

JAARBERICHT

VAN HET VOORAZIATISCH-EGYPTISCH GENOOTSCHAP

EX ORIENTE LUX

JOURNAL OF THE ANCIENT NEAR EASTERN SOCIETY “EX ORIENTE LUX”
 ANNUAIRE DE LA SOCIÉTÉ ORIENTALE “EX ORIENTE LUX”

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TABLE OF CONTENTS

Preliminary Report on the Leiden Excavations at Saqqara, Season 2010: An Anonymous Tomb	M.J. RAVEN, H.M. HAYS, B.G. ASTON, R. CAPPERS, B. DESLANDES, AND L. HORÁČKOVÁ	3
Ein neuer Vorschlag zur Etymologie des ägyptischen Wortes “ <i>rr</i> ” “Armband/Ring/Halskette”	S. BOJOWALD	19
Einige Bemerkungen zum ägyptischen Wort <i>śkr</i> in Kairo JE 71902 (Vorderseite, Haupttext, Zeile 3) vorzüglich seiner Verbindung mit <i>īrt.t</i> – Milch	S. BOJOWALD	21
The Commemorative Scarabs of Amenophis III: An Update	R.J. DEMARÉE	25
The Egyptian asymmetric squatting statue (II)	M. HEERMA VAN VOSS	35
König Unas und das Tremendum	M. HEERMA VAN VOSS	39
Reading vignettes. An approach to illustrations in the Book of the Dead	H. MILDE	43
Studies of ancient Egyptian footwear. Technological aspects. Part VIII. Fibre, coiled sandals	A.J. VELDMEIJER	57

PRELIMINARY REPORT ON THE LEIDEN EXCAVATIONS AT SAQQARA,
SEASON 2010: AN ANONYMOUS TOMB

MAARTEN J. RAVEN, HAROLD M. HAYS, BARBARA G. ASTON, RENÉ CAPPERS,
BRUNO DESLANDES, AND LADISLAVA HORÁČKOVÁ

The joint expedition of the Leiden Museum of Antiquities and Leiden University resumed its work in the New Kingdom cemetery to the south of the causeway of Unas on 6 January 2010 and continued until 27 February. The staff consisted of Dr Maarten J. Raven and Dr Harold M. Hays (joint field directors), Dr Barbara G. Aston (ceramicist), Prof. René Cappers (palaeobotanist), Dr Rob J. Demarée (hieraticist), Dr Christian Greco (archaeologist), Dr Ladislava Horáčková and Dr Frank Rühli (anthropologists), Dr Nicholas Warner (architect), Ms Lyla Pinch-Brock and Mr William Schenck (artists), Drs Annelies Bleeker (surveyor), Mr Peter Jan Bomhof and Ms Anneke J. de Kemp (photographers), Ms Nicky van de Beek and Ms Irene Morfini (field assistants). Dr Bruno Deslandes, Ms Agnese Kukela, Mr Sicovs Georgijs and Dr Valdis Seglins joined the expedition briefly in order to carry out a geophysical survey, and Ms Ana Tavares assisted in transferring a surveying control point and establishing an excavation grid at the beginning of the season.

The fieldwork was carried out in close collaboration with Mr Usama Abdessalam el-Shimy (Director of Saqqara and Giza) and Mr Ali Asfar (Director of Saqqara) and was supervised in the field by Mr Wa'il Fathi Morsy (SCA inspector). The expedition is very grateful to Dr Zahi Hawass (Secretary General of the Supreme Council for Antiquities), Dr Mohamed Ismail Khaled (Chairman of the Department for Foreign Missions), and to the members of the Permanent Committee of the SCA, for permissions, advice, and assistance. The expedition acknowledges the help of the Saqqara Inspectorate in setting up its new accommodation in one of the SCA resthouses. The following projects were realised by the expedition in the course of the present season (see Fig. 1 for general orientation).

Excavation of a New Kingdom tomb of an unknown official

Work was concentrated to the south of the tombs of Ptahemwia and Meryneith, where the exterior wall of a hitherto unknown tomb had started to protrude from the sand in the course of the seasons 2008 and 2009.¹ This wall runs parallel to the two previously mentioned tombs and is made from mud-bricks. The first work done this season consisted of the removal of

¹ See M.J. Raven, H.M. Hays, C. Lacher, K. Duistermaat, I. Regulski, B.G. Aston, L. Horáčková, and N. Warner, Preliminary report on the Leiden Excavations at Saqqara, Season 2008: The Tomb of Ptahemwia, *JEOL* 41 (2008-2009), 13 and figs. 5 and 7; M.J. Raven, H.M. Hays, I. Regulski, B.G. Aston, L. Horáčková, N. Warner, and M. Neilson, Preliminary report on the Leiden Excavations at Saqqara, Season 2009: The Tombs of Khay II and Tatia, *JEOL* 42 (2010), fig. 7.

