EGYPTIAN MISSION RESCUE EXCAVATIONS IN TELL EL-RETABA
PART 2: THE SECOND INTERMEDIATE PERIOD CEMETERY

Mustafa Nour el-Din, Lucia Hulková, Alena Šefčáková, Jozef Hudec and Anna Wodzińska

Abstract: The present article about the first excavated part of an extensive cemetery of the Second Intermediate Period in Tell el-Retaba is one of the outcomes of the scientific co-operation between the Egyptian rescue excavation mission led by M. Nour el-Din and the joint Polish-Slovak archaeological mission in Tell el-Retaba. Seventeen mudbrick tombs dating to the mid – late 15th dynasty were unearthed during two campaigns in 2011–2012. The tomb architecture and the grave goods found with the buried individuals which are presented in this article offer an insight into the burial customs of the inhabitants of Tell el-Retaba during the end of the Second Intermediate Period. Furthermore, they can help us to shed more light on the settlement history and material culture of this still somewhat controversial period of Egyptian history.

Keywords: Second Intermediate Period, 15th dynasty, Tell el- Retaba, cemetery, mudbrick tomb, burial customs, grave goods

The archaeological site of Tell el-Retaba is located on the outskirts of the lively villages of Wokala, Dawawiz, Abu Said, and Magharba. The immediate proximity of modern settlement endangers the ancient landscape, as the remains of the past have given way to the needs of the present. One of the most recent modern intrusions results from the enlargement of the existing asphalt road cutting through the western part of the tell. This construction affects a ca. 10 m wide strip of land immediately adjacent to the eastern side of the existing road. This area was the object of Egyptian rescue excavations led by Mustafa Nour el-Din. The joint Polish-Slovak mission supported the archaeometric documentation of tomb structures and small finds in scientific collaboration with the Egyptian team. The present article concentrates on the archaeological remains discovered in the southern part of the rescue excavation trench (for general position of the cemetery see the insert in Plan 1). Here, in an area of about 300 m², seventeen mudbrick tombs – the oldest remains of human activity at Tell el-Retaba known to date – were uncovered (see Plan 1).

Based on the pottery found with the internments and/or the architecture of the mudbrick tombs, which closely resemble the Second Intermediate Period (SIP) tombs found in Tell el-Dab’a, the cemetery was dated to this period. Individual tombs are scattered in the area with no discernible spatial pattern. The soil around them was removed in the course of the excavations, completely exposing the brickwork. No tomb pits or traces of superstructures were found. The excavation of individu-

1 For Part I: New Kingdom Remains, see Rzepka, Nour el-Din, Wodzińska and Jarmuzek 2012, 253–287.
2 The Egyptian rescue excavations under the auspices of the Supreme Council of Antiquities (now Ministry of Antiquities) started on 20 November 2010 and continued until 4 November 2011. However, the work had to be suspended unexpectedly between 9 March and 5 September 2011, as a consequence of the developments after the revolution of 25 January 2011. On 9 March 2011, soldiers passing the site arrested Mustafa Nour el-Din, as he lacked authorization from the Armed Forces to work there. After an overnight stay in the military police HQ, the charges were dropped and he was released, after it was established that his rescue excavation mission did not need a permit from the Armed Forces. Still, work at the site was suspended. During this interruption, Tombs 1 to 6 were damaged, and the collapse of a profile destroyed parts of Tombs 10 and 11. Another short excavation campaign took place from 6 December 2011 to 5 January 2012. Both seasons were directed by Mustafa Nour el-Din. Among the members of his mission were, inter alia, Sameh Ahmed el-Sayed and Rizq Diab Ghadiry Hassan. The documentation of small finds and pottery from the excavation is still in progress at the time of this writing.
3 Drawings and photographs were done by Emam Salah, Lucia Hulková, Lubica Hudáková, and Mustafa Nour el-Din. Analysis of selected items of pottery was undertaken by Anna Wodzińska. The examination of human skeletal remains was undertaken by Alena Šefčáková; animal bones are examined by Anna Gręzak.
4 See, also, Nour el-Din et al., in print, 155. For the results from northern part of the trench, see Rzepka et al. 2012, 253–287.
Plan 1 The Second Intermediate Period Cemetery, the insert showing the general position of the cemetery within the excavation site (Drawing L. Hulková, Ľ. Hudáková and Ł. Jarmužek)
al structures was documented by photography, the dimensions of each tomb were recorded, and positions of the grave goods relative to the tomb walls or the skeleton were noted and measured. The grave goods were crudely measured and sketched in the excavation diary. The fill of the tomb around the skeleton was sieved, in order to retrieve beads and other small finds that, otherwise, could have been overlooked. The grave goods were then removed for further documentation. The skeletons of the deceased and, where present, the animal bones that served as food offerings, were left in the open tombs. Therefore, they often could not be fully evaluated anthropologically, owing to their fragile state.

More detailed plans of tombs and the cemetery were drawn later in September and October, 2011. The natural deterioration of these structures, resulting from their exposure, made the precise documentation of some construction details and the position of the internments impossible. Hence, some architectural features and/or position of the skeletons and grave goods had to be reconstructed from the photographic documentation of the excavation. These reconstructed parts are represented in red lines on the plans of the tombs.

The stratigraphic sequence above most of the tombs was lost. For this reason, it is not possible to reconstruct the chronological relationship between individual tombs directly. Position and orientation of some of the structures suggest, however, close chronological and/or social connection among the buried individuals.\(^5\) It is also impossible to determine whether there were any traces of other and/or older human activity contemporary with or predating the cemetery in this part of the tell, or whether the community that established it lived elsewhere and selected an uninhabited spot to bury their deceased. However, the stratigraphic situation of some tombs on the western edge of the trench, reaching under the existing modern asphalt road, can be partly traced, as layers that originally covered them are visible in the excavation photographs. It seems that these mudbrick tombs were constructed in tomb pits, dug into grey (settlement?) layers directly above a fine reddish gravel alluvial sediment (aggradation mound)\(^6\) that comprises the natural soil in this area of the tell (Fig. 1).

All 17 graves uncovered in the rescue excavation trench include architectural elements built of mudbricks. Based on macroscopic observation, there seems to be no significant difference between the material composition of the mudbricks and the bonding mortar used in these structures. As the burial pits were not recorded, it is in most cases unclear if the internment was placed within a completed tomb, or deposited into the burial chamber before it was closed by a roof. The small dimensions of some structures and the placement of mudbricks over the body in others suggests that at least some of the tombs were com-

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\(^5\) See Tombs 2 and 3, and Tombs 7, 8, and 9 below.

\(^6\) Hudec, Fulajtár and Stopkova 2015, 273.
pleted only after the body was interred. In the following paragraphs, the individual tomb structures and internments found within them are described in more detail. Anthropological analysis of the recovered skeletal remains is also included where possible.

Grave 1 [677]

This E–W-oriented child’s tomb with a gabled roof [677] was located at the E boundary of the rescue excavation trench (square Y160/X105). Its architecture corresponds to tomb Type 3.1 of Tell el-Dab’a.8 The burial in this tomb is somewhat disturbed. A few ribs were found displaced by the head of the child’s skeleton; however, this might be a result of animal activity and it does not mean that the tomb was robbed (Fig. 2).

![Fig. 2 Tomb 1 after it was opened (Photo M. Nour el-Din)](image)

Architecture

The rectangular tomb chamber measured 54 × 36 cm on the inside and consisted of only one layer of rectangular mudbricks (37 × 18 × 8 cm) placed on a bed in stretcher bond. A bonding mass was used to hold them together. Upon the E wall, a gable was built of two bricks, one on top of the other. The W wall was not preserved at the time of documentation; therefore, it is impossible to say if it was constructed in the same way. This poor state of preservation also causes difficulty in determining whether the burial was placed in the tomb after it was finished. It is possible, that the W wall was left open, and was sealed only after the burial. However, considering the small dimensions of the burial chamber, it is more likely, that the internment was placed in the tomb chamber before the roofing was built.

A simple saddle roof of sloping bricks was built directly upon the walls of the burial chamber. Four bricks on each side were required in order to cover the width of the chamber. No backing bricks were used to stabilize the construction at the point where the roof and the burial chamber met. Instead, the space was filled by the bonding mass. A thick layer of bonding material was also spread over the roof, further stabilising the construction.

The tomb’s contents

A child aged between 1 and 2 years (infans I) was buried in this tomb. It was placed in the burial chamber with its head in the W, facing S. The head seems to lay higher than the rest of the body – it could have been placed on a heap of soil.9 A more precise position of the body could not be determined, as the skeleton was very poorly preserved. There were no grave goods associated with this burial.

Anthropological observations

Preservation:
fragmentary skeleton of a little child

Morphological characteristics:
gracile skeleton with weak muscular relief

Metric characteristics:
scapula sin. l.: 39 mm (?), w.: 52 mm (?)
humerus sin. diaphysis l.: 96 mm (?)

Conclusion: Judging from the dental age (based on degree of development of temporary teeth and non-erupted permanent teeth) and on the bone measurements, the child died at the age of 1–2 years (infans I).

Grave 2 [673]

This ESE–WNW-oriented mudbrick tomb with a gabled roof [673] was located in the middle western part of the cemetery (squares Y145/X105, Y150/X105). It was badly decayed by the time it could be documented, with the greater part of the...

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9 In one subsidiary internment in Tell el-Dab’a, the head of the deceased was resting on a mudbrick. See FORSTNER-MÜLLER 2008, 39. Building a small heap of soil under the head of the deceased probably conveys the same idea, although it is not clear, why no brick was used – scarcity of the material does not seem to be the reason in these cases.
structure missing completely. However, it seems to have been intact prior to the excavation. Based on photos taken during the excavation, it was possible to reconstruct the tomb type, whose structure corresponds to Type 3.2 at Tell el-Dab'a (Fig. 3).10

Architecture

The tomb [673] consists of an elongated rectangular burial chamber with interior dimensions of $168 \times 44$ cm$^{11}$. It was built of one row of rectangular greyish-green mudbricks ($36 \times 16 \times 8$ cm) in stretcher bond, placed on their edges and held together by a coarse bonding material with a high portion of fine gravel. The masonry was rather crude, with joint width varying from 1 to 3 cm. After this stage of construction was completed, the deceased and burial goods was interred in the burial chamber and loosely covered by a layer of mudbricks on bed.

The gabled roof was made of single layer of sloping bricks, a kind of roofing that was possible due to the narrowness of the burial chamber. The roofing bricks were backed by bonding material, filling the joint between the burial chamber walls and the roofing bricks, as well as the ridge at the top. Due to bad preservation of the tomb at the time of documentation, the reconstruction of the exact construction of the gables is problematic. The situation in the ESE could not be reconstructed. The WNW gable, made of one brick, seems to be partly covered by the sloping bricks of the roof, but it was not cut to shape – the gaps between the brickwork of the roof and gable seem to be filled with lumps of bonding material. The same material once probably covered the whole roof, stabilizing it and maybe even creating a semblance of a barrel vault.

