

PRELIMINARY REPORT ON THE LEIDEN EXCAVATIONS AT SAQQARA,
SEASON 2004: THE TOMB OF HOREMHEB

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Introduction

The joint mission of the Leiden Museum of Antiquities and the Faculty of Archaeology/Department of Egyptology of Leiden University resumed its work at Saqqara on January 17th 2004 and continued until February 26th. The fieldwork was again directed by Dr Maarten J. Raven and Dr René van Walsem; unfortunately, the latter had to return home at an early stage due to unforeseen circumstances. Otherwise, the staff consisted of Dr Barbara G. Aston and Ms Amanda Dunsmore (ceramicists), Dr Ladislava Horačková (anthropologist), Drs Willem Beex (surveyor), Ms Anneke de Kemp (photographer), Ms Dorothea Schulz (draughtswoman), Ms Marjolein Etten and Ms Lynsey Vos-van Meer (field assistants). Prof. Geoffrey T. Martin (honorary director) continued his work in the Cairo Museum, copying New Kingdom reliefs from the Saqqara necropolis with a view to a special publication.

The fieldwork was carried out in close collaboration with Mr Atef Abu-el-Dahab, Mr Kamal Wahid and Mr Usama Abdessalam el-Shimy of the Saqqara Inspectorate. We want to thank our personal Inspector Mr Elsayed Gad el-Rab Hassan for the pleasant cooperation in the field. The Expedition also wants to express its gratitude to Dr Zahi Hawass (Secretary General of the Supreme Council of Antiquities), Mr Magdy el-Ghandour (Chairman of the Department of Foreign Missions), to the members of the Permanent Committee of the SCA, and to Dr. Wafaa el-Sadiq (Director) and Mr Ibrahim Abdelgawad (Curator of the New Kingdom section) of the Cairo Museum. A special word of thanks is due to the Director and staff of the Dutch-Flemish Institute in Cairo (NVIC) for logistic help and hospitality. The Egypt Exploration Society again granted us the use of the Saqqara dighouse. Financial support was received from the Netherlands Organization for Scientific Research (NWO), the newly-founded society of 'Friends of Saqqara', and an anonymous donator.

The fieldwork of the Dutch mission was concentrated on the area west of the tomb of Meryneith, Greatest of Seers of the Aten, where a mud-brick pylon was discovered in 2003¹. At the time of its discovery, we already realized that this wall must belong to the tomb of Horemheb further west, since it proved to run parallel to the known pylon of that tomb (which now appears to be the Second Pylon) and its doorway lies on the main axis of the monument in question. Clearly, the area between the new or First Pylon and the Second Pylon once

¹ See M.J. Raven, R. van Walsem et al., Preliminary report on the Leiden excavations at Saqqara, season 2003: the tomb of Meryneith, *JEOL* 38 (2003-2004), 5-23. In fact, part of the pylon had already been exposed in the course of our season 2002 (feature 2002/1; see M.J. Raven, R. van Walsem et al., Preliminary report on the Leiden excavations at Saqqara, season 2002: the tomb of Meryneith, *JEOL* 37 (2001-2002), fig. 1, unfortunately printed as a mirror image).

formed a large forecourt to the tomb proper. The objectives of the present season were the complete excavation of Horemheb's forecourt, the study of pottery and skeletal material found during previous seasons, and the recording of the wall-paintings and loose relief fragments of the tomb of Meryneith. The following sections will describe these various activities in more detail, and a special section will be devoted to Professor Martin's work in Cairo.

Clearance of the Forecourt of Horemheb

The Memphite tomb of Horemheb, commander-in-chief of Tutankhamun and later the King's second successor on the Egyptian throne, was relocated during the very first season of the Anglo-Dutch mission (the predecessor of the present Leiden Expedition) in 1975². Although repeatedly visited and plundered in the course of the 19th century, its location had been completely forgotten and the monument had again disappeared under deep strata of drift sand. Its rediscovery showed the full potential of the site for modern exploration, and accordingly the Expedition is still working there after 30 years (although under a different aegis). The tomb of Horemheb was excavated between 1975 and 1979 and fully published in 1989³.

Already during the first season (1975), some digging was carried out to the east of the massive pylon of the tomb. Here part of a limestone pavement could be exposed of what seemed to be a Forecourt of the tomb⁴. This proved to be demarcated by a plain mud-brick wall to the south, overlapping with the south face of the pylon and extending eastwards for an indefinite length. A corresponding enclosure wall to the north was only found in 1983 during the excavation of the tomb of Tia⁵. The full extent of the Forecourt was not cleared at the time, firstly because of the considerable height of the debris heaped over this feature (which reached a height of some 3.5 meters above the pavement), and secondly for fear of exposing the rear end of an adjoining tomb which would have inconvenienced the Expedition at that particular stage of the proceedings. In the course of the season 1977 and later, the area was used as a dump for material excavated from the burial-chambers of the tomb. Accordingly, what had briefly been exposed of the limestone pavement disappeared again under heaps of debris, and access to the tomb took place via some modern limestone steps installed in front of the pylon.

The discovery of a new mud-brick pylon further east in 2003 changed our perspective. It was soon realized that the Expedition could not celebrate its *heb-sed* festival in a better way than by returning to the tomb of Horemheb where we started off thirty years ago. Full clearance of Horemheb's Forecourt would not only add to our knowledge about what still is the most impressive monument of the New Kingdom necropolis; it would also reveal the relationship that existed between the adjoining tombs of Meryneith and Horemheb and throw new light on the tantalizing aspect of access and communication within the necropolis as a whole⁶.

² G.T. Martin, Excavations at the Memphite tomb of Horemheb, 1975: preliminary report, *JEA* 62 (1976), 5-13.

³ G.T. Martin, *The Memphite tomb of Horemheb, Commander-in-Chief of Tutankhamun, I* (London, 1989).

⁴ *Ib.* 21 and Pls. 10-11. It should be noted that neither pavement nor enclosure wall are marked on the plan of Pl. 5.

⁵ G.T. Martin, *The tomb of Tia and Tia, a royal monument of the Ramesside period in the Memphite necropolis* (London, 1997), 3-4 and Pls. 1 and 128 (right).

⁶ For the latter aspect, see M.J. Raven, Twenty-five years of work in the New Kingdom necropolis of Saqqara: looking for structure, in: M. Bárta/J. Krejčí (eds.), *Abusir and Saqqara in the year 2000* (*Archiv Orientální Supplementa* IX, Prague, 2000), 133-144, especially 140-141.

