Uncovering part of the western edge of the alleged “dry moat” was the chief objective of work carried out by the Polish-Egyptian archaeological mission at Saqqara between September 14 and October 31, 2002.1) Further clearing was also undertaken in the eastern part of the excavated area, particularly in connection with work on a new overall map comprising all the previous and current discoveries.

Particular categories of finds, especially pottery, human remains and botanical matter, continued to be studied by specialists.

1) The mission staff included: Prof Dr. Karol Myœliwiec, Director; Prof. Dr. Maria Kaczmarek, anthropologist; Dr. Kamil Kuraszkiewicz, Egyptologist; Dr. Mariusz Jucha, archaeologist; Dr. Jaros³aw Zieliñski, biologist; Dr. Salima Ikram, Egyptologist-palaeozoologist; Mrs. Teodozja Rzeuska and Mrs. Agnieszka Kowalska, Egyptologists; Ms Ma³gorzata Radomska and Mr. Hendrik Jan Top, archaeologists; Ms Beata B³aszczuk and Mr. Mieczys³aw Niepokólczycki, architects; Mr. Zbigniew Godziejewski, Ms Urszula Dąbrowska, Ms Izabela Uchman and Mrs. Teresa Żurkowska, conservators; Mr. Waldemar Jerke and Mr. Maciej Jawornicki, photographers. The Supreme Council of Antiquities was represented by Mr. Ezzat Sayed Ahmed Sherif, inspector of the mission.

Our work would never have been accomplished without the support of Dr. Zahi Hawass, Secretary General of the Supreme Council of Antiquities, whose competence and admirable efficiency engender our particular thanks. We should also like to express our gratitude to Mr. Ahmed El-Haggar, General Director of Saqqara, and Mr. Kamal Wahid, Chief Inspector of Saqqara District, for their understanding of our problems and assistance, particularly in matters of preservation and consolidation of monuments and objects discovered during this campaign.

Thanks are also due Mr. Magdy El-Ghandour from the Supreme Council of Antiquities for competently helping to save time and energy.
Fig. 1. Excavation in squares 1715 and 1716
(Photo M. Jawornicki)
EXPLORATION OF THE LATE NECROPOLIS

With the purpose of extending the E-W cross-section through the site running from the enclosure wall of the step pyramid in the east to the alleged “dry moat” (a deep longitudinal depression in bedrock) in the west, the mission started work in what is square 1716 of the present 10-by-10 m site grid, hoping to trace the western edge of the alleged “dry moat”.

Trial pit III containing an Old Kingdom burial shaft had been excavated during the first campaign in 1987.\(^2\) It lies on the eastern slope of the hill extending southwards from the tomb of Ptahhotep. Originally, the idea was to excavate squares 1716 and 1715 extending from the hill in the direction of the “moat”; archaeological circumstances required the extension of the trench further eastwards, that is, into the western half of square 1714, covering in effect an area 25 m (E-W) by 10 m (N-S) (Figs. 1, 2).

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\(^2\) K. Myśliwiec and T. Herbich, with a contribution by A. Niwiński, “Polish Research at Saqqara in 1987”, *EfTrav* 17 (1995), 178-180 and 202-203 (Fig. 27).
The structure of archaeological strata in this area varies. In the western end, i.e., in square 1716, a layer of compact dkka (mixture of flint, rubble and crystallized sand) underlies a thin layer of sand, which also fills some deeper cavities. These cavities lead either to superstructures of Old Kingdom shafts or to depressions where Ptolemaic Period (?) burials are to be found. Some of the late burials were made in the upper parts of shafts adapted for this purpose in various ways; for example, a pit for a simple wooden coffin had been hewn between two shafts (nos. 56 and 58). The upper part of each shaft is built of irregular stones and mud brick bonded in mud mortar. These poor structures have no outer face as a rule, being embedded in the dkka. The only feature to preserve a mud coating (2-3 cm thick) on the outside of the wall is a structure situated south of shaft 54, which is the largest and the best preserved of the shafts sunk into the dkka layer.

