

PRELIMINARY REPORT ON THE LEIDEN EXCAVATIONS AT SAQQARA,  
SEASON 2002: THE TOMB OF MERYNEITH

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*Introduction*

The joint expedition of the Leiden Museum of Antiquities and the Faculty of Archaeology/Department of Egyptology of Leiden University resumed its fieldwork in the Saqqara New Kingdom necropolis<sup>1</sup> on January 15<sup>th</sup>, 2002. The site was closed on February 28<sup>th</sup>. The excavation team consisted of Dr Maarten J. Raven and Dr René van Walsem (joint field directors), Dr Barbara G. Aston and Ms Amanda Dunsmore (pottery specialists), Prof. Eugen Strouhal (anthropologist), Drs Willem Beex (surveyor), Ms Dorothea Schulz (draughtswoman), Ms Anneke de Kemp and Mr Peter Jan Bomhof (photographers), Mr Christian Greco and Ms Heleen Wilbrink (field assistants). Dr Jos van der Vin (numismatist) and Dr Rob J. Demarée (hieraticist) joined the team for 2 weeks each.

The fieldwork was carried out in close collaboration with Mr Adil Hussein Muhammad (Director of Saqqara) and Mr Sami el-Hoseiny (Chief inspector) and was supervised in the field by the Inspector Mr Osama Abd-es-Salam el-Shimy. The Expedition wants to express its gratitude to Prof. Gaballa A. Gaballa (Chairman of the Supreme Council for Antiquities), to Dr Zahi Hawass (at the time Director of Giza and Saqqara, now successor to Prof Gaballa), and to the members of the Permanent Committee of the SCA. We are indebted to the Director and staff of the Netherlands-Flemish Institute in Cairo (NVIC) for all their assistance, and to the Egypt Exploration Society for granting us the use of the Saqqara dighouse. Finally, we wish to thank the following persons and institutions for their financial or logistic support: the Netherlands Organisation for Scientific Research (NWO), Dr Karel Innemée (Deir Musa el-Eswed excavations), Archaeological Research and Consultancy in Groningen, Archeoplan in Delft, and Mr R.J.M. Straathof (Koers-Kompas NV).

*Clearance of the exterior walls*

In 2001, the joint expedition succeeded in locating yet another of the 'lost tombs' of the New Kingdom necropolis of Saqqara, viz. the tomb of the Steward of the Aten temple, and later Greatest of Seers of the Aten, Meryneith. The new monument is situated about 20 m east of the tomb of Horemheb. The expedition managed to clear the debris from inside the central courtyard and the adjacent chapels and vestibule, thereby gaining a good impression of the general layout of the tomb. The exterior of the walls, however, still lay buried in drift sand

<sup>1</sup> For the preliminary report on the season 2001, see M.J. Raven, R. van Walsem, B.G. Aston and E. Strouhal, Preliminary report on the Leiden excavations at Saqqara, season 2001: The tomb of Meryneith, *JEOL* 37 (2001-2002), 71-89; cf. also M.J. Raven, High priest of the Aten, *Minerva* 13.4 (July-August 2002), 31-34.

and rubble. Needless to say, these masses exerted a great pressure on the already vulnerable mud-brick walls of the monument and impeded a detailed architectural inspection of the tomb's structure. This especially concerned the eastern part of the tomb, where the presence of a forecourt could be suspected, and its western end where the proper delimitation of the central chapel could not yet be established. Moreover, we were hoping to find additional fragments of the tomb's wall decoration immediately outside its perimeter. Therefore, one of the projects of the season 2002 was a full clearance of the exterior walls of Meryneith's monument.

To this end, a trench of c. 3 metres wide was cut around the south, west, and north walls of the superstructure of the tomb. The bottom of this trench could not be cut to one uniform level but was rather determined by the varying local conditions, or rather the different structures extant around Meryneith's tomb. In the south, a solid platform of rubble (*tafl*) was found to extend along the whole length of the exterior wall. The top of this platform lies about 1 m above Meryneith's floor level. Eastwards it continues beyond the tomb's façade, where an unfinished rectangular stela lies partly buried in this stratum of rubble. Further west, in line with the western portico of Meryneith's peristyle, a shaft was found (2001/23; see Fig. 1); its limestone rim lies flush with the rubble floor and displays a recessed ledge and one of the original covering slabs. Beyond the shaft, alongside Meryneith's southwest chapel, are further remains of a limestone structure (2002/5). The latter merely consists of the horizontal foundation slabs once supporting three parallel walls running north-south (the western one founded at a slightly lower level), plus three orthostats forming a wall in east-west direction and leaning against Meryneith's exterior wall (Pl. 1). Together with the shaft, this structure probably represents all that is left of a neighbouring tomb dating to the Ramesside period.

In the west, two more shafts with limestone rims were found (2002/2 and 2002/4), but since these do not have a recessed inner ledge they may be later in date than the one previously mentioned. However, this is not a very clear dating criterion. Soundings between the west wall of Meryneith and these shafts revealed the stratigraphy of this area, which comprises a sloping bank of rubble leaning against the west wall below, and a later accumulation of *tafl* on top, raising the area to the level of the shaft rims. Above, there were other strata, including layers of Coptic refuse, Late Period funerary material, and a bit of painted mud-plaster; the latter find seems to indicate that this material had been thrown out of the northwest chapel by robbers, presumably in the 19th century<sup>2</sup>. These soundings also demonstrated the presence of a retaining wall of four courses of limestone under the floor of structure 2002/5 and jutting out beyond the western wall of Meryneith's tomb. Of great interest was a massive mud-brick structure protruding from the centre of the west wall, which proved to be the base of a small pyramid once constructed over the central chapel of Meryneith's tomb<sup>3</sup>. Although the centre of this structure had been destroyed by two more secondary shafts (2001/9 and 2002/3), both western corners were well preserved up to their junction with the west wall (Fig. 2 and Pl. 2).

<sup>2</sup> A similar accumulation of very mixed material was found west of the tombs of Horemheb and Maya. It rather looks as if, in their search for stelae and sculptures, the 19th-century art robbers went straight for the chapels and threw their contents over the dilapidated west walls. The fact that the chapels had often been reused as Late Period burial vaults and Coptic hermitages explains the strange mixture of strata, with New Kingdom material sometimes on top of later remains.

<sup>3</sup> A similar pyramid was found to be part of the tomb of Iniua; cf. Schneider, *The tomb of Iniua: preliminary report on the Saqqara excavations, 1993*, *JEA* 79 (1993), 2, Fig. 1 and Pl. I.2.

