Report on the Excavations at Elephantine by the German Archaeological Institute and the Swiss Institute from autumn 2014 to spring 2015

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1. Introduction

The excavations in the ancient town of Elephantine carried out by the German Archaeological Institute Cairo in cooperation with the Swiss Institute for Egyptian Building Archaeology since 1969 were continued in the season 2014/2015. Research concentrated on two major areas, namely excavations in the ancient town and in the area of the temple of Khnum.[1]

In the settlement the German Archaeological Institute continued its archaeometrical project in the ancient town (see section 2). The Swiss Institute resumed the excavation of a building to the south of Heqaib Sanctuary in the framework of its study of the New Kingdom town of the island (see section 3).

At the site of the temple of Khnum the German Archaeological Institute continued the project on the reconstruction of the New Kingdom temples and sanctuaries of Khnum (see section 4) from re-used blocks found in the foundations of the later temple. Work of the Swiss Institute concentrated on various aspects of this late temple, its precinct and its furnishings (see sections 5).

Apart from this, the documentation and the study of finds played an important part in the work of the last season. Work on the pottery of the Middle and New Kingdom was continued by scientists from the German and Swiss Institute (sections 6–7). Furthermore, glass objects, silex tools and animal remains were studied (see section 8–10).

Conservation and reconstruction work was carried out by the Swiss Institute on blocks of the late temple of Osiris Nesmeti and the building of the same temple as well as on the small obelisks from the balustrade of the Roman river terrace of the temple of Khnum (section 11).

The German Archaeological Institute started and completed a major inventory in the so-called Annex magazines on the island and managed to transfer finds from several seasons to the new magazine near the local inspectorate. Apart from that new storage space for mass finds was built (section 12).

Last but not least a major effort was made by the German Institute in cooperation with the Aswan inspectorate in improving the relationship to the local inhabitants of the island by arranging an archaeology day for the pupils of the villages on Elephantine (section 13).

(S.J.S.)

[1] We are grateful to the members of the Ministry for Antiquities for their continued support, in particular the Directors of Aswan Inspectorate Dr. Fathy Abou-Zeid, Nasr Salama and Osama Abdel Latif as well as the chief inspector Shazli Abdel Azim.

2. The Project "Realities of Life"

The research project "Realities of Life – A Synthesis of Archaeology and Natural Sciences (Archaeometry)" has been launched by the German Archaeological Institute as a new way to approach the archaeological fieldwork on Elephantine island and herewith answer questions which former excavation works were not able to clarify in this detail. The aim of the project is to get a deeper insight into the living conditions on Elephantine island during the time of the Middle Kingdom. Furthermore, the regional and international connections of the inhabitants of the settlement in terms of trade for and with anything necessary for the daily life in ancient Egypt – food items, raw materials, objects of utility and art – are in the focus of the research work. As a third aspect the implementation of modern methods derived from natural sciences into the archaeological work, from the excavation up to the processing and interpretations of various materials such as soil and invisible residues in ceramics and on stone tools, serves on one hand to answer the research questions of the project and is on the other hand in itself a focal point of the work. The use of micromorphological and biochemical analyses under the individual preservation conditions on Elephantine island shall be discussed and networks between various scientific institutions for the execution of such methods be established.

As a first step on the path of this project the excavation method had to be adjusted to these aims. The new methodological concept of the archaeological fieldwork and find processing was defined during a workshop under the project title in November and December 2014 (see section A). The first execution of the new techniques in excavating, storing and find processing was done during the spring campaign 2015 (see section B).

A) Result from a Methodological Workshop in 2014

With the advance of scientific techniques and machinery in general, archaeological methods of the 21st century likewise have improved considerably: Archaeological investigations of historic strata have followed the example of prehistoric archaeology and moved on from studying mainly the macroscopic record to the microscopic and molecular level[2]. However, the possibility to conduct such analyses is depending on factors like preservation of material, excavation strategies, storing possibilities and – of course – the availability of processing facilities.

The workshop "Reality of Life" taking part in Cairo and Aswan from November 30th until December 4th, 2014[3] addressed the above mentioned factors at the example of various types of archaeological finds

[2] See for examples publications like: D.R. BROTHWELL / A. M. POLLARD, *Handbook of Archaological Sciences*, Cinchester 2001; ST. WEINER, *Microarchaeology*, Cambridge 2010.

[3] Workshop dates: 30th November – 4th December 2014 in Cairo and Aswan; inauguration and keynote lectures: Prof. Dr. M. Eldamaty (Ministry of Antiquities, Cairo); Prof. Dr. B. Midant-Reynes (IFAO, Cairo); Prof. Dr. K. El-Enany (National Museum of Egyptian Civilisation, Cairo); Prof. Dr. St. Seidlmayer (DAI Cairo); Prof. Dr. T. Tawfik (Grand Egyptian Museum, Cairo); R. de Silva (German Embassy Cairo); workshop participants: S. Abdel Gawad (Ministry of Antiquities, Cairo); M. Abdel Maguid (General Department of Underwater Antiquities, Alexandria); O. Abdel Latif (Ministry of Antiquities, Aswan); H. Abdel Rahim (Nubia Museum, Aswan); A. Abdelsami Ahmed Kelany (Ministry of Antiquities, Aswan); J. Auenmüller (Egyptian Museum of Bonn University); Chr. Eckmann (RGZM); D. Fritzsch (Goethe University Frankfurt); J. Gait (British School at Athens); A. Gräzer-Ohara (University of Cambridge); E. Khalifa (Cairo University); P. Kopp (DAI Cairo); C. Malleson (freelance researcher); N. Mounir (IFAO); E. Panagiotakopoulou (University of Edinburgh); A. Quiles (IFAO); M. Portillo Ramirez

– e.g. pottery, stone tools, botanical find, zoological finds – through lectures by specialists on the fields of geology/sedimentology, residue analysis, microbotany, metallurgy etc. Additionally, visits to the archaeological site of Elephantine and the storage facilities and workrooms of the area as well as the laboratories of the Institut Français d'Archéologie Orientale in Cairo (IFAO) were used as a basis for the discussion of the execution of these methods on the archaeological material excavated in the scope of this project.

Major risks in the successful use of modern biochemical methods on archaeological samples are the introduction of contaminating material and/or the failure to detect and identify contaminants. Thus contamination has to be prevented or detected and recorded in as early a stage of excavation and find processing as possible. The complete process of excavation has to be adjusted to this principle. Basic measures include the prohibition of e.g. smoking and food or drink consumption in the area of the archaeological excavation and its vicinity. Furthermore, finds are handled as little as possible in direct contact to bare skin (fig. 1). The bagging and labelling of excavated materials is adjusted not only to the type of the material but also to the methods to be executed on it, e.g. for 14C-samples direct contact to paper or other wood-containing objects is prohibited. The processing and further sampling is done under certain precautions and if possible in a laboratory environment.

Fig. 1: Preventing contamination during excavation (Foto: DAI, P. Kopp).

As an example, the treatment of pottery and stone tool finds in the scope of taking samples for residue analysis and petrography shall be detailed in the following. It was executed in this way for the first time during the field season in spring 2015 (see section B). For the analysis of residues in pottery shards or complete vessels are chosen, which are for example showing visible residues on the in- or outside or belong to pottery types which are of special interest because of their supposed but never entirely

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proven contents – e.g. the so-called beer jars which could also have held other liquids. The use of powder free nitrile or silicone exam gloves during this process of extracting a jar or shard from the surrounding soil in the excavated site as well as during handling it for its typological analysis, ensures the prevention of contamination of the sample through sweat or sun blocker. Additionally a sample of the surrounding soil is taken to counter-test for possible contamination from natural processes during the time since the pottery was deposited.

