

Title: **El-Zuma 2011: the fourth season of excavations on the site. Preliminary report**

Author(s): Mahmoud El-Tayeb, Katarzyna Juszczak-Futkowska, Ewa Czyżewska

Journal: *Polish Archaeology in the Mediterranean* 23/1 (Research 2011)

Year: 2014

Pages: 357–374

ISSN 1234–5415 (Print), ISSN 2083–537X (Online)

Publishers: Polish Centre of Mediterranean Archaeology, University of Warsaw (PCMA UW),
Wydawnictwa Uniwersytetu Warszawskiego (WUW)

www.pcma.uw.edu.pl – www.wuw.pl

**EL-ZUMA 2011: THE FOURTH SEASON OF EXCAVATIONS ON THE SITE.
PRELIMINARY REPORT**

Mahmoud El-Tayeb,¹ Katarzyna Juszczak-Futkowska,² Ewa Czyżewska³

^{1,3} Polish Centre of Mediterranean Archaeology, University of Warsaw,

² PhD candidate, Institute of Archaeology, Jagiellonian University

Abstract: The fourth season of work at the site of el-Zuma in Sudan was dedicated to the exploration of three different tumuli: middle-sized tumuli of Type II, L-shaped and U-shaped (T.9 and T.16, respectively), and the smallest size tumulus with rectangular vertical shaft and one side burial chamber, representing type III (T.20). A test trench dug on the southern edge of the biggest tumulus of type I (T.7) explored evidence for an external shaft, which turned out to lead to an underground tunnel reaching one of the burial chambers of the tomb.

Keywords: el-Zuma, tumulus, cemetery, grave, early Makuria, Meroitic period, pottery

EL-ZUMA 2011: THE FOURTH SEASON OF EXCAVATIONS ON THE SITE. PRELIMINARY REPORT

Mahmoud El-Tayeb,¹ Katarzyna Juszczuk-Futkowska,²
Ewa Czyżewska³

^{1,3} Polish Centre of Mediterranean Archaeology, University of Warsaw,

² PhD candidate, Institute of Archaeology, Jagiellonian University

Abstract: The fourth season of work at the site of el-Zuma in Sudan was dedicated to the exploration of three different tumuli: middle-sized tumuli of Type II, L-shaped and U-shaped (T.9 and T.16, respectively), and the smallest size tumulus with rectangular vertical shaft and one side burial chamber, representing type III (T.20). A test trench dug on the southern edge of the biggest tumulus of type I (T.7) explored evidence for an external shaft, which turned out to lead to an underground tunnel reaching one of the burial chambers of the tomb.

Keywords: el-Zuma, tumulus, cemetery, grave, early Makuria, Meroitic period, pottery

Work at el-Zuma in 2011 constituted the fourth season of exploration of a cemetery that has been dated to the early Makuria period, that is, from the mid-5th to the mid-6th century AD (El-Tayeb 2005: 389–400) [*Fig. 1*]. The objective was to study selected examples of different-type tumuli, hence the choice of two middle-sized tumuli of Type II, T.9 and T.16, and of tumulus T.20 of type III. A test trench was also dug in the south flank of one of the biggest tumuli on the site, T.7, representing Type I. The purpose was to explore an external shaft that appeared to lead to an underground tunnel penetrating the substructure of the tomb, as in previously excavated tombs T.2 and T.5, in an effort to better understand its structure and real function.

TYPE III: TUMULUS T.20

Situated in the central part of the site, in a group of three small tumuli (T.20–T.22) assigned to Type III [*Fig. 1*]. Round tumulus with flat top, maximum mound height not exceeding 0.70 m, diameter 13.50 m; stone ring of 9 m in diameter [*Figs 2, 3*]. Burial shaft of trapezoid shape and uniform dimensions from top to bottom (starting from the north side and proceeding clockwise: 0.85 m x 1.20 m x 0.90 m x 1.50 m). Cut 2.58 m deep in soft friable sandstone. Burial chamber, oriented N–S, cut in the white sandstone bed off the west side of the burial shaft; humidity inside the chamber, coupled with stone friability resulted in roof collapse [*Fig. 2*, bottom right]. Originally blocked with a wall of

