The 2006 campaign was devoted, among others, to studies and documentation of the late Old Kingdom necropolis extending between the enclosure wall of the Step Pyramid complex and the tombs of Merefnebef (Myśliwiec et alii 2004) and Nyankhneferterem (Myśliwiec 2005b: 197-211; Kuraszkiewicz 2004: 123-125), in preparation for publishing the fourth volume of the Saqqara series. During the previous ten campaigns of excavation, over 100 shafts have been identified; these are being consecutively explored, studied and documented.

The preserved remains of superstructures demonstrate that the area was occupied by a group of brick mastabas with cult places on their east side, in some cases provided with limestone elements: false doors, offering tables, etc. A typical mastaba contained at least one shaft where the body of the deceased was buried and, occasionally, also a ritual shaft, without a burial (Rzeuska 2002: 377-402).

As the mastabas were destroyed (probably on more than one occasion), it is difficult to attribute most of the shafts to particular funerary complexes. However, certain groups of shafts are arranged in longitudinal lines with other groups interspersed between them. This suggests that the tombs were originally built (as should be expected) in roughly parallel rows; in time they were extended and additional shafts were hewn into the cores of the mastabas.

Due to the poor state of preservation of the superstructures, it is often impossible to establish the relative dating of the mastabas or even of the shafts. Because of lack of relevant textual and iconographic dating criteria, the more precise and absolute dating of these structures depends mainly on ceramological data (Rzeuska 2006: esp. 380-384; Kuraszkiewicz 2007: 169-175). It should be kept in mind, however, that pottery as well as small objects could have been displaced as a result of robberies and natural processes (see part B, below).

The present paper discusses some aspects of the best preserved parts of the funerary structures discovered so far, namely their burial shafts.

**SHAFTS**

Most of the burial shafts are hewn in bedrock [*Fig. 1*] (exceptions discussed below). The uppermost parts of the shafts,
above bedrock level, were built of bricks or small, more or less irregular stones, then covered with mortar and, at least in some cases, whitewashed. Intentional use of dressed stone in the construction of the shafts has not been recorded.

The shafts differ significantly in the horizontal dimensions (from c. 1 m to over 2 m²) as well as in depth. The larger shafts are in general also deeper, and have larger and more elaborate burial chambers, although there are exceptions from these rules. Among the shafts dated to the early phases there are both large and small ones.

It seems that the dimensions of the shafts depended mainly on economic reasons; obviously not everyone could afford a large, expensive shaft. Apart from this, technical factors (discussed below) may have also played a role.

Many shafts have series of small hollows, spaced at approximately 0.50 m, cut in two adjoining walls (large shafts) or in opposite walls (smaller shafts); these were footholds for descent into the burial chamber by means of a rope.

In a few cases, an additional small niche is hewn in one of the shaft walls, usually at a higher level than that of the burial chamber. It seems possible that the niches functioned as a kind of serdab (cf. Drioton, Lauer 1958: 214-215, Pls II, IIIb, VIIa), although in most of them the original content has not been found.1

Several shafts have a "narrowing" immediately above the ceiling of the burial chamber – a kind of horizontal shelf with small, more or less irregular holes leading to the lower section. During exploration, the rough, uneven upper surface of the shelf and irregular opening often give the impression of an unfinished, empty shaft. It is therefore tempting to see in this feature a "false bottom" intended to deceive potential robbers.

### BURIAL CHAMBERS

A burial shaft ends almost always with a single burial chamber, only exceptionally with two (e.g. Shaft 39).

In many cases the burial chamber is situated at the bottom level of the shaft or slightly below it, seemingly following an earlier custom (cf. e.g. Reisner 1942: 85-103); however, in a number of shafts the

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1 A possible exception being the burial shaft Ny-Pepy (Sh. 32), where wooden figurines were found in the niche, see Myśliwiec 2008.
burial chamber is hewn above the bottom level, and the difference in levels can be significant, up to c. 1 m [cf. Fig. 2].

Alluvial sediments at the bottom of many shafts and burial chambers are proof of flooding, most probably during rainy periods known to have occurred in the terminal phase of the Old Kingdom. One may suppose, therefore, that the shafts reaching below the level of the floor of the burial chamber were intended as a kind of drainage device, meant to prevent rainwater from entering the burial chamber and destroying its contents (similar solution attested in Giza, cf. Reisner 1942: type 1r, Fig. 32, 92 and type 6, Fig. 24, 90).

The walls of burial chambers are hewn in bedrock and none was ever lined with stone blocks. When hewing a burial chamber, workers often took advantage of distinct bedrock structure consisting of alternate hard and soft layers of stone. By removing a soft layer and uncovering the bottom surface of the overlying harder one, they obtained a flat, relatively stable ceiling for a burial chamber.

