next to House 85 (fig. 19).



**Fig. 19:** Randomly stored blocks before relocation, blocking the exhibited architectural elements (columns, door jambs and lintels to the right) of Middle and New Kingdom houses (photo: M. Sählhof, © DAI Cairo)



The blocks were moved to a cleared area in the necropolis within the Northwest Town. Until autumn 2024, this area had been occupied by lapidaria, whose stone materials had since been fully transferred to find magazines. The area was thoroughly cleared of vegetation and bushes prior to the relocation. The blocks forming the uppermost foundation layer of the temple were not affected by this measure and remain in place as part of the open-air museum display. Following the clearance of the Satet foundation blocks in the open-air museum, the installation of the new fencing system, which began in the previous season,<sup>20</sup> was extended from House 70 to House 85.

(M. Sählhof)

### Measures in the Heqaib Street near House 95

In autumn 2024, a series of conservation and construction measures were undertaken in the area of Heqaib Street near House 95. The previously used visitor path, which passed along the south-western corner of House 95, was closed following the completion of a new staircase leading past the Heqaib sanctuary in late 2023 (fig. 20).<sup>21</sup> This earlier path was replaced by a reconstruction of the outer walls of House 95, so that access to Heqaib Street now occurs exclusively via the new stairway.



**Fig. 20:** Heqaib Street looking south from top of the new staircase installed in autumn 2023, the old visitor's path giving access to the ancient town via House 95 is on the right (photo: M. Sählhof, © DAI Cairo)

<sup>20</sup> M. Sählhof, 'Visitor's Infrastructure and Circulation', in: Sählhof, *et al.*, *Report on the 52nd Season*, 20-21.

<sup>21</sup> M. Sählhof, 'Visitor's Infrastructure and Circulation', in: Sählhof, *et al.*, *Report on the 52nd Season*, 20.

As part of the works, the south-western corner of House 95 was exposed and reconstructed according to archaeological evidence (walls M58 and M426) using newly produced mudbricks (approx. 30 × 15 × 9 cm), based on the dimensions of the ancient bricks.<sup>22</sup> A layer of pottery sherds set in mud mortar was inserted between the ancient masonry and the modern reconstruction to clearly mark the distinction between original and new material. The reconstructed mudbrick wall also serves to protect the underlying ancient fabric (fig. 21).

At the same time, the existing modern rubble-stone retaining wall on the western side of Heqaib-Street required repairs at several points and was extended towards House 95. The terrain at the entrance and exit of the new stairway was levelled using fill material to ensure a smooth transition (fig. 21).



**Fig. 21:** House 95 with closed corner of walls M58 and M426 in mud-brick masonry, the existing rubble stone wall is extended to from an upper terrace on the level of the open-air-museum (photo: M. Tschofen, © DAI Cairo)

Repairs to the existing rubble-stone wall were limited to minor interventions, such as reinserting dislodged stones or adjusting uneven wall tops. In addition, a new rubble-stone wall was constructed along the alignment of the existing wall, running between the mudbrick walls of Houses 95 and 97 and a further mudbrick wall located outside House 95. The building material used for this consisted of unworked rubble stones recovered from earlier

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<sup>22</sup> For House 95 see von Pilgrim, *Elephantine* XVIII, 148 and fig.59.



excavations. Although no undocumented ancient structures were expected in the relevant stratigraphic layers, the area was carefully examined on site prior to construction.

Finally, existing low rubble-stone walls within the open-air museum were also maintained, repaired and stabilised.

(M. Tschofen and M. Sählhof)

### 2.3.5 Consolidation of House 55

House 55 is the last building along the northern part of the central main street which had been fully excavated in former seasons.<sup>23</sup> It is a terraced house built in the 2<sup>nd</sup> Intermediate Period after the Sanctuary of Heqaib located north of it had been already abandoned and filled up. In the final phase of the House, two rooms at the back had been separated off and integrated into a newly built small house (H132) up the slope. This house had already been consolidated and partly reconstructed last season after the entire house had been backfilled up to the latest building phase.<sup>24</sup>



**Fig. 22:** Line of inserted sherds to mark the separation of ancient and modern brickwork (photo: C. von Pilgrim, © SIK)

<sup>23</sup> C. von Pilgrim, 'House 55: A workshop of the late 17<sup>th</sup> and early 18<sup>th</sup> Dynasty (Area VIII)', in: Sigl, *et al.*, *Report on the 46th Season*, 27-35.

<sup>24</sup> C. von Pilgrim, 'Khnum Temple Area and House 55', in: Sählhof, *et al.*, *Report on the 52<sup>nd</sup> Season*, 33-35.

This season, the walls of the western rooms of House 55 were consolidated and built up with several layers of new mud bricks to protect them from decay and erosion. The separation of ancient and modern brickwork was marked by a line of inserted pottery sherds (fig. 22). As a result, the terracing levels of this part of the domestic quarters with terraced houses become now clearly visible to visitors (fig. 23). House 55 is the only fully excavated house of the 18<sup>th</sup> Dynasty (and entire New Kingdom) on the site and complements the previous presentation of residential buildings from older and later periods in the urban area.



**Fig. 23:** Overview on Houses 55 and 132 (photo: C. von Pilgrim, © SIK)

All that remains to be done next season is to reinstall the large original stone threshold and to repair or add to the mud-brick door jambs.

(C. von Pilgrim)

### **2.3.6 Reconstruction of the Temple of Osiris-Nesmeti**

Following the completion of the anastylosis of the Nesmeti temple south of the antiquities area in spring 2024,<sup>25</sup> the temple site was now further cleaned, and the remaining gravel and sand removed from the former construction site.

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<sup>25</sup> C. von Pilgrim, 'Reconstruction of the Nesmeti Temple outside the ancient town, in: Sählhof, *et al.*, *Report on the 52<sup>nd</sup> Season*, 35-40.



The remaining blocks, which could be safely assigned to the temple but whose exact position cannot be determined, were then moved from the previous storage site next to the pyramid to the temple's new location. This involved a total of 41 blocks, including fragments of roof beams, thresholds, undecorated wall blocks, lintels and an unfinished cavetto cornice. They have been arranged to the west of the temple in a lapidarium, where visitors and colleagues will now be able to view details of the stonework.

(C. von Pilgrim)

### **Documentation of the Temple of Osiris-Nesmeti**

The documentation of the rebuilt temple was completed with comprehensive photographic documentation in order to generate a photorealistic 3D model of the temple together with orthophotos of the individual walls (fig. 24). A Sony a7 mark II camera with a SEL28F20 f=28mm prime lens and an aspherical super wide Viogtlander f=15mm were used to take the photographs. The use of a super wide lens minimised tonal differences between individual photographs, which significantly improved the quality of the final result. Photographs of the surface at the top of the temple were taken using a monopod with simultaneous live preview of the recorded frame to ensure proper coverage of the images. The photographs were taken sequentially for each wall of the temple in optimal lighting conditions. The interior of the temple was photographed in shaded or diffused light. In order to maintain adequate coverage and to ensure that the temple could be modelled by the software, additional photographs were taken every day, covering to a large extent the areas already photographed. This allowed for consistency between the individual sets of photographs.



**Fig. 24:** Shaded 3D model (R. Łopaciuk, © SIK)



**Fig.25:** Tiled 3D model of fragment Y414 (R. Łopaciuk, © SIK)

In addition, photographs were taken of loose blocks and fragments attributed to the temple which are stored in the magazine (fragment nos. YE22, Y853, Y508, Y693, Y425, Y414/E25, Y663, Y416, Y742, YE11, E21, Y851, Y757, Y740, Y812/Y824) and two larger blocks located in the lapidary (fig. 25). All blocks and fragments were measured, which will allow the 3D models to be calibrated and scaled accordingly. The calibration of individual blocks was performed based on direct measurement of the distance between characteristic decorative elements.

(R. Łopaciuk)

## 2.5 Documentation of the Reconstructed Ptolemaic Temple of Kalabsha

Fragments of the Ptolemaic temple of the god Mandulis at Kalabsha, along with the decorated gateway of its *temenos*, were uncovered during the dismantling operations that preceded the relocation of the later Roman temple dedicated to the same deity. The Roman sanctuary, constructed under the reign of Emperor Augustus had incorporated elements of the earlier structure as reused building material. These remains of the Ptolemaic temple, subsequently subjected to detailed Egyptological and architectural analysis by Erich Winter and Dieter Arnold, were transferred to the island of Elephantine. There, they formed the foundation for a scholarly reconstruction of the original sanctuary at the island's southern extremity. This reconstruction project, led by G.R.H. Wright, was complemented by the curation of an exhibition showcasing architectural fragments originating from the annexed chambers of the sanctuary.<sup>26</sup> Longstanding studies of the Ptolemaic structure by Ewa Laskowska-Kusztal served, among other purposes, to supplement the completed reconstruction, propose corrections to it, verify erroneous hypotheses concerning the dating of the original

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<sup>26</sup> Wright, *Kalabsha* III.

sanctuary,<sup>27</sup> and, in collaboration with Simone Schönenberger, to attempt a reconstruction of the layout of the annexed halls. A significant element of the undertaken research was the interpretation of the decoration program of the structure, dated to the reign of Ptolemy IX Soter II and later supplemented by Augustus. The aim was to define the identity and provenance of Mandulis,<sup>28</sup> as well as to establish connections with other religious centers.<sup>29</sup>

As part of the final phase of preparations for the publication of the Ptolemaic temple from Kalabsha, photographic documentation was carried out in autumn 2024 by the geodesist Roman Łopaciuk in order to generate a photorealistic 3D model of the reconstructed temple using Structure-from-Motion (SfM) technology (fig. 26) together with orthophotos of the individual walls. At the same time, 3D models of all sandstone blocks located within the existing exhibition area of the reconstructed Kalabsha temple were inventoried, and orthophotos were generated.<sup>30</sup>



**Fig. 26:** 3D model of the Ptolemaic sanctuary of Mandulis (photo: R. Łopaciuk, © DAI Cairo).

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<sup>27</sup> Laskowska-Kusztal, 'Ergamenes II in the Ptolemaic Temple of Kalabsha' in: Jucha, *et al.*, *Aegyptus est imago caeli*, 273-279.

