

Pottery from the tomb of Kairsu (AC 33) – a preliminary analysis

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ABSTRACT

This paper presents a preliminary report on the most significant ceramic contexts from the tomb of official Kairsu, excavated at Abusir Centre in the autumn of 2018. Based on the pottery finds, the activities in the tomb can be divided roughly into three main time frames. During the middle to late Fifth Dynasty, the tomb was constructed and four main burial shafts and apartments were equipped. The preliminary analysis shows that Kairsu was buried at a slightly earlier date than the owners of Shafts 2, 3 and 4, although all the pottery belongs to the span of the middle to late Fifth Dynasty.

The area east of the tomb is characterized by secondary activities – in the course of the late Fifth and early Sixth Dynasty, two small additional shafts were built; one in the corridor of AC 33 (Shaft 6) and another in the corner north of the so-called entrance rooms (Shaft 5), the second one very likely serving as an embalming deposit for an (at this point) unknown burial. The so-far analysed destruction and refuse layers in and around Entrance Rooms 1 and 2 can be dated to the Sixth Dynasty, with some contexts associated with pottery characteristic of the first half of the dynasty (within a time span of Pepy I to Merenre) and one cluster containing vessels typical of the second half of the Sixth Dynasty.

KEYWORDS

Abusir – tomb – pottery – burial equipment – embalming deposit – refuse layers

فخار من مقبرة كايرسو (AC 33) تحليل أولي

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ملخص

تقدم هذه الورقة تقريراً مبدئياً عن أهم اللقى الأثرية المصنوعة من الفخار والتي تم العثور عليها في مقبرة الموظف كايرسو، والتي تم الكشف عنها في خريف عام 2018 بالجبانة الملكية لمنطقة أبو صير. بناءً على تأريخ الأواني الفخارية، يمكن تقريباً تقسيم الأنشطة التي كانت تتم بالمقبرة إلى ثلاثة أطر زمنية رئيسية. خلال الفترة من منتصف إلى أواخر الأسرة الخامسة، تم تشييد المقبرة وكذلك أربع آبار للدفن وحجرة رئيسية. حيث تُظهر الدراسة المبدئية أن كايرسو دفن في تاريخ مبكر قليلاً عن تاريخ دفن أصحاب الأبار أرقام 2، 3، 4، وذلك على الرغم من أن جميع الأواني الفخارية تُورخ إلى الفترة من منتصف إلى أواخر الأسرة الخامسة.

تتميز المنطقة الواقعة إلى الشرق من المقبرة بأنشطتها الثانوية – ففي أواخر الأسرة الخامسة وأوائل الأسرة السادسة، تم تشييد بئرين إضافيين؛ واحد بممر المقبرة (AC 33)، وهو البئر رقم (6)، والبئر الآخر رقم (5) تم تشييده بالزاوية إلى الشمال من ما يسمى بحجرة المدخل (البئر رقم 5)، وهو البئر الذي من المحتمل أن يكون بمثابة وديعة تحنيط (وهو الاستنتاج الذي توصلنا له حتى الآن) لدفنة غير معروفة. حتى الآن يمكن تأريخ طبقات التدمير والمخلفات التي تم دراستها، والتي تم العثور عليها من المنطقة حول وداخل حجرة المدخل 1 و 2 إلى الأسرة السادسة، مع بعض السياقات المرتبطة بأنواع الفخار الذي يُورخ بالنصف الأول من الأسرة السادسة (في غضون فترة زمنية من عصر الملك بيبى الأول إلى الملك مرنرع)، ومجموعة واحدة تحتوي على أواني معروفة من النصف الثاني من الأسرة السادسة.

الكلمات الدالة

أبو صير – مقبرة – فخار – متاع جنائزى – وديعة تحنيط – طبقات مخلفات



Fig. 1 General view of the limestone mastaba of Kairsu from the east, with mud brick Entrance Rooms 1 and 2 seen in the foreground (photo P. Košárek)

The tomb of Kairsu was discovered by Ludwig Borchardt in the early twentieth century, but was excavated only partially at the time. The team of the Czech Institute of Egyptology, Faculty of Arts, Charles University, undertook the excavation in the autumn of 2018, concentrating on the substructures of the tomb, its eastern side and surrounding structures (fig. 1). Being as the full report is available in this edition (see Bárta *et al.*), only relevant contexts shall be discussed here.

The pottery was documented during the course of the 2019 season. It must be noted that the ceramic assemblage from this tomb was very extensive, containing 65 main ceramic contexts that numbered hundreds of baskets. As an example, a single context from the so-called relieving chamber in Shaft 1 (29.AC33.2018) held 30 baskets of pottery. Not all the ceramic finds from the tomb have been analysed yet; thus, only a preliminary report on the most significant ceramic finds is offered here and will require further study in the field.

During the excavation, all ceramic contexts are conventionally assigned priority and archaeological significance, ranging from 1 (usually primary) to 3 (often surface finds or heavily disturbed layers). This enables prioritization during the documentation of hundreds of baskets, making it possible to concentrate on the most important and relevant layers first. Each basket from a context is numbered and equipped with a date, allowing for a spatial analysis even within the context. The methodology of statistical analysis, description of clay fabrics and general principles of the documentation of the ceramic finds from Abusir has been outlined in

detail in several articles and studies (e.g. Arias Kytarová 2014b: 73–75; Arias 2017: 23–34), therefore it shall not be repeated here. This paper references the Abusir classification system of pottery, which is used in all the publications by the present author (see esp. Arias Kytarová 2011a: 125–150; Arias Kytarová 2014b: 106–259; Arias 2017: 218–309).

This paper will offer an analysis of the ceramic finds in their approximate chronological order, from the oldest (namely, the subterranean structures and parts of the mastaba superstructure) to the youngest (secondary areas uncovered east of the mastaba). Thus, the order of individual contexts may differ from the archaeological report of the tomb in this issue (Bárta *et al.*).

SUBTERRANEAN STRUCTURES

In the area of the mastaba, four shafts have been identified so far. Out of these, Shafts 1 and 2 were situated approximately in the central north-south axis of the tomb, while Shafts 3 and 4 were located in its north-east part (see Bárta *et al.* in this issue, fig. 1).

SHAFT 1

Shaft 1 belonged to the main owner of the tomb, official Kairsu. This fact is not only evidenced by its position, with the burial chamber situated immediately west of the main chapel with the (missing) false door, but also by the presence of the lower part of his statue, which was found *in situ* in a small enclosure directly in his burial chamber (pl. II: 1).¹ On the base of the statue, his name

and several titles are listed (see also Bárta *et al.* in this issue), including inspector of *w^cb*-priests in the pyramid complex of Sahure and inspector (of *hm-ntr*-priests?) in the complex of Neferirkare.

There were several ceramic contexts connected with Shaft 1 and its two rooms. From the shaft itself, only select pieces have been analysed yet, including those from the level of the entrance to so-called relieving chamber (22.AC33.2018) and the bottom of the shaft below the burial chamber, at a depth of 6.25 m (36.AC33.2018). These contexts yielded pottery of approximately middle Fifth Dynasty date, including a small ovoid beer jar (22-1.AC33.2018) preserved roughly to the lower level of its rim or neck (Abusir type J-1a or J-1b). It had a very low volume, with a maximum diameter of only 14 cm and a reconstructed height of *ca.* 26–27 cm. Both the height and volume of beer jars are of chronological significance, as has been shown by different studies (Bárta 1996: 128–129; Rzeuska 2006: 386). Comparative morphometric analysis would place this jar to before the middle of the Fifth Dynasty, as it is smaller than the examples from the mortuary temple of King Raneferef.²

Among the vessels collected from the bottom of Shaft 1, there were at least two examples with remains of white plaster inside. Both were relatively fine bowls made of Nile silt B1, one a very large and deep bowl with recurved shoulders (36-1.AC33.2018, type B-15) and the other a shallow bent-sided plate (36-2.AC33.2018, type B-2a). It is noteworthy to mention that diverse vessels are fairly often recorded in similar contexts, either at the bottom of the shaft or at the level of the opening to the burial chamber. They undoubtedly served as containers for the mortar or plaster that was used for sealing either the sarcophagus or the mud brick wall (for details, see Arias 2017: 178–181). The vessels used as such containers varied greatly – most commonly jars or their bases were employed, but bread moulds, bowls and vats are attested as well. As a fact, the custom seems to have developed from open vessels to closed ones in the course of the Fourth to Fifth Dynasty. For the earlier examples, we can mention a large bowl from the shaft of Rhotep at Meidum (M6; Petrie 1892: 35, pl. XXXI, no. 21) or large basins from Shaft G 7000 X of Queen Hetepheres (Reisner – Smith 1955: 14). The mastabas in Giza contained several examples of such a use (*e.g.* Junker 1929: 104, 161, Taf. X; Junker 1947: 2; Reisner 1942: 428, *etc.*). From Fifth Dynasty Abusir, we have a large variety of mortar containers uncovered in shafts, *e.g.* in those of Nefer and Neferhathor (Arias 2017: figs. 3.254 and 3.271), three shafts in the courtyard of AS 68 and several in the rock-cut tomb of Princess Sheretnebtj (see Arias 2017: 107–108).

Shaft 1 opened into two extensive rooms, built in an open pit above each other in the north wall of the shaft. The first one, designated as relieving chamber, was discovered at a depth of 2.5 m. It was very large and consisted of two parts, with the eastern one 5.50 m long and western one 2.50 m long (for more details, see Bárta *et al.* in this issue). From the area of the first 2 m from the entrance, only two small bags of pottery were collected (26.AC33.2018). In contrast, the main body of the room contained one of the largest ceramic contexts, as the fill consisted mainly of masses of vessels and sherds, fragments of mud bricks and chips of limestone. There were altogether 30 baskets of pottery from this chamber (29.AC33.2018), with more than 2 500 sherds making up over 500 individual vessels.³

Among the finds, the most highly prevalent class was that of bread moulds, with over a hundred examples. Significantly, almost all of them belonged to *bdj* bread mould with a rounded base, slightly concave open walls and an articulated “ledged” shoulder (Abusir type F-1b; see Arias Kytarová 2014b: 176–188). They differed only slightly in sizes, with heights mostly between 18–22 cm and maximum diameters between 24–28 cm (fig. 2), although a few smaller examples do occur as well. A large number of them were either preserved in full diameter (fig. 3), complete profile or were able to be reconstructed to full profile from fragments, enabling a morphometric analysis. They were all manufactured rather roughly and carelessly, as was common with bread moulds. The main body was formed on a conical matrix, roughly smoothed from the outside and then a rounded base was added (type F-1). The shape of the “shoulder” of F-1 *bdj* bread moulds, *i.e.* the transition between the rounded base and the body, has chronological significance, as it developed from simple smoothed to articulated, ledged and later to a crude base knob (see also Faltings 1998: Abb. 3c; Arias Kytarová 2011c). In the case of the bread moulds from this room, the transition was ledged and their bases were often placed off the central axis, which adds to the general irregular feel of the vessels. Only a few of them show traces of exposure to fire (*e.g.* 29-1.AC33.2018).

