

Report on the 33rd Season of Excavation and Restoration on the Island of Elephantine*

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The 33rd season of the German Institute of Archaeology and the Swiss Institute for Architectural and Archaeological Research on Ancient Egypt at Elephantine was carried out from October 25th till December 23th 2003, and from 13th January till 6th April 2004.

The work concentrated on the study and restoration of finds collected in past seasons. The small finds, pottery from the Middle Kingdom and the Roman Period, glass and lithic finds, Coptic ostraka and textiles as well as human and animal bones were studied. The epigraphic documentation of the Roman 'Temple Y' and the New Kingdom temple of Khnum was continued.

The conservation work of the wooden columns from the palace bakery of the First Intermediate Period was continued in autumn 2003 (pl. I),¹ while excavation work focussed on the area of the palace of the Old and Middle Kingdom, and the temple of Khnum. Small sondages were carried out in the southern harbour, the area south of the sanctuary of Heqaib², and the houses opposite the entrance of the festival courtyard of the Middle Kingdom (fig. 1-2). Restoration work in the archaeological area concentrated on the town enclosure of the Old Kingdom (pl. II).

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The Inspectorate of Antiquities was represented by the chief-inspector Mohi ed-Din Mostafa, Ozama Abd el-Latif and Karima Fahmy Mohammed, and the inspectors Hala Adel Mohammed, Fahmy Mahmud Mohammed El-Amin and Mohammed Gad. To them, as well as to the general director of Aswan, Ibrahim el-Saidi, we would like to express our sincere thanks for their kind support and cooperation.

¹ For the methods applied in the course of restoration, compare E. Peintner, in D. Raue et al., 'Report on the 32nd season of excavation and restoration on the island of Elephantine', *ASAE*, in press.

² Minor investigations in the houses of the late Middle Kingdom opposite the entrance of the festival courtyard of the Middle Kingdom were continued in autumn 2003, see 'Report on the 32nd season', *ASAE*, in press.

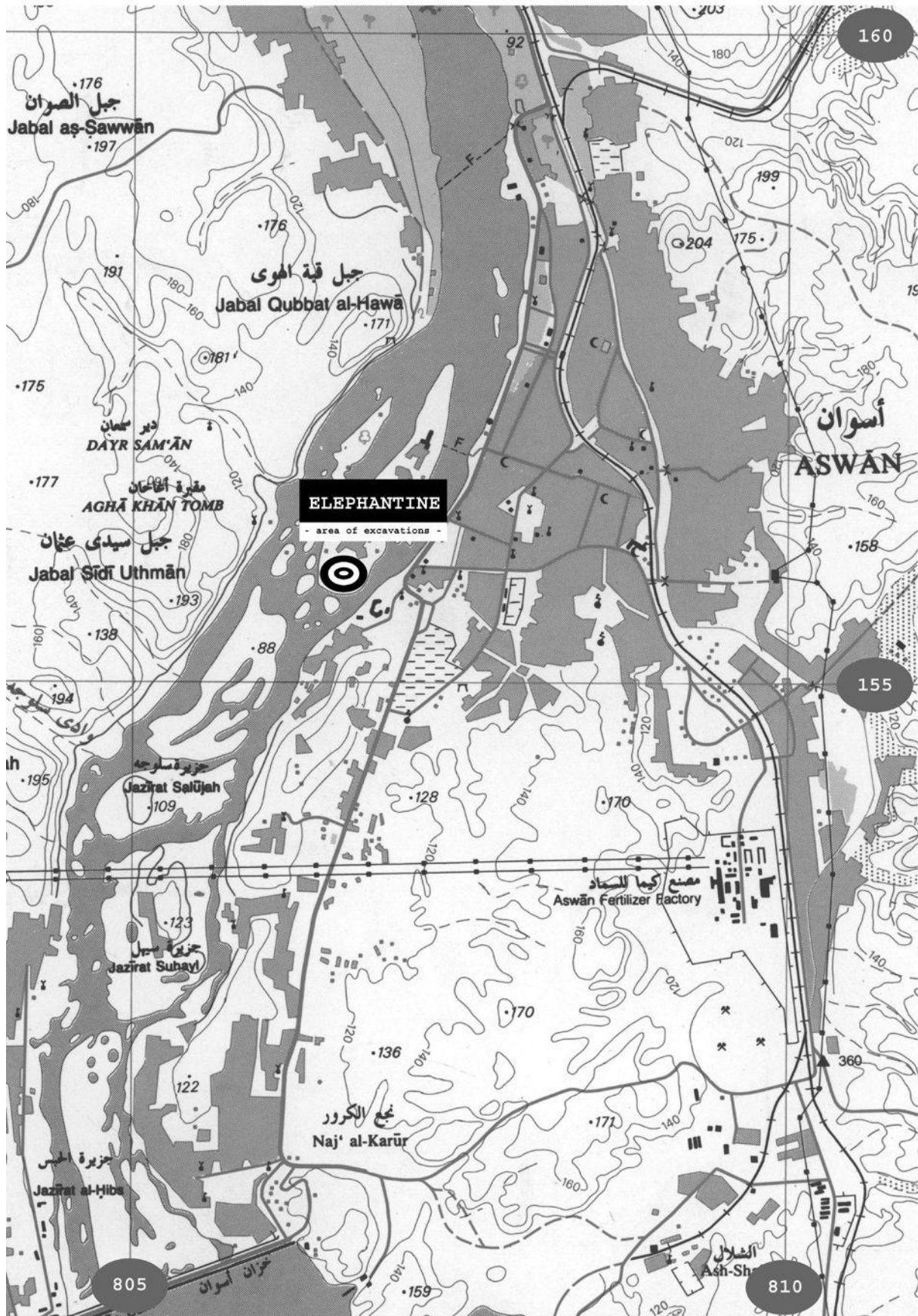


fig.1: Map of Aswan, scale 1:50000 (from E.G.S.A. sheet NG36B3b)

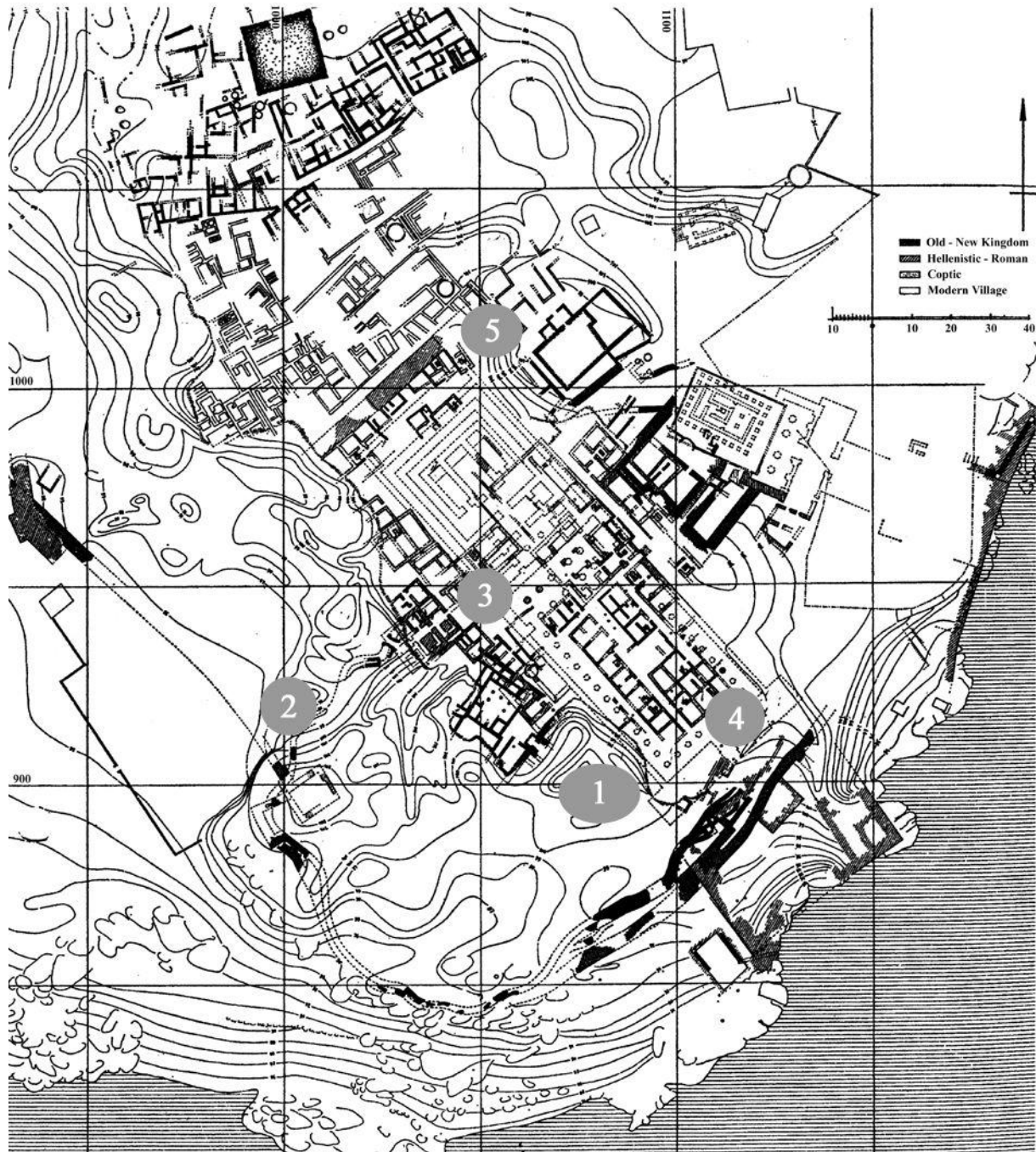


fig.2: Elephantine Excavations 2003/2004, scale 1:2000: 1. Area XXIV-XXX-XXXI, Palace of the Old Kingdom and Middle Kingdom; 2. Area XII, southern harbour, strata of the Old Kingdom; 3. Temple of Khnum – pronaos; 4. Temple of Khnum – courtyard; 5. Area II, houses of the earlier first millennium BC.