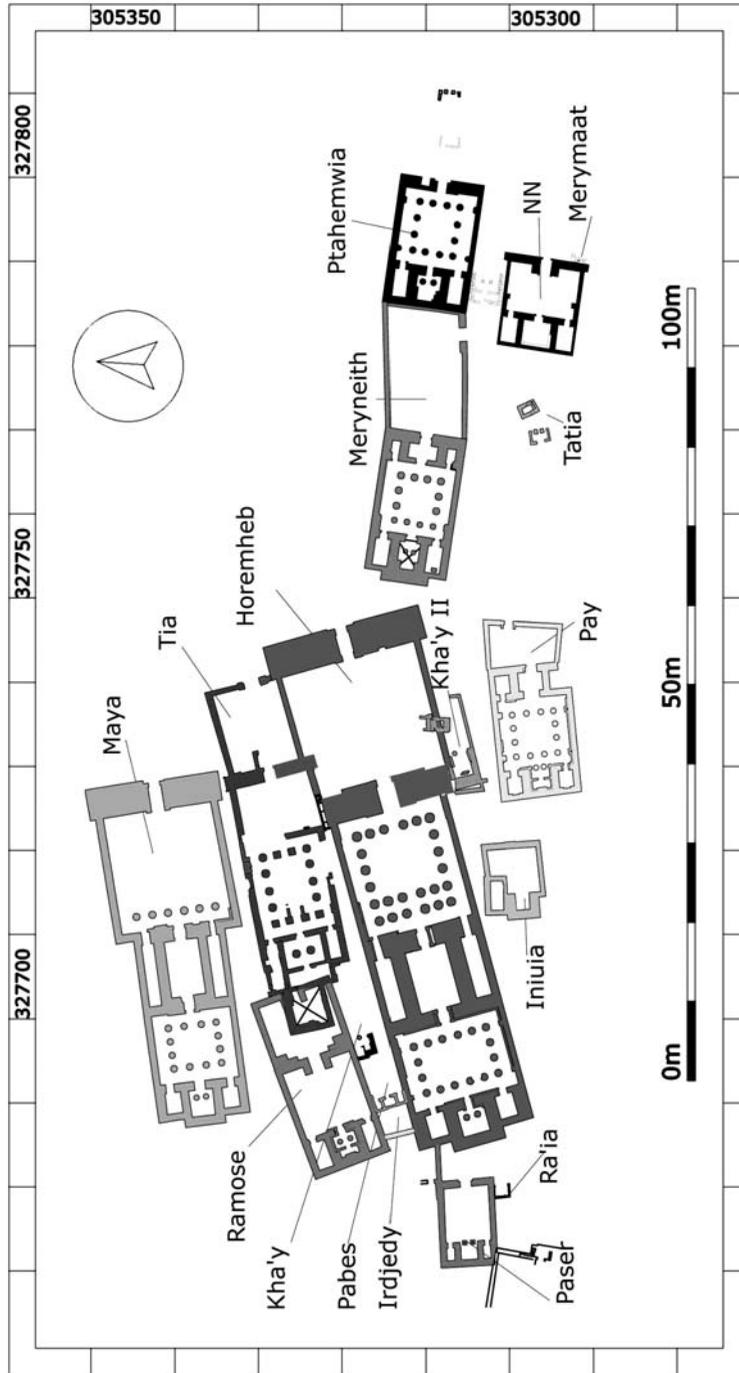


Fig. 1. General plan of the New Kingdom necropolis of Saqqara.

a hill of sand on top of the tomb, reaching as high as 6 metres above it. The excavation was executed in horizontal strata, which were plotted in a 5 × 5 metre grid conforming to the UTM grid. After three weeks the tops of the mud-brick walls of the New Kingdom tomb started to emerge from the sand. It proved to be an unfinished monument without any extant wall decoration or inscriptions, so that we are unable to provide the name of its owner (see Figs. 2-3).

The anonymous tomb is 11.07 m long and its mud-brick façade is 10.18 m wide — one metre wider than the rest of the tomb because both wings have been built out beyond the line of the lateral walls in order to make a more impressive appearance. It should be noted that this wall is also thicker than the other exterior walls and probably it was also (planned to be) drawn up to a greater height, thereby creating the impression of a proper pylon entrance. Another feature which helped in creating this effect was the two returns framing the entrance, as is also found in the nearby tomb of Ramose.² The entrance is flanked by two limestone jambs on the outside and by limestone reveals. It should be noted that all limestone parts have only been roughly dressed, not yet smoothed down to receive inscriptions.

