Child Burials at Saqqara
Ptolemaic Necropolis West of the Step Pyramid

MAŁGORZATA RADOMSKA

Abstract: The author analyzes the child burials from the Ptolemaic necropolis to the west of the Djeser pyramid in Saqqara. Issues of whether there was a separated child cemetery there in the Ptolemaic period and/or whether the burial practices with regard to children were different from those practiced for adults are discussed. To achieve these goals, the presence and location of possible clusters of child graves at the site as well as type of graves, burial practices and funerary equipment connected with sub-adults interments are examined.

Keywords: Ptolemaic Egypt, Saqqara, necropolis, child burials

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One of the most dramatic stories connected with the burial of children in the necropolis at Saqqara is described in the Complaint of Artemisia.¹ The text is one of the earliest known documents in Greek recorded on papyrus. This fourth century BC source came from the Serapeum. Addressing her plea to Oserapis, the distraught Artemisia cursed her husband for depriving her dead daughter of a burial and grave goods and asked that both her husband and his parents be denied a suitable burial.

The text, which is a source of information on the religion and burial practices of the Memphite community of the period, coupled with archaeological discoveries made on the western side of the Djeser pyramid complex in 2014, inspired the present examination of child burials from the so-called Upper Necropolis, superimposed on the remains of Old Kingdom structures and functioning from the terminal phases of the Late period through Greek and Roman times.² The importance of these finds is evident in view of the small number of well preserved burials from the period in Egypt, as emphasized recently in a publication edited by Marie-Dominique Nenna, devoted to child burials in antiquity.³

¹ Wilcken 1922: no. 1.
³ Nenna 2012 (Ed.); particularly, on the Saqqara necropolis, see: Ziegler 2012: 61–77.
One hundred of the 540 burials discovered in the Upper Necropolis until 2014 were sub-adult’s interments: from a newborn dead upon birth after 38 weeks of pregnancy (B. 663) through juveniles aged 18 years. According to anthropologists, the closure of the *synostosis sphen-occipitalis* is one of the main criteria for distinguishing sub-adult remains from those who survived above the age of 18 and died in adulthood. In the Saqqara sample, children (aged 0–14 years) make up 15% of the population (83 burials), but juveniles (aged 15–18 years) – only 3% (17 burials). The highest death rate, 31% of total sub-adults, was observed within the 4–7 years age group. It is by 3% more than that observed in the younger age group of 0–3 years (Tab. 1). Juveniles who anyhow belong to the group of sub-adults but are not children anymore, were excluded from statistics as an article is devoted to the child burials. They could appear only as a comparative material.

**Tab. 1.** Age distribution of burials excavated in the Saqqara West cemetery (Kaczmarek 2003: 157–158; 2008: 457–458, updated by I. Kozieradzka-Ogunmakin, personal communication).

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of individuals</th>
<th>Burial field number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foetal</strong> (38–39 weeks gestation)</td>
<td>1</td>
<td>B. 663</td>
</tr>
<tr>
<td><strong>Infants</strong> (birth to 12 months)</td>
<td>10</td>
<td>B. 515, 643, 430, 423, 98</td>
</tr>
<tr>
<td>6 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0–6 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than 3 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than 6 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6–9 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than 12 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Children</strong> (1–3 years)</td>
<td>17</td>
<td>B. 35, 184, 418, 487, 546</td>
</tr>
<tr>
<td>1.5 year</td>
<td></td>
<td>B. 46, 99, 162, 167, 189, 425, 456, 468, 601, 602, 642, 674</td>
</tr>
<tr>
<td>2–3 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Children</strong> (4–7 years)</td>
<td>31</td>
<td>B. 523, 556, 575, 584, 634, 681</td>
</tr>
<tr>
<td>4 years</td>
<td></td>
<td>B. 49, 73, 77, 144, 181, 195, 206, 226, 244, 254, 261, 320, 338, 404, 410, 412, 438, 467, 566, 585, 608, 624, 625, 673, 676</td>
</tr>
<tr>
<td>5–7 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Children</strong> (8–10 years)</td>
<td>7</td>
<td>B. 53, 85, 139, 183, 322, 347, 354</td>
</tr>
<tr>
<td><strong>Children</strong> (11–14 years)</td>
<td>6</td>
<td>B. 126, 185, 188, 318, 543, 627</td>
</tr>
<tr>
<td><strong>Children</strong> of indeterminable age</td>
<td>11</td>
<td>B. 1, 2, 4, 32, 33, 130, 229, 230, 247, 249, 282</td>
</tr>
</tbody>
</table>

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5 Kaczmarek 2012: 298.
ARCHAEOLOGICAL CONTEXT

An analysis of distribution of the child graves in the cemetery in question demonstrates their presence all over the site between the enclosure wall of the Djeser funerary complex and the western edge of the ‘Dry Moat’ (Figs 1–3). A clustering of these graves was observed in a relatively small area in front of the entrances to three cult chapels of Old Kingdom date: nos 7/8 (grid squares 1909 and 2009) (Fig. 2), 13 and 14 (grid squares 1714 and 1814) (Fig. 1).