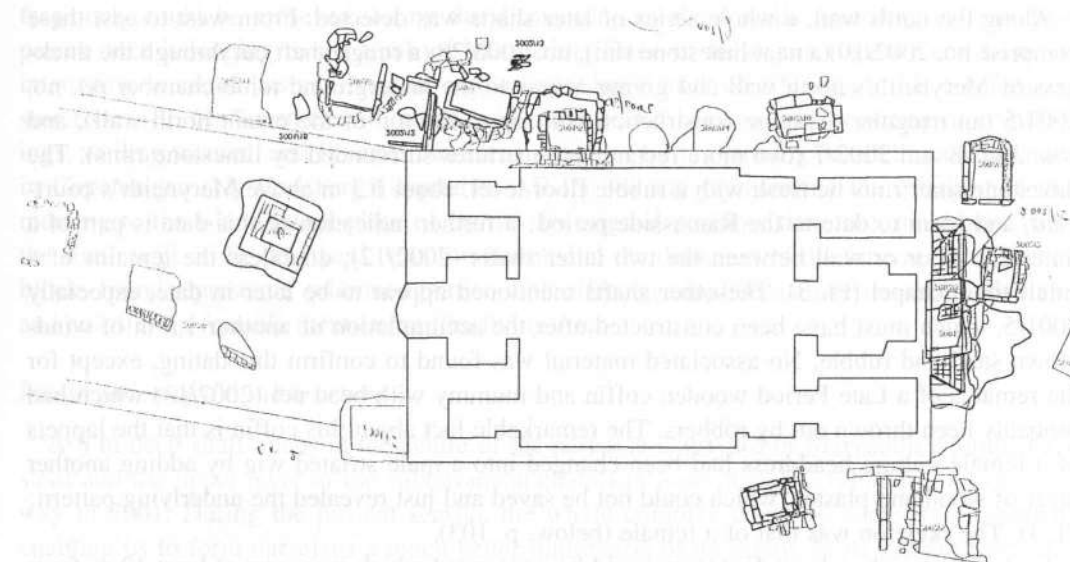


Fig. 1. General plan including the immediate surroundings of the tomb.

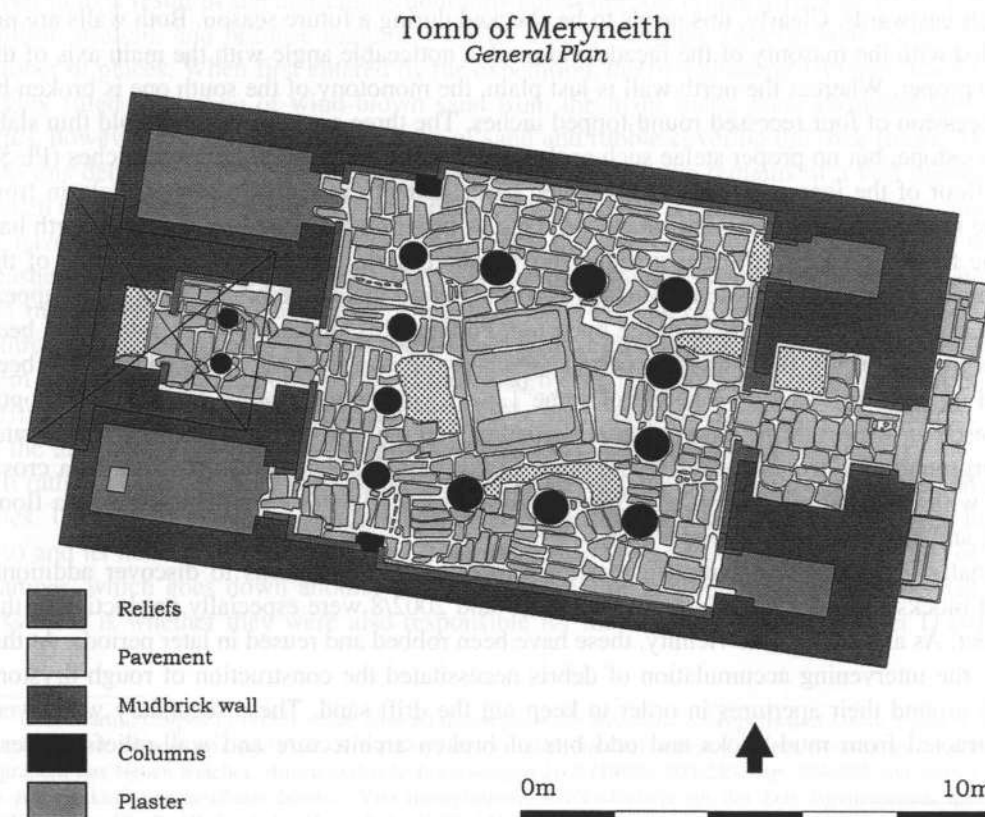


Fig. 2. Revised plan of the central part of the superstructure, with inclusion of the pyramid.



Along the north wall, a whole series of later shafts was detected. From west to east these comprise no. 2002/10 (a neat limestone rim), no. 2002/20 (a rough shaft cut through the thickness of Meryneith's north wall and giving access to the underground tomb-chamber A), no. 2001/5 (an irregular drystone construction built up to the top of the extant north wall), and nos. 2002/8 and 2002/7 (two more rectangular apertures surrounded by limestone rims). The limestone shaft rims lie flush with a rubble floor level, about 0.3 m above Meryneith's courtyard, and seem to date to the Ramesside period; a further indication of this date is part of a limestone floor or wall between the two latter shafts (2002/12), doubtless the remains of a small tomb-chapel (Pl. 3). The other shafts mentioned appear to be later in date, especially 2001/5, which must have been constructed after the accumulation of another 1.5 m of wind-blown sand and rubble. No associated material was found to confirm this dating, except for the remains of a Late Period wooden coffin and mummy with bead net (2002/13) which had probably been thrown out by robbers. The remarkable fact about this coffin is that the lappets of a female vulture headdress had been changed into a male striated wig by adding another layer of wood and plaster (which could not be saved and just revealed the underlying pattern; Pl. 4). The skeleton was that of a female (below, p. 103).

East of the tomb, a large forecourt could be uncovered which measures at least 12 m from west to east. At that distance from the tomb's façade, the mud-brick screen wall delimitating the forecourt's southern extension has a protruding pilaster or jamb that may mark its termination. On the other hand, the corresponding wall north of the courtyard seems to continue further eastwards. Clearly, this needs to be checked during a future season. Both walls are not bonded with the masonry of the façade and mark a noticeable angle with the main axis of the tomb proper. Whereas the north wall is just plain, the monotony of the south one is broken by a succession of four recessed round-topped niches. The three eastern ones still hold thin slabs of limestone, but no proper stelae such as they were no doubt planned for these niches (Pl. 5). The floor of the forecourt consists of beaten earth, apart from the strip immediately in front of the tomb's façade, which has limestone flags. A puzzling structure stands on the north half of the forecourt (2001/16). It is a square box of mud-brick, doubtless Coptic in view of the presence of the characteristic ribbed sherds of the period inside the bricks. Foot-holds appear to go down into the interior from the open top. Perhaps this structure, which must have been underground during the Christian period (because the surrounding area had by then been filled up with drift sand to a height of some 1.5 m), constitutes a cellar or crypt of a Coptic domestic structure<sup>4</sup>. More excavation is needed to find out how deep this structure penetrates underground and how it relates to the other Coptic remains detected further south (a cross-wall with identical orientation, 2002/6) and on top of Meryneith's southeast chapel (a floor, wall, and amphora, 2001/14).

