

PRELIMINARY REPORT ON THE LEIDEN EXCAVATIONS AT SAQQARA,  
SEASON 2013: THE TOMBS OF SETHNAKHT AND AN ANONYMOUS OFFICIAL

M.J. RAVEN, B.G. ASTON, L. HORÁČKOVÁ, D. PICCHI, AND A. BLEEKER

*Introduction*

The joint expedition of the Leiden Museum of Antiquities and Leiden University resumed its work south of the causeway of Unas on 26 January 2013 and continued until February 27th. The staff consisted of Prof. Dr Maarten J. Raven (field director), Dr Nicholas Warner (architect), Dr Ladislava Horáčková, Prof. Dr Frank Rühli and Dr Iwona Kozieradzka-Ogunmakin (anthropologists), Dr Barbara Aston (ceramicist), Dr Ilona Regulski, Dr Daniela Picchi, Mr Vincent Oeters and Mr Nico Staring (archaeologists), Dr Rob Demarée (epigraphist), Ms Annelies Bleeker and Mr Wael Fathi Morsy (surveyors), Ms Lyla Brock and Ms Dorothea Schulz (artists), and Ms Anneke de Kemp (photographer).

The fieldwork was carried out in close collaboration with Mr Kamal Wahid (Director of Saqqara) and Mr Mohammed Mohammed Yusuf (Chief Inspector of Saqqara-South) and was supervised in the field by Mr Azmy Salama (inspector) and Mr Mohammed Fathi Nasr (assistant inspector). The expedition is very grateful to H.E. Muhammad Ibrahim Aly (Minister of Culture), Dr Mohammed Ismail Khaled (Chairman of the Department of Foreign Missions), and to the members of the Permanent Committee of the Supreme Council for Antiquities, for permissions, advice, and assistance. We also acknowledge the help of the Saqqara restorers.

Work was concentrated in the south-east zone of the site of the Leiden Expedition (Fig. 1). In the first place, the substructure was excavated of the anonymous tomb found in 2010, and inscriptional evidence was found which allows us to henceforth designate it as the tomb of Sethnakht. Secondly, a new tomb — again unfinished and so far anonymous — was excavated to the south of the tomb of Meryneith. A third objective was the location of the original entrance to the Early Dynastic galleries situated under the tomb of Meryneith, a project that proved to be more difficult than estimated. Finally, two new replicas were installed in the tombs of Horemheb and Ptahemwia, and two new information panels were put up for the benefit of visitors to the site. These projects will be briefly discussed in the following sections of this report.

*Excavation of the substructure of the tomb found in 2010*

In 2010, the Expedition discovered the remains of a new tomb to the south of that of Ptahemwia.<sup>1</sup> Due to the fact that it was unfinished and did not contain any reliefs or inscriptions, the identity of the tomb-owner remained a mystery. Clearance of the shaft and subterranean

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<sup>1</sup> See M.J. Raven, H.M. Hays, B.G. Aston, R. Cappers, B. Deslandes, and L. Horáčková, Preliminary report on the Leiden excavations at Saqqara, season 2010: an anonymous tomb, *JEOL* 43 (2011), 3-18.

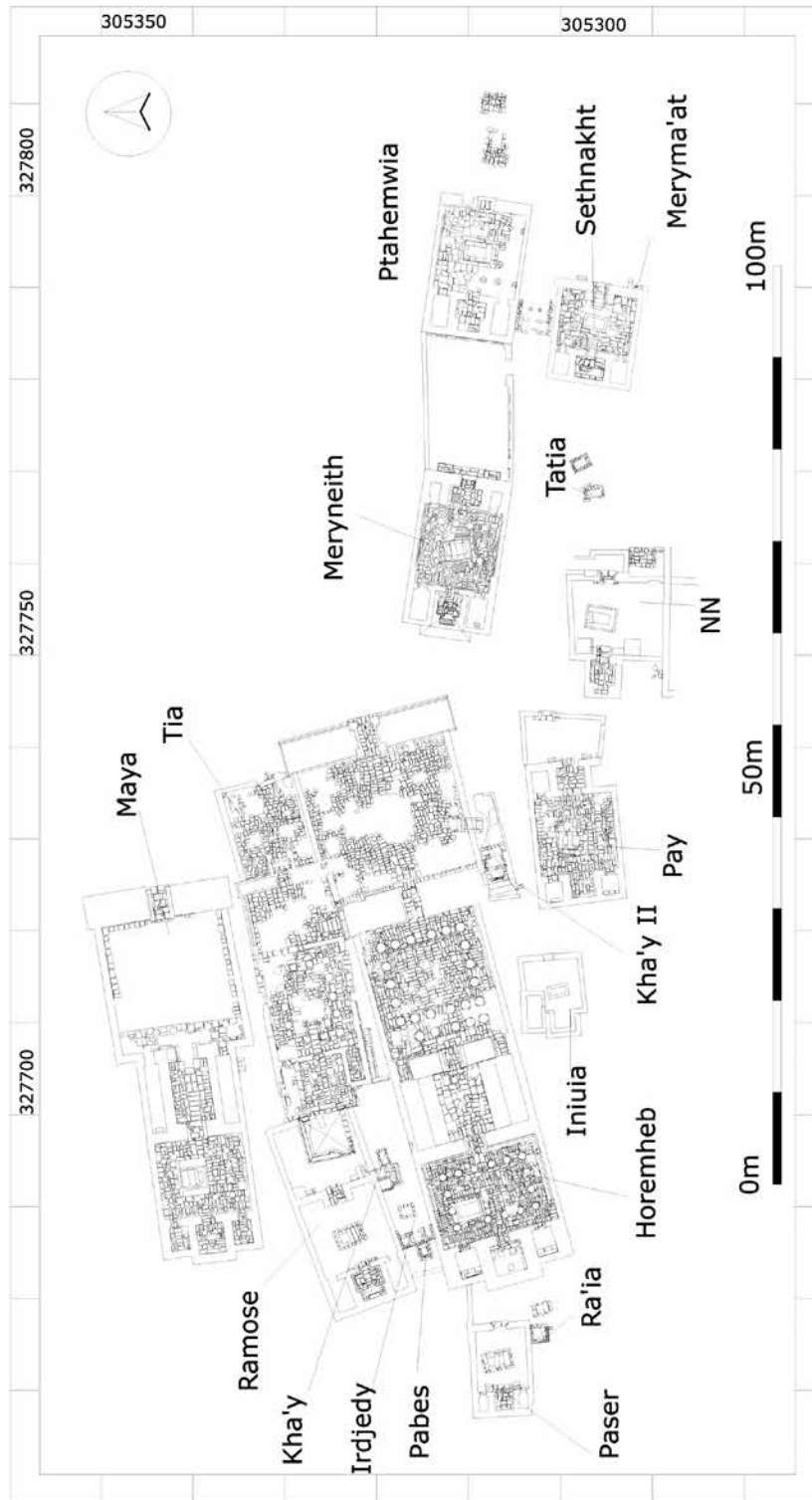


Fig. 1. General map of the site of the Leiden Expedition.