The fieldwork showed that the use of this methods cannot be implemented in the full process of excavation but is limited to object which seem promising for the aims only. The remaining finds are collected by hand or through sieving. Still, their handling is limited to as frequently and shortly as possible and by only a limited number of people. Therefore, further samples for analysis can be chosen during the process of typology and description of the finds, during which again exam gloves and even face masks are a standard equipment of the researcher since spring 2015. Similarly, the contact to wooden surfaces of the working tables, which still might hold traces of chalk from former pottery studies or other contaminants, is prevented by the coverage with plastic foil. Bagging and labelling of the finds is done separately in find bags of different size put into each other. In fact, the contact of samples chosen for residue analysis with plastic during the extraction from the archaeological environment, storage and typological analysis represents a possible contamination in itself. However, the chemical markers of plastics are known to the specialists and therefore can be identified in the results from the mass-spectrometer later on.

The good preservation of the finds from Elephantine island makes cleaning of especially pottery by water mostly unnecessary. The restoration of finds with glues is renounced until all samples necessary are taken. This routine was introduced, as mentioned above, for finds like stone or ceramic tools and vessels alike and is executed also on other items like botanic and zoological remains as well as worked small finds.

The extraction and preparation of the actual samples for biochemical analysis will either be possible in the storage rooms at the archaeological site or in the laboratory where the analysis will be conducted. The process of establishing co-operation agreements between institutions in Egypt, which can perform the necessary analyses, and the German Archaeological Institute was started during spring 2015. To the end of the year a working chain from excavation and selection to transporting and processing of pottery, stone, soil and biological samples shall be set up[4].

(J.S.)

B) Excavations in the Northern Town

In autumn 2014 and spring 2015 the excavations of the project “Realities of Life” continued in the settlement of Elephantine[5]. This project was started in 2013 with a new methodological concept and

[4] Laboratory facilities equipped for the various analyses which are in the aim of the project “Realities of Life” should be present at the French Archaeological Institute in Cairo (IFAO), Cairo University and the Grand Egyptian Museum (GEM) as well as the Nubia Museum in Aswan and Aswan University.

[5] Participants were R. Colman, K. Goldmann, E. Khalifa, P. Kopp, M.-Kr. Schröder, J. Sigl, Chr. Stöshel,

new research questions. In contrast to previous works it aims not only the usual study of archaeological finds and architectural features but also the reconstruction of the ancient living experience in the ancient town. Beside an analysis of the function of spaces, the feeling to live in the houses shall be reconstructed. Therefore it is necessary to get more detailed data about the remains of the former inhabitants. So additionally to the archaeological standard methods of find processing also microscopic and biochemical approaches will be executed. Furthermore it is necessary to verify the routines used in processing and storing finds.

In order to get significant results of the residue analysis of pottery the way of collecting, processing and storing the ceramics was checked for possible sources of contamination. Pottery that will be very likely chosen for residue analysis is in the field not touched with bare hands. It is taken with powder free nitrile exam gloves from the find spot and is immediately bagged; the tag with the find number is attached in a second bag. By the gloves a contamination of hand sweat or sun blocker should be avoided. The other pottery is collected normally but with as small direct hand contact as possible. The following storing in plastic bags also will affect the result of the residue analysis, but it is possible to count that out of the result. Any other kind of storing like directly in wooden boxes seems to give more possibilities for contaminations.

In the further process the pottery is not washed anymore like it was done before. Actually it is normally clean enough for a first sorting of wares and shapes. Also this sorting is now done for all pottery fragments with gloves and on tables covered with foil. Matching joints of broken pieces with chalk and restoring them with glue is not done until the residue samples were taken. This routine was also introduced for other groups of finds like flint tools, rock tools and stone vessels.

Fig. 2: Cellar of house 73 (Foto: DAI, P. Kopp).

and L. Warden.

These methods are tested in a trench of 10 x 10 m next to the south-eastern corner of the Old Kingdom pyramid[6]. During the last two years three main building layers of the 12th to early 13th Dynasty were here excavated. In this season a building layer of the 11th Dynasty was studied (fig. 2). All excavated soil was dry-sieved through a 5 mm mesh. Additionally, soil samples were taken for wet-sieving and floatation. This year samples for the residue analysis and thin section of ceramics were taken as well as additional samples for the micromorphology.

Only now excavated but already known since the previous season was a cellar (Ø471) in of the 12th Dynasty in house 73 (fig. 2)[7]. The plan of house 73 shows attributes of a so-called courtyard house with rooms arranged around three sides of an open yard[8]. An entrance corridor leads to this courtyard. In its centre was the nearly completely preserved beehive shaped cellar. It was built of a half brick wide wall of mud bricks and had an inner diameter of about 1.5 m. Above its floor it was still 1.76 m high preserved, but according to the floor level in the court of house H73 its height was once 2.02 m.

In a height of 1.02–1.07 m above the floor was a horizontal wooden beam with a diameter of 7–9 cm. The fully preserved beam was a naturally rounded branch of a tree. Only few similar wooden beams are known from other cellars. One example was situated on Elephantine in the settlement west of the Temple of Satet[9]. Here cellar Ø181 had an oblong soil colouration directly under the dome. It passed from one side to the other and was the trace of a 10–12 cm wide beam. Better preserved was a branch fork in a cellar in Lisht[10]. The beams in the cellars were probably quite common but are rarely preserved. They were used as climbing aid for entering and leaving the cellars.

On the floor of the cellar were no finds *in situ*, but its fill contained some pottery vessels, that were quite intact. The belonged most probable to the inventory of house 73 and were used for storing and serving of food.

In the further investigation the layers of the 11th Dynasty were reached (fig. 3). Most of the buildings were quite destroyed by later building activities. Large zones on top of them were covered by hard loam layers. Obviously this was the result of the production of mud bricks. The walls of the abandoned houses were broken down and their mud bricks were dumped in big pits with water. White traces of plant fibres in the soil indicated that the new made bricks had a temper of either chaff or animal dung. In one of these hard loamy layers were at two different spots some impressions of a 17.6 cm long child's foot. The child in an age of about 5 years passed this area when the mud was still soft and left this trace of an ancient life.

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[6] G. DREYER/W. KAISER, *Zu den kleinen Stufenpyramiden Ober- und Mittelägyptens*, *MDAIK* 36, 1980, pp. 43–44.

[7] See P. KOPP, *Excavations in settlement*, in: F. ARNOLD et al., *Report on the Excavations at Elephantine by the German Archaeological Institute and the Swiss Institute from autumn 2013 to spring 2014*, http://www.dainst.org/project/25953: Downloads: Elephantine – Report on the 43rd Season (ENGLISH), 25.05.2015, pp. 2–5 and fig. 1.

[8] C. VON PILGRIM, *Elephantine* XVIII: *Untersuchungen zur Stadt des Mittleren Reiches und der Zweiten Zwischenzeit*, *AV* 91, Mainz 1996, pp. 196-204.

9 P. KOPP et al., *Elephantine* XXIV: *Funde und Befunde aus der Umgebung des Satettempels. Grabungen von 2006–2009*, *AV* 104 (in print), chapter 2.5.2.

[10] A.C. MACE, *Excavations at Lisht*, *BMMA* 17, No. 12, Part 2, 1922, fig. 17.