Burial chambers are usually quasi-rectangular in plan, with the longer axis always oriented N-S, according to Old Kingdom burial practice (Ikram, Dodson 1998: 24, 109-113, 155-156, 195-196). In the excavated part of the necropolis, burial chambers are situated to the north, south, west or east of the shaft [Fig. 3]. When situated west or east, a burial chamber can be T-shaped (i.e., extending more or less symmetrically both north and south of the shaft), L-shaped (when extending only to the north or south of the shaft) or I-shaped (when the chamber is situated either north or south of the shaft). The majority of the shafts have the burial chamber on the western side, and the number of the T- and L-shaped chambers is nearly equal. Less common are the chambers situated on the eastern side of the shaft, these being predominantly L-shaped. The I-shaped chambers occur relatively seldom in this part of the

Fig. 2. Situation of the burial chamber in relation to the bottom of a shaft (vertical cross-sections) (K.O. Kuraszkiewicz)

2 In some cases the evidence visible in the shaft's bottom indicates that its hewing has been aborted for some reason, which means that the shaft was initially planned as reaching deeper below the burial chamber's floor level.

3 However, the rule of placing a body on its left side, with head to the north facing east, was not always observed; several burials have been noted to have a different orientation. Nonetheless, in burial chambers, they are laid consistently oriented N-S.
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There is no obvious relationship between the dating and position of the burial chamber: among the numerous shafts that date from the late Sixth Dynasty various configurations of burial chamber occur. It seems, however, that the arrangement of earlier, neighbouring shafts could have been a factor in determining the position and shape of the burial chambers. In some cases, workmen hewing a new shaft apparently knew in advance the position and layout of the chambers in neighbouring shafts. In others, they failed to have this knowledge and accidentally broke into neighbouring chambers, subsequently trying to redress the situation by changing the direction of the wall they were hewing and occasionally filling the break with mortar. The same factors possibly influenced the depth of some shafts as well.

Burial chambers differ in dimensions, but in general they can be classified as small (i.e., intended for just a coffin, with minimum space provided around it) or large (spacious room for a sarcophagus with plenty of space between it and the walls). Large burial chambers are usually

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Fig. 3. Types of burial chambers
(K.O. Kuraszkiewicz)

4 This type of construction, dating from the late Sixth Dynasty, the "tombeau en four", is well known from other sites (cf., e.g., Jequier 1929: 21-22, 39, 56, 64, 116, Figs 2-3, 34, 73, 84, Pls II, VI bis). 2 In some cases the evidence visible in the shaft's bottom indicates that its hewing has been aborted for some reason, which means that the shaft was initially planned as reaching deeper below the burial chamber's floor level.
provided with a stone sarcophagus or burial pit, that is, a rectangular depression hewn in the floor, which seems to be a cheaper alternative to a sarcophagus. Only in one case (Shaft 51), the burial pit is lined with slabs of fine limestone and south of it a separate compartment for canopic jars is hewn. Canopic jars were found more often, although they are by no means a common find. Small burial chambers, many of which were found intact, contained usually a rectangular coffin made of reed or wood, and only in a few cases was there a burial pit in them.

A special solution is a small burial chamber (in all attested examples of the I-type) connected to a small (approx. 1 m²) shaft, both built of reused bricks and small fragments of tafl, above bedrock level, in a depression dug in dakka, a type known also from other parts of the Memphite necropolis (Myśliwiec 2005c: 147-160; Fig. 4. Hypothetical reconstruction of shaft and burial chamber in Corridor 3: plan (A) and vertical cross-section (B) (K.O. Kuraszkiewicz)
forthcoming b). The evidence found in the western part of the excavated area suggests that at least in some cases the coffins were inserted into the burial chambers through the shaft, which in such cases could be only insignificantly higher than the roof of the chamber itself (Burials 348, 351; Myśliwiec 2003: 118-119, Fig. 8; Saqqara III, cat. nos 295-296).