The child graves discovered west of the pyramid enclosure were recorded in three layers: cut into the bedrock, in the superimposed layer of dakka⁶ and in the sand above it. The difference in altitude between the lowest- and the highest-lying burial was 10.6m (B. 681: H 44.97 m a.s.l.; B. 98: H 55.57 m a.s.l.).

According to Karol Myśliwiec, the Director of the project, the ground west of the pyramid enclosure wall falls away to the west implying that the absolute level of particular burials need not be a reflection of chronological sequence; consequently, specific groups of burials found in different contexts need to be dated individually. From the point of view of site stratigraphy, the lowest layer of the Upper Necropolis is constituted by mummies deposited in anthropoid burial pits hewn in bedrock, although their absolute level is much higher than e.g. that of evidently later burials in the “Dry Moat”.⁷

TYPE OF CHILD GRAVES

Child burials cannot be associated with any specific tomb architecture and the only cases of an architectural setting concern bodies intentionally interred in already existing structures. Of the 83 identified child burials, the largest group (56) was buried directly in the sand (Fig. 4) or dakka without a grave pit. Only in the case of 27 burials the state of preservation was sufficiently good for the grave type to be examined. The following types of interments were distinguished based on an analysis of this set.

The most common type was an oval pit cut to the size of the body in the dakka deposits (Fig. 5).⁸ In one case, where a child was buried with an adult (B. 566), the hollow was cut much larger, perhaps even for more bodies (Fig. 6); in another case (B. 99), the pit was longer than the child buried in it, hence it may have been intended originally for an adult (Fig. 7). It was standard practice to cover the wrapped and bandaged body with earth thrown directly into the pit. This kind of inhumations is represented by 17 burials (B. 1, 2, 49, 53, 73, 85, 98, 99, 167, 189, 261, 282, 566, 584, 585, 606, 608).

The second type was a rectangular structure of irregular blocks of white limestone encasing the interred body, recorded within existing structures from the Old Kingdom

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⁶ Dakka in archaeological parlance refers to a mix of mud brick, stone fragments, sand and pottery, compacted over the ages into a solid, practically petrified agglomerate.


⁸ E.g. analogous pits with child burials were discovered at a Late Roman necropolis in Ismant el-Kharab in Dakhleh Oasis: Bowen 2012: 357.
period, such as cult chapel walls. Burial 35 is the only example of a child grave located within the structure of the brick wall, namely that of a chapel no. 9 by the southeastern corner of shaft no. 14 (Fig. 8). A niche was first cut in the wall, the body interred and the opening blocked from the west with six reused limestone blocks. At the eastern end, feet of the deceased were surrounded with mud bricks laid in a semicircle. A flat limestone slab covered the grave; it proved to be a fragment of an anepigraphic offering table of Old Kingdom date (Fig. 9).

The third and fourth types were, respectively, oval pits cut into the walls of two thousand years earlier mastabas (Fig. 10) – represented by four burials (B. 185, 188, 347, 412) – and niche cut into the side of rock-cut burial shaft, closed with large blocks of limestone after the interment, as in burial B. 487 (Figs 11–12).

The last distinguished type were anthropoid-shaped burial pits cut in the rock, covered with flat limestone slabs, represented by two burials: B. 4 and B. 456 (Figs 13–14).

Eventually, in one case, two separate child burials (B. 467, 468) were laid to rest on top of slabs that had served as the covering of an adult male (B. 508).

BURIAL PRACTICES

Body orientation and position

Children were interred either singly, in twos or in groups of several individuals. Most of the burials (59) were single interments. In 16 double burials, there were five cases of two children in a grave, four cases of a child with an adult female and five cases of a child buried with an adult male. Children were also identified in two group burials, consisting of five bodies interred together (Fig. 15); adults were included in all of these graves.

Body orientation was discernible in 73 cases of burials with a good state of preservation. The predominant position was an east-west alignment of the body with the head to the west (55 cases) or to the east (three cases). Eight burials had the body aligned north-south, the head being to the north (five cases) or south (three cases). In seven cases, the recorded orientation was northeast-southwest, the head to the northeast in one case and southwest in six.

All interments were laid out supine, some differentiation being noted in the hand arrangement (indicated in Tab. 2). The predominant position was arms laid alongside the body and the palms of the hands placed flat on the pelvis (24 cases).

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9 Myśliwiec et al. 2004: Pl. II.
Tab. 2. Child burials at Saqqara: positions of arms and hands.