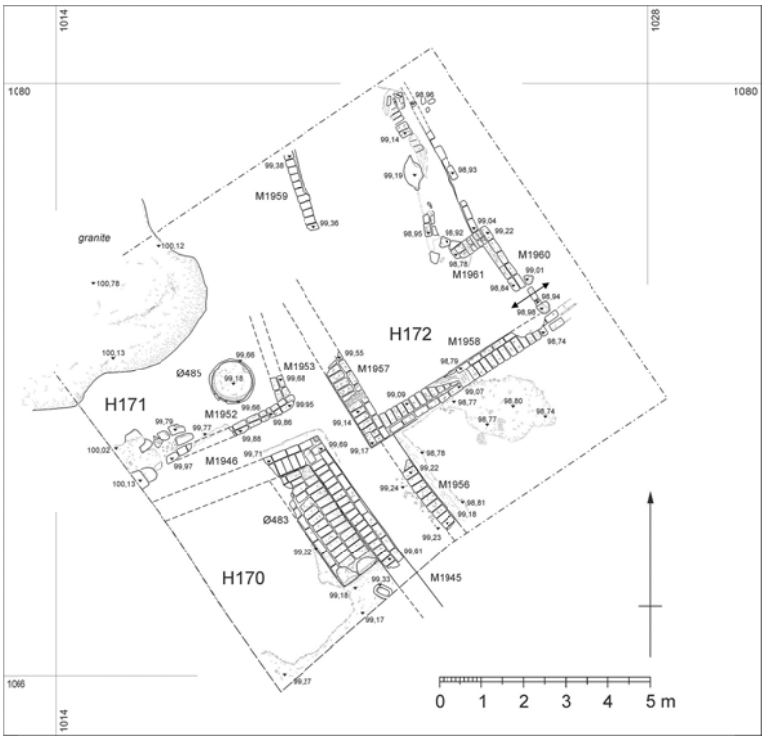

Fig. 3: Houses 170, 171 and 172 of the 11th Dynasty (plan: DAI, P. Kopp).

Fig. 4: Fish bones *in situ* (Foto: DAI, P. Kopp).

For a while the area was partly not used as building ground. At least one metre of soil was removed, most probably to level another area. Later this pit was refilled. On top of one these fill layers were many fish bones (fig. 4; see section 10). These were parts of spines, heads and fishtails, many of them of quite big fish. Some of the bones were lying in broken bowls. The vessels were already fragments when the fishbones were placed in them, so they were not cooking bowls for the fish. The place was used to cut fish and some waste fragments were left there. But it was only for a short time a walking horizon because many bones were still lying in the right position to each other. If they wouldn't

have covered relatively fast with soil they'd been dislocated either by the feet of passing humans or by animals.

Parts of three buildings of the 11th Dynasty were within the trench (H170–H172, fig. 3). Their walls were mostly only few courses high preserved. An exception was house 170 with a working platform in the corner (Ø483, fig. 5). Here the walls were still more than 1.5 m high preserved. The outer corner of the house was formed by a wooden post with a square section of 11.5 x 12.0 cm. The rectangular platform in the inner corner was approx. 3 m long and 1 m wide. It was not preserved to its full height. Most probable it was not a quern emplacement for a saddle quern like it was commonly found in the houses of the Middle Kingdom because these were constructed of a quadratic frame of four walls which was filled with soil[11]. In opposite the platform in house 170 was massive brickwork and had also no smaller compartment in the front like most of the quern emplacements.

Fig. 5: Working platform in house 170 (Foto: DAI, P. Kopp).

The oldest floor of this house was now reached and it showed clearly that the house was partly built into the sloping ground. The foundation trench at the northern corner was more than 1.5 m deep. Also in this building layer was a cellar in one of the houses (H171, Ø485, fig. 6). But in this case it was not built of mud bricks. The cellar was built of loam rings and had a diameter of nearly 1 m[12]. Two of the rings were preserved and were obviously made at the place. The lower one of 32 cm height was built on the floor, then – after the drying – a second ring was built on it. A loose fragment of the dome showed that it was constructed in the same way. The floor level in the room suggests that the small cellar was about 60 cm deep.

[11] C. VON PILGRIM, *loc. cit*, p. 213.

[12] A similar construction had a cellar of the 12th Dynasty in the area of the Museum on Elephantine. P. KOPP, *Excavations between the Old and the Annex Museum*, in: F. ARNOLD et al., *Report on the Excavations at Elephantine by the German Archaeological Institute and the Swiss Institute from autumn 2012 to spring 2013,* http://www.dainst.org/project/25953: Downloads: Elephantine – Report on the 42nd Season (ENGLISH), 25.05.2015, fig. 10.

Dating the excavated and surrounding structures was hampered not only by the later destructions but also by the natural topography of this part of the settlement. The ground level in the excavated area slopes – following the shape of the former island and the older settlement structures – from the northwest to the southeast. Because of this topography several architectural features had the function of terrace walls in order to gain horizontal floor levels. The floor of house 171 was nearly one metre higher than the oldest floor in house 170. Nevertheless, still many floors were not horizontal but sloping. So not only houses and paths within the settlement of a certain period were situated on different levels, but also rooms within the houses themselves. Steps connected the different levels.

Fig. 6: Cellar in house 171 (Foto: DAI, P. Kopp).

These differing levels caused probably stratigraphic problems in the analysis of the older excavations in this area. Discrepancies were met comparing the chronological data of the recently excavated houses with the results of previous research. House 73 was like house 68 to its southwest formerly dated to the 13th Dynasty[13]. A. SEILER re-dated already the three houses 50a, 53 and 89 of the same building layer to the 2nd Intermediate Period[14]. But actually the pottery that was found in house 73 suggests here an older age. In between the ceramics are for the first time in the local stratigraphic sequence hemispherical cups with a red rim. They appear for the first time in the advanced 12th Dynasty[15]. In opposite typical forms of the 13th Dynasty seem to be in the first stage of house 73

[13] C. VON PILGRIM, *loc. cit*, pp. 184–189, table 1 and fig. 109.

[14] A. SEILER, *Zur Formentwicklung der Keramik der 2. Zwischenzeit und der frühen 18. Dynastie*, in: W. KAISER et al., *Stadt und Tempel von Elephantine. 25./26./27. Grabungsbericht*, *MDAIK* 55, 1999, p. 223; A. SEILER, *Tradition und Wandel*, *SDAIK* 32, Mainz 2005, pp. 129–130.

[15] Elephantine pottery sequence F3, see D. RAUE, *Zu den Keramikfunden der frühdynastischen Zeit und des Alten Reichs*, in: P. KOPP et al., *Elephantine* XXIV: *Funde und Befunde aus der Umgebung des Satettempels. Grabungen von 2006-2009*, *AV* 104, chapter 9.2.3. (in print); R. SCHIESTL/A. SEILER, *Handbook of the Pottery of the Middle Kingdom* I, *Österreichische Akademie der Wissenschaften, Denkschriften der Gesamtakademie* LXXII, Wien 2012, pp. 96–99.

absent[16]. Rims of beer jars with a rim of triangular shape and slight indentation inside do not appear before a later alteration of the building. Therefore it was built in the second half of the 12th Dynasty or latest early 13th Dynasty and was not contemporary with the houses 50a, 53 and 89.

This lead to the question whether house 69, what was located below house 68, also might be older. It was suggested that this one dated to the late 12th Dynasty[17], but actually this is not possible anymore because house 68 has been right there at this time. A re-examination of the pottery found in house 69 gave a clear result. The pottery from the room fills date the house to the early/middle 12th Dynasty. There were clearly older shapes of pottery like hemispherical cups without red rims[18]. Therefore this house was contemporary to the later phases of houses 167 and 168[19]. If other houses have also been dated wrongly has to be checked in the future, but it is quite probable because the excavator stressed the stratigraphic connection of house 69[20].