The tomb’s contents

Directly underneath the mudbricks covering the burial, a skeleton of an adult female was discovered (Fig. 4). It was laying supine, with the head in the ESE and facing S. The arms of the deceased were placed alongside the body and the legs were outstretched. There was not enough space for the more usual contracted position; the outstretched body filled the entire width of the tomb and the gabled roof did not leave enough space for the legs to be pulled upwards.

Despite the simple construction of the tomb, several burial goods were deposited with the deceased (see Plate 1). In the SE corner of the burial chamber, which was not covered by bricks laying over the burial, a broken red ceramic jar (?) containing a ceramic cup was placed directly by the skull. A kohl-pot (SCA_634) with a bronze application stick still inside was found above the left elbow and two juglets (SCA_631 and SCA_649) were laying over the right side of the chest. In the pelvis region, under the lower juglet (SCA_649), about 45 globular beads (SCA_637) were discovered. They probably belonged to a belt, as the amount seems to be too large for a bracelet.

Cup

| SCA reg. no.: not registered$^{12}$ |
| Material: --- |
| rim Ø: 10 cm (?) |

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11 Only 136 cm of the original length of the tomb were preserved at the time of documentation, the preserved height of the structure being only 40 cm.
12 The cup and jar were not registered, they were only measured quickly on site and, hence, no further details of their form can be gained. Some objects from this excavation, which were not registered, are stored at various magazines in the Ismailia governorate and were temporarily unavailable at the time this article was prepared. Those that were either available for study or at least well-documented on photographs were given numbers consisting of the tomb number and a letter of the alphabet to facilitate further work with the material.
Description: small pottery cup.
State of preservation: complete profile (?)

Jar (?)  
SCA reg. no.: not registered
Material: ---
h.: 29 cm (?)
Description: red pottery vessel, possibly a jar (?) – precise identification of the vessel shape from the excavation photographs is not possible.
State of preservation: broken, rim missing (?)

Juglet  
SCA reg. no.: 631
Material: ---
h.: 15 cm; neck h.: 7 cm; base Ø: 4.5 cm; rim Ø: 3.7 cm
Description: globular pottery juglet with a tall neck, a flat base, and a single-strap handle; traces of burnishing on neck and rim, possibly also on the body.
State of preservation: complete, fragmented, the surface of the body is weathered

Juglet  
SCA reg. no.: 649
Material: ---
h.: 12.5 cm; neck h.: 5 cm; base Ø: 2.7 cm; rim Ø: 3 cm
Description: globular pottery juglet with a tall neck, a flat base, and a single-strap handle; faint traces of burnished surface on neck and rim, possibly also on the juglet body.
State of preservation: complete, fragmented, surface of the body is weathered

Kohl-pot  
SCA reg. no.: 634
Material: travertine (?)
h.: 8.5 cm; rim Ø: 7 cm; base Ø: 5.8 cm; app. Ø: 2.8 cm
Description: stone vessel with a broad rim, a shouldered squat body and a flat base; it was made of one piece of soft whitish stone, possibly travertine (also called calcite-alabaster). Its surface is rough and scratched in many places; the breaks on the rim seem to have been smoothed through continued use after the damage occurred. The inside of the vessel was drilled out as a straight channel with a rounded bottom.
State of preservation: lid missing, rim and base chipped, eroded surface, the part of the rim touched by the cosmetic stick is stained green

Application stick  
SCA reg. no.: not registered; 2-a
Material: copper/bronze  
l.: 3.5+x cm; Ø: 0.3–0.5 cm
Description: the strongly corroded piece seems to be a rod, round in section, thinning slightly towards the lower end. It was found within the kohl-pot SCA_634; residues of its contents still stick to one end of the application stick, obscuring its form. It was probably used to apply the black eye-paint stored in the kohl-pot; however, it needs to be properly restored before any other details may be observed.
State of preservation: strongly corroded, probably incomplete

Beads  
SCA reg. no.: 637
Material: limestone (?)  
l.: 0.6 cm; Ø: 0.7 cm
Description: 45 whitish globular beads decorated with vertical incisions, probably once a belt.
State of preservation: good

Anthropological observations
Preservation:
medium robust skeleton fragments of an adult individual
Morphological characteristics:
fragment of vertebra thoracica (corpus), fragments of proximal and distal parts of os sacrum, fragments of os ischium and os pubis, proximal part of femur dex. with damaged caput femoris, fragment of the tibia dex. distal epiphysis with a perforation during facies inferior (8 × 7 mm, damaged by animals (?) or a result of old age).
Metric characteristics:
caput femoris vertical Ø: 39 mm (?) – female indication
Deviations and pathological changes
degenerative changes particularly in the thoracic vertebral column at the caudal side (Schmorl’s nodes)
Conclusion: Judging from the small vertical diameter of caput femoris, the skeletal remains are of an adult female.

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14 See n. 11.
Grave 3 [674]

Immediately S of the tomb of an adult woman [673] (square Y150/X105), an infant mudbrick tomb with a gabled roof [674] with the same orientation (ESE-WNW) was situated (Fig. 5). The close proximity and identical orientation of these structures may indicate a social connection between the individuals buried in them. They were probably built around the same time. Like the previous structure [673], this tomb was also badly decayed by the time its position could be recorded on a plan, with only the WNW and SSE walls still standing in situ. The fact that it was located at a higher ground than the tomb [673] suggests that it was built in a shallower tomb pit, more appropriate for a small infant tomb. The tomb corresponds to tomb Type 3.1 of Tell el-Dab’a. It seems to have been intact prior to excavation.

Architecture

The tomb was built of rectangular greyish-green mudbricks (37 × 18 × 9 cm), held together by a coarse bonding material. It seems to be built more precisely than the preceding tomb [673], as the joints are only about 1 cm thick. The rectangular burial chamber has interior dimensions of 110 × 38 cm and consisted of two (?) rows of mudbricks in stretcher bond, placed on their bed. The chamber had a gabled roof built of sloping bricks, covered in bonding material. It was probably built only after the interred was placed in the burial chamber. No further details of the construction can be inferred from the photographs or the in situ remains.

The tomb’s contents

A skeleton of a small child with its head in the SE, facing S, was placed in the center of the burial chamber, which is larger than was necessary for accommodating the interment. The body was laying on its left side in a slightly contracted position, but not parallel to the main axis of the tomb. The arms were outstretched in front of the body to the S; the feet were probably touching the N wall.

Behind the skull and upper body, a jar (SCA_620) and a juglet (SCA_651) were placed at the NNW wall of the burial chamber (see Plate I). A necklace (SCA_644) was found around the neck of the child.

**Jar**

SCA reg. no.: 620  
Material: ---  
Material: ---  
Height: 16.5 cm; rim Ø: 6.7 cm, inner rim Ø: 4.5 cm  
Description: medium bag-shaped pottery jar with modelled rim and round base.  
State of preservation: complete, rim chipped

**Juglet**

SCA reg. no.: 651  
Material: ---  
Height: 9 cm; max. Ø: 6 cm; rim Ø: 2.7 cm; neck h.: 3.5 cm  
Description: bag-shaped pottery juglet with a slightly concave base and a round handle attached to the rim and the top of the body.  
State of preservation: complete, rim chipped

**Necklace**

SCA reg. no.: 644  
Material: green faience  
Material: black faience (?)  
Length: 1.1 cm; max. Ø: 0.4 cm; 8 lozenge-shaped  
Material: black faience (?)  
Ø: 0.5 cm, thread hole Ø: 0.2 cm; 2 disc-shaped  
Description: a necklace consisting of 10 beads of two different shapes; both types were probably made of faience. It is impossible to determine how the beads were arranged in the necklace.  
State of preservation: the lozenge beads are slightly worn, but the original surface can still be seen

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15 The exact distance between the tombs cannot be established with certainty, because both structures were badly decayed at the time of documentation; however, the position of preserved parts of these tombs indicates that this distance was less than 20 cm.
on most of them, the disc pearls are badly worn, with no trace of the original surface.

Grave 4 [672]

This E–W oriented mudbrick tomb with a vaulted roof [672] is one of the largest in the excavated part of the cemetery. It corresponds to Type 4.3 of the Tell el-Dab’a typology. It is notable that two individuals were buried in the burial chamber. The position of the skeletons suggests that these internments took place at or around the same time. The upper part of the barrel vault was missing when the structure was documented; however, the skeletons in the burial chamber seem to be undisturbed.

Architecture

The tomb seems to rest on a fine layer of bonding material spread at the bottom of the tomb pit to provide a basis for construction. It was not noted during the course of excavation whether this layer was spread throughout the chamber floor or was confined solely beneath the walls of the rectangular burial chamber whose interior dimensions are 225 × 65 cm. The structure was built of three rows of rectangular mudbricks (36 × 20 × 12 cm and 38 × 18(?) × 8 cm) in stretcher bond placed on their bed. The half-brick thick interior walls of the chamber seem to be plastered in the same kind of bonding material that was used to hold them together. Atop them, the basis for the barrel vault was built, consisting of one layer of mudbricks in a header bond protruding out of the burial chamber that increased the thickness of the wall to 1 brick.

The barrel vault was backed against the W gable built over the W wall of the burial chamber. It probably consisted of 6 rows of mudbricks in header bond (4 rows projecting out of the burial chamber were still standing), recessing in steps towards the top. Only one row of bricks from the vault itself still remained in situ in the S. The vault bricks sloped toward the W gable, with the angle becoming more acute towards the E. The first brick in every second row was placed on edge, protruding out of the vault. Thus, the joints between the vault bricks were not aligned. This kind of vault is a self-supporting construction and can be built without scaffolding. It is unclear how the roof was closed in the E. In the SE corner, there seems to be some kind of a backing structure, but its function is unclear due to the bad state of preservation in this part of the tomb.

The tomb’s Contents

The burial chamber was filled with soft soil covering two presumably adult skeletons (Fig. 6). They were laid largely in the W part of the tomb chamber with their heads in the E. While the northern skeleton was laying almost on the central axis of the burial chamber, the southern skeleton was placed in a narrow space between it and the S wall of the burial chamber, partly over the northern skeleton. This indicates that the northern skeleton was placed in the tomb first.

The northern skeleton was laying on its left side, facing S. Its right arm was placed across the abdomen; the position of the left cannot be seen on the photographs. The legs are sharply contracted, with knees pointing to the S. It is possible that the legs were originally upright, but the fact that the legs of the individual in the S lay across them renders this unlikely.

The southern skeleton was clearly interred afterwards. It lays in a contracted position on the right side, facing N. The legs are contracted, but less sharply than those of the northern skeleton, with its knees pointing to the N. The bones of the southern skeleton lay directly on those of its companion, whose bones were found in anatomic position, undisturbed by the later internment. This indicates, that both burials were interred either at the same time or only short time apart. As the excavation had to be suspended, no further information about the buried individuals could be gained, as the skeletons were too damaged for any anthropological analysis.