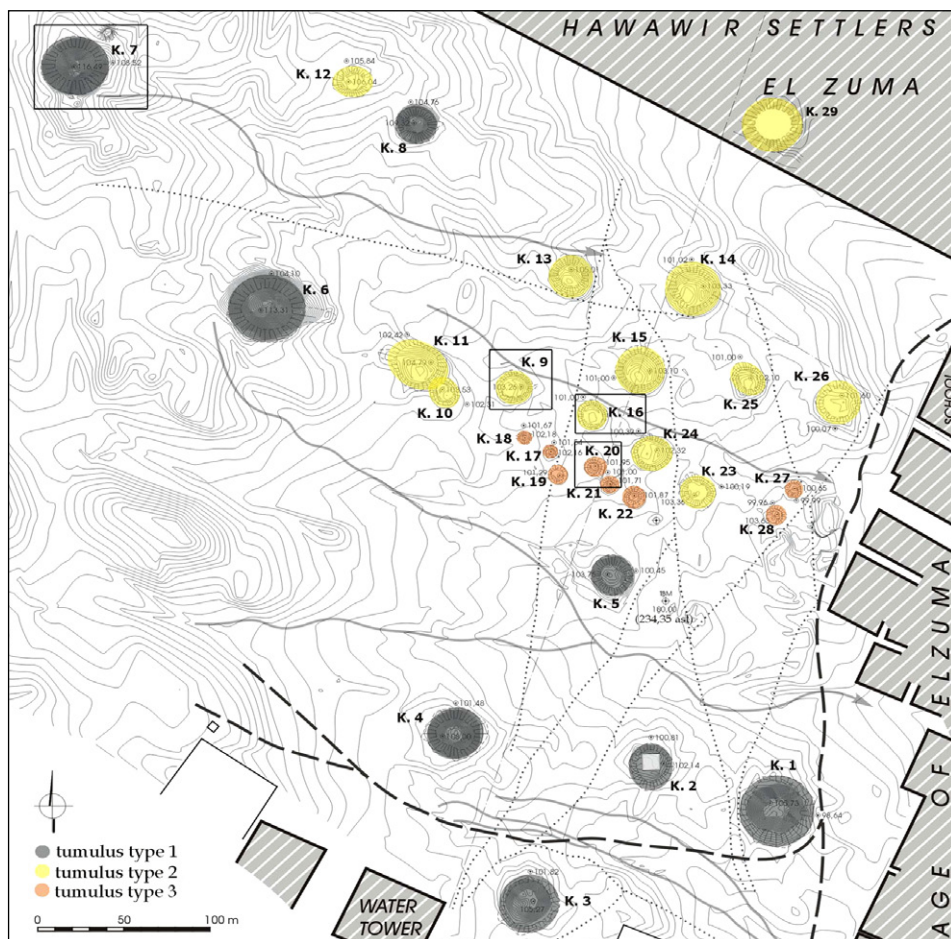


Fig. 1. Plan of el-Zuma with the location of the explored tumuli
(Drawing Yassin Mohamed Saeed, digitizing M. Puszkarski)

Team

Dates of work: 15 January–17 February 2011

Director: Mahmoud El-Tayeb (PCMA, University of Warsaw)

NCAM representative: Mrs. Neamat Mohamed El-Hassan (Inspector of antiquities)

Archaeologists: Ewa Czyżewska (PCMA, University of Warsaw), Katarzyna Juszczyk (Institute of Archaeology, Jagiellonian University, Kraków)

Archaeologist-ceramologist: Edyta Klimaszewska-Drahot (independent)

All photos in the text E. Czyżewska; *architectural drawings* K. Juszczyk-Futkowska, E. Czyżewska, E. Klimaszewska-Drahot; *pottery drawings* E. Klimaszewska-Drahot, digitizing U. Iwaszczuk

blocks of white sandstone (found in the fill); the bottom course of this wall, which can be reconstructed as being 1.50 m long and approximately 0.80 m wide, consisted

of two large sandstone boulders (each about 0.60 m long) [Fig. 2, center right].