Finally, it should be mentioned that the expedition's expectations to discover additional relief blocks were not frustrated. Shafts 2002/7 and 2002/8 were especially productive in this respect. As all shafts in the vicinity, these have been robbed and reused in later periods. At that time, the intervening accumulation of debris necessitated the construction of rough drystone walls around their apertures in order to keep out the drift sand. These secondary walls were constructed from mud-bricks and odd bits of broken architecture and wall-reliefs. Several

<sup>4</sup> For the occurrence of underground storage pits in Coptic monastic structures, see W. Godlewski, Naqlun, excavations 1997, *PAM* 9 (1998), 79-80 and Fig. 1.

fragments could be retrieved during the dismantling of these walls, including at least five pieces once belonging to the tomb of Meryneith. Three of these join together and form an interesting scene of Isis and Nephthys guarding a huge stack of offerings inside a columned storeroom (Pl. 6). Together with another fragment found last year and depicting more offerings, wailing women, and flowers, this scene seems to form a striking parallel to a relief now in Copenhagen (Ny Carlsberg Glyptothek AE IN 38) and representing the transport of the mummy to the island burial-place of Osiris<sup>5</sup>. Its original position, therefore, must have been the south wall of the courtyard, which is devoted to the depiction of the funeral. Two further blocks found represent a columned portico with offerings (doubtless also from the south wall) and an offering formula mentioning 'the living Aten'.

#### *Investigation of the substructure*

A 6 m deep shaft opens in the centre of the peristyle courtyard of Meryneith's tomb. This shaft and the upper level of the subterranean chambers were already explored in a summary way in 2001. During the present season, the whole complex could be completely emptied, enabling us to form ourselves a much better impression of its extent. In its present form, the subterranean complex represents a real labyrinth of chambers, corridors, and robbers' tunnels (Fig. 3). Various extensions made during the numerous centuries of its use as a burial-place have partly obliterated the original construction, especially since parts of the ceiling have now caved in as a result of the continuous additions cut in the soft crumbly rock of this relatively shallow stratum, and because secondary shafts link up with the underground complex in a number of places. When first entered by the expedition, the first chamber (A) was found to be largely filled by a cone of wind-blown sand from the main shaft; other chambers and galleries, however, only had about 10-50 cm of sand and rubble covering the rock floors. Mixed with this debris, but to a great extent also on top of it, were the remains of a vast number of broken mummies and decayed wooden coffins. As a result of the prevailing dampness, the latter have been reduced to hardly more than wood dust, whereas the bones have been badly smashed and dispersed by robbers. The total number of burials cannot even be estimated at this moment, but the remains were enough to fill 141 crates (*qafas*). An analysis of this anthropological material is planned for the next season (2003). Practically all of these burials seem to date to the Late Period. This is indicated by the few remaining traces of paint on the coffin fragments, by the potsherds and cylinder beads found associated with this material, and by the unexpected presence of two bronze lanceheads of a late type (Pl. 7)<sup>6</sup>.

It rather looks as if these Late Period intruders extended the pre-existing chambers and galleries. Undoubtedly, they gave Chamber G its present-day appearance, with its three loculi (a-c) and its numerous mummy niches. They must also have added the inner shaft (II) of this chamber, which goes down another 6 m to two levels of additional mummy niches (H-M). Less clear is whether they were also responsible for the construction of Chamber D (which

<sup>5</sup> G.T. Martin, *Corpus of reliefs of the New Kingdom from the Memphite necropolis and Lower Egypt*, I (London, 1987), no. 62 with ref.; add C.-B. Arnst, Das Inselheiligtum im Gartenteich. Zu einer Bestattungsszene in Privatgräbern des Neuen Reiches, *Altorientalische Forschungen* 16.2 (1989), 203-215, esp. 204-205 and Abb. 1; id., Die Aussagekraft unscheinbarer Motive, Vier memphitische «NN»-Reliefs aus der Zeit Tutanchamuns und ihre mögliche Zuordnung zum Grab des Haremhab, *BSEG* 15 (1991), 5-30, esp. 8-20 and Abb. 3.

<sup>6</sup> Cf. W.M.F. Petrie, *Tools and weapons* (London, 1917), 31-32 and Pl. XL.170.