tomb-chambers appeared to be the last chance to recover the identity of the original builder or occupant(s) of the tomb. This task was planned for 2011, but had to be postponed as a result of the Egyptian revolution, then again in 2012 because the security situation at Saqqara was judged to be insufficiently stable to allow fieldwork.<sup>2</sup> Luckily, the local situation had much improved by 2013 and accordingly the Expedition was allowed to resume its fieldwork. The task of emptying the shaft and underground chambers of the anonymous tomb could be finished. The shaft proved to be 7.4 m deep and has three chambers (A-C) in the south and one in the north (D) (Fig. 2). Chambers A and D contained some sand from the shaft, but the others rooms were found almost empty, doubtless as a result of previous plundering (Fig. 3). Tell-tale signs of such an intrusion by robbers were the presence of a dry-stone wall stacked around the shaft's upper aperture (already dismantled in 2010)<sup>3</sup> and of a break-through in the south wall of Chamber A. The latter leads to two further New Kingdom complexes located further south, but was closed off by the Expedition.

Chamber A is a square room with a raised mummy-niche (or *mastaba*) along the south wall and a doorway to Chamber B in the west. Chamber B has a 1.9 m deep sarcophagus pit in the floor and a further mummy-niche (C) in the south. Chamber D is also just a small mummy-niche. The shallow stratum of debris covering the floors of these chambers contained quite a quantity of smashed limestone slabs, presumably once closing off the various doorways and the sarcophagus pit (where one such slab was still in position). Some pottery collected from the same stratum proved to join to other potsherds found in 2010 in the tomb's superstructure. The former group did not show any erosion, as opposed to the sherds found above ground which therefore must have been thrown out by the tomb-robbers. This observation has important consequences for an analysis of the other finds from the subterranean chambers.

Thus the lower part of a faience canopic stopper found in the underground sarcophagus pit was found to join to a facial fragment picked up in 2003 in front of the door to Meryneith's forecourt (Fig. 4). During the seasons 2009 and 2010, the same area between the chapels of the anonymous tomb and Meryneith's forecourt produced several other canopic stopper fragments, as well as a number of body sherds and bases of faience canopic jars. Presumably, these fragments belong to a single set of four jars, and one of the body sherds is inscribed with the name [...]tynakht, followed by a typical Ramesside determinative of a seated man.<sup>4</sup> Probably this is the same name as that on nine faience shabti fragments discovered in the same area. These are inscribed for Sethnakhtu or Sutynakht, a scribe of the temple of Ptah. All this leads us to believe that this person was originally buried in the tomb in the 19th Dynasty, and therefore we propose to call it the tomb of Sethnakht from now onwards.

However, Sethnakht was clearly not the first owner of the tomb, which is older than the Ramesside period and seems to date to Dynasty 18. Some objects found in the burial chambers may have belonged to this mysterious original occupant of the underground complex. These comprise two faience parts of an inlaid wig (Fig. 5) and a steatite eye inlay, all of them

<sup>2</sup> The Expedition carried out a brief season of repairs, restoration, and registration instead. For a report, see M.J. Raven, A brief report on the 2012 season, *Saqqara Newsletter* 10 (2012), 5-9.

<sup>3</sup> See M.J. Raven *et al.*, *JEOL* 43 (2011), 5, 7.

<sup>4</sup> J. van Dijk, in: G.T. Martin *et al.*, *The tombs of three Memphite officials: Ramose, Khay and Pabes* (London, 2001), 25.