There was also a relatively large amount of beer jars from the relieving chamber, although most of them were broken to pieces and none were reconstructed to full profile. Interestingly, a large number of them exhibit white-washing on their outer walls. White-washing was usually only employed with beer jars devoted to some ritual designation; as an example, all of the ten beer jars from the burial equipment of priest Neferinpu were rudimentarily white-washed (Arias Kytarová 2014a: 136–138, fig. 7.10, pl. 7.1).

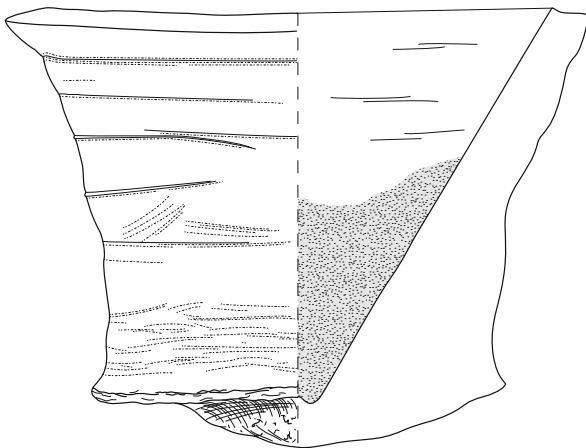
¹ The upper part of this statue was found in the upper room of Shaft 1, so-called relieving chamber.

² It is important to stress the relevance of a comparison of the size of beer jars only within their respective types. As an example, early Old Kingdom collar beer jars (type J-1h) tend to be relatively tall and slim, thus not “fitting” the general notion of increasing height during the progression of the Old Kingdom. On the other end of the spectrum, one particular type from the Sixth Dynasty (J-1g: short tubular beer jars, see also Rzeuska 2006: pl. 19–20) is the smallest known beer jar. Only the size development of ovoid beer jars (types J-1a and J-1b) is thus considered here.

³ For details of the quantification methods employed for the ceramic analysis at Abusir, see Arias (2017: 26–30).

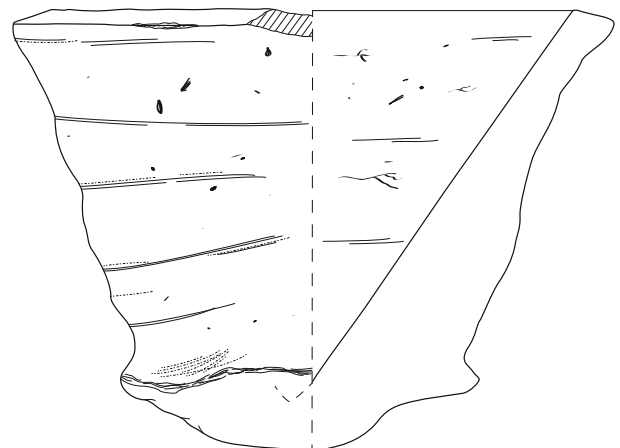
29-1.AC33.2018

F - 1b



29-3.AC33.2018

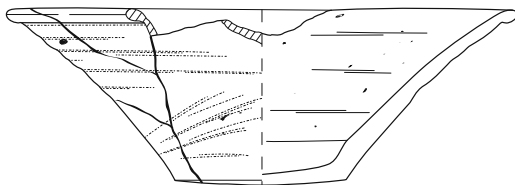
F - 1b



blackened by fire

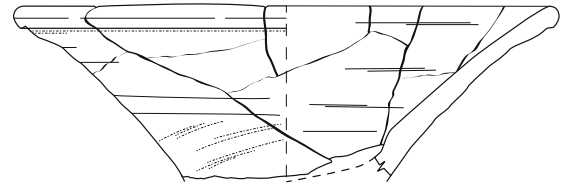
29-31.AC33.2018

B - 12



29-32.AC33.2018

B - 12



0 5 10 cm

Fig. 2 Select vessels from the so-called relieving chamber in Shaft 1 (drawing K. Arias, L. Vařeková)

Fig. 3 One of the fully preserved bread moulds from the relieving chamber in Shaft 1 (29-7.AC33.2018) (photo K. Arias)





Fig. 4 Miniature bowls from the so-called relieving chamber in Shaft 1 (photo K. Arias)

This chamber also held several dozens of miniature vessels, specifically at least 62 bowls and 31 cups. All of them were wheel-made with bases cut off with a string and the majority were only smoothed on the outside (fig. 4). Two main types of bowls abounded, those with concave walls (MB-2) or convex walls (MB-1), followed by a small number of those with an accentuated base (MB-3).

Among them, there were also four larger-sized miniatures coated with a red slip (29-15.AC33.2018 to 29-17.AC33.2018). The only example preserved in full profile was a bowl with a maximum diameter of 6.5 cm and a height of 3.3 cm. Such bowls (Abusir type MB-4) are much less common than their smaller, rougher counterparts described above. They occur mostly during the Fourth Dynasty, especially in the tombs of the members of the royal family and high officials (e.g. Reisner – Smith 1955: 66, fig. 75, nos. 82–85; pl. 47d). During the Fifth Dynasty, their numbers decrease gradually – as an example, compare 88 rim and 72 base fragments from the tomb of Kaaper (Bárta 2001: 185, pl. LXXIIIb) to a few cases each discovered in the tomb of Princess Sheretnebtu (Arias 2017: 283–284) and the tomb of Prince Werkaure (Arias Kytmarová 2014b: 229, fig. 4.90, MB-4). As for their development, a preliminary analysis shows that they went from larger and finer red-slipped miniatures, often made of Nile silt A in the course of the Fourth and early

Fifth Dynasty (such as those from the tomb of Queen Hetepheres or official Kaaper mentioned above), to smaller ones made predominantly of Nile silt B1 during the late Fifth Dynasty (e.g. Sheretnebtu and Werkaure, see above).

One red-slipped miniature in particular was the lower body and base of a vase (29-17.AC33.2018). This type (MV-1) is rather unusual and is rarely present in the ceramic material. It exemplifies an imitation of a cylindrical stone vessel (or, more likely, its stone model), which was originally designated for ointments. It is mostly attested in small numbers during the Fourth and Fifth Dynasty (e.g. from Giza, Junker 1929: fig. 15, 3; Reisner – Smith 1955: fig. 102), and the latest known examples from Abusir are from the late Fifth Dynasty (e.g. the anonymous tomb AS 47, Arias Kytmarová 2011a: fig. 29).

There were over 30 individual bowls in the relieving chamber, mostly heavily fragmented. Four rims belonged to type B-10a with a short inner ledge (29-34.AC33.2018 to 29-37.AC33.2018). Two of them were red-slipped inside and on the outer rim, while the other two were only smoothed. This type is characteristic of the early Old Kingdom⁴ and disappears from the ceramic material by the end of the Fifth Dynasty. Late Fifth Dynasty examples from Abusir include a single fragment from the complex of Sheretnebtu (Arias 2017: 247), several from the tomb of Werkaure (Arias Kytmarová 2014b:

⁴ Among the parallels from the Memphite region, there were examples uncovered west of the Step Pyramid in Saqqara (Rzeuska 2001: fig. 1, SQ01-1000 and K.01-52/5), Dahshur (Alexanian 1999: 144–147, Abb. 59, M99–M110), in Nazlet Batran (Kromer 1991: Taf. 24.2), etc. This type has also been observed in the provinces, most noteworthy in the stratified levels of the town of Elephantine (e.g. Seidlmayer 1996: 202–203).

161–162, fig. 4.45) and yet unpublished pieces from the tomb of Khentkaus III (AC 31).

Furthermore, there were four different bell-shaped bowls with convex bases, flaring walls and modelled rims (Abusir type B-12; 29-29.AC33.2018 to 29-32.AC33.2018). The only one preserved in full profile shows a vessel with a maximum diameter of 21 cm and height of 7.3 cm (see fig. 2). This ceramic group is attested already during the Fourth Dynasty, but remained popular during the Fifth Dynasty (see *e.g.* Reisner – Smith 1955: figs. 75 and 121, type D-XXXIXa). All of our examples were covered with a high quality red slip and two were additionally polished. Two of them exhibit extensive traces of exposure to fire both inside and outside.

Carinated bowls were represented only by a handful of examples. They all belonged to the type with rounded shoulders (B-1b; *e.g.* 29-38.AC33.2018 to 29-30.AC33.2018) and show relatively tall rims and smooth transition of the shoulders. None were preserved in full shape or profile, however the carination of the shoulder, the angle and height of the rims and the ratio between rim and shoulder diameter are characteristic of vessels dated to the middle to late Fifth Dynasty (see Ballet 1987; Op de Beeck 2004; Arias 2017: 237–240).

The relieving chamber held an extraordinary amount of ceramic vessels and sherds, many of them in a relatively high level of preservation. Among them, there was a noticeable presence of dozens of bread moulds, some complete or preserved up to 50–70% of their volume and diameter. The function of all these vessels is under discussion. Only a very small fraction of bread moulds and bowls exhibit traces of burning (compare the destruction and refuse layers around the so-called Entrance Rooms 1 and 2), thus not supporting a theory of a secondary use in food production or preparation. The vessels were not carefully deposited in any specific section, but rather intermixed with the

general fill of the room. Such a composition could be either the result of diverse activities of robbers who were trying to uncover objects in the chamber (maybe under the impression that it served as an additional storage space), or, in the author's opinion, it served the primary function of filling the room with a dense but relatively light material. A similar architectural technique could be observed in several nearby tombs in the pyramid field of Abusir, most notably in the mastaba of Princess Khekeretnebtu and Tisethor (Verner – Callender 2002: 15, figs. B8, B9a, pl. Bf14), Princess Hedjetnebu (Verner – Callender 2002: fig. K4) and the tomb of Idu (Verner – Callender 2002: fig. D2). In all these cases, the rooms situated immediately above the burial chamber were intentionally filled with a mix of complete or partially broken vessels (mostly beer jars, bread moulds, stands, *etc.*). Such a fill helped alleviate the weight of the massive roofing above the burial chambers while providing a cheap and strong building material. At this point of the analysis, we can presume that this was the function of the ceramics in the present chamber as well.