The floor of the entrance is paved in limestone flagstones. It continues at the same level into the courtyard of the tomb, which measures 6.16 m from east to west and 7.41 m from north to south. The floor does not show any traces of the former existence of a colonnade, and we take it that this element was never executed. There is a central shaft with a ledge around it to support the covering slabs. The latter have been taken away by robbers, and instead they erected roughly stacked walls of mud-bricks and stone (several fragments with reliefs or inscriptions) around the aperture in order to keep out the sand during their exploration of the subterranean structures.

The whole courtyard presents a markedly unfinished appearance, due to the absence of most of the usual limestone revetment. This is only present on the west wall and on the west parts of the lateral walls. The latter elements are framed by slightly protruding pilasters which were designed to stand in line with the west colonnade of the tomb and to carry its architrave. In their present state most of the limestone parts are only roughly dressed, with the exceptions being the south half of the west wall, the north jamb of the central chapel, and the west part of the south wall (but not the pilaster) which have already been smoothed to receive their final decoration and inscriptions.

Very few of the limestone slabs once presumably lining the walls of the central chapel have survived. Its most remarkable feature is a raised dais along the full width of the west wall, which is paved with limestone, like the rest of the floor, and is accentuated by a torus and cavetto cornice along its front edge (Fig. 4). The two side chapels never had any limestone casing of their walls, nor can we observe any mud-plaster or the remains of wall-paintings. The chapels have mud floors, apart from some paving in their entrances. The arched doorway into the northern chapel has been partly preserved, but of the vaults only the lower course of special roofing-tiles is still present.

When compared to the standard plan of the New Kingdom tombs at Saqqara,³ it will be noticed that these generally have a square courtyard. The plan of the present tomb is thus

² For this tomb, see G.T. Martin *et al.*, *The Tombs of Three Memphite Officials. Ramose, Khay and Pabes* (London, 2001).

³ See M.J. Raven, The modular design of New Kingdom tombs at Saqqara, *JEOL* 37 (2001-2002), 53-69.

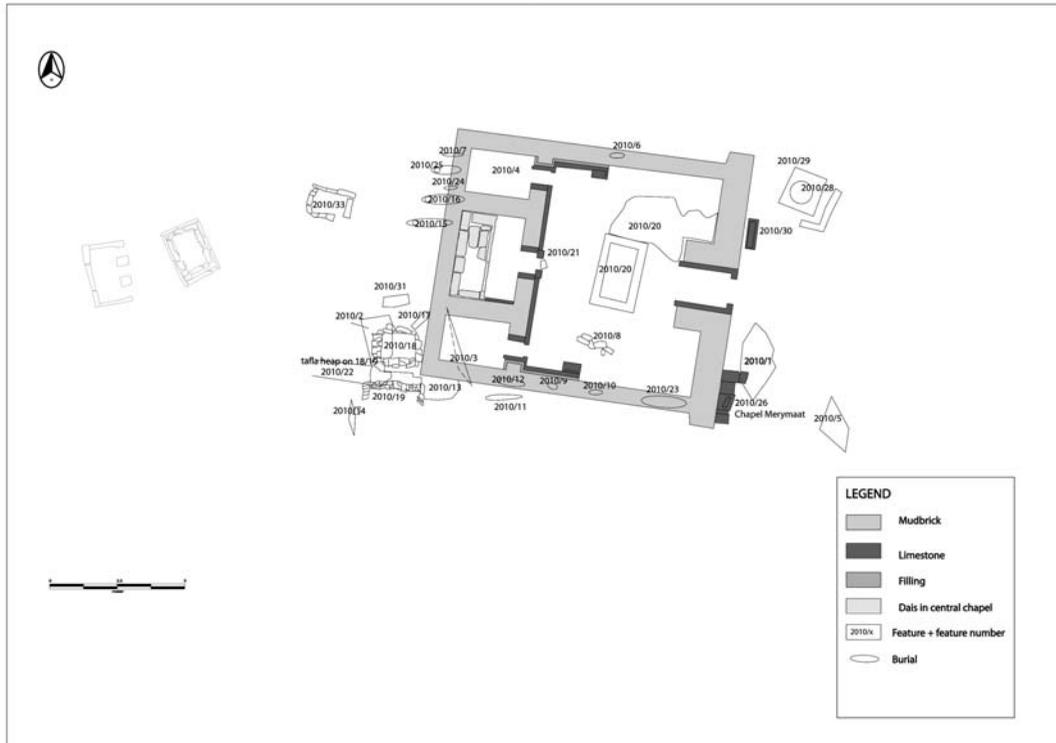


Fig. 2. Plan of the newly excavated tomb including later features.



Fig. 3. General view of the new tomb from the east.