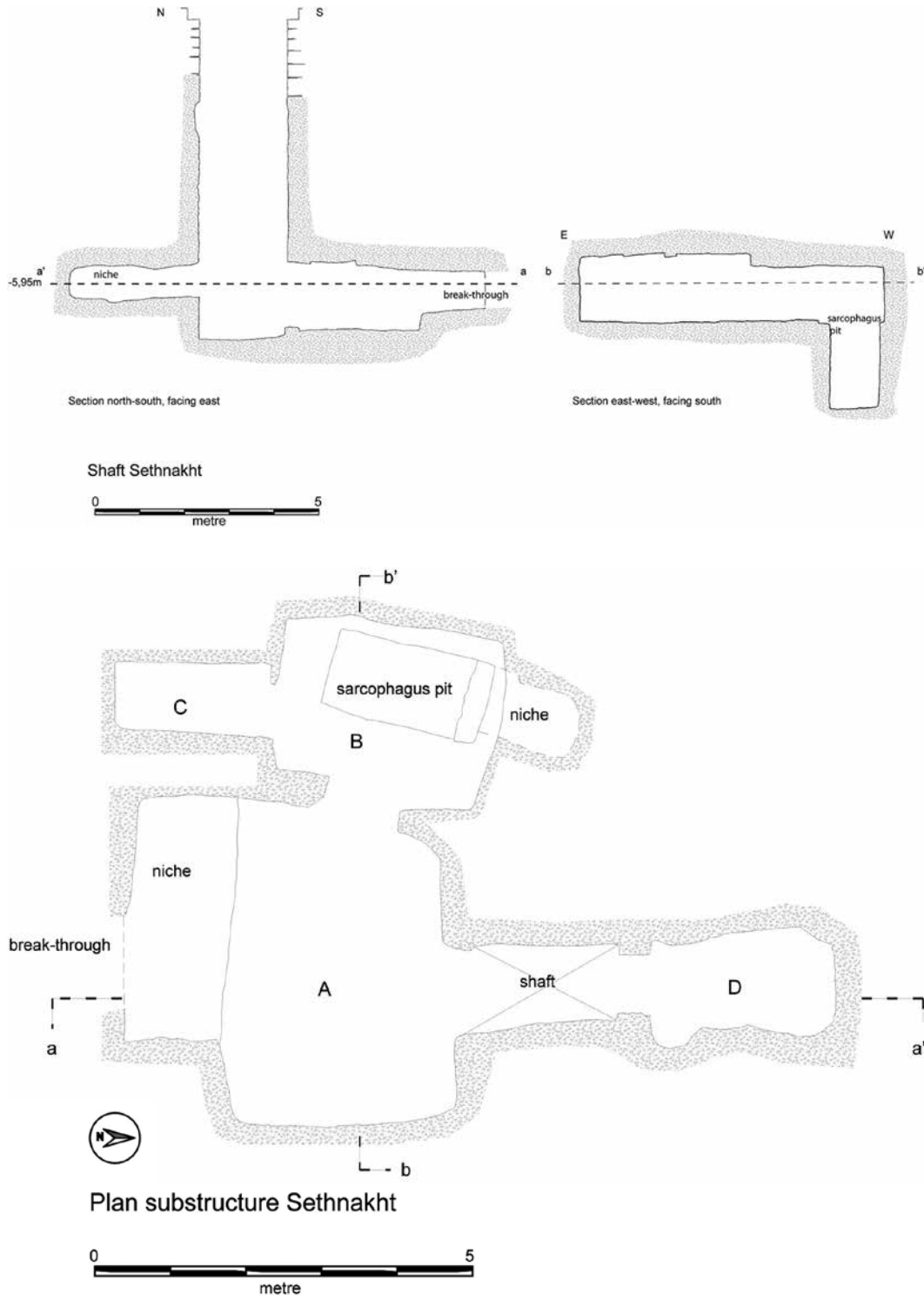


Fig. 2. Section and plan of the substructure of the tomb of Sethnakht.

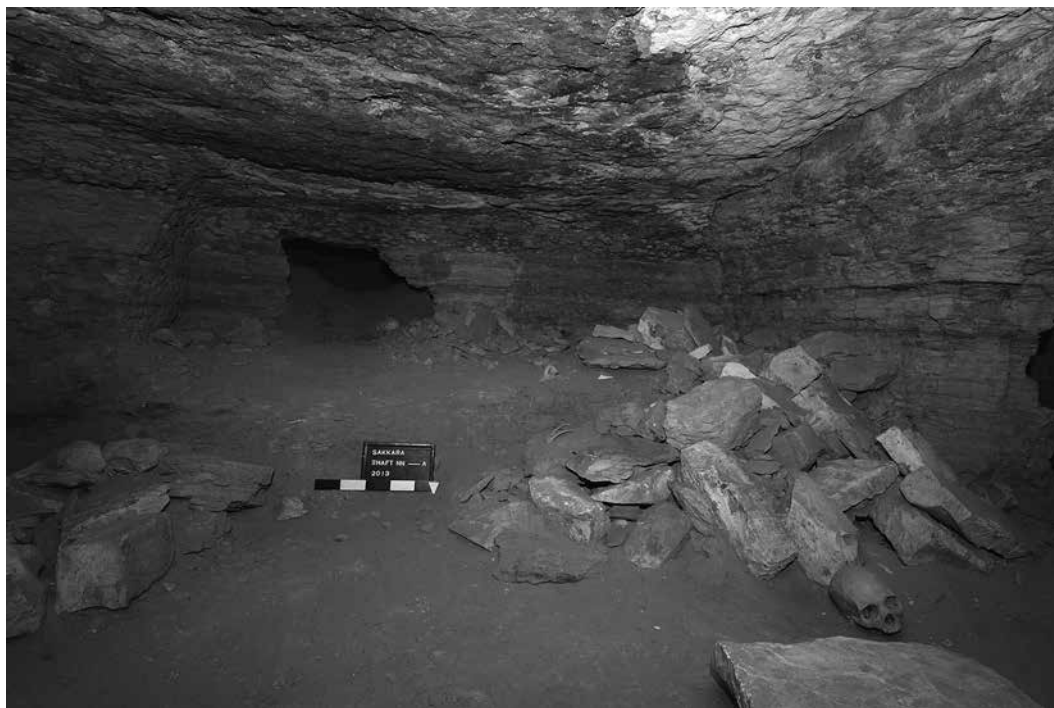


Fig. 3. Chamber A as found, with robbers' break-through in the rear wall.



Fig. 4. Canopic stopper.



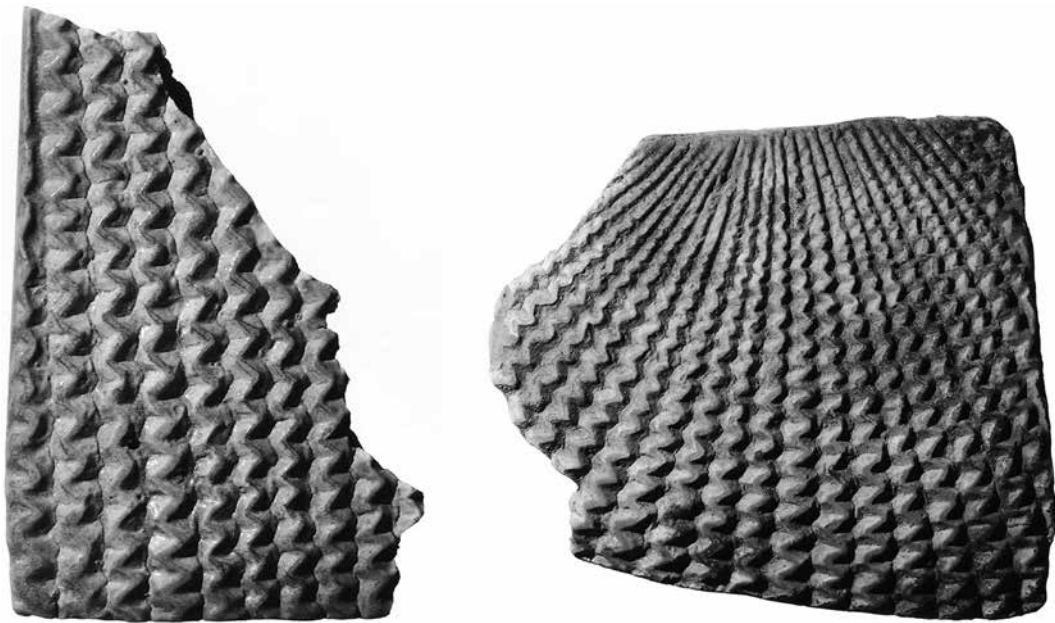


Fig. 5. Two fragments of an inlaid wig.