Burial Chamber 1

The entrance to the burial chamber of Kairsu was situated roughly 0.45 m above the bottom of Shaft 1. Its massive roofing blocks (with thicknesses up to 70 cm) served as the floor of the relieving chamber, which was situated immediately above it. The burial room itself consisted of two main parts and the robbed sarcophagus was in its original position in the western recess. Among the most notable finds, the lower part of the granite statue of Kairsu was uncovered *in situ* in a small mud brick enclosure east of the sarcophagus (for details, see Bárta *et al.* in this issue).

Altogether 13 baskets of ceramic fragments were collected from the fill of the chamber (33.AC33.2018). In addition, mud stoppers that could not be associated



Fig. 5a–c Select jars of types J-5 and J-13 from the burial chamber of Kairsu in Shaft 1 (photos K. Arias)



Fig. 6 Selection of fragmented mud stoppers from the burial chamber of Kairsu in Shaft 1 (photo K. Arias)

with specific vessels were assigned a special find number (110/AC33/2018).

Some of the most distinct ceramic vessels uncovered in fragments in the fill of the burial chamber were tall jars with articulated shoulders, a convex base and a low neck with a rolled rim (33-1.AC33.2018 and 33-2.AC33.2018, see fig. 5a). One was reconstructed to full profile, but there were at least three examples in the original burial equipment. The jar preserved in full profile was quite tall, with a height of 35 cm. It had an outer rim diameter of 11 cm and maximum diameter of 23.5 cm. All examples were made of Nile silt B1, covered with a thick red slip on the outer walls and inner rim and were well polished. This type (J-5) is uncommon in ceramic material and varies especially in the shape of the neck and rim. Among their parallels, there were two fully preserved jars found in Shaft 984 in Giza (Junker 1929: Abb. 13, nos. 5 and 6) and two others from shaft A in G 2440 (Reisner – Smith 1955: fig. 104, 40-4-8, 40-4-11, pl. 55a), dating to the Fifth Dynasty.⁵

The burial chamber of Kairsu also contained numerous fragments of tall ovoid jars with a low neck, modelled rim and rounded base (Abusir type J-15). Although

only two jars were reconstructed to full profile (33-3.AC33.2018 and 33-4.AC33.2018, see fig. 5b–c), some further 8 examples were preserved partially. They were all made of Marl clays or possibly a mixed clay, being characteristic of very hard, well fired and dense fabric and either pale red or yellow-grey break and surface.⁶ This type is quite characteristic of the Fifth Dynasty (see also Reisner – Smith 1955: fig. 82) and it was attested in numerous funerary contexts in Abusir South. Parallels include three jars in the burial chamber of the presumed husband of Princess Sheretnebtj (AS 68c; Arias 2017: fig. 3.170); four examples from the chamber of Nefershepes (AS 67; Arias 2017: fig. 4.5) and others.

There were numerous fragments of mud stoppers uncovered in the fill of Kairsu's burial chamber (find number 110/AC33/2018, fig. 6). While some were intact, many were broken to pieces. A preliminary analysis identified at least 14 individual stoppers. This number is significant, as it can point to the overall amount of various jars originally deposited in the burial chamber. As such, we know that besides the three red-slipped tall shouldered jars (J-5), eight ovoid ones made of Marl or mixed clay (J-15) and one massive storage jar

⁵ The type continues into the early Sixth Dynasty, but with more rounded shoulders. At least five intact examples came from the chamber of Ptahhotep (Shaft 890 A), presently held at the Roemer and Pelizaeus Museum in Hildesheim (inv. nos. PM 2408, 2409, 2412, 2413 and 2417) (see Junker 1944: 228 and www.giza-projekt.org. Accessed on 9th March 2020).

⁶ The designation of ceramic fabrics for the period of the Old Kingdom is complicated, as the widely used Vienna system (see Nordström – Bourriau 1993: 168–187) focused on samples from other periods of Egyptian history, predominantly the Middle Kingdom. The precise determination can be based only on petrographic analyses, which have not been undertaken for the material from Abusir yet. The use of mixed clay has been confirmed *e.g.* in the neighbouring site of Saqqara West (see Rzeuska 2006: 42–44).

(of which there was only a base), there were at least two others. The most unusual feature is that the vast majority of all the recorded stoppers seem to belong to a single type, namely one with a truncated and flattened top (D-4).⁷ Generally, D-4 stoppers have so far been considered the least common type at Abusir.⁸ The tomb of Kairsu significantly changed this presumption, as its three burial chambers provided us with more than 20 examples of this type (see also below). Also, up to this point, these stoppers were almost exclusively related to beer jars at our site.⁹ In some contexts from the late Fifth Dynasty, a link was observed between certain types of stoppers and vessels, such as in the two main burial chambers from the tomb of Neferinpu (AS 37). Ten beer jars from his burial equipment were sealed with D-4 mud stoppers (Arias Kytarová 2014a: fig. 7.1, 7.8–7.10), while fine ovoid jars of types J-2 and J-3 found in the neighbouring chamber in Shaft 2 were covered with simple rounded or conical stoppers (Abusir types D-1 and D-2; see Arias Kytarová 2014a: fig. 7.25). Correlation, or a lack thereof, between vessel and mud stopper types and the diachronic timeframe of occurrences of each type from the whole necropolis of Abusir will be analysed in detail in the near future (see also Arias 2017: 300–307).

From the burial chamber, a small bell-shaped bowl with a convex base (B-12a) can be mentioned. It was reconstructed to full profile, showing a maximum diameter of 22.5 cm and height of 7.7 cm. Similarly shaped bowls become increasingly popular during the late Old Kingdom, often having highly flaring walls and rolled or otherwise modelled rim. Our example belongs to older known examples, with only a thickened rim and concave open walls. Similar bowls were found e.g. in Shaft A in the anonymous tomb G4341 (Reisner – Smith 1955: fig. 121, 14-1-92)¹⁰ and in Shaft A of the tomb of Nysutnefret in Giza (G 1457; Reisner – Smith 1955: fig. 121, 34-11-4), both dating to the late Fourth/early Fifth Dynasty.

As far as the dating is concerned, the material from Shaft 1 and its two chambers displays a consistency of types known for ca. the middle of the Fifth Dynasty. Some types, such as bowls with an inner ledge (B-10a) are most commonly attested in the early Old Kingdom and disappear by the end of the Fifth Dynasty. Some tombs from Giza have shown multiple parallels for a variety of vessels.

SHAFT 2

Due to the position of Shaft 2, it is likely that it belonged to a direct family member of Kairsu. Both the shaft and

the chamber were situated roughly west of Chapel 2 and were built in an open pit (see also Bárta *et al.* in this issue). Pottery was uncovered in the shaft itself (18.AC33.2018), in the fill of the burial chamber (42.AC33.2018) and in the primary floor level around the sarcophagus (43.AC33.2018). Individual mud stoppers from the burial chamber were collected separately and assigned a find number (147/AC33/2018).

The fill from Shaft 2 was relatively rich in pottery and contained altogether 14 baskets of ceramic fragments, collected from a height of 1 m above the level of the chapel floor down to the bottom of the shaft. Among them, the largest percentage was taken by beer jars, followed by bread moulds. The bread moulds are very similar in both shapes and sizes to the material from the relieving chamber in Shaft 1. One example reconstructed to full height shows a *bd3* bread mould with a rounded base and ledged transition between the body and base (18-3.AC33.2018; Abusir type F-1b), typical of the second half of the Fifth Dynasty (see e.g. Arias Kytarová 2014b: 4.62–4.63). It had a maximum diameter of 22.5 cm and height of 17 cm.

In the lower level of the shaft, there were also vessels that were originally very likely part of the burial equipment, such as an upper part of a red-slipped shoulder jar (see below) and a carinated bowl (18-2.AC33.2018). The bowl was small, with a maximum diameter of 16.5 cm and height of 8 cm. It was slightly rougher than usual carinated bowls, and although it was red-slipped, the outer lower body also exhibited traces of smoothing with a tool (possibly a ceramic scraper, see the example in Shaft 4). It had a relatively deep body and rounded shoulders, with maximum diameter positioned at the shoulders (Abusir type B-1bIII). These markers, together with the rim height to vessel height ratio, point to Fifth Dynasty production (see also Op de Beeck 2004).

In the burial chamber, the floor layer north and northeast of the sarcophagus contained several intact and other mostly intact shouldered jars, intermixed with limestone canopic jars (43-1.AC33.2018 to 43-9.AC33.2018, see fig. 7). More fragments of identical vessels were collected from the fill of the chamber and one large upper body part with an intact mud stopper was found in the lower part of the shaft (18-1.AC33.2018). Altogether, the burial equipment originally included at least 10 shouldered jars. Besides the one with an intact mud stopper, all of them were originally sealed and due to the presence of whole or partial rims embedded in the stoppers, they could be securely associated with individual vessels. The jars belonged to the same type (Abusir J-14b, fig. 8) and had very similar sizes. They

⁷ For the general typology of mud stoppers from Abusir and their description, see e.g. Arias Kytarová (2014a: 128–130) and Arias (2017: 300–207).

⁸ As an example, out of 36 stoppers from the whole complex of Princess Sheretneby (AS 68), only a single one belonged to type D-4, which came from the burial chamber of Nefer in AS 68d (Arias 2017: 305). Similarly, among 13 mud stoppers preserved in full profile from the ritual structure AS 74, there was only one truncated stopper (Bárta – Arias Kytarová – Older – Šůvová 2017: 5–7).

⁹ Besides the 10 examples found intact from the chamber of Neferinpu (AS 37) and the one from the equipment of Nefer (AS 68d), there were also four from the burial of Ptahwer (AS 76b; see Dulíková *et al.* 2017: figs. 12, 18–19).

¹⁰ For additional photographic documentation, see also www.gizapyramids.org (Accessed on 11th March 2020).