<sup>28</sup> Laskowska-Kusztal, 'Mandulis on a block from the Ptolemaic temple at Kalabsha', *MDAIK* 70/71 (2014/2015), 309-316; Laskowska-Kusztal, 'Comprehending text – appreciating image. Text and image synergy in research on the remains of the Roman temple of Osiris Nesmeti on Elephantine and the Ptolemaic temple of Mandulis in Kalabsha' in: Beinlich, *KSG* 3,7 (2021), 149-174.

<sup>29</sup> Laskowska-Kusztal, 'The relation between the cult centre of Mandulis at Kalabsha and the religious centres on Elephantine and Philae' in: Dolińska and Beinlich, *KSG* 3,3 (2010), 111-122.

<sup>30</sup> Kraus, *Photogrammetry*.

This documentation fulfills several key objectives. Firstly, it enables the verification of the earlier drawn documentation – produced years ago using the facsimile technique – by significantly enhancing the legibility of the temple’s decorative program. This is achieved through the recording of all block surfaces as three-dimensional models that accurately capture the relief structures. Secondly, it provides empirical support for the proposed corrections and additions to the sanctuary’s reconstruction, thereby reinforcing the validity of these interpretative interventions. Finally, the documentation contributes to a deeper architectural understanding of the annexed halls, as evidenced by the analysis of sandstone blocks currently exhibited in front of the reconstructed sanctuary.

Although Dieter Arnold, one of the contributors to the reconstruction, expressed a cautious opinion: *“Of the chapel belonging to it only about a quarter survives (120 blocks). This made it impossible to reconstruct the original building. All that could be done was a coordination of the blocks associated in such a way as to be somewhat comparable to the original”*.<sup>31</sup> An analysis of this reconstruction suggests the incorrect placement of only a few blocks.

The orthophoto documentation, which enables the precise and reliable repositioning of architectural blocks within a revised contextual framework, provides critical support for these hypotheses. Specifically, they pertain to a limited number of elements: one block originating from the interior of the *cella*, bearing decoration attributed to the reign of Ptolemy IX Soter II (fig. 27); a single block from the exterior western façade of the reconstructed temple, featuring iconography associated with the reign of Augustus; and minor adjustments concerning the sequence of the Nile procession represented on the lower courses of both the western and eastern walls.



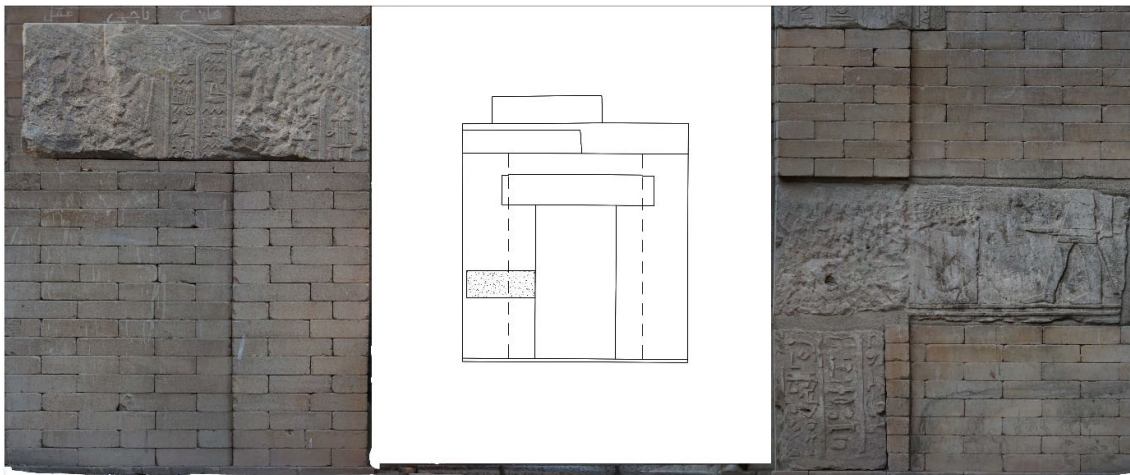
**Fig. 27:** Correction of the decoration of the eastern wall of the reconstructed sanctuary (photo: R. Łopaciuk, © DAI Cairo).

Of particular significance is the orthophotograph of the sanctuary’s entrance façade, which plays a crucial role in enabling the integration, on the eastern side of the doorway, of a previously unincorporated block depicting an armed deity belonging to the group of protective gods (fig. 28). The reconstructed decoration of this wall holds special importance, as it is echoed in the iconographic program of the Roman temple of Mandulis constructed

<sup>31</sup> Arnold, *Die Tempel von Kalabsha*.



under Augustus, thereby underscoring a visual and thematic continuity between the Ptolemaic and Roman phases of the sanctuary's development.<sup>32</sup>



**Fig. 28:** Supplementation of the decoration of the southern interior façade of the reconstructed sanctuary (photo: Roman Łopaciuk, © DAI Cairo).



**Fig. 29:** Preliminary correction and supplementation of the added decoration on the external façade of the original sanctuary following its expansion (photo: R. Łopaciuk, © DAI Cairo).

The orthophotographic documentation also serves as a critical instrument in substantiating the hypothesis that the structure reconstructed on Elephantine represents the earliest sanctuary dedicated to Mandulis. This original core was subsequently expanded by Ptolemy IX Soter II, the principal patron of its decorative program, who may or may not have been responsible for its initial construction. Evidence clarifying the chronological sequence of these architectural phases is preserved in the raised relief decoration adorning the angled façade, originally functioning as the external front of the early sanctuary. Orthophoto-based verification of the proposal to integrate a key block into the southern exterior wall of the reconstructed sanctuary, distinguished by clear indications of its origin in the earlier,

<sup>32</sup> Gauthier, *Le temple de Kalabchah* I, 6-8.

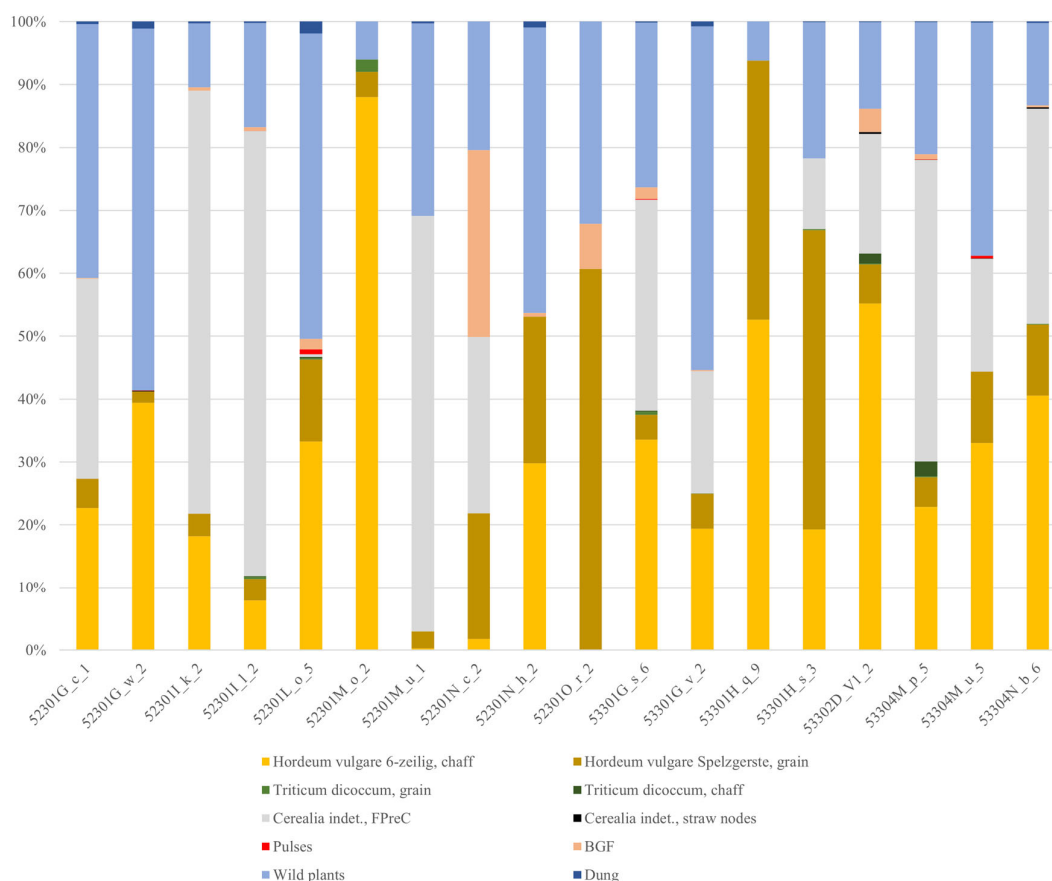
undecorated façade, provides valuable insight into the construction techniques employed during Ptolemy IX Soter II's expansion of the monument (fig. 29). The orthophoto documentation will replace the analog documentation previously prepared for publication purposes.