**Tomb of Meryneith  
subsoil structures**

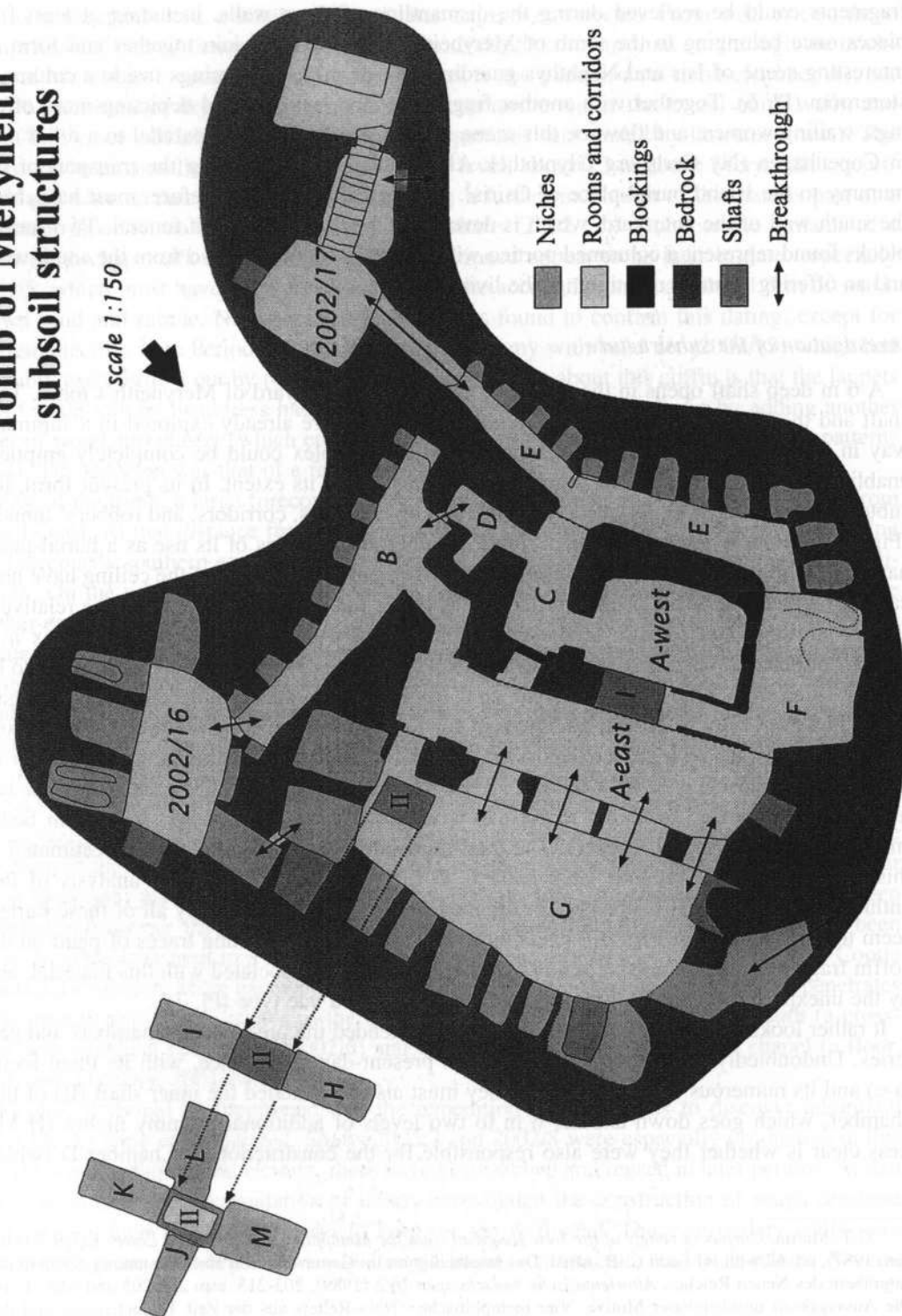


Fig. 3. Plan of the tomb's substructure.

breaks into Gallery B) and the break-throughs to the independent tomb complexes 2002/16 and 2002/17. Possibly, the latter two connections were in fact made by later robbers.

Complex 2002/16 is a self-contained Late Period tomb of a by now familiar type, with its own shaft, a single chamber, and five mummy niches. It was found full of decayed mummies, whereas the associated finds indicate a date around the 5th century BC; the latter comprise lots of pottery (including a fair number of complete pots) and one faience pataikos amulet. More interesting is a slab of relief reused as a covering slab for a mummy pit (*fossa*) inside one of the niches and originally forming part of the decoration on the west wall of Meryneith's courtyard (Pl. 8). In fact, a check on the presence of such relief material was the main motivation for our partial excavation of this complex.

Complex 2002/17, on the other hand, is doubtless a New Kingdom tomb and is probably connected with the remains of a mud-brick chapel jutting out of the sand to the east of the tomb of Pay and Ra'ia. This complex consists of a shaft, an antechamber, and a stairway leading down to a tomb-chamber with rock-cut *mastaba*. Because of the presence of relief fragments, both the stairway and the lower chamber were emptied by the expedition. This produced a stela fragment inscribed for a royal scribe Meriunu (Pl. 9)<sup>7</sup> and an abacus from the nearby tomb of Tia, a vessel fragment inscribed in hieratic (Pl. 13, and p. 101-2 below), and some other finds of no importance.

One of the reasons that motivated us to excavate the subterranean complex of the tomb of Meryneith was that we hoped to find evidence about who was actually buried there during the New Kingdom. Meryneith himself was clearly unable to finish the wall decoration of the tomb, and in view of the vicissitudes of his career he may in theory have been buried elsewhere. An alternative candidate would have been the elusive official Hatiay, whose addition of a wall relief and a stela to the tomb seems to imply that he appropriated it at some later stage. However, our hopes of settling this matter were frustrated. It proved to be very hard to identify the original New Kingdom chambers in the maze of Late Period extensions. In view of a concentration of New Kingdom sherds in the debris from Chamber F, this may have been used for a New Kingdom burial. A small number of inlays for wooden coffins from the same area seem to imply that such a burial actually took place, although the presence of several hammerstones and whetstones in a corner of the room is a clear indication that the construction was not yet finished. Later intruders and robbers have destroyed all the other evidence, and for lack of inscriptions there is nothing we can say about the mystery of the New Kingdom tomb-owner. It rather looks as if the strange raised 'catwalk' which runs through the middle of Chamber A once functioned as an access corridor to the New Kingdom chamber, but even this is not certain due to the partial collapse of several rock walls.

The other reason for our thorough investigation of the subterranean complex was the suspicion that these chambers were the source of the numerous sherds of archaic character found during the excavation of the superstructure. Here, our expectations were certainly rewarded and we are now able to state that Meryneith himself reused a pre-existing structure belonging to one of the kings of the Second Dynasty.

<sup>7</sup> Cf. PM III<sup>2</sup>/2, 715 for an official of this name. Since he is datable to the reigns of Ramesses II and Merenptah, he can hardly be the original tomb-owner of the present complex, since the mud-brick architecture indicates an Eighteenth Dynasty date. On the other hand, the pottery from the tomb-chamber in question seems to date to the Nineteenth Dynasty, too (see below, the section on pottery).



*A new royal tomb*

During the season 2001, the expedition already found a considerable number of limestone dummy vessels and sherds of alabaster and other stones (basalt, breccia, siltstone, indurated limestone, diorite). Some of these were situated immediately below the surface of the desert, especially on the hill south of the tomb, while others came up from the fill of the peristyle courtyard. Later that season, our cursory inspection of the shaft and tomb-chambers already made it clear that similar material was still lying around in the underground part of the tomb. At the same time, our pottery specialists called our attention to a number of sherds of Archaic Period wares not attested before at the site. Now that the subterranean part of the tomb has been fully cleared, it is quite certain that this formed the original provenance of the archaic material. The final count of dummy vessels is now seventy-five (Pl. 10)<sup>8</sup>, whereas about fifty stone vessels could be identified and some of them reconstructed; the latter comprise mainly bowls and plates with inverted rims, but also two cylinder jars and four offering tables. Other finds from this period may include a small number of stone beads and a broken copper knife. A provisional analysis of the pottery (see below) indicates a date in the later half of the Second Dynasty. Thus, there can be no doubt that Meryneith usurped the substructure of an Archaic Period tomb. The concomitant superstructure was probably razed to the ground, but the expedition intends to do some future fieldwork in order to clarify this matter.