Fig. 7 Floor layer containing ceramic vessels and canopic jars in the burial chamber of Shaft 2 (photo P. Košárek)

were made of Nile silt B1 and had identical surface treatment, being red-slipped and polished outside and on the inner upper rim. All were relatively small jars (height of 22–22.5 cm), with slightly pronounced shoulders (maximum diameter of 18–20.5 cm), convex bases and rolled rims. In at least six of them, the remains of an intentional and articulated filling of Nile mud was identified. No organic content was observed in these vessels.

Small shouldered jars occur only rarely during the Old Kingdom and only very few exact parallels have been found so far. At Abusir, shouldered jars often have different forms and diverse details.¹¹ General analogies to these particular jars were uncovered *e.g.* in Giza, although none of the shapes correspond precisely to the shape of the neck and rim (see Reisner 1931: fig. 68, esp. 2 and 3; Reisner 1942: fig. 68; Reisner – Smith 1955: fig. 93, esp. 14-2-121 and 32-4-23). Small shouldered jars have also been found in the necropolis of Qau in several Fifth Dynasty graves (Brunton 1928: Pl. LXXXI, 80P and 80Q). It must be noted that similar jars were also uncovered in the burial chamber of Shaft 3 of the tomb of Kairsu (see below).

The mud stoppers of these jars all belonged to the same type, Abusir D-4 with a truncated top (fig. 9). Seven fully preserved stoppers had a consistent height of 10–10.5 cm. The most noteworthy feature was their manufacture in two different parts, namely a small inner



Fig. 8 One of the small shouldered jars of type J-14b from the burial chamber in Shaft 2 (photo K. Arias)

¹¹ As an example, the shouldered jars from the burial chamber of Duaptah (AS 68a) have tall necks and angular short-ledged rims (see Arias Kytňarová 2016: figs. 6–7).

Fig. 9 Type D-4 mud stopper, belonging to jar 18-1.AC33.2018 (photo K. Arias)



“plug” of a simple rounded shape, topped by a second stopper flattened on the top. A similar technique of manufacture was reported occasionally with other mud stoppers (see e.g. Pätznick 2005: 13; Rzeuska 2006: 436). The occurrence of this type of mud stopper at Abusir is discussed above. A notable fact is their near absence from the iconographic material of the Fifth Dynasty. A variety of storage vessels and jars can be seen sealed with mud stoppers in the so-called daily scenes or during the production of beer (e.g. Junker 1940: Tf. VIII; Hassan 1944: fig. 72; Hassan 1950: fig. 191; Moussa – Altenmüller 1977: Tf. 23; Simpson 1980: fig. 41, pl. XLb–c; Brovarski 2001: figs. 56 and 116b; etc.). In most cases, the depicted stoppers show tall conical or rounded shapes that are also reflected in the archaeological finds (Abusir types D-2 and D-3; Arias 2017: 304–305). However, flattened or truncated stoppers are depicted very rarely.

The fill of the burial chamber brought to light fragments of other vessels, predominantly bowls. One of them was reconstructed to almost full shape and belonged to Abusir type B-1b, namely a deep bent-sided bowl with a modelled rim (42-1.AC33.2018). It was relatively large, with a maximum diameter of 26.5 cm and height of 15.5 cm and was red-slipped inside and out. Furthermore, there were at least three shallow bent-sided bowls (Abusir type B-2aII). Similar bowls are a regular part of burial equipment and they often differ only in particular form, sizes, material and surface treatment.

On the basis of the ceramic finds, the use of Shaft 2 and its burial chamber can be tentatively dated to the second half of the Fifth Dynasty.

SHAFT 3

This shaft is situated roughly in the north-east corner of the superstructure, immediately south of Shaft 4. Pottery was collected from the shaft (51.AC33.2018), the fill of the burial chamber (49.AC33.2018)¹² and the level of the burial (53.AC33.2018).

The evidence from the shaft suggests that it was disturbed at the latest during the Roman and Coptic Periods (Květa Smoláriková, personal communication). There were only 14 fragments of Old Kingdom pottery; these belonged to at least three beer jars, three different platters and one miniature bowl, all from the late Fifth Dynasty. Besides them, there were at least four other vessels of post-Old-Kingdom date. These included fragments of two storage jars with a handle(s).¹³

Late pottery was also present in relatively large numbers in the fill of sand mixed with stone fragments in the upper levels of the burial chamber (49.AC33.2018), including Roman amphorae with two handles. The disturbance of the context is furthermore indicated by the fact that some of the Old Kingdom pottery exhibited a high level of erosion. The content included beer jars, bread moulds, at least one large tubular stand, as well as dozens of small pieces belonging to fine red-slipped shouldered jars from the burial equipment. Both contexts contained vessels used secondarily as mortar containers; a beer jar base in the shaft and a bread form in the burial chamber.

The most interesting pottery was collected from the floor level around the burial (53.AC33.2018). As a rule, the vessels were broken into small and medium-sized pieces, coming both from the shaft and the burial

¹² The sequence of ceramic contexts stems from the fact that the chamber was discovered and explored before the shaft.

¹³ A detailed analysis of the late pottery from the tomb of Kairsu will be undertaken by Květa Smoláriková in the upcoming seasons.

chamber, and required time-consuming reconstruction. There were at least two shouldered jars of identical type to those found in the chamber of Shaft 2 (Abusir J-14b; 53-2.AC33.2018 and 53-3.AC33.2018). In the case of Shaft 3, they exhibited the same main features, having a low neck with a rolled rim and body with a convex base (see fig. 10). They were only slightly taller, with heights of 21.5 and 23 cm, but slimmer (with maximum diameters of 18 and 18.5 cm). Both were made of Nile silt B1 and were red-slipped and polished outside. At least one of them was originally filled with a false filling of Nile mud, judging by its remnants. As was already mentioned above, small shouldered jars are not a very common Old Kingdom type. They mostly occur in the burial equipment of higher officials, and although they share the general shape, they often differ in the presence and height of the neck and the shape of the rim. Closest parallels include the above-mentioned examples from Fifth Dynasty tombs at Giza (see Reisner 1931: fig. 68, esp. 2 and 3; Reisner – Smith 1955: fig. 93, esp. 14-2-121 and 32-4-23) and Qau (Brunton 1928: pl. LXXXI, 80P and 80Q).

The burial equipment originally also included a shallow bent-sided bowl with an angular rim (B-2b; 53-1.AC33.2018, see fig. 10). It was rather small, with a maximum diameter of 20.3 cm and height of 6.8 cm. It was also made of Nile silt B1, red-slipped and polished. Similar bent-sided bowls with modelled rims are a staple of late Old Kingdom ceramic production (*e.g.* Reisner – Smith 1955: 80, fig. 107, esp. 25-12-83 and 25-1-311).

Based on the ceramic finds and the morphometric similarities between the individual types of vessels, it can be assumed that Shaft 2 and 3 were equipped within

a similar time frame, during the second half of the Fifth Dynasty.

SHAFT 4

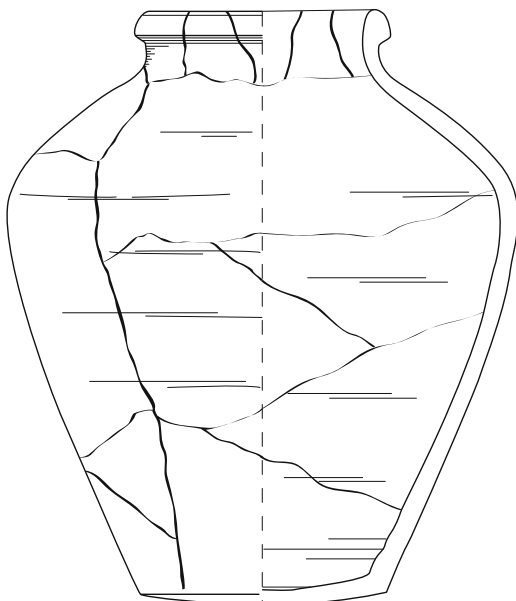
This shaft is situated in the very north-east corner of the tomb superstructure, north of Shaft 3 and roughly west of the northern cultic niche (see also Bárta *et. al* in this issue). It was partially built of mud bricks. Only the material from the shaft has been explored as of this date (55.AC33.2018); it was identified as a disturbed fill that was possibly mixed with material from Shaft 3, due to their proximity.

The fill of the shaft was relatively rich and contained seven baskets of pottery. Among them, there was a large percentage of beer jars, followed by bowls, platters, stands and bread moulds. Despite the fact that the pottery was heavily fragmented, it can be argued that it constituted the remains of an intentional shaft deposit, especially due to its representation of the above-mentioned ceramic classes. Such a deposit would be expected in a burial shaft; however, no chamber or niche has been discovered so far.

One beer jar was preserved in full profile, showing a slender vessel with a tall neck and round-pointed base (type J-1bI; 55-7.AC33.2018). It was considerably taller than the examples from Shafts 1 and 2, with a height of 33.5 cm. Beer jars of similar sizes and forms are typical for the late Fifth Dynasty at the cemetery of Abusir. To name just a few parallels, there were similar examples uncovered *e.g.* in the main shaft of priest Neferinpu (Arias Kytarová 2014a: fig. 7.11, 3.AS37.2007) and the burial chamber of Neferhathor (Arias 2017: fig. 3.276–3.277).

53-2.AC33.2018

J - 14



53 - 1. AC33.2018

B - 2b

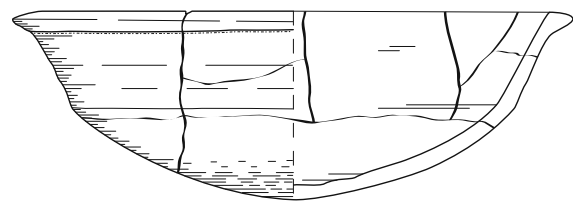


Fig. 10 Select vessels from the burial chamber of Shaft 3 (drawing K. Arias, L. Vařeková)

Among the bowls, those with bent-sided walls were the most frequent. There were two pieces of shallow bowls with a simple rim (B-2aII; 55-8.AC33.2018 and 55-9.AC33.2018) and two of deeper ones with a modelled rim (B-2b; 55-12.AC33.2018 and 55-13.AC33.2018). As was mentioned before, both types are a common feature of late Old Kingdom tombs (see *e.g.* Reisner – Smith 1955: figs. 107–108). The closest parallels from Abusir come from numerous late Fifth Dynasty contexts. Shallow B-2aII bowls were found in larger numbers *e.g.* in the tomb of Prince Werkaure (Arias Kytarová 2014a: fig. 4.36–4.37), official Kakaibaef (yet unpublished) and in the burial chamber of Princess Sheretnebtý's husband (Arias 2017: fig. 3.170, nos. 4, 11 and 12). This type often shares a common feature of red slip covering only the inner surface and outer rim, while the lower outer walls are scraped with a sharp tool. In this particular case, they were made of Nile silt B2 with visible organic inclusions. Deeper bent-sided bowls with a modelled rim were also found in Werkaure's tomb (Arias Kytarová 2014b: figs. 4.38–4.39), in both shafts in the tomb of Nefershepes (AS 67; Arias Kytarová – Havelková – Jirásková *et al.* 2013: 88–89) and in the mortuary temple of King Raneferef (Bárta 2006: pl. XXI). They were made of a finer fabric, namely Nile silt B1 and covered completely in red slip.