<table>
<thead>
<tr>
<th>Arms and hands position</th>
<th>Number of individuals</th>
<th>Burial field number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arms extended alongside the body, hands not identifiable</td>
<td>3</td>
<td>B. 418, 601, 606</td>
</tr>
<tr>
<td>Arms extended alongside the body, hands along thighs</td>
<td>2</td>
<td>B. 98, 625</td>
</tr>
<tr>
<td>Arms extended alongside the body, palms flat on the upper part of the thighs</td>
<td>7</td>
<td>B. 144, 415, 467, 487, 546, 585, 602</td>
</tr>
<tr>
<td>Arms extended alongside the body, hands flat on the pelvis</td>
<td>24</td>
<td>B. 33, 116, 126, 139, 162, 183, 185, 254, 261, 282, 320, 338, 347, 468, 523, 584, 608, 634, 642, 670, 673, 674, 676, 681</td>
</tr>
<tr>
<td>Arms crossed over the chest, palms flat on the shoulders</td>
<td>5</td>
<td>B. 425, 438, 456, 575, 624</td>
</tr>
<tr>
<td>Left arm alongside body and palm on the pelvis, right arm bent at elbow at the lowermost ribs, palm pressed against left flank</td>
<td>1</td>
<td>B. 318</td>
</tr>
<tr>
<td>Not identifiable</td>
<td>42</td>
<td>B. 1, 2, 4, 32, 35, 46, 49, 53, 73, 77, 81, 85, 99, 130, 167, 181, 184, 188, 189, 195, 206, 226, 229, 230, 244, 247, 249, 322, 354, 404, 410, 412, 423, 430, 515, 543, 556, 566, 627, 643, 663, 668</td>
</tr>
</tbody>
</table>

Body treatment

Most of the 83 recorded child burials were in a satisfactory state of preservation. The damaged burials consisted of loose bones in fragmentary condition, mixed with scraps of bandages. Small children’s bones, especially in the facial part of the skull, were crushed under the pressure of sand, dakka or stone slabs covering the bodies.

Mummification processes were recorded for 63 bodies, while the remaining 20 were skeletal inhumations. Anthropological examination of the remains identified two techniques of body mummification. One way was to pour liquid hot resin copiously over the bandaged body repeatedly in the course of the bandaging. A thick, burned, black mass was formed in effect, solidified with the bandages and shroud to the point that it was impossible to identify individual anatomical features. The other technique called for pieces of bandage to be dipped in hot liquid resin and then wrapped around the body (e.g. B. 183). Several layers of bandages of different quality, both new and reused, were applied in latter case. The condition of the bones and fabric scraps in this technique was fairly good, facilitating further analyses.

10 Kowalska et al. 2008: 166.
The brain was removed through the nostrils and the empty skull subsequently either filled with resin or not (B. 575, 602); it could also be left in place, turning into black powder as a result (no evidence of brain removal in burials: B. 566, 584, 585, 601, 606, 608).

In most of the cases, the mummies preserved traces of dark brown to black body wrappings adhering to the bones, carbonized due to contact with a resinous substance. The pattern of the outer bandaging was recognizable in 12 cases. Two main bandaging patterns were identified:

1. Body wrapped in a shroud and tied with thin intersecting strips of bandages (1.5cm wide) to form a rhomboid net pattern on the surface (B. 35, 183, 247, 602) (Fig. 8). In the case of Burial 183 the external layer was formed of 12 strips of bandages of equal width, looped horizontally around the body from head to knees; the mummy of Burial 247 additionally had two strips, 1.5cm wide, crossing diagonally on the pelvis and knees.

2. Body wrapped in a shroud and tied on the surface with two strips, 1.5cm wide, crossing diagonally on the chest. The external layer consisted of horizontal wrappings, 1.5cm wide, binding the entire body from head to feet, the feet being wrapped with wider strips, more tightly spaced than on the rest of the body (B. 4, 77, 282, 412) (Fig. 16).

In the case of three child mummies (B. 415, 418, 487), the bodies were wrapped in shrouds and tied diagonally on the surfaces with wider strips of bandages (5cm wide); the tying was horizontal in the case of B. 546.

Children’s mummies were protected by being placed inside a wooden coffin or contained within a cartonnage. Not single case of a cartonnage mummy inside a wooden coffin was found, unlike for the adult burials. There were four child burials in wooden coffins: a rectangular one (B. 625) (Fig. 17a-b) and three anthropoid ones (B. 32, 53, 185) (Fig. 18). Only one of these had the surface painted red (B. 53) and it was used for the burial of an 8-year old girl. A column of inscription in black ink written on a white background runs on the long axis of the lid, with the gods Osiris and Sokar being asked to care for the dead child.12

One girl of indeterminate age (B. 4) had a cartonnage covering. Her body was covered additionally with a palm-leaf mat. The cartonnage13 had a head cover with a gilded face and long lappets descending to the chest and a large piece reaching from the bottom edge of the head cover down to mid-calf (Figs 19–20). The decoration consisted of panels.14

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14 Panels typical of cartonnage adornment in the Late as well as Ptolemaic periods: e.g. cartonnage from the Late period (Hermitage inv. nos 18421a, b, 18422), representing a wsḫḫ-collar, winged goddess and Anubis on
$WsH$-collar and an image of a winged goddess holding a $m3\delta r$-feather below it appear on the upper body.\textsuperscript{15} Anubis, god of mummification\textsuperscript{16} and Lord of the Necropolis, in the form of two facing black canids lying upon two chests, occur on shin panel (Fig. 21).\textsuperscript{17} A winged solar disk on the chin encircles the face of girl from the bottom (Fig. 19) in a rare instance of such a placement of this motif, which usually appears on the forehead or, represented as a winged scarab symbolizing resurrection, on top of the head.\textsuperscript{18} The only parallel for the motif appearing on the chin of deceased coming from the necropolis under examination is provided by the cartonnage of an adult male (B. 483).\textsuperscript{19}