Fig. 4. Central chapel of new tomb, with raised dais along west wall.

a compressed version of the standard one, and it can hardly have had a courtyard with a normal peristyle or another pair of pilasters. Since nothing is known about the owner and his life, it is useless to speculate whether the choice for a more concise type of monument was due to lack of funds or to the imminent death of the patron. All we can see is that the tomb was left unfinished, probably due to similar causes. Thanks to its unfinished state, the tomb presents a clear impression of the working procedures of the Egyptian stonemasons. The only limestone element which was clearly finished is the central chapel — together with the burial-chamber the most important element for the survival of the deceased in the hereafter and therefore the first to be executed. The chapel may even have had carved decoration already, because its revetment has obviously been robbed and this may have been for its artistic value rather than for reuse of its building-stone.

Due to its absence of reliefs, the dating of the tomb is quite difficult. However, it may be said that it shares architectural features with both the 18th and 19th Dynasty tombs south of the Unas causeway. Notably its mud-brick structural material and the orientation of its shaft (transverse to the central axis) indicate an earlier date, whereas the comparative width of its central chapel and the presence of a pseudo-pylon suggest a later one. Future discoveries will hopefully permit its dating to be pinned down.

A few loose fragments of reliefs and inscriptions came up from the fill of the tomb and from the strata of the hill removed from above it. Probably these once decorated a number of adjacent tomb-chapels, and many pieces had in fact been reused by robbers in order to build a drystone wall around the aperture of the shaft of the new tomb. Apart from a burnt layer

containing fragments of New Kingdom objects such as canopic jars, shabtis and a few amulets, the tomb itself was largely devoid of objects. The most interesting material found consists of several Coptic burials installed in niches cut in the tops of the walls, some still including decorated textiles and a few simple items of jewellery. More of this material came up in the disturbed strata forming the fill of the tomb or overlaying the tops of its walls (Fig. 5).

A clearance executed around the exterior walls of the tomb indicated the presence of a continuous floor level of compacted rubble (*tafla*) apparently dating to the Ramesside period. On top of this floor, which is raised about 0.4-0.6 m above the pavement level of the new tomb, stood several chapels of the later New Kingdom. One of these (2007/10), bridging the gap between the anonymous tomb and the adjacent tomb of Ptahemwia, has already been described before.⁴ Remains of another limestone chapel (2010/26) were found against the south-east corner of the new tomb; these still held a fragmentary Ramesside stela inscribed for the scribe and controller of god's offerings Meryma'at (Fig. 6).⁵ A shaft and the lower part



Fig. 5. Fragment of a Coptic tunic with decoration in tapestry weave.

⁴ M.J. Raven *et al.*, *JEOL* 41 (2008-2009), 8-13 and figs. 5 and 7.

⁵ Among other reasons, it is datable by the presence of a distinctively Ramesside 'seated man' determinative; on this sign and its common use in the Ramesside Period, see J. Berlandini-Grenier, *Le dignitaire Ramsès-emper-Rè*, *BIFAO* 74 (1974), 15 with n. 1; J. van Dijk, in: Martin, *The Tombs of Three Memphite Officials*, 25.



Fig. 6. Fragmentary stela for the scribe and controller of god's offerings Meryma'at.

of a blank stela (2010/29-30) were discovered in front of the north half of the façade of the new tomb, whereas another shaft rim was found embedded in the *tafla* floor to the west of the mud-brick tomb (2010/33). The shaft and chapel of Tatia (see below, next section) are also constructed on this same level, a little further to the west.

Clearance of two New Kingdom shafts

During the season 2009, two small New Kingdom chapels were found in the area to the south of the tombs of Horemheb and Meryneith, respectively.⁶ The former had proved to belong to the priest of the front of Ptah, Khay. The second location had produced the chapel of a colleague of his, Tatia. In 2009, the underground parts of the two tombs could not be explored due to lack of time, and this task was therefore undertaken during the present season. The shaft of Khay (which is in fact a reused Old Kingdom shaft) is partly situated under the south wall of the forecourt of the tomb of Horemheb, and it was soon seen to be too dangerous to excavate in view of the bad condition of the rock walls. Its clearance was therefore given up at a depth of about 2 m, and it was refilled. The shaft of Tatia, on the other hand, was fully excavated and turned out to be 5.25 m deep. It has a north chamber with a separate mummy niche, and a second mummy chamber in the south (Fig. 7). All chambers had clearly been robbed, and the bones of the original burials were found heaped against the walls. No special finds were made here, apart from two fragments of a Book of the Dead papyrus belonging to a man called Suner (Fig. 8). The bones from these chambers were collected separately by the expedition's anthropologists and will be studied next season.

