

A NEW GROUP OF MIDDLE KINGDOM EMBALMING DEPOSITS? ANOTHER LOOK AT POTTERY DUMPS AND REPOSITORIES FOR BUILDING MATERIALS IN MIDDLE KINGDOM CEMETERIES

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Abstract: *Although mummification is assumed to have been a common practice during the mid-late Middle Kingdom, there are no confirmed examples of so-called “embalming deposits” – intentional deposits of waste created during the mummification process – from cemeteries of this period. The only Middle Kingdom deposits of this type date to the early Middle Kingdom and come from the Theban necropolis. This paper examines the archaeology of a hitherto overlooked group of intentional cemetery deposits from the mid-late Middle Kingdom and explores the possibility that the deposits might represent an alternative tradition of embalming or deposition of embalming waste.*

Keywords: *Mummification; Embalming; Intentional Deposits; Ritual; Archaeology; Burial Customs*

Introduction

This paper describes for the first time as a group some Middle Kingdom cemetery deposits that fall outside the parameters of known non-tomb features from Middle Kingdom cemeteries (hereafter MK Deposit Group 1). Characteristic for these deposits are ambiguous spatial and structural relationships to contemporary tombs, a high concentration of pottery vessels to the almost complete exclusion of other artefacts, diverse organic and inorganic materials resembling workshop or building site debris, and the absence of any human

remains or textiles. Items of explicitly ritual nature are restricted to miniature pottery vessels. All the examples of this group of deposits date to the 12th or early 13th Dynasty and most occur in the vicinity of the Middle Kingdom Residence and the Fayum but a single example can be found as far afield as the southern periphery of the Egyptian colonial empire in Nubia.

Given the rather mundane appearance and “utilitarian” contents of these deposits it is tempting to concur with DOROTHEA ARNOLD who identified a deposit of this sort from Lisht as a “repository for pottery and material no longer needed when the building activities in the area had come to an end”² or with PETRIE when he described a deposit that he had found at Lahun as a “pottery dump” used during the periodical cleaning up of the cemetery.³ But it is telling that clearly related deposits have alternatively been identified as intentional depositions of embalming materials by KEMP and VILA or as the burial of pottery vessels that had contained liquids expended during a funeral by HAYES pointing to the undeniably ambiguous nature of the deposits when viewed in isolation from each other.⁴

The paper describes and analyses the archaeology of these deposits, paying particularly close attention to their architectural context, the depositional processes which formed them as well as the various categories of objects that were present. It also examines how these deposits relate to other

¹ The following article builds on research started by the author as a PhD student at Macquarie University/Freie Universität supported by an Australian Postgraduate Award, see KNOBLAUCH 2008, 112–125. The paper was finished as part of the FWF funded START project “Beyond Politics: Material Culture in Second Intermediate Period Egypt and Nubia” (FWF-Y754-G19) led by Bettina Bader at the Austrian Academy of Sciences. An early draft of the paper was presented at the Workshop “Abfallhaufen oder kultische Ablagerungen? Werkstattgespräche zum Interpretationsspektrum archäologischer Deponierungen” that

was organised by Vera Müller and the author at the Institute for Oriental and European Archaeology (OREA), Austrian Academy of Sciences, in June 2014. Other contributions to that workshop will be published in the next volume of *Egypt and the Levant*.

² ARNOLD, Dorothea 1988, 92.

³ PETRIE *et al.* 1923, 29, pl. XLVIII:606.

⁴ See KEMP/MERRILLEES 1980, 23 regarding the Lisht South Wall Deposit I and the Lahun deposit, VILA 1975, 168 for Mirgissa T120, and HAYES 1953, 193 for Lisht South Wall Deposit I.

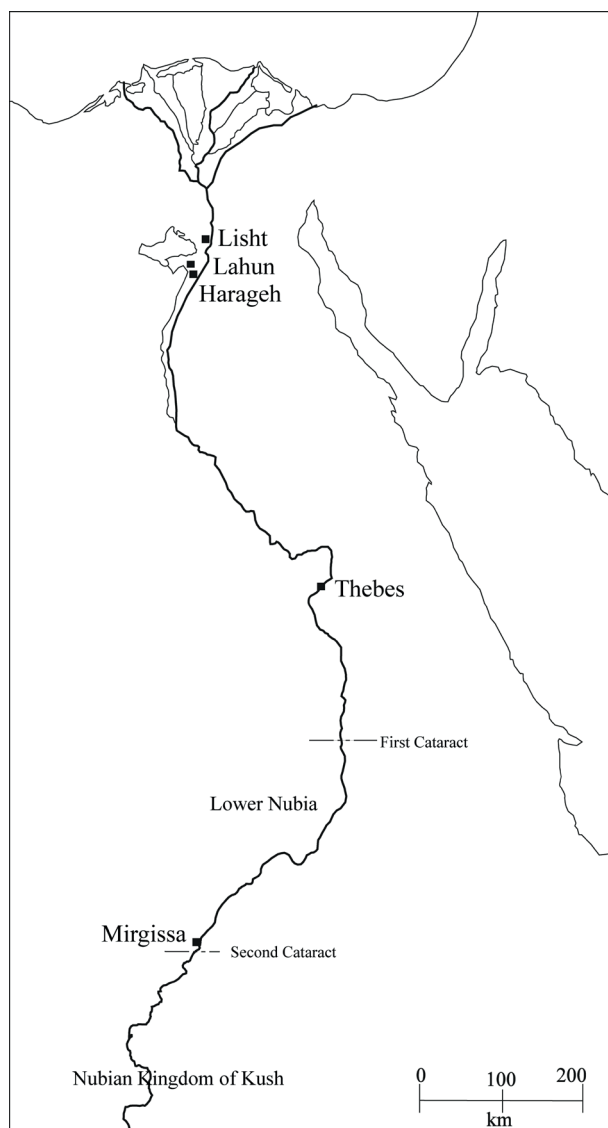


Fig. 1 The location of deposits discussed in the article

known categories of cemetery deposits during the Middle Kingdom. In particular, it explores the possibility that the deposits represent a different tradition of embalming and deposition of embalming waste to that already documented for the Middle Kingdom. As there is only very limited evidence for embalming deposits during the Middle Kingdom, MK Deposit Group 1 has the potential to substantially modify our knowledge of this relatively poorly understood aspect of contemporary funerary culture and to contribute to a growing body of archaeological evidence for variation in ritualised practice during the Middle Kingdom.

⁵ KNOBLAUCH In Press; KNOBLAUCH Forthcoming.

1. MK Deposit Group 1

In the presentation of MK Deposit Group 1, five deposits will be discussed in detail. These are Mirgissa Cemetery Mx T120, the Entrance Cut Deposit and the South Wall Deposit 1 from the Pyramid Complex of Senwosret I at Lisht, and a deposit each from the cemeteries at Harageh and Lahun (Fig. 1). The first three of these are comparably well published and it is clear that they form a relatively homogeneous group. For this reason, the analysis of MK Deposit Group 1 starts with these deposits. The publication of the final two deposits is comparably poor and while a close relationship between these deposits and the first three deposits is fairly certain, they should not be used to define the characteristic features of this group.

Tombe 120 (T120) at Mirgissa

The first of these deposits, T120, is a pit feature from the hill-top cemetery (Cemetery Mx) belonging to the colonial community living at Mirgissa at the Second Nile Cataract in Nubia (Fig. 2). The earliest datable burials in this cemetery are of the late 12th Dynasty-early 13th Dynasty (Phases Ia/Ib) and T120 is broadly contemporary with this horizon of activity.⁵ These early tombs belong to what can be loosely described as a relatively wealthy group within the colonial population⁶ and occur in a discrete portion of the cemetery adjacent to the north-western edge of the plateau about 20-25m north of T120. Unlike these clustered tomb structures, T120 is rather isolated and occupies an otherwise empty area on the cemetery edge.

The architecture of T120 consisted of a north-south oriented rectangular pit 2.3m deep (Fig. 3). The mouth of the pit measured 1.4m along the

Table 1

Measurements of Phase Ia/Ib pit tombs at Mirgissa	Subadults	Adults
Ave. length (<i>T120:1.4m</i>) ⁺	1.09m	2.10m
Ave. width (<i>T120:1.1m</i>)	.50m	.67m
Max. depth (<i>T120: 2.3m</i>)	1.70m	1.75m
Ave. depth	.97m	1.12m
Ave. LW index* (<i>T120:1272</i>)	3931	3134

⁺ *Italics* indicate measurements of T120

* LW index=(Length(cm)/Width (cm)) x 1000

⁶ Their burial customs included decorated wooden coffins that may have been imported from Egypt, polychrome burial masks and statuary, KNOBLAUCH In Press, 11–12.

north-south axis (length) and 1.1m along the east-west axis (width). A comparison with the dimensions of Phase Ia-Ib pit tombs from Mirgissa (Table 1) indicates that the structure of T120 belongs to a different category of pit and is therefore unlikely to have been a tomb that was considered a convenient place to make a deposit. Rather,

it is reasonable to suppose it was dug for another purpose entirely, namely the deposition of the material that is described in the following paragraphs.

The top of the pit fill of T120 consisted of a thick layer of “small stones” (*cailloutis*) and small stone blocks. Evidently it was an original feature

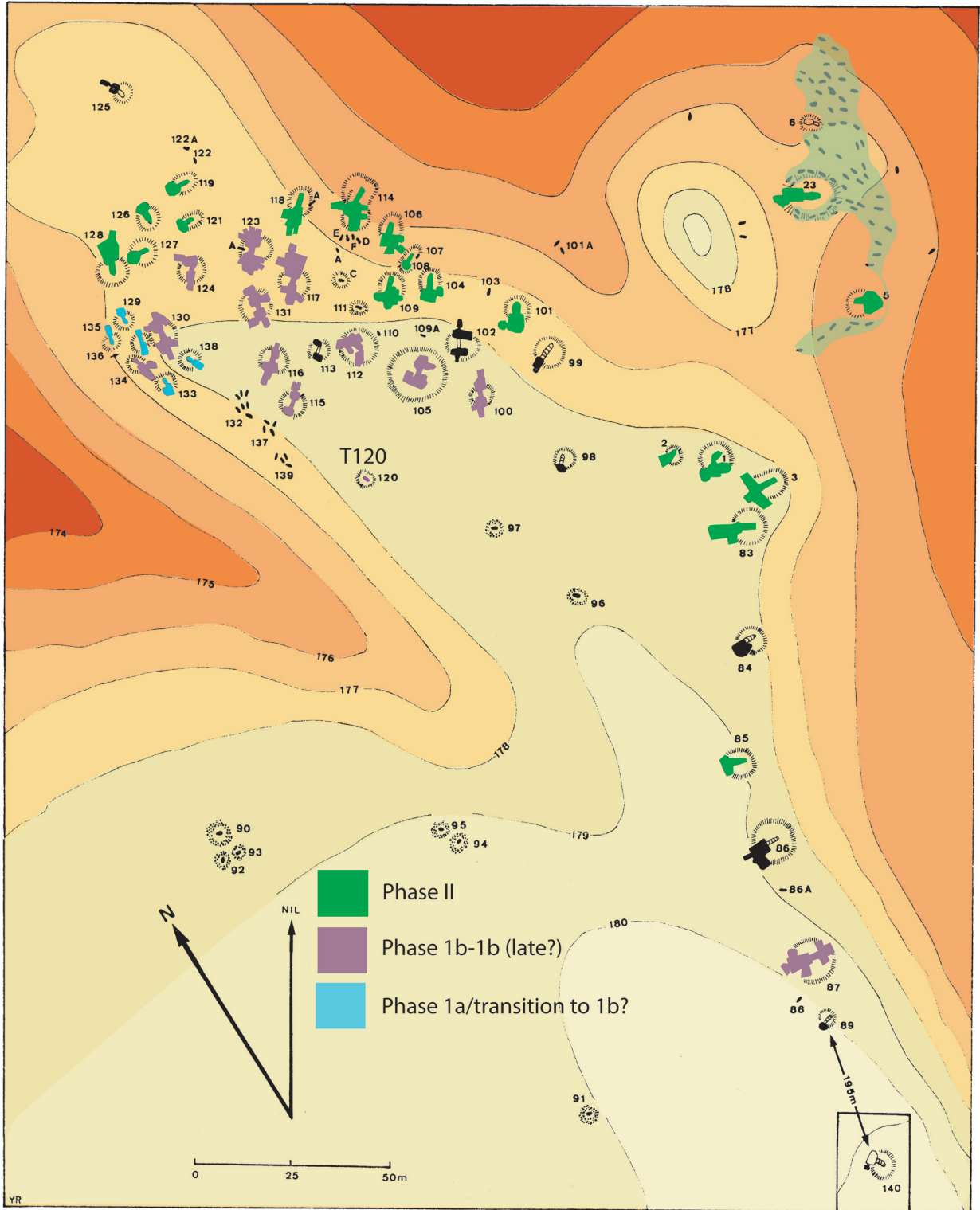


Fig. 2 Mirgissa Cemetery MX, after VILA 1975, fig. 7 with additions by author.

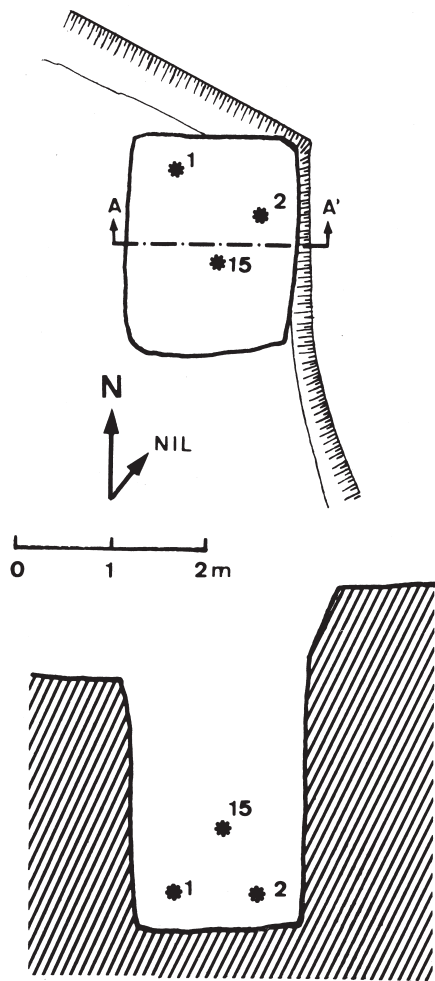


Fig. 3 Plan of the Deposit Mx T120, after VILA 1975, fig. 66.

of the depositional process and mirrored a contemporary burial practice that was intended to “seal” the shaft.⁷ Below this capping, the filling of the top half of the shaft was sterile (unfortunately it is not further described) and the first artefacts were encountered in the south-western half of the shaft at a depth of 1.20m. These included a great number of pottery sherds belonging to large storage/transport vessels (Table 2:17–31) and clumps of a white plaster-like material found adjacent to the western wall. The proximity of the white material to the broken storage jars led the excavator to suggest that the jars had originally held the white substance at the time of their deposition but these had subsequently broken in-situ. In the forty centimetres directly beneath these sherds were significant quantities of organic and non-organic materials, which may also have been jar contents. Along with these materials were sand and some small rocks (both evidently characteristic enough to be distinguishable from the shaft filling), as well as a single sun dried mud brick – the standard Middle Kingdom building unit at Mirgissa and elsewhere – for which no details were recorded. Below this were more storage jar sherds, an intact pottery vessel – a cup (Table 2:3) – and an intact blade of pale blonde silex (Fig. 3:15).⁸ A complete storage jar, apparently broken in-situ by downward pressure from the overlying fill, was found 20cm further down along with its contents (in Table 2:17–31).