The re-dating of house 69 has further consequences that need deeper studies. E.g. in this house was found a shallow bowl with a hieratic inscription[21]. The excavator dated it on the base of the stratigraphic position, the pottery found in the house and the mentioned number of regnal years on the inscription to the last year of the reign of Amenemhat III. But with the new date of the pottery found in house 69 this is simply not possible anymore. Therefore it has to be dated to one of the other Kings in discussion, Intef II, Mentuhotep II or Senwosret I. And now the worked out archaic ductus of the language[22] is not anymore surprising but just fits, the hieratic of the southern province doesn't necessarily keep an older stage.

(P.K.)

3. Excavation of House 55

In the framework of a wider study of the town of the New Kingdom the Swiss Institute resumed the excavation of a building (H 55) to the south of the Heqaib Sanctuary. It is the last building of a series of houses of the New Kingdom to be studied in order to complete an exemplary section through the

[16] T. RZEUSKA, *Pottery of the Middle Kingdom*, in: D. RAUE et al., *Report on the 34th Season of Excavation and Restoration on the Island of Elephantine*, http://www.dainst.org/project/25953: Downloads: Elephantine – Report on the 34th Season (ENGLISH), 25.05.2015, p. 14 and figs. 6–7.

[17] C. VON PILGRIM, *loc. cit*, fig. 110.

[18] Elephantine pottery sequence F2, see D. RAUE, *loc. cit.,* chapter 9.2.3.; T. BAGH, *Abu Ghalib, an Early Middle Kingdom Town in the Western Nile Delta*, *MDAIK* 55, 2002, pp. 56–57, fig. 8d.

[19] P. KOPP, *Excavations in settlement*, in: F. ARNOLD et al., *Report on the Excavations at Elephantine by the German Archaeological Institute and the Swiss Institute from autumn 2013 to spring 2014*, http://www.dainst.org/project/25953: Downloads: Elephantine – Report on the 43rd Season (ENGLISH), pp. 4–5 and fig. 4.

[20] C. VON PILGRIM, *loc. cit*, p. 286.

[21] C. VON PILGRIM, *loc. cit*, pp. 285–302.

[22] H.W. FISCHER-ELFERT, *Hieratische Schriftzeugnisse*, in: G. DREYER et al., *Stadt und Tempel von Elephantine, 28./29./30. Grabungsbericht*, *MDAIK* 58, 2002, pp. 214–215; P. ANDRÁSSY, *Ein Archiv von Wirtschaftstexten auf kalottenförmigen Trinknäpfen des Mittleren Reiches*, in: V.M. LEPPER, *Forschung in der Papyrussammlung: Eine Festgabe für das Neue Museum, Ägyptische und Orientalische Papyri und Handschriften des Ägyptischen Museums und Papyrussammlung Berlin* 1, 2012, pp. 36–38.

town of the New Kingdom from west to east. Furthermore, the excavation of H 55 completes the investigation of buildings along the main street of the town to the north of the Temple of Khnum.

Earlier excavations in H 55 had revealed a well-preserved house built at the very beginning of the 18th dynasty. The house was built into the slope of the eastern town mound. Two entrances both equipped with thresholds made of sandstone gave access to the house from the main street at the western side of the house. After the house was abandoned and the walls had collapsed the ruin was intentionally covered with debris.

The main task of this season was the investigation and removal of a central baulk, which had been left during earlier excavations in order to control the stratigraphy, and to study the debris above the ruined house (Fig. 7).

The results may be summarized as follows: Before the house was entirely abandoned it had been divided into several zones during the reign of Thutmosis III (Building layer 10a).[23] Two of the easternmost rooms were rebuilt on a higher level, and in one of these rooms a subterranean vaulted cellar was built in. A section through the cellar revealed the well-preserved original eastern back wall of the house. The wall was originally covered with ordinary mud-plaster and shows traces of a simple painting (Fig. 8). It is executed in red colour with small additions in black and white, and depicts several sailing ships as a bigger one with all sails and oarsmen, and two smaller ones with reefed sails. The depiction of a simple bark and four standing figures concludes the scene on the right side. Two figures are standing on the bark, with a seated man between them. After a careful documentation the most fragile parts of the plaster were consolidated by a conservator with specialised knowledge. Eventually the room, which is limited by two walls of the second building phase, was backfilled with sand in order to protect the painting from erosion.

Fig 7: Overview on the work in House 55 (Foto: Swiss Institute, C. von Pilgrim).

[23] The chronological assessments are based on the initial analysis of J. Budka, see section 7.

Fig. 8: Wallpainting on mud plaster in House 55 (Foto: Swiss Institute, C. von Pilgrim).

After the house was abandoned airborne sand and brick rubble from the collapsing walls deposited in the rooms. Eventually, in the time of Amenhotep II, the ruin was filled up intentionally with debris most probably deriving from the precinct of the Khnum Temple. A large amount of stone flakes both of larger limestone and sandstone blocks were found in the debris dumped in the house. Numerous stone fragments show small traces of decoration or smoothed sides. They let assume that the debris may have been brought from the construction site of the Khnum Temple when substantial building activities took place at the temple in the reign of Amenhotep II.

It is not before the reign of Amenhotep III when in a subsequent building layer (Bauschicht 9) a retaining wall was built at the western limit of the abandoned lot in order to hold back the debris from the main street.

(C.v.P.)

4. The Khnum temple of the New Kingdom

This season the work of the German Archaeological Institute on the decoration of the Khnum temple of the New Kingdom focused on relief blocks that had been reused in the foundations of the temple house of Nektanebos II. During excavations conducted in this area by H. Jaritz and W. Niederberger in 1991-1995, 26 blocks dating to the New Kingdom had been encountered. In his doctoral thesis, M. Bommas attributed most of them to the original temple house of Khnum[24]. The research of the past two years has shown that in fact none of them can have formed part of that building. All blocks of the temple house of the New Kingdom were reused in the Ptolemaic pronaos, not in the temple house of Nektanebos II. The aim of this season was to document the New Kingdom blocks found in the foundations of the temple of Nektanebos II and to identify the kind of building to which they belonged.

[24] M. BOMMAS, *Der Tempel des Chnum der 18. Dynastie auf Elephantine*, doctoral thesis, University of Heidelberg 2000.

During the course of the season several new blocks were discovered, bringing the total up to 30. More importantly, quite a number of the already known blocks were discovered to have been decorated on two or more sides, thus providing crucial evidence for the kind of architecture to which they originally belonged. Four major groups of blocks can now be distinguished:

1. 8 blocks of 62 cm thick walls with a small-scale decoration in raised relief. They belonged to a shrine built for the barque of the god Khnum, lord of the cataract.
2. 4 blocks and several fragments of 64 cm thick, monolithic pillars. The pillars can be attributed to an ambulatory that surrounding the barque chamber.
3. 10 blocks with a large-scale decoration in high relief on one side only. They appear to come from the inner face of 105 cm thick walls.
4. 4 blocks of large frieze inscriptions in sunken relief, probably from the outer façade of the same walls.

A singular block with a torus at the corner and raised relief on one side and sunken relief on the adjoining side can only be explained if a closed temple house adjoined the ambulatory, in a similar way as in the temple built by Queen Hatshepsut at Madinat Habu[25].

The original location of this building of Queen Hatshepsut is not known. At present it appears most likely that it stood behind the back wall of the temple of Khnum, in the area later occupied by the columned hall of the temple of Nectanebos II. The building may have faced north, toward the harbor area of the Elephantine.