I. Area XXIV-XXX-XXXI: The central part of the town of the Third Millennium BC (fig. 3; pl. III-V)

The investigations in the area that was later occupied by the Governor's Palace of the late Old Kingdom³ were continued. That palace is founded on a workshop area of the Fifth Dynasty. Extensive measures were taken during the middle of the Fifth Dynasty to level the area. In an area of about 20 x 20 m more ancient strata were removed to create this workshop area at an approximately equal level (fig. 3, pl. III). Except for terrace walls, no urban elements such as streets or paths were revealed. The masonry was generally executed in a very careless manner, and needed continuous repairs and renewal of wall courses.

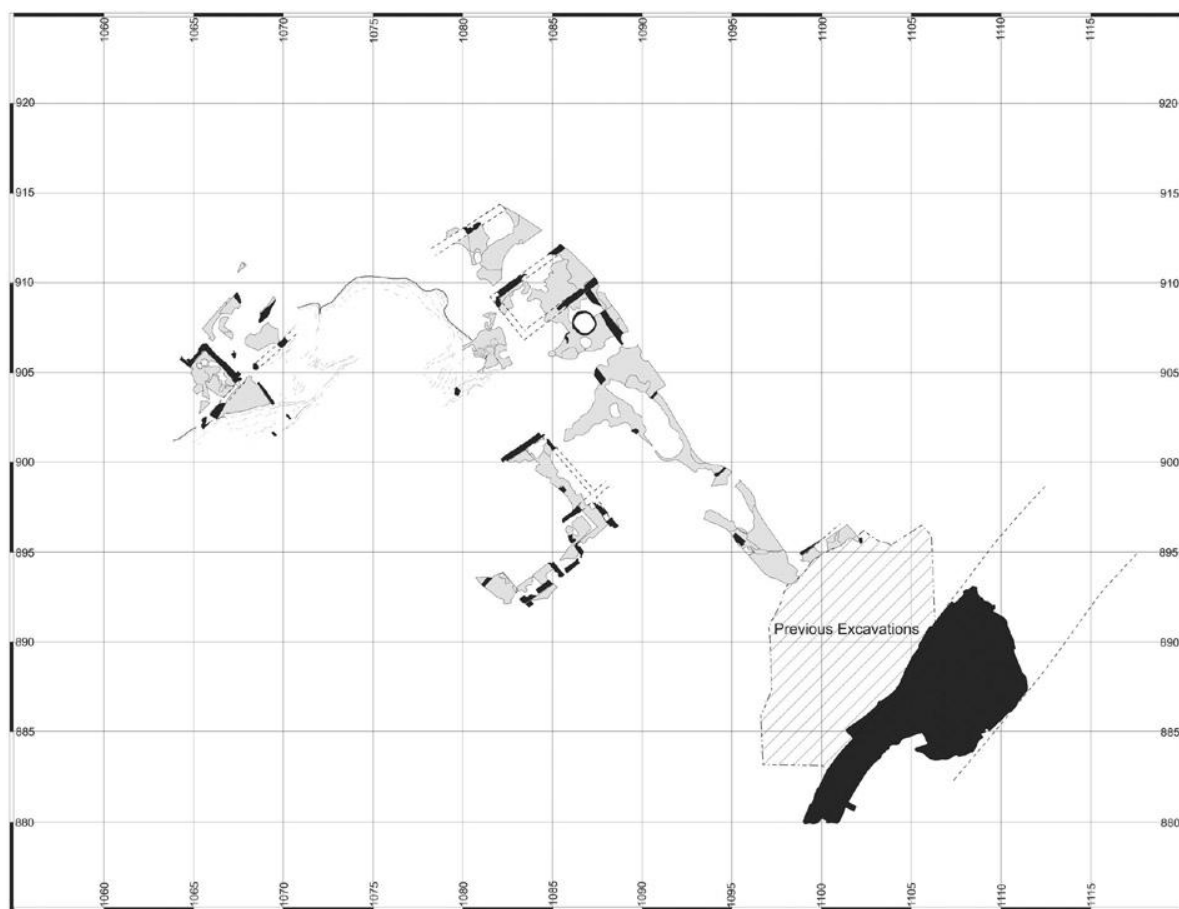


fig. 3: Area XXX-XXIV, workshop area of the Fifth Dynasty.

Numerous craft activities can be assigned to this room group. Most rooms show, with differing intensity, traces of firing processes. Some rooms contained evidence of firing pits lined with mud brick. A few installations for grinding and pounding grain point to bakery activities. Several large pieces of hippopotami teeth

³ For previous work in this area in the strata of Dyn. VI, see D. Raue, in G. Dreyer et al., 'Stadt und Tempel von Elephantine – 28./29./30. Grabungsbericht', *MDAIK* 58 (2002), 162 ff. and G. Dreyer et al., 'Stadt und Tempel von Elephantine – 31./32. Grabungsbericht', *MDAIK* 61 (2005), in press; see also: 'Report on the 32nd season', *ASAE*, in press.

with cut marks testify to the manufacture of small ivory objects. Furthermore, stone weights,⁴ remains of animal hide, indications of weaving, and tools for the stone vessel production and numerous finds of flint knives were recorded in these rooms.

A couple of seal impressions were found in the final occupation phases of this workshop area. Some of them, mentioning king Djedkare-Isesi, belong to seals for papyrus letters. They point to a direct relation of the workshop activity with central royal institutions. Tiny fragments of archive papyri with red line subdivisions suggest that the administration was recording and supervising the production of the various objects.

After the level of the area was raised by deposition up to one meter, this quarter was rebuilt with similar room divisions in the late Fifth Dynasty. These terraces and rooms were used and rebuilt repeatedly until larger structures of the Sixth Dynasty were consequently built in this area. These contained a remarkable number of storage facilities (oval and rectangular cellars). The latter stratum was traced to the east till the town enclosure. Here, two burials of small children in pottery vessels were found.⁵ This illustrates that the custom of in-settlement burials of foetuses and infants that is seen in later periods is attested as early as the Sixth Dynasty.⁶

These activities of the Fifth Dynasty reached in several spots to area XXX, the strata of the Third Dynasty. The general character of the area in the Third and Fifth Dynasty seems to have been comparable: open workshop units were grouped on top and around the natural granite bed-rock. Layers of charcoal dust, measuring up to 40 cm in thickness, point to an industrial firing processes. In these layers, a complete wooden cylinder seal of the Third Dynasty, that may serve to illustrate the administrative background of the work processes in this area, was found.⁷

The excavation of the palace bakery and the street leading at its eastern side to the north, was finished in April 2004⁸. The bottom layers of the bakery street can be dated to the middle of the Sixth Dynasty, while the highest preserved parts date to the Eleventh Dynasty (pl. IV).

Inside the bakery, two more sectors were excavated to obtain further information about the roofed eastern and unroofed western part. North of the four wooden columns that had been discovered in the 2000-2001 season, no further traces of columns or column bases were encountered. Instead, a rather large rectangular cellar (4,4 m x min. 2 m), built for an older structure of the late Sixth Dynasty,⁹ was still in use during the first occupation levels of the bakery (pl. V). The contemporaneous floor level of this cellar is about 2,5 m below the first floor of the bakery. No traces of its former contents and destination were found. The floor levels on top of the cellar were partly destroyed, thus making it difficult to be sure that no other columns had been placed here. Certainly, no traces of any other later columns were found in higher, better preserved levels. Furthermore, it is doubtful that

⁴ See below, contribution of P. Kopp.

⁵ The stratum of the early Sixth Dynasty that sealed these burials, contained just a few finds, among them a small alabaster cylinder: H: 4,2 cm, diam.-bottom: 2,46 - 2,5 cm, diam.-rim: 2,6-2,63 cm; find-no. K9191, excavation-no.: 33106T/b-1; register-no.: 4077.

⁶ M. Schultz / T. Schmidt-Schultz, in W. Kaiser et al., 'Stadt und Tempel von Elephantine – 19./20. Grabungsbericht', *MDAIK* 49 (1993), 182 ff.

⁷ H: 2,86 cm, diam.: 2,4 - 2,62 cm; find-no. K9192, excavation-no.: 33110H/e-1; register-no.: 4078.

⁸ For previous work in the bakery, see Raue, in Dreyer et al., *MDAIK* 58, 170 ff.; Dreyer et al., *MDAIK* 61, (in press).

⁹ The same type of cellar was found in the stratum of the late Sixth Dynasty in area XXX, see Raue, in Dreyer et al., *MDAIK* 58, 169 Abb.3, Pl. 17c.

heavy wooden columns with stone bases, carrying a roof construction, would have been placed on top of a mud brick vault.

An area of about 4,5 x 1,5 m in the western half of the bakery was excavated down to the first floor level. The ash layers of the Eleventh Dynasty contained a large number of door bullae, sealed with up to 20 impressions of seals of that period.¹⁰ Open unlined hearths were found on the earliest floor level of the bakery, and rectangular subterranean mud-brick storage facilities, 60 cm in width maximum, may have served to store grain or other materials involved in the baking processes. The foundation of an additional, square wooden post was found close to this rectangular silo.