(E. Laskowska-Kusztal)

### 3. Study of Objects

#### 3.1 Archaeobotanical Material Analysis

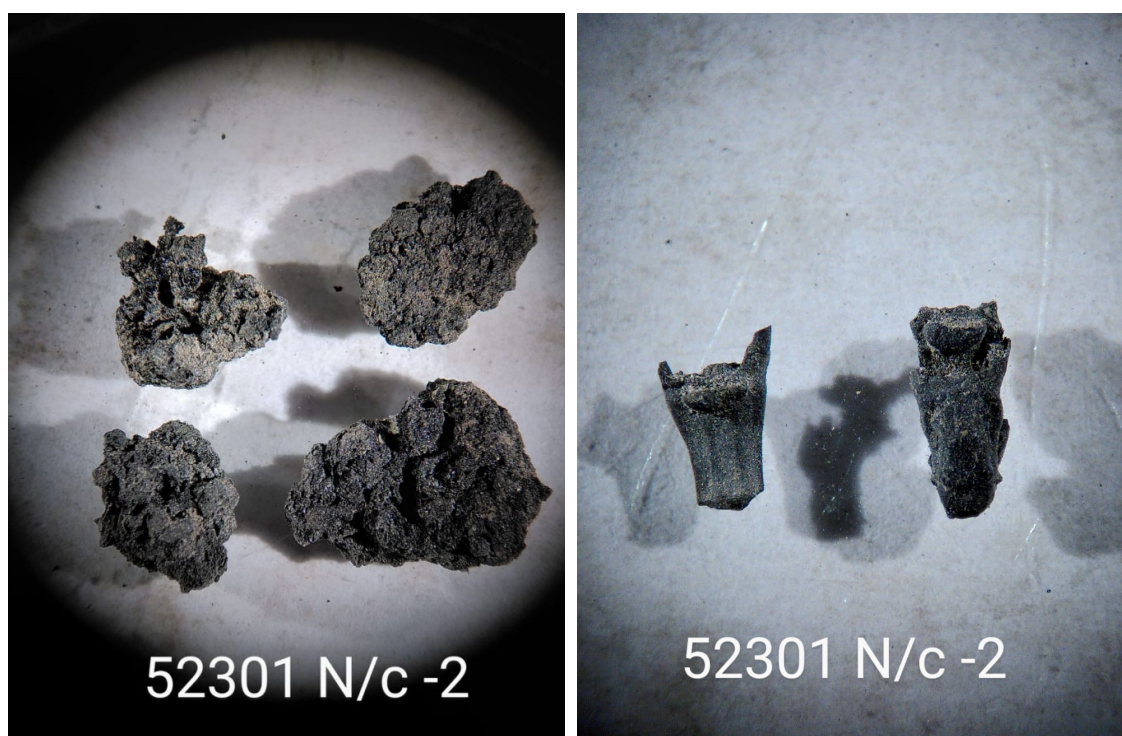
During the 53rd season, the archaeobotanical work in parallel to the excavations of the Eastern Town allowed the dry-sieving (with sieves of 2 and 0,5 mm) of 18 samples of ca. 6 L of volume in average. All of the samples were of ashy nature and greyish in colour. The samples only contained charred remains, but they were rich, with an average density of finds of ca. 300r/L. The 0,5mm fraction was systematically subsampled with a sample splitter. Relatively abundant remains of (often calcined) fish and mammal bones were encountered. Seed and fruit remains were sorted and identified, and the data was entered into the archaeobotanical database in Access called ArboDat.



**Fig. 30:** Proportions among the main groups of seed/fruit remains found in the sediment samples of the Eastern Town (diagram: F. Antolín, © DAI Cairo)

Barley was present in all samples (fig. 30), particularly chaff, which was often 25% or more of the botanical assemblage. Grain fragments produced prior to charring were also very abundant in some samples, occasionally becoming the most abundant find. The presence of other cereals is low and it is mainly reduced to a small number of grains and glume bases of emmer. Pulses were also rare, yet grass pea, pea, lentil and fava bean were identified.

Wild plants were often numerous in the samples. *Acacia* sp. was represented either by its flower buds, fruits and seeds, or its thorns and wood charcoal in all samples. *Festuca/Lolium* and *Phalaris* were equally abundant and frequent. Likewise, *Trifolium*-type plants were also very common.



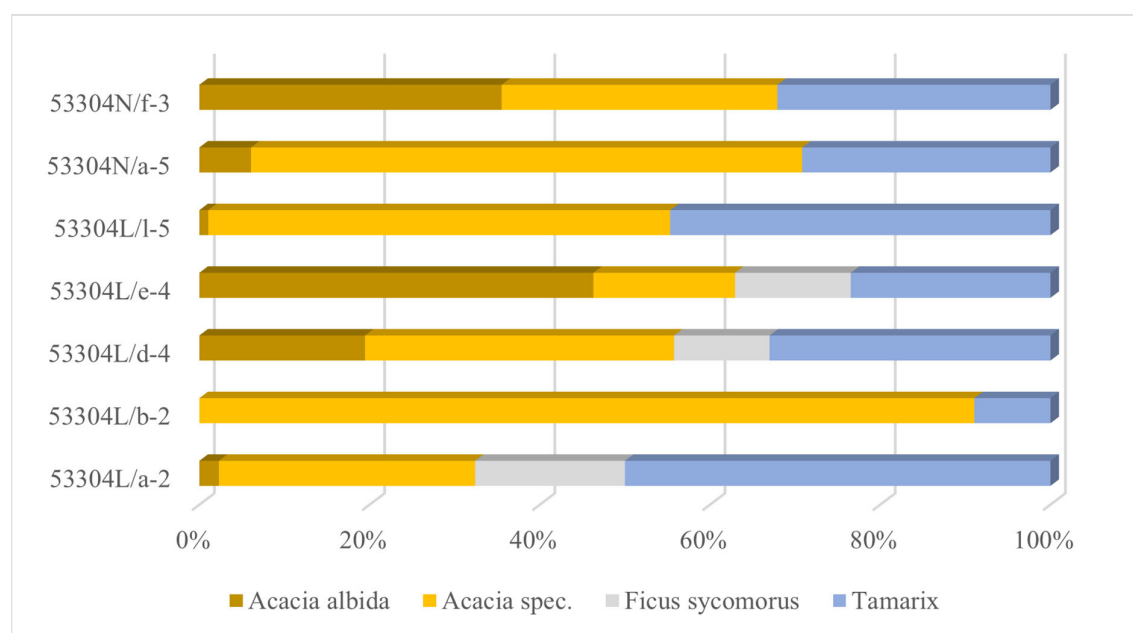
**Fig. 31:** (a, left) remains of amorphous charred objects and (b, right) rachis (chaff) remains of barley (photos: F. Antolín, © DAI Cairo)

Charred dung was abundant in most of the samples and we cannot discard the possibility that most of the remains recovered arrived to the site due to the use of sheep/goat dung as fuel. The preservation of the plant macroremains is very good (fig. 31a), which also points towards low charring temperatures (typical of dung fuel). Nevertheless, the abundant presence of cereal fragments produced prior to charring (a sort of *bulgur* production) and of potential charred food remains (fig. 31b) would lead us to suggest that the ashy deposits respond to multiple activities including cooking food. The abundant presence of chaff remains and potential weeds such as *Lolium/Festuca* are potential good indicators that fields were kept on the island or nearby and that animals were fed with crop processing by products (straw, chaff and field weeds) and potentially with additional plants such as *Acacia* sp. and *Trifolium* sp.

The seven charcoal samples retrieved from various contexts in the Eastern Town indicate that most of the identified wood derives from tree species that either grew naturally on

Elephantine or are typical of the riparian vegetation along the Nile, particularly in gallery forests. The samples varied considerably in size, ranging from 5 gr to 430 gr in weight, and contained between 12 and 642 charcoal fragments.

The identified taxa include white acacia (*Acacia albida*), other acacia species (*Acacia spec.*), most likely predominantly Nile acacia (*Acacia nilotica*) — as suggested by the frequent occurrence of seeds and pod fragments of this species in the assemblage — as well as tamarisk (*Tamarix sp.*) and sycamore fig (*Ficus sycomorus*). Acacia and tamarisk were present in every sample (fig. 32), indicating their primary role as fuelwood or construction material during the Early Dynastic period on the island.



**Fig. 32:** Proportion of wood taxa among charcoal fragments in the Eastern Town per sample (diagram: J. Izak, © DAI Cairo)

A notable outlier is sample no. 53304N/f-3, which consisted to 94% of twigs and small branches, in contrast to the other samples that contained only charcoal fragments. Of these twigs, 97% were identified as *Acacia albida*, while the remaining 3% were evenly split between *Acacia spec.* and *Tamarix sp.* This dominance of *Acacia albida* may point to a targeted collection of young branches from a specific stand or grove, possibly for kindling or fast-burning fuel. Alternatively, it could reflect pruning activities involving this species.

(F. Antolín and J. Izak)

### 3.2 Flora Urbis: Investigating the Socio-Cultural Role of Plants in Urban Contexts

As part of the long-term archaeological research on Elephantine, a new PhD project was initiated by Jessica Izak at the University of Leipzig, in cooperation with the German



Archaeological Institute in Cairo and Berlin. The project examines the socio-cultural role of plant remains in the urban context of ancient Elephantine, focusing not only on economic or ecological aspects, but on how plants were embedded in daily practices, infrastructure, ritual, and social distinction.

The research centres on four domains: construction, food provision, ritual activity, and status. It combines archaeobotanical analysis with contextual interpretation to contribute to broader debates on material agency and urban resource dynamics. In the previous season, a pilot project on mudbrick composition was initiated. Six mudbricks, six mortar, and seven plaster samples were examined to assess their organic and inorganic inclusions. The study aimed to better understand functional differentiation in earthen construction materials.<sup>33</sup>

During the 53<sup>rd</sup> season, this line of investigation was significantly expanded. A larger set of 34 mudbrick samples was analysed, with a focus on diachronic and functional comparison. The analysed material stems from various architectural contexts, including domestic buildings, temple structures, and segments of the city wall. Where preservation allowed, additional samples of mortar, plaster, and floor coatings were also examined. The study seeks to identify patterns in raw material composition and variation across different construction types and time periods. These differences may reflect changes in resource availability, construction logistics, and economic organization. Furthermore, particular attention is given to the sourcing and preparation of plant-based temper and its possible relation to local resource management or secondary use (e.g. dung, refuse, recycled bricks).

All samples were processed on site and prepared for further microscopic analysis. The results of this extended study will be integrated into the broader framework of *Flora urbis* and made available through future publications. The data is expected to provide important insights into material choices and plant use strategies within the architectural fabric of ancient Elephantine.

(J. Izak)

### 3.3 Work on Temple Blocks of Psametik II

In the working seasons between 2002 and 2013, around 160 blocks of a small temple from the time of Psametik II were recovered from the foundations of the Ptolemaic pronaos in the Temple of Khnum.<sup>34</sup> In addition, there are about 200 smaller fragments and splinters that can be attributed to the temple. The full documentation of the blocks was resumed during a short work campaign in February.<sup>35</sup> The work focused on documentation and material assessment, laying the groundwork for a preliminary reconstruction of the temple's decoration and the interpretation of the structure.

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<sup>33</sup> See J. Izak, 'Mudbrick Analysis', in: Sählhof, *et al.*, *Report on the 52nd Season*, 65-73.

<sup>34</sup> C. von Pilgrim, 'Ein Kultbau für Chnum aus der Zeit Psammetichs II.', in: Dreyer, *et al.*, *MDAIK* 61 (2005), 43-44. On the assumed location of the chapel north of the New Kingdom temple of Khnum see C. von Pilgrim, 'The spatial development of the Khnum Temple precinct before the 30<sup>th</sup> Dynasty', in: Seidlmayer, *et al.*, *Report on the 45<sup>th</sup> Season*, 26-27; C. von Pilgrim, 'The spatial development of the Khnum Temple precinct before the 30<sup>th</sup> Dynasty', in: Sigl, *et al.*, *Report on the 46<sup>th</sup> Season*, 36.