As at Madinat Habu, the meaning of the building may have been two-fold. On the one hand it served as a way station for the barque of a god, in this case Khnum. On the other hand, the back part of the building functioned as a sanctuary in its own right. The analogy with Madinat Habu might suggest that it served as a sanctuary for the god Khnum as a creator god. The barque of the god, normally housed in the main temple house, would have visited this second sanctuary during regular festivals (at Madinat Habu every ten days).

Of interest are the gods represented on the pillars of the ambulatory. On most sides of the pillars the god Khnum was represented, in various versions ("Khnum, lord of the cataract", "Khnum, lord of Senmet" and "Khnum, smiter of bubals", a version known from Kumma in Nubia[26]). Satet is attested only by one fragment of a pillar. Min-Amun is found once, with the otherwise unknown epithet *t3-stj* "of Nubia". In addition, two rather rare gods are depicted: *Nbt-mnjt* "the mistress of the mooring post" and *Jmj-pr=f* "He who is in his house" (Fig. 9).

Unlike the temple house of Khnum, on which only the name of Thutmosis III is found, the blocks of the newly identified structures bear names of Thutmosis I, II and III as well as Hatshepsut. In most cases, the name of Hatshepsut was erased and replaced with the name of Thutmosis II. The figure of the king was also erased in many cases. On a newly discovered relief, remains clearly indicate that Queen Hatshepsut had been represented as a woman (Fig. 10). The building must therefore date to the earliest part of her reign.

[25] U. HÖLSCHER, *The Excavation of Medinet Habu* II. *The Temples of the Eighteenth Dynasty*, OIP 41, Chicago 1939.

[26] R. A. CAMINOS, *Semna-Kumma* II. *The Temple of Kumma*, Archaeological Survey of Egypt Memoir 38, London 1998.

The date of the structure provides new insight into the building history of the temples at Elephantine. The newly identified building appears to have been the first major temple construction on the island after the Middle Kingdom. One might suggest a relation to the activity of Queen Hatshepsut in connection with the retrieval of obelisks from the quarries of Aswan. Later in her reign, she built the main temple of Satet. The temple of Khnum was not replaced until the sole reign of Thutmosis III.

Fig. 9: Newly discovered pillars with erased name of Queen Hatshepsut (left) and with the god *Jmj-pr=f* (right; Foto: DAI, T. Perkins).

Fig. 10: Block from the barque chamber of Khnum, with traces of female king marked in red (Foto: DAI, T. Perkins).

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During this epoch, a change can be observed in the shape of the barque of Khnum. In the earliest structure the barque is represented in a very basic shape. The shrine was inscribed with the name of Thutmosis I, suggesting that it had been donated by that king. By the time the temple house of Thutmosis III was built, additional elements had been added to the barque, including a figure of the kneeling king in front of the shrine. The same development can be observed in the barque of Amun at Thebes. This later barque remained in use at least up to the reign of Amenophis III, as can be seen in the decoration of the now-lost way station built by that king at Elephantine[27].

(F.A.)

5. The spatial development of the Khnum Temple precinct before the 30th Dynasty

During spring season the Swiss Institute continued previous investigations in the Khnum Temple precinct to the south as well as to the north of the late temple of the 30th Dynasty. A major aim of work was to establish a stratigraphic and chronological sequence of various temple enclosure walls of which short segments had been uncovered in earlier seasons.

Fieldwork focused mainly in the foundation trenches of the inner enclosure wall of the 30th Dynasty temple after the foundation sand in it had been removed, as well as in the baulk that left between the inner enclosure wall and the foundation pit of the temple proper. Additionally, limited sondages were conducted in the directly adjacent areas beside the foundation trench, i.e. Area XXVIf, in front of House K19 to the south of the late Khnum temple, and Area XXIX to the north of it. The results may be summarized as follows:

A major step towards a better understanding of the topography of the town centre was the identification of the western limit of the Khnum Temple precinct in the Middle Kingdom. The enormous thickness of the uncovered northern end of the enclosure's western side measuring about 9 m in width is explained by the fact that the lower part of the foundation also reinforces the western slope of the eastern town mound.[28] Not only the masonry but the whole construction resembles strongly the contemporary southern wall of the temple enclosure of the Satet Temple which was cut into the eastern slope of the mound.

During Dynasty XVIII (Building layer 9) a new enclosure wall was added on the western side of the Middle Kingdom precinct. The wall encloses an area of 10m in width. Thus it may be assumed that the enclosure was built in connection with a separate temple erected during the reign of Hatshepsut which was only recently identified and suggested to be located in the very same area by F. Arnold (see section 4).

The western extension of the temple precinct was knocked down when the whole temple precinct was rearranged in the Late Period. The foundation pit of a newly built temple was discovered only in a very short distance to the northern sector of the New Kingdom enclosure. The foundation pit was filled with

[27] *Description de le'Égypte* I, Paris 1809, pl. 36.1 and 37.2.

[28] After its initial discovery the wall (M1200) was suggested to be part of a Late Period enclosure, cf. C. von Pilgrim, Die Wirtschaftsbezirke des Chnumtempels im Neuen Reich und der Spätzeit, in Kaiser et al., Stadt und Tempel von Elephantine. 25./26./27. Grabungsbericht, MDAIK 55 (1999), 123, Abb. 17 und 25.

pure white foundation sand (river sand) and it was surrounded by a foundation trench filled with yellowish foundation sand (desert sand). The general similarity of the sub-foundations in its basic lay-out - consisting of a modest building measuring c. 8m x 4m and a surrounding wall – let assume that this sub-foundation belongs to a small temple of Psametik II of which more than 130 blocks had been discovered by the Swiss Institute during previous seasons[29].

Fig. 11: Sand-filled sub-foundations of a Late Period temple and remains of enclosure walls of the Khnum Temple precinct of the Middle Kingdom (background left side) and of the New Kingdom (centre right; Foto: Swiss Institute, C. von Pilgrim).

It was presumably in the reign of the same Pharaoh when a new temple enclosure was build (Building layer 4b), now enclosing the entire precinct of the Khnum Temple extending to the west as far as the town's central main street. Short segments of that wall, measuring 3m in width, were attested to the south as well as to the north of the Temple of the 30th Dynasty.[30] Only scarce remains of a preceding building layer (5a) have survived to the south of the temple including the short segment of the wall of a building as well as a large granary with a diameter of about 7m. The granary's date, however, is clear due to the stratigraphic analysis of the area. The granary overbuilds a large building of the 25th Dynasty whereas it was covered after is destruction by waste deposits containing numerous mud sealings with the name of Psametik II.

Eventually, a new enclosure was built in the late Saite or Early Persian Period (Building layer 4a). After the precincts northern limit was identified this season[31] it became clear that it just encloses a

[29] Cf. C. von Pilgrim, Ein Kultbau für Chnum aus der Zeit Psammetichs II., in Dreyer et al., Stadt und Tempel von Elephantine. 31./32. Grabungsbericht, MDAIK 61 (2005), 43-44.

[30] This wall (M495) was hitherto tentatively correlated with the so-called protection wall mentioned in some Aramaic papyri from Elephantine, a hypothesis now to be abandoned. Cf. C. von Pilgrim, Das aramäische Quartier im Stadtgebiet der 27. Dynastie, in Dreyer et al., Stadt und Tempel von Elephantine. 28./29./30. Grabungsbericht, MDIK 58 (2002), 193 ff.