Animal bones (?) were uncovered in the NE part of the burial chamber. In the SE corner, a cup (SCA_626) and two jars (SCA_621 and SCA_622) were placed (Plate II). Their proximity to the skull of the southern skeleton is not necessarily an indication of ownership. Three black (SCA_654 and SCA_650) and one red (SCA_652) pottery juglets, and a kohl-pot with a lid (SCA_635) were laying near el-Retaba 83. As the fill of the burial chamber was sieved, a toggle pin (SCA_617), various beads and three scarabs (SCA_676, SCA_680 and SCA_685) were found.

**Jar**
SCA reg. no.: 621
Material: ---
- h.: 20 cm; rim Ø: 8 cm; inner rim Ø: 7 cm
Description: medium pottery jar with direct rim, cylindrical body and rounded base; faint traces of red slip on the body.
State of preservation: complete, rim chipped, eroded surface

**Jar**
SCA reg. no.: 622
Material: ---
- h.: 16 cm; rim Ø: 7.8 cm; inner rim Ø: 7.3 cm
Description: medium pottery jar with a direct rim, a cylindrical body and a rounded modelled base; traces of red slip on the outside.
State of preservation: complete, rim chipped, worn surface

**Cup**
SCA reg. no.: 626
Material: ---
- h.: 10 cm; rim Ø: 7.7 cm; base Ø: 3.5 cm
Description: small pottery cup with a flat base and a direct rim; traces of red slip on the inside and the outside.
State of preservation: complete, rim chipped

**Juglet**
SCA reg. no.: not registered; 4-a
Material: ---
- h.: 11.6 cm, rim Ø: 3 cm; base Ø: 1.9 cm
Description: Tell el-Yahudiya pottery juglet with a single strap handle; incised groves on the body and a button base (Fig. 28.10).
State of preservation: complete profile, fragmented, very worn surface

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17 According to the excavator’s notes, there was an animal skeleton in the E, however, this skeleton is not depicted on the photos, even though there is sufficient space for such an offering.
top half of the shaft; globular (?) head and a round perforation about the middle of the length of the shaft
State of preservation: broken into 4 pieces, highly corroded

**Scarab**

<table>
<thead>
<tr>
<th>Material: steatite (?)</th>
<th>l.: 1.95 cm; w.: 1.5 cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description: head type D3³; back type: PS; seal: nude standing goddess with two twigs, enclosed by a simple line. Thread hole penetrating the length of the body. State of preservation: slightly worn surface</td>
<td></td>
</tr>
</tbody>
</table>

**Scarab**

<table>
<thead>
<tr>
<th>Material: steatite (?)</th>
<th>l.: 1.8 cm; w.: 1.35 cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description: head type D3; back type: PS; seal: three registers, not divided by a line: 1. udjat-eyes; 2. kheper-sign flanked by two nfr-signs; 3. nb-basket enclosed by a simple line. Thread hole penetrating the length of the body. State of preservation: slightly worn surface</td>
<td></td>
</tr>
</tbody>
</table>

**Scarab**

<table>
<thead>
<tr>
<th>Material: steatite (?)</th>
<th>l.: 1.6 cm; w.: 1.1 cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description: head type (?); back type: LS/LN; seal: striding antelope with a crocodile behind it enclosed by a simple line. Thread hole penetrating the length of the body. State of preservation: slightly worn surface</td>
<td></td>
</tr>
</tbody>
</table>

**Beads**

<table>
<thead>
<tr>
<th>Material: white faience (?)</th>
<th>l.: 0.5 cm; max. Ø: 0.3 cm; 12 lozenge-shaped</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material: blue &amp; white faience (?)</td>
<td>l.: 1.35 cm; max. Ø: 0.4 cm; 3 drop-shaped</td>
</tr>
<tr>
<td>Material: white faience (?)</td>
<td>l.: 0.8 cm; w.: 0.45 cm; 2 flower-shaped</td>
</tr>
<tr>
<td>Material: faience (?)</td>
<td>l.: 1.3 cm; Ø: 0.45 cm; 1 tubular incised</td>
</tr>
<tr>
<td>Material: faience (?)</td>
<td>l.: 0.9 cm; w.: 0.5 cm; 1 irregular</td>
</tr>
<tr>
<td>Material: amethyst</td>
<td>Ø: 0.5 cm; thread hole Ø: 0.15 cm; 1 round</td>
</tr>
<tr>
<td>Material: carneol</td>
<td>Ø: 0.4 cm; 1 round</td>
</tr>
</tbody>
</table>

Description: beads of different shapes and materials, predominantly faience. It is not clear if all of these beads belonged to the same piece of jewellery; their position within the tomb is unknown.
State of preservation: surface of faience beads weathered to various degrees, the beads of semi-precious stones are comparatively well-preserved

**Grave 5 [675]**

Another of the mudbrick tombs with barrel vault [675] was situated just S of the preceding tomb [672], but it was comparatively smaller and SE–NW-oriented. It seems to have been intact prior to excavation. This type of tomb, in which the vault was built directly over the walls of the burial chamber, without a broader basis, but with bricks on their edge, protruding from the vault in every second row, was not documented in Tell el-Dab’a (Fig. 7).

**Architecture**

This rectangular burial chamber, with interior dimensions of 155 × 75 cm, was built of rectangular mudbricks (34 × 15 × 8 cm) in stretcher bond; it was only two courses high. The masonry was

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¹⁸ The typology of scarab head and back is based on Tufnell 1984, 31–38 as revised by Keel 1995, §74–127.
not very precise; joints filled up with coarse bonding material were up to 2 cm wide. The space inside the burial chamber is quite narrow; the body could have been placed in the burial chamber before the vault was built. Entering the tomb through the opening in the SE wall would surely have been possible, but the manipulation of the deceased and the placement of the burial goods within the burial chamber, not to mention exiting the burial chamber without disturbing the burial would have been very difficult.

The barrel vault was built directly atop the half-brick thick burial chamber walls, without a base of bricks in a header bond. It was backed against the NW gable, consisting of five stepped, recessed rows of mudbricks in a header bond protruding beyond the walls of the burial chamber. In other respects, the construction of the vault was the same as that of the tomb [672]. The vault was covered in bonding material on the outside as is visible in the photographs taken by the excavator. It possibly added stability to the construction. It is unclear from the photos how the SE wall was constructed.

The tomb’s contents

An adult was buried in the tomb; its skeleton was placed in the NW part of the burial chamber laying supine, looking NE, with extremely contracted legs with knees pulled upwards, resting on the NE wall of the burial chamber (Fig. 8). The right arm was placed over the abdomen, the left one laid contracted along the chest. It is possible, that the head of the deceased was placed on a brick or a heap of soil, because it was lying considerably higher than some of the grave goods.

Immediately south of the skull, a pottery plate (SCA_623) with a copper/bronze dagger (SCA_615) was laid (Fig. 9). The plate was possibly placed on a ring stand (SCA_629) that was found further to the SE, partly underneath the plate (Plate III). North of the skull, on a lower level, a cluster of 2 red and 6 black juglets was deposited (see Plate IV). A bronze toggle pin was found in the tomb, but its location was not recorded.

Plate
SCA reg. no.: 623
Material: ---
| h. | 6.8 cm; rim Ø: 25.5 cm |
Description: large pottery plate with an incurved rim and a flat base, with traces of red slip on the walls and rim.
State of preservation: complete

Ringstand
SCA reg. no.: 629
Material: ---
| h. | 6 cm; rim Ø: 8.5 cm |
Description: small red slipped pottery ringstand.
State of preservation: complete

Juglet
SCA reg. no.: not registered, 5-a
Material: ---
| h. | 9.4 cm; rim Ø: 2.6 cm; base Ø: 1.9 cm |
Description: red pottery juglet with an ovoid body and a single band handle (Fig. 28.3).
State of preservation: complete profile, parts of the rim and neck missing; worn surface

Juglet
SCA reg. no.: not registered, 5-b
Material: ---
| h. | 10.8 cm; rim Ø: 2.5 cm; base Ø: 1.8 cm |
Description: Tell el-Yahudiya pottery juglet with an ovoid body and an incised decoration (Fig. 28.4).
State of preservation: complete, surface slightly worn

Juglet
SCA reg. no.: not registered, 5-c
Material: ---
| h. | 9.8 cm; rim Ø: 2.6 cm; base Ø: 1.6 cm |
Description: Tell el-Yahudiya pottery juglet with an ovoid body and an incised decoration (Fig. 28.5). State of preservation: complete profile, rim chipped, worn surface

**Juglet**  
SCA reg. no.: not registered, 5-d  
Material: ---  
max. pres. h.: 5.6 cm;  
base Ø: 1.9 cm  

**Description:** Tell el-Yahudiya pottery juglet with an incised decoration (Fig. 28.11). State of preservation: neck and rim missing, worn surface

**Juglet**  
SCA reg. no.: not registered, 5-e  
Material: ---  
max. pres. h.: 4.6 cm;  
base Ø: 1.6 cm  

**Description:** bottom of a red pottery juglet (Fig. 28.1). State of preservation: upper part of the body missing

**Juglet**  
SCA reg. no.: not registered, 5-f  
Material: ---  
h.: 9.2 cm; rim Ø: 3.4 cm;  
base Ø: 1.8 cm  

**Description:** Tell el-Yahudiya pottery juglet with an incised decoration (Fig. 28.8). State of preservation: complete, worn surface

**Juglet**  
SCA reg. no.: 653  
Material: ---  
h.: 10 cm; rim Ø: 2.5 cm;  
base Ø: 1.5 cm  

**Description:** Tell el-Yahudiya pottery juglet with an incised decoration. State of preservation: complete, worn surface

**Dagger**  
SCA reg. no.: 615  
Material: copper/bronze  
l.: 19.3 cm; w.: 3.3 cm;  
ths.: 0.2–0.4 cm  

Description: bronze/copper dagger with a tapering blade, slightly concave sides and a rounded point. The edges are poorly preserved. The cross section is quite flat; no traces of ribbing are discernible. At the trapezoidal butt, one rivet hole can be seen near the top. A vertical line some 3 cm from the top of the butt is probably where the haft ended. This dagger probably corresponds to Philip’s Type 34.  

State of preservation: tip broken, corroded, haft not preserved

**Toggle pin**  
SCA reg. no.: not registered  
Material: copper/bronze  
l.: 10.3 cm  

**Description:** ---  

State of preservation: ---

**Grave 6 [676]**

This tomb was situated in the SE part of the cemetery (square Y155/X100). The south part of the structure was missing completely, indicating that the tomb was probably robbed prior to excavation (Fig. 10).
Architecture

The tomb consisted of at least two chambers. The better preserved chamber is in the N and has interior dimensions of 158 × 72 cm. It was built of two rows of greyish green rectangular mudbricks (33 × 17 × 10 cm) in stretcher bond and probably a burial chamber. To the south, another chamber (max. preserved length 66 cm, original width not preserved) was built in the same course of work as the northern chamber. However, it does not follow the S–N axis of the grave, but is oriented slightly toward the east. This part of the structure was badly damaged, so that the exact form, function and dimensions of the second chamber could not be determined.

The vault construction rests on two rows of bricks in a header bond. Only the first row of the barrel vault with the typical bricks on edge in alternating courses was preserved. It continues also over the E wall of the disturbed S chamber. The spaces between these bricks seem to be filled with a bonding material, which suggests that the whole structure of the vault was once plastered.