The new work has changed the previous ideas concerning the bakery's architectural layout may have to be changed. Instead of a roof over the eastern half, the evidence points to a roofed sector in the south-eastern part, near the entrance, with a temporary additional roofing of the south-western corner.

II. Area XII: The strata of the Old Kingdom next to the southern harbour (fig. 2)

As a continuation of the work of the past two seasons, in spring 2004, small trenches were excavated in the area of the southern harbour¹¹. The excavation of the street of the later Sixth Dynasty that joints the southwest gate of the town with the southern landing place of the island was finished. As was the case with other sections of area XII, the building activity and occupation levels of the Sixth Dynasty are superimposed directly the sand-layer of the early Old Kingdom, that may have been designed to facilitate the landing of ships along the otherwise heavily fissured riverbank with its natural granite formations. Again, no traces of occupation levels of the Fourth and Fifth Dynasty were found. It may be assumed, that these were removed to leave space for the habitations of the later Sixth Dynasty.

D. Raue

III. Khnum Temple: the Temple of the Eighteenth Dynasty (pl. VI)

Subsequent to last season's final excavations of the Khnum Temple that related to the Eighteenth Dynasty¹² portions, some inconsistencies became apparent during the epigraphy-based attempt of its reconstruction¹³. Thus, in preparation for the final analysis of the temple, this season all known blocks that had been reused in the foundation of the later temple were uncovered again in order to collate and complete the documentation executed in former seasons. In addition to those blocks already uncovered by previous work of this and other earlier missions, several new blocks, both decorated and undecorated, were uncovered in the reused portion of the foundations in the Nectanebo II temple. They were clustered in the southern part of the Ptolemaic fore-hall of the temple and in the upper courses of the Ptolemaic-Roman terrace (pl. VI). Additional new blocks came to light by removing the debris that lay to the south of the temple. Among these, of particular

¹⁰ For example: find-no. K8256, excavation-no. 33101J/a-1, register-no.: 4069.

¹¹ See Chr. Heitz / A. Klammt, in: Dreyer et al., *MDAIK* 58, 174 ff.; Raue, in: Dreyer et al., *MDAIK* 61, in press; see also 'Report on the 32nd season', *ASAE*, in press.

¹² C. von Pilgrim, in: Dreyer et al., *MDAIK* 61, in press.

¹³ M. Bommas, *Der Tempel des Chnum der 18. Dyn. auf Elephantine*, M. Bommas, *Der Tempel des Chnum der 18. Dyn. auf Elephantine*, (Ph. D. diss., University of Heidelberg, 2000), www.ub.uni-heidelberg.de/archiv/3383, Heidelberg 2003..

interest, are some blocks bearing decoration of the Eighteenth Dynasty on one side and unfinished decoration on the reverse, which can be stylistically dated to the Saite Period.

Based on the new material, previous ideas concerning the lay-out of the temple and the history of its decoration now have to be reconsidered. Summarized preliminarily, it should be stressed that in contrast to the temple of Satet, the decoration of the Khnum Temple was obviously never completed in the Eighteenth Dynasty. At least the rear ambulatory of the temple seems to have been left nearly undecorated and was improved only in the Saite Period, when the temple was extended in this area during the reign of Psametik II. Also, the decoration of the vast area of the enclosure walls' outer face as well as of the first pylon in front of the festival courtyard built by Amenhotep II were obviously continued in subsequent phases. According to the cartouche preserved on one side of a huge block¹⁴ designed as a header to be placed in the upper part of the first pylon, the decoration of the pylon was started not earlier than in the reign of Thutmosis IV.

C. von Pilgrim

IV. Khnum Temple: the decoration of the temple of the Eighteenth Dynasty

During the 33rd season the documentation of relevant decorated blocks and architectural fragments belonging to the temple of Khnum from Thutmosis I to Nectanebo I reached its final stage. In year 2000, 268 decorated fragments were already known from this temple. This season, another 106 fragments were recorded, all of which also belonged to the New Kingdom. Out of these, 38 blocks were of especial importance for the reconstruction of the temple as a whole. Among the key-pieces were two drums of a 20-faced column initially decorated by Thutmosis IV (bearing an inscription that included the king's names) and later by Ramses II (inscribed with a royal name, as well as an offering of a floral bouquet). These fragments had already been carelessly recorded by J. de Morgan, and were later taken to the Egyptian Museum in Cairo. These drums were returned to Elephantine where they were included in the exhibition of other architectural fragments of the temple of Khnum (now: C 631 and C 632). According to their measurements, which match two architraves decorated by Thutmosis IV, too, these drums originally formed part of the southern gallery of the festival court added to the temple by Amenhotep II. As far as is known today, Amenhotep II did not have time enough to decorate anything more than the northern gallery of this court, leaving the southern part and the pylon undecorated. As shown by other fragments, the undecorated portions of the whole court were decorated during the Ramesside period.

Other fragments turned out to belong to one group of blocks of similar size, all of which once formed a part of the highest layer of the central building's outer wall that originally carried the roofing slabs. As some of the corners were still preserved, they could be placed within the reconstructed outline of the central building as following: North-wall: C 650, C 649[?], C 499, C 638, South-wall: C 644 while the position of C 637 remained unclear (most possibly south-wall). While the main building was erected by Hatshepsut, the majority of this area's decoration was carried out by Thutmosis III, as is found with this group of blocks.

Two other fragments uncovered this year belonged to the inner surrounding stone wall of the temple (C 751, C 680). A lintel was found among the key stones: a lintel (C 678), decorated by Hatshepsut to the memory of her father Thutmosis I, showing him offering wine to Khnum, Lord of the cataract region.

M. Bommas

Note: This work was continued in spring 2004 with a photographic survey of the outer side of the Roman terrace of the Khnum Temple. About 60 reused blocks were documented and described by descents using a rope¹⁵. The blocks belong to the eastern part of the temple of the New Kingdom, bearing decoration of the Eighteenth Dynasty as well as the Nineteenth Dynasty, and historical inscriptions dating to the reigns of Ramses II and Ramses III.

V. Final investigations in the precinct of the late temple of Khnum

The final analysis of the chronology of the building sequence in the precinct of the late temple of Khnum was concluded by re-examining the building phases of the inner enclosure wall established by W. Niederberger¹⁶ in order to correlate the previous results of the architectural history of the temple with the stratigraphic results obtained in the western part of the temenos. The fieldwork was confined to the cleaning of the southern part of the Ptolemaic fore-hall and the adjacent enclosure wall, this group being uncovered as a whole for the first time. It became clear that the foundation of the southern wall of the fore-hall was built after only the lowest course of the inner enclosure wall was already in place. Since the foundations of the fore-hall were much deeper, the foundation trench was lined with a mud-brick wall connected to the bottom of the lowest course of the enclosure wall in order to prevent any trickling of the foundation sand underneath. Only after the foundation of the fore-hall reached the same surface as the already existing course of the neighbouring enclosure wall, was the construction of the enclosure wall started, followed by the final construction of the fore-hall.

As Niederberger has already shown, the construction of the enclosure wall had already started at the end of the reign of Nectanebo II. In contrast to his assumption, however, the wall was evidently not built by laying one complete layer of blocks after the other on all sides of the enclosure. Rather, the wall was built in sections (as it is proven by the foundations of the fore-hall as well) since the northern wall of the inner enclosure was much more advanced before the building of the fore-hall was begun than the southern wall.

The construction of the enclosure wall was perhaps interrupted by the effect of the second Persian invasion. The resumption of the work, however, did not start earlier than the reign of Ptolemy VI/VIII. The construction debris of sandstone chips that connected to the construction of the second and third layer of the enclosure walls foundation on the western and south-western side of the precinct, contained a coin dated to the years 170 – 163 BC¹⁷. Of particular interest, however, is the fact, that this debris (Bauschicht 2a) accumulated only after the outer temenos wall, executed in mud bricks, was already built. Owing to this *terminus ante quem* the still uncertain date of the temenos wall can now be stated more precisely in the early Ptolemaic period¹⁸, during a time when all stone building works at the temple were lying fallow.

¹⁴ The block is still in situ in the foundation of the northern colonnade of the Roman courtyard.

¹⁵ This survey was carried out by H. Thaler and A.-C. Escher.

¹⁶ W. Niederberger, *Elephantine XX. Der Chnumtempel Nektanebos' II. – Architektur und baugeschichtliche Entwicklung*, AV 96 (Mainz, 1999), 60-65.

¹⁷ The classification of all coins was executed by H.-Chr. Noeske.

¹⁸ Cf. the previous assumption dating the temenos wall into the early Roman period, see H. Jaritz, in W. Kaiser et al., 'Stadt und Tempel von Elephantine – 23./24. Grabungsbericht', *MDAIK* 53 (1997), 186ff.

At the beginning of the second century AD (Bauschicht 1) the outer ambulatory of the temple was levelled, leaving only some remains of the lowest courses of the building ramps in the ground. These had been built in order to complete the upper courses of the enclosure wall. This extensive measure is connected to the construction of a small contra chapel in the central axis at the rear side of the inner enclosure wall¹⁹. The chapel consisted of one room and was surrounded by trees. Based on a coin minted during the reign of Emperor Hadrian and found in a subsequent layer of wind blown sand outside the contra chapel it might be assumed, that this extension of the temple was constructed in Trajan's reign; he was also responsible for further decoration in the temple of Khnum²⁰.