[31] The wall segment in question was already uncovered during earlier excavations, cf. H. Jaritz, Untersuchungen im Bereich des späten Chnumtempels, in Kaiser et al., Stadt und Tempel von Elephantine. 21./22. Grabungsbericht, MDAIK 51 (1995), 168, Taf. 40A.

separate district to the south of the temple covering an area of 27m x 15m[32]. The function of the precinct remains unclear since no further structures or layers above ground escaped extensive landscaping measures when the building ground for the new temple of Khnum was prepared in Dynasty XXX.

(C.v.P.)

6. Studies on Middle Kingdom Pottery

As new members to the work on the kom, the study of pottery we conducted this year was meant to introduce us to the present identification and dating systems. Apart from that we established in cooperation with the team members responsible for the field archaeology and pre-processing of finds a new way of working with pottery: Especially the washing of the material had been prohibited since this season, to allow the reduction of contamination as we are hoping to undertake natural scientific analyses on the pottery in the future.

This spring, we worked on the ceramics from autumn 2014 to spring 2015, excavated in the area of the Middle Kingdom houses next to the pyramid in the scope of the project "Realities of Life" (see section 2). We began by working with the typology and chronology framework created by previous ceramicists.[33] This enabled us to aid in ceramic processing, as well as to develop new ways to process and work through the material after the primary chronological sorting is accomplished. The typology needs to be extended into the Middle Kingdom and made more robust; these are goals for future seasons. We also worked on creating a typology of local ceramic fabrics used on the island in the Old Kingdom, First Intermediate Period, and the Middle Kingdom by consulting the study collection of pottery now stored in the "Karima"-magazine.

An additional goal was to begin scientific sampling of the ceramics. We chose 46 samples for future residue testing in order to understand what the vessels held and what specific pottery forms were used for. Apart from that we selected 32 samples of ceramics to be thin sectioned in order to investigate local ceramic manufacture. The samples were labled and bagged accordingly and are awaiting processing in the magazine at the moment. Further sampling and, eventually, testing will take place in future seasons.

(E.K./L.W.)

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[32] This enclosure was hitherto correlated with the so-called Town of Khnum in the Aramaic Elephantine Papyri, cf. C. von Pilgrim, in Kaiser et al., Stadt und Tempel von Elephantine. 25./26./27. Grabungsbericht, MDAIK 55 (1999), 121-124.

[33] D. RAUE, *Zu den Keramikfunden der frühdynastischen Zeit und des Alten Reichs*, in: P. KOPP et al., *Elephantine* XXIV: *Funde und Befunde aus der Umgebung des Satettempels. Grabungen von 2006-2009*, *AV* 104, chapter 9.2.3. (in print); R. SCHIESTL/A. SEILER, *Handbook of the Pottery of the Middle Kingdom* I, *Österreichische Akademie der Wissenschaften, Denkschriften der Gesamtakademie* LXXII, Wien 2012, pp. 96–99; T. RZEUSKA, *Pottery of the Middle Kingdom*, in: D. RAUE et al., *Report on the 34th Season of Excavation and Restoration on the Island of Elephantine*, https://www.dainst.org/project/25953: Elephantine – Report on the 34th Season (ENGLISH), 25.05.2015, p. 14 and figs. 6–7.

7. Studies on New Kingdom Pottery

The Swiss Institute continued the study on the New Kingdom pottery in the period from October 20 to December 3, 2014.[34]

The present focus of the pottery project was put on the material from House 55 in Area VIII. Both ceramics from former seasons (26th-28th seasons) and from the current excavations (44th season) were studied. In addition, 30 pottery assemblages excavated in the 43rd season from a different area (south of the Khnum temple) were processed. The two main working steps conducted during the 2014 season were: 1) documenting the statistics and establishig the dating for pottery from house 55 from the 27th season and from the current excavation; 2) drawing of the material from both former seasons and current excavations.

Fig. 12: Pottery assemblage in House 55 left in situ (Foto: Swiss Institute, C. von Pilgrim).

The first task was documenting material from the 27th season; 165 assemblages were studied in total and representative pieces as well as more than 20 *in situ* vessels from the earliest phase of use of House 55 were documented in detail. Furthermore, eight assemblages from the 26th and two from the 28th season were also studied. A total of 5347 diagnostic pieces was processed from early excavations in House 55. In addition, simultaneously to the excavation of this year, the processing of the ceramics from House 55 was carried out – 63 ceramic assemblages (more than 10.000 sherds) were studied, including 20 vessels found *in situ*. A total of 350 significant diagnostic sherds and complete vessels were drawn.

The ceramic material illustrates several phases of use of House 55 within the early to mid-18th Dynasty, thus supporting the archaeological and architectural findings. The major re-filling of House 55

[34] The study of the Elephantinian New Kingdom pottery is conducted in close cooperation between the Swiss Institute Cairo and the ERC project "AcrossBorders" directed by J. Budka, see http://acrossborders.oeaw.ac.at/about/about-acrossborders/.

can be dated according to the pottery to the very late reign of Thutmose III or maybe even to the time of Amenhotep II-Thutmose IV.

(J.B.)

8. Glass Studies

The Swiss Institute continued the study of objects deriving from the Late Roman settlement in the Khnum Temple precinct. In continuation of the documentation works conducted by D. KELLER in previous seasons[35] M.-D. NENNA recorded all collected glass sherds ranging from the early Roman Period until the 7th c. AD (about 1100 pieces).

(C.v.P.)

9. Silex studies

The pilot study on silex raw materials used at Elephantine Island from the Old Kingdom started in 2013. Our aim is not only to understand the selection of different kind of silex in the settlement itself, but, by comparing this with other settlements, understanding the distribution and access to silex tools in Ancient Egypt. To this end, the project is running in close cooperation with the current work of the IFAO Cairo (Institut français d'archéologie orientale).

Two larger collections have been chosen at Elephantine Island, one dating from the earlier Old Kingdom (2nd/3rd dynasty), and the other dating from the end of the Old Kingdom/beginning of the First Intermediate Period. Both collections are part of a previous study concerned with typology and chronology[36]. However, the analysis of material in terms of knapping technology and tool selection has been not carried out before. To date, 1,694 pieces have been recorded and sorted into provisional groups, which are awaiting the results of archaeometric analysis to confirm them. All groups have been recorded in detail, including photographic documentation under the same light conditions and calibration, which has enabled the creation of a ‘guide’. In addition, the samples sent to IFAO have been studied by binocular as well as by macroscopic photography.

According to the initial results, there seem to be three main groups and several subgroups. Group 1 consists of pebbles, defined by their typically smoothed and polished cortex, e.g. patina. As they are carried by the river, they can easily be picked up on the bank. Thus, local access was possible, but has not yet been confirmed. The fact that they were used for local industry is demonstrated not only by the tools and cores, but also by the existence of primary debitage. In contrast, neither of the other two groups is local, but there is still a clear distinction between them. While Group 2 includes besides tools and debitage also small nodules, imported blanks are designated as comprising Group 3. The subgroups of Group 2 are rather homogeneous in a light colour range and texture (cf. fig. 13). The

[35] Cf. D. Keller, Preliminary report on the Late Roman, Byzantine and Early Islamic glass finds, in Dreyer et al., Stadt und Tempel von Elephantine. 33./34./35. Grabungsbericht, MDAIK 64 (2008), 137-148.

