# Embalming deposit of Wahibremeryneit from Abusir – a preliminary report of the 2022 spring season

Květa Smoláriková

#### ABSTRACT

In the 2021 archaeological season at Abusir, the shaft of the tomb of Wahibremeryneit, containing the largest intact embalming deposit ever found in Egypt was excavated. From about 370 transport amphorae discovered in different states of preservation, more than 250 have been hitherto examined, including a fine assemblage of Greek transport amphorae. Aside from smaller or larger ceramic vessels which were put into amphorae, the other waste embalming material comprised a mixture of sand, lumps of clay/mud, chaff, straw, charcoal, myrrh, fragments of wood and a rather large quantity of decayed linen cloth impregnated with oil and other substances. This embalming deposit is very valuable as it contains all of the materials used by embalmers in the mummification of the body of commander of the troops of Greek mercenaries Wahibremeryneit.

#### **KEYWORDS**

embalming deposit - Wahibremeryneit - Saite-Persian cemetery - Abusir - ceramic - Greek amphorae

وديعة تحنيط واح إيب رع مرى نيت – تقرير مبدئى لموسم ربيع 2022 كفينًا سمو لاريكو ڤا

#### الملخص

تم الكشف خلال موسم عام 2021 الأثري بمنطقة أبوصير عن مقبرة بئرية لشخص يدعى واح إيب رع مرى نيت، وهى المقبرة التى احتوت على أكبر وديعة تحنيط يتم العثور عليها كاملة فى مصر. فمن حوالى 370 أمفورة فخارية، استخدمت للنقل تم اكتشافها فى أوضاع أثرية مختلفة من درجات الحفظ، تم فحص أكثر من 250 أمفورة حتى الآن، بما فى ذلك مجموعة رائعة من أمفورات اليونانية تم استخدامها خلال عمليات النقل. بصرف النظر من 250 أمفورة حتى الآن، بما فى ذلك مجموعة رائعة من أوضاع أثرية مختلفة من درجات الحفظ، تم فحص أكثر من 250 أمفورة حتى الآن، بما فى ذلك مجموعة رائعة من أمفورات اليونانية تم استخدامها خلال عمليات النقل. بصرف النظر من 250 أمفورة حتى الأن، بما فى ذلك مجموعة تم وضعها داخل الأمفورات اليونانية تم استخدامها خلال عمليات النقل. بصرف النظر من 100 أمفورة حتى الأن، بما فى ذلك مجموعة تم وضعها داخل الأمفورات اليونانية من أوضاع أثرية مختلفة من درجات الحفظ، تم فحص أكثر من 250 أمفورة حتى الآن، بما فى ذلك مجموعة وائعة من أمفورات اليونانية تم استخدامها خلال عمليات النقل. بصرف النظر من 100 أمفورات اليونانية تم استخدامها خلال عمليات النقل. وما فالنظر من 100 أمفورات الونان المعنار أو الأكبر التى والقش، وانعة من أمفورات اليونانية تم استخدامها خلال عمليات النقل. ومن فليط من الرمل، وكتل من الطين/الصلصال، والقش، والتبن، والفحم، والمر، وبقايا من الخشب وكمية كبيرة نسبياً من الكتان المتحال، المتشبع بمادة زيتية ومواد أخرى. تعتبر وديعة التحنيط هذه ذات قيمة علمية كبيرة؛ لأنها تحتوى على جميع المواد التى استخدمها المحنطون القدماء في تحنيط جسد قائد قوات التحنيط هذه ذات قيمة علمية كبيرة؛ لأنها تحتوى على جميع المواد التى استخدمها المحنطون القدماء في تحنيط جسد قائد قوات المحنية اليونانيين.

ا**لكلمات الدالة** وديعة تحنيط – واح إيب رع مرى نيت – جبانة العصر الصاوي والفارسي – أبوصير – فخار – أمفورا يونانية

In a separate small shaft located in the usual position close to the south-western corner of the massive limestone enclosure wall of the shaft tomb of Wahibremeryneit (about 0.8 to 1.3 m to the south of it; fig. 1), a large embalmers' deposit was discovered (fig. 2). The mouth of this shaft, measuring 5.3 by 5.3 m, seems to have been covered already in ancient times by

WAHIBREMERYNEIT



# **Fig. 1** The area of the Saite-Persian cemetery at Abusir with the recently discovered complex of a large shaft of Wahibremeryneit in its northermost part (drawing K. Smoláriková, L Vařeková)

#### SAITE-PERSIAN CEMETERY AT ABUSIR



**Fig. 2** Large funerary complex of Wahibremeryneit with embalming deposit in the foreground (dimensions of the top are 5.3 by 5.3 m), located in the shaft about 15 m deep, situated in the south-western corner of his shaft tomb at Abusir (photo K. Smoláriková)