Fig. 6. General view of the new anonymous tomb from the south-east.

presumably belonging to a coffin of outstanding quality. On the other hand, the presence of a set of terracotta shabtis of poor manufacture attests that there must have been several more secondary interments during the Ramesside period. All the pottery found in the subterranean apartments is likewise of Ramesside date.

#### *Discovery of a new anonymous tomb*

Gradual extension of the excavations by the Leiden Expedition had left an area unexplored which is surrounded by the tombs of Tatia (in the east), Meryneith (in the north) and Pay (in the west). Full clearance of this rectangular area was undertaken in the present season, and a new tomb could be uncovered (Figs. 6-7). This is built in mud-brick and measures about 10.9 m from north to south and 15.1 m from east to west. It comprises a simple eastern gateway between limestone reveals, a more or less square courtyard, and a single western chapel which was once surmounted by a pyramid. The chapel still has four slabs of its original limestone reliefs, depicting the feet of the tomb-owner and a number of male and female offering-bearers (Fig. 8). Two

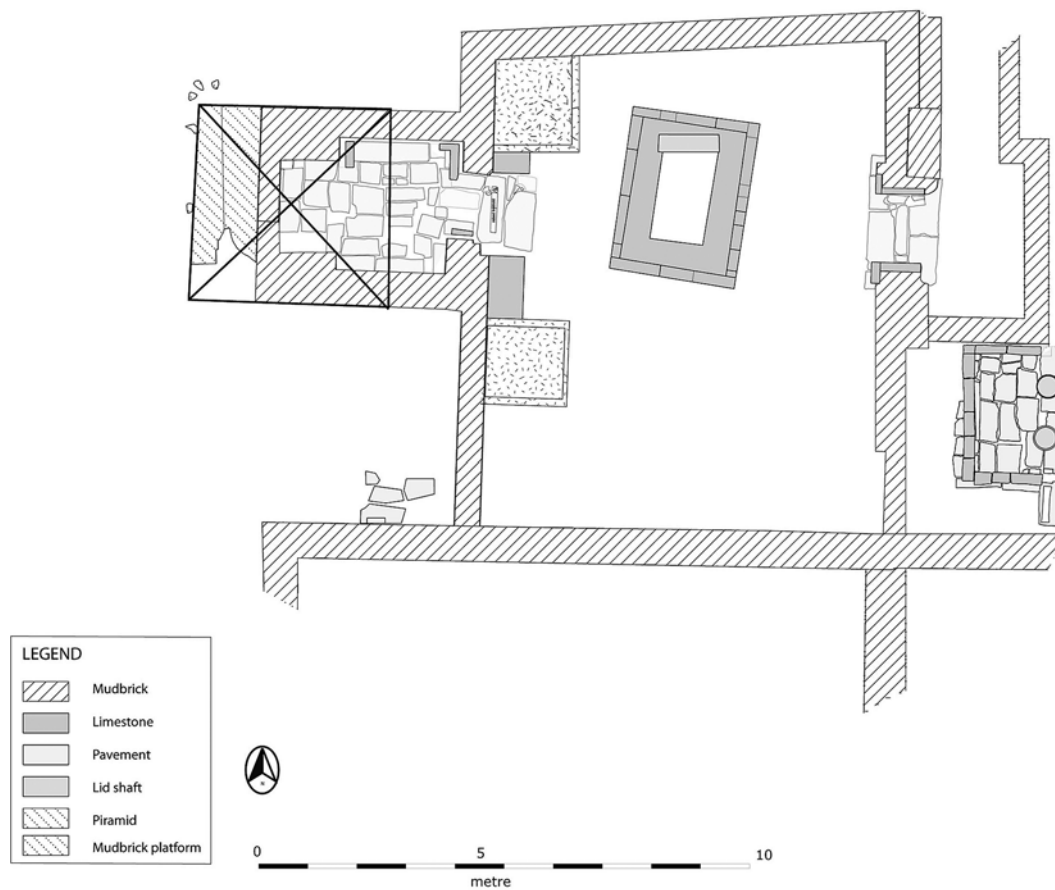


Fig. 7. Plan of the anonymous tomb.

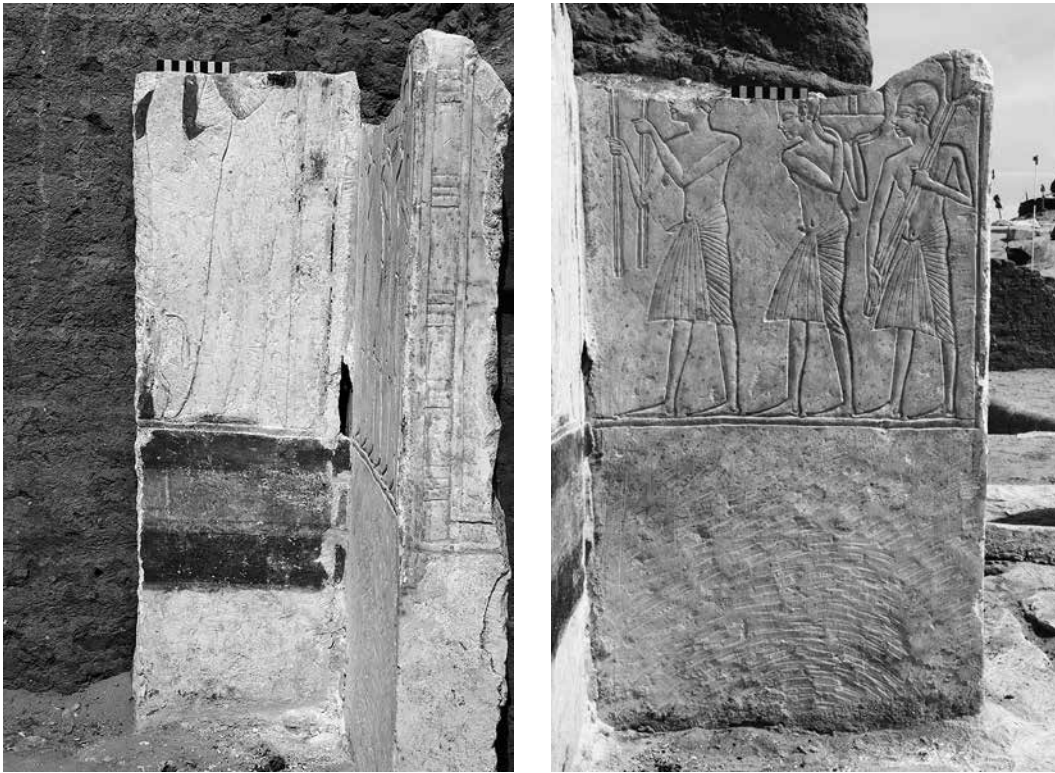


Fig. 8. Reliefs in the north-east corner of the central chapel.