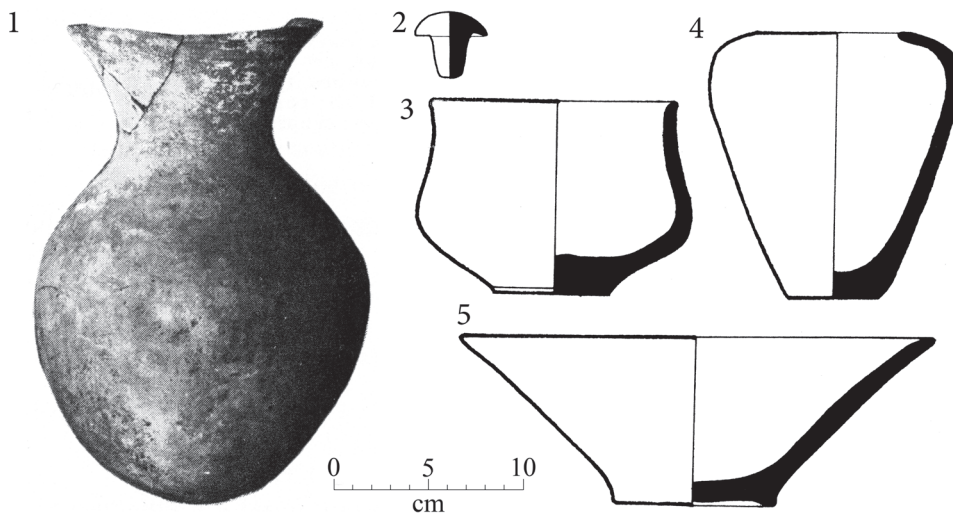


Fig. 4 Objects from Deposit Mx T120, after VILA 1975, fig. 66.

⁷ Compare, for example, the description of stone layers in Tombs 7, 36, 37, 38, 38, 69, 104 from Mirgissa Cemetery MX TC, MALEY 1975, 233, 244–245, 249, 272. The custom

was not restricted to Nubia, i.e. NELSON/KALOS 2000, 141 fig. 7 (Thebes).

⁸ VILA 1975, 169.

From here to near the bottom of the shaft, the fill consisted of pottery sherds and more of the white plaster-like substance. An intact pottery jar and a small lid were found at the bottom of the shaft (Table 2:1, 2, Fig. 3:1, 2, Fig. 4:1, 2).

Pottery vessels were quantitatively the most significant element of the pit contents. In total, there was evidence for at least 36 individual vessels. Reconstruction of the entirety of the assemblage was not attempted⁹ and only five vessels

Table 2.

Obj. Nr.	Type	Pottery Type ¹⁰	Equivalencies to the Vienna System ¹¹	Condition	Measurements	Quantity
1	Medium sized water jar	I-E	Nile B1/2	Unknown	H:22.5cm RD:13cm	1
2	Small lid	I-E	Nile B1/2	Unknown	H:3.5cm RD:4cm	1
3	Small bowl	I-B3	Nile B1/2	Unknown	H:10.3cm RD:13.4cm	1
4	Small high shouldered jar	I-F	Nile B1/2	Incomplete	H:14.2cm RD:6.4cm	1
5-6	Medium sized bowls	III-B2	Nile B1/2	5-Incomplete 6-Unknown	H:9cm RD:24.8cm	2
7, 7a-7c	Small hemispherical cups	I-B1	Nile B1/2	Sherds	–	4
8	Large bowl	III-A1	Nile B2/C	Sherds	H:7cm RD:33cm	1
9	Medium sized bowl	III-B1	Nile B2/C	Sherds	H:7cm RD:24cm	1
10, 11, 11a-c,16	Small to medium sized plate	I-B2	Nile B1/2	Sherds	H:5cm 13–18cm	6
12	High pot stand	I-G2	Nile B1/2	Single sherd		1
13-14	Small bowls	I-A2	Nile B1/2	Sherds	RD:15cm	2
17-31	Large storage/transport jars	VI ¹²	Marl C	Sherds, some evidently complete (but broken)	H:50cm D:40cm ¹³	15

⁹ For four of the table-ware vessels the condition is not recorded. The exceptions are the pot-stand of which only a single fragment could be found, a medium sized bowl (nr. 6) and the small jar (4) that are both described as “incomplete”.

¹⁰ According to VILA (1975). These locally defined type designations consist of two elements: a Roman numeral followed by a Roman letter that is in some cases accompanied by a European digit. The Roman numeral refers to the fabric, general quality and method of manufacture of the vessel while the Roman letter refers to a basic shape (i.e. a bowl) and the European digit denotes a potential further subdivision of the type (i.e. a flat base).

¹¹ The Vienna System as outlined in NORDSTRÖM/BOURRIAU 1993. The equivalencies are suggested by the current author on the basis of the descriptions of vessel fabrics in VILA 1975 and the author’s experience rerecording pottery from the Mirgissa excavations in Lille and Khartoum. Vessels of Type I were relatively soft fired, friable, thin walled and wheel-made with a light brown surface. The fabric of Type I vessels contained fine sand and very fine vegetable matter and may thus be compared with the description of fabrics Nile B1 and Nile B2 from the Vienna System although VILA’s description is too broad to allow for a positive identification with either variant, i.e. NORDSTRÖM/BOURRIAU 1993, 171–173. Vessels belonging to Type III were well fired, fairly hard, thick-walled and wheel-made. They had brown-red surfaces and often had black

zones visible in the break. The fabric of Type III vessels contained straw or chaff temper and a variety of mineral inclusions dominated by quartz/sand. An identification with Nile C of the Vienna System is reasonable, i.e. NORDSTRÖM/BOURRIAU 1993, 173–174. Vessels of Type VI were characteristically very hard fired with a weak red to violet and grey break. The fabric was tempered with abundant “gravel” and diverse mineral inclusions. It may be compared with Marl C in the Vienna System, although an allocation to one of the further subdivisions of this fabric is not possible based on the published description, i.e. BADER 2002; BADER 2001, 38–41.

¹² No illustrations of vessels made of this fabric from T120 were published, although the description provided by VILA – “Très grandes jarres sphériques à large ouverture et à fond concave. Engobe blanc-jaunâtre” (1975, 169) and his citing of Harageh/Riqqeh BSAE Corpus Type 67e as a parallel (VILA 1975, 226) leaves little doubt that these vessels belong to a class of large Middle Kingdom storage/transport jars known colloquially in the literature as *Zirs*, i.e. BADER 2002, 35 Type 57; BADER 2001, 155–158. For BSAE Type 67e, see ENGELBACH 1923, pl. XXXIX; ENGELBACH 1915, pl. XXXII. According to the typology of this vessel shape in BADER 2001, 160–161, Type 67 e belongs to Typ 57 b.

¹³ The diameter refers presumably to the maximum diameter and not the rim diameter.

were illustrated in the publication (Fig. 4). The remaining 31 broken vessels were described by shape, measurements and by the designation to a “type”. The details of all these vessels, including probable equivalencies with the Vienna Fabric system, are summarised in Table 2.

From this presentation of the data, it is readily observable that there are three separate groups of pottery present in the assemblage that may be defined by considering shape, size, ware and fabric.

The largest group consists of 20 vessels made of silt that can be assigned to the class of Middle Kingdom “table ware” – in other words vessel types used in daily life as well as during burial and in the mortuary offering cult for serving and consuming meals of food and drink (Table 2:1–3, 5–14, Fig. 4:1, 3, 5).¹⁴ Open forms suitable for serving and consumption of foods and liquids, such as small-medium sized bowls, plates and drinking cups dominate (17/20 or 85% of the table ware) while there is only a single closed vessel with round base suitable for the short term storage and pouring of liquids (Table 2:1, Fig. 4:1). The pot stand (Table 2:12) may have formed a set with this former vessel. Signs of use or residues were neither noted nor sampled.

The second major group of pottery from T120 is a corpus of 15 very large jars circa 50cm in height with a maximum diameter of approximately 40cm (Table 2:17–31). Unfortunately none were drawn, but according to the excavator these were bag-shaped jars with a concave base and wide aperture that were similar to Harageh/Riqqeh Type 67e – a large Middle Kingdom transport/storage jar type (Fig. 12).¹⁵ The published descrip-

tion of the fabric leaves little doubt that the jars were probably made of “Marl C”, a fabric that according to current understanding was likely to have been produced in Lower Egypt.¹⁶ The presence of these imported vessels at Mirgissa in significant quantities reflected the practice of using them to export goods to the colony from the Egyptian Nile Valley.¹⁷ But whereas this type of vessel was probably employed to transport a range of items, chemical analysis has shown that ten jars of this type from T120 contained natron at the time of their deposition¹⁸ – one of the better documented uses to which this jar type was put.¹⁹ Other materials from T120 identified as probable jar contents that unfortunately were not subjected to further scientific analysis included blocks of whitish material similar in appearance to plaster/gips, a fatty sediment composed of a loosely sorted grey-green material (the aforementioned natron?), mixed up fine plant remains (presumably chaff), powdered “granite”, sand and further unidentified organic materials.²⁰ It is also possible that some, or perhaps all of the table-ware had been originally been transported to T120 and deposited there in these larger jars, but this cannot be ascertained on the basis of the evidence. Unfortunately, it is difficult to establish if, and how, the jars were closed at the time of deposition, but it is conceivable that the four largest plates with a rim diameter in excess of 24 centimetres (see Table 2:5–6, 8–9) were originally lids for four of the 15 vessels.

Finally, there was a locally-produced miniature *nmst* vessel – a vessel type used for libation and purification during rituals performed in the wider context of death, burial and the mortuary cult²¹ –

¹⁴ BOURRIAU, QUIRKE 1998, 69. For these types in funerary/mortuary contexts and their function there, see SEILER 2005, 110–122.

¹⁵ A detailed description is given in the footnotes to Table 2.

¹⁶ A detailed description is given in the footnotes to Table 2. For Marl C and its origin see BADER 2001, 35–36; BADER 2009, 421, 646 (but see fn. 1826 for the absence of scientific provenience studies that categorically prove this assumption which is based on relative frequency).

¹⁷ For the many uses of these vessels see BADER 2002, 31; BADER 2001, 155–158. The vessels occur in great numbers in Nubia pointing to an extensive supply network that supported expatriate Egyptian populations living there, see BADAWY 1965, pl. XV:B ; EMERY *et al.* 1979, pl. 67:117; ENGELBACH 1938, pl. LV:4; KNOBLAUCH/BESTOCK 2014 (2013); SHAW/BLOXAM 1999, 17 fig. 3; SHAW 2000, 19; SMITH 2012, 390–392; SMITH 1995, 60 fig. 3.6.

¹⁸ VILA 1976, 173–174 fn. 51.

¹⁹ ENGELBACH 1915, 3, 10; KEMP/MERRILLEES 1980, 22–23; BADER 2001, 155.

²⁰ VILA 1975, 168–169.

²¹ See TAWFIK 1979, 343–344; ARNOLD, Dorothea 1984, and *WB* II:269, nrs.7–8. In the Old Kingdom Pyramid Texts, *nmst* were employed in purification rituals surrounding the preparation of the burial (i.e. PT 510, 536, 553, 676; TAWFIK (1979, 343)) and were used in rites performed on the flat roofs of Old Kingdom mastaba tombs (ALEXANIAN *et al.* 2006, 19, Abb. 7). During the late First Intermediate Period and the Middle Kingdom, *nmst* vessels occur amongst the objects of purification depicted in the *Frises d'Objets* on coffin interiors (i.e. JÉQUIER 1921, 311) and were employed during the funeral (e.g. Pap. Ram. E col. 10: GARDINER 1955, 11–12, pl. II), in the mortuary offering cult (LANGE/SCHÄFER 1902, Tafel CII:719, Tafel CIII:727) as well as in temple ritual (ARNOLD, Dorothea 1982, 30 Abb. 36:17, 54 fn. 59).

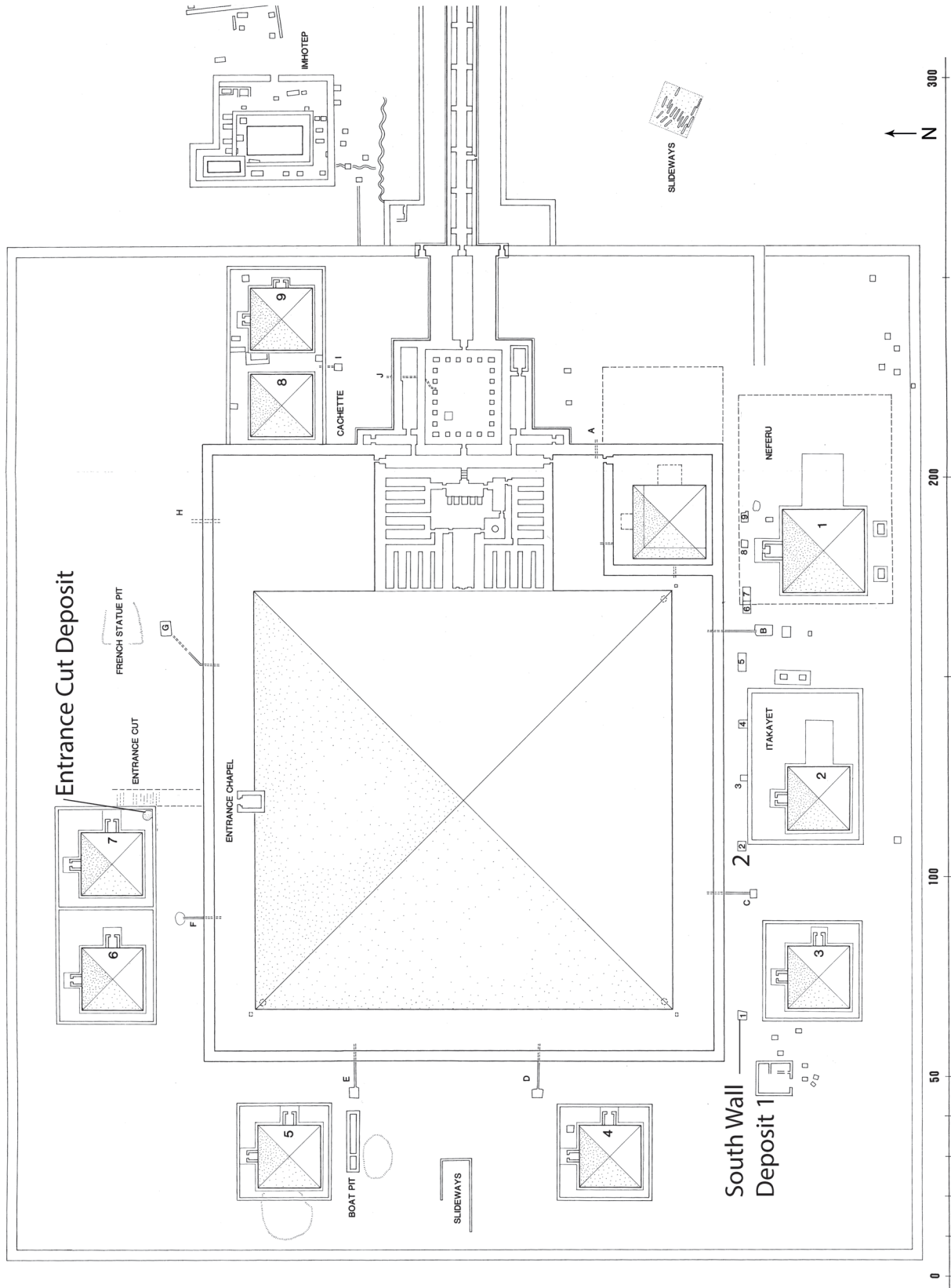


Fig. 5 The pyramid complex of Senwosret I at Lisht with the locations of deposits discussed in this article, excerpted from ARNOLD, Dieter 1988, pl. 75. Copyright © 1988 The Metropolitan Museum of Art, New York. Reprinted by permission. With additions by author.

that had been coated with a micaceous slip (Table 2:4, Fig. 4:4). Other than the pottery, the only two other artefacts listed from this deposit are the aforementioned silex blade and mudbrick.