Fig. 3 A cluster of Egyptian amphorae found *in situ* (photo P. Košárek)



**Fig. 4** An excellent example of a sealed Egyptian transport amphora with ribbed surface (photo K. Smoláriková)



**Fig. 5** Remnants of resin impregnated linen on the surface of a faience cup (rim diameter 12 cm, height 10 cm) inserted into amphora No. XXVII; after cleaning (photo K. Smoláriková)

sand and debris removed from the area of main shaft by ancient looters and, because of that, had gone unnoticed and remained intact until the moment of its unearthing in 2021. This deposit creates an integral part of the large funerary complex of Wahibremeryneit, which is northernmost among the large Late Period shaft tombs unearthed in the western part of the Abusir necropolis so far and perhaps the latest. The shaft, about 14.5 m deep, was dug directly into the fragile *tafla*/shale bedrock. In the pure sand fill, at depths between 4.4 and 12.1 m, a total of 14 clusters (containing between 7 and 52 amphorae each) of large Egyptian transport amphorae were found (fig. 3). Thorough analysis of this large embalming deposit started partly at the very end of the previous season and continued during this archaeological season (Bareš *et al.* 2022: 8–26).

Out of about 370 transport amphorae found in different states of preservation, more than 250 have been meticulously documented hitherto. Thus, we are quite far from finished yet. Especially interesting and extremely important will be the analyses of the contents of each of 14 clusters of amphorae because this can shed the light onto the timing of the embalming process and clarify perhaps, why the number of amphorae in each cluster is so different. Unfortunately, due to the enormous pressure of sand, a considerable number of amphorae (about 70–90 pieces) have been heavily crushed and their contents spread all around, especially in the cases of the amphorae laying in the lower layers. Curiously enough, rather a significant amount of the amphorae so far examined were found almost empty – their bases were mostly filled with tiny pieces of straw and/or decayed lumps of linen cloth, albeit when found they were thoroughly sealed (amphorae Nos. CCXXXVI, XC, XVIII, XXXIV, etc.). This sealing with



**Fig. 6** The most common types of Egyptian vessels used in the embalmer's workshops from Egyptian amphora CLVIII (photo K. Smoláriková)



**Fig. 7** Marl fabric, medium-sized beaker with traces of fine linen still visible on the outer surface (photo P. Košárek)

a very strong layer of mud and plaster of all the amphorae is a constant feature of this deposit and would have been, without doubt, a time consuming activity (fig. 4).

On many smaller vessels inserted into the transport amphorae were still preserved remnants of heavily impregnated linen both on the outer and inner surface (fig. 5), this is especially the case of fine, medium-sized, faience cups (Exc. Nos. 1-4/AW6/2022 or 7/AW6/2022) and some cooking pots (in amphorae Nos. XXVII, CCCLXX). It is not without interest that these medium-sized, faience cups (height 11 cm, rim diameter 12 cm, bottom diameter 9 cm) were – in comparison with two (521/S/03a, b) found in Menekhibnekau's embalming deposit – not only significantly larger, but also much more numerous (so far about 9 pieces). Generally, the repertoire as well as number of Egyptian vessels (fig. 6) used by the embalmers is surprisingly limited and consists mostly of fragmentary/intact preserved cooking pots/so-called "goldfish bowls" (about 32 pieces), jars with/without a red-polished surface and rounded base (about 24 pieces), bottles with red-polished surface, ribbed neck and rounded base (about 7 pieces), course jars with short neck and pointed bases (7 pieces), large plates of different diameters with flat bases (3 pieces), different types of small lids with flat bases (4 pieces), fragments of torches (3 pieces) and coarse uncoated/wet-smoothed pot-stands with rolled/direct rims (about 8 pieces) (Hussein – Marchand 2019: 101–132); all are of Nile silt fabric J1/J2, with marl fabric K2 (Smoláriková 1999: 89) being rather rare and connected with the medium-sized beakers (in amphorae Nos. LIX, CIV, CVIII, CCLXXIV, CLVIII, CCCIV, CCCII) (fig. 7). As a whole this assemblage of Egyptian pottery can be dated to the end of the Saite and beginning of the Persian era, i.e. Twenty-sixth and Twenty -seventh Dynasties (Smoláriková 2016: 545–555). The number of large broken or intact smaller vessels inserted inside the transport amphorae varied in number from 1 to 3, which is also very well attested from the large embalming deposits of Iufaa or Menekhibnekau at Abusir and of course, from elsewhere (Smoláriková 2011: 81–163; Smoláriková 2008: 192–202; French 2003: 221–224; Ikram – López-Grande 2011: 205–228).