Therefore the area between the newly-found mud-brick pylon (First Pylon) and the Second Pylon further west was divided into two strips (south and north) which were excavated one after the other. Five weeks were sufficient for removing the considerable volume of sand and rubble which had accumulated over the area, which measures about 15.5 m from east to west and 17.5 m from north to south (Fig. 1).

As foreseen, the material covering the west half of the Forecourt was obviously of recent date, viz. builders' debris deposited during the restoration and reconstruction of the tomb of Horemheb in the 1980s (fragments of paper and plastic, cement bags, limestone chippings, and baked bricks) and our own dump of the years 1977-1979. The latter contained lots of *tafl* brought up from Horemheb's burial-chambers, partly stained brown by the presence of decayed wood and mummy dust. Although this material had been carefully sieved at the time,



Fig. 1. Plan of the forecourt and pylons of the tomb of Horemheb (drawn by Willem Beex).

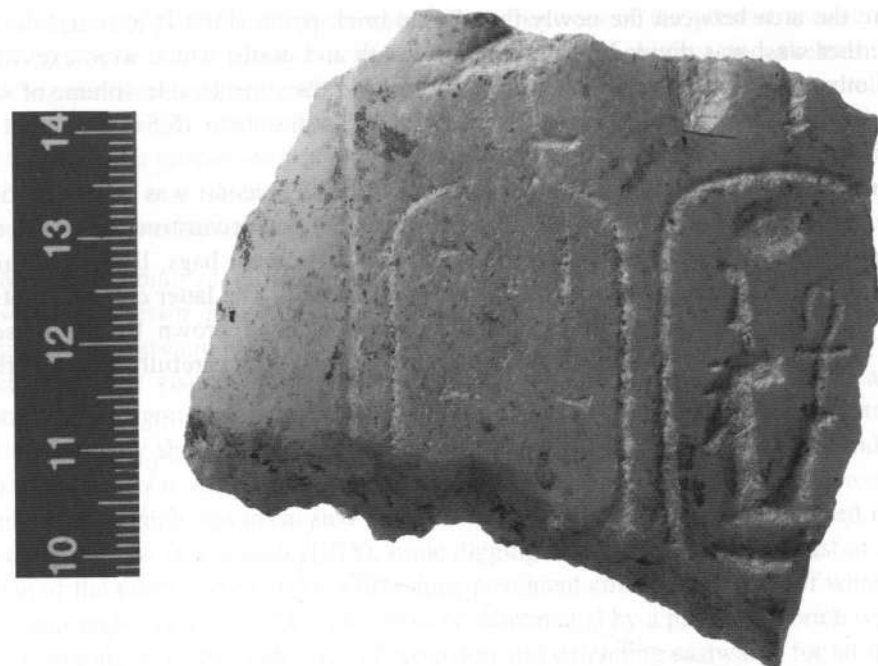


Fig. 2. Body sherd of alabaster vessel inscribed with the cartouches of Amenhotep III.



Fig. 3. General view of the south half of Horemheb's forecourt, looking east towards the south wing of the First Pylon.



Fig. 4. Horemheb's First Pylon, looking southeast.

it proved to contain a small alabaster sherd inscribed with the cartouches of Amenhotep III (Fig. 2) and doubtless joining a fragmentary vessel recovered from Horemheb's Shaft III in 1977⁷. Otherwise, a number of paper tags clearly labelled '1977' gave the date of deposition of this dump. When we finally hit the pavement in front of the Second Pylon, we uncovered a Late Period shaft already seen in 1975 and now designated as feature 2004/11⁸.

Excavation of the east half of the Forecourt and its First Pylon produced more fascinating results and fully justified the decision to clear this whole area. As was to be expected, the north and south enclosure walls run eastwards until they join the First Pylon (Fig. 3). Whereas the south wall is in relatively good condition and still stands to a height of 1.75-2.10 m, the east half of the north wall shows a large gap. This, in combination with the presence of a 4.5 m high sandy hillock immediately to the northeast, has made it impossible so far to excavate the extreme northeast corner of the Forecourt or to clear the east face of the north wing of the new pylon. Otherwise, the First Pylon could be completely uncovered. Both wings have been preserved to a height of about 2.5 m; the north wing measures 8.8 x 3.9 m, the south one is slightly shorter with a length of about 8.0 m. A striking detail is the row of holes occurring about halfway up the long faces of both wings of the pylon, perhaps to be interpreted as air passages rather than as the remains of a scaffold (Fig. 4)⁹. Otherwise, the west face of the

⁷ H.D. Schneider, *The Memphite tomb of Horemheb, Commander-in-Chief of Tut'ankhamūn, II* (Leiden and London, 1996), Cat. 263. It should be noted that the element 'Amun' has been erased, just as in the case of the vessel published ib. Cat. 262.

⁸ G.T. Martin, *The Memphite tomb of Horemheb, I*, 21 and Pl. 11.

⁹ See M.J. Raven, R. van Walsem *et al.*, *JEOL* 38 (2003-2004), 16 with n. 14.

south wing shows a strange block of masonry not bonded with the rest and perhaps forming the infill of a stairway used during the construction. The masonry proved to be rather dilapidated as a result of the robbing of large numbers of mud-bricks and the excavation of several burial niches and trenches. Three partially preserved skeletons (one adult and two children, features 2004/3, 2004/7 and 2004/8) were found in shallow trenches cut out on top of the south wing. Other holes appear to be Late Period shafts (2003/21 in the south wing, 2004/12 in the north wing), whereas several courses of bricks laid on top of both wings seem to show the outlines of a number of rectangular dwellings, perhaps dating to the Coptic period. Mud floor levels associated with these rooms proved to seal earlier deposits containing Late Period pots and sherds. More ceramic material of the Late Period was found in the upper strata adjoining the west face of the south wing of the First Pylon; perhaps this had once formed a large embalmers' cache disturbed by later activity in the area.

There is no evidence to suggest that Horemheb ever considered installing limestone reliefs against the side-walls of the Forecourt. The entrance between the two wings of the pylon, however, has preserved parts of a limestone wall revetment and its four door jambs; a broken lintel was found lying in the entrance. None of these elements bears any decoration or inscriptions, apart from a roughly-scratched graffito of a royal head on the west face of the north-west door jamb. Numerous scratches and a marked patina on the stone seem to indicate that the entrance lay exposed to the elements for quite a long time and that many visitors came to this area. This assumption is also corroborated by the fact that the limestone slabs of the pavement are rather heavily eroded. Due to lack of time we have been unable to clear the area east of the doorway, where we surmise the presence of a mud street level, parts of which were seen to the north of the tomb of Meryneith in 2003.