Besides these, the shaft also held a large bowl with a carinated rim (B-15; 55-11.AC33.2018). Unlike its better known, thin-walled examples (so-called Meidum bowls), this particular form has a much larger and deeper body, with a maximum diameter of 34 cm, and often exhibits much thicker sherds. It was made of Nile silt B1 and red-slipped. Its analogies include a fully preserved bowl from the burial chamber of priest Neferinpu (Arias Kytarová 2014a: fig. 7.21, 8-1/AS37/2007, pl. 7.5).

In the shaft, we uncovered more than ten stands in diverse extent of preservation. Five of them belonged to the most frequent type, namely tall biconical stands. Two examples had simple rims (S-1aI; 55-18.AC33.2018 and 55-19.AC33.2018) and two had rolled rims (S-1aII; 55-20.AC33.2018 and 55-21.AC33.2018). We have a plethora of identical stands from burial shaft deposits of higher officials from the cemeteries of Abusir South, especially those dating to the late Fifth Dynasty. Among them, the closest parallels are the numerous biconical stands of both forms from the shafts of official Nefer and his wife Neferhathor (Arias Kytarová 2015: figs. 3 and 13, upper two rows), the shaft of Princess Sheretnebtý's husband (Arias 2017: fig. 3.159) and the anonymous tomb AS 47 (Arias Kytarová 2011a: fig. 21, 1.AS47.2007 and 3.AS47.2007).

Apart from these, we also found a small slender stand with concave walls (S-8a; 55-22.AC33.2018). It was reconstructed to full profile, showing a height of 10.5 cm. Although this particular form is less common,

we have several analogies from all the above-mentioned shafts.¹⁴ This type seems to be limited to a period of the late Fifth Dynasty, approximately the reigns of Nyuserre to Djedkare.

In general, the function of stands is well known, especially from iconographic depictions. They were used as a support for all manner of uneven vessels, predominantly bowls and platters (in the case of tall stands) and jars (especially low stands). A combination of stands with platters formed small transportable offering tables that were used for placing bread, meat and other offerings. It is precisely this function that supports their frequent presence in shaft deposits – on the basis of iconographic evidence that shows their use during burials and actual archaeological data, we can presume that such “tables” were thrown into the shaft after the rituals.

Thus, a presence of platters in shaft contexts is unsurprising. In the case of Shaft 4, they were highly fragmented and often preserved in full profile but only to about 7–18% of their diameter. All of them were made of very rough Nile silt B2 with numerous organic inclusions and were covered with a thin red slip on the upper (inner) surface and outer rim. Their bases were manufactured by pounding and left very uneven. Their sizes were relatively similar, with maximum diameters of 30–34 cm and heights of 3–3.5 cm. Three types were identified in this shaft; with simple open walls (P-4a), concave walls (P-2) and with an inner groove (P-3). These are all quite common at Abusir and parallels were found in the mastaba of Prince Werkaure (Arias Kytarová 2014b: 210–212, figs. 4.80 and 4.82), the shafts of Nefer and Neferhathor (Arias Kytarová 2015: fig. 3, lower two rows) and the anonymous tomb AS 47 (Arias Kytarová 2011a: fig. 21, middle row). Due to their rough material, fragmented nature and often irregular shapes, platters are often on the fringe of archaeological interest and often only a handful of examples are published (see *e.g.* Reisner – Smith 1955: fig. 132; Kaiser 1969: type LIII; Bárta 2006: LIII).¹⁵

One of the more noteworthy finds was a complete tool made from a jar fragment that was originally red-slipped on its outer walls (55-1.AC33.2018, fig. 11). It had a roughly trapezoid shape, and due to the smoothing of the outer edges, it was probably used as a scraper or burnisher. Similar tools are accounted for in a few shafts at Abusir South, *e.g.* the shaft of Nefer in AS 68d (Arias 2017: fig. 3.251) or seven pieces from Shaft 5 in the anonymous tomb AS 32 (Tomášek 2003: tab. 1). In general, tools make up only a very small percentage of the ceramic assemblages as they often go unrecorded. Only a handful of short studies (Soukiasian – Wuttman – Pantalacci *et al.* 1990: 87–88; Rzeuska 2014) and published pieces (*e.g.* Hawass – Senussi 2008: 59, no.

¹⁴ *E.g.* from the shafts of Nefer and Neferhathor (Arias Kytarová 2015: fig. 3, 77-3.AS68d.2014, 77-37.AS68d.2014; fig. 13, 44-14.AS68d.2014 and 44-15.AS68d.2014)

¹⁵ The platters are often intermixed with flat bread trays. For a discussion on their identification, function and the differences between the platters and bread moulds, see Arias (2017: 273–274).



Fig. 11 A ceramic tool from the fill of Shaft 4 (photo K. Arias)

118) are available. Recent excavations at Abusir show a variety of diversely shaped tools that very likely served different functions (Arias 2017: 307–309), from scrapers (e.g. Tomášek 2003: tab. 3, no. 5; Arias Kytarová 2014b: fig. 4.103, T and fig. 4.104) to make-shift scoops (e.g. the tomb of Shepseskafankh, yet unpublished). Similar trapezoid tools were found e.g. in tombs AS 31, AS 57 and AS 59 (Arias Kytarová 2011b: fig. 6.9, 40–12. AS59.2010 and fig. 6.10, 35–4. AS57.2010).

Despite the fact that the material from Shaft 4 was very fragmentary, its content exhibits ceramic types characteristic for intentional deposits, namely stands, platters, bowls and beer jars (for a detailed analysis of similar shaft deposits, see Arias 2017: 181–188). As far as the dating of the material is concerned, it is slightly younger than the assemblages from Shafts 2 and 3. The parallels from late Fifth Dynasty contexts at Abusir (such as e.g. the mastaba of Prince Werkaure or the tomb of priest Neferinpu, etc.) point to the use of this shaft at the latest around the reign of King Menkauhor or Djedkare.

MASTABA SUPERSTRUCTURE

So far, only a few contexts from the areas of the superstructure have been analysed. Among them, there were a few pieces that probably came from the original fill of the mastaba core, mixed with various-sized chips of limestone from the north-west part of the mastaba (4.AC33.2018). This context was very small, consisting of 30 diverse fragments, belonging to a minimum of eight different beer jars and one platter. At least five pieces (two bases, one large shoulder fragment, nos. 4-1. AC33.2018 to 4-3.AC33.2018, in addition to two body fragments) exhibited a diversely thick but continuous

layer of fine white substance, probably plaster, on the inner and sometimes also outer walls. It is very likely that these vessels were used secondarily as containers for plaster during the construction, and afterwards, they were simply added to the building material. As far as their dating is concerned, they belong to characteristic material of the second half of the Fifth Dynasty, with partly pointed bases and modelled contracted rims (Abusir type J-1aII).

At least 33 pieces of pottery were collected from destroyed mud bricks mixed with limestone chips around the large basalt block in the southern part of the chapel (14.AC33.2018). Only a small minority were diagnostic, including a large miniature cup (with a height of ca. 8 cm), a base of a biconical stand (S-1), a knob foot belonging to a platter of type P-12 (see also Arias Kytarová 2014b: 212, fig. 4.87), a base of a fine jar, as well as rims of beer jars of type J-1aII. It is noteworthy that the stand (14-1.AC33.2018) was whitened on the outer walls, possibly pointing to its primary use during cultic activities. All the diagnostic pottery is from the second half of the Fifth Dynasty, with numerous parallels from the Abusir South and Centre necropolis.

In front of the northern niche of the tomb, a small step was uncovered (see also Bárta *et. al* in this issue). It was built of mud bricks, small limestone chips, ceramic sherds and strengthened with mortar. The pottery from this step (11.AC33.2018) included at least six vessels, mostly bread moulds. There were two small bread moulds with a flat base (Abusir type F-2) and one with a rounded base and ledged shoulder (F-1b). Form 11-1. AC33.2018 was preserved in full profile and shows a small F-2 mould with an outer rim diameter of 13 cm and a height of 10.8 cm. Interestingly, all three bread moulds were blackened inside and outside and therefore might have had a practical use before their disposal in the construction. The other F-2 mould was slightly larger. Similar bread moulds of both types (especially with similar width to height ratios) became popular during the late Fifth Dynasty. It is therefore possible that this step was a secondary addition.

There were also several pieces of pottery collected from a layer above the floor to the north of this mud brick step, in front of the east wall (12.AC33.2018). Only two fragments were diagnostic, namely a fully preserved miniature bowl with concave walls (MB-2) and the body of a red-slipped and polished bell-shaped bowl (Abusir type B-12). Bell-shaped bowls occur throughout the whole late Old Kingdom (e.g. Reisner – Smith 1955: figs. 75 and 121; Kaiser 1969: Gruppe XLI; Bárta 2006: type XLI; Arias Kytarová 2014b: 166–169, fig. 4.50) and only their precise shape (simple versus modelled rim; shaping of the base) can clarify the dating. This context can be tentatively dated to the late Fifth Dynasty.

SECONDARY ACTIVITIES

The ceramic evidence from the eastern part of the tomb indicates that this area of the tomb continued to be



Fig. 12 Ceramic deposit *in situ* in Shaft 6 (photo P. Košárek)

in use during the late Fifth Dynasty and at least until the middle of the Sixth Dynasty. The building activity comprised at least two new shafts and so-called entrance rooms enabling access to the tomb from the east.