The Entrance Cut Deposit, Lisht

A very similar deposit to the last, but from the early 12th Dynasty and from the vicinity of the Middle Kingdom Residence, was placed in the royal pyramid complex of Senwosret I at Lisht.²² The deposit was made in a pit located to the west of the actual entrance cut for the king's pyramid. It lay outside the pyramid's northern enclosure wall and was partially covered by the southeastern corner of the enclosure wall of the smaller Pyramid 7 (Fig. 5).²³

The architectural context of the deposit was a roughly executed, round shaft measuring 2.5m in diameter with a depth of 5.35m that had been filled to the surface with sand following the placement

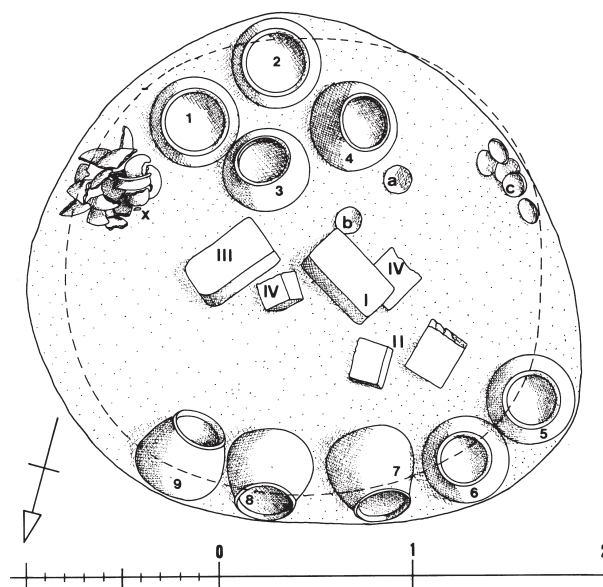


Fig. 6 Plan of the Entrance Cut Deposit from the pyramid complex of Senwosret I at Lisht, after ARNOLD, Dieter 1988, fig. 39. Copyright © The Metropolitan Museum of Art, New York. Reprinted by permission.

Table 3.

Obj. Nr.	Type	Fabric	Condition	Measurements	Quantity
1-2	large round-based plates(lids)	Nile C	Fragmentary	RD:33–45cm	7
3-4	Medium sized to small round-based plates	Nile B2	Fragmentary	RD:12.5–18cm	7
5-7	Small footed plates (miniatures)	Nile B2	Fragmentary	RD:10.4–11.6cm	4
8-9	Large round-based cups	Nile C	Fragmentary	RD:18–24cm	2
10	Large shouldered flat-based cup/jar	Nile C	Complete	RD:20cm	1
11	Large cup	Nile C	Fragment only	-	1
12	Hemispherical Cup	Nile B1	Complete?	RD:14cm	1
13	Open-mouthed jar	Marl C	Incomplete	-	
14	Large Storage/transport jars	Marl C	Complete	RD:27–31.5cm, H:50–55cm MD:40–48cm	9

of the deposit on the shaft floor. Unlike the depositional process at Mirgissa where the objects had been placed in multiple layers, the objects belonging to the Lisht deposit had been carefully lowered down the shaft and deliberately placed around the floor of the shaft in discernible groups (Fig. 6 and see below).

The briefest glance at the assemblage from the Lisht Entrance Cut Deposit (Table 3, Fig. 7) suffices to conclude that its composition is remarkably similar to that of Mirgissa T120. As was the case

with that deposit, pottery constituted the largest object group at Lisht (33 individual vessels) and can be subdivided into two – or perhaps three (see below) – groups based on shape, ware and fabric. Firstly there is a group of nine large transport/storage jars that were placed upright in the northern and southern half of the shaft against the wall (Fig. 6:1–9). These vessels were made of Marl C fabric (Table 3:14, Fig. 7:14) and are the typological forerunners of the large vessels reported from the Mirgissa deposit.²⁴ The vessels were on aver-

²² The archaeological context is described in ARNOLD, Dieter 1988, 92, fig. 29, pl. 64c–d, 65. The discussion of the contents are to be found in ARNOLD, Dorothea 1988, 109–112.

²³ ARNOLD, Dorothea 1988, 109.

²⁴ See SCHIESTL/SEILER 2012, 580–583; BADER 2001, 155–178. The jars are described in ARNOLD, Dorothea 1988, 112.

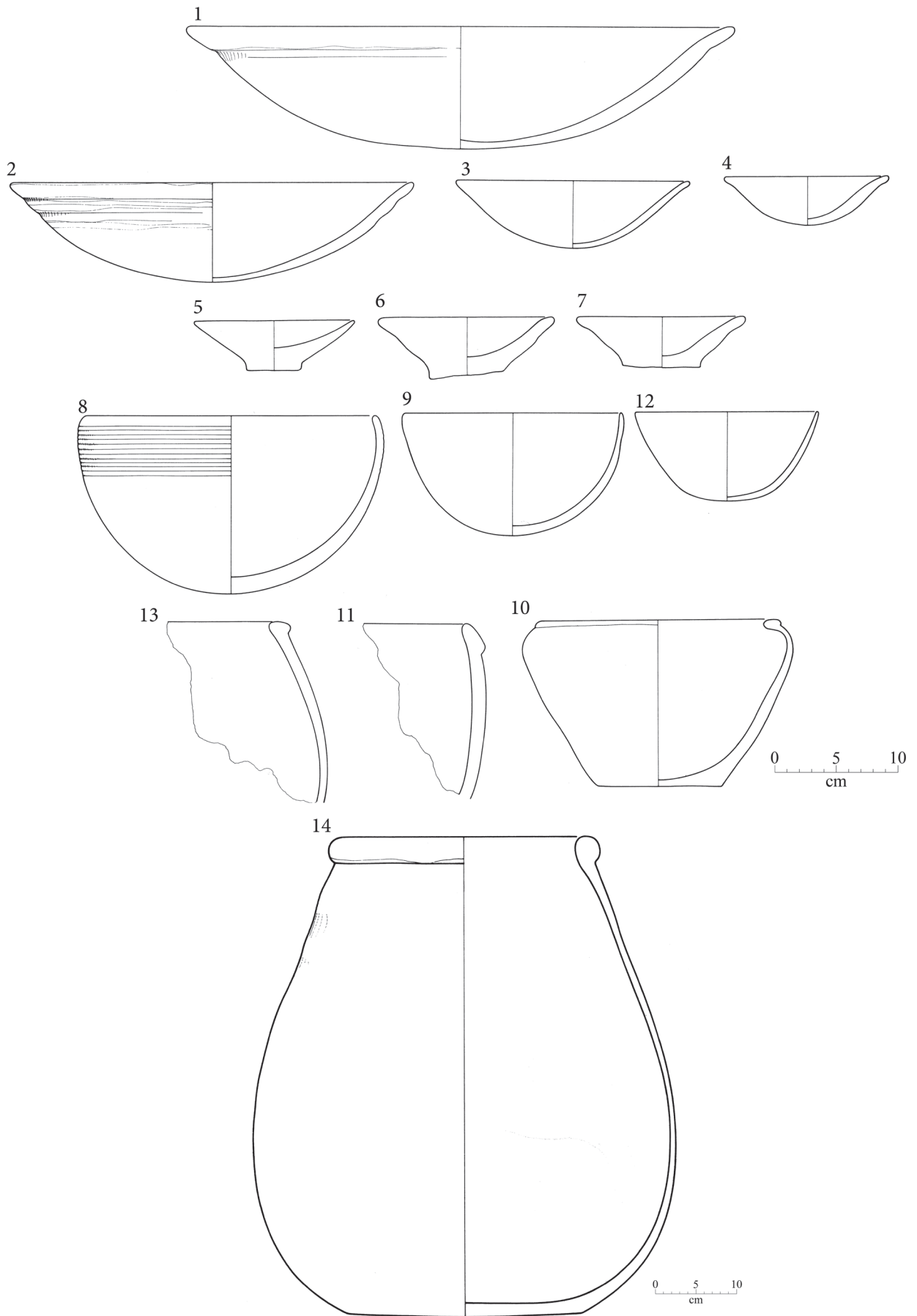


Fig. 7 Contents of the Entrance Cut Deposit from the pyramid complex of Senwosret I at Lisht, after ARNOLD, Dorothea 1988, figs. 55a, 55b, 57. Copyright © The Metropolitan Museum of Art, New York. Reprinted by permission.

age 50cm high, 45cm wide with a rim diameter of circa 28cm and still bore traces of sealing mud on their shoulders.²⁵ Some large bowls from the deposit (see below) were smeared with lumps of the same mud and were evidently lids for the large jars that had been removed at some point before final deposition.²⁶ In addition to charcoal, ash and a small number of bird bones – items which were not identified at Mirgissa – the jars held a diverse array of organic and inorganic materials at the time of their deposition that resemble the character of some of the materials that were found in T120. These included brown sand, limestone, two quartz-like materials, unidentified organics, natron powder and a single flint knife.²⁷ Some of the table-ware pottery vessels from the deposit (see below) were also found inside the large jars.

The second pottery group from the deposit is an assemblage of 19 Middle Kingdom table-ware vessels found as broken sherds in a pile at point x (Fig. 6) and within the storage/transport jars, or as largely intact vessels at point a, b, and c. Some of these table-ware vessels were able to be completely reconstructed, but others are represented by a small number of sherds or a single sherd only suggesting that they were broken elsewhere and then deposited in a broken state in the shaft. These vessels were all made of Nile silt and much like in T120 at Mirgissa, consisted almost exclusively of open and restricted shapes such as plates, medium – small sized drinking cups and bowls (Fig. 7:3, 4, 9, 10, 12). Perhaps two of the larger cups were used for the preparation of food (Table 3:8, 9, Fig. 7:8, 9)²⁸ and seven of the largest bowls were probably lids for the storage jars that had been removed before or after deposition as indicated by the presence of sealing mud on some of them²⁹ (Table 3:1, 2 Fig. 7:1, 2). Three of the medium sized-small bowls had been “charred” by fire (Table 3:3, 4, Fig. 7:3, 4)³⁰ and could have been used for a purpose other than the serving and consuming food and drink, for example for burning incense or as lamps.

A possible third group of vessels may be recognized in the four smallest plates (Table 3:5–7, Fig. 7:5–7) from the deposit that are of a size that

classifies them as “miniatures”. Accordingly, rather than regular table-ware, the vessels in question should be identified as plates produced specifically for use in ritual contexts such as burial, cult and special depositions.³¹

The final artefacts from the deposit to be discussed are four bricks of sun-dried mud that were found at the same depth as the rims of the transport/storage jars and were apparently the last objects to be added to the deposit. Rather than being placed in the pit, they may have been “dropped in”, dispersing a few small pottery vessels that were lying in the centre of the pit (i.e. Fig. 6:I–IV). Despite this, the bricks appear to belong to the deposit in the same way that the mudbrick in the Mirgissa context was clearly embedded amongst the other materials (see above).

Vital for understanding the function of the deposit is its position in the history of the Senwosret I complex. Above it was noted that the deposit was partially covered by the enclosure wall of Pyramid 7 (Fig. 5) and is thus provided with a terminus ante-quem – it either predates or is contemporary with the building of the enclosure wall of that pyramid.³² As Pyramid 7 was apparently built as a unit with the adjacent Pyramid 6 and the construction of that Pyramid was “rather early in the construction period of the king’s pyramid”³³ – thus well within the lifetime of the king³⁴ – a direct relationship with the burial of the king seems unlikely, whereby a connection to either the foundation event of Pyramid 7, or perhaps the burial of the owner of Pyramid 7 (unknown) remains a possibility. A prerequisite for the latter scenario is that the owner had died before the final completion of their pyramid complex. Alternatively, the proximity to the entrance cut – a ramp used during the construction of the subterranean components of the king’s pyramid – and its massive size might suggest a relationship to that feature³⁵ meaning that the excavation of the pit could have belonged to a very early stage in the construction of the king’s pyramid. Thereby it should be borne in mind that some time may have elapsed between the construction of the pit and the laying of the deposit. Whether the pit was originally built in

²⁵ ARNOLD, Dorothea 1988, 112.

²⁶ See ARNOLD, Dorothea 1988, 110.

²⁷ ARNOLD, Dorothea 1988, 110, Table I.

²⁸ SCHIESTL/SEILER 2012, 306; ARNOLD, Dorothea 1988, 110

²⁹ ARNOLD, Dorothea 1988, 110.

³⁰ ARNOLD, Dorothea 1988, 110.

³¹ See SCHIESTL/SEILER 2012, 846–848; ALLEN 2006, 23–34.

³² ARNOLD, Dorothea 1988, 109.

³³ ARNOLD, Dieter 1992, 36.

³⁴ See ARNOLD, Dorothea 1988, 109.

³⁵ As suggested by ARNOLD, Dieter 1988, 92.

order to receive the deposit or was built for another purpose and then opportunistically appropriated is unclear.³⁶

The Entrance Cut Deposit was in fact only one of a number of deposits that were associated with the pyramid complex of Senwosret I.³⁷ The best preserved of these were located beneath the corners of the king's pyramid and contain materials of a clearly ritual nature, such as mud bricks containing plaques inscribed with the name of the pyramid and miniature pottery vessels alongside articulated faunal remains. They represent the buried remains of the foundation rituals of the pyramid that were performed before the commencement of construction.³⁸ The position, size and contents of the Entrance Cut Deposit are all different enough from these foundation deposits to rule out the possibility that the former was a "normal foundation deposit" in the same tradition as the latter.³⁹

The placement of the Entrance Cut deposit has more in common with a series of deposits that were found on the southern side of the king's pyramid between the enclosure wall and the enclosure walls belonging to Pyramids 1, 2 and 3 (Fig. 5:1–9) and occasionally within the enclosures of the subsidiary pyramids themselves.⁴⁰ These deposits are certainly not aligned with each other and are architecturally heterogeneous enough to suggest that they were not a simultaneously conceived group of systematic deposits, but individual depositional events with their own histories.⁴¹ Some of them, much like the Entrance Cut Deposit, are partially covered by the enclosure walls of subsidiary pyramids or are in such close proximity to these last that they might relate to those structures rather than the king's pyramid⁴², a fact that helps explain their idiosyncratic nature. Most were empty, but one contained a "huge black wig", another some broken table-ware vessels and another was the burial place of a complete wooden sledge.⁴³

Seen in this context of depositional activity, the Entrance Cut Deposit was only one of a number of different deposit "types" that were made in the vicinity of tombs in the royal necropolis at Lisht.