Several Late Period tomb shafts were discovered in the area of the Forecourt itself. The presence of one of these (2004/11) against the south enclosure wall was already noted above. Three others were situated against the west face of the south wing of the First Pylon (2004/2), due west of this near the centre of the Forecourt (2004/6), and near the north enclosure wall (2004/13, Fig. 5). All shafts were simple 'tubes' piercing the strata of drift sand, constructed



Fig. 5. General view of Horemheb's forecourt, looking northeast from the top of the Second Pylon. Shaft 2004/13 is visible close to the north wall.

of roughly stacked mud-bricks and blocks of limestone or *tafl*, sometimes held together by an interior facing of yellow clay. The shafts are square or rectangular in plan and were surrounded by massive strata of rubble acting as a support. None of these shafts was excavated down to the bottom; instead they were dismantled by the Expedition till the level of Horemheb's pavement. A similar mud-brick structure further east against the south wall (2004/4) proved to be founded on a heap of fallen bricks, with three vessels standing next to each other on top of the bricks; perhaps this feature was not a shaft.

An interesting deposit of New Kingdom potsherds was discovered in the southeast corner of the Forecourt, partly covered by fallen bricks from the pylon. In view of the presence of numerous 'beer jars' this is probably a dump of discarded vessels used during the offering cult of the deceased. A similar dump has been found before in a corresponding position on the forecourt of the tomb of Maya¹⁰. The presence of Late Period pottery in the fill of the Forecourt has already been mentioned above.

Finds from the tomb of Tia and Tia

A spectacular find was that of an ancient robbers' dump in the northeast corner of the Forecourt. A thick stratum full of finds sloped down from a height of 1.5 m at the north wall to just above the pavement near the eastern doorway, and extending in a strip of 2 m wide along the west face of the First Pylon. This dump lay on top of a *tafl* stratum associated with shaft 2004/13, itself covering a destruction layer of the pylon. This suggests its deposition after the Late Period, whereas the presence of numerous Coptic sherds on top of the dump seems to indicate that the robbers were active somewhere in the early Christian period. The dump itself contained masses of New Kingdom pottery, and otherwise lots of human bones, decayed wood, and broken objects in faience, alabaster, and other stones. All this material was only provisionally recorded and is in need of further study in the season 2005; this means that several of the following conclusions have a preliminary character only.

Many fragments were inscribed with the names of the princess Tia and her like-named husband, director of the treasury during the reign of Ramesses II. This indicates the original provenance of these objects, which have clearly been taken out of the main burial shaft of the adjacent tomb of Tia and Tia. Thus, this find presents a welcome addition to the rather meagre evidence obtained on the burial equipment of the couple during the 1982-1984 excavations of their tomb¹¹. No less than fifteen fragments could be recovered of the granodiorite sarcophagus of the treasurer Tia (Fig. 6), which was hitherto represented by only eight pieces¹². These enable us to confirm that its head end was decorated with a depiction of Nephthys kneeling on the 'gold' sign, the foot end of the case with a composition of a *djed* flanked by two *tyet* signs, and the foot end of the lid with a kneeling Isis. Other fragments comprise the throat and chest of the lid, and several pieces from the left side of the lid.

The wooden fragments comprise a massive black-varnished angle post, presumably of Tia's canopic box; several pieces showing standing deities may belong to the same object, others clearly derive from a number of wooden coffins. Several inscribed fragments, often

¹⁰ M.J. Raven, *The tomb of Maya and Meryt, II: objects and skeletal remains* (Leiden and London, 2001), 8.

¹¹ Cf. M.J. Raven, in: Martin, *Tia and Tia*, 63.

¹² Cf. ib. Cat. 7.



Fig. 6. Head end of the case of Tia's sarcophagus with a kneeling figure of Nephthys.

with incised signs filled with green pigment and showing traces of gold leaf, mention the names of Tia or his wife. Some of these are much thinner and must have formed part of boxes for clothing or cosmetics. A very surprising find was the broken lid of a coffin for a monkey which shows the relief depiction of the animal in question (Fig. 7). So far, the skull of this animal has already been identified (Fig. 8) and there may be more primate bones among the skeletal material recovered from the dump. A preliminary identification of the skull seems to indicate a member of the *Cercopithecinae* family, perhaps *Miopithecus talapoin*¹³. Under the circumstances, this can only have been a pet animal of the Tia's; *Cercopithecinae* are often shown under the chair of their masters, although extant pet mummies seem to contain baboons only¹⁴. It should be noted that a box with a mummified cat, likewise from the tomb of Tia, was found during the season 1983¹⁵.

Another find of considerable interest concerns the canopic material of the Tias. Fragments of their visceral jars were already found in 1975 during the excavation of the tomb of Horemheb: two sherds of the Qebhsenuf jar for the husband, and a fragmentary

¹³ Identification by professor Vaclav Vancata (Charles University, Prague) and professor Jiri Gaisler (Masaryk University, Brno). *Miopithecus* is the smallest monkey of the Old World, with a length of head and body of 32-45 cm and a weight of 0.8-1.3 kg.

¹⁴ D.J. Osborn/J. Osbornová, *The mammals of Ancient Egypt* (Warminster, 1998), 39-41; J.E. Harris/K.R. Weeks, *X-raying the Pharaohs* (London, 1973), 53, 174-5; S. Ikram/N. Iskander, *Non-human mummies* (CGC, Cairo, 2002), 29837-9 with ref.

¹⁵ M.J. Raven, in: Martin, *Tia and Tia*, 64, 81.



Fig. 7. Fragmentary lid of the wooden sarcophagus for a pet monkey.