The tomb’s contents

In the northern part of the burial chamber, a pair of extremely contracted legs could be identified in situ with the knees pointing toward the E. The body was presumably laying on its left side. No further parts of the skeleton were preserved. It is unclear if these skeletal remains belonged to a primary internment or to an intrusive secondary burial.

Two koḥl-pots (SCA_633 and SCA_636) were found in the tomb (Plate IV); at least one application stick was reported in the excavation diary. Some beads were also recovered. The precise position of these burial goods could not be determined, as there are no photos of the burial.

Koḥl-pot with lid  SCA reg. no.: 636
Material: travertine (?)  h.: 6.5 cm; rim Ø: 7.0 cm; base Ø: 7.0 cm; app. Ø: 2.5 cm; max. Ø: 7.5 cm; lid Ø: 7.0 cm

Description: a squat koḥl-pot with a broad rim and a flat base was made of one piece of soft whitish stone, probably travertine. Its original exterior surface is much better preserved than that of SCA_636. The interior consists of a straight drill-channel with a rounded bottom. On the lid, the fine crystalline layers of the stone can be seen. Eye-paint applicator was found inside.

State of preservation: rim and lid chipped

Material: carnelian  Ø: 0.5 cm; thread hole Ø: 0.2 cm; 2 round
Material: carnelian  1.: 1.6 cm; max. Ø: 0.6 cm; 2 lozenge-shaped
Material: amethyst  Ø: 0.6 cm; thread hole Ø: 0.15 cm; 3 round
Material: amethyst  Ø: 0.9 cm; thread hole Ø: 0.15 cm; 1 round

Description: beads of different shapes, made of semi-precious stones. It is unclear if all of these beads belonged to the same piece of jewellery; their position within the tomb is unknown.

State of preservation: well-preserved.

Grave 7 [612]

This SSE–NNW-oriented infant mudbrick tomb with a gabled roof [612] and another infant tomb [613], further to the S, seem to be built around the vaulted tomb [610]. On the other hand, their orientation differs slightly from the latter’s orientation. This could indicate that some time passed between

Fig. 11 Tomb 7 before excavation (Photo M. Nour el-Din)
its construction and that of the infant tombs. Tomb [612] was intact prior to excavation (Fig. 11).

**Architecture**

The infant tomb [612] was built of rectangular greyish-green mudbricks (40 × 18 × 9 cm), held together by a coarse bonding material. The construction of this small tomb, which has interior dimensions of 64 × 24 cm, was very simple. There is no distinction between the burial chamber and the roof; the long walls of the tomb were built of three sloping bricks each. The shorter wall in the SSE was built of two rows of bricks placed on their edge and the NNW side consisted of three rows of bricks on their bed. Traces of a thick layer of bonding material were discernible on the outside of the WSW wall, indicating that the tomb was probably covered with this material on the outside. Due to the small dimensions of the construction, the burial was probably placed before the walls made of sloping bricks were built. This tomb was constructed for the burial of an infant aged between 0.5 and 1 year, laying slightly contracted on its right side, facing E. The excavator noted that there were two mudbricks placed on the skeleton. A black juglet was found beside the skull (see Plate IV).

**Juglet**

SCA reg. no.: not registered; 7-a
Material: ---
max. pres. h.: 6.6 cm; base Ø: 1.8 cm
Description: Tell el-Yahudiya pottery juglet with incised decoration (Fig. 28.12).
State of preservation: rim missing; worn surface

**Anthropological observations**

Preservation:
almost complete, but damaged skeleton of a little child with a fragmentary skull
Morphological characteristics:
gracile skeleton with weak muscular relief
Metric characteristics (diaphysis length): humerus dext.: 73 mm
radius sinister: 62 mm
Conclusion: Judging from the dental age and the length of measurable long bone diaphyses, this child died at the age of 0.5 – 1 year (infans I).

**Grave 8 [610]**

This NW–SE-oriented mudbrick tomb with vaulted roof was situated in the southern part of the excavated cemetery section (squares Y145/X95 and Y150/X95). Around it, the small tombs with gabled roofs [613] and [612] were located. This arrangement seems to be intentional, but it is unclear if it reflects any familiar relationships between the buried individuals or some other kind of social interconnection. Based on the undisturbed state of the skeleton, it may be inferred, that the tomb was not robbed prior to excavation. This tomb corresponds to Type 4.3 of the Tell el-Dab‘a tomb typology (Fig. 12).

**Architecture**

This tomb [610] was built of rectangular greyish-green mudbricks (39 × 20 × 12 cm), which are held together by a coarse bonding material. The joints between the bricks were relatively wide, ranging between 1 and 2 cm. The tomb consisted of a rectangular burial chamber with interior dimensions of 220 × 90 × 20 cm, built in two rows of mudbricks in stretcher bond. The inside of the burial chamber seems to be plastered with the bonding material. At the top of the burial chamber walls, a 155 cm broad basis was created by a row of bricks in a header bond protruding outward from the burial chamber. The barrel vault sloping towards the triangular NW gable was built on this basis. Bricks laying on their edges were placed at the beginning of alternating rows to ensure that the joints of the vault bricks would not be aligned. The NW gable consisted of 6 rows of bricks in a header bond recessing in steps towards the top. The SE wall of the tomb seems to be built less carefully than the rest of the structure. This might indicate, that here the entrance into the tomb was left open and was built only after the internment was placed. However, it is also possible, that the burial was interred in the burial chamber before the vault.
was built. The vault was covered in a bonding mass on the outside. Maximum preserved height of the tomb was 97 cm.

The tomb’s contents

In this tomb, an adult male aged between 45 and 55 years (adult II/matur I) was interred. The skeleton was laying off the main axe of the tomb, contracted on its right side in the SE part of the tomb. It was looking towards S. The legs were sharply contracted, with knees pointing to S. The right arm was not preserved and the left was laying alongside the chest. It is possible, that the legs were originally pulled up, but the position of the upper body is inconclusive. The orientation of the body is unusual in the excavated part of the cemetery – the only other skeleton with its head to the E is the infant from tomb [677].

In the SW corner of the burial chamber, a skeleton of sheep/goat was placed. A pottery bowl (SCA_674) on a ring stand and a cup (SCA_675) were placed by the head of the deceased (see Plate V). To the left of the left shoulder, two red and one black juglets were placed. Another red juglet was placed to the right of the pelvis. Furthermore, 5 scarabs were found in the left hand of the skeleton and another one was laying by the head of the deceased (SCA_674, 679, 681, 682, 683 and 684).

Bowl
SCA reg. no.: 674
Material: ---
h: 6.6 cm; rim Ø: 13.5 cm; base Ø: 4 cm
Description: small pottery bowl with slightly canted walls, a direct rim and a flat base (Fig. 28.17). State of preservation: complete

Cup
SCA reg. no.: 675
Material: ---
h: 10 cm; rim Ø: 8 cm; base Ø: 4.5 cm
Description: small ceramic cup with a flat base, traces of red slip on the wall and base. State of preservation: complete, rim chipped

Juglet
SCA reg. no.: not registered
Material: ---
Description: red pottery juglet with ovoid body. State of preservation: broken handle, eroded surface

State of Tell el-Yahudiya pottery juglet.
State of preservation: only the base and lower part of the body were preserved

Juglet
SCA reg. no.: not registered
Material: ---
Description: red pottery juglet. State of preservation: ---

Juglet
SCA reg. no.: not registered
Material: ---
Description: red pottery juglet. State of preservation: ---

Ringstand
SCA reg. no.: not registered
Material: ---
Description: Red pottery ringstand (Fig. 28.18). State of preservation: broken, complete profile

Scarab
SCA reg. no.: 678
Material: steatite (?)  l: 1.95 cm; w: 1.3 cm
Description: head type A4/A6; back type: PN; seal: the motive is arranged horizontally. It shows the nfr-sign above the gold nwb-sign, flanked by two nfr-signs. The whole motif is enclosed by a simple line. In accordance with a dating in the SIP, the bee has only three legs21. The thread hole penetrates the length of the body. State of preservation: ---

Scarab
SCA reg. no.: 679
Material: steatite (?)  l: 1.9 cm; w: 1.3 cm
Description: head type A4/A6; back type: PN; seal: sun disc located over a horizontal moon sickle, further down is the kheper-sign; the whole design is enclosed by a rope border. The thread hole penetrates the length of the body. State of preservation: worn at the top of the back; traces of yellowish glaze at the sides of the back

Scarab
SCA reg. no.: 681
Material: steatite (?)  l: 1.75 cm; w: 1.2 cm

20 Four juglets from this tomb were not registered, but they can be seen on the excavation photos. No details of their form and size are available.

21 MELNAR 2001, 155.
Description: head type D3; back type: PS, two straight twigs at the lower part of the back; seal: concentric circles connected with lines arranged in a floral pattern, enclosed by a simple line. The thread hole penetrates the length of the body. State of preservation: worn at top of the back; traces of a green glaze on the right side of the back.

Scarab SCA reg. no.: 682
Material: steatite (?) 1.: 1.95 cm; w.: 1.3 cm
Description: head type D3; back type: PS; seal: concentric circles connected with lines arranged in a floral pattern, enclosed by a simple line. The thread hole penetrates the length of the body. State of preservation: scratched back.

Scarab SCA reg. no.: 683
Material: steatite (?) 1.: 1.7 cm; w.: 1.2 cm
Description: head type A4; back type: PN; seal: concentric circles around the edge and in the middle enclosed by a simple line. The thread hole penetrates the length of the body. State of preservation: worn at top of the back; traces of green glaze at the clypeus.

Scarab SCA reg. no.: 684
Material: steatite (?) 1.: 1.95 cm; w.: 1.3 cm
Description: head type A4/A6; back type: PN; seal: Hathor-emblem standing on nb-basket, flanked by ‘nr’-signs on both sides, whole motive enclosed by a simple line. The thread hole penetrates the length of the body. State of preservation: worn at top of the back; traces of green glaze at the clypeus.