The differentiated state of preservation of the embalmed children’s bodies is mostly the result of the embalment method. In the Ptolemaic period the art of mummification had deteriorated substantially reaching a much lower standard than in previous periods. Indeed, examination of the bodies from the Saqqara necropolis suggests that they were often brought for embalming already in an advanced state of decay. The carelessness of Ptolemaic embalmers was noted by anthropologist Maria Kaczmarek in the case of the mummy of an infant which died at the age of 6–9 months (B. 415); its small crus bones...
having been replaced with the much larger bones of a child dead at seven years of age, creating what is called a ‘composite mummy’. Typically, the bones of one or more dead persons, children and adults, were used to fill out a different mummy in order to replace missing body elements and achieve an anthropoid shape. The procedure was believed by Kaczmarek to take place whenever body decay had resulted in parts of the body missing at the time of the mummification process. ‘Composite mummies’ have been attested also at other necropolises, for example, at Hawara and in the west cemetery of the Roman period site at Ismant el-Kharab (Kellis) in Dakhleh Oasis.

Sticks were found inserted into the bodies in the case of three child burials: in the skull in one instance (B. 35), and lengthwise along the body in two others (B. 415, 566). This was done in the course of the mummification, in an effort to reconnect the head of the deceased with the rest of the body and to stiffen the corpse to retain its human shape. The sticks could be placed both on the body and inserted between the layers of bandages. This solution was useful particularly when the corpse was not interred in a coffin. In all examples the sticks were identified as palm leaf ribs.

A typical feature of late Ptolemaic and Early Roman mummies is the heavy use of liquid resin both inside the body cavity as well as on the surface. As a result, the bones are largely destroyed. It seems to be the evidence of poor embalming technique. The wrapping of the mummy became at the time more important than the preservation of the body itself. As stated by Salima Ikram, a features of those periods were also so-called ‘dummy mummies’ (body, wrapped to look like an infant, when unwrapped revealed an old muddy bones), and ‘composite mummies’, described above, as well as a practice when a head of a mummy was reconnected to the torso with a stick.

FUNERARY EQUIPMENT

Grave goods were found with 17 child burials and there is no distinction by age to be noted: from infants of 6–9 months (B. 415) to children aged less than 15 years (B. 543). The equipment consisted of the following items (indicated in Tab. 3).

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20 Kaczmarek 2008: 467.
23 Kaczmarek 2008: 468; Radomska 2013: 95.
24 Radomska 2013: 95 (identification by J. Zieliński).
<table>
<thead>
<tr>
<th>Grave goods</th>
<th>Context and description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floral bouquet</td>
<td>Bouquet of dried flowers was found in one child burial (B. 183). Archaeobotanical examination of the remains of the bouquet indicated the presence of papyrus stems (Cyperus papyrus L.).</td>
</tr>
<tr>
<td>Bracelets</td>
<td>Two bronze bracelets found lying beside the left leg, at knee height of B. 99 (Fig. 22a-b), two others by the shoulder and head of B. 162 (Fig. 22c-d).</td>
</tr>
<tr>
<td>Earrings</td>
<td>Copper earring, covered thickly with verdigris, found by the right ear of a child’s skull (B. 206), consists of a loop with heart-shaped pendant (ib) (Fig. 22g). Two others, bronze, were found by the right and left ears of B. 585 (Fig. 22e-f). Three copper beads, found by the left shoulder of the body (B. 673), could have been part of an earring that once decorated the ear of the child. Unidentifiable fragments of copper objects were also found in the vicinity of the body remains in B. 244.</td>
</tr>
<tr>
<td>Pendant</td>
<td>Small copper-alloy pendant in the form of a thin sheet of metal engraved with a rectangle, found between the neck and chest vertebrae (B. 642).</td>
</tr>
<tr>
<td>Beads</td>
<td>Two blue-glazed faience beads were found by the right side of the body in B. 35 (Fig. 22h-i), two others in the context of B. 162 (Fig. 22j-k), and one by the pelvis, above the thigh bone of B. 543. Two glass beads were found under the shoulder blades of the body in B. 189 (Fig. 22l-m).</td>
</tr>
<tr>
<td>Wreath</td>
<td>In the case of one child mummy, a wreath had been placed on the head (B. 35) (Fig. 23a). It was made of a rope of date-palm leaf fiber (Phoenix dactylifera L.) wrapped in grass blades and covered with bandages wrapped around this core.</td>
</tr>
<tr>
<td>Onion</td>
<td>Found in one child burial context: B. 423.</td>
</tr>
<tr>
<td>Amulets</td>
<td>An amulet made of cedar wood found between the layers of bandages in the region of the neck in B. 415. Of possibly a squatting or standing female figurine shape, it was threaded on a string plied from several strands (Fig. 23b). A green-glazed faience wḏ3t-eye amulet was found in B. 162 (Fig. 23e).</td>
</tr>
<tr>
<td>Cowrie shells</td>
<td>White cowrie shells were found in two cases: under the shoulder blades of the body in B. 189 (Fig. 23d) and by the right thigh bone of the mummy in B. 681. The top of the shell from B. 189 was struck off to allow stringing. Originally, it was part of a necklace,</td>
</tr>
</tbody>
</table>