By contrast, the stratum featured in squares 1715 and 1714 in the eastern part of the area explored this season is a thick layer of pure sand accumulated in front of a rocky facade. It has been explored to a depth of c. 5 m without reaching the bottom. The sand stratum contains an exceptionally dense agglomeration of late (probably mainly Ptolemaic) burials (Fig. 3). Together with the burials found in the western sector of the site, the total amounts to 136, which constitutes more than one-third of all the burials (353) registered by the mission to date (from 1987). Included in this number are the remains of three bodies dating doubtless from the Old Kingdom (nos. 337, 342a and b), found inside rock-hewn funerary chapels 13 and 14 (see below), as well as two unusual burials of uncertain date (nos. 348 and 351, see below). Why this spot enjoyed such immense popularity in the Ptolemaic Period will have to remain an open question for now.

Many of the skeletons, mummies and coffins followed an east-west orientation with the head to the west (Fig. 4). This arrangement was not the rule, however, given that many undisturbed burials from the same context represented a north-south orientation with the head mainly to the south. The skeletons in a considerable number of the burials from the top of the sand layer are poorly preserved, unlike the bodies found lying in the lower layer. The upper layer remains have obviously been disturbed by those seeking, ineffectually, to penetrate into the deeper strata.

Fig. 3. Upper stratum of the Late Necropolis in square 1715, viewed from the east (Photo M. Jawornicki)
Fig. 4. The Late Necropolis in squares 1714 and 1715 (lower layer) and Old Kingdom shafts in square 1716 (on far left)
(Drawing B. Blaszczyk)
The variety of burial types is considerable. The following classification includes only burials attributable to one of the types (those too poorly preserved to be attributed – 52 in all – escape this statistic).

A. Skeletal burials, sometimes with remains of reed mats found under the body or covering it. Only two burials could be identified as skeletal beyond any doubt (nos. 348 and 351, see below). Some of the badly damaged corpuses could possibly belong to this category, e.g. nos. 304 and 344 (see below) with traces that could be recognized as a form of primitive mum-mification.

B. Mummies, that is, bodies wrapped in white linen, bound with thin straps of similar material, without any decoration, generally deposited directly in the sand (Fig. 5); 96 burials of this type were identified, but the number may still grow.

C. Coffins made of various materials, containing either a skeleton or a mummy, or else a mummy overlaid with cartonnage. The cases come in three varieties: a) oblong wooden boxes made of plain planks, usually slightly broader at the shoulders, containing either a skeleton (nos. 348, 351, see below) or, more frequently, a mummy; b) anthropoid wooden coffins (six burials), with a lid preserving a relief rendering of the head and occasionally solely the face. The surfaces were painted white at the very least; the most sophisticated ones bear polychrome decoration, usually a vertical inscription written in black on a white- or yellowish-colored band, against a red

Fig. 5. Three mummy burials next to one another – nos. 288, 289 and 314 – in sector 1716, viewed from the south (Photo M. Jawornicki)
Fig. 6. Two wooden coffins – burials 335 and 336 – from the Late Necropolis (square 1715), viewed from the northeast (Photo M. Jawornicki)

Fig. 7. Two terracotta coffins – burials 345 and 346 – from the lower stratum of the Late Necropolis (square 1714), viewed from the northeast. The entrance to the Old Kingdom chapel 13 can be seen in the west face of the “dry moat” (Photo M. Jawornicki)
background. The polychromy is preserved, at least partly, on coffins nos. 269, 295, 335, 336, 340 and 341. In one case (no. 295), the outside of the case bottom is decorated. The inscriptions usually contain the epithets of Osiris or other gods and the name of the owner, but the lower end, where the name of the deceased should occur, has been destroyed in this case;

c) oval coffins made of poorly fired clay (red surface and thick black core). The flat lids are decorated with a human face molded in relief. A pair of such coffins, containing mummified remains (burials 345 and 346), was found in square 1714 (Fig. 7).