Anthropological observations
Preservation: damaged fragmentary skeleton of an adult individual.
Morphological characteristics: fragmented, robust cranium with sutures usually almost closed. Arcus superciliaris indicated, margo supraorbitalis rounded, processus mastoidei large, os zygomaticum high, with slightly irregular surface, processus zygomaticum high and large. On the inner side of the upper right edge of the orbit is a small ledge; very robust fragmentary mandible; only right sided simple and little foramen mentale, spina mentalis spina-shaped, mandibular angles everted (+1). Tooth wear degree of abrasion 1 to 3, particularly the lower teeth are encrusted with dental calculus, the teeth of the maxilla and mandible have exposed necks (parodontosis). Trigonum mentale medial, delimited (0), corpus mandibulae thick; vertebrae damaged-to-fragmentary, robust and high-sized, spondylotic changes in thoracic and lumbar vertebrae (4 – 5 mm). At atlas, on the left side of fovea articularis superior osteoma (6 × 8 mm); only a small fragment was found from the os sacrum, medium robust to robust ribs fragmentary; fragments of robust right clavicle, with medium robust till robust muscular relief; robust scapulae, humera, radii and fragmentary ulnae; fragmentary robust pelvic bones with medium robust to robust muscular relief, sulcus preauricularis narrow and shallow, facies auricularis at a sharper angle without constriction, tuberculum musculi piriformis heavily indicated; femora damaged till fragmentary, robust with robust muscular relief, epiphyses synostosed, linea aspera narrow and high. On the left femur, which can be partly measured, the medium pilaster. In front of both femoras on the collum femoris a (backhorse riding?) facet (on the right – 16 × 20 mm) but linea intertrochanterica is less noticeable. Long bones of foreleg fragmentary, robust, with a robust muscular relief.
Metric characteristics: humerus dex.: 73 mm
Deviations and pathological changes: parodontosis, degenerative changes (spondylosis deformans) of the vertebral column, osteoma (6 × 8 mm) at atlas, collum femoris (riding?) facets on both femora.
Conclusion: Judging from the degree of sexualisation of the skull (+ 0.64) and postcrania skeletal (+ 1.00), summed up to (+ 0.82), the robust skeleton, and degree of dental abrasion, the skeleton probably belongs to a male individual who died at age adultus II/maturus I (ca. 45 – 55 years).

Grave 9 [613]
This SSE–NNW-oriented infant mudbrick tomb [613] was situated immediately S of the vaulted tomb [610]. Its architecture strongly resembles one of the other infant tombs [612], indicating a possible closer social and/or chronological relation between them. It was intact prior to excavation (Fig. 13).

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22 For further discussion on the position, see tomb [612] above.
Architecture

This mudbrick tomb [613] was built of rectangular greyish-green mudbricks (27 × 18 × 9 cm), held together by a coarse bonding material with a high portion of fine gravel. The construction of this tomb, which has interior dimensions of 60 × 30 cm follows the same principle as that of the aforementioned infant tomb [612]: there is no distinction between the burial chamber and the roof. The SSE wall consists of one brick on the edge; the NNE wall was not preserved at the time of documentation. A thick layer of bonding material on the WSW wall of the tomb [613] indicates that this structure was also covered by plaster on the outside.

The tomb’s contents

In this tomb, a skeleton [613] of an infant of about 0–0.4 years (circumnatale) was discovered. The skull was in the S. No more information about the position of the deceased could be gained at the time of documentation, as the skeleton was badly preserved due to its prolonged exposure in the open grave. A red pottery juglet (SCA_665) was discovered within the tomb (see Plate IV).

Juglet

SCA reg. no.: 665
Material: ---
Description: red pottery juglet with rounded base.
State of preservation: complete profile, highly worn surface

Anthropological observations

Preservation:
very fragmentary skeleton of a little child
Morphological characteristics:
very gracile skeleton with weak muscle relief
Metric characteristics (diaphysis length):
humerus dex. (?): 66 mm
femur: 87 mm (?)
Conclusion: Judging from the dental age and the length of measurable long bone diaphyses, this child died at its birth (circumnatale).

Grave 10 [680]

This E–W-oriented tomb is the northernmost tomb excavated in 2011 (squares Y140/X120 and Y145/ X120). The tomb structure is badly disturbed; the E part of the tomb is completely missing (Fig. 14). Despite this, enough architecture was preserved to be able to assign the tomb to the same type as tomb [675], i.e., Grave 5.

Architecture

This mudbrick tomb with a barrel vault [680] was built of rectangular greyish-green mudbricks (36 × 16 × 10 cm), held together by coarse bonding material. It consisted of a rectangular burial chamber with interior dimensions of 93(+?) × 71 cm and was built to the height of three rows of mudbricks.
The parts of walls still standing were built in stretcher bond.

The burial chamber was once roofed by a barrel vault. The typical bricks protruding out of the vault rested directly upon the burial chamber walls and were leaning towards the W gable. On the W gable the impression left by the upper part of the vault was still visible. The vault seems to be covered in a bonding mass on the outside.

**The tomb’s contents**

A burial of an adult/mature female between 50 and 59 years was discovered in the NW corner. It was probably a secondary interment. The skeleton was badly damaged at the time of documentation, because it was left in the grave that remained open for some time. The skeleton was laying in contracted position on the right side, with its head in the E and its hands folded underneath.

A scarab (SCA_677) was found in the tomb, alongside red and blue faience beads and a black dipper juglet (SCA_630). Additionally, scarabs and disc beads made of shell and a cylindrical bead of milk-white stone were found during sieving (see Plate V). It is not clear, if these objects belong to the secondary interment, or are a part of the original equipment of the primary burial once interred in the tomb.

**Dipper juglet**

SCA reg. no.: 630
Material: ---

h.: 20 cm, rim Ø: 4.4 – 4.6 cm

Description: medium ceramic jug with a spouted rim and a pointed base, traces of vertical polishing on the neck and body.

State of preservation: complete, worn surface

**Scarab**

SCA reg. no.: 677
Material: steatite (?)

l.: 2.1 cm; w.: 1.4 cm

Description: head type A2; back type: PN; hairy legs; seal: standing man with a cape holding a lotus flower, flanked by uraeus-cobra in the front and a kheper-sign with a sun disc at the rear, enclosed by a simple line. The thread hole penetrates the length of the body.

State of preservation: worn at the top of the back

**Scarab**

SCA reg. no: 688
Material: steatite (?)

l.: 2.2 cm; w.: 1.5 cm

Description: head type D3; back type: PS; seal: udjat-eyes over nb-baskets, line of ankh- and nfr-signs, nwb-sign, enclosed by a simple line. The thread hole penetrates the length of the body.

State of preservation: worn

**Beads**

SCA reg. no.: not registered
Material: shell --- disc
Material: red faience --- 2 lozenge-shaped
Material: blue faience --- 3 round
Material: milk-white stone --- round

**Anthropological observations**

Preservation:

damaged skeleton of an adult individual with a medium robust skeleton

Morphological characteristics:

calvarium damaged-to-fragmentary, medium robust in structure (but the thickness of the bones flat parts is greater, squama occipitalis – 12 mm), muscle relief weak. The obliteration of lamina interna is almost complete. Norma frontalis: arcus superciliiarist slightly delimited, margo supraorbitalis sharp, sutura metopica obliterated, margo inferior aperturae piriformis of anthropine form.
Norma lateralis: glabella –1, os zygomaticum medium high with irregular surface, processus retromarginalis large, protuberantia occipitalis externa flat. Norma verticalis: tubera parietalia medium-sized, foramen parietale on the right.
Norma occipitalis: surface of squama ossis occipitalis flat, processus mastoidei very small, crista supramastoidea weak; mandible damaged, gracile, with medium muscular relief, chin prominent in lateral view, in inferior view narrow with the pick in the middle, planum alveolare and mentum visible in superior view. Foramina mentalia simple bilaterally, spina mentalis elevated, mandibular angles inverted. Extensive remodelling of bone tissue is visible on the right side of the maxilla and mandible (on site dental alveoli teeth C, P1, P2, P3, M1, M2 and M3), which is probably caused by a large abscess (bacterial infection?). On the place of third molar (18) an unerupted tooth is seen. Trigonum mentale connected to the bone wall, mandible angles with small eminences, processus mandibularis very small; vertebrae damaged, medium robust and medium-sized. Degenerative changes particularly in the thoracic and lumbar vertebral column (spondylodis deformans – reaches up to 15 mm, Schmorl’s nodes, spondylarthrosis). Gracile ribs damaged and fragmentary; clavicles gracile-to-medium robust, damaged, strongly
curved with feeble muscular relief. Only left scapula present, it is gracile-to-medium robust, fragmentary; humeri fragmentary, robust, their muscular relief medium to mighty. Osteoma on the epicondylus lat. of humerus dex., arthrotic changes on the epicondylus medialis of humerus sin.. Radii and ulnae fragmentary, robust, with mighty muscular relief; pelvic bones medium robust, fragmentary, with medium muscular relief. Sulcus preauricularis broad and deep, arc composé in form of two arches intersecting in imaginary lines, facies auricularis a rather obtuse angle, tuberculum musculi piriformis feebly indicated, tuber ischiadicum rough with osteophyts; femora damaged, robust, with a mighty muscular relief, trochanter tertius in the shape of crista hypotrochanterica, linea aspera is narrow and high, vertical diameter of the right and left caput femoris 41 mm. In front of both femoras on the collum femoris a (backhorse riding?) facet, linea intertrochanterica is less noticeable and in fossa trochanterica bon spurs. According to some measurements, there are weak pilasters on the femurs and the right femur is platymer. Only left patella with mighty muscular relief and a perforation on the medial part of facies posterior is preserved. Long bones of foreleg fragmentary, medium robust-to-robust, with a mighty muscular relief. Weak tissue hypertrophy is visible on the lateral side of the tibia sin.; osteophyitic enlargement on the linea musculi solei.

Deviations and pathological changes

Large abscess on maxilla and mandible; degenerative changes particularly in the thoracic and lumbar vertebral column (Schmorl’s nodes, spondylosis deformans, spondylarthrosis), collum femoris (riding?) facets on the both femora, arthritic changes on the bones of the legs.

Conclusion: The degree of sexualisation of the skull (– 0.82), postcranial skeleton (– 0.33), summed up (– 0.58), the skeleton morphology and degenerative changes on the skeleton seem to indicate a female who died at age maturus II (ca. 50–59 years).

Grave 11 [681]

The disturbed SE–NW-oriented mudbrick tomb was also situated in the northern part of the excavated cemetery part (squares Y140/X115 and Y145/X115). Most of the structure toward the E was missing. The grave was possibly robbed prior to the excavation, probably already in antiquity (Fig. 15). Enough of the architecture was preserved to determine that the tomb belongs to the same type as tombs [675] and [680], i.e., Graves 5 and 10, respectively.

Architecture

The tomb [681] was built of rectangular greyish-green mudbricks (38 × 18 × 10 cm), held together by coarse bonding material with high portion of fine gravel. The masonry on the preserved part of the structure was not very fine. The joints were very irregular, ranging between 0.5–4.5 cm. The tomb consisted of a rectangular burial chamber with interior dimensions of 70(±x?) × 72 cm, built in two rows of mudbricks in stretcher bond.

The roof had a form of barrel vault, backed against the W wall built of 6 rows of bricks in header bond, protruding out of the burial chamber. The vault construction rested directly on the walls of the burial chamber and was probably covered in plaster on the outside.

Content of the tomb

No skeleton or grave goods were discovered in the preserved part of the tomb.