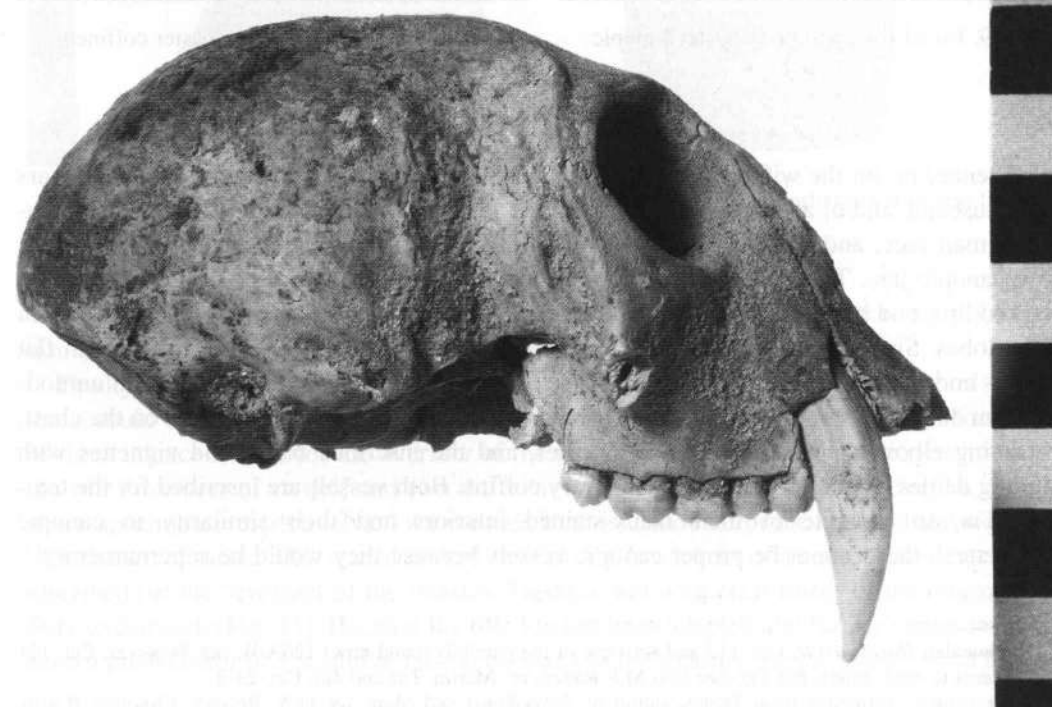


Fig. 8. Lateral view of a monkey skull.

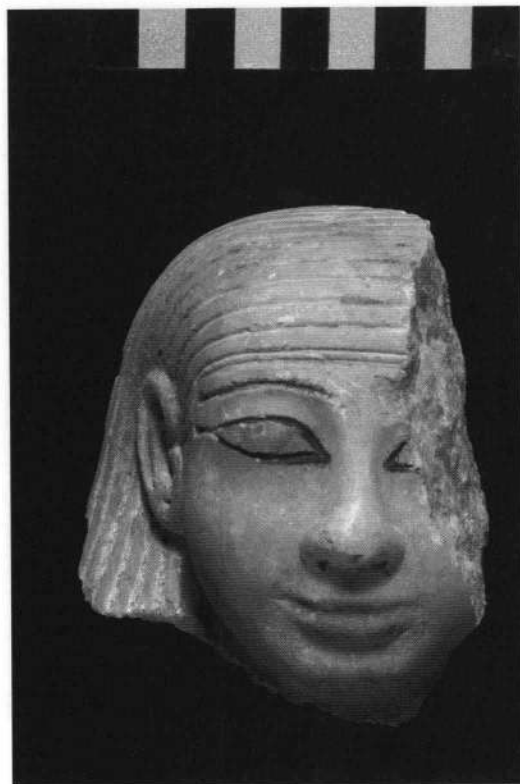


Fig. 9. Facial fragment of alabaster canopic stopper.



Fig. 10. Fragment of an alabaster coffinette inscribed for Tia.

Qebehseuef jar for the wife¹⁶. Now, considerable parts turned up of the Amset and Hapy jars of the husband, and of all four jars of the Princess. A complete falcon-headed stopper, a beautiful human face, and various other fragments (all made of alabaster) seem to belong with these canopic jars. The human face (Fig. 9) is of exquisite workmanship and has a striated wig, red lips, and black-painted details of the eyes and brows, nostrils, and the perforations in the earlobes. Similar workmanship can be seen on two fragmentary alabaster vases with flat bottoms and mummiform bodies (Fig. 10); the latter each have a striated wig with an unmodelled rim directly above the ears, an ornamental collar and a winged sky goddess on the chest, protruding elbows and fists modelled in relief, and the inscribed bands and vignettes with standing deities characteristic of contemporary coffins. Both vessels are inscribed for the treasurer Tia, so in spite of their black-stained interiors and their similarity to canopic 'coffinets', they cannot be proper canopic vessels because they would be supernumerary¹⁷.

¹⁶ Schneider, *Horemheb II*, Cat. 112 and (in view of the parallels found now) 120A-B; not, however, Cat. 121 which seems to read 'Imsty, not Tia. See also M.J. Raven, in: Martin, *Tia and Tia*, Cat. 21-2.

¹⁷ For similar coffinettes from Thebes (tomb of Sennedjem) and Meir, see G.A. Reisner, *Canopics* (Cairo, 1967), nos. CG 4248-4256, 4307; S. Ikram/A. Dodson, *The mummy in Ancient Egypt, equipping the dead for eternity* (London, 1998), fig. 427 (CG 4252). However, these parallels have been made in two halves like a coffin.



Fig. 11a-b. Front and back of the lower part of a steatite shabti with inscriptions recarved for Tia.

Two further fragments of these mummiform vessels have been found before by the Expedition but not recognized for what they are¹⁸.

Finally, there was a considerable number of shabti fragments in the dump, and some of these could be joined together to form complete ones. Altogether, the expedition found parts of three faience shabtis for the overseer of the treasury Tia, four for the same person but with the title 'overseer of cattle', and two different types of shabti for the Princess Tia (five and seven specimens, respectively). Two wooden shabtis inscribed for the husband show evidence of a change of name. This was also very clear on the lower part of a composite steatite shabti, inscribed for the 'overseer of the treasury Tia<ty>' but with clear traces of the original name Suty underneath (Fig. 11). Because the title has not been adapted, the former owner must have been a predecessor of Tia, and in fact an overseer of the treasury Suty is known from the reign

¹⁸ M.J. Raven, in: Martin, *Tia and Tia*, Cat. 14; Raven, *Maya and Meryt II*, Cat. 31.



Fig. 12. Upper part of a stela inscribed for Raia.

of Seti I and the early years of Ramesses II¹⁹. Because it is rather improbable that an overseer of the treasury would not possess the financial means to have some shabtis made for himself, one might even conjecture that Tia himself was called Suty earlier in his career, e.g. before his marriage. However, the fact that Suty has a tomb of his own at el-Khawaled makes this identification rather implausible²⁰, so that other reasons must have motivated Tia to usurp this shabti (and the two wooden ones). As overseer of the treasury he may have been responsible for the state burial of his predecessor, and perhaps the shabti was taken as a memento of that occasion.