A clear identification of the original layout of the subterranean complex under the tomb of Meryneith is complicated by the same circumstances that frustrated our search for the burial of the New Kingdom tomb-owner: the continuous reuse, extension, and partial collapse of the chambers, and the repeated robbery of their contents. When Meryneith appropriated the shaft, he started to enlarge it; an irregular shelf of rock just above the ceiling of Chamber A still shows that the original archaic shaft was narrower. It rather looks as if (part of) Chamber A may have functioned as a tomb-chamber during the first phase of use of the complex. Otherwise, the subterranean complex seems to have comprised four galleries with shallow lateral niches forming a rough square around the central shaft and chamber. The exact configuration of the access to the various galleries cannot be ascertained any more, although Corridor C with its blocked eastern doorway, the two doors at the south end of Chamber A-east, and at least one of the two blocked doors at the north end of Chamber A-west are probably original.

These galleries are the most characteristic element of the tomb-complex, and they are quite unlike anything found in tombs of the New Kingdom or Late Period at Saqqara. Gallery B is almost 10 m long, with a maximum width of 2.10 m and a height of 1.75 m (Pl. 11). It has eight niches along the south side, and one more niche at the east end. Gallery E is roughly 11.25 m long and has a maximum width of 1.50 m and a height of 1.50 m. It has ten niches along the west side, some of which are still partially blocked in mud-brick covered with gypsum plaster, whereas its northern end turns to the east and has a further two niches before leading into Chamber F (Pl. 12). It rather looks as if (Meryneith's?) Chamber F was cut straight through a pre-existing gallery, since irregular patches in its floor seem to indicate the original presence of at least another two niches in the north, and there are two further blocked

<sup>8</sup> Cf. A. el-Khouli, *Egyptian stone vessels, Predynastic Period to Dynasty III* (Mainz am Rhein, 1978), e.g. pls. 17 (346-7, dyn. 2), 24 (468, dyn. 2), 30 (672-3, dyn. 2), 35 (752-4, dyn. 2), 36 (764, dyn. 3; 773-4, dyn. 2), 37 (785, dyn. 3), 38 (854, dyn. 3), 42 (1039, dyn. 2), 44 (1087, dyn. 2), 46 (1136, dyn. 2, Hetepsekhemwy!).

niches or rather doorways in the south (leading to Chamber A). Finally, it should be noted that Chamber G, which in its present form was doubtless created in the Late Period, has six irregular niches along the east wall. Their floor lies at the same level as that of the chamber itself, and is not raised above it as usually in Late Period mummy niches. One may therefore suspect that Chamber G constitutes a Late Period extension of another gallery with lateral niches.

Among contemporary private tombs, there are no parallels for this layout with a central shaft surrounded by galleries. Second Dynasty mastabas always have a substructure that is accessible via a stairway from the north end of its east façade; shafts only came into use for private tombs during the reign of Khasekhemwy at the very end of the dynasty. The subterranean part of these private mastabas favours a longitudinal layout with a corridor flanked by storerooms and terminating in a burial-chamber at its south end, accompanied by a latrine and bathroom. There are no examples of a concentric design as shown in the newly-found tomb, although the layout tends to become more compact towards the end of the dynasty. Likewise, galleries with lateral niches are completely unknown from private tombs of the period<sup>9</sup>.

Second Dynasty royal tombs are extant at two different sites in Egypt. The last two kings of the dynasty, Peribsen and Khasekhemwy, built their tombs at Abydos; these followed the traditions set by the local monuments of the First Dynasty and need not concern us here. The earliest pharaohs of this dynasty, however, were buried at Saqqara<sup>10</sup>. A long gallery ('A') found by Barsanti under the Unas pyramid temple in 1902 has been attributed to King Hotepsekhemwy on the basis of seal impressions; other seals give the name of his successor Raneb, however, and according to some authors the latter pharaoh would have been buried here together with his predecessor. This gallery is of the longitudinal type with side-chambers and a burial complex at the far end, but with its 120 m it is far larger than the contemporary private tombs. The access is via a sloping corridor from the north; nothing is known about the superstructure of this tomb<sup>11</sup>.

Another tomb ('B') was partially excavated by Selim Hassan in 1937-1938. This lies about 150 m further east under the Unas causeway and is attributed to King Ninetjer on the basis of seal impressions. Recent work by Munro has revealed some traces of a rectangular superstructure. There is a shaft on the north side of the complex, which gives access to a long corridor leading to a burial complex at its southern end. This longitudinal complex is surrounded by a large number of irregular side-galleries, several of which have lateral niches just like the new tomb found by our expedition. The complex is still not fully explored; it now measures about 50 x 50 m and seems to show a development towards a more concentric layout<sup>12</sup>.

<sup>9</sup> Cf. J.E. Quibell, *Excavations at Saqqara (1912-1914), Archaic mastabas* (Cairo, 1923), 11-12 and pl. XXX; G.A. Reisner, *The development of the Egyptian tomb down to the accession of Cheops* (Cambridge, 1936), 134-145.

<sup>10</sup> We ignore here the ongoing discussions whether the so-called western galleries of the Step Pyramid complex are in fact also Second Dynasty tombs. Recent Polish excavations just outside this area have demonstrated the presence of archaic material, but the real identity of these constructions is still not well understood.

<sup>11</sup> Cf. B. Porter and R.L.B. Moss (J. Málek, ed.), *Topographical bibliography of ancient Egyptian hieroglyphic texts, reliefs, and paintings*, III<sup>2</sup> (Oxford, 1979), 613; add R. Stadelmann, *Die Oberbauten der Königsgräber der 2. Dynastie in Sakkara*, in: P. Posener-Kriéger (ed.), *Mélanges Gamal eddin Mokhtar* (Cairo, 1985), II, 295-307, esp. 296-7 and Abb. 1.

<sup>12</sup> Cf. B. Porter and R.L.B. Moss (J. Málek, ed.), *loc. cit.*; add: P. Munro, *Einige Bemerkungen zum Unas-Friedhof in Saqqara*, 3. Vorbericht über die Arbeiten der Gruppe Hannover im Herbst 1978 und im Frühjahr 1980, *SAK* 10 (1983), 277-295, esp. 278-282; id., *Der Unas-Friedhof Nord-West*, 4./5. Vorbericht über die Arbeiten der Gruppe Hannover/Berlin in Saqqara, *GM* 63 (1983), Faltplan; id., *Report on the work of the Joint Archaeological Mission Free University of Berlin/University of Hannover during their 12th campaign at Saqqara*, *DE* 26 (1993),

With its much more regular design of a central tomb-chamber surrounded by (four?) galleries the new tomb seems to constitute a missing link between the Ninetjer monument and the substructure of the original mastaba under the Step Pyramid. The latter also has a large central shaft, with at the bottom four corridors leading to three galleries with lateral niches plus the well-known suite of tiled rooms<sup>13</sup>. Concentric galleries with side-niches are also a fixed element of other step pyramids, such as those of Sekhemkhet and at Zawiyet el-Aryan<sup>14</sup>.