The South Wall Deposit 1

Of the deposits on the southern side of the king's pyramid, only one –the so-called South Wall Deposit 1⁴⁴– bears close comparison with the Entrance Cut Deposit. The pit in which the deposit was made was dug roughly equidistant to both the enclosure wall of Pyramid 3 and the king's pyramid and was cubic with dimensions of circa 2 x 2 x 2m with a shallow rectangular depression in the floor.⁴⁵ The pit was filled with debris-like material and was evidently preserved intact beneath a preparatory surface for the paving of the outer courtyard, a fact which according to DO. ARNOLD suggests a date in the middle of the reign of Senwosret I for the South Wall Deposit 1 thus again ruling out any connection to the burial of Senwosret I.⁴⁶ A relationship to Pyramid 3 is conceivable, again perhaps related to the founding event or the burial of its owner.

The contents of the deposit were sherds belonging to 22 transport/storage jars that were supposedly deposited in two layers on the floor of the pit⁴⁷, along with the decayed remains of 22 wooden poles used to carry the jars and some rope.⁴⁸ The jars, large Marl C transport/storage jars over 40cm in height and 40cm in maximum diameter (Fig. 8.3–6) are closely related to those from the Entrance Cut Deposit although the published drawings (based on the original tomb cards and not the objects themselves) and photographs⁴⁹ do suggest some subtle morphological differences between the two groups. Whether this has chronological ramifications, however, is unclear.⁵⁰ Like in the Entrance Cut Deposit, the rims of the vessels

³⁶ The latter scenario is favored in ARNOLD, Dieter 1988, 92.

³⁷ See ARNOLD, Dieter 1988, 92–93; ARNOLD, Dieter 1992, 22, 26.

³⁸ See ARNOLD, Dieter 1988, 87–91; ARNOLD, Dorothea 1988, 106–109.

³⁹ ARNOLD, Dorothea 1988, 109.

⁴⁰ ARNOLD, Dieter 1992, 22, 26.

⁴¹ ARNOLD, Dorothea 1988, 113.

⁴² ARNOLD, Dieter 1992, 22, 26.

⁴³ ARNOLD, Dieter 1992, 22, 26.

⁴⁴ ARNOLD, Dorothea 1988, 113–115; ARNOLD, Dieter 1988, 92; KEMP/MERRILLEES 1980, 23.

⁴⁵ ARNOLD, Dieter 1988, pl. 74; ARNOLD, Dorothea 1988, 113–114.

⁴⁶ ARNOLD, Dorothea 1988, 113–115.

⁴⁷ ARNOLD, Dieter 1988, 92, fig. 40–41, pl. 66; ARNOLD, Dorothea 1988, 113.

⁴⁸ ARNOLD, Dorothea 1988, 113–114.

⁴⁹ LANSING 1933, fig. 12.

⁵⁰ For the various types and references to further literature see SCHIESTL/SEILER 2012, 586, 591. I thank BETTINA BADER for an insightful discussion regarding these jars and the drawings thereof.

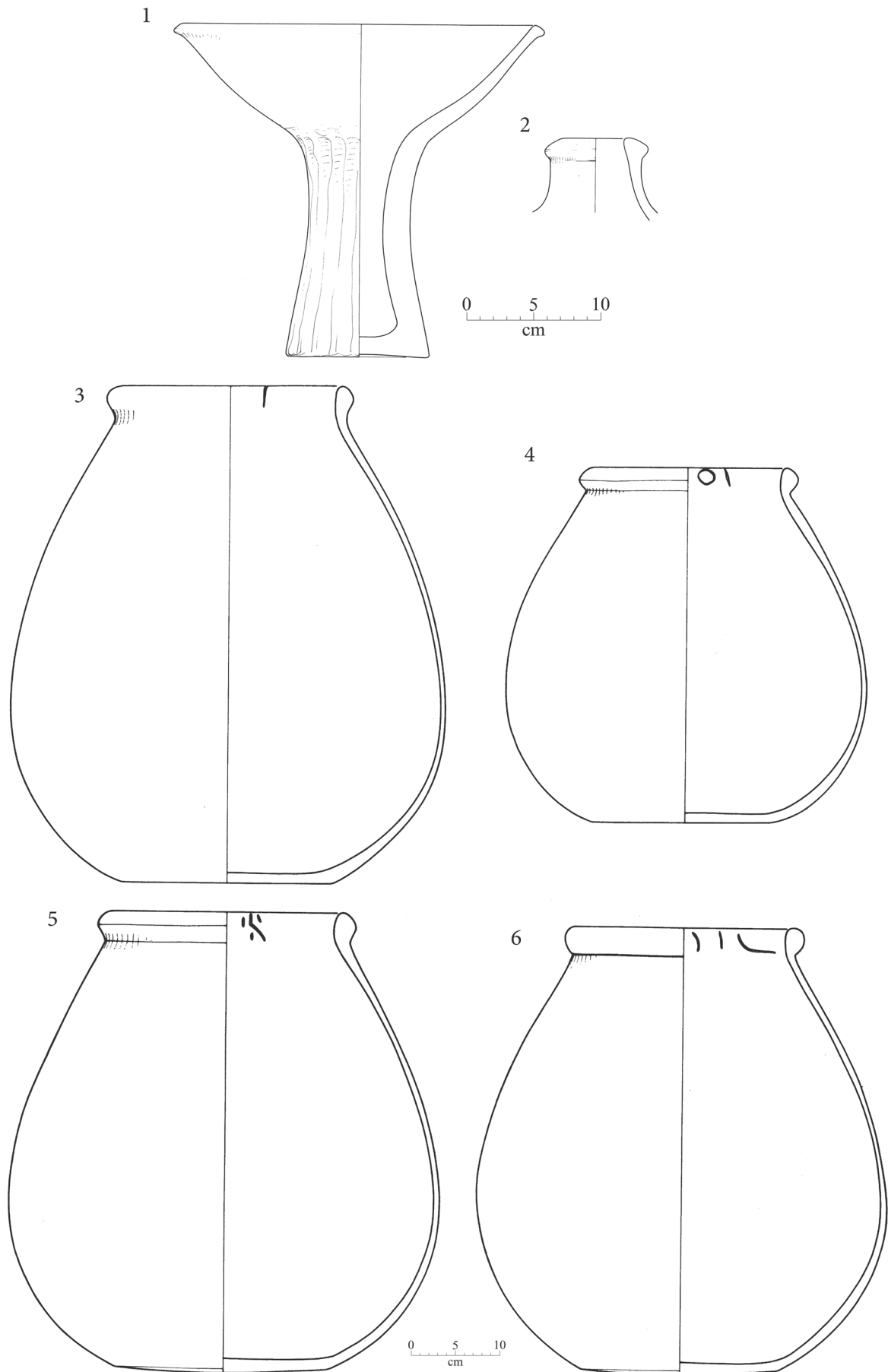


Fig. 8 Contents of the South Wall Deposit 1 from the pyramid complex of Senwosret I at Lisht, after ARNOLD, Dorothea 1988, figs. 59, 61. Copyright © 1988 The Metropolitan Museum of Art, New York. Reprinted by permission.

were smeared with sealing mud, but as there were no lids it has been suggested that the vessels were deposited unsealed.⁵¹ The vessels had a combined volume of circa 1100 litres, but according to the excavators they were empty except for a crust on the interior of the vessel walls.⁵² Some samples from the large jars, however, were collected and one analysis indicated the presence of a diverse array of materials in “zir no. 4”, namely quartz sand, rose gypsum, limestone, other carbonates, charcoal, other organic material and a “piece of chert” – unfortunately not illustrated – but no natron.⁵³ The vessels may have been deposited as intact vessels and then later collapsed under their own weight and the weight of the overlying fill, as appears to have been the case in the Mirgissa deposit.

While storage/transport jars and their carrying poles were certainly the main contents of the deposit, some other artefacts were recorded from within the pit structure. These other finds included broken (mud?)bricks (no quantity given) which according to the original reconstruction of the deposit was lying directly above the upper level of jars⁵⁴, some broken “red ware” pottery (no type or quantity given), two examples of footed simple bowls with an open stemmed base – a type known as “offering stands” because of their use in the offering cult as a receptacle for offerings (Fig. 8.1)⁵⁵ – and the neck of a large “beer bottle” (Fig. 8.2).⁵⁶

These last objects were found intermingled with the filling of the pit and it is possible that they were part of the matrix of the “debris” used to fill the pit as argued by ARNOLD.⁵⁷ On the other hand, comparable finds occurred in both the Lisht Entrance Cut Deposit and Mirgissa T120 so the matter of intention should perhaps be left open. Regardless of which alternative we accept, the South Wall Deposit 1 shares other important features with the latter two deposits – location, architecture, a large number of storage/transport jars containing diverse debris – and it is reasonable to suppose it was formed by closely related processes.

Before leaving Lisht, mention must be made of a final possible “deposit” (South Wall Deposit 2) from a pit adjacent to the north western corner of the enclosure wall of Pyramid 2 roughly in line with the South Wall Deposit 1 (Fig. 5).⁵⁸ Unfortunately there is practically no information for this context other than it was found robbed and contained at least one large storage/transport jar of Marl C (Fig. 9) that according to the illustration on the “tomb card” was very similar to the jars discussed from the South Wall Deposit 1.⁵⁹

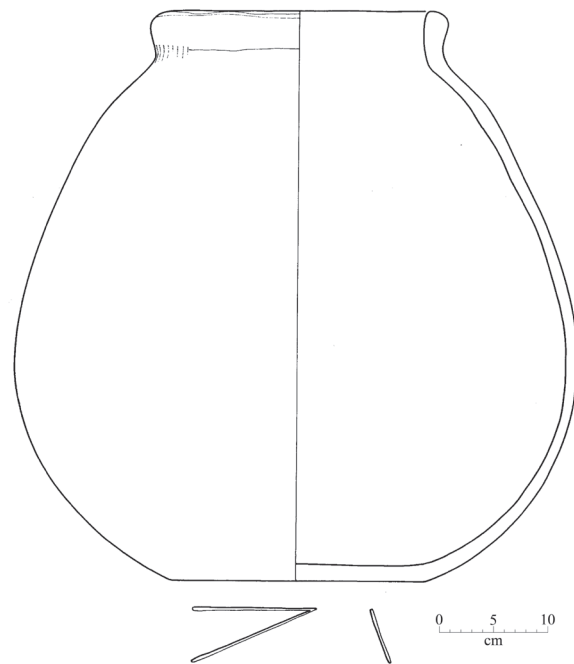


Fig. 9 Contents of the South Wall Deposit 2 from the pyramid complex of Senwosret I at Lisht, after ARNOLD, Dorothea 1988, fig. 62. Copyright © The Metropolitan Museum of Art, New York. Reprinted by permission.

Lahun Pit 606

Two further examples of deposits similar in profile to these last derive from cemeteries in the wider region of the Middle Kingdom Residence, but their publication precludes a close examination. The first of these deposits comes from the Western

⁵¹ As suggested by Do. ARNOLD who contradicts the original report, see LANSING 1933, 14–16.

⁵² ARNOLD, Dorothea 1988, 114.

⁵³ ARNOLD, Dorothea 1988, 114, fn. 298.

⁵⁴ ARNOLD, Dieter 1988, 93 fig. 40.

⁵⁵ SCHIESTL/SEILER 2012, 354–356.

⁵⁶ ARNOLD, Dorothea 1988, 113–115; ARNOLD, Dieter 1988, 93 fig. 41.

⁵⁷ ARNOLD, Dorothea 1988, 113.

⁵⁸ South Wall Deposit 2, ARNOLD, Dieter 1988, pl. 75; ARNOLD, Dorothea 1988, 115–116; ARNOLD, Dieter 1992, 26.

⁵⁹ ARNOLD, Dorothea 1988, 115–116, fig. 62.

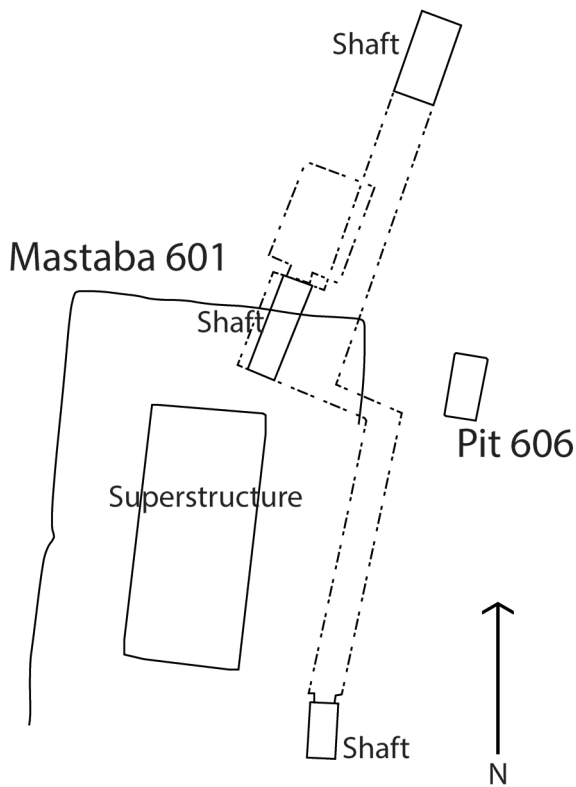


Fig. 10 Lahun Deposit 606 and Mastaba 601, after PETRIE *et al.* 1923, pl. XXXVIa.

Ridge Cemetery at Lahun, an area of the necropolis that contained a small number of large mastaba tombs on a ridge behind the pyramid of Senwosret II.⁶⁰ The deposit was made in a rectangular pit (nr. 606) with dimensions of 2.41m x 1.4m x 2.5m close to the north-eastern corner of one of the large mastaba tombs (Fig. 10 nr. 601).⁶¹ Pit 606 is oriented northeast-southwest which is in general, but not in perfect agreement with the orientation of the core of the mastaba and the subterranean components of the tomb. It should also be borne in mind that the precise chronological relationship to Tomb 601 is uncertain and it is theoretically possible that Pit 606 was built either earlier or considerably later than the mastaba tomb rather than being contemporary with it.

The only contents of Pit 606 listed in the publication was pottery (Fig. 11), consisting of a great quantity of sherds that had originally belonged to 10 or more large jars of Harageh/Riqqeh “Type 67f”.⁶² These are medium-large, flat-based vessels

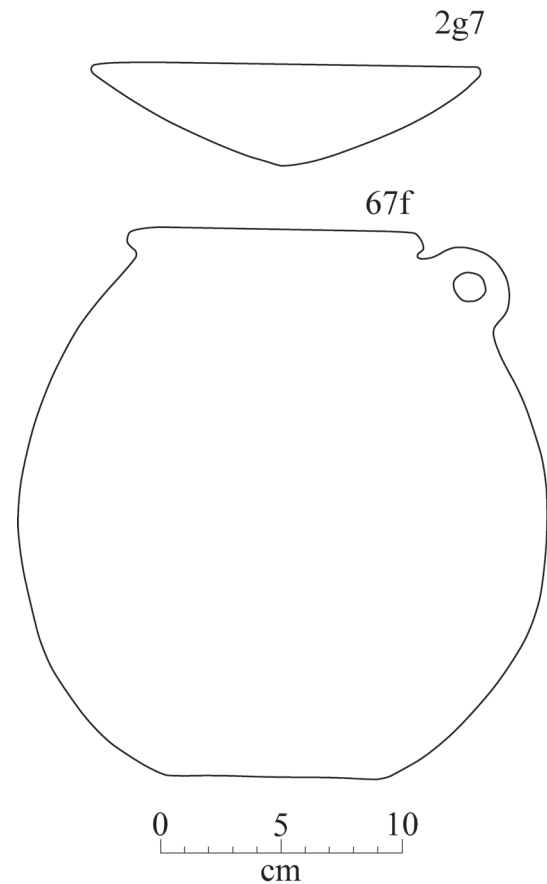


Fig. 11 Objects from Lahun Deposit 606, after PETRIE, BRUNTON, and MURRAY 1923, pls. LVI, LVII.

with a bag-shaped body and a handle just below the rim that might belong to a smaller class of the large Marl C storage/transport jars that occurred in the deposits already discussed. The only other pottery type recorded from Pit 606 was a medium sized bowl “whitened inside except rim” (Type 2g7).⁶³ Other than these pottery vessels, there were no human remains and there were no further finds, or at least no mention is made of these in the publication.