Apart from these objects, the Forecourt of Horemheb also contained a number of stray relief blocks from adjacent tombs. A sunk relief fragment depicting a seated lady probably derives from the west wall of the courtyard of the tomb of Meryneith. A large piece inscribed with nine lines of incised hieroglyphs forms the continuation of a fragmentary stela of the overseer of the harīm Pay²¹. A rather puzzling fragment mentioning Pay's son Raia forms the top of a round-topped niche-shaped stela, with a raised edge inscribed with Raia's titles and a double offering scene to Osiris and Re-Horakhte in the recess (Fig. 12). Last but not least, a block in sunk relief representing a royal head seems to derive from the interior wall of the north wing of Tia's pylon²².

¹⁹ KRI III, 140-7, cf. J. van Dijk, in: Martin, *Tia and Tia*, 54 n. 7.

²⁰ It should be noted that this tomb contained several other fragments of shabtis of 'black serpentine', now in the Cairo Museum (27/3/24/3-6). See PM V, 6; M. Châban, *Un tombeau de la XIX^e Dynastie à el-Khawaled*, ASAE 2 (1901), 137-40; G. Brunton, *Mostagedda* (London, 1937), 135-6.

²¹ One fragment in New York (MMA 04.2.527), other fragments found by the Anglo-Dutch Expedition, see J. van Dijk, *OMRO* 75 (1995), 20 and pl. 7.1-2; id., *OMRO* 77 (1997), 79.

²² Martin, *Tia and Tia*, scene [21].

Recording of the tomb of Meryneith

The tomb of Meryneith (to the east of Horemheb's forecourt) was discovered in 2001 and fully excavated during the seasons 2001-2003. Copying of all the extant wall-reliefs and inscriptions could be completed in the course of the season 2003, and a start was already made with recording the vulnerable wall-paintings in the four corner chapels. This task could now be finished as well, with the result that all the wall decoration of the tomb of Meryneith has now been copied in facsimile drawings. Numerous small relief fragments found in the fill of the tomb during the season 2001 could also be studied, copied, and photographed, in order to facilitate a reconstruction of the missing parts of the wall decoration. In the course of the season 2005, we hope to continue this job with a study of the small fragments found during the years 2002 and 2003, and of the larger detached blocks.

The pottery (B.G. Aston and A. Dunsmore)

Within the excavated area of the forecourt of the tomb of Horemheb, three distinct Late Period (5th century BC) embalmers' caches were uncovered. One appeared to consist of three vessels, corroded by natron and standing upright next to each other in the sand at the basis of feature 2004/4. However, inside each of these vessels was a smaller one: a small, red-slipped beaker, a small jar, and a knob-based dish (Fig. 13). The second cache (found to the north of shaft 2004/2) consisted of a large bottle sealed with an original mud plaster seal and containing



Fig. 13. Cache of Late Period pottery.

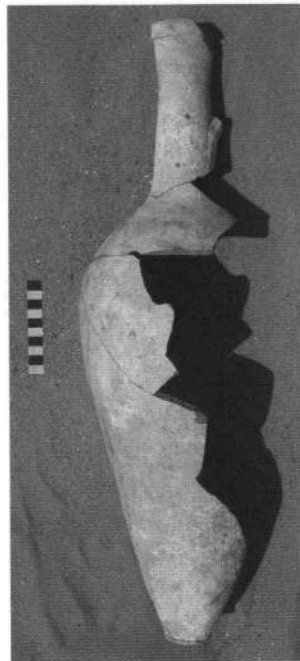


Fig. 14. Fragmentary one-handled jar of marl clay fabric, probably from the burials in the tomb of Tia.

blackened linen, the sherds of one nearly complete restricted bowl, and the base of a red-slipped beaker; the latter had been deliberately broken up and sealed inside. The third cache, found close to the north wall and still being reconstructed, contained red-slipped bottles, coarse silt plates, and red-slipped restricted bowls, some with scrawling charcoal inscriptions.

In addition to the caches of pots, there was a layer of Late Period pottery extending west from the south pylon wing, probably mixed material from disturbed caches and burials. This layer yielded some new forms for the Saqqara corpus including a distinctly ribbed, small bag-shaped jar in fine pink marl and a globular, self-slipped burnished jug with a painted decoration of pink lines around the maximum body diameter.

In the southeast corner of the forecourt, right at floor level, was found a deposit of over 100 New Kingdom 'beer jars' and one large, blue-painted beaker with a decorative pinched rim; presumably this pottery has been used for offerings in the cult of Horemheb or his queen.

The deposit of material found to the west of the north pylon wing yielded an important group of pottery undoubtedly provided for the Tia burials. This material remains to be studied next season, but a new type of slender, one-handled marl clay jar with unusual button-like base can already be distinguished (Fig. 14). Finally, it may be noted that within the surface fill of the forecourt were found two fragments of Mycenaean stirrup jars and a shoulder sherd of a Cypriot Black-on-Red ware juglet.

Ongoing work on pottery excavated in previous seasons included reconstruction (by Barbara Aston) of Late Period pottery from Shaft 99/I Chamber B, excavated in 2003. The late

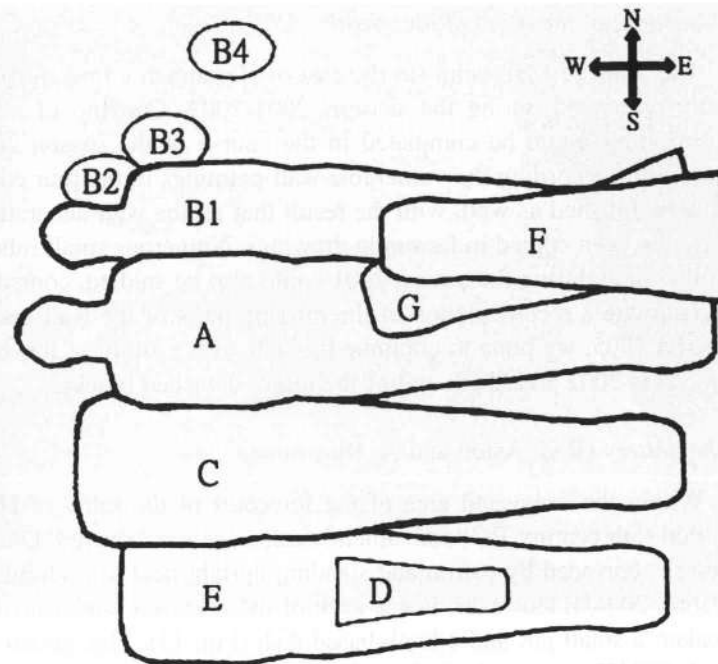


Fig. 15. Sketch showing the position of the burials 2003/13 (drawing by Ladislava Horačková).