SHAFT 6

Two additional shafts were built in the vicinity of the main tomb. One of them was constructed into the wall at the northern end of the corridor east of the tomb (Shaft 6). It was very small, with dimensions of only 0.7×0.8 m. It was rather shallow, with a depth of 0.8 m, but contained a relatively large number of almost complete ceramic vessels and their fragments at the bottom of the shaft (54.AC33.2018, fig. 12).

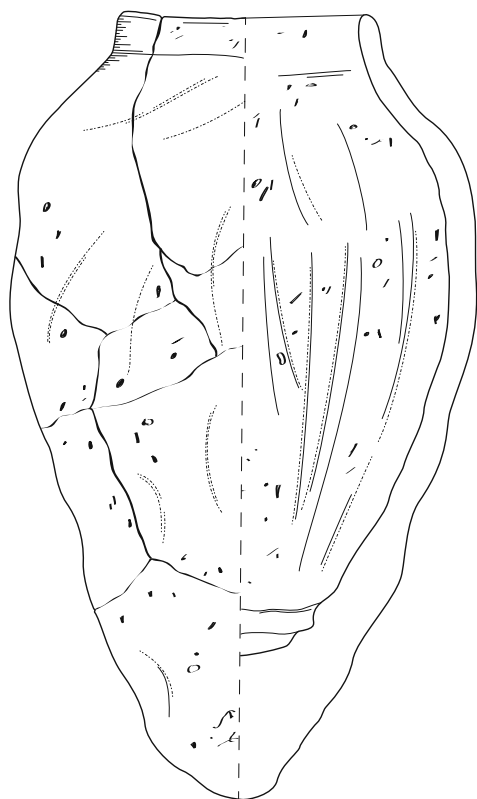
Among these vessels, there was a predominance of diverse jars. The beer jars show a mixture of late Fifth Dynasty types. There were two complete examples. The smaller jar shows a typical ovoid shape with a low neck and partly pointed base (J-1b; 54-4.AC33.2018, see fig. 13). The larger one had a wide tapering body with a rounded base and low neck (54-2.AC33.2018). It reached a height of 33 cm. This jar had three notable features – it was equipped with a hole made in its base before firing, filled with a still intact false filling of Nile mud and was coated with thick white wash. The presence of intentional holes made either in the lower body of beer jars, or (less traditionally, as in our case) the very

base, is attested from the end of the Fifth Dynasty and becomes increasingly popular during the Sixth Dynasty. The best recorded examples come from the excavations of various tombs and structures at Saqqara West (see Rzeuska 2006: 468–470).¹⁶ At Abusir, a single Sixth Dynasty shaft brought to light almost 25 of such beer jars, all of the same type (see Arias 2017: 232–232). In some of them, the original false filling was still preserved – the hole was first blocked with small pieces of eroded pottery and only after that was the liquid mud poured inside. This particular vessel was certainly dedicated for a ritual use, as indicated not only by its fill but also the white wash. Such a surface treatment was designated almost exclusively for ritual and offering vessels as a means of purification (see also Rzeuska 2003; Arias 2017: 195–198).

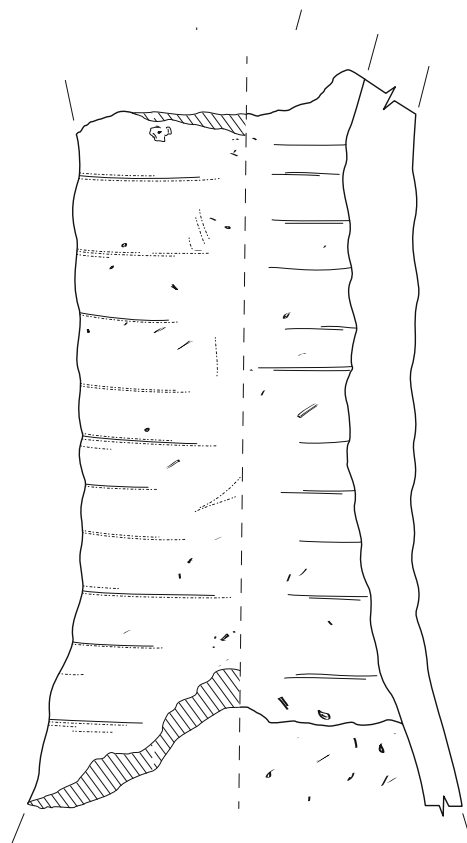
The most specific and unusual vessel was a very tall and massive storage jar (54-3.AC33.2018). It had highly positioned shoulders, spindle-shaped body, tall wide neck with a simple rim and a pointed base (type J-9a). The jar was very tall, with a height of 39 cm and maximum diameter of 23.5 cm. Interestingly, this type is almost exclusive to the royal cemetery of Abusir Centre and so far, no examples have been discovered at Abusir South. In the pyramid field, it is a frequent feature amongst the burial equipment of the deceased, most notably in the burial chambers of official Kakaibaef,

¹⁶ The catalogue shows at least 17 examples (Rzeuska 2006: pls. 9–31). In Saqqara West, the jars with holes are often associated with ash contents; this feature is not confirmed yet in the material from Abusir.

54-4.AC33.2018
J - 1



54-1.AC33.2018
S - 2



54-8.AC33.2018
B - 2a

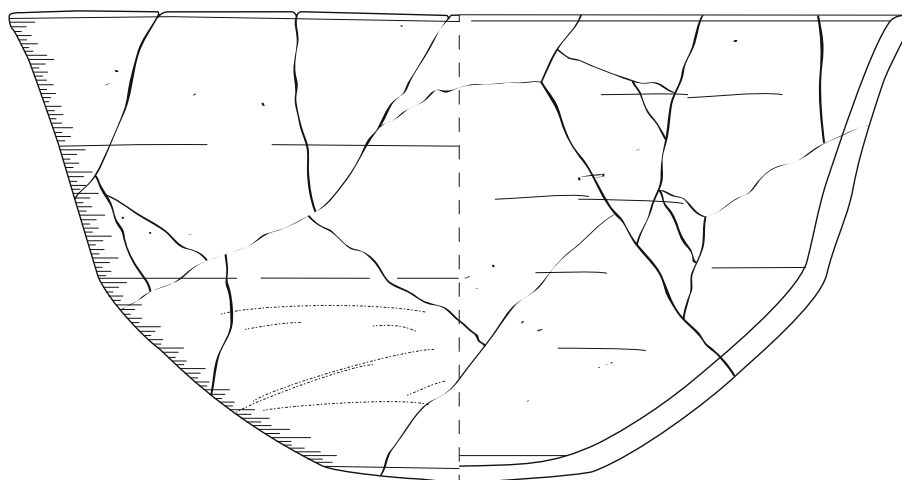


Fig. 13 Select vessels from the possible deposit in Shaft 6 (drawing K. Arias, L. Vařeková)

Queen Khentkaus III (both yet unpublished) and the anonymous woman in mastaba AC 31 (Arias 2019: 72–73). It was also present in the temple of Queen Khentkaus II (135/AA/1987).¹⁷ The jar from Shaft 5 differs mainly in its material and surface treatment. While most of the other vessels of this type were relatively fine, precisely formed and well smoothed, this jar was made from very porous Nile silt B2 and treated as a beer jar, namely with very rudimentary vertical and horizontal smoothing. It is possible that it was meant to imitate the more prestigious storage jars using a cheaper material.

Besides these, there was also a massive and thick-walled tubular stand (S-2; 54-1.AC33.2018, see fig. 13). It was made of Nile silt B2 and has visible traces of coil manufacture. Although only its middle part was preserved, it reached a height of almost 27 cm, making it possible to estimate that the full stand was probably about 50 cm tall. Such massive stands are much less frequent when compared to their smaller biconical forms (see above, type S-1). They were usually part of presumed permanent equipment of a chapel or offering niche, replaced only when damaged (Rzeuska 2006: 513; Arias 2017: 195–198). In very rare cases, we can find such tall massive stands *in situ* in front of false doors, such as in the chapel of Gegi (Bárta 2001: 126, pl. XLIVb–c) and others named below. Their exact form and execution depended on the time of manufacture and the social standing of the owner. During the Fifth Dynasty, the predominant form of these massive stands were usually A-shaped or tubular stands, such as the example from tomb AS 13 at the Lake of Abusir (Bárta 2001: 41, pl. XXIb) or intact stands from the chapel of Nysutnefret (G 1457) and in tomb G 1407 in Giza (Reisner – Smith 1955: fig. 129, 34-11-9 and 34-12-3).¹⁸ Later, during the end of the Fifth and early Sixth Dynasty, biconical and X-shaped stands with a flaring rim became much more popular, such as the almost intact example found in the chapel of Kaisebi (Dulíková *et al.* 2017: fig. 1 and pl. 1) and the tomb of Senwehem (G 2132; Reisner – Smith 1955: fig. 129, 36-2-15). The type from Shaft 6, a tubular stand, has additional parallels in shafts and chapels of the late Fifth Dynasty, such as Shaft 1 in the anonymous tomb AS 47 (Arias Kytarová 2011a: fig. 21, 5.AS47.2007).

The function of this shaft is a matter of ongoing discussion. It did not have a chamber or niche and no traces of a burial were observed. On the other hand, its ceramic content seemed deliberate and relatively well preserved. It is thus plausible that it served as a cache of vessels used during the rituals undertaken in the chapel. Another possibility is that it was simply unfinished and later used as a convenient space for the disposal of pottery. The dating of the material comprises a span of late Fifth to early Sixth Dynasty.

SHAFT 5

Another secondary shaft was constructed in the southwest corner of the space immediately north of so-called Entrance Room 1 (Shaft 5; see Bárta *et al.* in this issue). This shaft was very small, with a mouth of 0.8 × 0.8 m. It reached a depth of only 1 m and did not contain any traces of a burial (fig. 14).

There was a large amount of ceramic fragments collected from two observed layers. The upper fill of brown sand was mixed with both large and smaller limestone detritus and reached a depth of 1.15 m below the preserved top of the shaft's side walls (60.AC33.2018). The lower layer, from 1.15 m to the bottom of the shaft, consisted of grey sand with smaller amounts of limestone detritus and small cobbles (61.AC33.2018). Both layers contained fragments of wood and textiles (yet to be analysed). The ceramic documentation showed that these contexts were at least partially mixed and sometimes pieces of the same vessel were found in both of them. In such a case, a vessel was assigned to the layer where most of its fragments came from. Almost all the pieces had traces of erosion and were covered and damaged by crystals and layers of sodium chloride, signifying either that the context was disturbed or that it was otherwise exposed to a wet and saline environment.