26 Kowalska et al. 2008: 166, 291. The second example from the necropolis under examination comes from an adult burial (B. 417).
27 Kowalska et al. 2008: 131, Fig. 97, Pl. LVIib.
28 Kowalska et al. 2008: 158, Fig. 147, Pl. LXIXd-f.
29 Kowalska et al. 2008: 177, Fig. 179.
30 Kowalska et al. 2008: 192.
31 Unpublished.
32 Kowalska et al. 2008: 169, Fig. 165.
33 The remaining 23 cases of wreaths decorating the head of the deceased were all adults (B. 8, 25, 26, 34, 47, 51, 80, 216, 217, 358, 359, 406, 451, 459, 463, 466, 477, 478, 486, 494, 495, 498, 504): Kowalska et al. 2008: 377.
34 Kowalska et al. 2008: 289, Pl. CXLIId.
35 Kowalska et al. 2008: 169, Fig. 165.
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composed of a shell pendant and two small beads. Stringed cowrie shells were found around the upper left arm in B. 546 (Fig. 23f), and in the context of B. 642, where it was under the vertebrae (Fig. 23c).

<table>
<thead>
<tr>
<th>Plaited basket</th>
<th>Woven reed basket placed with the mummy in B. 183, at hip level (Fig. 24a). Made of a bunch of (bulrush?) stalks coiled into a flat spiral, bound with thin strands of the same stalks, radiating from the center. Judging by the thickness of the bundle, the plaiting could have been part of the bottom of a large basket.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pottery</td>
<td>Juglet found north of B. 139 (terminal Late period) (Fig. 24b), small juglet next to B. 254 (Fig. 24c) and a large pot on the feet of B. 624 (Fig. 24d).</td>
</tr>
</tbody>
</table>

**Discussion**

Items intentionally buried with the children can be divided into two groups: purely decorative, included probably as a last farewell, and symbolic. In the latter case, the term symbolic engages a broad spectrum of meanings, including protection and state that these are formal funerary rather than personal. On occasion, artifacts could have combined different functional roles.

Floral bouquet and jewelry form the first group. Pendant and beads could have been parts of decorative collars or pendant necklaces. Adorning the body with jewelry was one of the important elements of burial practices, for children as well as for adults. Jewelry might have been items made specifically for burial purposes or used in everyday life.

Wreaths and amulets belonged to the symbolic funerary equipment and were imbued with a protective function. The custom of decorating the head of a deceased with a wreath may be related to the so-called crown/wreath of justification, also referred to as a ‘crown of victory’. Wreaths of justification were common from the Twenty-second Dynasty to the Graeco-Roman period. Philippe Derchain shows that in the Ptolemaic era, when the custom became very popular, the emphasis was put on Osirian

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37 Kowalska, Radomska, Kozieradzka 2010: 67, Pl. XXb.
38 Kowalska et al. 2008: 166, Figs 159–160, Pl. LXXIVa-b.
39 Kowalska et al. 2008: 148; Rzeuska 2008: 426, Fig. 534 (pottery cat. no. 18).
40 Kowalska et al. 2008: 195; Rzeuska 2008: 420, Fig. 531 (pottery cat. no. 1), Pl. CCLXIa.
41 Unpublished.
42 Copper bracelets accompanied also several child skeletons at the ‘late necropolis’ around the mastaba of Ptahshepses at Abusir: Strouhal, Bareš 1993: 23, 24, 27, 31, 33 (Burials I 305, I 327, I 387, I 413, I 465). Two bronze bracelets came from the grave of a child (D19) in the necropolis at Douch in Kharga Oasis: Dunand, Lichtenberg 2012: 335. Also earrings were recorded in three child burials from the ‘late necropolis’ around the mastaba of Ptahshepses: Strouhal, Bareš 1993: 23, 24, Pl. 34 (Burials I 305, I 313 and I 465).
43 Instances of amulets from the context of child burials are known from Abusir: Strouhal, Bareš 1993: 23, 39 (Burials I 313, J 1950); as well as from the necropolis around the Anubieion in Saqqara: Giddy, Smith, French 1992: 48, Pl. 38 (Burial BIA). For the custom of decorating the head of a deceased with a wreath and its symbols, see: Barguet 1967: 67–68; Schweitzer 1992: 21; Kowalska et al. 2008: 56; Radomska 2013: 95.
44 Derchain 1955.
connotations. The basic idea was that the deceased person who is identified with Osiris will receive the crown which signifies his triumph in the judgment after death. The ritual of offering of the crown was accompanied by the words m5“ hrw ‘the one justified by voice’. Placing the wreath of justification vel crown on the head of the deceased in this ritual could have been intended as a symbol of favorable judgment issue at the Court of Osiris. It is awarded to those who pass the divine test, thus symbolizing the passage to the new life. Anne Schweitzer suggested that the plant wreath may be associated with Osiris and is a crown symbolizing victory over his enemies. The wreath protects the deceased, representing the victory over Seth and the enemies of Osiris, as mentioned also in the text on the mask from Abydos. The contribution of Re to the triumph of Osiris is recalled also at the end of spell 151a, inscribed in the lower band of the mummy mask of Takerheb. As stated by Luca Miatello spell 19 of the Book of the Dead, entitled ‘Spell for the wreath of justification’, celebrates the resurrection of Osiris and his triumph over his enemies, symbolized by the ‘beautiful wreath’ bound on his head by Atum. In Ptolemaic papyri inscribed with spell 19 of the Book of the Dead, the vignette shows Atum, ‘the father of the gods’, in front of whom is a large loop-shaped wreath with knot. The upper band of the mask of Takerheb, the fillet in the mask of Asetemachbit and one of female from Abydos, all make reference to the spell 19 of the Book of the Dead. Different writings indicate the wreath, made of vegetable material.