Harageh WI 624

A second deposit from the vicinity of the entrance to the Fayum comes from a shallow valley – “Wadi I” – that separated Harageh Cemeteries A and F, which were the focal point for wealthy shaft tombs from the mid-late Middle Kingdom onwards.⁶⁴ In comparison to these elevated ceme-

⁶⁰ PETRIE, BRUNTON, and MURRAY 1923, pl. III.

⁶¹ PETRIE, BRUNTON, and MURRAY 1923, pl. XXXVIa

⁶² PETRIE, BRUNTON, and MURRAY 1923, 29.

⁶³ PETRIE, BRUNTON, and MURRAY 1923

⁶⁴ For example GRAJETZKI 2004; RICHARDS 2005, 88–124.

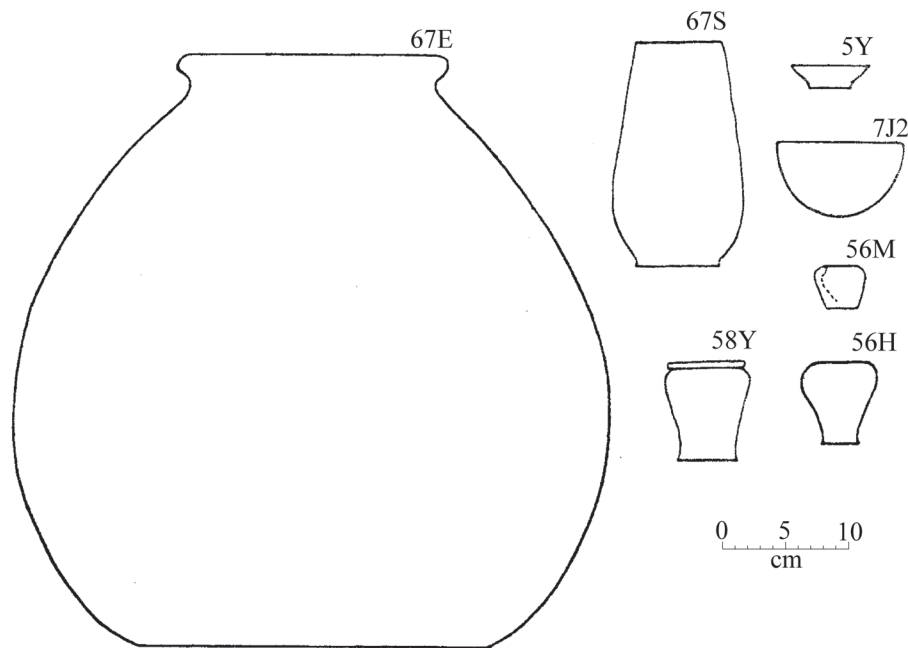


Fig. 12 Objects from Haraeigh Deposit WI 624, after ENGELBACH 1923, pls. XXXV–XL.

tery areas, the Wadi was used for less-wealthy burials, the only tombs being shallow pits dug into the sandy top-soil.⁶⁵ Unfortunately the placement of the deposit (WI 624) in relation to these pit tombs is not stated and there is no published information regarding the architectural context.

In the published tomb register, WI 624 is simply identified as a “Pottery Deposit”⁶⁶ due to the presence of a number of pottery vessels and the absence of any other types of objects or human remains. However, as was customary only the different types, and not the quantities of pottery were listed so it is not known how many individual vessels were actually found. According to the publication, there were seven different pottery types in the deposit (Fig. 12) which may be divided into three groups according to shape and size only, there being no reliable information pertaining to ware and fabric. The first grouping consists of “miniature” vessels including three small shouldered jars (Types 56h, 56m and 58y) that may be considered miniaturised versions of common ritual vessel forms, and a miniature plate (Type 5y).⁶⁷ Table-ware is represented by a drinking cup (Type 7j2) and a flat-based bag-shaped beaker (Type 67s) that was ideally suited for serving and consuming

liquids.⁶⁸ The final group –storage/transport pottery– is composed of a single vessel type (Type 67e) that can be identified as a vessel of essentially the same Marl C storage/transport type that occurred in the other deposits being discussed here.⁶⁹ The only other contents of the pit that are listed in the Tomb List were two flint blades– an object type that occurred in both Mirgissa T120 and the Lisht Entrance Cut Deposit – and a fragment of worked quartzite.

Summary of Features of MK Deposit Group 1

As the individual deposits have now been introduced, the common features of this group can be summarised and a simple reconstruction of the events that ultimately led to their final deposition can be offered.

Location

All the deposits were made in cemeteries, but either in ambiguous or in no relation to contemporary tomb structures. Three deposits (Lisht Entrance Deposit, Lisht South Wall Deposit 1, Lahun 606) were found in the close vicinity of presumably contemporary tombs, but only one of

⁶⁵ Discussion in RICHARDS 2005, 117–118.

⁶⁶ ENGELBACH 1923, pl. LXII.

⁶⁷ For miniature vessels and their ritual function, see ALLEN 2006.

⁶⁸ E.g. SCHIESTL/SEILER 2012, 544–547.

⁶⁹ See discussion above and BADER 2001, 160–163.

these had been (possibly) structurally incorporated into a tomb complex (Lisht Entrance Deposit). The other two deposits were found in cemetery areas that were either unused (Mirgissa T120) and/or used by low-status burials (Harageh WI 624).

Structure

The architectural context of only four of the deposits is known. In all these cases the deposits were made in the bottom of simple vertically cut pits. While these pits are all different in size and shape, they share the fact they were all rough – i.e. not dressed or lined in any way – and there were no chambers cut off from the bottom of the shaft. This combination of features does not resemble contemporary tomb architecture and it is therefore likely that the pits were dug in order to receive the deposits rather than some other unrelated function. It is notable the volume of the shaft was always far in excess of what was required to contain the deposits principally due to the depth which was at least two metres, and in one case over 5m. Whether the depth was intended to ensure the contents were not disturbed and/or to avoid contaminating the surrounding area is unclear.

The deposits, where space permitted, were carefully placed around the floor of the shaft (Lisht Entrance Cut Deposit). In more confined spaces, for example the Lisht South Wall Deposit, Mirgissa T120 and probably Lahun, the deposits had to be laid in multiple layers to a considerable depth, ultimately resulting in a collapse of the containers that held the deposit. In all documented cases, the shafts had been backfilled to the surface after the placement of the deposition. The archaeological situation on the surface of the deposits is mostly unclear. In two cases (Lisht), the deposits would certainly have been invisible on the surface as they were presumably covered by the stone pavement and walls.

Objects

In all deposits, the overwhelming majority of the contents consisted of pottery vessels. A clear, non-random, division into three groups of pottery can be observed. Firstly, there is a group consisting of large storage/transport jars (probably) of Marl C fabric. In four of the deposits there were nine or more examples of this type of jar, and where there is sufficient documentation to determine this, these were deposited intact and were not closed at

the time of final deposition. The function of this vessel type in the deposits was as a container for transporting the other materials and objects that comprised the deposits (see below) to the cemetery and in some cases for burying these material. The other main group of pottery vessel represents a different class of ceramic entirely, namely table-ware made of Nile Silt fabrics. There is a noticeable predilection for open forms, for example drinking cups and medium sized plates and bowls pointing to the presentation and consumption of foods and liquids. In no deposit was there more than a single regular sized table-ware vessel suitable for pouring liquids. A third group of pottery belongs to the sphere of ritual, namely miniature pottery vessels as well as “offering stands” (the latter only occur in the South Wall Deposit 1). These forms included small plates and dishes as well as shouldered jars which were suitable for use in libations and/or rites of purification that accompanied offering rituals. Considering the evidence for the table-ware and the miniature pottery together, one is inclined to interpret them as the utensils of a ritual meal or offering ritual that had been gathered together. Some of the vessels may have been deliberately broken in accordance with the closing rites of the Offering Ritual, but this is naturally difficult to ascertain based on data of this quality. Other finds that occur in more than one of these deposits include flint knives – standard tools for both daily life and ritual purposes during the Middle Kingdom – and one or more bricks made of sun-dried mud, the basic building unit of the Middle Kingdom. The latter, evidently, did not fit neatly in the transport-jars and were placed separately from these.

Contents of Storage Jars

Where there is sufficient information to determine this, the storage jars contained different types of organic and inorganic materials. Unfortunately there has been little scientific analysis of any of these materials and even in cases where testing has occurred, this was certainly not representative or complete. Items that probably occur in more than one deposit included natron, plaster/gips, sand, ashes, charcoal and organics – possibly chaff or a similar material. The diversity of the material is a distinctive feature, and suggests a workshop or building site that has been tidied up.

Similarly, there is little information regarding the quantities of materials involved but reading

between the lines, it cannot have been too significant. Given the fact that the volume of the storage/transport jars used to carry the material to the cemetery was considerable, it is conceivable that some, if not most, were half empty when deposited. Perhaps the missing contents had been used on the way to the deposition or included liquids that were not archaeologically detectable. Alternatively, the vessels could have simply been half-filled for transport to the cemetery and final deposition. This would imply that the final number of transport vessels used to make the deposit was decided upon for some reason other than simple utility (see below).

Summary of Features

When considered together, it is difficult to overlook the similar spatial, structural and compositional features of the deposits. This, together with the systematic process of deposition itself, speaks against an interpretation of the deposits as unrelated and random events. Rather, the combination of recurring features indicates ritualised actions, closely related to the burial and/or mortuary sphere. These actions consisted of at least five broad stages. In the first stage, various crafts were practiced and a meal, probably of a ritual nature (offering ritual) was consumed. In the second stage, the material left over from the craft activities and the table-set used for the offering ritual(s) was packed together in a number of large storage-transport jars of a very specific type. The selection of these jars may have been for purely practical and/or aesthetic reasons. It might also be considered whether (some of) the jars had been used to transport and/or store certain materials used in the craft activities, for example natron, gips and water. Their use and burial in the context of the deposition, therefore, would also have been in accordance with the same custom that dictated the removal and burial of the work-shop rubbish and the pottery table-set. In a third stage the architectural context for the deposit was prepared. In the cases of Lahun, Mirgissa and Harageh, this was probably a relatively straightforward affair, but in the case of Lisht which was an active building site

and a royal necropolis, the choosing of the site and its excavation must have been negotiated and meticulously planned. In a fourth stage, the storage/transport vessels were carried to the necropolis to be buried in the specially prepared shaft. The size and weight of the jars meant that each jar must have been carried in a net suspended from a pole carried by two people.⁷⁰ If the jars were transported to the cemetery all at once, an occurrence which is implied by the 22 wooden poles found in the Lisht South Wall Deposit I (one for each jar), the carrying of the jars to the cemetery would have resembled a sizable procession. In a fifth stage, the jars were deposited and buried. There is no indication that any rituals were performed to accompany the placing of the deposition which was followed by the backfilling of the shaft to the cemetery surface.

Interpretation

Now that a profile of the deposits and the general nature of the activities that created them have been articulated, it remains to be demonstrated whether these can be convincingly tied to existing categories of Middle Kingdom intentional depositions or whether they represent a new form of deposit. As already mentioned in the discussion of the Lisht Entrance Cut Deposit (see above), MK Deposit Group 1 were certainly not regular foundation deposits. The latter had diametrically different contents and were always structurally linked to the buildings whose foundation event they marked. Nor does it seem likely that they are closely related to the intentional deposits found in the cemeteries, temple forecourts and settlements at Tell el-Daba which have been published by MÜLLER.⁷¹ While these latter did show evidence for the remains of ritual meals or offering rituals that resembled the activities represented by the tableware and miniature pottery component of MK Deposit Group 1 assemblages, they included neither the storage/transport jars typical for this group or the diverse materials such vessels contained. Rather, the suggestion made here is that the presence of natron⁷² in two of the deposits points relatively conclusively to the sphere of

⁷⁰ ARNOLD, Dorothea 1988, 113, fig. 58.

⁷¹ MÜLLER 2001; MÜLLER 2002; MÜLLER 2008.

⁷² A natural occurring combination of sodium carbonate and sodium bicarbonate with sodium chloride and sodium sulphate, i.e. NICHOLSON/PELTENBURG 2000, 187. Well known

sources for natron in Egypt include the Wadi Natrun or the area of el-Kab, KACZMARCZYCK/HEDGES 1983, 243. The natron found in Mirgissa MT120 would almost certainly have had to be imported from the Egyptian Nile valley.

embalming where natron was employed as a desiccant for the corpse.⁷³ This, along with other features that MK Deposit Group 1 share with Middle Kingdom “embalming deposits” (see below), strongly suggests that MK Deposit Group 1 should also be identified as “embalming deposits” (contra ARNOLD, pro KEMP) – intentional deposits in cemeteries from the Middle Kingdom onwards which, according to a synchronic definition, contained waste and excess materials generated during the preparation of the body for burial⁷⁴ in the “place of embalming” – a temporary or permanent structure in or near the cemetery where professional embalmers practiced their trade.⁷⁵ Nonetheless, as the following comparative analysis demonstrates, there are obvious differences between MK Deposit Group 1 and Middle Kingdom deposits already identified as embalming deposits raising the possibility that the former represents an alternative tradition of embalming/and or deposition of embalming waste. The comparative analysis, however, is unsatisfactory for the simple reason that so few Middle Kingdom embalming deposits have been identified. For the entire Middle Kingdom I am aware of only two deposits from the very early Middle Kingdom at Thebes, namely the deposits found in small rock cut chambers adjacent to the tombs TT280/MMA 1101 (Meketre)⁷⁶ and TT315/MMA516 (Ipi) – hereafter *MK Deposit Group 2*.⁷⁷ This is (presumably) not a statistically representative sample of the original evidence for such deposits and there is reason to believe (see below) that the two deposits in question may not be entirely characteristic of the full spectrum of contemporary depositional practice. Be that as it may, this is the evidence we do have and it must be dealt with accordingly.