The contents of the shaft were relatively homogenous and showed a predominance of very fine, red-slipped bowls (see fig. 15a–e). For such a small shaft, there was an extensive amount of pottery, all broken into small and medium fragments (namely six baskets and additional 3 bags).

Among the bowls, several recurrent types were recorded. By far the most common were very fine carinated bowls (so-called Meidum bowls), with seven examples in full profile and others in fragments. They all belonged to the same type, having rounded shoulders (B-1b). Their sizes were rather homogenous, with heights of 8–8.5 cm and diameters of 19–21.5 cm. Many were reconstructed to almost full shape (see fig. 15a). There were only two forms of rim, namely either straight (B-1bIII) or open and underlined with a groove (B-1bIV). While the first one is mostly typical for the late Fifth Dynasty, the second form is characteristic of the early Sixth Dynasty.¹⁹

For the carinated bowls with a groove under the rim (B-1bIV), parallels were found *e.g.* in Shaft 5 in the anonymous tomb AS 32 (Tomášek 2003: tab. 3, no. 25; Kytarová 2009: fig. 55, LL-Sh5-31, LL-Sh5-32) and, most importantly, in the ritual shafts L (Tomášek 2003: tab. 4, no. 13) and E (Kytarová 2009: fig. 55, JJ-ShE-08) in the tomb of judge Inti, who served as a mortuary priest in the complex of Teti. The same form was also present in the burial chamber of Inumin at Saqqara,

¹⁷ The archaeological and architectural analysis of the complex of Queen Khentkaus II is available (Verner 2001), but the pottery remains unpublished.

¹⁸ For additional photographic documentation, see www.gizapyramids.org (Accessed on 29th March 2020).

¹⁹ For a detailed typology and discussion of the chronological importance as well as limitations of the use of carinated bowls as dating tools, see Arias (2017: 237–242).



Fig. 14 Small secondary Shaft 5 after cleaning (photo J. Krejčí)

dated to the early part of Pepy I (Kanawati *et al.* 2006: pl. 80, TNE96:SH42).

The second most common group were diverse bent-sided bowls. Altogether three types were recorded, namely with simple rims (B-2a), modelled rims (B-2b) and a lip rim (B-2c). Bent-sided bowls with a simple rim were the most frequent and there were at least ten examples. They came in two variations, either having a wide shallow or deeper body. Both these forms are a staple of late Old Kingdom assemblages and often occur in the whole Memphite necropolis. Our shallow bowls (B-2aII) had a diameter of 20.5–21.5 cm and heights of only 4.5–6 cm. They exhibited a common feature of this particular form, namely being red-slipped only on the inner surface and outer rim. The outer lower body was scraped with a sharp tool. Often, they manifest lesser attention to their manufacture and at least two of our examples had a slightly oval rather than rounded shape. This particular form is among the oldest from this context, as their parallels in this size, shape and quality are well known from numerous late Fifth Dynasty structures (see also above, Shaft 1).

There were at least three examples of bent-sided bowls with a modelled rim (B-2b; 60-4.AC33.2018, 61-3.AC33.2018 and 61-8.AC33.2018, see fig. 15b). All three were deep, with heights of 12–12.5 cm, and noticeably larger than the other bowls, with maximum diameters of 24–25 cm. The bent point is situated relatively deep, at about half their heights. Among the analogies, we can name form 167 from Saqqara West. Two bowls were found *e.g.* in the ritual shaft C2/16 and another one

inside a wooden chest with resin-soaked bundles in the burial chamber of Shaft C2/10 in Corridor 2 (Rzeuska 2006: pl. 116, nos. 593, 594).

Bowls with a lip rim (B-2c) were only present in two examples (60-1.AC33.2018 and 61-4.AC33.2018, fig. 15c). A noticeable feature was that both were relatively deep, with a height of 8 cm, and their bent points were set very low, at 1/3 of the height. The closest parallel from Saqqara West excavations is form 175 (Rzeuska 2006: pl. 124). Noticeably, three such bowls were again found in the already mentioned contexts, namely the ceramic deposit in the ritual shaft C2/16 and the wooden chest with resin-soaked bundles in the burial chamber of Shaft C2/10 in Corridor 2 (see Rzeuska 2006: 579). This detail is very significant for the discussion of not only the function of the bowls but also the context of our shaft as a whole. Another parallel came from the ritual shaft B in tomb G 6052 in Giza (Weeks 1994: fig. 134, 25-12-693).

By far the largest bowls from this context were two examples reconstructed from fragments to full profiles. They belong to type B-15 and have very deep bodies and carinated shoulders (61-5.AC33.2018 and 61-11.AC33.2018, fig. 15d). They had almost identical shape and sizes, with maximum diameters of 33 and 33.5 cm and heights of 20 and 21 cm. Similar bowls occur in the ceramic material from the late Fifth Dynasty onwards (see *e.g.* Arias Kytarová 2014a: fig. 7.21, 8-1/AS37/2007, pl. 7.5) and continue well into the middle of the Sixth Dynasty (see Rzeuska 2006: pl. 136), although the straight shape of our rims is closer to the older forms.

The most unusual vessel from this context is a tall bowl with open concave walls, a flat base and flattened rim (60-10.AC33.2018). While bowls of group B-12 are relatively common, they usually have a shallow, wide, bell-shaped body and flaring rims (compare examples from Shaft 1, fig. 2). This bowl is relatively tall, with a height of 15 cm and maximum diameter of 24 cm. The shape of the bowl, the ratio of height versus width (*ca.* 1:1.5), and the rim are all infrequent features (see fig. 15e). None of the available parallels are precise; one similar vessel was found in the Sixth Dynasty tomb of Sienakhet (G 5562; Reisner – Smith 1955: fig. 121, 33-2-116).²⁰

The parallels for most of these vessels share a common spatial feature; namely, a large number of them came from so-called ritual shafts (see also Rzeuska 2002). The main features of these shafts are their small size, low depth (maximum of about 2.5 m) and lack of any kind of burial. Besides that, they often contained large amounts of ceramics of very similar typological sequence (predominantly fine red-slipped ware, especially bowls and plates, broken to pieces), remains of wood, textiles, charcoal, and sometimes also animal bones, flint tools and other objects. Among the typological representation, the most common combinations during the Sixth Dynasty consist of carinated bowls (mostly type B-1b), bent-sided bowls of all three types but particularly those with a lip rim (B-2a, B-2b, B-2c) and deep thick-walled carinated bowls (such as B-15). The closest parallels include Sixth Dynasty ritual shafts in tombs 24 and 27 in Meidum (Petrie 1892: pl. XXX; *cf.* Rzeuska 2011); shaft B in tomb G 6052 (Weeks 1994: figs. 132–133), X constructed near the annex of G 1223 (Reisner 1942: fig. 227b; *cf.* Arias Kytarová 2016: 265) and Shafts E and L in the tomb of Inti at Abusir (Tomášek 2003: tab. 4), to name just a few.²¹

The most extensive analysis on the topic of these ritual shafts was offered by Teodozja Rzeuska (2002 and 2006: 492–511). On the basis of these common features, she has interpreted them as intentional ritual shafts designated for the discard of all items used in the course of the funeral banquet that took place during the burial rituals (Rzeuska 2006: 510). However, due to the large amount of new evidence, the present author proposes a different interpretation of these shafts. On numerous occasions, they contained additional organic matter, mainly diverse textiles and even bundles of bandages stored in baskets. Some bowls exhibited remains of a dark substance identified as resin. There is no reason to use either resin or bandages during a funeral banquet. It seems more likely that these were all objects and vessels used during the embalming of the body of the deceased. After the funeral, these items were all buried inside intentionally created small shafts out of piety and as a prevention against repeated use.

Therefore, Shaft 5 can be interpreted as yet another example of such an embalming deposit. It is clear that it did not belong to any of the burials in the mastaba of Kairsu, as it was much later in date. Rather, it was built for a yet undiscovered structure east of AC 33. As far as the dating is concerned, while some ceramic types from this shaft were widely in use during the late Fifth Dynasty, several other forms became popular only during the early Sixth Dynasty and thus the context can be tentatively ascribed to the first half of the Sixth Dynasty.

ENTRANCE ROOMS

In the area east of the tomb of Kairsu, a small structure made completely of mud bricks was uncovered. So far, two rooms have been excavated, so-called Entrance Rooms 1 and 2 (see also Bárta *et al.* in this issue). There was a large amount of pottery from this area; however, only part of it has been analysed thus far. Here, only the most significant contexts shall be discussed. These include various layers in Entrance Room 2, as well as some contexts from the spaces north and south of both rooms.

Entrance Room 2 was situated further from the entrance and was smaller. Three contexts have been documented as of present; the surface layer reaching to the mud brick destruction (23.AC33.2018), the level of the mud brick destruction itself (24.AC33.2018) and finally, the concentration of pottery collected around a fireplace (25.AC33.2018). It is significant to note that sherds of some vessels were present in both latter contexts.

The most notable finds from the surface layer in Entrance Room 2 were at least eight examples of beer jars with a tubular body and modelled rim underlined with a wide groove (*e.g.* 23-18.AC33.2018–23-22.AC33.2018). Due to the fact that only *ca.* the upper 12–15 cm of the jars were preserved, it is impossible to say whether they belonged to type J-1f with a tall tubular body (see *e.g.* Rzeuska 2006: pl. 13) or type J-1g with a short tubular body (Rzeuska 2006: pls. 19–20). However, both these types occur in Saqqara during the same period, namely during the reigns of Pepy I to Merenre I (Rzeuska 2006: 382–383). Further parallels include a short beer jar with a modelled rim that was found in the tomb of Nykauisesi, dated to the middle of Teti to early Pepy I (Kanawati – Abder-Raziq *et al.* 2000: pl. 71, TNE98:17).

The mud brick destruction in Entrance Room 2 was relatively rich in pottery and contained over 4 baskets of fragments. There was a significant prevalence of beer jars, stands and bowls, all possibly pointing to an originally ritual function. All the beer jars belonged to the same type, namely tall tubular beer jars with a simple straight rim (Abusir J-1fI). Although none were preserved in full profile, the two largest examples

²⁰ The structure was originally designated as G 2347 X; this bowl is also seen on the left in the middle row in an unpublished photograph (see www.gizapyramids.org. Accessed on 25th March 2020).