New Kingdom pottery from the inner courtyard of the tomb of Meryneith was recorded and drawn by Amanda Dunsmore. The material was excavated in 2001 and virtually all of it came from just above or on the surface of the courtyard. Some vessels appeared to be more or less in situ but others seemed to have been scattered over the courtyard after breakage. The majority of pottery dates from the mid-XIXth Dynasty (*i.e.* post-Merenptah) through to the XXth Dynasty or early Third Intermediate Period. Some pottery may be late XVIIIth Dynasty in date or later, but it is impossible to tell from its shape or fabric. As yet the relationship of this assemblage to the tomb of Meryneith is not understood, if indeed there is any. As this is a discreet assemblage and of a period that is not well documented at Saqqara or well understood, many of the forms were drawn, amounting to about 70 drawings.

As might be expected, the majority of diagnostics are Nile silt and virtually all are G1 in the Saqqara fabric system; G1 equates to Nile silt B2 in the Vienna System and I.1 at Amarna. There are a few marl diagnostics and these occur in H1 (Marl D in the Vienna System and III.9 at Amarna), H12 which may be a mixed fabric and has no equivalent in the Vienna System or at Amarna, and H15 which may be related to Marl D and equates with III.2 at Amarna. H12 is a fabric that appears during Dynasty XIX and continues into the Third Intermediate Period. Its appearance accords well with the late New Kingdom date of this assemblage.

The overall range of shapes in this assemblage is noticeably different to that of a late XVIIIth Dynasty assemblage. Among the silt vessels are the familiar shallow bowls with direct rims and rounded or slightly flattened bases, but there are also a number of small, deep cups with pointed bases, a shape that only appears in the XIXth Dynasty after Merenptah. There are several rims from funnel-necked jars, although the necks are now more upright and slightly concave with the rims slightly out-turned. The most distinctive new shapes, however, are the rim and upper body of a necked, globular jar, cream-slipped out, which dates to Dynasties XX-XXII, and two thickened rims from bag-shaped jars that are well known at Thebes and date to Dynasties XX-XXI. Both these rims are extremely highly fired and one of the jars is cream-coated out. Of the blue-painted pottery, several jar rims occur, possibly from funnel-necked jars, and one small jar is decorated with a pie-crust ledge just below the rim top. The decoration on all sherds consists of simple blue bands outlined in black with intermittent red stripes, a decorative style typical of blue-painted pottery in the late New Kingdom.

Compared with the silts, the number of marl diagnostics is considerably less and vessel shapes are harder to identify. One rim is clearly an amphora rim of the type that appears under Ramesses II, with a long, wide neck and pronounced thickened rim. Another rim may also be from this type of amphora although the neck is considerably shorter. Of note is the rim from what appears to be a necked, globular jar dating to Dynasties XX-XXII. Characteristic of these jars is their short, upright neck with direct rim that is slightly thickened on the interior. These jars occur in both silt and marl fabrics and both are cream coated.

Skeletal remains (L. Horačková)

Anthropological work during the present season concerned both human skeletal remains found in 2003 and some found in this year's season. Altogether the skeletons of 26 adults and 11 children were studied macroscopically, whereas their dimensions and the basic demographic parameters for the determination of sex and age were ascertained. The variability and the pathological changes on the skeletons were also studied.

The most interesting anthropological finds from the 2003 season included the mummified remains of adults and children found on top of the east wall of Meryneith's forecourt (burial 2003/13)²³. These had been much disturbed and were found on top of each other with no layer of sand in between. In view of the position and incompleteness of the skeletons, it is almost certain that the bodies had been thrown out by robbers from their original burial-place and had been deposited on the wall in secondary position. According to the ceramics found in the vicinity, these burials seem to date to the Late Period (5th century BC). A total of nine mummified bodies were found, mostly in bad, skeletized condition, with a hard shell of bandages and resin and remains of soft tissues (skin and muscles) on dark brown-coloured bones. Moreover, most of the skeletons were incomplete. Around them, isolated bones of other adults were found, but no connection could be established between these and the mummified remains. Besides, the colouring of most of the loose bones was different (yellow). An almost complete skeleton of a child was found in the immediate vicinity of the mummies. All the skeletons of children and four skeletons of adult individuals were positioned in the west-east direction, but the two uppermost adult skeletons were oriented in the opposite, i.e. east-west direction.

The main envelope of the bodies consisted of strips of linen 6 to 8 cm in width and wrapped around the body in several layers. The layers were saturated with resin, which was black in colour and highly lustrous at the fracture. Each limb was wrapped individually down to the fingertips. The lower limbs were then wrapped together, and lastly all of the body was wrapped up as a whole. Mummies A and B1 had surface straps consisting of several crossing bands of 12 mm wide. No protective amulets or other objects were found in between the bandages. The mummies of adults had the thoracic, abdominal, and pelvic cavities filled with rolls of cloth saturated with resin. When exposed to air, they usually disintegrated at the touch into fine black dust. On top of the heap of mummies were found remains of a reed mat and fragments of a coffin lid.

Individual A was an almost completely preserved, skeletized mummy (female, 25–30 years, stature about 155.7 cm) lying in a supine position with the head towards the west and the feet to the east (Fig. 15). The head was turned slightly to the left (i.e. north). The left hand of the deceased was placed on her right shoulder, her right upper limb was placed alongside the body with the palm rotated inwardly (the so-called pronate position) and the hand turned in the direction of the lap. The oral region was covered with resin, the roof of the nasal cavity was intact, and no resin level was visible in the cranial posterior fossa. The surface of all the bones was dark brown, and the bones were relatively gracile.

Placed over the lower limbs of this mummy were parts of two other burials. The first of these comprised the skeleton of the lower limbs of an individual G with a semi-robust relief for muscle attachment (30–50 year old male, stature about 163.7 cm) whose feet were towards the west. Above this and partly overlapping it lay about two thirds of the caudal part of a gracile skeleton of another individual F (30–40 year old female, stature about 157.7 cm), with legs also placed in a westerly direction and hands in pronate position (with palms turned backwards), extending to about the length of the femurs. Under the back there was an up to 3 cm thick layer of disturbed bandages. Right on top of the heap of corpses there were isolated bones of the left foot of an adult individual.