The tomb was evidently plundered: traces of a robbers' shaft were observed in

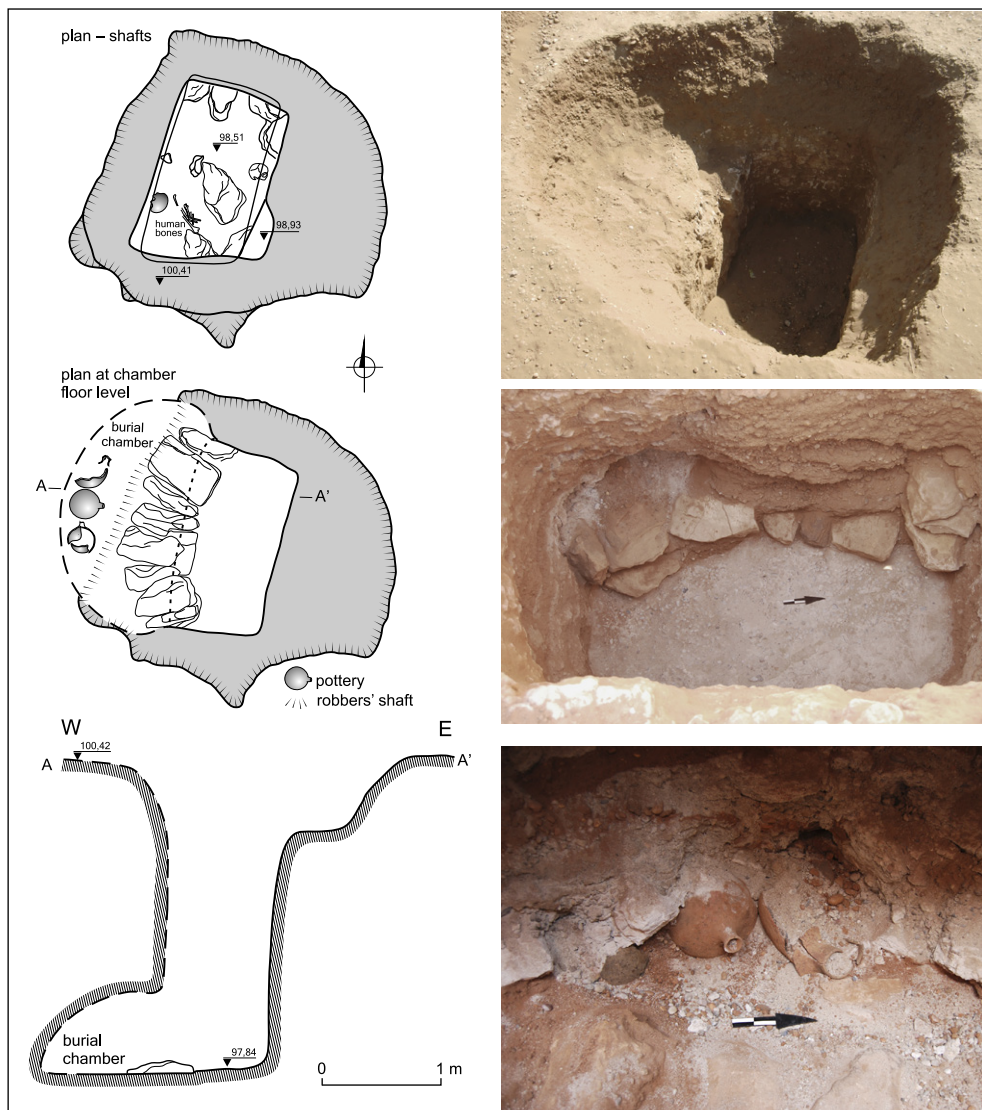


Fig. 2. Tumulus T.20 (Type III): plan and section; top right, robbers' shaft superimposed on the burial shaft, during exploration; center right, sandstone boulders at the bottom of the chamber blocking wall; bottom, burial chamber, view from the east

the center top of the mound, encompassing the original shaft and part of the burial chamber [Fig. 2, top]. Human bones including a skull, a substantial number of faience beads and a damaged vessel were found in the fill, indicating that the body had been dragged from the chamber during the plundering. Inside the chamber, the fill yielded three vessels, an abundance of faience beads and fragmented human bones from the burial.