The better preserved and documented of the two Middle Kingdom embalming deposits was that belonging to the tomb of Ipi. Like the deposits

of MK Deposit Group 1, the deposit was laid in a specially cut chamber (TT516a) that lay in a peripheral zone at the edge of a contemporary tomb complex, in this case 10m south east of the tomb entranceway at the point of transition from the courtyard to the causeway.⁷⁸ The architectural context, rather than the simple vertical shaft of Deposit Group 1, consisted of a short sloping shaft that opened into a small, very roughly cut, rectangular chamber⁷⁹ presumably referencing the local style of tomb construction in which chambers were cut laterally into the living rock. The chamber was completely filled by the deposit which consisted of 67 large intact storage/transport jars that had to be laid down in two layers to fit in the chamber much like the depositional process observed in the Lisht-South Wall Deposit 1. A further similarity to this last deposit was the deposition of the ropes and carrying nets used to carry the storage jars to the cemetery. Separate from the jars were the pieces of a wooden “table” or “board” that were placed on top of the pots and in front of the pots on the floor near the entrance to the chamber.⁸⁰ Four large wooden blocks – too large to fit in the jars (see below) – were placed in a pile next to the parts of the table found on the chamber floor and were evidently the last objects to be added to the deposit. This of course is reminiscent of the four mud bricks that were the last objects to be added to the Lisht Entrance Cut Deposit (see above and below). Finally, after the deposit had been laid, the chamber had been sealed with a blocking of coarse, dry stone masonry and the shaft was presumably backfilled.⁸¹ There does not appear to have been any marking of the deposit on the surface. Like the Lisht deposits that were obscured beneath courtyard pavements and enclosure walls, the Ipi deposit was probably intended to have been invisible to people visiting the tomb.

⁷³ For example IKRAM/DODSON 1998, 112–113; LUCAS/HARRIS 1962, 279. Natron, of course, was also used in the manufacture of various materials such as glass, faience and pigments, e.g. Egyptian blue. Do. ARNOLD has suggested that natron found in the Lisht Entrance Deposit (see above) was used to manufacture this last item, ARNOLD, Dorothea 1988.

⁷⁴ Recent summaries in EATON-KRAUSS 2008; BUDKA 2006; JANOT 2000, 91–116.

⁷⁵ This modern term covers a number of different Egyptian termini, including *ibw* (washing tent) and the *w^cb.t* (place of purification) as well as the *wr.yt.* and *w.t.* A recent discussion of these terms, especially where they relate to the

Middle Kingdom, can be found in WEGNER/ABU EL-YAZID 2005, 433–434, and especially footnotes 32–33.

⁷⁶ ALLEN, James P. 1996, 16 nr. 76.

⁷⁷ WINLOCK 1922, 33 ff.; WINLOCK 1942, 55–56. The author wishes to thank the Metropolitan Museum of Art, New York, for permission to use and refer to the unpublished primary documentation of this tomb in this article, and SUSAN ALLEN for facilitating access to it.

⁷⁸ WINLOCK 1942, 54 fig.6.

⁷⁹ MMA Photo M3C 196.

⁸⁰ MMA Photo M3C 235.

⁸¹ MMA Photo M3C 196.

The assemblage of intact jars placed in the chamber comprised two main groups: a sizeable group of 57 very large jars, of which at least one was made of Marl A3⁸², and a group of 10 large jars made of both Marl A3 and Marl C.⁸³ Although differing in morphology from the large jars found in MK Deposit Group I, such vessels can be considered functional equivalents (and perhaps functional antecedents?) to the later vessels, geared as they were for transport and storage.⁸⁴ In terms of function, therefore, the ceramic core of both Middle Kingdom Deposit Groups 1 and 2 was essentially the same. Differences in terms of depositional practice include the huge number of vessels in the Ipi (and Meketre) attesting to a level of expenditure far in excess of any of the MK Deposit 1 Group, and the fact that all of the vessels in the deposit of Ipi (and Meketre) were sealed for deposition with a rough mud capping whereas all the vessels from MK Deposit Group 1 were apparently “open” when deposited.⁸⁵

As in MK Deposit Group 1, broken pottery table-ware as well as miniatures had probably been a significant component of the Ipi deposit but unfortunately there is little published or unpublished information regarding this. According to the tomb cards, 22 of the large storage jars contained sherds of broken pottery vessels.⁸⁶ Among these were at least two small globular jars that had contained oils, but there were also sherds identified as belonging to regular-sized cups and bowls and

there is a description of at least one example of a miniature bowl.⁸⁷ Given the clear association of the materials in the Ipi deposit with the place of embalming (see below), it might be suggested that the table-ware vessels and miniatures were the remains of an offering ritual performed in that context. The obvious solution is that they were utensils used in the rituals that took place either during the night before the burial – the *Stundenwache*⁸⁸, or at some time prior to this accompanying the mummification. As the sherds were found inside sealed vessels, it seems less likely that vessels were used in rituals performed at the tomb side, for example the Offering Ritual or the various other rituals such as those attested in *Pap. Ram. E.*⁸⁹

Other materials deposited in the storage jars that parallel items associated with MK Deposit Group 1 are, regular flint blades (two examples)⁹⁰, organic materials such as chaff (*tibn*) and saw dust that might be analogous to fine organic remains observed in MK Deposit Group 1, and natron⁹¹ – found in circa 40 of the jars⁹². Most of this was loose dry natron (*salt*, or *dirty salt*, but textile bags containing natron were also reported (the importance of the absence of the latter in MK Deposit Group 1 will be discussed below).

In addition to these common elements, the Ipi deposit also contained a number of materials and items not found with Group 1, whereby their absolutely unique nature probably point to the exceptional level of expenditure invested in the Ipi

⁸² Unfortunately only one of these was kept. It is OIC 28929/MMA 22.3.317 and has been published in SEILER 2012, 306 fig. 7. The height of that vessel is circa 80cm and the maximum diameter 40cm.

⁸³ SEILER 2012, 306, fig. 7.

⁸⁴ For the vessels of Marl C, see especially BADER 2006; RZEUSKA 2012, fig. 13. A thorough discussion of the Marl A3 jars and their function is to be found in RZEUSKA 2011a.

⁸⁵ The Meketre deposits also consisted of a much larger number of intact storage/transport jars (there were 46, but originally at least 50) than found in MK Deposit Group 1. They had been sealed with mud and wrapped in textiles prior to their deposition; see MMA Photo MC1, MC2, Theban Expedition Tomb Cards 3484–3485. The material will be the subject of a new study in ROEHRING/CORTES Forthcoming. The author thanks C. ROEHRING for permission to make reference to the unpublished primary data from the excavation.

⁸⁶ Given the narrow vessel aperture of the storage/transport jars, it is conceivable that the table-ware was broken to fit into the jars.

⁸⁷ Unfortunately there is no illustration of most these vessels among the tomb cards or unpublished photographs. The

vessels illustrated in MMA Photo M3C 239 are from different contexts, but probably representative of what was found broken in TT516a. There is one sketch of a small bowl with a diameter of circa 10cm on Theban Expedition Tomb Card 1807.p.3 and the jars are sketched on Theban Expedition Tomb Card 1805. Five rings made of straw wrapped in twisted papyrus were probably stands for the oil jars as they were stained with oil, see Cairo 47341, MMA Photo M3C 256, Theban Expedition Tomb Card 1809. In addition to these last there was a mud stopper and a small covering made of hide that may have been used to seal the oil jars.

⁸⁸ WILLEMS 1988, 240–241 and 156–159.

⁸⁹ E.g. GARDINER 1955.

⁹⁰ Cairo 47346, MMA Photo M3C 261, MMA Theban Expedition Tomb Card 1805-1806, 1808.

⁹¹ MMA Theban Expedition Tomb Card 1812 (Report by A. Lucas 30.9.1922).

⁹² The quantity of natron appears to be very considerable and presumably far in excess of what was actually required for embalming.

deposit. These included a series of objects that may be identified as tools (both “practical” and “magical”) used during the embalming procedure, for example a hooked copper needle⁹³, two wooden pegs⁹⁴ and four wooden *ankhs*⁹⁵ as well as the aforementioned wooden table that was the working surface on which the embalming took place.⁹⁶ The four sturdy sycamore blocks noted above, the largest being 77 x 15.5 x 12.5cm and the smallest 52 x 15 x 12cm, had one “rounded” side each and had probably been surmounted on the table with this side facing upwards in order to elevate the corpse and allow fluids to drain away as well as assist during the wrapping of the corpse.⁹⁷ They were coated with natron and oils. Such objects are *generally* unique and they did not occur in the only other positively identified Middle Kingdom embalming deposit, namely the material associated with the nearby tomb of Meketre. Their absence in MK Deposit Group 1, therefore, cannot be used to argue against the identification of the latter as embalming deposits.

However, one very significant difference between the composition of the Ipi and Meketre deposits and MK Deposit Group 1 is the presence of textiles in large quantities in the former and the complete absence thereof in the latter. As textiles are usually ubiquitous in Embalming Deposits of all dates, their absence in MK Deposit Group 1 is puzzling and it is therefore desirable to understand their role in the Ipi and Meketre deposits more precisely. In the case of Ipi, textiles were found in 30, or just less than half the jars that comprised the deposit. According to the description of the jar contents on unpublished tomb cards, the textiles consisted of three types. The great majority were described simply as “rags”, or sometimes “dirty rags” or “salty rags”, suggesting that they had been used to temporarily stuff the corpse after the

probable removal of internal organs (evisceration) in order to prevent the collapse of the body and assist in the dehydration of the corpse.⁹⁸ The second group of textiles – bags that were filled with natron (see above) – were also intended to be packed inside the body cavities in order to desiccate the corpse.⁹⁹ Clean bandages that were perhaps surplus to requirements were only found in one of the jars from the Ipi deposit. The same three groups of textiles also occurred in the Meketre Deposit.

Given the essential role of textiles in the mummification procedure attested to by both the Ipi and Meketre embalming deposit, how can the absence of textiles in MK Deposit Group 1 be understood? One obvious option would be to draw attention to the far less conducive conditions for preservation of textiles in the locations where deposits of Group 1 were made in contrast to the exceptional conditions for preservation characteristic of the high hill face of the Theban necropolis where the Ipi and Meketre deposits were placed. The Lisht Entrance Cut Deposit, for example, was affected by dampness that may have decomposed any organic materials¹⁰⁰ whereas the preservation of textiles was rare at Mirgissa reflecting generally poor preservation conditions.¹⁰¹ The subsurface conditions at Lahun and Harageh are not explicitly mentioned, but given the rarity of textile wrappings (“clothing”) in the Harageh cemeteries generally¹⁰² and the high water level of groundwater at Lahun, the decomposition of textiles in the deposits from those cemeteries would hardly be surprising. The evidence for the Lisht South Wall Deposit 1, however, represent a more problematic case as it contained preserved remains of both wooden objects as well as fibre ropes (see above) indicating comparatively benign conditions. If textiles (in very large quantities) had originally been part of

⁹³ Cairo 47348, MMA Photo M3C 261, MMA Theban Expedition Tomb Card 1805, 1808.

⁹⁴ Cairo 47350, MMA Photo M3C 261, MMA Theban Expedition Tomb Card 1805, 1808.

⁹⁵ Cairo 47342, MMA Photo M3C 261, MMA Theban Expedition Tomb Card 1807, 1808.

⁹⁶ Cairo 47354, MMA Photo M3C 260, MMA Theban Expedition Tomb Card 1813, TT 516a p. 9.

⁹⁷ Cairo 47337-47340, see WINLOCK 1922, 34 fig. 33, MMA Photo M3C 239, MMA Theban Expedition Tomb Card 1814, TT516a p. 10.

⁹⁸ For this process, see DAVID 2007, 93. J. ALLEN has pointed out that the tombs of Ipi and Meketre were both equipped with canopic jars or containers for such jars – an indication that the bodies were eviscerated and the internal organs buried separately, ALLEN, James P. 1996, 16.

⁹⁹ Discussion in DAVID 2007, 93–94.

¹⁰⁰ ARNOLD, Dorothea 1988, 109: “...it is therefore possible that any organic material that may have been placed in the center of the deposit had completely vanished.”

¹⁰¹ Textiles were only found in unique cases where the preservation of the burial was exceptional, e.g. tombs Mx T3, T117, 130, T131, c.f. VILA 1975.

¹⁰² See ENGELBACH 1923, pl. LIX.

this deposit, one might assume that some trace of these would have been identified.

Another option would be to consider the possibility that MK Deposit Group 1 represents a different tradition of embalming to that attested to in the Ipi and Meketre deposits. The main differences seem to revolve around the stages of mummification during which the corpse was eviscerated and desiccated. The absence of dirty rags and bags of natron in MK Deposit Group 1 suggests one of two possibilities. Evisceration and (internal) desiccation was attempted without copious employment of textiles and bags of natron, or more likely, the mummification procedure that resulted in these deposits did not involve these procedures. Unfortunately there is little direct, contemporary evidence that would either strongly confirm or reject this hypothesis, but what evidence there is indicates that a wide spectrum of mummification practices co-existed during the Middle Kingdom and even individuals belonging to the royal sphere were not always eviscerated or even properly desiccated.¹⁰³ The mummification of the corpse in these latter cases presumably required neither sacks of natron nor temporary body packings, and it might be expected that “embalmer’s deposits” deriving from such procedures should reflect this difference. In conclusion, the absence of sacks containing natron and textiles in MK Deposit Group 1 should not preclude an identification of this group as related to the sphere of embalming. Their absence could have been either the result of the decomposition of organic materials in generally poor conditions for preservation or/and a very simplified, or alternate tradition of mummification, which did not require these items in large quantities.

In fact other items found in the deposits MK Deposit Group 1 *but not* in either of the Theban

embalming deposits hint at further differences in the traditions of mummification and/or deposition of waste, suggesting that the latter alternative should be seriously considered. This is clearly the case with the varied materials found in/with the storage/transport jars referred to above that collectively evoke a workshop that had been tidied up.¹⁰⁴ While this characterisation is undoubtedly correct, a case can be made that these materials were the detritus of various craft activities practiced in the “place of embalming” by embalmers during the final phase of mummification when the embalmed corpse was prepared for burial and final adjustments were made to articles of burial equipment which were to be deployed in close spatial proximity to the body.

Plaster/gips, for example, was found in the Mirgissa T120 deposit in significant quantities as well as in the Lisht South Wall Deposit I. While its main use was undoubtedly in construction, it is also the main material used in the production of the “funerary” or “burial” masks that were placed over the wrapped head and torso of the deceased during the Middle Kingdom.¹⁰⁵ As the study of such masks from Mirgissa demonstrates, their production probably took place on demand subsequent to the completion of the embalming procedure¹⁰⁶ and thus presumably in the place of embalming by the embalmers themselves. Excess materials used for the production of these masks (and their containers?)¹⁰⁷, as well as other goods closely associated with the body may have been considered sacred waste and dumped along with materials expended during the earlier phases of mummification. This would certainly account for the variety of materials found in these jars. In turn, the apparent absence of comparable items in the deposits of Ipi and Meketre might indicate that

¹⁰³ For example the royal women buried in the Mentuhotep II complex at Deir el-Bahari. Discussion in DAVID 2007, 90.

¹⁰⁴ E.g. ARNOLD, Dorothea 1988, 92.

¹⁰⁵ Regarding the material of masks from Mirgissa, see RIGAULT-DÉON 2012, 30–31 and catalogue entries.; PAGÈS-CAMAGNA 2012, 269. For the regular use of masks in the 12th Dynasty, see the data collated in BOURRIAU, Janine 2001. If the preparation of some of the pigments and other materials for decorating the masks also took place in this context this would have ensured the presence of a variety of raw and processed materials. The analyses of pigments of funerary masks from Mirgissa, for example, revealed kaolinite, calcite, huntite, ocre, carbonised organic remains, silicon sand, calcareous rocks, copper bearing

minerals and orpiment, PAGÈS-CAMAGNA 2012, 267–274. To this list one could add gold leaf and wood.

¹⁰⁶ VILA 1976, 173–176; RIGAULT-DÉON 2012, 58–59. The plaster base was moulded directly onto the wrapped head of the deceased after which a thin layer of plaster was applied to reproduce facial details.