Thus, the subterranean structure under the tomb of Meryneith seems to point to its identification as a royal tomb. It may in fact have belonged to one of the lesser kings of the middle of the Second Dynasty, who are known only from later kinglists and inscriptions: Weneg, Senedj, and Nebnefer<sup>15</sup>. For lack of inscriptions, however, this must remain an open question. The small size of the tomb (about 15 x 15 m) could reflect the short-lived reign of its royal builder, whereas the private tombs of the period seem to indicate that the decrease in size was also a general trend at the time. An additional argument for the royal status of the new monument is suggested by its position within the Saqqara cemetery<sup>16</sup>. Private tombs of the Archaic Period do not occur south of the Teti pyramid. Royal monuments, however, were apparently restricted to a zone at the southern end of the wadi running towards Abusir, which may have been the main access route at the time. This is suggested by the situation of the royal enclosures (especially the well-known Gisir el-Mudir, now attributed to Khasekhemwy<sup>17</sup>) and the two funerary complexes A and B discussed above. The new tomb lies in the same area, and Djoser and Sekhemkhet seem to have continued the tradition to be buried well apart from their officials in the traditional cemetery of their ancestors.

Future fieldwork around the tomb of Meryneith may uncover remains of the original superstructure of the newly found royal tomb, although similar endeavours above tomb 'B' by Munro have demonstrated that one should not perhaps expect too much of such an enterprise. One can only hope that this work will also produce some inscribed material to certify the identity of the original tomb-owner. So far, only one inscribed archaic sherd has turned up in the area surrounding the tomb, i.e. on the surface above the nearby tomb of Maya and Meryt<sup>18</sup>. This is a docket of a type well known from the Step Pyramid mentioning 'the palace of the *ka* of King Sa'. Perhaps this monarch can be equated with one of the three kings otherwise known as Weneg, Senedj, or Nebnefer, but at present there is no evidence available to solve this question.

47-58, esp. 49-54 and Pls. 1-2; W. Kaiser, Zur unterirdischen Anlage der Djoserpyramide und ihrer entwicklungs-geschichtlichen Einordnung, in: I. Gamer-Wallert and W. Helck (eds.), *Gegengabe, Festschrift für Emma Brunner-Traut* (Tübingen, 1992), 167-190, esp. 182-183 and Abb. 4:d; W. Kaiser, Zu den Königsgräbern der 2. Dynastie in Sakkara und Abydos, in: B.M. Bryan and D. Lorton (eds.), *Essays in Egyptology in honor of Hans Goedicke* (San Antonio, 1994), 113-123; id., Zur Nennung von Sened und Peribsen in Sakkara B3, *GM* 122 (1991), 49-55.

<sup>13</sup> Cf., conveniently, I.E.S. Edwards, *The pyramids of Egypt* (Harmondsworth, 1986), Fig. 7.

<sup>14</sup> *Ib.* Figs. 14-15.

<sup>15</sup> Cf. P. Munro, *SAK* 10 (1983), 280.

<sup>16</sup> For the following, cf. D. Jeffreys and A. Tavares, The historic landscape of early dynastic Memphis, *MDAIK* 50 (1994), 143-173, esp. 147-151 and Fig. 7.

<sup>17</sup> W.V. Davies and R. Friedman, *Egypt* (London, 1998), 67-69.

<sup>18</sup> M.J. Raven *et al.*, *The tomb of Maya and Meryt, II: objects and skeletal remains* (Leiden and London, 2001), 25 and Pl. 31, Cat. 40.

### Recording and restoration

A good start could be made with the facsimile recording of the relief decoration of Meryneith's tomb. Copying the extant slabs of the courtyard and central chapel could almost be finished. Moreover, a considerable number of loose blocks and fragments could be recorded as well, including material found during the present season. The remaining reliefs and the paintings in the four corner chapels will be dealt with in the season 2003. This task will also include copying a selection of the hundreds of loose fragments found during the two seasons, so that all material needed for a reconstruction of the wall decoration as a whole will be at hand.

The expedition's specialists in the fields of ceramology and anthropology will report below on the progress of their work. At the same time, the epigraphist Dr Demarée has been able to study the hieratic and demotic inscriptions found during the seasons 2001-2002. These comprise a number of ostraca and several dockets on sherds of pottery, including one found in the chamber of tomb 2002/17 and reading *pd(wt) ndm n r' nb* 'sweet incense pellets for daily use' (Pl. 13). Dr Demarée also identified a hieratic graffito on one of the columns of the peristyle courtyard as mentioning a scribe of the treasury; although the name of this person is now illegible, the patronymic clearly reads Kanakht. The expedition's numismatist, Dr van der Vin, studied the coin hoard found during the season 2000 in the Ptolemaic shaft 99/I. This proved to consist of 246 silver tetradrachms, only 3 of which were unidentifiable. The remainder dated to the years 10-22 of Ptolemy XII<sup>19</sup>, so that the date of deposition can be established as 60-59 BC.

It is the explicit concern of the expedition to preserve Meryneith's monument, including the reliefs and wall paintings, in good order. Contact was therefore established with a specialised architect, who was asked to provide a feasibility study for the restoration of the tomb's superstructure. This project especially concerns the re-erection of the peristyle, roofing the vestibule and central chapel, and providing the necessary security for an *in situ* display of the reliefs. The provisional designs will first be submitted to the SCA for approval, and if all parties agree, the actual restoration could take place during the season 2004.

### The pottery (B.G. Aston)

Excavation of the subterranean complex under the tomb of Meryneith yielded four interesting groups of pottery of different dates. A large collection of Second Dynasty pottery was recovered from the tomb chambers, which included new shapes, fabrics and wares to add to the types noted last year from the surface debris. There were fine marl jars of a globular shape not found in the material from last season, and heavy, cylindrical vessels, which had been red-slipped and burnished. One intact cylindrical marl vessel of a type with ridges below the shoulder and above the base was found in a niche with partially intact blocking in the western archaic gallery (E; Pl. 14).

A sloping entrance ramp led from the main shaft down into Chamber F, where we found a small collection of New Kingdom pottery, presumably dating to the New Kingdom use of the

<sup>19</sup> Not Ptolemy VI, as assumed before (cf. R. van Walsem, Preliminary report on the Dutch excavations at Saqqara, season 2000, *JEOL* 35-36 (1997-2000), 20 and Fig. 23).



tomb, in a *tafl* layer underneath Late Period burials. One interesting marl vessel from this group is the carinated body of a very squat type of mug with a single vertical handle and a wide, cylindrical neck.