TUMULUS OF TYPE II: T.9

Situated in the central part of the site, between tombs T.16 to the east and T.11 and T.10 to the west [see Fig. 1]. Round mound with flat top, much like T.20, but bigger. Maximum mound height about 1.80 m, diameter (measured on the E–W axis) 24.50 m [Fig. 4]. The L-shaped burial shaft (disturbed in the upper part by the plundering) is only the second of its kind in this cemetery; it was first observed in tumulus T.11, which was excavated in the 2009 season (El-Tayeb 2005). A parallel is known from the cemetery in Abkur, where tumulus T.1 had an L-shaped burial shaft, 3.30 m deep on the south and 3.60 m on the north when measured from

the ground surface around the tumulus (Kirwan 1939; Żurawski 2003: 220; Juszczuk 2011: 119–121). Two steps were cut in the rock by the east wall of the burial shaft [Fig. 4, top left] in a manner typical of the el-Zuma tombs, one in the northeastern corner, the next at the turn, following an L-shaped plan at a depth of 2.20 m–2.50 m.

Red bricks (found in the fill) were used to block each of the three chambers of the tomb. The bricks measured 33 cm x 17 cm x 8 cm and 36 cm x 18 cm x 5 cm. The different shape and size, as well as traces of coarse white plaster or mortar, suggested that they had been taken from various parts of an unidentified Meroitic structure. The blocking wall of the main chamber (No. 1) was 3.30 m long and about 0.60 m high. It consisted of six courses, bonded in mud mortar; the arrangement was headers and stretchers, set on the lowest course of bricks set sideways on the narrowest side [Fig. 5, left], whereas the outer face was constructed of bricks set vertically. The second chamber was blocked with a wall of the same height but shorter, 2.10 m long, consisting of five courses. The bottom and top courses were of