Geophysical investigation of an Archaic Period tomb (B. Deslandes)

In 2002, several galleries dating to the Archaic Period were discovered under the superstructure of the tomb of Meryneith.⁷ In 2009, these were further investigated by a team from the Dutch-Flemish Institute in Cairo, which located a portcullis and the start of an underground ramp at 9 m depth.⁸ Since the Expedition would like to know where this gallery (the original entrance to the Archaic complex) comes up to the surface of the desert, a Latvian team under the direction of Dr Bruno Deslandes was invited to perform a geophysical analysis of the area using ground penetrating radar. Their results were successful and the team was able to identify a spot where a future sondage should be made in order to assess whether the radar signal indeed indicates the entrance of the underground complex.

A similar analysis to the north of the tomb of Maya (where similar Archaic galleries have been explored by the team of the Dutch-Flemish Institute)⁹ has indicated that there is no clear ascending corridor as expected on the basis of the already recorded subterranean structures. On the other hand, it clearly shows the presence of large-scale developments of the Archaic

⁶ M.J. Raven, H.M. Hays, *et al.*, *JEOL* 42 (2010), 6-13.

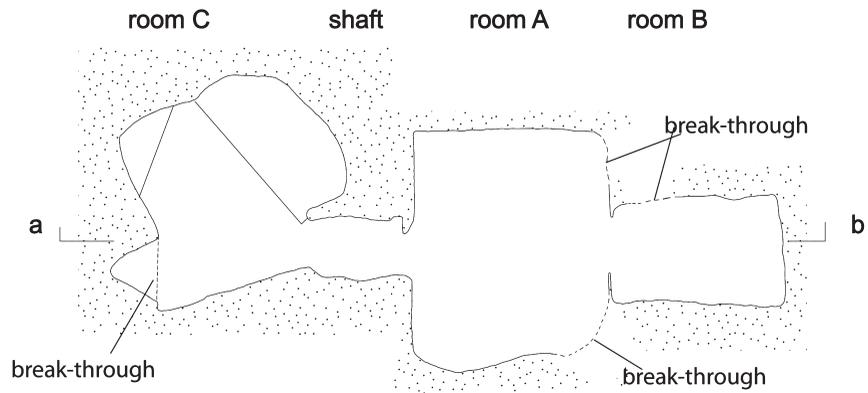
⁷ See M.J. Raven, R. van Walsem, B.G. Aston and E. Strouhal, Preliminary report of the Leiden excavations at Saqqara, season 2002: the tomb of Meryneith, *JEOL* 37 (2001-2002), 98-100.

⁸ I. Regulski, C. Lacher and A. Hood, Preliminary report on the excavations in the Second Dynasty necropolis at Saqqara, season 2009, *JEOL* 42 (2010), 25-54.

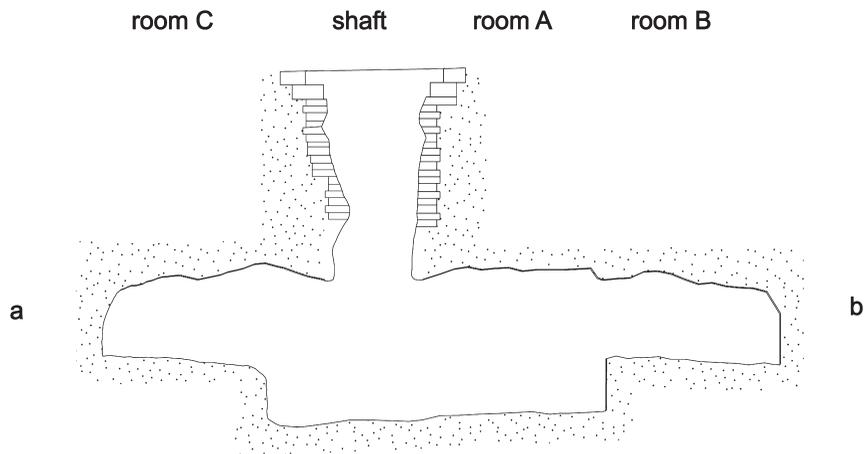
⁹ M.J. Raven *et al.*, *JEOL* 41 (2008-2009), 17-20; I. Regulski *et al.*, *JEOL* 42 (2010), 25-54.



Elevation



Profile



LEIDEN EXPEDITION TO SAQQARA
SUBJECT: Substructure 2009-23, Tatia

Fig. 7. Plan of the substructure of the tomb of Tatia.