²¹ For a list of ritual shafts, their analysis and interpretation, see Arias (2017: 188–193).



Fig. 15a–e A selection of fine, red-slipped bowls from the possible embalming deposit in Shaft 5 (photos K. Arias)

(24-19.AC33.2018 and 24-20.AC33.2018, see fig. 16) had considerably preserved heights (20.5+x and 22+x cm) and had without any doubt a wide rounded base. The closest analogies are beer jars of form 5 from Saqqara West (Rzeuska 2006: pl. 18) that are again dated to the span of Pepy I to Merenre I.

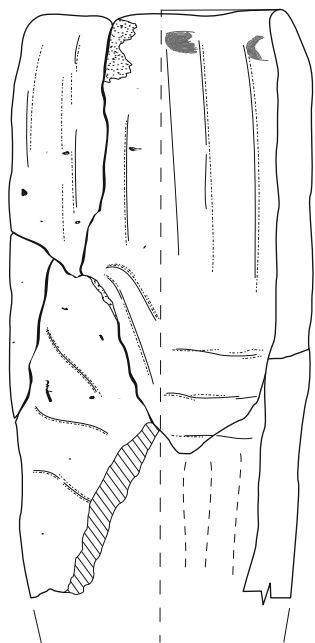
Besides these, the context held at least three very specific bell-shaped bowls that had a wide field of grooving on the inner rim (B-12d; 24-2.AC33.2018 to 24-4.AC33.2018). They were manufactured rather hastily and exhibited irregular and slightly oval shape. The grooving covered more than a third of the height in each vessel. All three had consistent sizes, with maximum

diameters of 19–19.5 and heights of 5–5.5 cm. A small number of similar bowls were discovered at Saqqara West (Rzeuska 2006: pl. 100, forms 143–144), with the closest parallels (vessels 499 and 500) dating to the first half of the Sixth Dynasty.

There was one example of a very large bowl with a contracted rim (24-1.AC33.2018). It had a maximum diameter of 34 cm and preserved height of 16.3 cm. It was broken to dozens of small sherds that were all present exclusively in context 24. The shape strongly resembles massive bowls with a short tubular spout (see e.g. Reisner – Smith 1955: fig. 117), although no spout was discovered in this context.

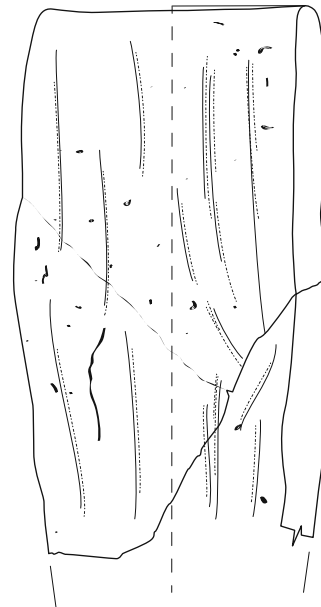
24-19.AC33.2018

J - 1f



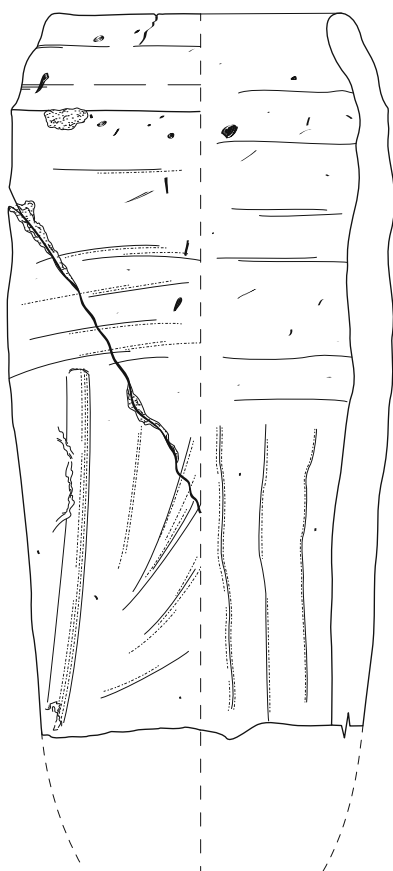
24-20.AC33.2018

J - 1f



25-10.AC33.2018

J - 1e



25-11.AC33.2018

J - 1e

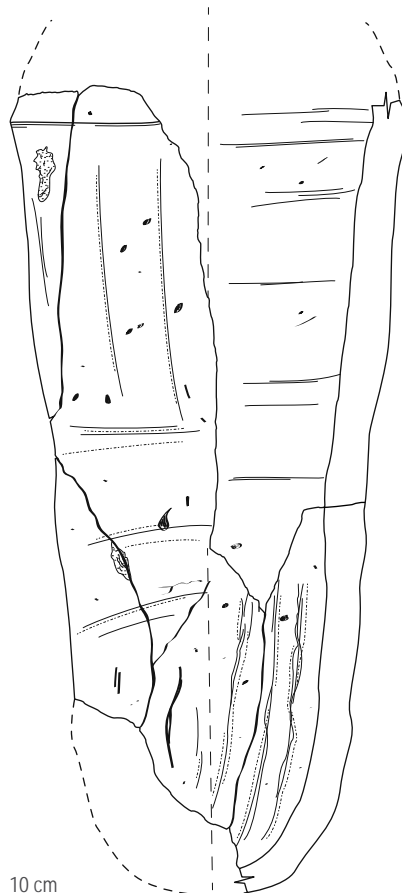


Fig. 16 Examples of beer jars from Entrance Room 2, type J-1f from context 24.AC33.2018 and type J-1e from context 25.AC33.2018 (drawing K. Arias, L. Vařeková)

The most interesting context came from a sand layer that held a concentration of pottery and a fireplace in the north part of Entrance Room 2 (25.AC33.2018). As was mentioned before, some fragments from this layer belonged to vessels from contexts 24. Others were associated solely with this context.

A large majority of the material was made up of beer jars broken into small and large fragments. Among them, three types were observed. There were at least 8 examples of tall tubular beer jars with a simple straight rim (J-1fI; 25-13.AC33.2018 to 25-16.AC33.2018), very similar in sizes to the examples from context 24 (see above). One of them was preserved to almost full height, having 26+x cm and thus confirming that the full-sized vessels must have reached about 30 cm. A single fragment can be associated with a tubular beer jar with a modelled underlined rim (either J-1fII or J-1gII, see above).

The context also held at least three beer jars with an articulated shoulder, tapering body and rounded base (J-1e, see fig. 16). This type is very specific and has been discovered only in a few instances at Abusir, such as two intact jars in a small deposit in tomb AS 77 (Dulíková *et al.* 2016: 33, obr. 11) or two fragmented ones in Shaft 7 built in the open pillared courtyard of Princess Sheretnebty (Arias 2017: figs. 3.45–3.46). The largest number of beer jars with articulated shoulders and tubular bodies comes from the excavations of Saqqara West, where at least four forms have been observed. The closest parallels to our vessels are forms with rounded bases (Rzeuska 2006: pl. 16–17) that are dated to the reign of Pepy II.

It is noteworthy to mention that various surface contexts around the entrance rooms also contained a considerable amount of late Fifth Dynasty pottery. This would possibly point to the fact that this mud brick structure was built at the latest during this time. The refuse layers inside the Entrance Rooms indicate without any doubt that they continued to be in use throughout most of the Sixth Dynasty. Some layers exhibit the latest pottery dated to the span of Pepy I to Merenre I, while others also include vessels typical for the second half of the Sixth Dynasty, thus providing us with a preliminary dating for the main areas of activity. However, it must be kept in mind that the mud brick structures east of the tomb of Kairsu have not been excavated in full and the pottery thus provides us with only a partial view. It will be necessary to re-evaluate the dating and our knowledge after the completion of excavations and the full documentation of the ceramic finds.

CONCLUSIONS

The ceramic assemblage from the tomb of official Kairsu was very extensive and so far, only partially analysed. However, the available data enabled the present author to draw several preliminary conclusions. Mainly, the tomb itself and its four shafts were built in the course of the middle to late Fifth Dynasty. Among the shafts, Shaft 1 that belonged to the main owner, Kairsu, was the

oldest and can be tentatively dated to the middle of the Fifth Dynasty. It incorporated some ceramic forms that continued from older Fourth Dynasty traditions.

Shafts 2 and 3 were used slightly later and both of them approximately at the same time, judging by the recurrent pottery uncovered in them. The material from both these shafts and their burial chambers is very similar typologically and metrically, thus pointing to a rather small window of construction. Shaft 4 was disturbed and while it incorporated some mixed material from Shaft 3, it also contained distinctly younger material leaning towards the later part of the Fifth Dynasty (*ca.* Menkauhor to Djedkare).

During the late Fifth or early Sixth Dynasty, two additional shafts were built in the immediate vicinity of the mastaba. Shaft 6 was built in the northern end of the eastern corridor of the tomb and contained a rather large number of well-preserved vessels. There was no niche, chamber nor any traces of a burial in the shaft, but judging from the amount, nature and preservation of the vessels, the contents of the shaft might have been a refuse deposit from cultic activity. The span of the pottery ranged from the late Fifth to early Sixth Dynasty, with the latest vessels from the reign of Pepy I.

Shaft 5 was constructed in the south-west corner of the space north of Entrance Room 1. Its fill was almost completely made of very fine, red-slipped ware broken to pieces, with high probability pointing to its function as an embalming deposit. Due to the fact that this pottery is undoubtedly of a much younger date than the material from the known burial shafts in the mastaba, it cannot be associated with any of them. It is more likely that it belonged to a yet undiscovered burial east of mastaba AC 33. The ceramic material covers a span of late Fifth to early Sixth Dynasty and was likely deposited during the first half of the Sixth Dynasty.

Judging by the oldest preserved pottery associated with Entrance Rooms 1 and 2, they were very likely added during the late Fifth Dynasty. However, their use continued well into the Sixth Dynasty. Refuse layers in both entrance rooms displayed considerable amounts of pottery of the Sixth Dynasty, with some areas showing use or destruction during the earlier part (up to the reign of King Merenre I), while others functioned into the reign of King Pepy II. Among the ceramics, there is a high predominance of beer jars, possibly signifying their use in regular offering activities.

Further study will be required to understand the full scope of the ceramic assemblage from the tomb of Kairsu, especially diverse areas of the mastaba superstructure and the secondary features constructed east of the mastaba.

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