The mummy portraits of the Graeco-Roman era often show wreaths either on the head or in a hand of deceased, and sometimes in both places. According to Miatello the custom of inscribing mummy masks with spells of the Book of the Dead in the Ptolemaic period is more common than previously thought. The inscriptions represented protective,  

45 Derchain 1955.
46 Derchain 1955: 231 n. 2.
48 British Museum: EA 51147 (reg. no. 1912,1012.52).
50 Miatello 2012–2013: 73.
51 An early version of this spell appears in a papyrus of the Twenty-first Dynasty Queen Nedjmet, from Deir el-Bahari, and is found in papyri and sarcophagi of the Late and Ptolemaic periods: Urk. V, 136–144.
53 Miatello 2012–2013: 73.
54 Cf. Parlasca 1966: 144ff., who accepts Derchain’s interpretation that it is the Osirian ‘crown of justification’ that is figured, whether it is on the head or in the hand.
55 Three cartonnage masks from the Ptolemaic period, inscribed with spell 19 (‘Spell for the wreath of justification’) from the Book of the Dead (after Miatello 2012–2013: 62–63, 69–71, 80): 1. mask of a woman called Takerheb, of Theban provenience (Egyptian Museum of Florence 5708), combines spells 151a and 19. Multitude of amulets were placed at the head of the mummy, including two hypocephali. Around the top of head are two inscribed fillets. On the upper headband is the beginning of spell 19 of the Book of the Dead: the “beauty of justification” is exalted, the wreath made for Osiris by the father Atum and his Tefnut. The noble is crowned with the wreath; 2. mask of female of Abydos provenience, from the tomb E437 (British Museum EA 51147). In the text on the fillet around the head the green ‘wreath of justification’ is extolled; 3. mask of Asetemachbit (Kunsthistorisches Museum Wien ÄS 297). Around the top of the head is a fillet inscribed with the incipit of spell 19 of the Book of the Dead, exalting the ‘wreaths of justification’ made by Atum for his son.
apotropaic and revivifying means associated to the head. The fillet around the head, symbol of justification and new life, is made of vegetable material, as the garlands of leaves and flowers, associated with the lotus flower as sign of rebirth. The vegetal wreaths found with the mummies in the Upper Necropolis at Saqqara could have signified this particular rite taking place during the course of the funeral ceremonies.

Probably in the very same category of grave goods one should count also an onion found in one child burial context, namely B. 423. The antiseptic and deodorizing qualities of onions made them ideal for inclusion in the mummification process. Archaeobotanical analysis of the onion from burial in question identified it as a vegetal (*Allium cepa* L.) not floral species. This choice must have been of symbolic significance. The possible interpretation was prosaic: its smell warded off snakes. Defensive magic against poisonous snakes was popular as from the *Pyramid Texts* onward, if not before, and is represented also by spells of daily magic against dangerous animals. Snakes appear also in the Ptolemaic versions of the *Book of the Dead* on mummy wrappings (chapters 33–35 and 39 are devoted to spells for repelling snakes). As stated by Rita Lucarelli, compared to the *Pyramid Texts*, the spells against snakes recorded in the *Book of the Dead* seem to focus more on the action of physical warding off the animal rather than on healing the body from the snake’s poison, as in the spells of daily magic.

The symbolic meaning of the vegetal onion for the protection of the bodily remains deposited in a grave must have been considered of great importance. The presence of onions in mummy burials may also be associated with the worship of Sokar. On the eve of the main feast of this god, participants tied garlands of onions at their necks and followed Sokar’s cult statue in procession within the temple precincts. Garlands of onions were also worn during the night of that eve, and onions were offered at tomb chapels. The onions can represent the gift to, and receipt by, the dead of all manner of garden-vegetables.