<sup>35</sup> The work took place from from 8 to 20 February, 2025, and was supported by Roman Łopaciuk.

Documentation: The primary objective was to produce orthophotomosaics of individual blocks. A total of 152 decorated surfaces were documented, including 28 blocks bearing decoration on both sides. In addition, 151 top surfaces and 21 larger fragments were recorded. The orthophotomosaics were captured using a Xiaomi Redmi Note 13 Pro smartphone equipped with a 50 MP camera. The images were processed in Agisoft Metashape Pro (v. 2.2.0) to ensure complete and accurate visualization (see fig. 33). Basic measurements were taken to allow for proper scaling of the individual projections. Supplementary photographs were taken of 57 blocks. Missing measurements were collected for 193 blocks and fragments.



**Fig. 33:** Block C 450, preliminary version of the orthophotomosaic (Photo and processing: J. Iwaszczuk, © SIK)

Architecture: The blocks attributed to Psamtek II were initially identified by C. von Pilgrim based on stone characteristics, inscriptions bearing the ruler's name, and the use of distinctive flat relief. The blocks are composed of medium-quality grey sandstone with visible inclusions, some exhibit signs of surface saltation. The stone surfaces were carefully prepared. The collection includes both single- and double-sided decorated blocks featuring a mix of sunken and raised relief. On double-sided blocks, one side typically displays raised relief and the other sunken, though some have raised relief on both sides.

Further analysis of the block layers revealed that among the raised relief blocks, two distinct groups can be identified by the vertical displacement of decoration in relation to the



horizontal layering. This may indicate that they originated from two separate rooms (fig. 34a-b). The wall thickness was measured at approximately 86 cm at the bottom, with a slight incline of about 2.5 cm per meter.



**Fig. 34:** Offset of decoration relative to block layering: a (top). 642a; b (bottom). C 817. Not to scale. (Photo A. Krause, © SIK)

Two distinct types of columns bearing the name of Psamtek II on all four sides were identified. The first type consists of smooth-shafted columns that taper toward the top. Blocks from this type have a diameter of 60-63 cm and preserve only the upper sections. These may have belonged to papyrus-shaped columns, similar to those known from Psamtek II's structures on Philae.

The second type comprises 24-sided columns with diameters ranging from 77 to 80 cm. Only a small fragment of a column base has been preserved. Although it lacks a royal name, it has been tentatively attributed to Psamtek II based on its material characteristics, though this attribution remains uncertain.

Additionally, one unfinished block featuring a torus moulding on two adjacent sides, may originate from the intercolumniation space. While its association with Psamtek II's temple is not definitive, the corresponding column diameter supports this hypothesis.

The only preserved element of a doorway is a fragment of a door jamb inscribed with Psamtek II's name, previously published by Friedrich Junge.<sup>36</sup> It most likely belonged to a small doorway set between columns (fig. 35). Both the door jamb and the block from the intercolumniation appear to have been added to already-standing columns at a later stage.



**Fig. 35:** Fragment of a door jamb inscribed with the name of Psamtek II: a (left). front view; b (right). top view showing the cutting for column attachment. Preliminary orthophotomosaic, not to scale (Photo and processing: J. Iwaszczuk, © SIK)

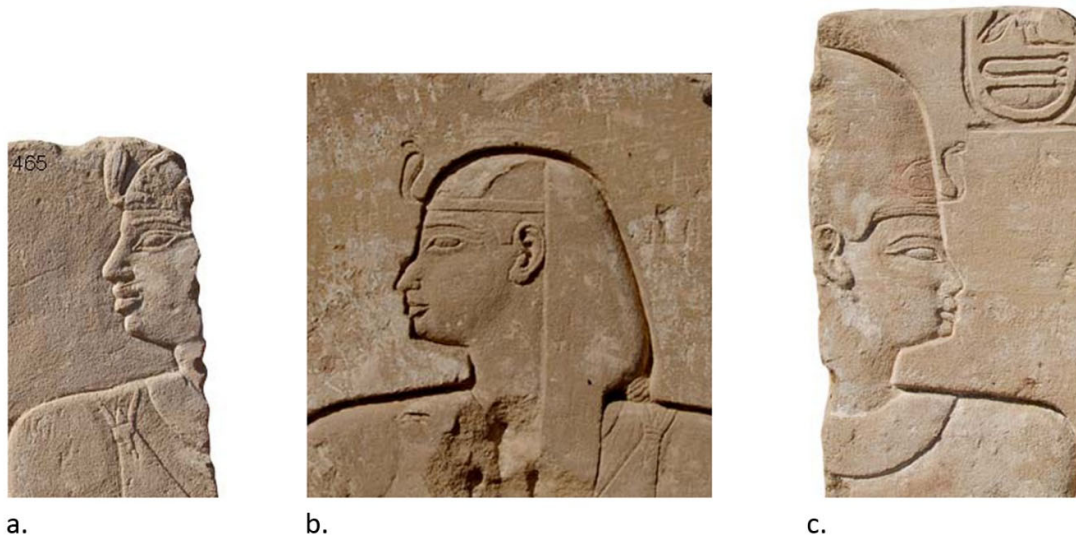
<sup>36</sup> Block C 357: Junge, *Elephantine* XI, 67 (6.3.1) [F 136], Pl. 53d.



Additional architectural elements include cornice blocks bearing Psamtek II's cartouches and blocks with a torus moulding at their base. These are decorated on the interior face with a *kheker*-frieze.

Decoration: The decorative work is executed with care and skill in both raised and sunken relief. So far, three distinct stylistic variants have been identified, bearing the name of Psamtek II.

- The first style is characterised by prominently modeled musculature and a rounded face with broad nose and lips, executed in raised relief (fig. 35a). This style may date to the Kushite period.
- The second style, found in both sunken and raised relief, is more delicate and finely carved (fig. 35b). It comes probably from the reign of Psamtek II.
- The third style, carved in sunken relief, is distinguished by its flat execution and meticulous detail (fig. 35c). The date is still uncertain.



**Fig. 35:** Royal faces on blocks from the temple of Psamtek II: a. C 465; b. C 448; c. C 442a. Not to scale. (Photo A. Krause, © SIK)

Destruction and reuse: To analyse modifications on reused blocks, particular attention was given to chisel marks and their dimensions. Comparative photographic documentation was gathered from both New Kingdom structures and the pronaos of the Temple of Khnum. This allowed for the exclusion of blocks that had been reworked during the New Kingdom and enabled a comparison between chisel traces found on the Psamtek II blocks and those associated with Graeco-Roman interventions in the Khnum temple.

The original carving of the Psamtek II blocks was executed using chisels approximately 12-14 cm in width. Evidence suggests that these blocks were later reworked during the Ptolemaic period using narrower chisels, measuring around 7-9 mm. In most cases, the original surfaces

remain preserved on the sides of the blocks, while the upper surfaces typically bear traces of the finer Ptolemaic chisel, indicating secondary modification.

(J. Iwaszczuk)

### 3.4 The Realities of Life Project

The 'Realities of Life' project (RoL) was established in autumn 2013 in the scope of the research of the German Archaeological Institute Cairo (DAIK) at the archaeological site of Elephantine, Aswan. It is conducted under the direction of Dr. Johanna Sigl (Commission for Archaeology of non-European Cultures, Germany).<sup>37</sup>

Excavations until 2018 focussed on House 169 (H169), a large residential building in the north-western part of the remaining settlement hill on Elephantine, in which a well-preserved stratigraphic sequence of around 150 year of domestic occupation was recorded. H169 dates to the late Middle Kingdom (late 12th to late 13th dynasties, approx. 1800-1650 BCE) but the surrounding, partially disturbed strata expand this time span as far as the late Old Kingdom and First Intermediate Period.

The aim of the combined archaeological and archaeometric work of the project is to get a multi-perspective view on found objects, never forgetting the archaeological context they came from. Through this approach we hope to gain insight into the realities of everyday life of the inhabitants of the island settlement at the first Nile cataract.

In autumn 2024 and spring 2025 various detailed investigations on find materials from the RoL project have been carried out by specialists in the Elephantine excavation on site and in the materials' laboratory of the Institut français d'archéologie orientale in Cairo (IFAO).

(J. Sigl)

#### 3.4.1 Analysis of Wood Charcoal from House 169

From 24 November and 5 December 2024 anthracological analysis was conducted on 281 charcoal fragments recovered from H169 at Elephantine, specifically from rooms 04, 07, 08, and 09, at material laboratory of IFAO Cairo. The study was undertaken with the aim of reconstructing past fuel usage and wood selection practices.

All charcoal pieces were analysed using reflected light microscopy (x100, x200, x500 magnification) after manual breaking to expose transverse, radial, and tangential sections.

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<sup>37</sup> For information on the project including bibliography see: <https://www.dainst.org/projekt/-/project-display/4711172>. Our sincere thanks go to our D. el-Meliegy, A. Nageh and their colleagues of the Centre of Research and Conservation of the Ministry of Tourism and Antiquities (MoTA) for supporting our sample transport from site to the laboratory, N. Mounir and N. Medhat of IFAO Cairo for the receiving of the samples from MoTA and the provision of space and equipment for sample analysis. We are sincerely grateful for the administrative work and financial support of the endeavour to the German Archaeological Institute Cairo, in particular department director D. Raue, administrative director J. Schröder, and the Elephantine project director M. Sählhof. For their assistance of our work on site we thank the workmen from Quft under the direction of A. El-Amir. We are grateful for the support by the local employees of the Aswan inspectorate.





assemblages across Egypt.<sup>40</sup> The probable identification of Mimosoideae as *Prosopis farcta*, also known for good fuel value,<sup>41</sup> further supports this interpretation.

Secondary taxa such as *Ficus* sp., *Ziziphus* sp., *Calotropis procera*, and *Balanites aegyptiaca* likely had other primary uses. Ethnobotanical and archaeobotanical sources suggest that *Ficus* and *Ziziphus* were cultivated for their edible fruits and used in woodcraft.<sup>42</sup> *Balanites* and *Calotropis* are valued for their medicinal properties.<sup>43</sup> Their sparse occurrence in the charcoal assemblage supports the idea that these woods were not preferred fuels but may have entered fireplaces as incidental debris.