of these slabs have well-preserved colours, the others are still unfinished. The rest of the tomb has no reliefs or inscriptions and shows all the signs of likewise being unfinished. Thus the courtyard has a simple rubble floor, there is no colonnade and no wall revetment, and only the eastern entrance and the chapel have limestone paving. Both the style of the reliefs and the construction in mud-brick seem to date the tomb to the end of Dynasty 18.

A large rectangular shaft lies in the north half of the courtyard. It has a well-constructed rim with rounded top, whereas one of its covering slabs still lies in position. A dry-stone wall stacked around the rim betrays that it was visited by robbers. Indeed, the burial chamber of this complex has already been found empty by the Expedition in 2002, because it is accessible via a robbers' break-through from the substructure of the tomb of Meryneith.<sup>5</sup> Full excavation of the shaft and chambers is planned for 2014, and in the meantime the shaft has been sealed by concrete slabs. To this end, the dry-stone wall had to be dismantled, which proved to contain several interesting relief fragments and architectural blocks, including an inscribed jamb fragment from the tomb of Tia.<sup>6</sup>

<sup>5</sup> M.J. Raven, R. van Walsem, B.G. Aston, and E. Strouhal, Preliminary report on the Leiden excavations at Saqqara, season 2002: the tomb of Meryneith, *JEOL* 37 (2001-2002), 97 and fig. 3, complex 2002/17.

<sup>6</sup> For another block of Tia from the burial-chambers of the new tomb, see *ibid.* 97; now published in M.J. Raven, V. Verschoor, M. Vugts and R. van Walsem, *The Memphite tomb of Horemheb, commander in chief of Tutankhamun*,



The new tomb has a number of very unusual architectural features. In the first place, it is very asymmetrical. The gateways in the east and west walls of the courtyard are not aligned with each other, its north and south walls do not run parallel, and the shaft does not lie on the main axis either. There are two raised platforms in front of the west wall, perhaps for offerings, with two limestone bases probably for stelae. Again, these do not form a symmetrical layout. Two vertical joins in the brickwork of the courtyard's west wall betray that the building plans were changed at some stage, and the south wall is not bonded with the rest of the brickwork either. Obviously the latter belongs in fact to the tomb's southern neighbour, and the southward extension of the courtyard must have been an afterthought.

Another remarkable fact is the lack of side-chapels flanking the central chapel, which is now the only element protruding beyond the west wall of the tomb. Perhaps this unusual plan has to do with the proximity to the tomb of Pay in the west, of which the access should not be blocked by the present monument. Later, the eastern extension of Pay's tomb constructed by his son Raia caused further problems.<sup>7</sup> The forecourt added by Raia was built right against the west face of the pyramid of the anonymous tomb (Fig. 9). Constructing an axial doorway leading into that forecourt was therefore out of the question, and instead the doorway had to be shifted further to the north. It may also have been Raia who was responsible for the partial destruction of the pyramid, of which a 1.7 m wide west section was chopped off down to base level, leaving a flimsy wall of no more than 0.4 m thickness as the west perimeter wall of the anonymous tomb's central chapel.

East of the façade of the tomb lies a small limestone chapel, clearly Ramesside in date but completely undecorated (2013/7, Figs. 6-7). In its present condition the walls are no more than one or two courses high. The west wall has the base and raised jambs of a 1.08 m wide stela. Two slender papyrus columns, sections of which have been preserved, were flanked by two semi-circular half-columns with strange floral capitals. The presence of an adjacent shaft further east has not yet been verified. The north wall of the limestone chapel is connected to a strange L-shaped brick wall which shields off the entrance to the anonymous tomb and forms some kind of porch. The full extent of this construction is not yet known, because the area lying to the north of the new tomb has not yet been excavated completely. Here are located some Coptic remains, including a square brick pit full of garbage (2013/6) which was already emptied and dismantled in the present season. A strange idol of unbaked clay covered in fine linen found at the base of this pit likewise seems to date to the Christian period (Fig. 10). In the area between the east wall of the tomb and the L-shaped brick wall were located four surface burials (2013/22a-d), including one child.

#### *Search for the entrance of Early Dynastic galleries under the tomb of Meryneith*

In 2002, underground galleries dating to the Early Dynastic Period were discovered under the tomb of Meryneith.<sup>8</sup> In 2009 it was found out that the original access to those galleries is

V: *the forecourt and the area south of the tomb, with some notes on the tomb of Tia* (Turnhout, 2011), 164-165, no. [79].

<sup>7</sup> Cf. M.J. Raven *et al.*, *The tomb of Pay and Raia at Saqqara* (Leiden/London, 2005), 11-13.

<sup>8</sup> M.J. Raven *et al.*, *JEOL 37* (2001-2002), 98-100 and fig. 3.



Fig. 9. Pyramid of the anonymous tomb with wall of Raia's forecourt, from the north.



Fig. 10. Human figure of unbaked clay.

a stairway which must emerge in daylight to the north of the tomb,<sup>9</sup> and in 2010 we had ground radar exploration performed in order to verify the exact location of this mysterious tunnel.<sup>10</sup> An analysis of the geophysical data indeed showed the presence of an underground feature which seems to emerge on the surface about 10 m to the north of the tomb of Meryneith. Accordingly, part of the desert surface in this area was now cut back in order to find the hidden entrance, but so far in vain.