C. von Pilgrim

Note: After recording the temple foundations of the temple of the New Kingdom in the east of the Roman courtyard (season 2001), the underlying strata of the central administrative unit of the third Millennium BC were investigated in February 2004 in four sections. 20 m to the north of the palace bakery, the corresponding layers of the First Intermediate Period have been found at a considerably higher level. About 2 m higher than the floors of the bakery, a courtyard with subterranean storage facilities put the continuous occupation of the central administrative unit within the town enclosure in evidence. A rectangular silo was built in a neighbouring room, being of the same type as the structure found in the western half of the bakery. During the Eleventh Dynasty, the court was occupied by round cellars, pointing to a continuation of this area's storage function. As it is the case in other parts of the building complex, most wall courses were constructed in the late Sixth Dynasty, used during the First Intermediate Period, and subsequently repaired or rebuilt in the Eleventh Dynasty.

D. Raue

VI. Area II: Domestic Quarters of the Third Intermediate Period (fig. 4, pl. VII)

In the domestic quarters north of the Khnum Temple (area II) the work concentrated in the 33rd season on stratigraphic investigations in the eastern part of House X (Bauschicht 6/TIP), in order to clarify the sequence of building phases of the house²¹ (fig. 4).

¹⁹ Some foundation blocks of the chapel were already uncovered in earlier seasons, but were misinterpreted as belonging to a row of rooms added at the back of the enclosure wall, see H. Jaritz, in W. Kaiser et al., 'Stadt und Tempel von Elephantine – 15./16. Grabungsbericht', *MDAIK* 44 (1988), 160, fig. 8. See also H. Ricke, *Der Tempel Nektanebos' II. in Elephantine*, *BÄBA* 6 (Kairo, 1960), plan 1.

²⁰ E. Laskowska-Kusztal, *Elephantine XV. Die Dekorfragmente der ptolemäisch-römischen Tempel von Elephantine*, AV 73 (Mainz, 1996), 4.

²¹ Evidence of the latest building phase (Bauschicht 6a) is limited to the western part of House X; cf. A. Krekeler, *Elephantine XXI. Ausgrabungen in der Weststadt 1987-92. Bauten und Stadtstruktur*, AV (Mainz, in preparation).

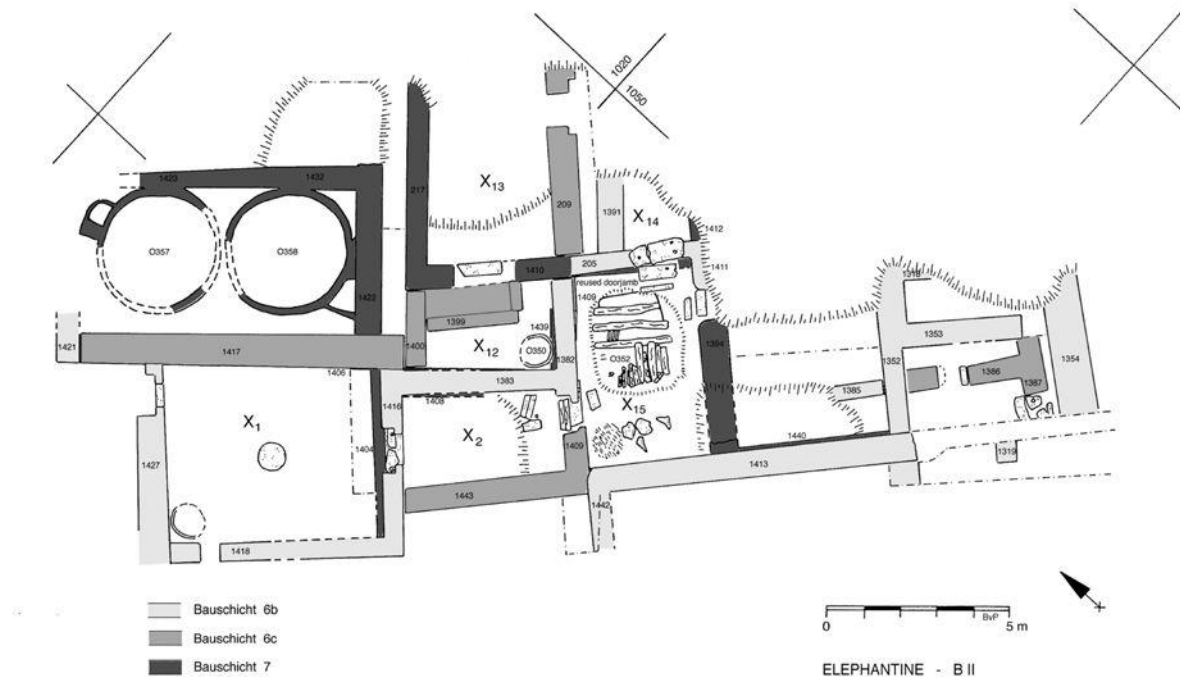


fig. 4: Eastern part of House X (Third Intermediate Period)

It turned out that in the earliest phase of House X (Bauschicht 6 c) only some of the walls were rebuilt (1417, 1409 and 1443), while most of the walls belonging originally to an earlier building (Bauschicht 7) were retained. The rooms, however, were filled up with debris to a height of about 0,50-0,70 m and covered with new mud floors. Apparently, this became necessary due to the raised level of an open courtyard east of wall 1409. Later on, the floor layers of the courtyard caved in due to the collapsed roof of an underlying cellar (pl. VII).²² Sandstone steps led from the courtyard onto various entrances giving access to adjacent rooms on a slightly higher level (pl. VII).²³ After the division of the large room to the north by a new wall (209), a new entrance was added in the eastern part of wall 1410.²⁴ The corridor east of the granary room (Bauschicht 7) was blocked (1400), so that the way to the entrance of room X13 led through a door in the north of wall 1409 and a second one in wall 1408. Due to the different floor levels north and south of wall 1410 it became clear that the remains of a rectangular mud-brick structure (1399) in front of the western entrance in wall 1410 has to be identified as a stairway leading up to the room behind.

In the following building phase (Bauschicht 6b) the floor level was raised once more and many of the walls of building level 7 were rebuilt. Wall 209 was replaced by a new wall that was shifted to the east (1391),

²² Most likely the cellar belongs to a preceding building of Bauschicht 7, but it is yet to be excavated as only the wooden beams of the roofing were uncovered.

²³ The steps in one of these entrances consist of 2 reused fragments of an inscribed doorjamb, belonging to a high Theban official named Hori, which in the last season were still assigned to the preceding building level 7, see 'Report on the 32nd season', *ASAE*, in press. It seems now clear that in building phase 6c, one of the fragments was located on wall 1410 and served originally as a threshold, whereas the other fragment served as a step. Only in building phase 6b the upper fragment was moved to the south and served as step onto the once more raised entrance level equipped with a new threshold.

²⁴ In contrast to previous assumptions, the foundation trench of the wall, which destroyed the latest mud floor of Bauschicht 7 indicates that wall 209 was erected not earlier than in building phase 6c.

and the former more elongated courtyard (X15) was reduced by a new wall (1413) in the south. In wall 1416, replacing an older wall underneath (1404), a new entrance was installed, equipped with a door-frame made of sandstone, leading into room X1.²⁵

Various small finds were discovered during the course of this season, including grinding stones, jar stoppers, and fragments of stone vessels. Of particular interest is a complete wooden comb²⁶, which was discovered on the floor of courtyard X15.

B. von Pilgrim

VII. Small finds of the Old Kingdom (fig. 5)

In spring 2004, about 2100 small finds were studied. These had mainly been excavated during the last three years in the area around the palace of the governor of Elephantine. In this area administration is attested by four cylinder seals, five button seals, two stamp seals, ingots of sealing clay and three stone weights, all of which are dated to the Old Kingdom (fig. 5).

Two other similar weights had been found during earlier campaigns in other areas of the settlement. Four of these are square with rounded edges (shape 653),²⁷ while the fifth is flat with slightly rounded edges (shape 625). These pieces are of special interest, because only a few weights from other places can be clearly dated to the Old Kingdom. Four of these are dated to this period because they have an inscribed cartouche of a king, while four others bear names of private persons.²⁸ The dates that W. M. F. Petrie provides for the numerous weights that he publishes are unsubstantiated.²⁹

²⁵ Cf. A. Krekeler, in: W. Kaiser et al., 'Stadt und Tempel von Elephantine – 17./18. Grabungsbericht', *MDAIK* 46 (1990), 211f., Abb. 7; Krekeler, in: Kaiser et al., 'Stadt und Tempel von Elephantine – 19./20. Grabungsbericht', *MDAIK* 49 (1993), 171f., Abb. 13.

²⁶ Find-no. K8255, excavation-no. 33602H/a-1, register-no.: 4070.

²⁷ The numbering of shapes is according to W. M. F. Petrie, *Ancient Weights and Measures*, *BSAE* 39 (London, 1926), pl. VI.

²⁸ M.-A. Cour-Marty, 'Les poids inscrits de l'Ancient Empire', in C. Berger, B. Mathieu (eds.): *Études sur l'Ancient Empire et la nécropole de Saqqâra dédiées à Jean-Philippe Lauer*, *OrMonsp* IX (Montpellier, 1997), 133 ff., nos. 2-5, 11, 14 and 15; Th. von der Way, *Tell el-Fara 'in - Buto I. Ergebnisse zum frühen Kontext. Kampagnen der Jahre 1983-1989*, *AV* 83 (Mainz, 1997), 162 f. and pl. 70.9.

²⁹ Petrie, *Ancient Weights and Measures*.