Deserving mention is an unfinished rock-hewn structure, the so-called Corridor 3, situated in close vicinity of the Netjerkhet enclosure wall, significantly below the level of the well-dated structures of the early Sixth Dynasty (Myśliwiec 2005c: 152; 2005a: 6-7: 2007: 160-168; Welc 2007: 176-181; Rzeuska 2007: 186-189; on the chronology of this part of the necropolis, Kuraszkiewicz 2007). It consists of a ramp falling to the south and ending in a partly hewn, underground chamber. The steep angle of the slope seems to exclude the possibility that the ramp was intended for descent (e.g., during the funeral) into the chamber, but rather for lowering therein a heavy object (e.g. a sarcophagus). In front of the entrance, across the ramp, there is a deep groove which could have been intended for holding in position a stone portcullis [Fig. 4]. These features, as well as close analogies found in the central mastaba field at Dahshur (especially mastabas I/1 and II/1, cf. Stadelmann et alii 1993: 272-283, Abb. 10-13; also Gundacker 2006: 175-177, Fig. 37; 181-194, Fig. 39) and Meidum (Reisner 1936: 206-209) suggest that Corridor 3 can be identified as an unfinished substructure of a late Third-early Fourth Dynasty mastaba. If so, the sloping shaft was intended as a "construction ramp", which, after the sarcophagus had been lowered, would have been filled with rubble and cased with masonry. It can be assumed that the original intention was to create a T-shaped shaft would have been created, with rails for the portcullis in its south wall, which have not been executed before the work was abandoned. If this interpretation is correct, the case would be particularly worthy of attention, since until now Fourth Dynasty structures, generally rare at Saqqara, seemed to have been entirely absent from the area west of the Step Pyramid complex and so close to it for that matter. Certain features do not exclude an earlier dating of this structure (Welc 2007; and contribution in this volume); the stratigraphy of the area, however, is not conclusive in this respect.

CONCLUSION

It seems that the size, position and orientation of most burial chambers in this necropolis cannot be accepted as dating criteria; these aspects evidently depended chiefly on economic and technical reasons. However, an interpretation may be proposed for the practice of hewing a chamber above the bottom level of a shaft. Whenever more precise dating, based on pottery, was possible, shafts of this type were attributed to the final phases of use of the Old Kingdom necropolis (Rzeuska 2006). It may therefore be supposed that the shafts provided with a drainage "reservoir" below the level of the burial chamber were hewn significantly more often in the final phase of the Sixth Dynasty, in response to occasional heavy rains which must have posed a difficulty of increasing severity in the times of the late Old Kingdom.5

FRAGMENT OF A FALSE DOOR FRAME OF A PRIESTESS OF HATHOR

A decorated limestone block found in 2006 provided an apt illustration of the problems connected with the dating of the shafts. The block is a fragment of a jamb once framing the niche of a false door [(S/06/12), Fig. 5; see also above, Fig. 6 on 161]. Another part of this jamb was discovered in 1998 (S/98/24.P, in Shaft 2 (grid square 2003/2004), at a depth of 7.70 m; cf. Kuraszkiewicz 2002: 363-364, Fig. 9, Pl. 21). The two parts of the same jamb were found deep in the fill of the two shafts, which are separated by more than 15 m. It is therefore evident that material for the fill of the shafts was moved considerable distances and there can be no certainty that either of the two shafts actually belonged to the owner of the jamb. The same remark concerns other objects found in the shafts.

The presently discovered fragment lay at a depth of 4.34 m in the fill of Shaft 101 (grid square 2002). It is a block of fine, white limestone measuring 66.5 cm (height), 13 cm (max. width), 33 cm (max. thickness). Only one face of the block is smoothed, the others are left roughly worked. The smoothed side (8-9 cm wide) is decorated with a single column of inscription and figural representations carved in sunk relief some 2 mm deep. A small figure of the deceased is shown facing right below the inscription. The woman is depicted with one arm loosely by her side, the other bent at the elbow and holding a long-stemmed lotus blossom. Her dress is a long robe with shoulder straps, falling from beneath the breasts to the ankles; she also wears a short wig and a broad necklace. Traces of yellow paint are visible on the woman's body, and remains of greenish-blue in the hieroglyphs.

Fig. 5. Fragment of false-door frame, S/98/24.P+S/06/12, respectively top and bottom (Photo P. Lelek)
The fragments S/98/24.P and S/06/12 join, forming the right jamb of a niche for a false door, which was at least 1.20 m high. The combined inscription on the two blocks reads:

\[ S/98/24.P \]

\[ \ldots \ jm\tilde{h}wt \ hr \ Wsjr \ nb \ Ddw \ hr \ Jnpw \ tpj-dw \ S/06/12 \ j丙jt-jxt \ njswt \ hmt-ntr \ Hwt-hr \ Jitj \]

\[ \ldots \ h\]onoured by Osiris Lord of Busiris and by Anubis Who-is-upon-his-hill, king's acquaintance (Jones, Index I: 327-328, no. 1206). priestess of Hathor (Jones, Index II: 540-541, no. 2012) Ikhti.6

The beginning of the inscription is missing, but the opening phrase of the offering formula or just the upper parts of the first two signs of the word \( jm\tilde{h}wt \) should be reconstructed there.

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