In the first place, the area in question is situated on a steep slope lying between the north wall of the modern shelter erected over the tomb of Meryneith in the south, and a recent dump in the north of about 6 m high. Needless to say, this rather complicates the endeavour to clear a portion of the original rock face now buried under considerable strata of drift sand and debris. Secondly, a complicated stratigraphy of various structures dating to the New Kingdom or later emerged from the sand, effectively blocking our access to the underlying strata (Fig. 11). These included two New Kingdom shafts of about 7.5 m deep (features 2013/9 and 2013/14) which were emptied but proved not to break through to the Early Dynastic Period tunnel. Shaft 2013/14 was connected with a rubble floor extending to the east and constricted in the north by a mud-brick wall running east-west (2013/12). A Late Period burial was found lying in a *fossa* cut out in this floor (2013/13), whereas another one had been interred against the north face of the wall (2013/15). A stretch of wall running north-south over the foot end of the latter burial may date to the Late or Coptic Period (2013/10).

In the end, it proved to be possible to reach the level of the underlying rock in a deep trial pit between the tomb of Meryneith and wall 2013/12. The presence of a single sherd of an Early Dynastic Period stone vessel on this rock floor is promising, and we may consider continuing our search during the following season. However, this will involve the dismantling of all the constructions of later periods and the removal of a large quantity of debris from the dump lying to the north.

#### *Installation of two replicas (D. Picchi)*

In 1985, a considerable number of resin replicas were installed in the tomb of Horemheb.<sup>11</sup> These had been taken from originals in the Louvre, the British Museum, the Leiden Museum, and the museums of Berlin and Vienna, at the request of the then field director of the excavations, Geoffrey T. Martin. Later, a small cast from a block in Munich was added to this series.<sup>12</sup> At the time, the Archeological Museum of Bologna, owner of five Horemheb reliefs purchased by the Bolognese painter Pelagio Pelagi in 1831, was the only museum which refused the request for reasons of preservation. Both the fragility of the limestone of the Bologna blocks and the remains of polychromy still present on their surface were considered to make them unsuitable for replication methods involving direct contact with the originals.

However, the Bologna Museum of Bologna has recently tried out advanced non-destructive technologies of digital copying and CAD/CAM techniques for the reproduction of objects.

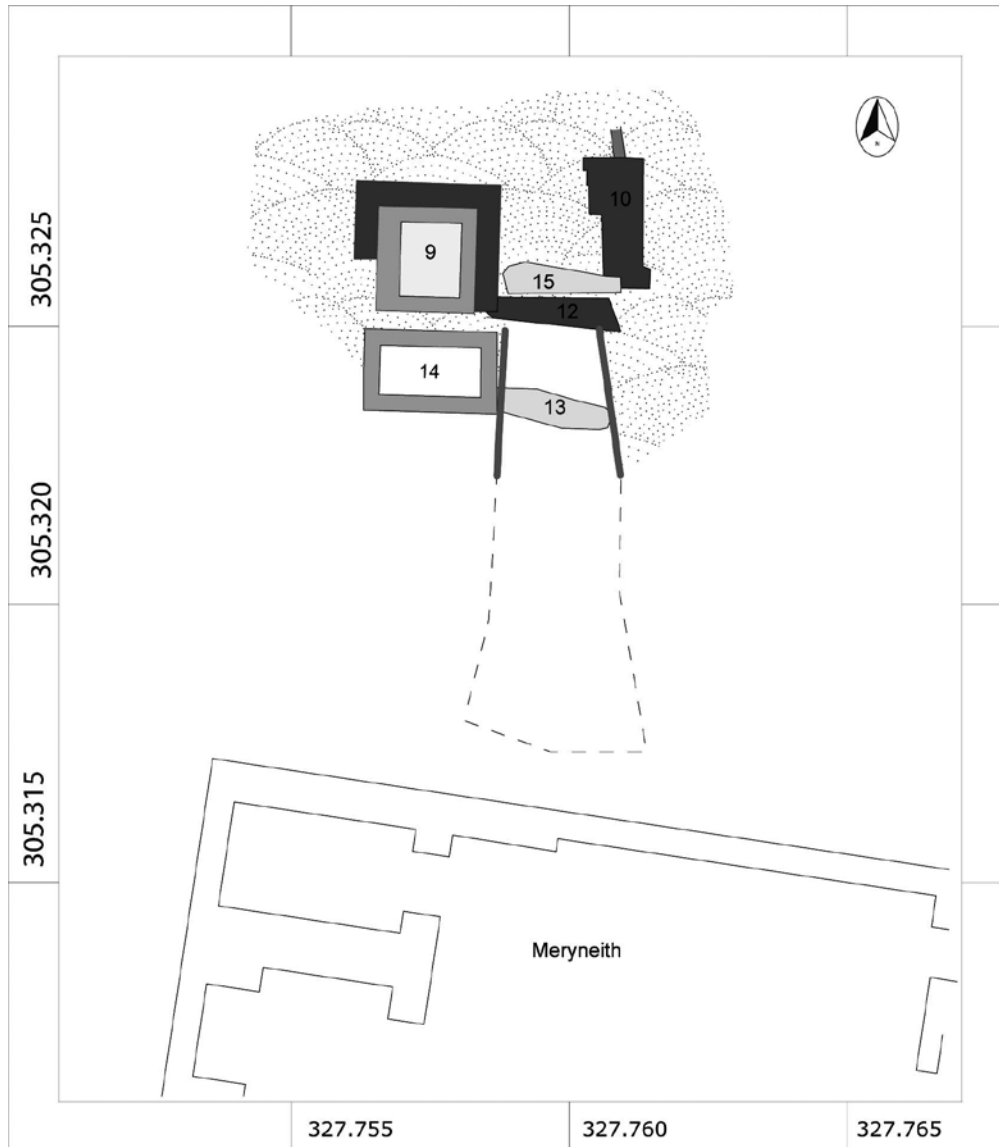
<sup>9</sup> I. Reguluski, C. Lacher and A. Hood, Preliminary report on the excavations in the Second Dynasty necropolis at Saqqara, season 2009, *JEOL* 42 (2010), 30-33 and figs. 4-5.

<sup>10</sup> See B. Deslandes, in: M.J. Raven *et al.*, *JEOL* 43 (2011), 10-12.

<sup>11</sup> G.T. Martin, M.J. Raven, and D.A. Aston: The tomb-chambers of Iurudef, preliminary report on the Saqqâra excavations, 1985, *JEA* 72 (1986), 21-22.