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57 Onions were found also in context with three adult burials: B. 417, 466, 495. In two cases (B. 417 and 495) they had been placed between the feet of the deceased, under the inner bandages. One of them (B. 495) had another onion clasped in the palm of the left hand. A third deceased (B. 466) had two onions wrapped together with him in bandages: one under the flat right palm, and the second one on the left foot.
58 The archive of the *Book of the Dead* project in Bonn contains 16 fragments including such spells: Lucarelli 2009: 107–108.
59 E.g. *BD* 35 from Fragment 2 (National Museum of Antiquities in Leiden inv. no. F 2008/1.1) dated to the Thirtieth Dynasty – early Ptolemaic period from Theban area: Lucarelli 2009: 115–116. Also in the vignettes of the *Book of the Dead*, which refer to these spells; see especially the vignettes in the papyri of the Late period, like in pRyerson and pMilbank: Allen (Ed.) 1960: Pls 20–21, 66. Recently on the Thothian *Book of the Dead* tradition in the Late period, see: Mosher 2010: 139. *BD* 35 belongs to the set of serpent spells and is entitled: ‘Spell for not allowing a man to be eaten in the necropolis by any snake (*HfAw*)’. The familiar illustration to the Saite or later Memphite document with the vignette of this spell can be observed in the Louvre N 3089 and Ryerson groups as well as in the greater subset of the Louvre N 3079 group, where the deceased is depicted spearing an advancing serpent. This scene is clearly based on the title of the spell. For artistic variety in the depiction of the serpent, compare: vignettes of *BD* 35 in pLouvre N 3249, N 3151, N 3089 and in pBM EA 10257).
60 Niwiński 1993: 209.
Shells, in their turn, also combine decorative as well as protective functions. They are found on statuettes and figurines, and occur in the funerary equipment as personal adornment. Cowries, in particular owe their popularity to a specific and suggestive shape that brings to mind the female vulva or a squinting eye and their symbolic meaning is connected with their appearance. They have been recognized in the human mind as amulets protecting against infertility and shielding from the evil eye.

From the Late and Graeco-Roman periods in Egypt they are known mainly from the grave goods accompanying burials of women and children. Cowrie shells were also a symbol of the goddess Anuket, daughter of the Elephantine Triad of Khnum and Satet. Her role in fecundity symbolism led to her identification as a goddess of desire in the Ptolemaic period, thus beginning her iconographic association with cowrie shells. Finally, these shells’ role in protecting from the evil eye derives from the association of their appearance with the squinting eye. The connection is emphasized by finds of cowrie shells in the eye sockets of many skulls with gypsum masks, as for example in the case of the skulls from Jericho. This aspect of the cowrie shell was particularly important to women during pregnancy and childbirth, and it is for this purpose that they may have been included in children’s burials.

Since the bodies of two children had been covered respectively with a basket and a large pot, a similar purpose of the two latter items belonging to the funerary equipment seems
probable. The plaited basket may have been used to hold an infant, as in the case of an interred infant from the necropolis at Umm el Boraigat in Tebtynis, dated to the end of the eighth and beginning of the ninth century AD (T 06-40), which had been buried in sand and half covered with a basket. In the case of burial B 183 from the Saqqara necropolis however, the child’s age (10 years) makes such a purpose of the basket rather improbable. Ismant el-Kharab (Dakhleh Oasis), broken jars were used in the late Roman period to cover children bodies. And it seems that such was also a role of the large pot found in our Saqqara burial B 624.

**SOME PRELIMINARY CONCLUSIONS**

An analysis of distribution of the child burials discovered in the Upper Necropolis at Saqqara leaves no doubt that there was no special place in the cemetery set aside for children alone. They were neither isolated from adults nor buried in special age groups. Even so, two slightly more evident clusters could be observed, around chapels from the Old Kingdom, not extensive enough however to argue in favor of recognizing them as separate special burial grounds.

**Social status**

An examination of child burials from the Upper Necropolis demonstrates no significant differences in burial practices between children and adults. Social status, regardless of whether an adult or a child, is expressed in the type of grave, its localization, equipment and the treatment of the body, whether it was embalmed and in what way. The further west of the pyramid, the poorer the child burials. Better prepared graves, set up either within earlier architecture or purposefully cut in the ground, as well as decorated mummy cartonnages, show up closer to the Djoser’s pyramid enclosure. A similar regularity could be observed with regard to the adult burials. Nonetheless, a group of more affluent adult burials, evidently from a wealthier social class, was observed on the western side of the ‘Dry Moat’, to the north and west of Old Kingdom chapels nos 13 (anonymous) and 14 (Ikhi/Mery), not far away from the area in front of them, where the most numerous group of child burials was unearthed.