²³ See M.J. Raven, R. van Walsem et al., *JEOL* 38 (2003-2004), 15, 23.

Close to the left (north) of mummy A were found the incomplete skeletal remains of two infants (B2 newborn, B3 about 6 months old) and one adult (female adult B1, gracile). The head of female B1 was turned to the left in the direction of the newborn designated as B2. The newborn was lying on the right-hand side, with the right forearm slipped under the left. Bones of both of the newborn's upper limbs extended about 6 cm under the skull of female B1. The other incomplete skeleton of an infant (B3) was found to the northeast from the newborn's skeleton.

Individual C (30–40 year old male, stature about 166.7 cm) was placed to the other side (south) of individual A, lying in a supine position with his head in a westerly direction (but no skull was found). A very stiff wrapping from the left thigh of this mummy was up to 3 cm thick. Its forearms were crossed over the chest, with the right forearm slipped under the left, and the right and left hands placed on the left and right shoulders, respectively. The position of this deceased is very interesting because crossed arms are usually regarded as a characteristic of the Ptolemaic period²⁴. On the right (northern) side of the skeleton of male C there was another skeleton E (30–40 year old female, stature about 160 cm), with a child skeleton D (3–4 year old child) placed over the two skeletons. Only about two thirds of the caudal parts of these three skeletons (C, D and E) have been preserved.

No epigenetic characteristics were ascertained that might suggest that these buried individuals were relatives. The main reasons are that only the long bones of the lower limbs of the adults have been preserved (except of females A and B1) and that the condition of the child burials was generally bad. The basic morphometric and morphoscopic traits characterizing the physical condition of the deceased are given in Tab. 1²⁵.

The most frequently found pathological processes on all the skeletal remains uncovered in the 2003 season included arthrotic changes in the spine. These usually appeared on the ventral edges of the vertebral bodies in the form of outgrowths (osteophytes), some of which were up to 9 mm long. This spinal condition usually becomes apparent later in life (changes begin to manifest themselves at the age of about 40), or even in younger individuals as a consequence of excessive physical exertion (e.g. heavy work). Arthrotic changes on large limb joints were less frequent. The onset of arthrotic changes was also found in several temporomandibular joints.

Traces of healed fractures were rare (e.g. a fracture of the radius and of the clavícula). The mechanics of clavicular fractures are most frequently indirect: by falling down on the shoulder, on the outstretched upper limb, by pulling the upper limb, or by lifting heavy objects. The metabolic diseases detected for this material included cribra orbitalia on the orbital roofs of several women and children, usually ascribed to anaemia caused by iron deficiency (because of low levels of iron in the food or its poor utilization). Congenital defects found included cases of canalis sacralis apertus (Fig. 16) and unilateral spondylolysis. Hormonal disturbances consisted of hyperostosis frontalis interna found in one of the older women. A non-malignant tumour (osteoma) growing inwardly into the frontal sinus was found in another of the adult women (Fig. 17). Dental caries and cysts were also fairly frequent.

²⁴ P.H.K. Gray, Notes concerning the position of arms and hands of mummies with a view to possible dating of the specimen, *JEA* 58, (1972), 200–201.

²⁵ Calculation of stature according to H. Bach, Zur Berechnung der Körperhöhe aus den langen Gliedmassen-knochen weiblicher Skelette, *Anthrop. Anz.* 80 (1965), 12–21; E. Breiting, Zur Berechnung der Körperhöhe aus den langen Gliedmassen-knochen, *Anthrop. Anz.* 14 (1937), 249–274.



Fig. 16. Sacrum with canalis sacralis apertus.



Fig. 17. Osteoma inside the frontal sinus of an adult woman.

All human bones found during the season 2004 were studied on a continuous basis but because most of them (plus bones of monkeys and other animals) were found only towards the end of the season, the bones were stored in one of the chapels of the tomb of Horemheb in order to be studied next year.

Table 1. Basic features of individuals 2003/13

adult individuals:	A	B1	C	E	F	G
sex	female	female	male	female	female	male
age (years)	25-30	adult	30-40	30-40	30-40	30-50
Robusticity	gracile	gracile	robust	gracile	midd.rob.	midd.rob.
height of body (cm)	155,7	—	166,7	160,0	157,7	163,7
cranial index	mesocran	—	—	—	—	—
children:	B2	B3	D			B4?
age	newborn	6-9 months	3-4 years			14-16 years

Cairo Museum project (G.T. Martin)

The richness of the Memphite New Kingdom cemeteries has been amply demonstrated archaeologically over the past three decades, with a series of discoveries at Saqqara and elsewhere of tombs of important functionaries, made by British, Dutch, Egyptian and French scholars. At Dahshur Japanese Egyptologists have also uncovered New Kingdom funerary monuments. The potential for the future seems without limit, in a vast terrain stretching probably from the southern edge of Abusir to Dahshur, not only on the high desert but also in the escarpments.

Apart from all the material found since 1975, some of it still unpublished, there are a great number of inscribed and decorated blocks and architectural elements from New Kingdom Memphite tombs in the museum collections all over the world. The present writer began to record this material as a private enterprise, an offshoot of the work of the EES-Leiden Expedition at Saqqara from 1975. The first-fruits appeared in 1987 in a volume in which 114 blocks were dealt with²⁶. Enough drawings are to hand for a second volume, and a third volume would probably suffice to publish the remaining museum reliefs, excluding those in Cairo. By far the largest collection of New Kingdom Memphite blocks is in the Egyptian Museum, much of the material stemming from the excavations of J.E. Quibell in the monastery of Apa Jeremias at Saqqara in the early years of the twentieth century.

With the generous permission of Dr Mamduh el-Damaty and Dr Wafaa el-Sadiq (successively Directors of the Cairo Museum) and with the valued cooperation of Mr Ibrahim Abdelgawad (Curator of the New Kingdom section) a start has been made on documenting the Cairo material²⁷. Over three short seasons (2001, 2003, 2004) a total of 115 blocks, including some architectural fragments, have been recorded in facsimile, and numerous details overlooked in previous publications have been noted. At least 120 individual blocks remain to be dealt with, some exhibited in the galleries, others in the reserve collections.