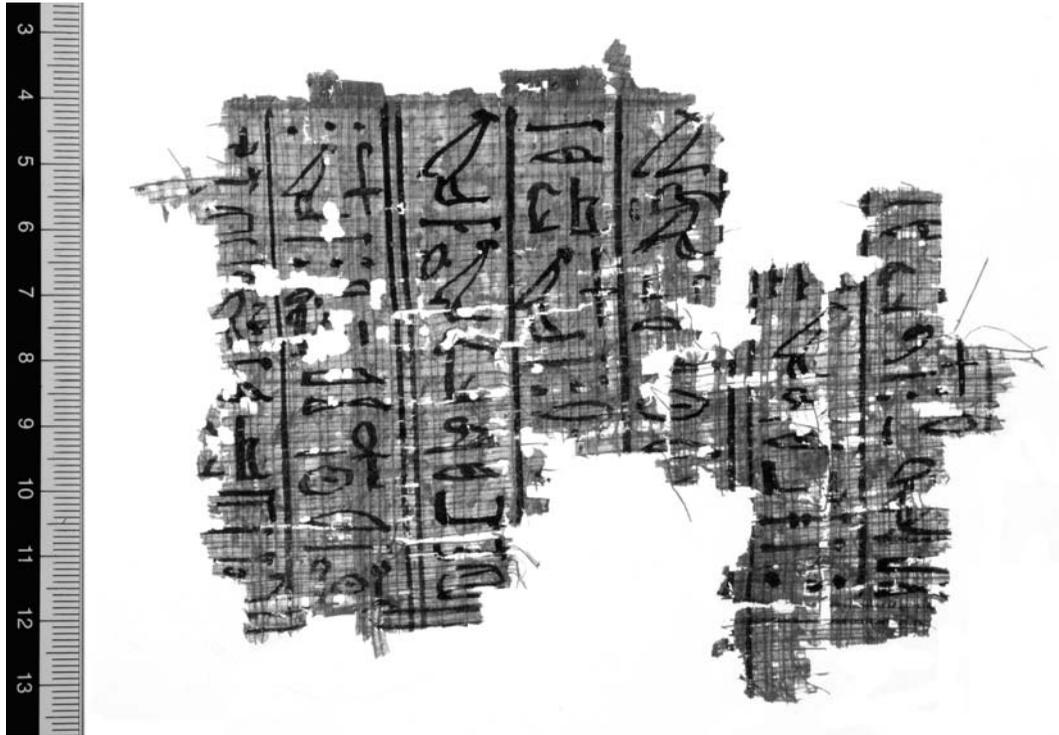


Fig. 8. Book of the Dead fragment of a man Suner.

structures further to the north. A descending corridor has been identified there. Data procession is currently going on in order to try to understand this complicated three-dimensional system and to determine if this located access possibly connects with the already documented galleries.

Search for the skeletal material of Queen Mutnodjmet

In 1979, some bones discovered by the Anglo-Dutch expedition under the direction of Dr Geoffrey Martin (the predecessor of the present Leiden Expedition) in the deepest parts of the subterranean complex under the tomb of Horemheb were tentatively identified as belonging to the owner's wife after his accession to the throne, Queen Mutnodjmet.¹⁰ In view of the possibility that the Queen was related to other members of the royal family of the Eighteenth Dynasty,¹¹ Dr Zahi Hawass has expressed an interest in having these bones analysed, and he has tried to re-locate them in the various storerooms in use by the Leiden expedition. Since the Expedition felt obliged to assist in this search, our team inspected various storerooms and

¹⁰ See now E. Strouhal, *The Memphite tomb of Horemheb, Commander-in-Chief of Tutankhamun, IV: human skeletal remains* (London, 2008), 1-4.

¹¹ Notably, that she was a full sister of Nefertiti: see R. Hari, *La reine d'Horemheb était-elle la soeur de Nefertiti?*, *CdE* 51 (1976), 39-46.

made detailed inventories of their contents. We also reopened several shafts previously excavated by the Anglo-Dutch expedition and which were thought to be in use as storage for skeletal material. However, this was to no avail, and the bones of the Queen were not re-located. Probably, they were not stored on the site but elsewhere in one of the SCA store-rooms of Saqqara.

Study of pottery (B.G. Aston)

Pottery recovered during the 2010 season included two deposits of New Kingdom date found in the surface debris over the anonymous tomb. Bones and coffin fragments in the deposits indicate they had been thrown out from nearby tomb shafts. The first was located over the south-west corner of the tomb at 2.0-2.6 m height above floor level and included the body of a mug and the top of a pilgrim flask (both in Marl D) and fragments of a Delta marl amphora with a wine docket. The tall shape of the mug as well as the convex shape of funnel-neck jar rims from the deposit date it to the Ramesside Period.

The second deposit was over the central chapel at 1.3-2.0 m height and contained many fragments of travertine canopic jars as well as fragments of the false neck, spout and body of a Mycenaean stirrup jar (or jars) and a body sherd of a blue-painted silt jar with a figurative scene depicting a man in a boat with a lotus-shaped prow (Fig. 9). This deposit may prove to belong with the burial goods of the anonymous tomb-owner.



Fig. 9. Blue-painted jar fragment with painted scene of man in boat.

A collection of New Kingdom offering pottery was recovered from the floor of the chapels and the courtyard of the new tomb, which included a shoulder fragment of a Mycenaean stirrup jar and a Mycenaean globular flask neck.