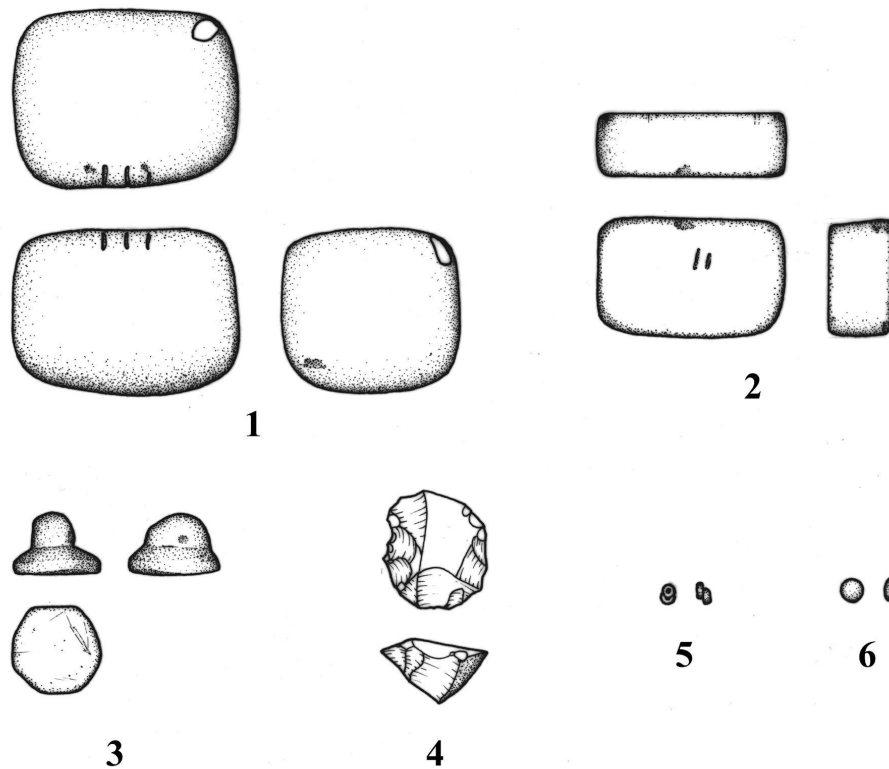


fig. 5: Small finds of the Old Kingdom. Scale 2:3: 5.1: weight, limestone, Fifth Dynasty, exc.-no. 33113 L/c-1; 5.2.: weight, calcite alabaster, Fifth Dynasty, exc.-no. 33111 F/m-1; 5.3: half product of a button seal, limestone, late Sixth Dynasty, exc.-no. 31106 R/m-3; 5.4: core, carnelian, Sixth Dynasty, exc.-no. 31107 M/k-2; 5.5: beads, fayence, Sixth Dynasty, exc.-no. 32112 Z/c-1; 5.6: bead, faience, Fifth Dynasty, exc.-no. 32110 G/b-2.

One of the weights of Elephantine dating to the Old Kingdom has an incised circle and six strokes.³⁰ The weight of one unit is 13,7 g, what corresponds to one *dbn*.³¹ Another one has the inscription \cap II and a weight of 320,5 g, so one unit is 26,7 g, what is similar to the copper *dbn* of the Middle Kingdom.³²

On the majority of the weights the inscription is inscribed on one of the larger sides; however, on one three incised strokes are placed on the edge (fig. 5.1).³³ This weight, like another one (excavation-no. 24334 a), weighs a bit more than 20 g and therefore represents another kind of weight unit.³⁴

³⁰ Excavation-no. 10900.

³¹ Compare W. Helck, 'Maße und Gewichte', in: *Lexikon der Ägyptologie* III (Wiesbaden, 1980), 1202.

³² Excavation-no. 32114X/a-5. Compare J. Vercoutter, 'Les poids de Mirgissa et le «standart-cuivre» au Moyen Empire', in E. Endesfelder, K.-H. Priese, W.-F. Reineke, St. Wenig (eds.), *Ägypten und Kush*, *SGKAO* 13 (Berlin, 1977), 437-445.

³³ Excavation-no. 33113L/c-1. Compare Petrie, *Ancient Weights and Measures*, pls. VI ff., nos. 646, 652, 3453, 4149 and 4354.

³⁴ Compare Cour-Marty, in C. Berger, B. Mathieu (eds.), *Études sur l'Ancient Empire*, 134 ff., nos. 14 and 18.

A weight of about 15 g, inscribed with two strokes (excavation-no. 33111 F/m-1, fig. 5.2) takes a different shape. Weights of this shape found in other places are also mainly made out of calcite and all weigh less than one *dbn*.³⁵

find no.	material	shape	Weight (g)	inscription	basic unit (g)	Date
24334 a	limestone	653	102,0	IIII	20,4	Third Dynasty
33113 L/c-1	limestone	653	62	III	20,7	Fifth Dynasty
33111 F/m-1	calcite	625	15	II	7,5	Fifth Dynasty
32114 X/a-5	serpentinite	653	320,5	∩II	26,7	late Sixth Dynasty
10900	Limestone	653	82,0	O IIII	13,7	Old Kingdom

Table 1. weights from Elephantine (Old Kingdom)

Industrial production around the palace area is attested by unfinished products and wasters. For example, two unfinished button seals were found. One was neither drilled nor incised (exc.-no. 31106 R/m-3, fig. 5.3), while the other had been drilled, but the loop had broken during the procedure, and thus the seal had finally been left unincised (exc.-no. 32106 W/h-2). The production of carnelian beads is demonstrated by the discovery of two cores (fig. 5.4).³⁶ The natural surface of the pebbles is partially removed to prepare them for the final cut and drilling.³⁷ Also, the production of faience beads seem to have taken place in this area. Twelve unuseable beads were found here, the first time a significant amount of such wasted products has been found on Elephantine (fig. 5.5-6). These beads were discarded because during the glazing process some were fixed together, while the holes of others had been sealed by the glaze.

In addition to these finds, more than 20 parts of hand mills with traces of red ochre and about 6 kg of red ochre were found in area XXX/XXXI/XXIV. This represents almost 50% of that raw material found during earlier excavations on Elephantine.

P. Kopp

VIII. Lithic studies (fig. 6)

Borers or drills made of flint for perforating beads or pendants were known in the Nile Valley from at least the Neolithic onwards. Various types of such implements have been found in the 'Urschicht' at Merimde-Benisalâme. They were made of small flakes or blades and all have a working tip.³⁸ Their function was for drilling holes in broken pottery to make repairs, manufacturing pendants from animal teeth, shells or bones, or drilling beads of limestone, calcite or carnelian. Intriguing evidence for the workshops and the social status of

³⁵ 7,8 to 11,6 g, see Petrie, *Ancient Weights and Measures*, pls. XXVII ff., nos. 2128, 3793, 4098, 4110, 4191 and 4209.

³⁶ Excavation-nos. 31107M/k-2 and 31108S/a-2.

³⁷ Compare K. W. Butzer, 'A Minute Predynastic Flake Industry from Hierakonpolis', in *Archivio Internazionale di Etnografia e Preistoria* II (Turin 1959), 17-21.

³⁸ J. Eiwanger, *Merimde-Benisalâme. Die Funde der Urschicht*, AV 47 (Mainz, 1984), pl. 54, 55.

the workmen who produced carnelian beads during the Chalcolithic period at Hierakonpolis has already been found.³⁹ Other Chalcolithic sites like Maadi produced hundreds of stone borers as well.⁴⁰ From the so-called Microlithic Hill at Abu Ghâlib alone some 7000 microdrills were retrieved, while at other locations at the site several more dozens were found.⁴¹ The forms resemble the types already known from the earlier sites.⁴² Almost half of them were drop-shaped, while a good 25% were obelisk-shaped. Other forms such as needle or triangular accounted for less than 4%. The length of the drills ranged mostly from 8 to 30mm with the longest measuring 37mm. The drills from the Microlithic Hill were, due to the vast amount of both unfinished and finished artefacts, linked to the production of carnelian beads. Based on associated pottery the microlithic tools were dated to the end of the Old Kingdom and the Middle Kingdom. The debate over whether these stone tools are Dynastic or Predynastic has recently been revived by T. Bagh with the announcement of a future study and publication of the lithic assemblage.

In 2004 the lithic assemblages from the 20th to 33rd campaigns on the island of Elephantine were studied. The total assemblage comprised 4626 objects, of which about 11% could be classified as tools. The typical raw material was local wadi or Nile pebble while less than 3% seemed to be imported, mined flint. Out of ca. 500 tools 88, and thus more than 15%, were small borers; 60 of them still complete (fig. 6, 3-8). They usually feature only one working tip and are less than 3cm long. The drills were struck from small cores (fig. 6, 1-2). More than 70 of these small cores with single or multiple platforms have been retrieved so far. The common raw material is again wadi or Nile pebble. Based on the colouration and the coarseness of the raw material many of the small drills could be linked to the small cores. It was, however, not possible to match any of the drills to a specific core.

The workshop producing the small borers and the cores can be described as part of a area next to a palace bakery.⁴³ The date of more than 90% of the borers ranges from late Sixth Dynasty to the early First Intermediate Period. 85% of the cores come from layers dated from the late Sixth Dynasty to the early Twelfth Dynasty. Thus it is very convincing that the small borers were detached from the small bladelet cores in a lithic workshop.

³⁹ Th. Hikade, in: St. Hendrickx, R. Friedman, K. M. Cialowicz, M. Chlodnicki (eds.), *Egypt at its Origin. Studies in Memory of Barbara Adams*, Proceedings of the International Conference "Origin of State. Predynastic and Early Dynastic Egypt", Krakov, 28th August – 1st September 2002, OLA (Leuven, 2004), 181ff.