All identified taxa are native to the region. *Vachellia nilotica*, *Faidherbia albida*, *Prosopis farcta*, and *Ficus* sp., including *F. sycomorus*, grow naturally along Nile riverbanks. *Ziziphus* and *Balanites* are typical of alluvial zones, and *Tamarix* and *Calotropis* are adapted to saline soils and disturbed habitats, respectively.<sup>44</sup> These environmental preferences strongly suggest local procurement of firewood from the surroundings of House 169.

The taxonomic profile of the charcoal thus reflects a pattern of opportunistic yet informed fuel selection. The dominance of *Vachellia nilotica* indicates preferential use, likely due to its abundance and excellent combustion properties. The recurrent presence of *Faidherbia* and *Tamarix* underscores their value as supplementary fuel resources. The occasional inclusion of other taxa highlights the complex interplay of utility, availability, and household activity in wood use.

This season's anthracological study provides further evidence for localized and ecologically adapted resource use at Elephantine. The data also contribute to broader comparative frameworks of plant use in ancient Egypt, especially in domestic contexts. Further analysis, especially of charcoal from additional houses and features, may help refine interpretations and distinguish functional differences in wood use across space and time.

(S. Bodin)

### 3.4.2 Study of Wooden Furniture from House 169

From November 16 to 28, 2024 wooden artefacts excavated in the north-western sector of Elephantine site in the scope of the RoL project were studied. The material was housed in two containers (boxes 4333 and 575) in the storage area on the island, and grouped into two categories: 1) tools and furniture associated with textile production, and 2) small, everyday objects.

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<sup>40</sup> Eg., K. Wasylikowa, 'Site E-75-6: Vegetation and Subsistence of the Early Neolithic at Nabta Playa, Egypt, Reconstructed from Charred Plant Remains', in Wendorf and Schild (eds), *Holocene Settlement of the Egyptian Sahara*; Newton, *JAS* 32 (2005); Newton and Midant-Reynes, *The Holocene* 17 (2007); C. Bouchaud, C. Newton, M. van der Veen, C. Vermeeren, 'Fuelwood and wood supplies in the Eastern Desert of Egypt during Roman times', in Brun, *et al.*, *East Desert Egypt Archaeological Reports*; Bouchaud, *et al.*, *JAS Reports* 35 (2021); Verly, *et al.*, *JAS Reports* 37 (2021).

<sup>41</sup> Fagg and Stewart, *Journal of Arid Environments* 27 (1994).

<sup>42</sup> Malleon, 'Flora of ancient Egypt', in Shaw and Bloxam (eds), *Oxford Handbook of Egyptology*; Oakley, *Analyst* 672 (1932); Geweely, *et al.*, *Archaeometry* 65 (2023).

<sup>43</sup> Chothani and Vaghasiya, *Pharmacognosy Reviews* 5 (2011); Hassan, *et al.*, *Trees* 29 (2015).

<sup>44</sup> Fahn, *et al.*, *Wood Anatomy*; Neumann, *AAR* 7 (1989).

A full anatomical study was carried out using portable Dino-Lite and standard light microscopy. The analyses focused primarily on tool morphology and wood species identification. Most textile tools were crafted from local varieties of *Vachellia* (notably *V. nilotica* and *V. raddiana*), pointing to the local procurement of raw materials. A few items were also identified as *Faidherbia albida*, *Tamarix* sp., *Ziziphus spina-christi*, and *Cedrus libani*, indicating limited use of imported species.

The corpus of weaving-related items includes needles, spindles, spindle whorls, shuttles, and loom components, many of which were stuccoed, with rare traces of paint. Some spindle shafts showed spiral grooves for thread attachment, consistent with Middle Kingdom technology, as attested by finds at Kahun (e.g. LDUCE UC7306 and UC7307 in the Petrie Museum).<sup>45</sup> Spindle whorls from Kahun were frequently made of non-local *Abies* wood and *Ficus sycomorus*, while the Elephantine examples were almost exclusively of acacia – likely due to local availability and workshop traditions.<sup>46</sup>

Among the more remarkable finds were netting needles made from both local (*Tamarix* sp.) and imported (*Cedrus libani*) wood. The latter contrasts with the absence of cedar in spinning tools, suggesting differentiated material choices depending on tool type. These needles are similar in form to those discovered at Kahun (e.g. LDUCE UC28273)<sup>47</sup> and further contextualise the fishing activities evidenced by artefacts such as net weights in the Elephantine domestic quarters.<sup>48</sup>

A singular reel (46501S/c-8, fig. 37), charred and poorly preserved, may suggest disturbance of stratigraphy or intrusive later-period artefacts, as such items are typically associated with New Kingdom and 3rd Intermediate Period contexts. This will require further stratigraphic clarification in coordination with the project direction.<sup>49</sup>

Additional artefacts include cosmetic tools such as a mirror handle, a hairpin, and a kohl stick – mostly carved from local woods, except the mirror handle, which was made from *Ziziphus spina-christi*. These objects are stylistically consistent with Middle Kingdom typologies, although later dates cannot be ruled out.<sup>50</sup> Fragments of veneered wooden boxes also provide insight into higher-quality woodwork. Notably, one box wall was crafted from *Vachellia raddiana* and veneered with *Mimusops* sp., fixed with fine dowels and painted red on both surfaces.<sup>51</sup>

Elements from funerary furniture, such as a boat oar and a zoomorphic bed foot, were also studied. The latter, attributable to the late 12th Dynasty (Sesostris I-III), raises questions due to its unusual discovery in a domestic context. Similar items from Kahun are preserved in the

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<sup>45</sup> Spinazzi-Lucchesi, *Unwound Yarn*, 84.

<sup>46</sup> Spinazzi-Lucchesi, *Unwound Yarn*, 123; C. Cartwright, H. Granger-Taylor and S. Quirke, 'Lahun Textile Evidence in London', in Quirke (ed.), *Lahun Studies*, 96 and 101.

<sup>47</sup> C. Cartwright, H. Granger-Taylor and S. Quirke, 'Lahun Textile Evidence in London', in Quirke (ed.), *Lahun Studies*, 101; Spinazzi-Lucchesi, *Unwound Yarn*, 90.

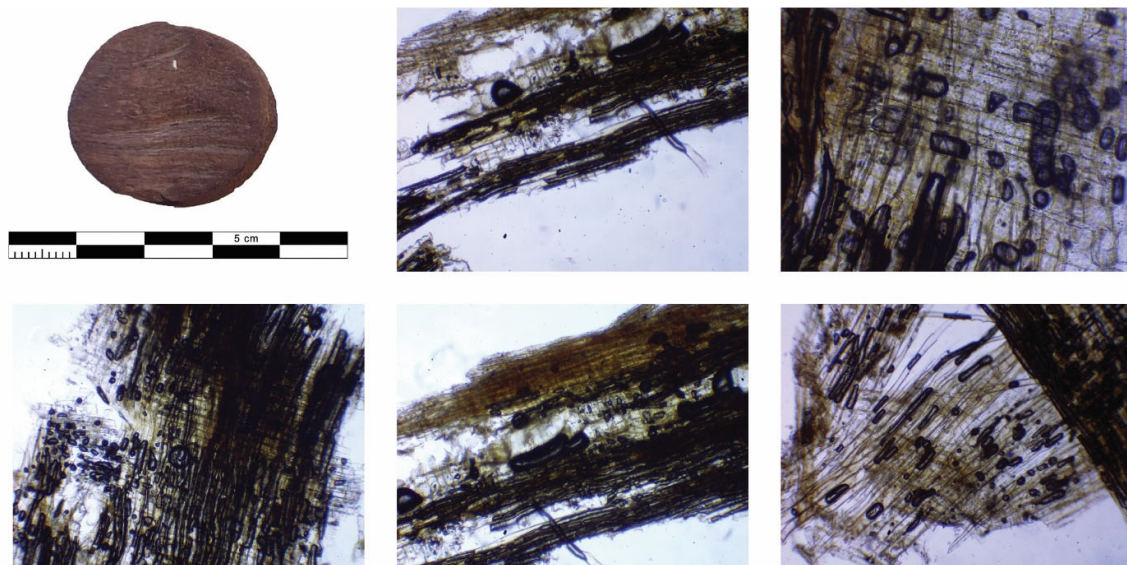
<sup>48</sup> Spinazzi-Lucchesi, *Unwound Yarn*, 95.

<sup>49</sup> Spinazzi-Lucchesi, *Unwound Yarn*, 90.

<sup>50</sup> De Marco and Eschenbrenner Diemer (forthcoming).

<sup>51</sup> Field observations and EIP73a-b identifications.

Petrie Museum (e.g. LDUCE-UC7402), and the proximity of the Middle Kingdom necropolis may account for their presence.<sup>52</sup>



**Fig. 37:** Intrusive reel (46501S/c-8) dating past the late Middle Kingdom and thin sections of its wood (photos: G. Eschenbrenner Diemer, © DAI Cairo).



**Fig. 38:** Wooden ball (47501Z/m-6; photo: G. Eschenbrenner Diemer, © DAI Cairo).

<sup>52</sup> G. Eschenbrenner Diemer, 'From the Workshop to the Grave: the case of Funerary Wooden Models (End of VIth dynasty- XIth dynasty)', in Miniaci, *et al.* (eds), *OLA* 262, 133-192.



Two small items – a wooden ball and a conical piece – may represent gaming elements. The ball (47501Z/m-6, fig. 38), coated with stucco, resembles UC7149 from Kahun, while the conical object matches game pieces also preserved in the Petrie Museum (e.g. UC7147).<sup>53</sup> Their presence aligns with broader evidence of daily life activities within this settlement area. In conclusion, the study confirmed that locally available woods were predominantly used for manufacturing both utilitarian and personal objects. The data contrast with sites such as Kahun and Deir el-Medina, where a broader range of imported species was employed, reflecting differences in workshop access, trade networks, and socioeconomic context. Continued collaboration with Dr. Amandine Mérat is envisioned to harmonise artefact interpretations and enhance the comparative study of Middle Kingdom woodcraft across Egypt.<sup>54</sup>

(G. Eschenbrenner Diemer)

### 3.4.3 Textile Studies

Between November 5 and 16, 2024, the third season of textile study on Elephantine Island was conducted as part of the RoL project. The primary goal was to finalize the analysis of textiles recovered from nine architectural units excavated in seasons 43, 45, 46, 47, and 48, particularly focusing on materials from Houses 73 and 175, and – resources permitting – on Houses 57, 58, 167, 170, 174, 182, and the so-called Houses NN.