Some mummies, found either in coffins or directly in the sand, were furnished with a cartonnage, of which only scant remains are usually preserved. Three of the nine cartonnage cases identified this year were found inside coffins. The best preserved cartonnage comes from an anthropoid wooden coffin no. 269. Some skeletons found lying in the sand still had gilded covers of eye sockets and remains of blue paint on the gypsum over their heads.

The position of the mummified bodies varies. Three variants occur repeatedly: hands crossed on the chest (like Osiris); hands resting on the pelvis; and hands extended laterally alongside the body. One
exception from the above is represented by burials nos. 304 and 344, where the body has been laid on one side with flexed legs, in both cases resting on burial mats. Although some evidence of primitive mummification may be observed, it is equally possible that these were skeletal burials. In another case (burial 325) the hands are positioned one (left) on the pelvis, the other on the belly. Finally, there is burial 340, in which case each leg of the mummy had been wrapped separately.

Multiple burials comprised most frequently two mummies or coffins lying next to one another (335 and 336 – Fig. 6; 340 and 341; 345 and 346 – Fig. 7). Some cases of multiple burials of three (nos. 288, 289 and 314 – Fig. 5; 329, 330 and 331) and four (nos. 317, 319, 320, 321) were also recorded, in the latter case there being the possibility of a fifth burial (no. 322) having been placed next to the group of four (the condition of the bones precludes definite determination).

Two of the above mentioned burials (nos. 348 and 351 – Fig. 8) deserve special attention in recognition of their uniqueness as regards architecture and body arrangement. With no evidence of mummification whatsoever, they must be considered as skeletal burials. Their setting, however, finds no parallels in the excavated part of the cemetery.

The burials are both in square 1716, near the present western edge of the excavation. Their orientation was longitudinal with head to north facing east. The skeletons lay in simple wooden coffins devoid of lid, set in rectangular pits lined with irregular slabs of local limestone (resembling in this the Old Kingdom structures) and with mud bricks bordering the upper edge of this “tomb”. The width of each structure corresponded to the width of the coffin, but the length in both cases exceeded that of the coffin. In burial 348, the space extended northwards into a broader rectangular square which seems to have originally belonged to a shaft. What is unusual also is the position of the skeletons inside the coffins. Both bodies are supine, forced back into the northern end of the coffin so that the head is pushed to the side; the legs were flexed at the knees (cf. Fig. 8). These two burials are unusual for both Ptolemaic and Old Kingdom burial customs; the architecture, however, seems closer to Old Kingdom traditions rather than Ptolemaic ones. Unfortunately, no grave goods have been found with the burials to confirm this dating.

Indeed, most of the burials contained no funerary equipment. Only one of the mummies (burial 283), damaged in its upper part, had seven blue faience amulets representing various Egyptian deities, mainly Re, Horus and Isis (Fig. 9). A similar amulet, figuring a falcon-headed god with solar disc on top of his head, was found in the same stratum, but out of the original context.

Another discovery from the upper stratum of the excavated burial ground, at the interface of squares 1715 and 1615, near their eastern edge and c. 1 m below ground surface, is an assemblage of fragmentary bronze (copper?) figurines. A few of the 129 fragments belong to highly eroded, but reconstructable figurines representing Osiris (5-6 figurines), Ptah (1) and a goddess (1) (Fig. 10); 14 pieces were identifiable as vessel fragments, while 74 small bits could not be attributed at all. The best preserved piece is a figurine of the Apis bull, provided with a dowel originally meant to fix the statuette to a (wooden?) base. A fragmentary small base of this kind was also found in the assemblage. A total of 9-11 figurines has been identified in this material.
Fig. 9. Faience amulets from a mummy burial (no. 283) in the Late Necropolis (Photo W. Jerke)

Fig. 10. Selection of fragmentary figurines from a deposit of bronze (?) objects found in the Late Necropolis (Photo W. Jerke)
As stated above, the sand layer in the western part of the excavated area (i.e., square 1716) is relatively shallow, not exceeding c. 0.8 m. Underlying the sand is an irregular layer of dakka that accumulated over the bedrock, in which the Old Kingdom shafts were hewn (cf. Fig. 4 for plan, Fig. 3 for general view from the east). Two shafts were found in this square: a big shaft, no. 54, that was identified in 1987 and excavated this season, and a smaller shaft, no. 57, situated further to the northwest.