<sup>12</sup> M.J. Raven, V. Verschoor, M. Vugts and R. van Walsem, *The Memphite tomb of Horemheb*, V, 56-57, no. [22].











-  Shaft
-  Mudbrick wall
-  Limestone block (vanishing in sanddune)
-  Burial
-  Position of the sondage
-  Position of the profiles

Fig. 11. General plan of sondage to the north of the tomb of Meryneith.

These tests were performed in cooperation with the ProtoCenter Laboratory of ENEA (the Italian National Agency for New Technologies, Energy and the Environment) in Bologna, which, under the direction of Ing. Sergio Petronilli, developed some innovative processes for the application of these techniques in the field of monumental works and archaeological finds. This cooperation has enabled the creation of virtual 3D-models of one relief of Horemheb's tomb and of a pilaster from the tomb of Ptahemwia, which was likewise purchased by Pelagio Pelagi in 1831. These high resolution models were made by means of a laser scan having an error margin of only 0.02 mm, thus ensuring a very high quality replication without any risk for the originals.

For the realization of the replicas, a leading company in this field has been contacted, *viz.* the Italian UNOCAD known for its 1:1 copies of famous works such as Donatello's David in Florence, Michelangelo's Piety in Milan, a number of statues by Canova, and many other Italian masterpieces.<sup>13</sup> Thanks to their expertise, it has been possible to find a marble with a colour similar to the limestone used for the reliefs of Horemheb and Ptahemwia. Several duplication tests were carried out by means of a special computer-controlled milling-machine. The copies produced by this machine had to undergo a final stage of detail finishing and coating by some skilled workers, to obtain a better correspondence with the original reliefs. The choice for marble was made to enhance the notion of value of these replicas, and also because the resins used in the 1980s have shown poor resistance to weather conditions.

The first replica concerns a scene with seated Nubians from the east wall of Horemheb's inner courtyard.<sup>14</sup> The second block is a pilaster from the north wall of the tomb of Ptahemwia, showing the tomb-owner praying to the sun god.<sup>15</sup> After arrival of the replicas in Cairo they were exhibited in the Italian Cultural Institute from February 4-15. Both replicas were then successfully installed on the walls in Saqqara by the team of the contractor Mr Mahmud el-Taiyib, under direction of the expedition's architect, Dr Nicholas Warner (Figs. 12-13). Both these replicas and the previous set were provided with small brass labels identifying their museum number and present location. The Bologna replica project was executed in the framework of the Memorandum of Understanding signed by the Archaeological Museum of Bologna and the Rijksmuseum van Oudheden of Leiden in 2011. All costs involved in the project were sponsored by CISE (the Italian Centre for Egyptological Studies in Imola), the Rotary Club of Imola, and Tarros SPA.

#### *Installation of two information panels*

In view of the opening of the site for tourists (which was finally effectuated by the SCA in 2011) the Expedition has carried out a programme of providing information panels for the most important tombs on site. These panels are executed in etched aluminium and have bilingual texts in Arabic and English, in combination with some plans and photographs. In former years, such panels were already installed on the façades of the tombs of Horemheb, Tia, Maya

<sup>13</sup> <http://www.unocad.it/cms>.

<sup>14</sup> Bologna EG 1887. See G.T. Martin, *The Memphite tomb of Horemheb, Commander-in-chief of Tut'ankhamūn, I* (London, 1989), 82 and pls. 92-93, scene [69].

<sup>15</sup> Bologna EG 1891; see J. Berlandini, in: *L'Égyptologie en 1979, Axes prioritaires de recherches, II* (Paris, 1982), 208, n. 74; D. Picchi, in: C. Morigi Govi (ed.), *Guide to the Museo Civico Archeologico of Bologna* (Bologna, 2009), 192.



Fig. 12. Replica of seated Nubians in position in Horemheb's inner courtyard.



Fig. 13. Replica of Ptahemwia's pilaster in its original position on the north wall.



(with a further panel in the inner courtyard), Pay, Meryneith, and Ptahemwia. A slightly larger introductory panel explaining about the site as a whole was put up at the entrance to the site, where the concrete path now linking it with the Unas pyramid area comes in. This season, two further information panels of the same model were installed. The first was hung on the west wall of Horemheb's inner courtyard and helps to identify the replicas, while also providing some information on the statues found in the tomb. The second was put up to the south of the Unas pyramid temple, at the start of the concrete path leading to the site. It provides some details on those New Kingdom tombs which can be visited by tourists and helps them to locate the area in question.

*Study of style and iconography* (D. Picchi)

Full understanding of the iconographical programme of the tomb of Horemheb, certainly unique within the New Kingdom necropolis of Saqqara, is only possible if this monument is considered as part of a work in progress related to the chronological development of the site, where some major artists of the time were active. Last year a project of stylistic and iconographical analysis was started with the comparative study of those tombs at least partially contemporary to Horemheb's, such as those of Maya, Meryneith, and Ptahemwia. These tombs and their iconographical programme helped in understanding the stylistic development of the funerary monument of Horemheb, which is really important in order to distinguish the artistic transition from the Amarna Period to the end of the Eighteenth Dynasty.

This season, the analysis of the tomb of Horemheb has been continued by careful photography of both entire scenes and individual reliefs of all the blocks still *in situ*. Detailed descriptions were made of every single scene, paying particular attention to execution techniques, extant polychromy, possible production markers, and dimensional ratios of figurative elements both within individual scenes and in relation to the decoration as a whole. An attempt was also made to come to a hypothetical reconstruction of those iconographical elements which are now lacking, by means of a study of known fragments and the possible identification of new ones which can be attributed to the tomb, especially to the north and north-east walls of the inner courtyard.

As a result of this, it has become clear that a more thorough study of the reliefs still visible in the tomb of Horemheb, as well as of those now preserved in the Imhotep storerooms at Saqqara or in various museum collections, will be necessary in order to achieve any reliable results. For this reason, it will be fundamental in preparation for next season to examine the unpublished photographic material relating to the tomb which is kept in the Leiden Museum, and to personally examine the relief fragments preserved in the Imhotep storerooms.