Procedures established during the 2022 spring season were resumed. After verifying the contents of boxes 4912, 4913, and 573, a dedicated workstation was installed in the magazine. Each textile fragment was cleaned with soft brushes, photographed with scale, measured, technically analyzed, and rehoused in acid-free materials. The data were recorded in a structured Excel database and cross-referenced with excavation metadata exported from the project's iDAI.field database.

Textiles from House 73 originated from six contexts and were generally fragmentary and in poor condition. The fabrics, composed exclusively of undyed or bleached linen S-spun yarns, included faced weaves with some examples preserving selvages and fringed borders. These enabled the identification of weaving types as both warp-faced (e.g., 43501D/r-7 and 43501H/q-12) and weft-faced (e.g., 43501D/o-4). Additionally, non-woven materials such as netting (e.g., 43501D/r-7), wicks, and raw yarn bundles (e.g., 43501G/d-15) were also documented.

House 175 yielded a larger and more diverse assemblage from 26 features. This included soft cloth fragments, nets, and strips used as binding material. Noteworthy were warp-faced weaves with reinforced borders and tone-on-tone weaver's marks. One assemblage preserved a complex border reinforced with additional weft threads forming decorative fringes (e.g., 43501I/r-10). Fine netting, likely used for domestic decoration rather than fishing, was also observed (e.g., 43501H/k-18, 43501H/l-18, 43501H/p-7, 43501H/v-9, and 43501I/n-15).

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<sup>53</sup> Petrie, *Objects of daily use*, 58, pl. LI.361; Marshall, *Childhood*, 133.

<sup>54</sup> Cf. Spinazzi-Lucchesi 2018; J. Allgrove-McDowell, 'Kahun: The Textile Evidence', in David (ed.), *The Pyramid Builders*.

Evidence of reuse and repair was frequent in House 175. Several fragments showed extensive darning using S- or Z-spun linen threads and overcast stitches (e.g., 43501I/h-15 and 43501I/y-4). Particularly remarkable was a 16 cm long repaired fragment and another reused as a binding strip, complete with loops and knotted ends (43501I/h-15). Hemming and seam repairs (e.g., 43501I/h-15 and 43501H/s-18) further emphasized the textiles' domestic functionality and prolonged use-life.

After concluding work on Houses 73 and 175, textiles from Houses 57, 58, 167, 170, 174, 182, and NN were sorted and checked against the excavation database. House 57's assemblage included fine warp-faced weaves (e.g., 45502K/i-8) and a distinctive Z2S4s rope fragment (e.g., 45502H/a-13), suggesting more robust binding practices. House 167 preserved particularly fine faced weaves (e.g., 43501I/c-7 and 43501E/l-4) and netting fragments indicative of hairnets or hanging devices.

Fragments from House 174 and 182 were few and small, though in House 182, two pieces preserved reinforced selvages (28 warps/cm; 20 wefts/cm; e.g., 48501I/d-5), confirming warp-faced structures. Darning was also documented in Houses 167 and 182. House 170 yielded only minute yarn fragments, while House 58 had a single linen thread fragment.

Concurrently, the season offered an opportunity to examine associated wooden tools from House 169 in collaboration with wood specialist Dr. Gersande Eschenbrenner-Diemer. Twenty-five items were identified as textile tools, including spindles, needles, shuttles, loom feet, and a wooden ring likely used for thread manipulation. These provide direct material evidence for domestic textile production on the site and will be included in a forthcoming joint publication.

(A. Mérat)

#### 3.4.4 Fossil Insects of the Late Middle Kingdom

After permission was granted for material to be accessed for research at IFAO, 27 samples were studied in May 2025 and the material sorted and photographed. The information provided from this study, combined with research on insect material from previous seasons, will provide the first systematic study of Middle Kingdom insect faunas.

The opportunity to study assemblages from the small island of Elephantine in the Nile is unique as it provides an interesting biogeographic perspective on the insect faunas which have been shaped primarily by human impact. The material studied gave information for dry arid environments around the site and the principal species of Tenebrionidae recovered was *Trachyderma hispida* (Forskål). In addition, there were a few specimens of *Adesmia* sp. and *Thriptera* cf. *kraatzi* (Haag-Rutenberg), tenebrionids which also tend to be widespread in desert environments.<sup>55</sup>

Various species of dermestids were part of the assemblage, including *Dermestes frischii* (Kug.). Feeding largely on maggots,<sup>56</sup> these provide indication of the availability of meat and/or fish debris within the settlement. Additional species include *Attagenus* spp., with various

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<sup>55</sup> Lillig and Pavlíček, *Darkling Beetles of Sinai*.

<sup>56</sup> Peacock, *Carpet beetles*.

members of the genus frequenting mills, warehouses, animal matter, etc. *Trogoderma granarium* (Everts.), the khapra beetle, a small dermestid pest often found in grain storerooms,<sup>57</sup> was also recovered from the samples. Its presence from the Middle Kingdom indicates that it was perhaps endemic in Egypt. A few specimens of *Sitophilus granarius* (L.), the flightless granary weevil,<sup>58</sup> with probable origins in the Fertile Crescent, were also present in the samples (fig. 39). *Alphitobius diaperinus* (Panz.), an endemic omnivorous pest<sup>59</sup> of a large range of commodities was also included in the assemblage and a half eaten elytron probably provides evidence for its cannibalistic tendencies. Elytra of *Tribolium* sp., a secondary pest of flour and processed materials, were recovered from one of the samples; however, without a pronotum identification to the lowest taxonomic level was not possible. The bostrychid *Rhyzopertha dominica* (F.), the lesser grain borer, with probable origins in India, is a secondary pest known for damage in storerooms feeding on infested grain,<sup>60</sup> but it also frequents various seeds and other foodstuffs.



**Fig. 39:** Head and thorax of *Sitophilus granarius* (L.) from sample 47502D/e-17-1, Elephantine (photo: E. Panagiotakopulu, © DAI Cairo)

The list of cosmopolitan pests from Elephantine includes the flightless *Gibbium psylloides* (Cz.) feeding on a variety of materials from grain to wool and leather, it is also found in human and

<sup>57</sup> Munro, *Pests of Stored Products*.

<sup>58</sup> Hoffmann, *Coleoptères Curculionides*.

<sup>59</sup> Despins, et al., *Coleopterists Bulletin* 42 (1988).

<sup>60</sup> Attia and Kamel, *Bulletin Société entomologique d' Egypte* 49 (1965).



other faeces.<sup>61</sup> One of the most interesting finds from the samples was the presence of bruchids in one of the contexts. In addition to a record of the legume pest *Bruchidius* cf. *incarnatus* (Boheman) from sample 47502 B/a-6-1, 72 individuals of *Caryedon serratus* (Olivier), the groundnut beetle, were recovered. The latter feeds on seeds of tamarind and on Caesalpinioideae, e.g. *Piliostigma*, *Cassia* and *Bauhinia*, and its association with groundnuts is quite recent.<sup>62</sup> This is its first and only archaeological record. Given that its origins are thought to be Asian, it is now widely distributed in West and Central Africa and has become worldwide in the tropical to sub-tropical zone. This find showcases the importance of early accidental introductions along the Nile, facilitated by trade of materials and transit crossings of people and allows the possibility that the species is indigenous to the warmer parts of Africa.

With the exception of the bruchids, the assemblages provide a glimpse of urban environments and largely lack information about natural vegetation around the site. This begs the question as to whether the bruchid infested Leguminosae were locally collected or transported to the island on boats.



**Fig. 40:** Puparium of *Musca domestica* (L.) from sample 47502B/a-6-1, Elephantine (photo: E. Panagiotakopulu, © DAI Cairo)

The flies provide some information about hygiene and conditions on site. The main fly species from these samples is the ubiquitous housefly, *Musca domestica* (L.) (fig. 40), which is endemic in the Nile valley. In addition, there is a single record of *Megaselia* cf. *scalaris* (Lowe), the scuttle fly, which has been recorded from a variety of contexts, from sewers to garbage and

<sup>61</sup> Fogaliazza and Pagani, *Tecnica Molitoria* 44 (1993).

<sup>62</sup> Delobel, et al., *Annales de la Société Entomologique de France* 39 (2003).

from decaying meat to rotten vegetables.<sup>63</sup> A puparium of the family Sphaeroceridae, a lesser dung fly, associated with decaying organic matter, including carrion and dung, was also recovered.

(E. Panagiotakopulu)

### 3.4.5 Conclusions

The here presented studies on material culture and bioarchaeological remains from settlement remains of the late Middle Kingdom from Elephantine Island provided deep insights into daily life practices and resource use in the First Cataract region.

Wood identification revealed the deliberate selection and varied use of local and imported taxa, with a predominance of acacia and tamarisk for everyday household items, while imported cedar and juniper were largely restricted to furniture and architectural elements. Charcoal analyses from hearths and rubbish pits confirm this pattern, showing continuity in the exploitation of native riverine species over time. It is interesting to note that the only non-urban elements of the identified insect fauna are bruchids. These beetles infest, among other, acacia trees, which are the dominant wood species identified in both charcoal and wooden objects. From the excavated features we furthermore know that people living in H169 and the surrounding buildings used storage spaces close to the main hearth for fuel storage,<sup>64</sup> among other chaff, animal faeces and twigs including remnants of acacia trees.

The recovery of insect remains, particularly dermestid beetles and other detritivores, sheds light on storage practices, food processing, and waste management strategies. The insect fauna shows an overwhelming tendency towards urban species, which confirms the archaeologically assumed layout of the settlement with barely any open spaces apart from narrow streets and festive areas and—in contrast to today's modern settlement—no vegetation inside the town perimeters.<sup>65</sup> Remarkable is the first archaeological record of *Caryedon serratus* (Olivier), the groundnut beetle, which will have to be discussed again in upcoming publications.