Grave 12 [653]

This E–W-oriented infant tomb [653] with a gabled roof was situated in the northern part of the excavated cemetery section, relatively close to the following tomb [654] (square Y145/X115). The structure was comparatively well-preserved and seems to have been intact prior to excavation. This tomb is the only one in the rescue excavation trench that does not have a rectangular burial chamber, but the roof construction is clearly related to Type 3.1 of Tell el-Dab‘a (Fig. 16).
Architecture

The tomb [653] was built of rectangular greyish-green and olive mudbricks (40 × 20 × 8 cm), held together by a coarse bonding material with a high portion of fine gravel and occasional lime particles. The burial chamber of the tomb [653] consists of one row of bricks standing on their edge. The 93 × 56–70 cm chamber is trapezoid in form, the E side being the broader one. The brick constituting the E wall of the burial chamber is shifted inside the tomb, leaving part of the S and N wall protruding, possibly to support the roofing. The roof consisted of a row of sloping bricks on the N and S side resting upon the brick in the second row of the W wall. In the E, two more sloping bricks were added to the roof, spaces between them being filled with a lot of bonding mass. These bricks in the E rest partially on the protruding N and S wall. In the SE corner an additional backing construction made of brick parts was preserved.

The tomb’s contents

On the eastern side of the tomb a pottery jar covered with a bowl was placed (see Plate VI). The internment was covered by two mudbricks. Underneath, a skeleton of an infanet [653] aged between 0.5 to 1 year (infans I) was found, with the head in the E, facing N, leaning slightly on its right side. As the content of the tomb chamber was sieved, 3 beads of carnelian were discovered.23

<table>
<thead>
<tr>
<th>Jar</th>
<th>SCA reg. no.: not registered, 12-a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material:</td>
<td>h.: 37 cm; rim Ø15.5 cm, max. Ø: 18.2 cm</td>
</tr>
</tbody>
</table>

23 No further information available.

Description: a large pottery jar with direct rim and rounded base.
State of preservation: complete profile, rim partly broken off

Bowl (?)
Material: ---
Description: ---
State of preservation: ---

Beads
Material: carnelian Ø: 0.4 cm; thread hole Ø: 0.15 cm; 3 round
Description: three rounded beads of semi-transparent carnelian.
State of preservation: good

Anthropological observations
Preservation: almost complete, but damaged skeleton of a little child
Morphological characteristics: gracile skeleton, with weak muscular relief. At the fragmentary cranium – os occipitale the frontal fontanelle is open and the back fontanelle closed; some arches of thoracic vertebrae are fused
Metric characteristics (diaphysis length): humerus sin.: 91 mm tibia dex.: 82 mm (?)
Conclusion: Judging from the dental age (developmental degree of deciduous and permanent teeth) and the length of measurable long bone diaphyses, this child died at the age of 0.5 – 1 year (infans I).

Grave 13 [654]
The SE–NW-oriented tomb [654] with gabled roof was situated in the northern part of the excavated...
cemetery section (square Y145/X110), south of the preceding tomb [653] (Fig. 17). It corresponds to Type 3.1 of Tell el-Dab’a and was intact prior to excavation.

Architecture

The tomb [654] was built of rectangular greyish-green mudbricks (37 × 18 × 10 cm), held together by a coarse bonding material. It consisted of a rectangular burial chamber with inner dimensions 110 × 41 cm built in two rows of mudbricks in stretcher bond. The roof construction made of sloping bricks rested on the walls of the burial chamber. These bricks were backed against the burial chamber wall only by a mass of bonding material. At the ridge, triangular stoppers cut out of mudbricks were placed. In the SE, an additional brick was placed on the rooftop, connecting the roof and the SE gable. This roof was also covered with plaster on the outside.

The tomb’s contents

The burial chamber was slightly bigger than necessary to accommodate the contracted body. A child aged between 5 to 6 years (infans I) was buried in this tomb (Fig. 18). The contracted skeleton was laying on its left side, with the head in the SE, facing S. The head seems to be higher than the rest of the body, probably placed on a heap of soil, not different from the tomb fill. The arms were bent in front of the body with hands placed in front of the face; the legs were bent with knees pointing to the S.

Several burial goods were discovered alongside the skeleton (see Plate VI). A red pottery juglet (SCA_669) was found in the NE behind the skull, at approximately the same height as the head. Somewhat deeper under the juglet, a pottery bowl (SCA_674) was placed. In the left hand of the child, two scarabs (SCA_693 and 694) were found. A bronze toggle pin under the mandible probably once held the deceased’s garment closed. Around the neck, a necklace consisting of carnelian and faience beads was found.

Juglet

SCA reg. no.: 669
Material: ---
h.: 9 cm; rim ∅: 2.4 cm; base ∅: 2.5 cm
Description: a red pottery juglet with an ovoid body (Fig. 28.2).
State of preservation: complete, worn surface

Bowl

SCA reg. no.: not registered; 13-a
Material: ---
h.: 6.6 cm; rim ∅: 13.5 cm
Description: a small pottery bowl with a direct rim and a flat base (Fig. 28.16).
State of preservation: complete

Toggle pin

SCA reg. no.: not registered; 13-b
Material: copper/bronze
l.: 3.8 cm; ∅: 0.4–0.5 cm, ∅ around circular hole: 0.7 cm
Description: a toggle pin with a round profile and a circular hole in the shaft. No further details of form could be discerned before conservation.
State of preservation: probably broken, heavily corroded

Scarab

SCA reg. no.: 693
Material: steatite (?)
l.: 1.2 cm; w: 0.8 cm
Description: head type D9; back type: LS; seal: stylized red crown and s3-symbol above nb-basket, a rising sun (?) at the top, enclosed by a simple line. Thread hole penetrates the length of the body.
State of preservation: slightly scratched at the back

Scarab

SCA reg. no.: 694
Material: steatite (?)
l.: 1.2 cm; w: 0.8 cm
Description: head type B2; back type: decorated LS; seal: Horus-hawk standing on nb-basked, with a very stylized uraeus/maat-feather behind, enclosed by a simple line. Thread hole penetrates the length of the body.
State of preservation: slightly scratched at the back

Beads

SCA reg. no.: not registered; 13-c
Material: green faience
- l.: 0.85 cm; max. Ø:
  - 0.25 cm; 15 lozenge-shaped
- Ø: 0.4 cm; thread hole Ø:
  - 0.1 cm; 10 round
Material: white faience
- Ø: 0.4 cm; thread hole Ø:
  - 0.15 cm; 3 ring-shaped
Material: black faience
- Ø: 0.5 cm; thread hole Ø:
  - 0.15 cm; 2 disc-shaped
Material: carnelian
- Ø: 0.45 cm; thread hole Ø:
  - 0.15 cm; 3 round

Description: beads of various shapes and materials, it is unclear if they belong to the same piece of jewellery.
State of preservation: worn surface

**Anthropological observations**

Preservation:
- almost complete, but damaged skeleton of a child

Morphological characteristics:
- gracile skeleton, with weak muscular relief; on the frontal bone *sutura metopica* between orbits (10 mm)

Metric characteristics (diaphysis length):
- *humerus sin.*: 151 mm (?)
- *radius sin.*: 112 mm (?)
- *ulna sin.*: 134 mm
- *femur dex.*: 195 mm (?)
- *tibia dex.*: 151 mm (?)

Conclusion: Judging from the dental age (degree of development of temporary and permanent teeth) and the length of measurable long bone diaphyses, this child died at ca 5 – 6 years (infans I) of age.

**Grave 14 [655]**

This small SE–NW-oriented tomb of an infant [655] with a gabled roof was situated approximately in the middle of the excavated part of the cemetery (square Y145/X105). The architectural structure was badly preserved at the time of documentation, with only the SW and NE walls still standing (Fig. 19).

**Architecture**

The tomb [655] was built using rectangular greyish-green mudbricks (30 × 15 × 9 cm). The reconstruction of the architectural structure is problematic owing to the bad preservation. The tomb seems to be a shelter built of one row of mudbricks in stretcher bond and covered by a simple roof made of sloping bricks, covering an area of about 63 × 32 cm. The bottom of the tomb seems to be uneven, with a deeper mould in the centre. On the outer SE corner, behind the skull, a pottery cup was placed (see Plate VI). The roof was at least partly covered with a coarse bonding material on the outside.

**Content of the tomb**

This tomb held the burial of a child aged between 1 and 2 years (infans I). The skeleton [655] was laying in contracted position on its right side, with the head in the SE, facing N (Fig. 20). The arms

![Fig. 19 Tomb 14 before opening (Photo M. Nour el-Din)](image1)

![Fig. 20 Internment in Tomb 14 (Photo L. Hudáková)](image2)
were bent under the skull; the legs were sharply bent, with the knees pointing to N. The head was somewhat higher than the body, probably due to the uneven surface of the burial chamber. It is uncertain if this head position, which is somewhat higher than the rest of the body, was intentional, but examples from other tombs suggest this possibility.

**Cup**

SCA reg. no.: not registered; 14-a  
Material: ---  

d.: 9 cm; rim Ø: 8 cm; base Ø: 4 cm  
Description: small ceramic cup with a direct rim and a flat base (Fig. 28.15).  
State of preservation: complete, rim chipped

**Anthropological observations**

Preservation: damaged skeleton of a little child  
Morphological characteristics:  
gracile skeleton, with weak muscular relief; the frontal fontanela on fragmentary cranium open; halves of the mandible and arches of cervical vertebrae fused.  
Metric characteristics (diaphysis length):  
radius sin.: 122 mm (?)  
femur dex.: 241 mm  
tibia dex.: 198 mm  
Conclusion: Judging from the morphological characteristics and the length of measurable long bone diaphyses, this child died at the age of 1 – 2 years (infans I).

**Grave 15 [656]**

This E–W-oriented tomb was situated in the S part of the excavated area (square Y145/X100). The E part of the tomb seems to be missing from the photographic documentation, suggesting that it may have been robbed in antiquity, or not closed completely after the internment was put inside (Fig. 21).

**Architecture**

The tomb [656] consisted of a rectangular burial chamber with interior dimensions of 120 × 43 cm, built of two rows of greyish-green mudbricks (35 × 15 × 9 cm) in stretcher bond. The roof construction made of sloping bricks rested on the burial chamber. The roof was plastered with bonding material on the outside and the construction was backed against the W wall of the tomb.

**The tomb’s contents**

The tomb held the burial of a child aged between 5–9 years (infans I/II). The skeleton was laying in contracted position on its right side, with the head in the E, facing N (Fig. 22). The right arm was outstretched, resting on the right knee, and the left arm was bent with the hand resting on the right elbow; the legs were sharply bent with the knees pointing to N.

In the south, behind the skull, a Tell el-Yahudiya juglet was placed. A jug with a broken rim was laid in the inner SE corner and a cup (SCA_671) was in the inner NE corner of the burial chamber (see Plate VI).

**Cup**

SCA reg. no.: 671  
Material: ---  

d.: 10 cm; rim Ø: 8.4 cm; base Ø: 3.7 cm  
Description: a small ceramic cup with a direct rim and a flat base (Fig. 28.14).  
State of preservation: complete
Jar

SCA reg. no.: not registered; 15-a
Material: ---
max. pres. h.: 15.4 cm;
max Ø: 10.8 cm
Description: medium ceramic baggy jar with a rounded base (Fig. 28.13).
State of preservation: rim missing

Juglet

SCA reg. no.: not registered, 15-b
Material: ---
max. pres. h.: 10 cm; rim Ø: 3 cm
Description: Tell el-Yahudiya ceramic juglet with an incised decoration (Fig. 28.6).
State of preservation: base broken

Anthropological observations

Preservation:
among complete, but damaged skeleton of a child
Morphological characteristics:
gracile skeleton, with weak muscular relief
Metric characteristics (diaphysis length):
humerus sin.: 151 mm (?)
radius sin.: 112 mm (?)
ulna sin.: 134 mm
femur dex.: 195 mm (?)
tibia dex.: 151 mm (?)
Deviations and pathological changes
cribraria orbitalia on the eye socket roofs

Conclusion: Judging from the dental age (degree of development of temporary and permanent teeth) and the length of measurable long bone diaphyses, the child died at the age of 5–9 years. Presence of cribraria orbitalia indicates food stress.