[36] HIKADE, T. 2013. Elephantine XXXV: The Lithic Industries on Elephantine Island during the 3rd Millennium BC. *AV* 121, Wiesbaden: 114.

nodules are relatively small and often have a weathered cortex, indicating that they have been not mined but collected. As with Group 1, the remains of all stages of production are evidenced in the inventories, whereas hardly any primary debitage has been found relating to Group 3. Instead, blanks are present including some classical debitage with shallow modification[37], and in addition certain finished tools, such as bifacial knives and bitruncated tools. The subgroups show a wide range of colour, though they are all of high quality (cf. fig. 14). While Group 2 may possibly be collected from the closest possible, e.g. from the limestone plateau roughly between Luxur and Edfu, Group 3 seems to originate from different sources. Some subgroups of Group 3 may come from the recently re-discovered quarries at Galâlâ North in the Eastern Desert[38]. Others strongly resemble certain silex variations known from Upper Egypt[39]. However, these hypotheses still need to be confirmed in the near future.

Fig. 13: Core, Group 2 (Foto: DAI, C. Jeuthe).

Although the recording is not yet finished, it is rather obvious that selection changed during the Old Kingdom. While Group 1 and Group 2 are constantly present in both the collections at the current stage of the study, certain subgroups of Group 3 completely disappear. These subgroups are connected with the specialist production of bitruncated tools; a type of tool which disappeared from all known sites in Egypt during the 4th/5th dynasty[40]. Supported by other observations, the current study

[37] Cf. HIKADE 2013; BRIOIS, F. & MIDANT-REYNES, B. 2008. Lithic industries from Adaïma. Between farmers and craftsmen. In: Midant-Reynes, B., Tristant, Y., J. Rowland, J. & Hendrickx, S. Egypt at its Origins 2, *OLA 172*, Leuven: 21–32.

[38] BRIOIS, F. & MIDANT-REYNES, B. 2015. Sur les traces de Georg August Schweinfurth. Les sites d'exploitation du silex d'époque pharaonique dans le massif du Galâlâ nord (désert Oriental). *BIFAO* 114, 2015: fig. 2.

[39] I am thankful to Fr. Briois for the helpful discussion and remarks.

[40] Summerized in HIKADE 2013, 114f.

indicates, therefore, not only the existence of highly specialist quarries and workshops, but also a change in selection and tool making towards the end of the late Old Kingdom.

Fig. 14: Bitruncated tool, Group 3 (Foto: DAI, C. Jeuthe).

(C.J. / R.C.)

10. Animal remains from the Middle Kingdom settlement

Animal remains are a common finds in Egyptian archaeological excavations. The huge mass of these finds, however, often hinders a quick processing of them. Especially as the work of the German Archaeological Institute in the Middle Kingdom houses on Elephantine (see section 2) now focuses on every detail and uses finest possible excavation methods (including sieving and floating of remains as well as the study of soil samples under the microscope), the number of finds from macroscopic to microscopic scale has increased considerably. Therefore, the zoological study of the material is time consuming, which is why this report only refers to 1626 entries in the database which resemble a total number of 3191 fragments (8700 g) of bone, tooth, coprolite, mollusc shell and egg shell. On statistical basis this amount of finds is too low to draw any conclusions. The following remarks can therefore be only seen as preliminary.

As the whole material from the excavated trench was encrusted often densely in soil, which had hardened on the surfaces of the bones and was due to salty particles not removable without destroying the bone, the identification was in many cases problematic. However, in few occasions this fact also helped to identify bones of one individual buried in articulation. The main meaty food used by the inhabitants of houses next to the pyramid on Elephantine during the Middle Kingdom seems to have been fish. In the excavated material a huge variation of sizes has been found. The main species

seem to have been the Nile perch and various catfish, individuals reaching from 5 to over 200 cm in length. Apart from that pig, sheep and goat were used in limited number.

An interesting find was the deposit of several bones of large fish in anatomical articulating position together with nearly whole preserved pottery: On top of one of fill layers of an ancient excavation pit the remains of at least eleven large fish individuals of the species Nile perch (*Lates niloticus*; MNI 9; fig. 4) and Bagrus catfish (*Bagrus sp.*; MNI 2) were found (section 2). Parts of the spines connected to portions of the heads and fishtails, sometimes even including remains of the soft parts of the fins, were preserved. The body parts indicated that the deposition contained such part of the fish as would mainly be the waste products of food processing. The filets would have been taken away and prepared for consumption. Some of the bones were lying partially in largely complete bowls. The vessels had however already been broken to a certain extent when the fishbones were placed in them and in most cases they were considerably too small to hold a fish of the sice the bones were indicating (total lengths between 100 cm and 180 cm were estimated for the Nile perch). These items therefore cannot have functioned as cooking bowls for the fish. As many of the bones were still in anatomical articulating position, the area was not frequented by human or animal traffic during the time when the excavated remains were discarded. The duration of this period can be estimated as relatively short for the same reason: If bones and pottery vessles would not have been covered by other rubble relatively fast, a wider scattering of bones and destruction would have occurred. Apart from the fish remains other zoological finds were scarce in this area

(J.S.)

11. Restauration work on the temple of Osiris Nesmeti and the balustrade of the Khnum temple terrace

The Swiss Institute has continued various conservation works at Elephantine. The operations focused on two main subjects: the reconstruction of the Osiris-Nesmeti temple (“Temple Y”) and the restoration of two obelisks from the balustrade of the Khnum temple terrace.

A. The obelisks of the Khnum temple’s terrace

After two obelisks had collapsed from the rebuilt balustrade of the late Khnum Temple to the east of the Nilometer[41] several years ago, their fragments had been restored in spring 2014. In this season the obelisks were re-installed on-site. They were fixed with fiberglass dowels and dots of Araldite to ensure the assembling. The drilling of the holes for the dowels was realized by casting and counter-casting of the surface in order to get a minimal diameter of drilling. After the obelisks were settled on the balustrade, the restituted parts made of mortar were then covered with a final lime mortar mixed with natural color pigments.

[41] See H. Jaritz, Elephantine III. Die Terrassen vor den Tempeln des Chnum und der Satet, AVDAIK 32, 1980, p. fig. 4; H. Jaritz, Wiedererrichtung der südlichen Brüstung der Chnumtempel-Terrasse und des Mandulis Tores von Ajuala, in: W. Kaiser et al., Stadt und Tempel von Elephantine. 19./20. Grabungsbericht, MDAIK 49, 1993, p. 181, pl. 36b.

(J.F.)

B. Conservation works of stone blocks from the Osiris-Nesmeti Temple

After the fragments of blocks corresponding to the first two phases of reconstruction (more than half of the temple's surface) had been assembled in spring 2014, all remaining blocks were finished to be reassembled this season, except of two heavily fragmented columns and capitals..

The assembling was made with epoxy resin (Araldite® 2015) and the heaviest fragments were dowelled with stainless steel. Missing parts were then filled with a primary lime mortar that will be completed after the reconstruction by a colored superficial mortar.

Fig. 15: Fragments of columns and capitals (Foto: Swiss Institute, C. von Pilgrim).

The reconstruction of the two capitals of the entrance gate, each of them made of three blocks, was started. The blocks are fragmented in about a hundred fragments which are estimated to represent about 40% of the original surface for one capital and up to 65 % for the second one. The fragments were glued with epoxy resin (Araldite® 2015), and some fiberglass dowels will be added next season to secure the assemblages. The puzzling as well as the assembling were completed for the lower blocks and are well advanced for the middle blocks. The upper blocks are less complete. The restitution of missing parts shall be undertaken next season after completing the assemblages.

(J.F.)

C. Reconstruction of Osiris-Nesmeti Temple

From 07.11.2014 – to 30.11.2014 the reconstruction work on the site was followed up after the beginning of the work in 2012. Reconstruction works were continued in the period of February 1st until February 17th.