Textile fragments mainly composed of linen attest to a thriving tradition of domestic textile production and reuse. The fabrics range from finely spun linen to coarser weaves, with extensive evidence of patching, over-stitching, and refunctionalization, suggesting a strong culture of conservation and recycling.

Taken together, the analyses of wood, charcoal, textiles, and insects offer a detailed picture of the material conditions of life on Elephantine Island around 1800 BCE. They reveal an economic interplay based mainly on local or regional sources, which—possibilities permitting—needs to be explored further.

(J. Sigl)

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<sup>63</sup> Disney, *Annual Review of Entomology* 53 (2008).

<sup>64</sup> J. Sigl, 'Of Bugs and Beads. Realities of Life in the late Middle Kingdom northwestern town of Elephantine' in Bussmann, *Spuren der altägyptischen Gesellschaft*, 95.

<sup>65</sup> Cf. F. Arnold, 'Communal spaces in Elephantine', in Sigl (ed.), *SDAIK* 47, 151-162.

### 3.5 Continuation of Various Study Projects

Bettina Bader continued the documentation of the pottery shards and small ceramic finds from the excavations in front of the town wall of the Middle Kingdom in Area XXXVI (2011-2013), which are now stored in the central magazine of the SCA in Aswan.<sup>66</sup>

David Aston continued the documentation of the pottery from the early 26<sup>th</sup> Dynasty (layer 4D and layer 5) in the area south of the Khnum temple (Area XXVI).<sup>67</sup> In addition, he recorded the pottery sherds from a cellar dating to the 25<sup>th</sup> Dynasty which had been excavated in the domestic quarter south of the Khnum Temple in the 25<sup>th</sup> season. The cellar is the only built feature from the 25<sup>th</sup> Dynasty in this residential district that escaped the extensive site levelling from the Persian period. It probably belonged to a priest's house in the district of the Temple of Khnum, as many fragments of a papyrus with a magical text had been discarded in a layer of rubbish between two floors of the cellar.<sup>68</sup>

(C. von Pilgrim)

#### 3.5.1 Late Period Pottery from the area south of the Khnum Temple

In the past two seasons, the study of diagnostic sherds continued with several loci from House 205 being examined and drawn. All of these contexts were assigned to Level 5, but it is clear that whilst most of these contexts, most notably from Rooms A and D were similar to the pottery previously studied from Level 4D, and would thus date to the 25<sup>th</sup> dynasty/early 26<sup>th</sup> dynasty (*Elephantine XIX* Phase III.), some of them, particularly those from Rooms 087 and 089 and the silo 090 were distinctly earlier and clearly date to the Third Intermediate Period, equivalent to *Elephantine XIX* Phase IIB.

However as only two loci, 47703G from Room 087, and 47704X/a from silo 090, from the earlier deposits have so far been studied, this report is concerned only with the material from Rooms A and D. As with Level 4D the majority of the pottery is made from local Nile clays, most often in the fabric termed Nile B2 variant 2, or Nile C1 which is, as usual for Nile clay fabrics in the Aswan region, much more micaceous than in the rest of the Nile Valley. In addition, a large amount of a Nile C2 type clay was utilised for handmade pithoi and their associated lids. Contemporary pottery made of marl clays is somewhat scarcer, and most were made from Marl A4 variant 2 (= Marl A5), although some, perhaps residual pieces were manufactured from Marl A4 variant 1. The pottery was generally very broken up, and, with the notable exception of a large slender storage jar, 47704X/b:1, very few complete profiles could be reconstructed.

As with Levels 4C and 4D, these later Level 5 loci, from Rooms A and D, were characterised by a somewhat small repertoire of forms. Amongst the pottery made from Nile B2 variant 2, small, thin-walled dishes with direct rims and flat bases, (fig. 41a) are very common. However, in contrast to similar dishes from level 4B, no examples were found with the base being made as separate plug to which the sides are then added. Bowls/Beakers with direct rims and ledge bases of various sizes (fig. 41b-c), are also, as in levels 4B and 4C frequently found. The example shown

<sup>66</sup> B. Bader, 'Work on the small finds and Pottery from the excavations at the town wall in Area BXXXVI, in: Sählhof, et al., *Report on the 49<sup>th</sup> Season*, 64-67.

<sup>67</sup> D. Aston, '26<sup>th</sup> Dynasty Pottery', in: Sählhof, et al., *Report on the 51st Season*, 43-48.

<sup>68</sup> The publication of the papyrus by G. Vittmann (Würzburg) is in preparation.



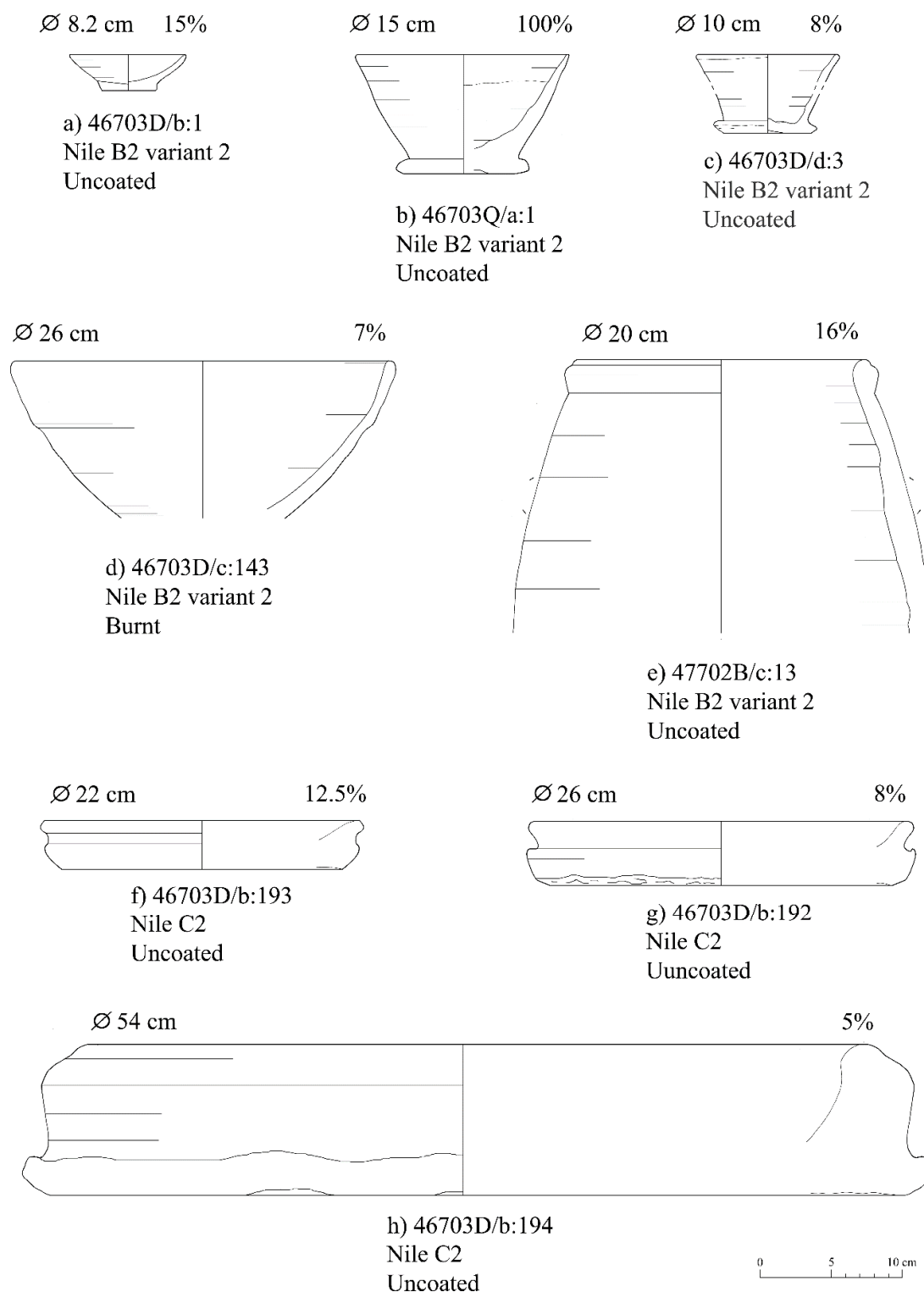
as fig. 41b (46703Q/a:1) is interesting since the base was clearly broken during manufacture, and repaired before firing. Other kinds of open shapes were extremely rare, though they did include a large rim sherd of a bowl with direct rim, and probably round base (fig. 1d), and rim sherds of shallow dishes with direct rims, and bowls with inner lips. No sherds from ringstands were noticed, and apart from the large slender storage jar, just mentioned closed shapes consisted almost entirely of two-handled storage jars with rounded rims, although as most of the pottery was very much broken up, not many pieces preserved both the rim and the handle (cf. fig. 41e)

Vessels made of Nile C2 are frequent, although again the range of shapes is limited. Most often they comprise fragments of uncoated hand-coiled pithoi and their lids, with diameters generally around the 56 cm. mark. The hand-made lids were sometimes ornamented with parallel ridges made with the fingers, and presumably had a large solid handle in the middle, although in contrast to the material from previous seasons, no handles were found. Numerous fragments of bread plates with a diameter of around 20 to 30 cms, generally uncoated, but sometimes coated with a pale red wash or a white slip, similar to *Elephantine XIX* pl. 62, nos. 1835-1836, were also fairly frequent (figs. 41f-g). One example of a platter was also found, together with one very large plate (fig. 41h).

Once again, numerous tubular bread moulds, (fig. 42a) made of a uniform brownish, low fired sandy Nile clay, were also common. These were often white slipped on the exterior, whereas the interior was given a smoothed coating.