The excavation of the shaft of Tatia yielded remnants of the original Ramesside funerary pottery from the burial chambers including three Marl D amphorae and a Marl F 'meat jar' along with a silt 'beer jar' and a nearly intact dish with an outcurved, red-slipped rim.

This season also saw the completion of the reconstruction of the Late Period (5th century) pottery from Chamber A of Shaft 2002/16.¹² New forms of 5th century pottery continue to be added to the Saqqara corpus, including a miniature two-handled jar with pinched knob base, a miniature marl jug, and two examples of the common red-slipped restricted bowls with an unusual feature: the addition of two small handles. Recording of the Khay forecourt deposit excavated in 2009¹³ was carried out at the excavation house along with the drawing of 150 vessels from the tombs of Khay and Ptahemwia and the New Kingdom levels south of Horemheb.

Study of skeletal material

The expedition's anthropologists studied skeletal remains from various locations excavated during former seasons: those from the central chapel and main burial chambers (E and F) of the tomb of Ptahemwia, as well as a number of isolated burials found in 2009 to the south of the tombs of Horemheb and Meryneith. They also finished a morphoscopic and morphometric analysis of several of the Coptic burials which were discovered this season (Fig. 10), and registered a number of palaeopathological changes in loose bones found during the clearance of the superficial strata above the new anonymous tomb.

Palaeobotanical sampling (R. Cappers)

During three days on site samples were taken of floral material from some mud-bricks from various locations, in order to study the agricultural processes of the ancient Egyptians and their use of threshing remains in brick manufacture. The analysis of mud-bricks is of particular interest as they contain plant material which has not been contaminated or partly lost by erosion processes. The question is what kind of plant material was used as temper during the Pharaonic period. It is assumed that until the Graeco-Roman period, hulled wheat (emmer) was cultivated. Such a cereal does not produce large quantities of threshing remains when processed on a non-commercial scale. The analysis of mud-bricks from Saqqara, which is in progress, should shed light on the kind of plant material that was used instead.

Restoration and site management

Dr Nicholas Warner again assisted the expedition in the preservation of the ancient monuments. At the special request of Mr Ali Asfar, Director of Saqqara, several mud-brick walls

¹² Fully excavated during the season 2009; see M.J. Raven, H.M. Hays, *et al.*, *JEOL* 42 (2010), 9.

¹³ *Ibid.* 18.



Fig. 10. Coptic burial as found (feature 2010/6).

of the tombs of Tia and Maya were raised and consolidated, and the First Pylon of the tomb of Horemheb was likewise built up and protected by newly laid mud-brick capping. Minor repairs were also done to a shaft rim (2007/5) in front of the façade of the tomb of Ptahemwia.

A project initiated by the Expedition itself was the restoration of the tomb-chapel of Tatia (found in 2009). This was realised by the erection of a shelter around it with walls of limestone rubble laid in lime mortar, a wooden roof with bitumen sheet isolation topped by 7 cm of white cement, and a grilled metal screen and door forming the façade (Fig. 11). The new roof was laid to fall to the rear of the tomb chapel, and the masonry was plastered internally and externally with a lime render. After this structure was finished, the central stela and south door-jamb of the chapel, found loose in 2009, were put back in their original positions (Fig. 12). With the help of the SCA restorers, the Expedition hopes to add some more loose fragments and to execute a final cleaning and consolidation of the wall-faces during the season 2011.

An introductory information panel was erected on the hill due east of the tomb of Maya, which forms an ideal viewing platform for overlooking the site excavated since 1975 by the Leiden Expedition and its Anglo-Dutch predecessor. This is also the spot where a footpath of concrete tiles starting from the Unas pyramid temple enters the site. This path, plus a number of wooden walkways linking the individual tombs, was laid at the expenses of the SCA, and our Egyptian colleagues also renovated the modern stairway leading down from the viewing platform to the entrance of Maya's tomb. This means that the site is now ready to be opened for tourists, an exciting prospect that has always motivated the special efforts by the present



Fig. 11. Shelter erected around the tomb-chapel of Tatia.



Fig. 12. General view inside the shelter after the anastylosis of the central stela and south door-jamb.

Expedition in the field of consolidation and site management. In fact, dr Zahi Hawass has already published his intentions to realise this plan in the immediate future, so that finally those interested in the New Kingdom tombs and their exquisite wall-decorations will be able to see the site for themselves.

Establishment of new control points

In order to proceed with the season's excavations, it was necessary to remove an existing control point, T8. This was replaced with two new control points, L1 and L2 (or 'Leiden 1' and 'Leiden 2'), which are shown below in Fig. 13. The control points used to establish the two new ones were T4, T7, T9, SoE M005, and SoE M006.¹⁴ The values presented in the table below are in UTM values used by most missions at Saqqara. We would like to thank Ana Tavares for her instrumental involvement in establishing the new control points, as well as David Jeffreys through whom survey data and maps of the Saqqara plateau were obtained.