¹⁰⁷ Presumably water was required for various activities in the “place of embalming”, for example the hydration of plaster. It would also have been required in larger quantities for the purposes of purification. As is well-attested, the storage of water is one of the better known functions of the storage/transport jars characteristic of MK Deposit Group I. I thank VERA MÜLLER for a discussion of this aspect.

such activities were not practiced in the workshops where those bodies were mummified, or more probably, that the embalmers did not choose to gather and bury the waste created by such activities.

Another object category which occurs in three of the deposits from MK Deposit Group 1 that has no direct parallel in either of the Theban deposits are sun-dried mud bricks. Their primary function was for building and construction, but like the materials just discussed, it is also possible to make a case for the presence of such items in the sphere of embalming and the preparation of the body. Considering their shape and size, they may be parallels for the wooden blocks that were surmounted on the “Embalmer’s Table” from the Ipi deposit which were used to elevate and support the body during the embalming process, in particular during the application of natron and resins-oils (see above). Thereby, it must be pointed out that the wooden blocks from the Ipi deposit were caked with the material residues of these activities whereas no such traces were observed on any of the mudbricks being discussed here. Alternatively, a related function for the bricks may have been to temporarily support the corpse at some point between the completion of the embalming procedure and the departure from the place of embalming for burial. While this might have simply been a profane and convenient measure, the image of the deceased on mudbricks evokes certain Middle Kingdom Coffin Texts where Osiris/the deceased is described as desiring to be upon, or simply upon the *Meskenet* (birthing bricks) in the place of embalming¹⁰⁸ – calling to mind the general circumstances of human birth, where the woman in labour squatted on mud bricks to deliver her

child.¹⁰⁹ The placement of the *deceased* on the Birth Bricks, however, might specifically allude to a birthing custom that is related in the Second Intermediate Period text *Pap. Westcar*. That text, which recounts the birth of three Old Kingdom kings, specifies that after birth, the newborn was to be placed on “four bricks” – presumably the birthing bricks – in order that the goddess *Meskenet* decree their fate.¹¹⁰ The later depictions of bricks in the Embalming Pavilion in vignettes accompanying Chapter 151 of the Book of the Dead¹¹¹, or the New Kingdom practice of placing “magical bricks” in niches around the tomb chambers might in some way be related to this earlier practice.¹¹² As such, the suggestion forwarded here that the deceased was placed on mudbricks after embalming much like a newborn after birth is consistent with a profound reconceptualization of resurrection in the afterlife as a symbolic rebirth that occurred during the Middle Kingdom.¹¹³ This concept permeated many aspects of funerary culture at that time¹¹⁴ and is tangible, for example, by the frequent inclusion of “birthing wands” – also objects used during birth – amongst the burial equipment.¹¹⁵ Following this reasoning, the mudbricks found in three of the deposits were not random building debris, but may have been ritualised objects that came into contact with the deceased in the “place of embalming”, and following a specific custom, were buried with the waste material used to prepare the burial.

Conclusion

In summary, it has been argued that the presence of natron in at least two of the MK Deposit Group 1 deposits as well as a number of features which

¹⁰⁸ In CT III 274b (228), FAULKNER 1973, 181 the deceased states his purpose to enter into the place of embalming in order to heal the body of Osiris upon the “Birth Bricks of Osiris”. That the episode takes place in the place of embalming is indicated by the presence of the “gate keeper(s) of Osiris”, individuals responsible for guarding the place where the corpse of Osiris lay, see WILLEMS 1996, 308–309. The text of CT IV 37j (286) as recorded on Coffin B1 is similarly explicit in locating the deceased on the birthing bricks: “O you silent ones, N is recognized upon the birth-stool”, FAULKNER 1973, 215 fn. B1C. Further mention of the “birthing bricks” is made in the so-called Abydos formula which in turn alludes to the events of the Osiris mysteries, see for example Stele Louvre C3 (SIMPSON 1974, 3 pl.15 ANOC 6) and BM 567 (SIMPSON 1974, pl.22 ANOC 13.2). The close relationship of the Osiris mysteries to

funeral rituals performed for private persons is discussed in WILLEMS 1996, 241.

¹⁰⁹ WEGNER 2002; WEGNER 2006, 35; ROTH/ROEHRING 2002, 129–130.

¹¹⁰ For a convincing discussion of this passage with literature, see ROTH/ROEHRING 2002, 131–132. Following their arguments, the common translation “pillow of cloth” instead of “four bricks” (e.g. LICHTHEIM 1973, 220–221) is to be rejected.

¹¹¹ ROTH/ROEHRING 2002, 127 suggest that the scene in fact depicts the burial crypt.

¹¹² For this practice, ROTH/ROEHRING 2002; FRANZMEIER 2010.

¹¹³ SPIEGEL 1973, 83; ASSMANN 2001, 565 nr.78.

¹¹⁴ MINIACI/QUIRKE 2009, 368.

¹¹⁵ BOURRIAU, Janine 1991, 13–15; D’AURIA *et al.* 1988, 128; SEILER 2005, 199; and VOSS in POLZ *et al.* 1999, 390 ff.

were also characteristic for deposits that have already been identified as Middle Kingdom embalming deposits (Middle Kingdom Deposit Group 2) strongly suggest that MK Deposit Group 1 should also be recognized as embalming deposits. Points of difference between these two groups can be explained by differences in the level of expenditure, different traditions in embalming and deposition, and possibly different conditions of preservation. Importantly, objects and materials from Middle Kingdom Deposit Group 1 that would seemingly be out of place in an embalming context could also be linked to the “place of embalming” and thus shed further light on the activities that took place there.

If it is accepted that MK Deposit Groups 1 and 2 represent two different traditions of deposition of “embalming waste” and/or different traditions of embalming, it might be asked what the reasons for these differences were. Given that both examples of MK Deposit Group 2 were found in Thebes and date to the very early Middle Kingdom before the shift of the residence to Lisht during the latter part of the reign of Amenemhat I¹¹⁶, it is certainly possible that they reflected a local tradition of embalming and deposition that blossomed at Thebes under the patronage of the royal court in the decades directly after unification. MK Deposit Group 1, on the other hand, could represent another (parallel?) tradition that was practiced in Lower and northern Middle Egypt after the shift of the Residence to Lisht. As such, it would be a further indication of regional differences in embalming traditions that have already been postulated for the early Middle Kingdom by ALLEN¹¹⁷ and for the later Middle Kingdom by QUIRKE and MINNIACI.¹¹⁸ According to this model, the occurrence of a deposit of this type at the Egyptian colony at Mirgissa in Nubia – as far from the Residence as it was possible to be during the Middle Kingdom – would be a convincing piece of evidence for the flow of practices and ideas from the residence to the rest of Egypt and Nubia during the Late Middle Kingdom.¹¹⁹ Of course, it is just as possible that

other factors such as privilege or status may have played a role in the differential treatment of the dead. Meketre the owner of one of the Theban embalming deposits, was one of the highest officials of the late 11th-early 12th horizon and evidently served a number of kings, rising to the lofty position of “Chief Steward” in the reign of Amenemhat I, whereas Ipi, the owner of the other Theban deposit was a “Vizier”, presumably under the same king – and thus Amenemhat’s direct successor in this office.¹²⁰ Their costly and elaborate embalming procedures, therefore, might directly reflect their very close relationship to the king and their status as the most powerful men in the land at the birth of a new dynasty. The owners of the Lisht deposits, on the other hand, are unknown. Most reasonably they can be attributed to the unknown owners of the minor pyramids in the Senwosret I enclosure. Following the pattern of pyramid ownership of Pyramid 1 and 2, they might be lower status queens and princesses, but this can only be speculated upon.¹²¹ Why such persons would not qualify for a full embalming is unclear, but it has already been noted above that the royal women buried in the Mentuhotep II complex at Deir el-Bahari were neither eviscerated or properly embalmed, pointing to the absolutely exceptional treatment that both Meketre and Ipi received in the context of the late 11th–12th Dynasty. The owners of the other deposits belonging to Middle Kingdom Deposit Group 1 are similarly unknown. Lahun Mastaba 601 evidently belonged to an important personage, but beyond this nothing more can be stated with certainty. The deposits from Harageh and Mirgissa, in comparison were not near a specific tomb and thus a claim of ownership cannot be made. Those cemeteries, however, belong to wealthy local populations that may be clearly differentiated from the elite stratum in Middle Kingdom Society (see above). It can hardly be doubted that the owners of the deposits in question belonged to a sub-elite “class”, a fact that might have directly impacted upon the manner in which their corpses were prepared for burial. In

¹¹⁶ For the dating of these tombs, see ALLEN, James P. 1996. For the date of the shift of the Residence to Lower Egypt during the early 12th Dynasty, ARNOLD, Dorothea 1991.

¹¹⁷ For example, the burial of the viscera separately in canopic jars, see ALLEN, James P. 1996, 16–17.

¹¹⁸ MINNIACI/QUIRKE 2009, 369–370.

¹¹⁹ Discussion in BOURRIAU, Janine 1991. The evidence from the New Kingdom which more closely resembles the pos-

tulated “Theban early Middle Kingdom tradition” might indicate the renewed relevance of a local Theban style following the rise of the Theban Dynasty at the beginning of the New Kingdom, but this is beyond the scope of the current paper.

¹²⁰ Discussion in ALLEN, James P. 1996, 1–3, 15–17.

¹²¹ See ARNOLD, Dieter 1992, 20, 23.

summary, while a dichotomy of embalming practices based on chronology and geography might be tempting, other avenues should be explored. More direct and indirect evidence for embalming practices in the Middle Kingdom is sorely needed.

The identification of MK Deposit Group 1 as a type of “embalming deposit” may help to explain a curiosity in Middle Kingdom archaeology: until now, there were no known deposits of embalming materials that could be dated between the very early 12th Dynasty and the end of the Middle Kingdom despite the fact that embalming is assumed to have been a relatively frequent procedure in this time period. MK Deposit Group 1 fills this gap in evidence for the burial of embalming waste deposition neatly. This is another reason, albeit circumstantial, to suspect that the solution offered here is the correct one. Be that as it may, the evidence for Middle Kingdom embalming deposits is still rather thin on the ground and the question naturally arises why there are so few of these deposits known? The obvious answer is that such deposits were misidentified as “empty” tombs and simply ignored or incorrectly described. Another possibility is that the custom of burying the remains from embalming procedures was not widespread during the Middle Kingdom. Perhaps there were clear rules of decorum about whose waste would be treated in this manner. The remains from other mummification events may have been disposed of in another, more informal way, for example in waste dumps on the edge of the cemetery similar to the situation at Harageh where large deposits of broken transport/storage jars were observed behind the town close to the necropolis.¹²²

As there are no deposits of First Intermediate Period date comparable to the deposits discussed here, the question of origins of the embalming tradition(s) must remain hypothetical. However, a distant antecedent to both MK Deposit Group 1 and 2 can plausibly be sought in the Old Kingdom practice of burying diverse materials in specifical-

ly constructed shafts within the tomb superstructure.¹²³ In addition to smashed table – ware – often coated in copious oils and textiles – the contents of these the shafts included other materials found in the later Middle Kingdom deposits, namely flints, miniature pottery vessels, ash and sand.¹²⁴ Storage/transport jars, however, were not included representing a major difference to the Middle Kingdom deposits. Although a final interpretation of the function of these Old Kingdom deposits is outstanding, they are usually identified as the remains of funeral meals alongside modest amounts of materials that had come into contact with the corpse during its preparation for burial.¹²⁵ The modest scale and character of the deposits may reflect the fact that Old Kingdom mummification was generally restricted to the more “cosmetic” procedure of maintaining the *appearance* of the deceased using textile wrappings which were sometimes soaked in resins.¹²⁶ This may be contrasted with the evidence for the Middle Kingdom procedure which attests to the intensification of efforts to desiccate and *preserve* the corpse through embalming that presumably required greater quantities, and different types, of materials¹²⁷ – an undertaking that is also reflected in the changed nature and increased volume of the Middle Kingdom deposits. Looking ahead to the New Kingdom, many features of the MK Deposit Group 1 can be recognised in the embalming deposits of that date, for example the remarkably well preserved embalming cache associated with the burial of Tutankhamun which was made in large storage/transport jars.¹²⁸ Like MK Deposit Group 1, the Tutankhamun deposit contained materials that were not strictly “embalming waste” and that seemed to be “a sort of tying up of loose ends and items”¹²⁹ from the wider context of the embalming ritual and the preparation of the body for burial including the remains of an offering ritual or ritual meal. A proper evaluation of the relationship of the Middle Kingdom deposits to those of the New Kingdom is not possible in the current

¹²² As suggested by KEMP/MERRILLEES 1980, 23.

¹²³ RZEUSKA 2011b; RZEUSKA 2002.

¹²⁴ See also KYTNAROVÁ 2014; VERNER 2002, 91–93. Two deposits of the same kind have now been excavated in 6th Dynasty contexts at Abydos by the University of Michigan Middle Cemetery Project and are currently being prepared for publication by the author and other members of the team.

¹²⁵ RZEUSKA 2011b, 254–255; KYTNAROVÁ 2014.

¹²⁶ LACOVARA *et al.* 2015, 69–71; DAVID 2000, 373.

¹²⁷ A recent overview of Middle Kingdom mummification practice can be found in DAVID 2007, 85–97. As may be gleaned from the nature of the evidence that is cited, there are unfortunately few modern scientific studies of this topic.

¹²⁸ WINLOCK 2010 (1941).

¹²⁹ ALLEN, Susan 2003, 26.

study, but that later material certainly draws attention to the inadequacy of the modern term “embalming deposit” to accurately describe the varied nature of the Middle Kingdom deposits. It is beyond doubt that these deposits contained materials used in the physical evisceration and desiccation of the corpse (embalming), but they also included materials from activities performed

in the wider context of the preparation of the body for burial (mummification) which, from a scientific perspective, includes, but is certainly not restricted to “embalming”. As such a less loaded term, for example “Middle Kingdom mummification deposit” or “Middle Kingdom Embalmers’ Deposit” would be more appropriate.