Grave 16

The SE–NW-oriented Tomb 16 is situated on the E border of the excavation trench (square Y160/ X100), under the remains of Petrie’s Wall 3 and north of Petrie’s Wall 2 (Fig. 23).25 Tomb 16 was built over Tomb 17, disturbing the tomb structure and the burial within.

Architecture

Tomb 16 is a relatively large mudbrick tomb with a rectangular burial chamber and a barrel vault roof. It was built of rectangular mudbricks and corresponds to tomb Type 4.3 of the Tell el-Dab’a typology. The burial chamber seems to be built of two rows of bricks in stretcher bond. The basin for the vault is built on top of the burial chamber walls and consists of one row of bricks in header bond, protruding out of the burial chamber and increasing the wall thickness from the original half-brick to 1 brick.

The barrel vault was built upon this construction, backed against the N gable. The first brick in every second row is placed on edge, so that the

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Fig. 23 Tomb 16 under Petrie’s Wall 3 (Photo M. Nour el-Din)

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24 Tomb 16 and Tomb 17 were discovered after the Polish-Slovak archaeological mission left and were crudely measured during the 2012 season; therefore, some details of the construction are not available and the tombs do not have a SU number.

vault joints are not aligned. The construction of the N gable cannot be reconstructed in detail; however, as far as it can be seen on the excavation photos, it was not triangular as usual, but rectangular.

The tomb’s contents

At least two adult individuals were buried in Tomb 16 (Fig. 24). One of them was laying supine in the N part of the tomb. The right arm was flexed, so that the hand was in front of the face; the left hand was only partially preserved and was probably placed over the abdomen. A scarab (SCA_687) was found near the right wrist. The legs were extremely contracted with the knees pointing towards W. However, considering the position of the upper body, it is possible, that the knees were originally pulled up.

A dish (SCA_663) was found in the SE corner of the tomb, over the disturbed burial (Fig. 25). Underneath, mixed with the bones of the disturbed burial, three ivory (?) plates (SCA_695), kohl-pot (SCA_660), juglet (SCA_662) and the stone juglet (SCA_661) were unearthed. It is possible, that they belonged to the disturbed burial. In addition, four scarabs were found in the tomb, but their precise position is unknown (see Plate VII).

Juglet

SCA reg. no.: 662
Material: ---

h.: 9 cm; rim Ø: 2.3 cm; max. Ø: 9 cm

Description: a small pottery juglet with a black painted decoration on the body and base.

State of preservation: complete

Dish

SCA reg. no.: 663
Material: ---

h.: 7 cm; rim Ø: 22.5 cm; base Ø: 6.5 cm

Description: a medium pottery dish with an inverted rim.

State of preservation: complete

Kohl-pot with lid

SCA reg. no.: 660
Material: travertine (?)

h.: 7.4 cm; rim Ø: 4.5–5 cm; base Ø: 3.6–4.1 cm; cm; lid Ø: 4.7–5.5 cm, knob Ø: 1.5 cm

Description: the kohl-pot with broad rim and flat disc base was made of one piece of soft whitish stone, probably travertine. Its original exterior surface is not preserved; no traces of the manufacturing process could be seen. The inside of this vessel consists of a straight drill-channel with a rounded bottom.
State of preservation: extremely worn surface, chipped rim and lid

Ivory (?) plate

Material: ivory (?)

\[ l.: 6.7 \text{ cm}; \ w.: 2.1 \text{ cm}; \ th.: 0.2 \text{ cm} \]

Description: a thin rectangular plate made of bone. Three holes are located approximately in the middle of the plate, but they are not arranged in a line. The piece seems to be decorated on both sides with incisions filled with black paint. Another two similar objects were found in the tomb, but they could not be lifted, as they were badly decomposed.

State of preservation: glued together from three pieces

Travertine juglet

Material: travertine (?)

h.: 10 \text{ cm}

Description: the form of this small juglet resembles pottery dipper juglets with pointed base and straight rim. The round handle is broken at the top. The drill canal is narrowing towards the bottom of the vessel.

State of preservation: weathered outer surface, broken handle

Scarab

Material: steatite (?)

\[ l.: 2.3 \text{ cm}; \ w.: 1.6 \text{ cm} \]

Description: head type: D9, back: LN; seal: three cobra-signs, flanked by a T-shaped pedestal, whole motive being enclosed by a simple line. Thread hole penetrates the length of the body.

State of preservation: good

Scarab

Material: steatite (?)

\[ l.: 1.8 \text{ cm}; \ w.: 1.25 \text{ cm} \]

Description: head type: A1 (?); back type: PS; seal: six concentric circles arranged in two rows, enclosed by a simple line. Thread hole penetrates the length of the body.

State of preservation: traces of green glaze in the signs and on the back

Scarab

Material: steatite (?)

\[ l.: 1.95 \text{ cm}; \ w.: 1.3 \text{ cm} \]

Description: head type: D3; back: PS; seal: in the centre are two laying nfr-signs above an r-sign, under this group is nbw-sign in perpendicular orientation; the lateral registers are occupied by an ankh-sign each. The whole design is enclosed by a simple line. Thread penetrates the length of the body.

State of preservation: ---

Scarab

Material: steatite (?)

\[ l.: 1.9 \text{ cm}; \ w.: 1.3 \text{ cm} \]

Description: head type D3; back type: PS; seal: three registers, separated by two double register lines; in the middle register are anra-signs, flanked by nfr-signs (?) in outer registers, enclosed by a simple line. Thread hole penetrates the length of the body.

State of preservation: traces of green glaze in the signs and on the sides of the back; top of the back is worn

Scarab

Material: steatite (?)

\[ l.: 1.2 \text{ cm}; \ w.: 0.8 \text{ cm} \]

Description: head type B2; back type: decorated PS; seal: nfr-sign in the middle, flanked by two ankh-signs and uraei (?) under this group is winged sun-disc (?). The whole motive is enclosed by single line. The thread hole penetrates the length of the body.

State of preservation: extremely weathered and worn at the top of the back

Anthropological observations

Individual A

Preservation: fragmentary cranium of an adult individual

Morphological characteristics: robust cranium with medium robust to robust muscle relief. Arcus superciliaries arched, margo supraorbitalis rounded, fossae caninae deep. Maxillary premolars show degree 4 of abrasion and molars degree 3 of abrasion

Conclusion: Male individual, maturus (40–60 years).

Individual B

Preservation: fragmentary pelvis, some tarsal bones and bones of lower extremities toes of an adult individual

Morphological characteristics: fragmentary pelvic bones gracile-to-medium robust with medium muscle relief, sulcus praeauricularis broader and deeper, arc composé in form of two arches intersecting in imaginary lines, facies auricularis a rather obtuse angle with a con-
striction, *tuberculum m. piriformis* feebly indicated. Relief of *symphysis ossis pubis* III. Present *tarsalia* are small and *metatarsalia* medium-sized.

Conclusion: Above average tall (156 cm) female, who died at the age maturus (40–60 years).

**Grave 17**

Tomb 17 was heavily disturbed as Tomb 16 was built (Fig. 26). It seems to be NE–SW-oriented. Because of this disturbance, only a skull and a pot of the original internment on the NE side were preserved in situ. The skull seems to have been placed on a mudbrick or a soil heap. In the photos taken during the excavation of Tomb 16, more bones of a disturbed torso can be seen in the NW part of Tomb 17 (Fig. 27).

**Architecture**

Only one row of mudbricks in stretcher bond is preserved of the half-brick thick burial chamber walls of Tomb 17 on the SE side. Traces of the NW chamber wall are seen in the photograph of the NE chamber wall of Tomb 16. The burial chamber of Tomb 17 seems to be rectangular in plan. Its SW wall protruded slightly under the outer SW wall of Tomb 16. It is not possible to say if it was originally higher than 1 row. The roofing was destroyed completely as Tomb 16 was built. If we assume the dimensions of the preserved bricks on the photographs at $32 \times 20 \times ?$ cm or $40 \times 18 \times ?$ cm, the dimensions of the chamber might be $120–150 \times 40–50$ cm respectively.

**The tomb’s contents**

A disturbed skull of a juvenile individual of 13 years was found on the NE side of Tomb 17. The skull is oriented to the NE, looking NW. The skeleton once probably continued to NE, as the walls of the tomb chamber indicate. Its position could not be determined more precisely. On the NE side of the tomb, a cup was placed by the head of the deceased (see Plate VII).

**Cup**

SCA reg. no.: not registered; 17-a
Material: ---
h.: 11.8 cm; rim Ø: 8.9 cm, base Ø: 3.1 cm
Description: a small pottery cup with a flat base and traces of red slip on the outside.
State of preservation: complete, worn surface

**Anthropological observations (Individual C)**

Preservation: damaged to fragmentary skeleton of a juvenile individual
Morphological characteristics: epiphyses of all long bones are not synostosed
Metric characteristics
*femur sin.:: 315 mm*
Conclusion: Judging from the length of measurable long bone diaphyse, this individual died at the age of ca. 13 years (infans II).

**Conclusions**

The architecture and material culture of the Second Intermediate Period cemetery unearthed at Tell el-Retaba in 2010–2012, represent a considerable contribution to our knowledge of this only poorly known period of history in the Wadi Tumilat. The discovery of this cemetery not only extends the chronology of Tell el-Retaba further into the past, it also offers an important compari-
son to finds known from neighbouring Tell el-Maskhuta. Tell el-Retaba thus becomes a very promising site for the study of the Second Intermediate Period in Egypt.

In the 17 discovered tombs, containing remains of at least 18 individuals, most of the deceased were children up to the age of 5–6 years. The skeletons of adults that were sufficiently well-preserved for an anthropological analysis belonged to elderly persons, over 40 years of age. The tombs were relatively well-adorned with grave goods, scarabs and pottery vessels of different shapes and types (e.g. the chronologically sensitive Tell el-Yahudiya ware) being the most common category among them. However, further research is needed to estimate the chronological implications and stratification of the tombs and their connection with other contemporary tombs unearthed in Tell el-Retaba.

Some remarks on the dating of pottery coming from the rescue excavation of Hyksos tombs (AW)

The group of tombs uncovered during rescue excavations yielded pottery classifiable into six categories: red-slipped juglets; black juglets with stamped/incised decoration; a jar with ovoid body; red slipped cups; red slipped bowls; and a pot stand.