A breakthrough to another New Kingdom burial complex to the south of Meryneith's tomb (2002/17) allowed us to investigate a group of Nineteenth Dynasty pottery from the small burial chamber, which included marl flasks with horizontal loop handles and tall necks decorated post-firing with red, blue and green stripes. On one such vessel, a hieratic docket was added below a painted collar identifying the contents as incense (see above, p. 101).

A number of new types of Late Period (5th cent. BC) pottery not found previously in the Memphite necropolis were recovered from one of the burial niches cut in the sides of Shaft II (in Chamber G) and from the burial chamber of a Late Period tomb to the southeast (2002/16) which broke into the southern archaic gallery (B). These include a miniature version of a white-slipped, round-bottomed jar with ridged shoulder, a flat-bottomed beaker with ledge rim, and a red-slipped silt jar with a modelled Bes face and arms, of a type previously found only in marl clay fabrics.

Simultaneously with the excavation, work was continuing on reconstructing and drawing pottery from previous seasons. Late New Kingdom pottery from the floor level of the chapels and courtyard of Meryneith's tomb was reconstructed, along with two New Kingdom contexts from south of the tomb of Horemheb. Ms A. Dunsmore made 150 pottery drawings of material excavated in previous seasons.

#### *Anthropology and palaeopathology* (E. Strouhal)

The aim of this year's season was the completion of the analysis of the anthropological material found in Chamber A of Shaft 99/I and dated to the Ptolemaic Period. Last season, 31 individual skeletons were reconstructed according to bones found in the five niches, 9 in the chamber itself, and 2 in the shaft (altogether 42 persons). The remaining material in the chamber was found to have been mixed and disturbed to such an extent that recognition of further individual burials (except those of subadults) proved to be impossible. Therefore, the non-matching bones of adults were sorted according to their kinds and marked according to their find spots within the chamber. By working with smaller lots, this enabled us to identify and restore broken bones with greater ease. Pair bones of individuals were joined together on the basis of a study of morphological features. Sex determination was likewise performed, using the ranges of measurements established last year for the individualized skeletons. Skulls and mandibles were aged by their dentitions, and postcranial bones attributed to them on the basis of their dimensions.

The minimum number of individuals for this remaining material from the chamber was assessed as 31 during the season 2001. According to our recent analysis, it was in fact slightly higher, *viz.* minimally 36 persons consisting of 16 adult males, 8 adult females, and 12 subadults. Together with the 9 individuals already identified in 2001, this results in 45 persons buried in the chamber itself (or at least found there, since some bodies may in fact have been taken out of the niches by robbers): 23 males, 9 females, 13 subadults. If we add the individuals found in the niches, a total of 76 persons were buried in Chamber A. Two further ones represented by skulls and bones excavated in the sand fill of the shaft may also have belonged to this group, having been pulled out by the robbers.

From a biological point of view, new evidence was produced for a close kinship of several of the buried persons by the similar morphology of their bones or by the frequent occurrence of less current anomalies (e.g. the 6-segment sacrum with fused 5th lumbar vertebra). There were the usual palaeopathological changes, mostly caused by physical stress and ageing. A unique case should be mentioned of a well-healed traumatic dislocation and rotation of the 3rd cervical vertebra connected with its incarceration into the 4th cervical vertebra as a result of an impression fracture. This recalls the description of a similar case in the Papyrus Edwin Smith<sup>20</sup>. Such a fatal injury can be caused by a perpendicular, headlong fall.

Two burials found *in situ* during the current excavations inside and around the tomb of Meryneith were identified in a preliminary way. Burial no. 1 in Chamber F belonged to a male of about 50 years old (Pl. 15), burial 2002/13 north of the tomb to a 20-30 year old probable female (pelvis missing).

<sup>20</sup> pEdwin Smith XI.9-17. See J.H. Breasted, *The Edwin Smith surgical papyrus* (Chicago, 1930), 337-342 (case no. 33).



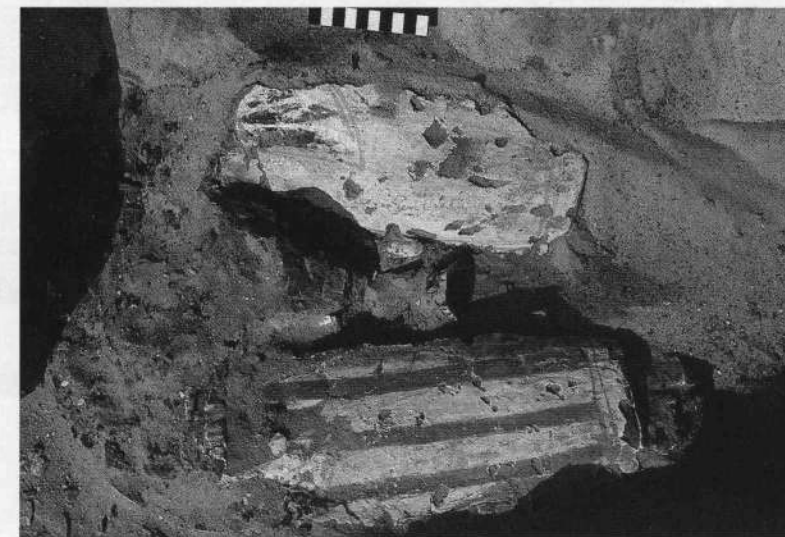
Pl. 1. Feature 2002/5 looking northeast. The foreground shows the partly excavated foundation blocks. The orthostats against the south wall of the tomb of Meryneith are visible in the background.



Pl. 2. General view from the west, with the pyramid and the edge of shaft 2002/2 in the foreground.



Pl. 3. View from the east along the north wall of the tomb, with the remains of chapel 2002/12 and the partly dismantled shaft 2001/5 behind.



Pl. 4. Remains of coffin mask 2002/13, with one lappet showing the striated male wig, the other the underlying layer with a female vulture headdress.

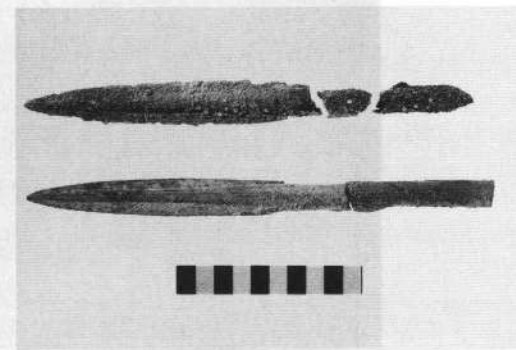




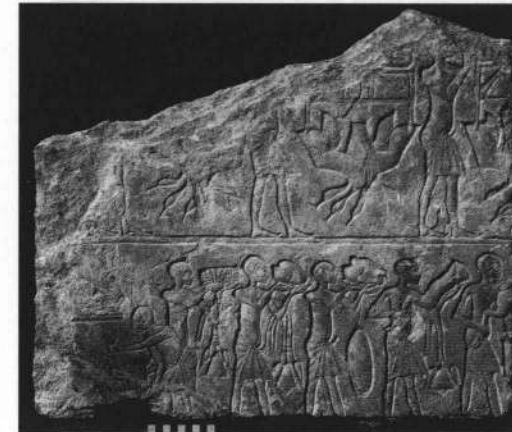
Pl. 5. General view from the east over the forecourt. On the left, the four niches in the south wall, on the right the Coptic structure.