Bibliography

- ALEXANIAN, N./BECKER, H./MÜLLER, M./SEIDLMEYER, S.
2006 Die Residenznekropole von Dahschur. Zweiter Grabungsbericht, *MDAIK* 62, 7–41.
- ALLEN, J. P.
1996 Some Theban Officials of the Early New Kingdom 1–26 in: DER MANUELIAN, P./FREED, R. E. (eds.), *Studies in Honor of William Kelly Simpson Volume I*, Boston.
- ALLEN, S.
2003 Tutanchamun’s Embalming Cache Reconsidered, 23–29 in: HAWASS, Z./BROCK, L. P. (eds.), *Egyptology at the Dawn of the Twenty-first Century. Proceedings of the Eighth International Congress of Egyptologists Cairo 2000*, Cairo.
- 2006 Miniature and Model Vessels in Ancient Egypt, 19–24 in: BARTA, M. (ed.) *The Old Kingdom Art and Archaeology. Proceedings of the Conference held in Prague, May 31-June 4, 2004*, Prague.
- ARNOLD, D.
1988 *The Pyramid of Senwosret I*, PMMA 22, New York.
1992 *The Pyramid Complex of Senwosret I*, PMMA 25, New York.
- ARNOLD, D.
1982 Keramikbearbeitung in Dahschur 1976–1981, *MDAIK* 38, 25–65.
1984 Reinigungsgefäße, 213–220 in: HELCK, W./WESTENDORF, W. (eds.), *LÄ V*, Wiesbaden.
1988 Pottery, 106–146 in: ARNOLD, D. (ed.) *The Pyramid of Senwosret I Volume I*, Publications of the Metropolitan Museum of Art 22, New York.
1991 Amenemhat I and the Early Twelfth Dynasty at Thebes, *Metropolitan Museum of Art Journal* 26, 5–48.
- ASSMANN, J.
2001 *Tod und Jenseits im Alten Ägypten*, Munich.
- BADAWY, A.
1965 Preliminary Report on the Excavation by the University of California at Askut. First Season, October 1962–January 1963, *Kush* 12, 47–53.
- BADER, B.
2001 *Tell el-Dab’a XIII. Typologie und Chronologie der Mergel-C-Ton Keramik. Materialien zum Binnenhand-
del des Mittleren Reiches und der Zweiten Zwischenzeit*, Untersuchungen der Zweigstelle Kario des Österreichischen Archäologischen Instituts 19, Vienna.
- 2002 A Concise Guide to Marl C-Pottery, *Ä&L* 12, 29–54.
- 2006 Damals in Nubien: Ägyptische Tongefäße in Toschke, 97–102 in: CZERNY, E./HEIN, I./HUNGER, H./MELMAN, D./SCHWAB, A. (eds.), *Timelines. Studies in Honour of Manfred Bietak. Volume III*, OLA 149, Leuven.
- 2009 *Tell el-Dab’a XIX. Auaris und Memphis im Mittleren Reich und in der Hyksoszeit. Vergleichsanalyse der materiellen Kultur*, Untersuchungen der Zweigstelle Kario des Österreichischen Archäologischen Instituts 31, Vienna.
- BOURRIAU, J.
1991 Patterns of Change in Burial Customs during the Middle Kingdom, 3–20 in: QUIRKE, S. (ed.) *Middle Kingdom Studies*, New Malden.
2001 Changes in Body Position in Egyptian Burials from the Mid XIIth Dynasty until the Early XVIIIth Dynasty, 1–20 in: WILLEMS, H. (ed.) *Social Aspects of Funerary Culture in the Egyptian Old and Middle Kingdoms*, OLA 103, Leuven.
- BOURRIAU, J./QUIRKE, S.
1998 The Late Middle Kingdom ceramic repertoire in words and objects, 60–83 in: QUIRKE, S. (ed.) *Lahun Studies*, London.
- BUDKA, J.
2006 Deponierungen von Balsamierungsmaterial und Topfnerster im spätzeitlichen Theben (Ägypten), 85–103 in: MYLONOPOULOS, J./ROEDER, H. (eds.), *Archäologie und Ritual. Auf der Suche nach der rituellen Handlung in den antiken Kulturen Ägyptens und Griechenlands*, Vienna.
- D’AURIA, S./LACOVARA, P./ROEHRING, C.
1988 *Mummies and Magic. The Funerary Arts of Ancient Egypt*, Hong Kong.
- DAVID, A. R.
2000 Mummification, 372–389 in: NICHOLSON, P./SHAW, I. (eds.), *Ancient Egyptian Materials and Technology*, Cambridge.
2007 *The Two Brothers. Death and Afterlife in Middle Kingdom Egypt*, Bolton.

- EATON-KRAUSS, M.
2008 Embalming Caches, *JEA* 94, 288–293.
- EMERY, W. B./SMITH, H./MILLARD, A.
1979 *The Fortress of Buhen. The Archaeological Report*, EES 49, London.
- ENGELBACH, R.
1915 *Riqqeh and Memphis VI*, BSAE 26, London.
1923 *Harageh*, BSAE 28, London.
1938 The Quarries of the Western Nubian Desert and the Ancient Road to Tushka, *ASAE* 38, 369–390.
- FAULKNER, R. O.
1973 *The Ancient Egyptian Coffin Texts. Volume I Spells 1-354*, Warminster.
- FRANZMAIER, H.
2010 Die magischen Ziegel des Neuen Reiches – Material und immaterieller Wert einer Objektgruppe, *MDAIK* 66, 93–105.
- GARDINER, A. H.
1955 A Unique Funerary Liturgy, *JEA* 41, 9–17.
- GRAJETZKI, W.
2004 *Harageh, an Egyptian Burial Ground for the Rich around 1800 BC*, London.
- HAYES, W. C.
1953 *The Scepter of Egypt I: A Background for the Study of the Egyptian Antiquities in the Metropolitan Museum of Art*, New York.
- IKRAM, S./DODSON, A.
1998 *The Mummy in Ancient Egypt. Equipping the Dead for Eternity*, London.
- JANOT, F.
2000 *Les instruments d'embaumement de l'Égypte ancienne*, Bibliothèque d'étude 125, Cairo.
- JÉQUIER, G.
1921 *Les Frises d'Objets des Sarcophages du Moyen Empire*, MIFAO 47, Cairo.
- KACZMARCZYCK, A./HEDGES, R. E. M.
1983 *Ancient Egyptian Faience*, Warminster.
- KEMP, B. J./MERRILLEES, R.
1980 *Minoan Pottery in Second Millennium Egypt*, SDAIK 12, Mainz am Rhein.
- KNOBLAUCH, C. M.
2008 *The Egyptian Cemeteries in Lower Nubia during the first half of the Second Millennium B.C.*, Unpublished PhD Thesis, Macquarie University.
- Forthcoming The Late Middle Kingdom in the Cemeteries at Mirgissa: Pottery and Relative Chronology, *CCE* 12.
- In Press The Burial Customs of Middle Kingdom Colonial Communities in Nubia: Possibilities and Problems in: BINDER, M./SPENCER, N./STEVENS, A. (eds.), *Nubia in the New Kingdom: Lived experience, pharaonic control and indigenous traditions*, British Museum Publications on Egypt and Sudan. 3, Leuven.
- KNOBLAUCH, C. M./BESTOCK, L. D.
2014 (2013) The Uronarti Regional Archaeological Project: Final Report of the 2012 Survey *Mitteilungen des Deutschen Archäologischen Instituts* 69, 103–142.
- KYTNAROVÁ, K. A.
2014 Ritual Ceramic Deposit from the Tomb of Prince Werkaure? A Tentative Interpretation, *Bulletin de liaison du groupe international d'étude de la céramique Égyptienne* 24, 71–84.
- LACOVARA, P./IKRAM, S./BRIER, B./LEVEQUE, M./STEIN, R.
2015 An Egyptian Mummy of the Late Old Kingdom in the Michael C. Carlos Museum, Emory University, *JARCE* 51, 65–74.
- LANGE, H./SCHÄFER, H.
1902 *Catalogue Général des Antiquités Égyptiennes du Musée du Caire: Grab und Denksteine des Mittleren Reiches*, Cairo.
- LANSING, A.
1933 The Egyptian Expedition 1931-1932: The Museum's Excavations at Lisht, *The Metropolitan Museum of Art Bulletin* 28, No. 4, Part 2: The Egyptian Expedition 1931-1932 (Apr., 1933), 3–22.
- LICHTHEIM, M.
1973 *Ancient Egyptian Literature Volume I: The Old and Middle Kingdoms*, Los Angeles.
- LUCAS, A./HARRIS, R.
1962 *Ancient Egyptian Materials and Industries*, 4th Edition ed, London.
- MALEY, J.
1975 La nécropole de la vallée occidentale (MX.TC), 229–289 in: VERCOUTTER, J. (ed.) *Mirgissa II*, Paris.
- MINIACI, G./QUIRKE, S.
2009 Reconciving the Tomb in the Late Middle Kingdom. The Burial of the Accountant of the Main Enclosure Neferhotep at Dra Abu al-Naga, *Bulletin de l'Institut Français d'Archéologie Orientale* 109, 339–383.
- MÜLLER, V.
2001 Bestand und Deutung der Opferdepots bei Tempeln, in Wohnhausbereichen und Gräbern der Zweiten Zwischenzeit in Tell el-Dab^a, 175–204 in: WILLEMS, H. (ed.) *Social Aspects of Funerary Culture in the Egyptian Old and Middle Kingdoms*, OLA 103, Leuven.
2002 Offering Practices in the Temple Courts of Tell el-Dab^a and the Levant, 269–295 in: BIETAK, M. (ed.) *The Middle Bronze Age in the Levant*, CCEM 3, Vienna.
2008 *Tell el-Dab^a XVII. Opferdeponierungen in der Hyksoshauptstadt Auaris (Tell el-Dab^a) vom späten Mittleren Reich bis zum frühen Neuen Reich. Teil I: Auswertung und Deutung der Befunde und Funde*, Untersuchungen der Zeigstelle Kairo des Österreichischen Archäologischen Instituts 29, Vienna.

- NELSON, M./KALOS, M.
 2000 Concessions funéraires du Moyen Empire découvertes au nord-ouest du Ramesseum, *Memnonia* 11, 131–151.
- NICHOLSON, P./PELTENBURG, E.
 2000 Egyptian Faience, 177–194 in: NICHOLSON, P./SHAW, I. (eds.), *Egyptian Materials and Technology*, Cambridge.
- NORDSTRÖM, H./BOURRIAU, J.
 1993 Fascicle 2. Ceramic Technology: Clays and Fabrics, 149–190 in: ARNOLD, D./BOURRIAU, J. (eds.), *An Introduction to Ancient Egyptian Pottery*, SDAIK 17, Mainz am Rhein.
- PAGÈS-CAMAGNA, S.
 2012 I. La polychromie des masques de mirgissa conservés au musée du Louvre, 267–278 in: RIGAUULT-DÉON, P. (ed.) *Masques de Momies du Moyen Empire Égyptien. Les Découvertes de Mirgissa*, Paris.
- PETRIE, W. M. F./BRUNTON, G./MURRAY, M. A.
 1923 *Lahun II*, BSAE 33, London.
- POLZ, D./GORDON, W./NERLICH, A./PICCATO, A./RUMMEL, U./SEILER, A./VOSS, S.
 1999 Bericht über die 6., 7., und 8. Grabungskampagne in der Nekropole von Dra'Abu el-Naga/Theben-West, *MDAIK* 55, 343–410.
- RICHARDS, J.
 2005 *Society and Death in the Middle Kingdom. Mortuary Landscapes of the Middle Kingdom*, Cambridge.
- RIGAUULT-DÉON, P.
 2012 *Masques de Momies du Moyen Empire Égyptien. Les Découvertes de Mirgissa*, Paris.
- ROEHRING, C./CORTES, E.
 Forthcoming *The Tomb of Wah at Thebes*.
- ROTH, A. M./ROEHRING, C. H.
 2002 Magical Bricks and the Bricks of Birth, *JEA* 88, 121–139.
- RZEUSKA, T.
 2002 The Necropolis at West Saqqara: the Late Old Kingdom shafts with no Burial Chamber. Where they False, Dummy, Unfinished or Intentional?, *Archiv Orientální* 70 (3), 377–402.
- 2011a Grain, Water and Wine: Remarks on the Marl A3 Transport-Storage Jar from Middle Kingdom Elephantine, *Cahiers de la céramique égyptienne* 9, 461–530.
- 2011b And where are the viscera..? reassessing the function of Old Kingdom canopic recesses and pits, 244–255 in: STRUDWICK, N./STRUDWICK, H. (eds.), *Old Kingdom, new perspectives: Egyptian art and archaeology 2750-2150 BC*, Oxford.
- 2012 Elephantine – A Place of an End and a Beginning, 329–359 in: SCHIESTL, R./SEILER, A. (eds.), *Handbook of Pottery of the Egyptian Middle Kingdom. Volume II: The Regional Volume*, Contributions to the Chronology of the Eastern Mediterranean 31, Vienna.
- SCHIESTL, R./SEILER, A.
 2012 *A Handbook of Middle Kingdom Pottery. Volume I: The Corpus Volume*, Contributions to the Chronology of the Eastern Mediterranean 31, Vienna.
- SEILER, A.
 2005 *Tradition & Wandel. Die Keramik als Spiegel der Kulturentwicklung Thebens in der Zweiten Zwischenzeit*, SDAIK 32, Mainz am Rhein.
- 2012 Middle Kingdom Pottery in the Theban Necropolis, 299–320 in: SCHIESTL, R./SEILER, A. (eds.), *Handbook of Pottery of the Middle Kingdom. Volume II: The Regional Volume* Contributions to the Chronology of the Eastern Mediterranean 31, Vienna.
- SHAW, I.
 2000 Khafra's quarries in the Sahara, *EA* 16, 18–20.
- SHAW, I./BLOXAM, E.
 1999 Survey and Excavation at the Ancient Pharaonic Gneiss Quarrying Site of Gebel el-Asr, Lower Nubia, *Sudan and Nubia* 3, 13–20.
- SIMPSON, W. K.
 1974 *The Terrace of the Great God at Abydos: The Offering Chapels of Dynasties 12 and 13*, Publications of the Pennsylvania-Yale Expedition to Egypt, New Haven/Philadelphia.
- SMITH, S. T.
 1995 *Askut in Nubia. The Economics and Ideology of Egyptian Imperialism in the Second Millennium B.C.*, Studies in Egyptology, London/New York.
- 2012 Pottery from Askut and the Nubian Forts, 377–405 in: SCHIESTL, R./SEILER, A. (eds.), *Handbook of Pottery of the Egyptian Middle Kingdom. Volume II: The Regional Volume*, Contributions to the Chronology of the Eastern Mediterranean 31, Vienna.
- SPIEGEL, J.
 1973 *Die Götter von Abydos*, Wiesbaden.
- TAWFIK, S.
 1979 Aton Studies, *MDAIK* 35, 335–344.
- VERNER, M.
 2002 The Mastaba of Hedjetnebu, 85–97 in: VERNER, M./CALLENDER, V. (eds.), *Abusir VI. Djedkare's Family Cemetery*, Prague.
- VILA, A.
 1975 La nécropole du plateau occidental (M.X), 31–227 in: VERCOUTTER, J. (ed.) *Mirgissa II*, Paris.
- 1976 Les Masques Funéraires, 151–267 in: VERCOUTTER, J. (ed.) *Mirgissa III*, Paris.
- WEGNER, J.
 2002 A Decorated Birth-Brick from South Abydos, *EA* 21, 3–4.
- 2006 Echoes of Power. The Mayor's House of Ancient Wah-Sut, *Expedition* 48 (2), 31–36.

WEGNER, J./ABU EL-YAZID, M. A.

- 2005 The Mountain of Anubis: Necropolis Seal of the Senwosret III Tomb Enclosure at Abydos, 419–435 in: CZERNY, E./HEIN, I./HUNGER, H./MELMAN, D./SCHWAB, A. (eds.), *Timelines. Studies in Honor of Manfred Bietak. Volume III*, Orientalia Lovanensia Analecta 149, Leuven/Paris/Dudley.

WILLEMS, H.

- 1988 *Chests of Life. A Study of the Typology and Conceptual Development of Middle Kingdom Standard Class Coffins*, Ex Oriente Lux 25, Leiden.

- 1996 *The Coffin of Heqata (Cairo JdE 36418). A Case Study of Egyptian Funerary Culture of the Early Middle Kingdom*, OLA 70, Leuven.

WINLOCK, H. E.

- 1922 The Egyptian Expedition 1921-1922: Excavations at Thebes, *BMAA* 17, No. 12, Part 2, 19–49.
- 1942 *Excavations at Deir el Bahari 1911-1931*, New York.
- 2010 (1941) *Tutankhamun's Funeral (with an Introduction by Dorothea Arnold)*, New York.