Fig. 16: Reconstructed doorframe of inner sanctuary (Foto: Swiss Institute, W. Mayer).

Fig. 17: State of reconstruction February 20015 seen from the back (Foto: Swiss Institute, W. Mayer).

In this season about 100 blocks were placed in the walls according to their original positions[42]. Since not all blocks were available due to the ancient reuse of the temple the missing part to the position of the original block was filled with lime-bricks, put in lime mortar.

[42] Cf. Chr. Ubertini, Restitution Architecturale du „Temple Y“, in: Dreyer et al., Stadt und Tempel von Elephantine. 31./32. Grabungsbericht, MDAIK 61, 2005, p. 64-75.

About 30 % of the whole reconstruction of the Tempel of Osiris-Nesmeti was finished. The walls of the Naos and the Sanctuary were rebuilt up to layer 5, the walls of the Pronaos are finished up to layer 3. Missing blocks were replaced by masonry consisting of lime bricks and lime mortar.

(W.M.)

12. Work in the Elephantine magazines and on the building of a new final storage area at the southern side of the kom

In the season 2014/2015, the work in the magazines on Elephantine Island was continued after the summer break[43]. The main goal was the inventory of small finds in the Annex magazines and to prepare as many boxes as possible for the transfer to the newly opened magazine of the Ministry of Antiquities in the Governorate of Aswan, where the complete material culture of excavations in and around Aswan is supposed to be kept in the future.

For now, the MA-magazine contains the following amounts of boxes in three rooms:

- 388 so-called *SCA-Boxes* with various small finds from all periods from Elephantine Island
- 203 so-called *Study-Collection-Boxes* with diagnostic pottery, which has been extensively studied and is now easily accessible for researchers as a comparison collection
- 54 so-called *M-Boxes*, which contain all registered objects from Elephantine Island

Since Annex 1 was completely emptied and the boxes were transferred to the MA-magazine in autumn 2014, we were able to empty Annex magazine 2, where all botanical remains were kept until then. This room could be emptied in the autumn season as well and all material was transferred to Annex 1. This magazine contains now more than 700 wooden boxes with organic/ inorganic samples, botanical remains and animal bones. We were able to establish this room as a study room, where no findings are stored anymore, except material which is under study during the ongoing seasons. After every season, all these finds have to be transferred back to the magazines.

For the future plan of the German Archaeological Institute to restore and then reopen the Old Elephantine Museum, it is essential to gain space also in the newly built Annex Magazines 4 and 5. Annex 5, which contained small finds, was emptied last autumn. The major find group, which takes most of the magazine space, is the pottery from the last 45 excavation years. In Annex magazine 4, 2500 wooden boxes with pottery are kept, additionally about 1100 large flour bags with pottery in the cellar of the Satet temple of the 18th Dynasty. For this reason we started building a wall magazine on the south side of Elephantine Island. In this magazine, we will be able to store about 2000 big bags ("shewals"), after they are studied intensely. We already repacked 250 large bags with pottery, which are stored in this magazine. Furthermore, about 50 bags with grinding stones were packed, which are stored in the wall as well. This work will continue over the next few seasons, until Annex magazine 4 is empty and can be used for the finds from the Old Elephantine Museum.

[43] The magazine inspectors were Hala Adel Mohammed , Ahmed Awad, Faisal Hafny and Wafa Mohamed, who very kindly supported our work and helped in every possible way.

Fig. 18: Annex magazine 2 before in autumn 2014 (Foto: DAI, M.-K. Schröder).

Fig. 19: The organic sampels storage room, Annex magazine 2 (Foto: DAI, M.-K. Schröder).

(M.-K. S.)

13. Public work on the *kom*

Of special impact and response was the archaeological day for the schools of the island (Ahmed Saber Prep School; Shahid Abdel Kader Prep School), which was supported actively by the Egyptian members of the excavations team from Quft as well as the inspectors of Aswan under the direction of

N. SALAMA.[44] Around 150 pupils resident on the island were introduced to reading and writing hieroglyphs and Coptic letters; They could draw pictures of Pharaonic, Coptic and Islamic motives by connecting dots; they followed the ancient and modern paths of the island and through the archaeological site through a paper labyrinth and rebuild a pillar of the temple of Satet made from paper. These games were the preparation for a tour over the archaeological site of Elephantine led by the Egyptian members of the German mission as well as the lady-inspectors of the inspectorate. At the site the pupils were able to use their newly gained knowledge on real Pharaonic hieroglyphs and learned about the use, aims and conduction of archaeological work.

In the aftermath we met several of the pupils during our walks through the villages of the island, who expressed the wish to learn more about archaeology and visit the site on their own in the future. Further days like this one will hopefully be taking part every season.

Fig. 20: Inspector H. ED-DERS helping girls with the labyrinth-game (Foto: DAI, J. Sigl).

(J.S.)

[44] We would like to express our sincere thanks to N. SALAMA for his informing of the Ministry of Education in Aswan, which was represented by a member of the school department, and the local press, who did a successful interview on the following day. My sincere thanks also go to M. ABDEL WAHAB, the *omda* of the village community on Elephantine, who established and supported the contact with the schools, and to the inspectors, workmen and colleagues, who helped on this day.

List of depiction

Fig. 1: Preventing contamination during excavation (Foto: DAI, P. Kopp).

Fig. 2: Cellar of house 73 (Foto: DAI, P. Kopp).

Fig. 3: Houses 170, 171 and 172 of the 11th Dynasty (plan: DAI, P. Kopp).

Fig. 4: Fish bones *in situ* (Foto: DAI, P. Kopp).

Fig. 5: Working platform in house 170 (Foto: DAI, P. Kopp).

Fig. 6: Cellar in house 171 (Foto: DAI, P. Kopp).

Fig 7: Overview on the work in House 55 (Foto: Swiss Institute, C. von Pilgrim).

Fig. 8: Wallpainting on mud plaster in House 55 (Foto: Swiss Institute, C. von Pilgrim).

Fig. 9: Newly discovered pillars with erased name of Queen Hatshepsut (left) and with the god *Jmj-pr=f* (right; Foto: DAI, T. Perkins).

Fig. 10: Block from the barque chamber of Khnum, with traces of female king marked in red (Foto: DAI, T. Perkins).

Fig. 11: Sand-filled sub-foundations of a Late Period temple and remains of enclosure walls of the Khnum Temple precinct of the Middle Kingdom (background left side) and of the New Kingdom (centre right; Foto: Swiss Institute, C. von Pilgrim).

Fig. 12: Pottery assemblage in House 55 left in situ (Foto: Swiss Institute, C. von Pilgrim).

Fig. 13: Core, Group 2 (Foto: DAI, C. Jeuthe).

Fig. 14: Bitruncated tool, Group 3 (Foto: DAI, C. Jeuthe).

Fig. 15: Fragments of columns and capitals (Foto: Swiss Institute, C. von Pilgrim).

Fig. 16: Reconstructed doorframe of inner sanctuary (Foto: Swiss Institute, W. Mayer).

Fig. 17: State of reconstruction February 20015 seen from the back (Foto: Swiss Institute, W. Mayer).

Fig. 18: Annex magazine 2 before in autumn 2014 (Foto: DAI, M.-K. Schröder).

Fig. 19: The organic sampels storage room, Annex magazine 2 (Foto: DAI, M.-K. Schröder).

Fig. 20: Inspector H. ED-DERS helping girls with the labyrinth-game (Foto: DAI, J. Sigl).