The first group (Fig. 28.1–3) consists of small juglets with ovoid body, a narrow ring base and a flaring rim. Their external surface was red-slipped and burnished. The pots are made of good quality Nile B1 fabric. Such vessels are very well known in Tell el-Dab’a, where the closest parallels came from layers E/1 (mid-15th Dynasty), D/3 (mid-15th Dynasty) and D/2 (end of the 15th Dynasty).

The second group consists of classic Yahudiya ware juglets with one vertical strap handle and ring base (Fig. 28.4–12). All of them were made of Nile B1 fabric, covered with a black slip and burnished. The external surface bore incised decoration. The juglets can be divided into several forms based on their shape and patterns of decoration.

The most numerous were juglets with ovoid or slightly squat bodies. Their external surface was divided into three vertical panels filled with sequences of impressed dots forming zigzags (Fig. 28.4–7 and probably 12). These pots are of Type L.1.3 of Aston and Bietak’s proposed typology.

In the relative chronology of Tell el-Dab’a they can be placed in the D/3 and D/2 horizon, that is, after the mid-to-late 15th Dynasty.

The second form of the Yahudiya ware group is the juglet with a biconical body (Fig. 28.8–9). The decoration consists of two horizontal panels filled with sequences of impressed dots forming lines. According to Aston and Bietak, such juglets belong to Group L.5, especially L.5.1, also known from Tell el-Dab’a, from late 15th Dynasty layers.

There is also a juglet with a biconical body adorned with a number of incised horizontal lines (Fig. 28.10). It is clearly comparable to the “combed” pots of Group L.13, belonging to the late Egyptian horizon according to Aston and Bietak, especially to the L.13.2 type. These can be dated, according to Tell el-Dab’a chronology, to the D/2 phase (the late 15th Dynasty).

The Yahudiya juglet group also includes a pot with an ovoid body and decoration consisting of three vertical panels filled with sequences of impressed dots forming horizontal lines (Fig. 28.11). This can be classified as a pot very similar to those in Figs. 8, 9 and thus can be dated to a later part of the 15th Dynasty.

Among the pots from tombs, there was also a jar with an ovoid body and round base (Fig. 28.13). It is made of Nile B1 fabric. Its external surface is covered with a red, smoothed slip. Its rim is not preserved but it seems it can be compared to vases with narrow necks and flaring rims known from Tell el-Dab’a, layers between E/2 and D/2 (mid-to-late 15th Dynasty).

Very characteristic of Hyksos layers are also cups with slightly incurved rims and narrow concave bases made of Nile B2 fabric (Fig. 28.14–15).
Fig. 28 Selection of pottery from rescue excavations of the Tell el- Retaba Hyksos cemetery (Drawing S. Gromadzka, M. Piorun and A. Wodzińska).
Their external and internal surfaces were red-slipped and well smoothed.37

The Nile B1 fabric was used in the production of two bowls; both covered with red slip and well smoothed (Fig. 28.16–17). One of them has a bent wall and a narrow, flat base. The second has a bent wall, slightly flaring rim and low ring base. There is no exact parallel to the pots from Tell el-Retaba, but the bowl with narrow base in Fig. 28.16 can be compared to vessels from Tell el-Dab’a from layers D/3 and D/2 (from mid-to-end of 15th Dynasty).38 The bowl with ring base shown in Fig. 28.17 is very similar to pots from Tell el-Dab’a, also from layers D/3 and D/2.39 The pots might be considered versions of carinated bowls from the early 15th Dynasty, the walls of which are steeper.40

There was also a pot stand made of Nile B2 fabric, with a smoothed surface (Fig. 28.18). Its upper and lower parts were covered with red slip and smoothed. Such stands appear in Tell el-Dab’a in layer a/2, which corresponds to D/3 dated to the mid-15th Dynasty.41

One of the pots is especially interesting. It is a squat juglet with a round base and one handle (Fig. 29). Its external surface was covered with creamy slip and painted with black horizontal lines. Its base was decorated with a black painted cross. There are traces of black paint also on the handle. Such pots seem to be typical for the Wadi Tumilat Hyksos sites. A similar juglet was found in another Tell el-Retaba tomb.42 They are also known from Kom el-Koa and Tell Om-Bordi located in the vicinity of Tell el-Retaba.43 The pots are not known in Tell el-Dab’a44 and their exact dating is difficult, but it seems that we can date them to after the middle of the 15th Dynasty.45

Another group of vessels from the Hyksos tombs is shown in Fig. 30. It includes a red slipped juglet with one handle and carinated base (Fig. 30.1). Such shapes also occurred in Tell el-Dab’a, in layer E/1 dated to the mid-15th Dynasty.46

One of the most popular juglets known from Tell el-Dab’a has a biconical body and combed decoration similar to the specimen found in Tell el-Retaba (Fig. 30.2). The one from Tell el-Dab’a is a pot of the L.13.2 type from layers D/3 and D/2 (from mid-to-end of 15th Dynasty).47

Among pots from Tell el-Retaba, a juglet with a flaring rim, long neck, globular body, flat base and long vertical handle was also found (Fig. 30.3). Its external surface was covered with brown slip and burnished. It can be compared to pots from other sites in Wadi Tumilat.48

A juglet with an elongated body, pointed base, one handle and flaring rim shaped into a spout was covered with red slip and burnished (Fig. 30.4).

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37 BADER 2009, 124, Abb. 54, Standbodennäpfe, layer D/2, here without red slip; see also KOPETZKY 2010, 229, Abb. 221, from phase E/1, 268, Abb. 260, from phase D/3, but especially 313, Abb. 305, from phase D/2; and FORSTER-MÜLLER 2008, 387, Abb. 314, cups with flat base known from layers E/1, D/3, D/2, from mid-to-end of 15th Dynasty.
40 KOPETZKY 2010, 217, no. 460.
42 WODZIŃSKA in RZEPEKA et al. 2014, 96–97, Fig. 101.1.
43 EL-HANGOURY 2003.
44 The decoration of the vessel is very similar to that of juglets known from Tell el-Dab’a from layers E/2 to E/1, which correspond to the early 15th Dynasty (BIEFAK 1991, 163, Abb. 123, no. 1) although the last one also bears wavy lines. However, the form from Tell el-Retaba is possibly a later version of the type known from Tell el-Dab’a.
45 Karin Kopetzky, personal communication, October 2011.
47 ASTON and BIEFAK 2012, 278, 283, 555, Figs. 206, 253.
48 EL-HANGOURY 2003.
The type is very well attested in Hyksos contexts, especially in Tell el-Dab'a in layer E/1.49

The small jar in Fig. 30.5 had a flaring rim, an ovoid body and a round base, and was well smoothed. On the basis of known examples from Tell el-Dab'a, it can be dated to the mid-15th Dynasty.50

Tall, elongated vessels with a direct rim, a round base and a smoothed surface (Fig. 30.6.) can be dated to the mid-15th Dynasty. An example from Tell el-Dab'a came from layer D/3.51 Vessels of this type are also known from Wadi Tumilat, for example Kom el-Koa.52

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Fig. 30 Selection of pottery from rescue excavations of the Tell el-Retaba Hyksos cemetery (Drawing E. Salah).

52 EL-HANGORY 2003.
A bowl with a ledge rim and low ring base is shown in Fig. 30.7. It was covered with red slip and smoothed. Its hemispherical body shows similarities to vessels from Tell el-Dab’a found in layer E/1.53

Based on archaeological data, we can construct the following list of tombs and pots found in them together with their proposed dating:

<table>
<thead>
<tr>
<th>Tomb no.</th>
<th>Fig.</th>
<th>Tell el-Dab’a layer</th>
<th>Dating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomb 2</td>
<td>30.3</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Tomb 3</td>
<td>30.1 and 30.5</td>
<td>E/1a and D/3</td>
<td>mid-15th Dynasty</td>
</tr>
<tr>
<td>Tomb 4</td>
<td>28.10, 30.2 and 30.6</td>
<td>E/1, D/3 and D/2</td>
<td>mid-to-end of 15th Dynasty</td>
</tr>
<tr>
<td>Tomb 5</td>
<td>28.1, 28.3, 28.4, 28.5, 28.8, 28.9, 28.11</td>
<td>E/1, D/3 and D/2</td>
<td>mid-to-end of 15th Dynasty</td>
</tr>
<tr>
<td>Tomb 7</td>
<td>28.12</td>
<td>D/3 and D/2</td>
<td>mid-to-end of 15th Dynasty</td>
</tr>
<tr>
<td>Tomb 8</td>
<td>28.17 and 28.18</td>
<td>D/3 and D/2</td>
<td>mid-to-end of 15th Dynasty</td>
</tr>
<tr>
<td>Tomb 10</td>
<td>30.4</td>
<td>E/1</td>
<td>mid-15th Dynasty</td>
</tr>
<tr>
<td>Tomb 13</td>
<td>28.2 and 28.16</td>
<td>E/1, D/3 and D/2</td>
<td>mid-to-end of 15th Dynasty</td>
</tr>
<tr>
<td>Tomb 14</td>
<td>28.15</td>
<td>E/1, D/3 and D/2</td>
<td>mid-to-end of 15th Dynasty</td>
</tr>
<tr>
<td>Tomb 15</td>
<td>28.6, 28.13 and 28.14</td>
<td>E/2 but more probably D/3 and D/2</td>
<td>mid-to-end of 15th Dynasty</td>
</tr>
<tr>
<td>Tomb 16</td>
<td>29 and 30.7</td>
<td>E/1</td>
<td>mid-15th Dynasty</td>
</tr>
</tbody>
</table>

The ceramic material shows that the Hyksos cemetery uncovered during rescue excavations can be generally dated to the middle and end of the 15th Dynasty. Thus, this part of the Tell el-Retaba site was used later than the area located further to the west, where one tomb was clearly earlier, coming from the beginning of the 15th Dynasty.54

Bibliography

ASTON, B. G., HARRELL, J., SHAW, I.

ASTON, D.
2004 Tell el-Dab’a XII. A Corpus of the Late Middle Kingdom and Second Intermediate Period Pottery, UZK 23, Wien.

ASTON, D., BIEK, M.
2012 Tell el-Dab’a VIII. The Classification and Chronology of Tell el-Yahudiya Ware, UZK 12, Wien.

BAETE, B.,

BIEK, M.,
1991 Tell el-Dab’a V. Ein Friedhofsbezirk der Mittleren Bronzezeitkultur mit Totentempel und Siedlungsschichten. UZK 8, Wien.

EL-HANGOURY

FORSTNER-MÜLLER, I.

HUDEC, J., FULAJTÁR, E., STOPKOVÁ, E.

KEEL, O.

KOPETZKY, K.,
2010 Tell el-Dab’a XX. Die Chronologie der Siedlungskeramik der Zweiten Zwischenzeit aus Tell el-Dab’a, UZK 32, Wien.

MLINAR, CH.


54 WODZIŃSKA in RZEPKA et al. 2014, 95, Fig. 99, nos. 6–15.


PHILIP, G. 2006 Tell el-Dab’a XV: Metalwork and Metalworking Evidence for the Late Middle Kingdom and the Second Intermediate Period, UZK 26, Wien.