**Fig. 8** The large Egyptian amphora CCCLXX contained a heavily decayed faience cup accompanied by the remains of a large quantity of brown linen (photo K. Smoláriková)



Fig. 9 Detail of several lumps/rags of fine dark brown linen from amphora No. CCCLXX (photo K. Smoláriková)

Not only used ceramic and faience vessels were put into the amphorae but a wide range of waste embalming materials also accompanied the pottery: a mixture of sand, clumps of clay/ mud, chaff and straw that still held the shape of the base of the amphora, charcoal, myrrh, fragments of wood and a rather large quantity of decayed fragile linen impregnated with oil, resins and dark bodily fluid (figs. 8, 9). An assemblage of more than 30 samples was prepared from these waste embalming materials for a thorough chemical analyses. Sampling of some of the organic and mineral embalming remains will allow us to pay more attention to some special elements of the diverse material, and so improve the quality of our data, based so far on a visual classification.

Surprisingly, no natron bags, so numerous for example in the Theban area, were found in this as in other embalming deposits at Abusir (Ikram – Dodson 1998: 106). The care in disposal of the enormous amount of embalming material may suggest that the vessels were either ritually unclean, or too sacred, to be used further in mummification workshops for other bodies (Budka 2006: 85–103; Rageot *et al.* 2023: 297–293). As a whole, the Wahibremeryneit embalming deposit falls into Aston's Type B classification as it consists only of ceramics with no coffins affiliated with it; parenthetically, the results of many recent archaeological excavations definitely illustrate that this type of embalming deposit was the most frequently used in the Memphite area and is not connected with the social level of a deceased person (Aston 2003: 154–155; Ikram – López-Grande 2011: 216).

Rather unexpectedly, evidence for the destructive activities of stone looters was present not only through eroded fragments of Late Period sherds spread all around the burial structure (interestingly, very little pottery datable to this period has come to light), but mainly thanks to the discovery of two perfectly preserved vessels: a medium-sized jug (Smoláriková 1999: fig. 18/35) from about 400 AD and a large amphora (Gempeler 1992: 199, Abb. 129/3) datable to the end of the sixth, beginning of the seventh century AD. They were found lying close to each other in the sand fill of the main shaft. Behind this need for fine, soft limestone might be the enormous building activities of the monks' community from the nearby Coptic Monastery of Apa Jeremias at Saqqara, which must have existed from about the end of the fifth to the middle of the ninth century AD. Here, the walls of large edifices were built from mud bricks and then covered with a thick layer of white lime plaster as a base for painted decoration (Quibell 1912: 1–30, Pls. XX, XXI, *etc.*).

## **GREEK IMPORTS/IMITATIONS**

East Greek transport amphorae appeared in Egypt already towards the end of the seventh and beginning of the sixth century BC and were mostly imported from Chios, Samos, Lesbos, Clazomenae, but also from other sites; usually they were filled with oil or wine of excellent quality (Cook – Dupont 1998: 142–145). The occurrence of Greek imports in the shaft tombs at Abusir is precisely localised and, mostly, also stratified thanks to the fact that the objects and pottery were unearthed *in situ*. This is true about the large shaft tombs of the Saite dignitaries Iufaa, Menekhibnekau and Wahibremeryneit, and more or less also about the tomb of Udjahorresnet (Smoláriková 2007: 189–97). So far, the discovered pieces of East Greek transport amphorae came predominantly from Lesbos, Samos, Chios, Clazomenae and Miletus and can be dated to the sixth century BC. However, the character of imports/their provenance and



Fig. 10 Greek imports and imitations found in situ (photo P. Košárek)

dating in Wahibremeryneit's deposit is rather different to the other Abusir large shaft tombs (fig. 10). Amongst more than 370 transport amphorae of Egyptian provenance, the assemblage of about 13 Greek amphorae were clearly identified. More precisely, there were about 8 intact or almost completely restored amphorae (Nos. CCXXXII, CLXXVIII, LVIII, CIII, CCCI, CCCII, CCCII, CCCII, CCCIV) and 5 amphorae were found broken into many fragments that, moreover, were very eroded due to the high humidity in the shaft and could not be completely reassembled (Nos. LV, CCCLXIX, CIII, CCXI, XLIV). They can be considered mainly of Samian, Milesian, Zeest's "Samian", the Northern Aegean, perhaps from the area of Thasos/"Prothasian" and Corinthian provenances; additional transport amphorae or better their fragments may be identified after further post-excavation ceramic processing. Interestingly enough, they were used side-by-side with the large amount of Egyptian amphorae.

Two examples of Corinthian amphora Type A (Nos. CCCIII, CCCIV) – datable to the middle of the sixth century BC – have the characteristic features of a broad, horizontal rim and a wide neck from the top, from which short handles arch down to the top of shoulder (fig. 11). The large, spherical body tapers to a massive cylindrical toe. They were being made of the coarse, reddish fabric (Koehler 1979: 449–459).