Control Point	Elevation ASL	UTM 36/E	UTM 36/N
T4	63.50	327 560.883	306 009.491
T7	73.37	327 519.074	305 552.139
T9	62.35	327 274.267	305 509.967
SoE M005	60.84	327 682.368	305 362.331
SoE M006	61.26	327 818.384	305 292.481
L1	61.56	327 754.049	305 341.438
L2	61.15	327 689.449	305 282.975

¹⁴ On the T-control points (Cairo University), see D.G. Jeffreys, J. Bourriau and R. Johnson, Memphis, 1999, *JEA* 86 (2000), 5-12.

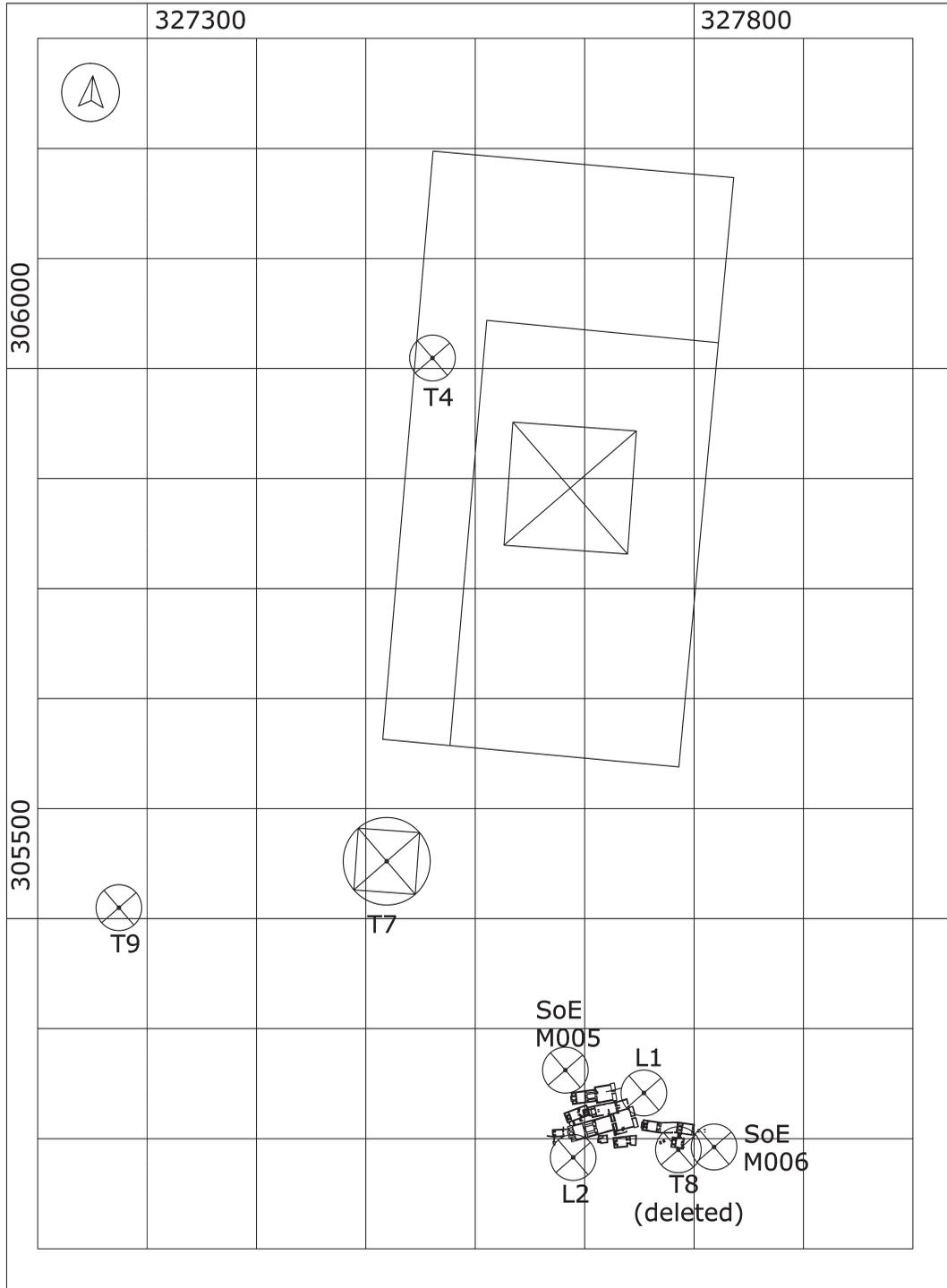


Fig. 13. Saqqara control points.