⁴⁰ I. Rizkana / J. Seeher, *The Lithic Industries of the Predynastic Settlement, Maadi II*, AV 68 (Mainz, 1988) and recently Th. Hikade, in U. Hartung et al., 'Vorbericht über neue Untersuchungen in der prädynastischen Siedlung von Maadi', *MDAIK* 59 (2003), 180ff.

⁴¹ The site has been recently again brought into the limelight by T. Bagh, 'Abu Ghâlib, an Early Middle Kingdom Town in the Western Nile Delta: Renewed Work on Material Excavated in the 1930s', *MDAIK* 58 (2002), 29 ff. The article also includes the older literature regarding this site.

⁴² H. Larsen, 'Vorbericht über die schwedischen Grabungen in Abu Ghalib 1932/34', *MDAIK* 6 (1936), pl. 19.

⁴³ Cl. Jeuthe, in: Dreyer et al., *MDAIK* 61 (in press). See also Raue, in Dreyer et al., *MDAIK* 58, 170ff.

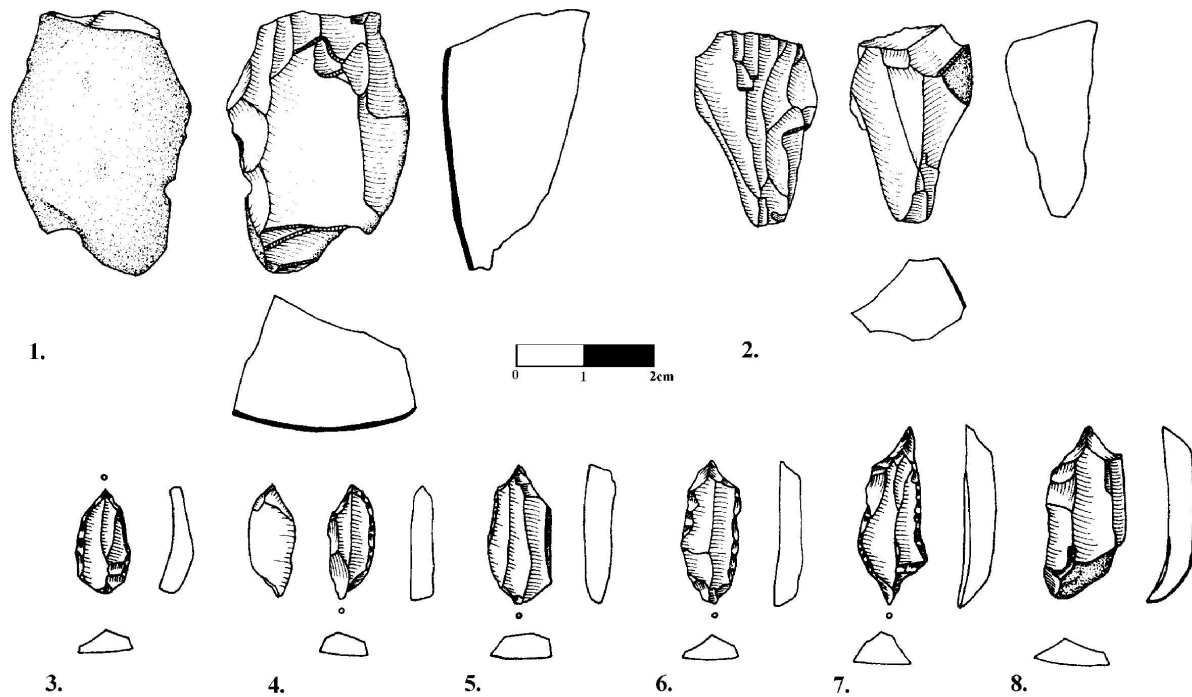


fig. 6: Small borers and bladelet cores from Elephantine.

But what was the function of these little implements? The possibility for drilling carnelian is not very likely, as only 55 small flakes of this raw material have been found, hardly enough for the waste from large-scale bead production⁴⁴. From layers dated to the same period several button or stamp seals for administrative purposes have been found, carved from various kinds of raw material such as bone and stone. The raw material of the seals is in all cases softer than flint, which has a Mohs hardness of 6.5-7. Some of the depictions and signs on the seals were made in a rather crude manner suggesting the tool for it was not a needle sharp metal tool but a tool with a rather coarse working tip. For this work, the small flint borers would have been the most convenient and cheapest implements at hand.

To further underline the use and introduction of a new tool type, especially for the locally burgeoning stamp seal industry at the end of the Old Kingdom on Elephantine, it is noteworthy that the small borers and bladelet cores are absent from the lithic inventory of the periods prior to the end of the Sixth Dynasty.⁴⁵ In light of the recent investigation on Elephantine it becomes evident that with new industries and workshop activities emerging, the lithic industry had to catch up and so flint-knappers too, had to develop their skills to match this new demand.

T. Hikade

⁴⁴ See, also for the presence of manufacture of seals in this area, the contribution of P. Kopp in this report.

⁴⁵ Th. Hikade, 'Die lithischen Industrien des Alten Reiches auf Elephantine', *MDAIK* 58 (2002), 305ff.

IX. Coptic textiles

The study of textiles from Roman, Byzantine and Early Islamic periods excavated at Elephantine by the German-Swiss mission started in November / December 2003, focussing upon finds of textiles found in precisely dated strata of recent excavations in the Khnum precinct.⁴⁶ The upper strata date to the ninth century AD, followed by seventh century AD and fifth-sixth century AD. 142 samples were examined for a total number of 472 artefacts, many of them composed of several fragments.

The chronological distribution is the following: 163 artefacts date to the fifth-sixth century; 211 to the seventh century and 64 to the ninth century. The remaining pieces straddle strata of more uncertain date.

Many pieces are sewn together showing that they were old, reused fabrics. This is significant, because in Antiquity the lifespan of textiles, in their original or reused form was very long. Therefore, the strata in which the fragments were found date neither their production nor their original use.

It is no surprise that most of the fragments are tabbies (especially in linen), but often they are banded, striped or checked. There are also several quite important tapestries (40), four pieces decorated with supplementary weft brocading, and one compound tabby. A remarkable group is composed of nine fragments woven with an extremely thick and stiff fibre, which were certainly mats. Since they are the strongest part of textiles, many reinforced selvages and finishing borders were found, and fewer starting borders.

Every item was cleaned with a soft brush; a few fragments were rinsed in distilled water, and few others humidified for an easier flattening. A technical analysis was drafted and at least one digital picture was taken for each piece. A study is now in progress to synthesize all the data collected on the spot.

R. Cortopassi

X. Glass studies

During four weeks in November and December 2003 the Roman, Byzantine and early Islamic glass finds found from the excavations in Elephantine between 1969 and 2003 were studied. While the glass finds from the early seasons are mainly unstratified collections of glass, the finds from the Twenty-sixth to the Thirty-first campaigns (1996/97-2001/02) are coming from well stratified contexts in the area of the temple of Khnum. As the stratified finds belong to the Byzantine and early Islamic period, the Roman glass finds studied as part of this project come from unstratified contexts, or have to be considered as redeposited in later periods. Various fragments are significant: part of a core formed for a late Hellenistic amphoriskos of the second/first century BC, Roman glass such as a rim sherd of a ribbed bowl of the first century AD, a body sherd of an early Roman mosaic glass bowl of the first century AD, several fragments of cast colourless tableware bowls of the late first to early third century AD, a rim sherd of a square bottle of the mid first to mid third century AD, a body sherd of a mould blown head flask of the second/third century AD, a few body sherds of unguentaria with solid base of the second/third century AD, and a few fragments of colourless glass vessels with wheel cut decoration of the second to the fourth century AD. The ribbed bowl, the mosaic glass, the cast colourless tableware, the square bottle, the unguentaria with solid base and the vessels with wheel cut decoration can be regarded as typical for Roman

⁴⁶ For the excavation of this area, and the excavations of the years 1998-2000, see F. Arnold, *Elephantine XXX. Die Nachnutzung des Chnumtempelbezirks. Wohnbebauung der Spätantike und des Frühmittelalters* (Mainz, 2003).

Egypt; parallels are known from Quseir al Qadim⁴⁷ and from Karanis.⁴⁸ Rather uncommon for Roman Egypt is the mould blown head flask, as mould blown glass is only rarely appears in Egypt.⁴⁹ These few Roman glass vessels do not provide further evidence for the suggested local production of glass vessels during the Roman period on Elephantine, but most of them seem to have parallels within the assemblage from the Roman industrial dump on Elephantine.⁵⁰

One hundred twenty-one glass fragments belong generally to *Bauschicht* 0, the Byzantine occupation of Elephantine, were found mainly in the fill that was deposited after the destruction of the temple of Khnum. Most of these belong to beakers or bowls. Among them conical beakers with a cracked off everted rim, conical beakers with a fire rounded sloping rim, cylindrical beakers with a fire rounded straight rim, beakers with a short stem and a thin foot, beakers with a long solid stem, bowls with an outfolded rim and bowls with a fire rounded sloping rim are the most common types. They most probably represent a rather mixed assemblage of redeposited Byzantine glass dating between the fifth and seventh century AD.