Shaft 54 turned out to be 9.5 m deep. It was associated either with a mud-brick structure, remains of which were found south of the shaft, or with chapel 13, which was hewn in the rock near the bottom of the shaft behind its eastern wall. The upper part of the shaft, which is a square measuring 1.5 m to the side, was constructed of irregular blocks of local limestone down to a depth of 1.70 m. For the sake of exploration safety, the walls had to be reinforced with an additional thickness of similar blocks.

Just behind the eastern wall of this shaft (and 9.5 to 10 m away from the west edge of the excavation), the surface of the rock forms a few small irregular shelves that descend gradually toward a place, where the rock starts sloping regularly for about 2 m toward the border of a deep depression. The edge, running longitudinally, constitutes the top of a rocky façade which resembles that discovered in 2000 some 45 m from this spot to the east. Its top is only 20 cm higher than that of the eastern facade. One is persuaded that the two facades border the western part of the “dry moat”, which is also to be found on the other three sides of the “step pyramid”.

Like the eastern façade, the western one features a sequence of rock-hewn Old Kingdom tombs. It does not have, however, the eastern façade’s “architrave”, being recessed instead under the sharp outer edge. Explorations this season have uncovered the vertical face of the rock to a depth of c. 1.90 m below the overhang. Digging deeper will first require drillings to check the overall depth of the “dry moat”. The proposed trench will also need to be wide enough to ensure proper terracing of the dig for safety reasons.

A narrow entrance in the façade (H. 1.57 m; W. 0.70 m; jambs 0.60 m thick) leads to a chapel (no. 13) hewn in the rock (Fig. 11). The threshold of the entrance is situated 1.90 m under the rock overhang. In front of the entrance, especially to the north of it, the rock face slopes away to the east, disappearing under the sand. There is a small rectangular pit (0.97 m (N-S) by 1.00 m (E-W); 30 cm deep) hewn in the rock just in front of the threshold. Another larger depression adjoining the rock face south of the entrance (the sole visible edge on the north is 1 m long) may turn out yet to be a shaft.

The chapel this entrance leads to is hewn in extremely flaky rock. Its shape is irregular (approximately rectangular, cf. Fig. 11: c. 7 m (E-W) by c. 3 m (N-S); c. 1.7 m high). There is no decoration on its walls. The accumulation found inside the chapel consisted of the usual rubble (stones, sand, humus); it had poured in

through the doorway in a sloping fill that virtually closed off the entrance. A medieval glazed oil lamp (cf. Fig. 1 on page 144 below) found atop the fill bears witness to earlier, less than welcome visitors to the tomb. The robbers had entered the chapel through a hole that they had pierced in the western wall of the chapel from shaft 54.

Inside the chapel there are eight shafts hewn in the rock floor (Fig. 12; cf. Fig. 11). Five of these have been explored in this campaign (Figs. 13, 14). Counting from the entrance, these are: 13/4, 13/2, 13/1, 13/8, and 13/7 (the latter being the westernmost shaft in the south row). Shafts 13/6, 13/3 and 13/5 were not explored this season. The investigated shafts turned out to be all different:

13/1: depth 3.4 m; upper level 0.9 by 0.9 m; funerary chamber to west;
13/2: depth 4.6 m; upper level 0.7 by 0.9 m; funerary chamber to west; wooden coffin inside the chamber;
13/4: depth 3.3 m; upper level 0.9 by 1.0 m; funerary chamber to east;
13/7: depth 4.9 m; upper level 1.3 by 1.3 m; funerary chamber to east with a burial pit in the shape of a coffin inside it;
13/8: depth 2.3 m; upper level 1.0 by 1.0 m; no burial chamber.