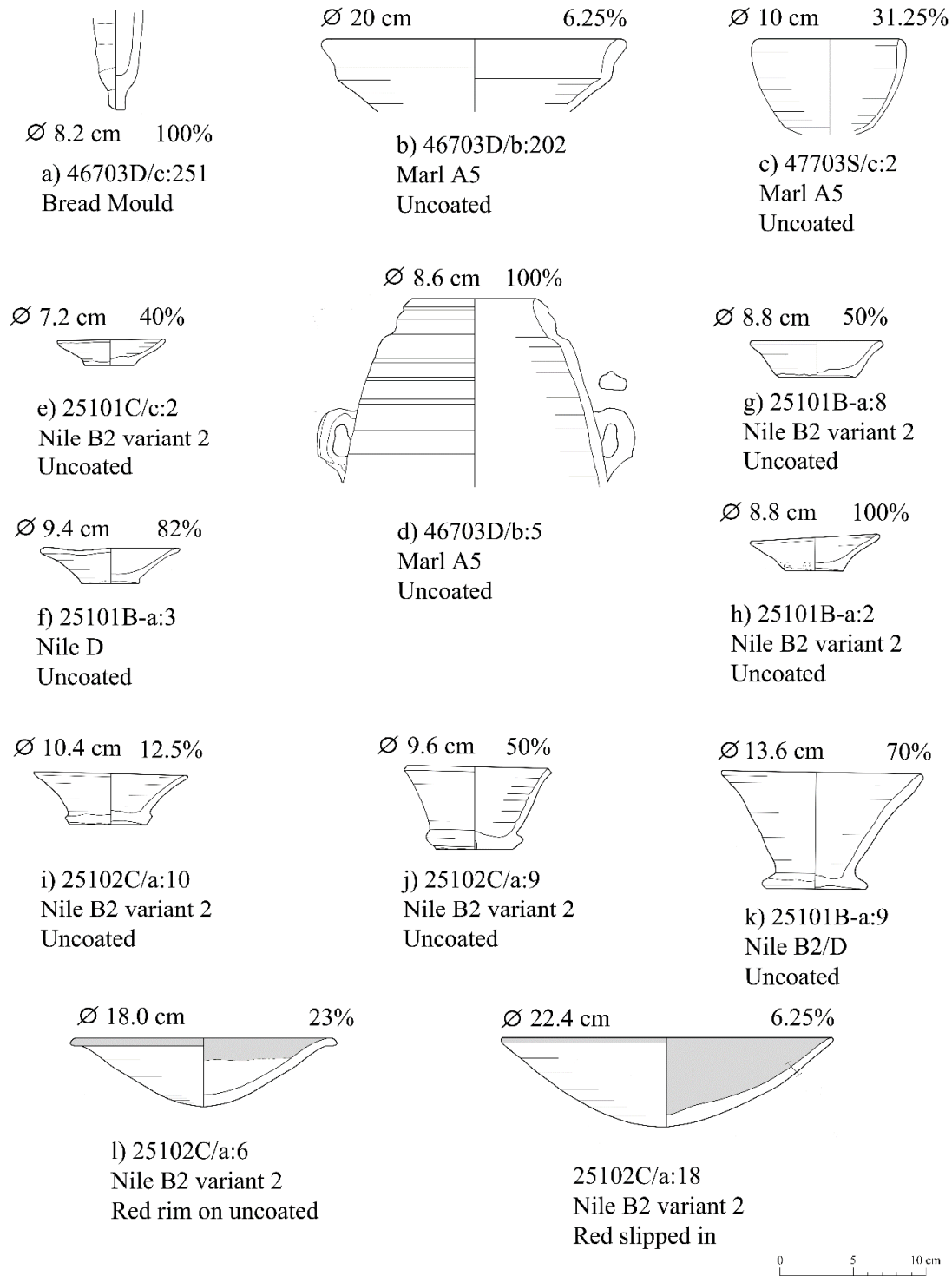
The Marl A4 variant II (= Marl A5) vessels are less numerous than in the later levels, but comprise bowls with out-turned lips, of which a well preserved example was found in context 25101B/a see below, carinated bowls (fig. 42b) and a singular example of a cup with direct rim and bevelled base (fig. 42c), whilst closed shapes consist entirely of small jars with “corrugated” necks and two vertical handles (fig. 42d).

A study was also made of the eighth-seventh century BC pottery locus 25101B/a, which derived from a cellar, and the related deposits 25101 B/b, C/a, C/b, and C/c. This material was much better preserved than all loci previously studied, and provided a number of complete examples of the types only known through fragments from the other contexts of this date. The pottery is dominated by Nile clay forms, and again small flat-based dishes, somewhat carelessly made, and cut from the wheel with string, are very common, usually made from Nile B2 variant 2, or, less often Nile D, in which the limestone temper has often exploded out during firing, with a selection shown in figs. 42e-h. Again bowls/beakers with direct rims and ledge bases of various sizes (fig. 41b-c), are also numerous with many more low forms than are found in the other loci. Whilst many of these were made from a Nile B2 variant 2 clay, some had distinct amounts of limestone temper and are borderline Nile D. All, however were left in an uncoated state and cut from the wheel with string, and some are shown as figs. 42i-k. Another type of open shape, which was relatively frequent are shallow dishes with direct rims and round bases, some with red rim bands (figs. 42l-m), whilst an unusual form with rounded rim and flat base is shown in fig. 43a. An interesting form shown in fig. 43b is a small beaker/beer jar. The tall cooking pot, fig. 43c, is a highly unusual form, which is so far unique, although this may simply be a case of mistaken identity. Body and base sherds could easily be mistaken for beer jars whilst the rim and handles could be wrongly ascribed to much smaller cooking pots.



Note percentage given is the percentage of rim/base preservation; 22 cm is the aperture diameter

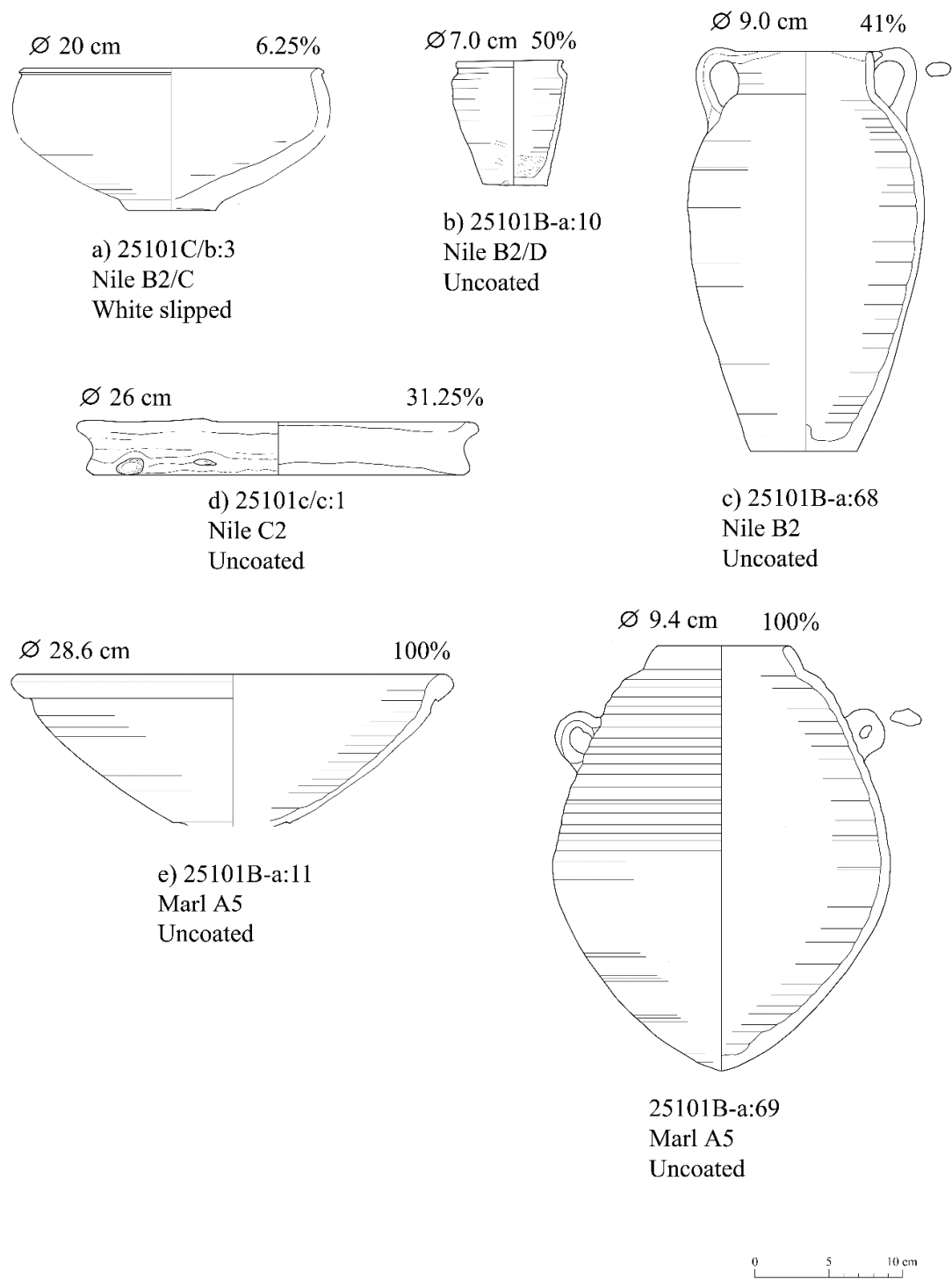
**Fig. 41:** Pottery from House 205 (a-d, f-h) and Level 4D (e) (drawings: D. Aston, © SIK)



Note percentage given is the percentage of rim/base preservation; 22 cm is the aperture diameter

**Fig. 42:** Pottery from House 205 (a-d) and Cellar 0541 (e-m) (drawings: D. Aston, © SIK)





Note percentage given is the percentage of rim/base preservation; 22 cm is the aperture diameter

**Fig. 43:** Pottery from Cellar 0541 (drawings: D. Aston, © SIK)

Within loci 25101 B/a, B/b, C/a, C/b, and C/c, Nile C2 pottery is frequent, although again the range of shapes is limited, and as with the more fragmentary pottery from other loci only, they generally comprise platters with direct rounded rims and flat bases, bread plates with a diameter of around 20 to 30 cms, (cf. fig. 43d) generally uncoated, but sometimes coated with a pale red wash or a white slip, deep platters or uncoated hand-coiled pithoi and their lids, with diameters generally around the 56 cm. mark. Fragments of Nile C2 large dishes with diameters of 42 cm. or above with direct rims, or rims with inner lip were found whilst sherds deriving from Nile C2 ringstands are also present

The Marl A4 variant II (= Marl A5) vessels comprise bowls with out-turned lips, (fig. 43e) whilst closed shapes consist entirely of small jars with “corrugated” necks and two vertical handles (fig. 43f).

(D. Aston)

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