Pl. 6. Relief fragment depicting a storeroom guarded by Isis and Nephthys.



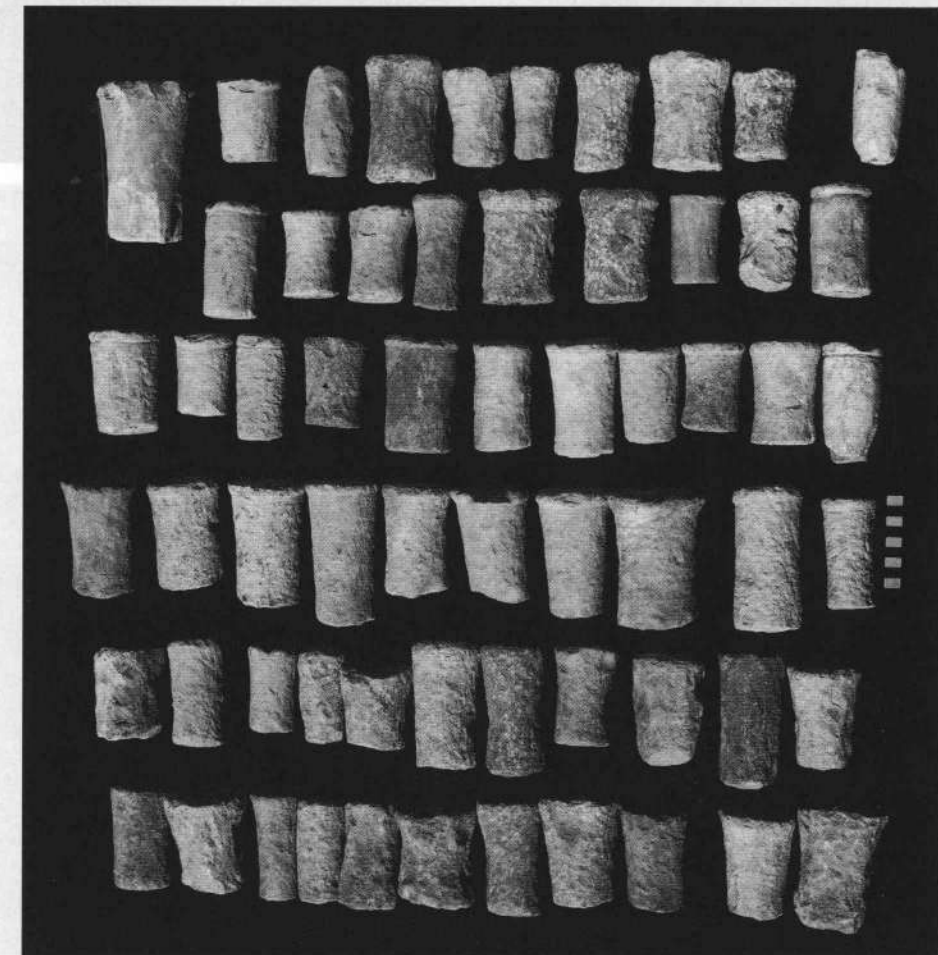
Pl. 7. Two bronze lanceheads found in the substructure.



Pl. 8. Relief fragment representing offering bearers, found in burial-complex 2002/16.



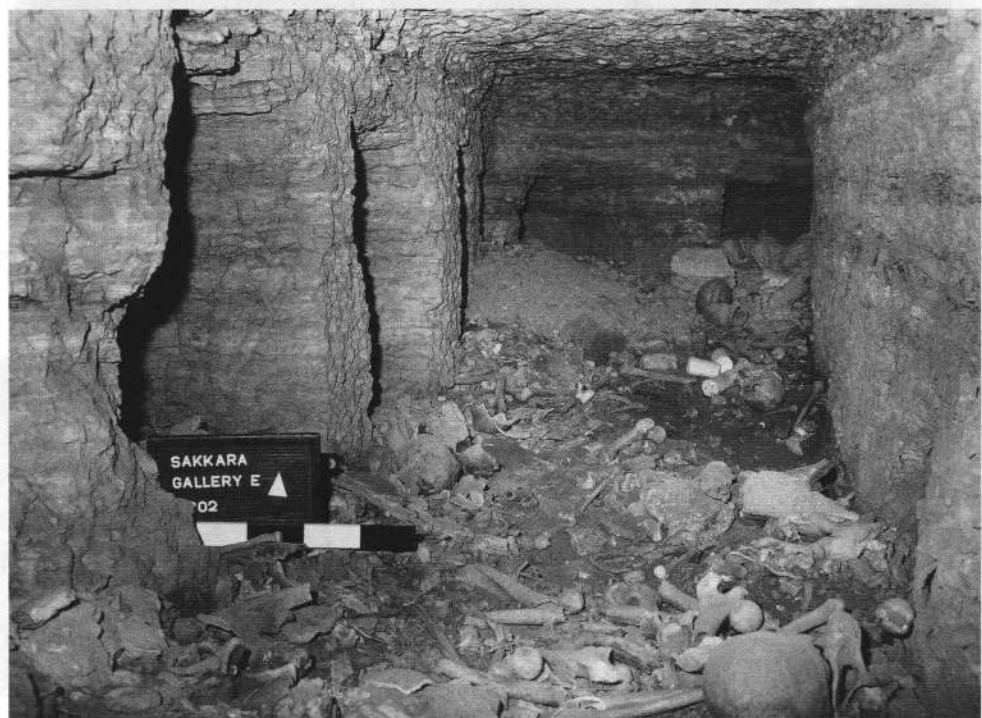
Pl. 9. Relief fragment inscribed for Meryiunu, found in burial-complex 2002/17.



Pl. 10. Archaic dummy vessels retrieved from the subterranean galleries and chambers.



Pl. 11. Gallery B, looking east towards the break-through to burial-complex 2002/16, after excavation.



Pl. 12. Gallery E, looking north, prior to excavation.



Pl. 13. Inscribed New Kingdom amphora fragment.



Pl. 14. Complete Archaic wine jar, from Gallery E.



Pl. 15. The only undisturbed skeleton, as found on the floor of Chamber F.