A major role in the architectural and iconographic development of the New Kingdom necropolis during the delicate transition from the Amarna Period to the end of the Eighteenth Dynasty was certainly played by Maya, who acted as Overseer of the Treasury and Overseer of all the Works of the King during the reigns of Tutankhamun and Horemheb. Therefore, the stylistic and iconographical analysis of the tomb of Horemheb was now extended to include the tomb of Maya, using the recently published volume by G.T. Martin as a means of reference.<sup>16</sup> This was carried out comparing it with that of Horemheb, because

<sup>16</sup> G.T. Martin, *The Tomb of Maya and Meryt, I: the reliefs, inscriptions, and commentary* (London, 2012).

it cannot be excluded that some artists worked in both monuments, albeit at different times and for different iconographic developments.

The first preliminary analysis of the tomb of Maya has been carried out by careful photography of both entire scenes and reliefs of all the blocks still *in situ*. Once again detailed descriptions were made of every single scene, paying particular attention to execution techniques, extant polychromy, and possible production markers. This study will also have to include the archive material kept in the Leiden Museum and the fragments currently preserved in the Imhotep storerooms.

#### *Study of skeletal material* (L. Horáčková)

Human skeletal remains studied this season came from the shaft and from Chambers A, B, C and D of the tomb of Sethnakht. Various Coptic burials found during the seasons 2003, 2009 and 2010 were also re-examined. The skeletons and their parts were studied macroscopically, and both their dimensions and basic demographic parameters (for the determination of sex and age) were ascertained. The variability and the pathological changes on the skeletons were also studied in the usual anthropological analyses.

The isolated bones found accidentally in the course of the fieldwork (and mainly associated with surface layers of sand without any specific archaeological context) were only assessed with respect to the occurrence of paleopathologic changes. All studies were carried out by Ladislava Horáčková, with the collaboration of Iwona Kozieradzka-Ogunmakin. Frank Rühli visited the site only briefly, mainly for the selection of samples for scanning analysis to be carried out next season.

#### *Pottery* (B. Aston)

During the 2013 season pottery from the substructure of Sethnakht's tomb was reconstructed as far as possible, also utilizing sherds found in the surface debris over the tomb in 2010. The burial assemblage was Ramesside in date and included at least seven large Marl D amphorae (five certainly with wide carinated bases), plus an interesting ring-necked Marl D jar with flaring rim and sharp shoulder of a type inscribed for *nhh* oil in the tomb of Maya and Meryt, though with much thicker walls. The assemblage also included a Canaanite jar (fabric P40) for oil imported from Syria, a Mycenaean stirrup jar, and one blue-painted, ovoid jar with linear band decoration.

In the new anonymous tomb, offering pottery of Ramesside date was found in a sand layer near floor level in the courtyard. A large deposit of late Eighteenth Dynasty pottery was recovered from above the two platform structures flanking the entrance to the chapel. The dense concentration of sherds continued down within the low platform walls. It is possible that these structures were made specifically as a repository for offering pottery which had fulfilled its function and was no longer needed.

A partially disturbed New Kingdom embalmers' cache was uncovered against the west exterior wall of the tomb, south of the chapel. This included a large blue-painted, funnel-necked storage jar with fluting on the 'front' of the jar while the 'back' was plain. The jar was found on its side with an inverted plate forming a lid which was covered with a thin sealing of mud. Though broken, the jar still contained part of its original contents: a brown powder.

In the shaft 2013/9, among the material originally from a Coptic dump, the expedition recovered part of the rim from a large jar with an applied face sporting a very large nose and round owl-like eyes. A sherd from the centre of an Egyptian B red-slipped dish with the stamped figure of a priest was also found here.

Ramesside pottery from the floor of the courtyard and chapels of Sethnakht's tomb excavated in 2010 was fully recorded this season, and over 100 pieces of New Kingdom and Coptic pottery were drawn.

#### *Survey work* (A. Bleeker)

For the purpose of surveying the newly excavated features, the grid developed in 2010 was extended over the present area.<sup>17</sup> Whilst executing the fieldwork, it appeared that there was an possible error in the site plan: on the drawing the newly found tomb was partly projected over the tomb of Pay. After careful measuring again it became clear that the western tombs (i.e. the tombs of Maya and Meryt, Tia and Tia, Ramose, Khay I and II, Pabes, Horemheb, Paser, Raia, Iniua, and Pay) were projected approximately 2 m too far eastward. In relation to each other, the tombs were placed correctly.

We suspect that the difference in coordinates may have occurred due to the fact that old manual methods of measuring have now given way to new digital measuring methods. In the latest drawings all diverging coordinates have been corrected and fixed.

#### *Other tasks*

Mr Vincent Oeters started the registration of several crates of relief fragments from the tomb of Maya and elsewhere, not previously studied by Geoffrey Martin and his team. Mr Nico Staring studied several hitherto unknown graffiti on the walls of the tomb of Horemheb. The limestone revetment of the First Pylon yielded another 15 pharaonic graffiti, including eight representations of boats.<sup>18</sup> More graffiti were found elsewhere in the tomb, accounting for a total number of 62 graffiti. Dr Ilona Regulski checked the Early Dynastic objects found during previous seasons and managed to make some joins with stone vessel fragments which came up during the present season, mainly in the fill of the new tomb.

The restoration team directed by Dr Nicholas Warner did some necessary maintenance. Thus the roofs of the courtyard of Raia and of the chapels of Ptahemwia (both of which showed some deterioration as a result of problems with the concrete) were renewed. Some gaps in the walls of the newly excavated tomb were closed using ancient mud-bricks found in the course of the fieldwork and kept for this purpose. This especially concerns the south-west corner of the cult chapel and the south wall of the courtyard. As stated above, Dr Warner and his team were also responsible for the installation of the replicas and the information panels.

Finally, the restorers of the Saqqara Inspectorate assisted the Expedition in cleaning the newly found relief blocks in the tomb's chapel, in stabilizing their colours, and in fixing them to the walls. One broken slab could also be repaired, using steel bolts and epoxy resin. All reliefs were protected by a cover of brick before the end of the season.

<sup>17</sup> Cf. M.J. Raven *et al.*, *JEOL* 43 (2011), 3.

<sup>18</sup> Already ten graffiti had been recorded in this area: Raven/Van Walsem, *Horemheb V*, 29-30, fig. I.8 (nos. 35-44). Graffiti nos. 1-34 have been published in Martin, *Horemheb I*, 157-159, pls. 146-149.