Among the items recorded in detail so far are blocks from tombs of well-known Memphite New Kingdom personalities, including Horemheb, royal scribe and fanbearer on the right of the King (a Ramesside official to be distinguished from his more famous Eighteenth Dynasty namesake), Hormin, overseer of the royal apartments of the harīm at Memphis, Kairy, head of the chariot-makers and overseer of a workshop in the armoury, and Ptahmose, chief steward of the temple of Ramesses II in the domain of Ptah, to mention only a few. The tombs from which all these blocks derive remain to be discovered.

Consolidation and restoration

A revised plan for the restoration of the tomb of Meryneith by the Cairo-based architect Nicholas Warner has been submitted for approval to the Secretary-General of the SCA. The Permanent Committee has agreed with the plans as proposed by us, so that actual restoration work could start in the course of the year 2004. This means that the actual tomb walls will be surrounded by new walls of red brick supporting a roof construction of steel girders and wooden

²⁶ G.T. Martin, *Corpus of reliefs of the New Kingdom from the Memphite necropolis and Lower Egypt, I* (London, 1987).

²⁷ Listed by G.T. Martin, Reliefs and architectural fragments from New Kingdom tombs in the Cairo Museum, principally from the Memphite necropolis, *The New Kingdom Memphis Newsletter* 3 (1995), 5-33.

panels. There will be an opening above the centre of the inner courtyard, closed by means of bars and steel mesh in order to keep out unwanted visitors and birds. A locked door in the east will be the only access to the interior. The exterior of the walls can be plastered in any colour (for instance, mud or sand coloured) in order to merge with the landscape and the ancient tombs. Moreover, the tomb of Meryneith is situated in a deep pit so that the new constructions will be practically invisible from a distance. Inside the new construction, the original relief walls and paintings can be exhibited, studied and reassembled without the need for further protective covers.

Otherwise, the Expedition consolidated a number of weak spots in the mud-brick walls of the tombs of Maya, Horemheb, Ramose, Iniua, and Pay. New protective panels were installed in front of the reliefs on the west face of Maya's vestibule, and the condition of the south wing of the pylon itself (where deep cracks have appeared in the part that was reconstructed in modern brick) was closely monitored. Likewise, the modern roof over the inner courtyard of the tomb of Horemheb was inspected with a delegation of the Saqqara inspectorate in view of serious constructional problems which may force us to replace the existing roofing slabs in the near future.

It is to be expected, therefore, that the season 2005 will be devoted to construction work and to the study of excavated material from former seasons. The only excavation envisaged will be the removal of the hillock around the northeast corner of Horemheb's forecourt, which should enable us to clear the full extent of its north wall and to open its eastern entrance.

SCHLACHTVIEH AUS PUZRIŠ-DAGĀN. ZUR BEDEUTUNG DIESES KÖNIGLICHEN ARCHIVS

WALTHER SALLABERGER (MÜNCHEN)

In memoriam

G. van Driel

1. Status und Aufgabe von Puzriš-Dagān*

König Šulgi von Ur gilt zu Recht als einer der bedeutendsten altnesopotamischen Herrscher, gelang ihm doch die im Frühen Mesopotamien außergewöhnliche Leistung, als Nachfolger eines mächtigen Vorgängers das ererbte Reich zu erhalten und sogar zu erweitern. Unter den Taten Šulgis wirkt die, nach der er sein 39.-41. Jahr benannt hat, recht blass: „Das Haus (von Šulgi)¹ von Puzriš-Dagān hat er erbaut“. Was sich hinter dieser knappen Formulierung verbirgt, wurde seit 1910 durch Tausende von Verwaltungsurkunden deutlich, die Raubgräber aus dem Ruinenhügel von Drehem auf den Markt brachten. Die meisten Urkunden betreffen die Verwaltung von Vieh; und kaum eine moderne Beschreibung der Ur III-Zeit kommt ohne den Hinweis aus, dass selbst noch die Transaktion eines einzelnen Schafes oder der Verzehr eines Eselkadavers durch Hunde von einer weitreichenden Verwaltung in einer auf den Tag datierten Urkunde erfasst worden sei. Puzriš-Dagān/Drehem wurde so zu einem Synonym für eine staatliche Bürokratie, und die schiere Masse und die detaillierten Angaben allein führten schon zu einer entsprechenden Einschätzung des Ur III-Reiches als zentralistischer oder gar totalitärer Staat mit einer alle Wirtschafts- und Gesellschaftsbereiche gleichermaßen lücken- und gnadenlos erfassenden Verwaltung.

* Vortrag, gehalten auf dem *Farewell Symposium* für G. van Driel, *Documentary Coverage*, am 3. 7. 2002 im Rahmen der 48. *Rencontre Assyriologique Internationale* in Leiden. Gerne habe ich das Angebot von K. R. Veenhof wahrgenommen, eine überarbeitete Fassung des Vortrags an dieser Stelle zu publizieren. Gewidmet ist er wie der Vortrag einem Gelehrten, der in seinen Synthesen ebenso wie im Werk seiner Schüler so grundlegend zum Verständnis administrativer Texte beigetragen hat.

Herzlich danke ich Remco de Maaijer und Bram Jagersma dafür, dass sie mir Ihre Umschriften von Ur III-Texten zur Verfügung gestellt haben, ohne die diese Untersuchung nicht möglich gewesen wäre. Markus Hilgert danke ich für die Mitteilung von OIP 121, der Publikation der Drehem-Texte in Chicago aus der Zeit Amar-Suenas, noch vor dem Erscheinen. H. Bongenaar sei als Organisator des van Driel-Symposiums gedankt. Für Anregungen bin ich den Teilnehmern des Münchner Assyriologischen Kolloquiums vom 25. 6. 2002 verbunden.

Der Aufsatz gehört in den Rahmen einer größeren Untersuchung zum Inhalt von Palastarchiven und zu einer Analyse der ‚Prestigewirtschaft‘; dort wird der methodische Ansatz begründet, bei der Beschreibung von ökonomischen Phänomenen vom Konsum als treibendem Ziel auszugehen und verstärkt die soziale Relevanz zu beachten. Ich hoffe, diese Studie unter dem Titel „Geschenke des Palastes“ in Kürze vorlegen zu können. — Für bibliographische Abkürzungen s. die Übersicht am Ende des Aufsatzes.

¹ Die Erweiterung „von Šulgi“ fehlt in der Regel; das Datum meint also nicht den Bau eines „Šulgi-Tempels“, sondern das „Haus“ von Puzriš-Dagān wird nach seinem Stifter „Šulgi-Haus“ genannt.