Although there is no single type of grave assigned to a specific age group of children, one may observed, compared to those for adults, that there are no bodies buried inside

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70 At the Upper Necropolis in Saqqara, two other baskets were discovered with the body of an adult (B. 422): Kowalska et al. 2008: 294; Kaczmarek et al. 2008: Pl. CCLXd. Pot burials dated to the Late period are also well attested for children at Saqqara and Abusir: Grajetzki 2004: 117.
71 Gallazzi, Hadji-Minaglou 2012: 395, 397, Fig. 7.
73 Grid squares 1909/2009 and 1814.
74 No differences were observed between child and adult burials also at the Roman period necropolis at Marina el-Alamein. The character of the burial was a factor of the social status and affluence of the family of the deceased (Daszewski, Zych 2012: 285). Older children were buried singly, very small children with adults (2012: 286).
a stone enclosures in the sand layer or in the Old Kingdom funerary shafts in the group of children.

Contrary to the adults not single case of a cartonnage mummy inside a wooden coffin was found.

Some differences in the funerary equipment could be observed between individual age groups of sub-adults: bracelets, shells and amulets were discovered with those aged 0–3 years, but earrings – only among children aged 4–7 years.

Finally, it was observed that larger concentrations of sub-adults burials were located in the agglomeration of visibly poorer inhumations. Most probably all multiple or family graves with children also belonged to the impoverished inhabitants of Memphis.

**Kinship (family groups)**

Multiple burials – comprising two adults, male and female, and two children or a double one, containing woman or man and child buried in one grave – can, to our mind, be rather safely considered as family burials. Siblings can be suspected in the case of the individuals buried in B. 601 and B. 602, as well as in B. 673 and B. 674.

**Religious association**

Ancient Egyptian burial traditions appear to be attested here by mummification methods, the iconography of the cartonnages, the decoration of the coffins, the body position, and the presence of standard funerary equipment. However, the evidence does not exclude Memphite individuals of different ethnic origin who were already assimilated into the local religion system and beliefs from being buried there as well.

**Ailments and causes of death**

Pathological changes observed by the anthropologists examining the bones suggested a whole catalogue of ailments suffered by children in this age buried in the necropolis. Malnutrition and poor resistance to all kinds of parasitical diseases and infections were common, but to consider them as direct causes of death in this social group would be a hasty interpretation.

**Acknowledgments**

This study has been conducted within the research project of the National Science Centre no. UMO-2013/11/B/HS3/04472.

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76 A special chapter prepared by I. Kozieradzka-Ogunmakin to the sixth volume of the *Saqqara* series will be devoted to a discussion of the anthropological issues.
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1. Distribution of burials on the west side of the 'Dry Moat'. Child burials are indicated in black (Drawing: K.O. Kuraszkiewicz, M. Radomska).
2. Distribution of burials between the Chapel of Merefnebef and the east side of the 'Dry Moat'. Child burials are indicated in black (Drawing: K.O. Kuraszkiewicz, M. Radomska).
3. Distribution of burials between the enclosure wall of the Step Pyramid and the Chapel of Merefnebef. Child burials are indicated in black (Drawing: K.O. Kuraszkiewicz, M. Radomska).

5. The standard oval pit burial of a child aged 5–6 years (B. 73) in the dakka layer (Phot. M. Jawornicki).

7. A child aged 2–3 years (B. 99) in the pit longer than the body (Phot. M. Jawornicki).
8. A child aged 18 months (B. 35) with male adult (B. 34) in the stone enclosure arranged in Old Kingdom wall (Phot. Z. Kość).


12. Double burial inside the niche: child aged 18 months (B. 487) and female adult (B. 486) (Phot. P. Lelek).

13. Child aged 2–3 years (B. 456) in the rock-cut anthropoid burial pit (Phot. J. Dąbrowski).


17. Child aged 6 years (B. 625) *in situ*: a. in rectangular wooden coffin; b. after removal of the lid (Phot. J. Dąbrowski).
18. An anthropoid wooden coffin containing a child aged 8-9 years (B. 53)
(Phot. Z. Kości).

19. Cartonnage of the mummy of a small girl (B. 4); head cover with a gilded face and winged solar disc on the chin (Phot. G. Wyrzykowski).
20. Wsd-collar, winged goddess and shin panel decorating the middle and lower parts of the cartonnage from burial B. 4 (Phot. G. Wyrzykowski).

22. Funerary equipment from child burials: bracelets from B. 99 (a-b) and 162 (c-d); earrings from B. 585 (e-f) and 206 (g); beads from B. 35 (h-i), 162 (j-k) and 189 (l-m) (Phot. M. Jawornicki (a-d), W. Wojciechowski (e-f); drawing: A. Kowalska (g-i, l-m), D. Czerwik (j-k)).
23. Funerary equipment from child burials: wreath from B. 35 (a); amulet from B. 415 (b); wgd3t-eye amulet from B. 162 (c); cowrie shells from B. 642 (c), 189 (d) and 546 (f) (Phot. Z. Kość (a), P. Lelek (b), W. Wojciechowski (f) and J. Dąbrowski (c); drawing: D. Czerwik (e), A. Kowalska (d)).
24. Funerary equipment from child burials: fragment of woven reed basket from B. 183 (a); juglets found near B. 139 (b) and 254 (c); large pot found on the feet of B. 624 (d) (Phot. M. Jaworncki (a, c), J. Dąbrowski (d); drawing: T. Rzeuska (b-c)).