5) Cf. the pottery report by T.I. Rzeuska in this volume, Fig. 1.
In the south wall of chapel 13 there is a large irregular hole, obviously cut by the robbers, opening into chapel 14. This chapel was also irregular in shape, additionally subdivided by pilasters of sorts hewn in the chapel’s south and north walls (cf. Fig. 11). The western part is a rectangle measuring c. 2.5 by 2.5 m.

A big “false door” was inserted into the western wall (cf. Fig. 14).\(^6\) The “door” is made of white limestone and is decorated with inscriptions and representations of the deceased, all carved in relief and perfectly preserved with remains of black paint even visible in places (Fig. 15). The object measures 1.6 m in height, 0.88 m in width, and 0.28 m in depth. It was inscribed for an Ikhi (“fair name” Mery) whose titles are as follows: “sealer (treasurer) of the King of Lower Egypt, overseer of the residence, god’s treasurer (sealer) or boat’s captain, expedition leader in two great boats, regulator (selectioner ?) of the crew of the ship, sole friend, overseer of the scribes of the crews, chamberlain”.

In front of the stela, there is a large shaft (1.5 by 1.5 m at the top). To a depth of 9 m it was empty. The fill from this level down consisted of pure sand under which there was rubble containing humus and

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\(^6\) Cf. contribution by K. Kuraszkiewicz in this volume.
fragments of decorated and undecorated limestone blocks: nine big pieces and some 20 small fragments belonging to the two jambs that had originally flanked the "false door". These fragments yielded further epithets of Ikhi: "attendant of the pyramid of Teti" and "attendant of the pyramid of Pepy I". The other decorated fragments (two big ones and three small ones) seem to have belonged to the revetment of a wall, possibly the south face of the west section of the chapel, where there are but scarce traces of white paint. A thin layer of white paint is preserved in much better condition on the opposite north wall. The shaft was explored down to a depth of almost 14 m, where the rock became too friable for further exploration without proper reinforcements. A big unfinished "false door" lies along the south wall of the shaft between the thirteenth and fourteenth meter. It was made of good quality limestone, but is void of any decoration. Its original purpose appears obscure.

The eastern section of the chapel is larger: 4.5 m (N-S) by 3.8 m (E-W), and its lateral, north and south, walls bear many traces of white paint. In the east end it is blocked with a kind of screen wall built of white limestone blocks; this wall is 1.85 m high and 3.8 m wide. Through an entrance in its center one enters another

Fig. 13. Section A - A (east-west) through chapel 13 and shafts 54 and 56
(Drawing B. Błaszczyk)
room, presently filled with sand, where the putative entrance from the rocky façade should be expected.

A long strong wall along the outside of the façade has been erected to block the excavated feature. Wooden supports were installed to reinforce the cracked ceiling of the eastern part of chapel 14. The entrance to chapel 13 has been closed off with an iron door and an iron grill has been fixed at the top of the reinforced shaft 54.

**SPECIALIST STUDIES**

Specialists continued work on three particular categories of finds: skeletal remains, pottery, and botanical matter. Their findings are presented in separate contributions in this volume.7) Egyptologists prepared for publication the objects found during the season.8)

Over the course of the season a new overall map was prepared covering the area excavated by the mission to date. It was necessary for this purpose to clear some parts of the area excavated in previous campaigns, e.g. the space between shaft 51 and the enclosure wall of the “step

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7) Cf. reports by M. Kaczmarek, T.I. Rzeuska and J. Zieliński in this volume.
8) Cf. contribution by A. Kowalska in this volume.
Fig. 15. The “false-door” of Ikhi/Mery in the west wall of chapel 14
(Photo W. Jerke)
CONCLUSIONS

The results of the present campaign have proved the existence of a “dry moat” running from north to south in this part of the site. Its western facade, like the eastern one, contains rock-hewn tombs that were used during the Sixth Dynasty. The distance between the eastern and western edges of the moat is about 45 m at the top, doubtless diminishing toward the bottom of the “moat”, if the inward inclination of the facades further down is any indication.

9) Cf. contribution by K. Kuraszkiewicz in this volume.