Fragments of 180 glass vessels belong to the fifth/sixth century AD occupation south and west of the temple of Khnum.⁵¹ Again, most of them belong to beakers and bowls, there is only a small amount of flasks and jugs. Among the beakers, conical beakers with a cracked off everted rim and a small flat base are the predominant type, while conical and cylindrical beakers with a fire rounded rim are less common. Conical beakers with a cracked off rim are among the most common beakers in fifth century AD Egypt.⁵² There are some base sherds of beakers that cannot yet be attributed to certain rim sherds. However, they show that stemmed beakers were common during the Byzantine period in Elephantine. They can be divided into three main groups: beakers with a short stem and a thin foot, beakers with a high base ring and beakers with a long solid stem. All three types are well known in Byzantine Egypt as similar finds from Coptos show.⁵³ Most common among these beakers are the ones with a foot and a short stem, while the beakers with a long solid stem are the rarest. Bowls with an outfolded rim are the most common bowls in the fifth/sixth century AD contexts, followed by the bowls with a triangular rim, bowls with a fire rounded sloping rim and bowls with a fire rounded inwards turning rim,

⁴⁷ C. Meyer, *Glass from Quseir al-Qadim and the Indian Ocean trade*, SAOC 53 (Chicago, 1992), 17-20, 30-32, 36-38.

⁴⁸ D. B. Harden, *Roman Glass from Karanis. Found by the University of Michigan Archaeological Expedition in Egypt, 1924-29*, *UMichS Humanistic Series* 41 (Ann Arbor, 1936), 60-61, 83-84, 89-90, 118-119, 124, 152-153, 238, 248-250, 272, 276-277.

⁴⁹ Meyer, *Glass*, 39.

⁵⁰ M. Rodziewicz, in: W. Kaiser et al., 'Stadt und Tempel von Elephantine – 23./24. Grabungsbericht', *MDAIK* 53 (1997), 192.

A rim sherd of a black bottle of the second/third century AD is the only Roman glass vessel among the studied finds that comes from a secure temporal context, as it was found in a context in the area of the temple of Khnum belonging to *Bauschicht* 1 together with pottery of the second - fourth century AD. Parallels are known from Quseir al Qadim, see Meyer, *Glass*, 28. Roman black glass vessels are produced from strongly coloured glass - in this case green glass - of such intensity that they appear black, and they generally belong to the first/second century AD, J. Price / S. Cottam, *Romano-British Glass Vessels: A Handbook, Practical Handbook in Archaeology* 14 (York, 1998), 15.

⁵¹ Arnold, *Nachnutzung des Chnumtempelbezirks*, *Bauschicht* 01: 29-32. 36-37. 47-77.

⁵² Harden, *Roman Glass from Karanis*, 159-164; D. Foy, 'Secteur nord de Tebtynis (Fayyoum). Le verre byzantin et islamique', *AnIsl* 35 (2001), 465-466.

⁵³ M.-D. Nenna, 'Ateliers de production et sites de consommation en Egypte. V siècle av. J.-C. – VII siècle apr. J.-C. Premier bilan', in *Annales du 14^e congrès de l'association internationale pour l'histoire du verre* (Lochem, 2000), 24 fig. 10.

while bowls with a fire rounded straight rim are rare. Bowls with a triangular rim are common in Egypt during the fifth/sixth century AD as shown by respective finds from Karanis, Coptos and Tebtynis.⁵⁴

One hundred twenty-five fragments of glass vessels belong to the seventh century AD occupation south and west of the temple of Khnum.⁵⁵ Again, most of them belong to beakers and bowls, and flasks and jugs are still very rare. Among the beakers, conical beakers with a cracked off everted rim and a small flat base are still the most common type, followed by conical beakers with a fire rounded sloping rim and cylindrical beakers with a fire rounded straight rim. There is no change in the rim types of the beakers between the fifth/sixth and the seventh century AD contexts in Elephantine, which is rather surprising. Especially the predominance of conical beakers with a cracked off rim in the seventh century AD is noteworthy as this beaker type usually disappears after the fifth century AD.⁵⁶ Therefore, it is possible that some of the glass finds from the seventh century AD contexts have to be regarded as redeposited material. Only a detailed study of the different contexts and their stratigraphy may reveal more information concerning the chronology of the Byzantine glass in Elephantine. However, among the stemmed beakers there is a difference between the fifth/sixth century AD and the seventh century AD contexts, as in the later contexts the beakers with a long solid stem are now predominant, while the beakers with a foot and a short stem are less common and the beakers with a high base ring are rare. The bowls are still divided into the same types as in the fifth/sixth century AD contexts, although the predominance of bowls with an outfolded rim is now even clearer.

Only 14 fragments of glass vessels can be attributed to the latest occupation south and west of the temple of Khnum during the 9th century AD.⁵⁷ This small amount is due to the fact that most of the houses from this area were already excavated in the early twentieth century,⁵⁸ leaving a very few layers to be excavated further; none of the glass from the earlier excavation has ever been studied. Only the most common bowl type with an outfolded rim and the most common type of stemmed beakers with a long solid stem from the seventh century AD contexts are still present in the later contexts, together with an isolated fragment of a beaker foot with a short solid stem which seem to be a re-deposited earlier piece. Beside these fragments there are three new types of glass vessels: a conical beaker with an infolded rim, a cylindrical beaker with incised or scratched decoration, and cylindrical beakers with pinched decoration. The decorated beakers are common in Abbasid Egypt as shown by respective finds from Tebtynis and Fustat⁵⁹ as well as in the entire Near and Middle East.⁶⁰

While there is only a change in the predominant type of stemmed beakers between the fifth/sixth and the seventh century AD contexts and all the other types are present in similar numbers in both phases, there is a noticeable development in the colours between the two phases as there is a tendency from more yellowish,

⁵⁴ Harden, *Roman Glass from Karanis*, 110 no. 247 ; Nenna, in *Annales du 14^e congrès de l'association internationale pour l'histoire du verre*, 24 fig. 9 ; Foy, *AnIsl* 35, 467-468 no. 15-16. 24.

⁵⁵ Arnold, *Nachnutzung des Chnumtempelbezirks*, Bauschicht 02: 32-33, 37, 77-102.

⁵⁶ Foy, *AnIsl* 35, 465-466.

⁵⁷ Arnold, *Nachnutzung des Chnumtempelbezirks*, Bauschicht 03: 33-35, 37, 102-130.

⁵⁸ Arnold, *Nachnutzung des Chnumtempelbezirks*, 13-14.

⁵⁹ Foy, *AnIsl* 35, 474-475 fig. 5 ; D. Foy, M. Picon, M. Vichy, 'Verres omeyyades et abbassides d'origine égyptienne: les témoignages de l'archéologie et de l'archéométrie', in: *Annales du 15^e congrès de l'association internationale pour l'histoire du verre* (Nottingham, 2003), 139-140 fig. 2, 16, 20.

yellowish green and pale green glass in the fifth/sixth century AD to more pale green, green and bluish green glass in the seventh century AD.

Among the Abbasid glass finds from the 9th century AD contexts, the typical Byzantine glass colours such as yellowish green and pale green have disappeared and the dominant colours are now greenish blue and turquoise, together with some dark blue and dark green glass. While the colours of the Abbasid glass vessels are among the preferred colours during this time throughout the Islamic world, the yellowish greenish and the pale green glass vessels seem to be characteristic colours for the Byzantine glass in Egypt. Therefore, the Byzantine and early Islamic glass from Elephantine is to be considered as Egyptian glass, but it is not possible to give a more precise location of its origin. A local production in Elephantine seems to be unlikely as the amount of glass finds is relatively small.

D. Keller

XI. Coptic ostraka

In spring 2004, 350 fragments of Coptic ostraca in march 2004 examined. All Coptic ostraca found in Elephantine are fairly fragmentary. About 200 pieces bear enough precise information to indicate the text given on an ostrakon. These inscriptions include remains of letters, contracts, receipts, school exercises and indices of names.

A constant feature in letters and contracts was the cross or staurogram. One of these two marks was used at the beginning of the texts or appeared at the end as signature or for witnesses. Also the superscription CMG, a Christian invocation with different reading or interpretation, was recorded.

The most interesting fragments are the legal contracts. We suppose that the contracts were written at the end of the sixth to the first quarter of the seventh centuries A.D. Legal contracts are substantial secular documents, but Christian features make their appearance in the form of symbols, invocations and oaths. As a rule the Elephantine legal contracts from this period are loans between two private persons. These documents written in a specific formulation give information about money-lending and repayment. The use of Greek loan-words specially for the legal patterns allowed supplements in smaller ostraca-fragments. The loans mentioned on these potsherds were given in coins – the unit of measurement was gold. In Elephantine the hiring fee seems to be money – in other areas in Egypt natural produces like wheat were also usual. The time of repayment was variable.

A school exercise also in fragmentary condition shows the beginning of the Coptic alphabet, with the typical letters borrowed from Demotic script augmenting the alphabet.

There are some indices of names, maybe remains of lists for receipts or taxes. The documents reveal a lot of Christian names, almost all male. Deacons and other members of the clergy appear in the Coptic ostraca as scribes, signatories and witnesses.

S. Schaten

⁶⁰ Sh. Hadad, 'Incised Glass Vessels from the Umayyad and Abbasid-Fatimid Periods at Bet Shean, Israel', *BASOR* 317 (2000), 65; Foy, *AnIsl* 35, 474.

XII. Rock inscriptions (pl. VIII-IX)

The project to record the rock inscriptions on Elephantine island and in the Aswan area, now underway for several years,⁶¹ was continued. This season, work concentrated on a group of inscriptions which lined the beginning of the ancient street from Aswân to Shellâl. Still nowadays it is visible that, originally, a narrow way left the bay of modern Aswân and ascended to the higher ground of the quarry area. High walls and boulders of granite rock flanked this road on either side.