The transport amphorae of the island of Samos, which was an excellent producer of olive oil and wine, form a particularly large and conspicuous group among the assemblage of Greek pottery (Grace 1971: 71); interestingly enough, some examples (amphorae Nos. CCXI and LV) show a rather unusual fabric in the sections: it is extremely gritty, friable, porous, rich in mica and with a rather large portion of sand – perhaps a locally produced ware (?). For the present, therefore, it is not certain if some Samian amphorae are true imports, in other words, it is difficult on the basis of a visual analysis to determine if this type was made locally from a finer, gritty clay with a high portion of minerals or was imported. Further mineralogical analysis



**Fig. 11** A completely preserved massive Corinthian amphora Type A, amphora No. CCCIV (photo K. Smoláriková)



**Fig. 12** On the shoulder of amphora No. CCCI is clearly visible a post-firing scratched mark in the shape of a rectangle divided into small quarters and a short, perhaps Aramaic text (two orange--red ink letters, actually) (photo K. Smoláriková)

is necessary (Myśliwiec 1987: 77, footnote 104). This is especially true about amphora No. CIII, datable to the third quarter of the sixth century BC (Cook – Dupont 1998: fig. 23a).

Generally, pottery from Samos is very well attested across Egypt. Our examples of amphorae have an ovoid body, a shorter cylindrical neck which narrows slightly downward, a shoulder over which the handles arch out, and typical is the bevelled ring-foot. The origin of this type of amphora is, however, not always certain and is closely connected with similar Milesian, Zeest's "Samian" or "Protothasian" models, displaying orange clay, rich in mica (Aston – Aston 2010: 9). In this respect we can mention amphora No. CLXXVIII (Cook – Dupont 1998: fig. 23.120) or amphora No. CCXXXII (Cook – Dupont 1998: fig. 23.11b), dated to the beginning of the fifth century BC and Zeest's "Samian" (or "Protothasian"?) amphora No. CCCII with double-bevelled foot, from about 500 BC (Cook – Dupont 1998: fig. 23.10f; Grace 1971: 71, fig. 2/4). According to Pierre Dupont they belong to the intermediary type between Zeest's "Samian" and "Protothasian". In the fifth century BC this type continues with examples of amphora more elongated at both ends and the neck ended by a well-articulated ridge. The clay is remarkably gritty and dark red, with a high portion of mica and other organic inclusions, which differs enormously from other Samian fabrics. For example, a Samian amphora No. CCCLXIX with pointed base, has fabric that is dense and extremely hard with a high proportion of mica and mostly fired to a brownish colour and grey core. All of these components serve to distinguish



**Fig. 13** Unusual incised trader's mark in the shape of a "serekh" (?) on the shoulder of Samian amphora No. LVIII (photo K. Smoláriková)

it from fragments of other amphorae akin to it in shape. On the shoulder of another almost intact and sealed Samian amphora No. CCCI from the last quarter of the sixth century BC (Cook – Dupont 1998: fig. 23.9b), is clearly visible a post-firing incised mark in the shape of a rectangle divided into small quarters (fig. 12), this is a quite curious trade mark and so far we did not find a parallel or a similar mark (Johnson 2006: 23-30). Moreover, below this trade mark is a very short, perhaps Aramaic text (two letters actually), written in Aramaic cursive script in red ink (for comparison of the text see, Dušek – Mynářová 2011: 179–181). The same uncertainty stands about the trade mark (fig. 13) in the shape of a "serekh" (?) on the shoulder of the Samian amphora No. LVIII from the third quarter of the sixth century BC (Cook – Dupont 1998: fig. 23.9a). Also of Samian provenance is perhaps an amphora with post-firing scratches that appear to be tally-marks as was identified by Peter French (2003: 223, Abb. 7/6) in the embalming deposit in Buto. In the last example of a fragmentary preserved Samian amphora No. XLIV, the neck joins the shoulder in a continuous curve, the body is ovoid and the ring-foot is bevelled; the section of the sherd shows reddish brown outer zones and faint grey core, the surface is whitish and slightly glitters with mica.

The Saite-Persian cemetery at Abusir has for a long time provided a good number of Greek transport amphorae of various provenances and, because their documentation is far from complete, further evidence of their variability would be expected.

Here also much wider analyses of the newly established trade contacts within the Mediterranean area is necessary (Wilson – Gilbert 2007: 251–265), the more so that no vessels of Phoenician provenance (mainly so called "torpedo jars"), so common at that time, were so far discovered within the large assemblage of imported pottery.

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## Květa Smoláriková

Czech Institute of Egyptology, Faculty of Arts, Charles University; kveta.smolarikova@ff.cuni.cz