At this conspicuous site, the rock faces were decorated with several inscriptions and reliefs. DeMorgan *et al.* in their *catalogue des monuments* list only 17 texts; most of them were copied only incompletely and imprecisely.⁶² Later, Labib Habachi provided significantly improved facsimiles of a few of the most important tableaux.⁶³ After prolonged work on the site, we were able to reveal a total of about 50 inscriptions, most of them hitherto unpublished, and to attain a considerably improved understanding of the previously recorded texts.

The site offers a rather specific and unusual assemblage of inscriptions. In clear contrast to what is usually the case, as found on Elephantine Island, inscriptions of both the Middle and the New Kingdoms are present at the site in nearly equal proportions. Actually, due to lack of space, the inscriptions of the New Kingdom regularly reused the areas used for the Middle Kingdom inscriptions. Many of the tableaux therefore are palimpsests with two or even three texts carved over one another. Naturally, epigraphic work, under these conditions, is particularly difficult but also particularly rewarding.

During the Middle Kingdom, a number of beautiful relief tableaux were carved along both sides of the street, showing the figure of the owner, sometimes accompanied by up to 15 family members. In one case, the owner is shown seated in front of an offering table, a rather rare iconographic type in the rock inscriptions of the Aswân area.⁶⁴ As far as is still discernible from the inscriptions, nearly all of the Middle Kingdom persons held positions in the army on different hierarchical levels. This fact probably points to the rôle of this street in the passage of military personnel to Nubia, and also to the military organization set up to control the portage road circumventing the cataract and the work going on in the nearby quarries. While one of the inscriptions is dated to the reign of Senwosret I, most of the texts seem rather to belong to the late Middle Kingdom (pl. VIII) and even the Second Intermediate Period.

In the New Kingdom, a number of beautiful rock reliefs was executed, showing their owners in adoration in front of deities (pl. IX). Here, the god Chnum plays a prominent rôle, but in other cases, the Theban triad is depicted or mentioned in the accompanying prayers. Only the highest ranking persons were permitted to show

⁶¹St. J. Seidlmayer, 'New Rock Inscriptions at Elephantine Island', in: *Egyptian Archaeology - Bulletin of the EES Exploration Society* 14, 41-43; 'New Rock Inscriptions on Elephantine Island', in Z. Hawass (ed.), *Egyptology at the Dawn of the Twenty-first Century, Proceedings of the Eighth International Congress of Egyptologists* (Cairo/New York, 2003), 440-447; ',30 Jahre ließ ich gehen ...'. Bemerkungen zu zwei Jubiläumsinschriften der Aswaner Region', *MDAIK* 57 (2001), 247-256.

⁶²J. De Morgan et al., *Catalogue des monuments et inscriptions de l'Égypte antique* I (Vienne, 1894), Pls. 26-27, nos. 195-211.

⁶³L. Habachi, 'The Graffiti and Work of the Viceroy of Kush in the Region of Aswan', in *Kush* 5 (1957), 23 no. 15 and 28 no. 25.

⁶⁴Compare e.g. DeMorgan et al., *Catalogue des monuments* I, Pl. 14 no. 61, Pl. 19, no. 110; this motif, however, is common in early rock inscriptions at other sites, see e.g. R. Anthes, *Die Felseninschriften von Hatnub*, *UGAA* 9 (Leipzig, 1928), passim.

themselves paying homage to the cartouches of their royal master. In this period, members of the civil and military administration of the Nubian colonial empire are particularly prominent, especially the viceroys of Nubia, such as Merimes (temp. Amenophis III) and Hui (temp. Ramesses II).⁶⁵ Like at most other places in the Aswân area, no inscriptions are found which post-date the New Kingdom, while the majority belongs to the 18th and 19th dynasties (Ramesses I. and Siptah), with a few extending into the Twentieth Dynasty (Ramesses III).

In the course of this season, it was possible to complete the series of facsimile drawings for all of the inscriptions at this site, which, after study and re-checking against the originals, will be published in due course. While working on the inscriptions in this area, however, the urgent necessity of conducting a full survey of the rock inscriptions on Aswan's east bank became increasingly clear. The modern housing is growing very rapidly, and soon the inscriptions will be lost unless they are quickly identified, mapped, and documented fully. Hopefully, our project will address this objective in the next season.

St. J. Seidlmayer

XIII. Archaeozoological studies

During a study season in Elephantine in February and March 2004, animal bone material excavated during the last 4 years was analysed. The main bulk of the faunal remains originates from three different locations dated into the Old and the Middle Kingdom of the ancient city of Elephantine. All locations yielded a rich inventory of taxa, consisting of domestic and wild mammals, birds, reptiles and a great variety of fish. However, differences in the percentages in which the animal species occur in these locations can be described as follows. The majority of the faunal material from the workshop area of the Fifth/Sixth Dynasty belonged to fish. Remains of mammals and reptiles were less abundant. The major species of fish were Nile perch, *Lates niloticus*, and Docmac-catfish, *Bagrus docmac*. Large specimen of both fish, and primarily the Nile perch, are often found. Consequently, fish was the main source of protein during this earlier occupation of Elephantine, and in this specific dwelling area. Besides fishing, people exploited cattle, donkeys and pigs, but the most numerous domestic animals were goats. Noteworthy is the presence of a series of hippo-canine-, and incisor-teeth, *Hippopotamus amphibius*, which bear traces of cut marks and can be considered as raw material to be worked for different items.

The animal assemblage from the second millennium BC contained much more mammal bones than fish. The most important species here is cattle, large specimens of which were found. In addition, hunting activities increased. The hunted taxa include not only wild animals of the desert (antelopes, *Alcelaphus buselaphus*, gazelles, *Gazella dorcas* and hares, *Lepus capensis*), but also hippopotami, crocodiles, *Crocodilus niloticus*, soft shell turtles, *Trionyx triunguis*, and hyraxes, *Procavia capensis*. White and Black storks (*Ciconia ciconia* and *C. nigra*) were also regularly hunted, because Elephantine lies on the main migration route of these birds from (and to) the Near and Middle East to (and from) East-Africa during autumn (and springtime).

A. von den Driesch and J. Peters

⁶⁵Habachi, *Kush* 5, 23 ff.

XIV. Human skeletons

The investigation of the human skeletons from the settlement and the cemetery on the island of Elephantine was continued in spring 2004. In total, 81 individuals were examined⁶⁶. Among these are 37 children, 3 juveniles and 41 adults.⁶⁷ Twenty-five of them date from the Early Dynastic Period to the Old Kingdom, and thirty-one from the Middle Kingdom to the Graeco-Roman Period. The remaining individuals can be mainly dated to the late Roman Period.

Sinusitis maxillaris (inflammatory processes of the maxillary sinus) is frequently found, in most cases this inflammatory process of the sinuses was provoked by dental abscesses. In addition, *Otitis media* (inflammatory process of the tympanic cavity) was frequently observed. This disease could be fatal because of septicaemia. Furthermore, inflammatory and haemorrhagic irritations of the meninges (e.g., *bacterial meningitis*, *epidural haematoma*) were taken into consideration.

Three cases of skull trauma due to, for example, a stone from a sling (one male and one female dating from the fifth -sixth century CE, the third one dates from the late Old Kingdom) were observed, as well as fractures of long bones (e.g. *fibula radius* and *ulna*; basic phalange of the thumb)

Dental caries was not common, however periodontal diseases are frequently observed (with many apical abscesses).

M. Schultz / T. Schmidt-Schultz

⁶⁶ 30 of these are represented by one bone only; 46 were found in settlement context, the others were discovered in cemetery areas of the island.

⁶⁷ 14 females, 11 males; the sex of 16 individuals is not determinable

Abstract

During the 2003/2004 excavation season at Elephantine work focussed on the area of the palace of the Old and Middle Kingdom, the temple of Khnum, the southern harbour and the area south of the sanctuary of Heqaib.

In the mid-third millennium BC town, the strata of the Third and Fifth Dynasty were investigated. In the north, the excavation of the palace bakery of the First Intermediate Period and adjoining contemporary strata was finished.

The architectural history of the Khnum Temple continued to be examined, with special attention being paid to the Ptolemaic pronaos. Re-used blocks of the New Kingdom and the Twenty-sixth Dynasty were documented in the foundation of the Ptolemaic portico, the Roman terrace of the temple and in the courtyard. The earlier first millennium BC was examined in an area south of the sanctuary of Heqaib with a sequence of habitations of the late New Kingdom and the 3rd Intermediate Period.

Besides this, the study of finds (small finds, pottery of the Middle Kingdom and the Roman Period, lithic, glass, Coptic textiles and ostraka, human skeletons, animal bones) and of rock inscriptions was continued. Restoration work concentrated on the town wall of the third millennium BC, and the wooden architectural elements of the bakery of the First Intermediate Period.



pl. I: Area XXXI, palace-bakery of the First Intermediate Period with restored column



pl. II: town enclosure of the Old Kingdom (southeastern part) after restoration



pl. III: Area XXX, workshop area of the Fifth Dynasty.



pl. IV: Area XXXI, street east of the palace-bakery



pl. V: Area XXXI, cellar in the palace-bakery of the First Intermediate Period



pl. VI: Khnum Temple: Decorated block of the Khnum Temple reused in the Ptolemaic-Roman terrace of the late temple of Khnum.



pl. VII: Area II: Overview of the eastern part of House X with collapsed roof of an earlier cellar



pl. VIII: Aswan, Rock inscription from the time of Amenemhat III showing the owner and members of his family.



pl. IX: Aswan, New Kingdom rock inscription showing the owner in adoration before Ptah, Khnum and Anuket.