Fig. 3. Tumulus T.20: tomb during exploration, view from the south

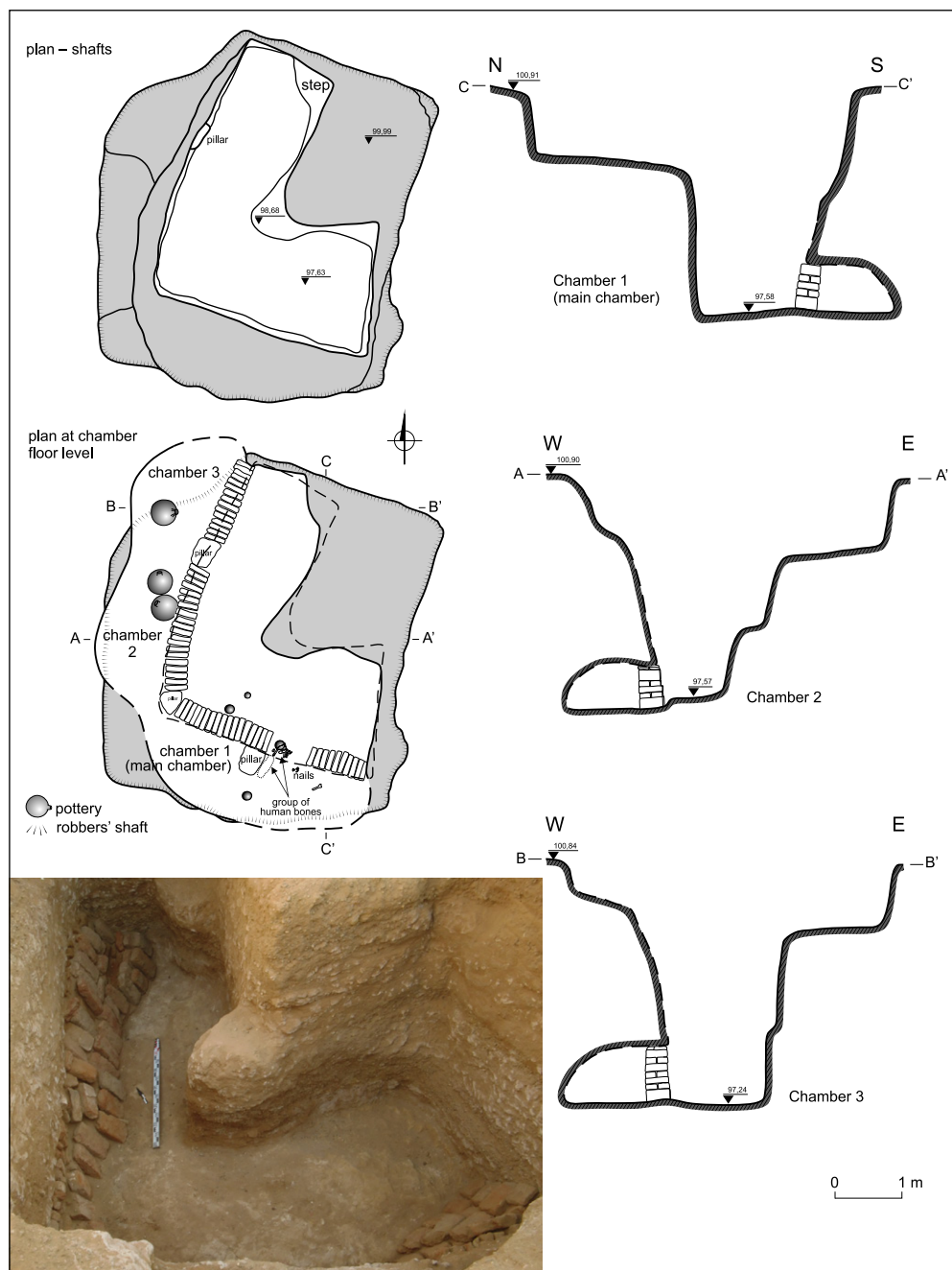


Fig. 4. Plan and sections of tomb T.9; bottom, L-shaped burial shaft, view from the south

bricks set on the narrowest side and between them a course of headers between two courses of stretchers. Blocking the third chamber was a wall 1.40 m long and about 0.75 m high, consisting of seven courses that were one-brick thick, alternating headers and stretchers; the bottom course was level with the same course in the blockages of the other two chambers [Fig. 5, right]. The casing; the courses above that were alternately headers and stretchers. Chambers 2 and 3 shared

a red-brick facade, approximately 3.80 m long.

Three chambers were cut off the sides of the burial shaft: the main chamber on the south, chambers 2 and 3 on the western side [Fig. 6]. The dimensions of the chambers were respectively: 1 – L. 3.70 m, W. 1.50 m, H. 0.65 m; 2 – L. 2.40 m, W. 1.30 m, H. 0.60 m; 3 – L. 3.00–1.80, W. 1.40 m, H. 0.75 m. Passages were cut between the chambers, the one from the main chamber to the



Fig. 5. Brick bonding in the blocking walls of chambers: left, main chamber (1) and right, chamber 3



Fig. 6. Burial chambers of tumulus T.9, view from the east (the ceiling of the chambers collapsed during exploration)

second chamber being 0.40 m wide, the one from the second chamber to the third one being just a narrowing of space that imparted a kidney-shaped plan on both [see *Fig. 4*, center left; *Fig. 6*]. The passages could have been of symbolic importance, allowing the soul of the grave owner to move freely between the chambers.

Exploration was hindered by the poor geological structure of bedrock, which resulted in intermittent collapse of the walls of the tumuli, especially the west wall, during the excavation. A robbers' hole of irregular shape was sunk from the center top of the mound, centered over the burial shaft and chambers, but damaging especially the west wall of the original burial shaft. The fill in the southern part of the shaft yielded concentrations of red bricks presumed to be from the destroyed blocking wall of chamber 1 and probably also chamber 2 (possibly only the outer

facing). Two vessels and fragmentary human bones were found among the bricks by the main chamber indicating that the burial had been plundered. The main chamber had been penetrated through a robbers' hole in the ceiling in its eastern end. Scattered human bones (pelvis, long bones and ribs) were found in the central part, as well as two cups and remains of nails. The original orientation of the burial was suggested by human teeth found lying by the southeastern corner of the chamber. Two beer jars were found in the fill of the second chamber and one in the fill of the third one. The latter, third chamber may have been plundered at some point.

TUMULUS OF TYPE II: T.16

Situated in the central part of the site, between tombs T.9, T.15 and T.20 [see *Fig. 1*]. Round mound with flat top, slightly smaller than T.9, maximum



Fig. 7. Tumulus T.16: rectangular burial shaft with, left, scattered bricks from the disturbed blocking wall, and right, chambers cut in the west wall, view from the north

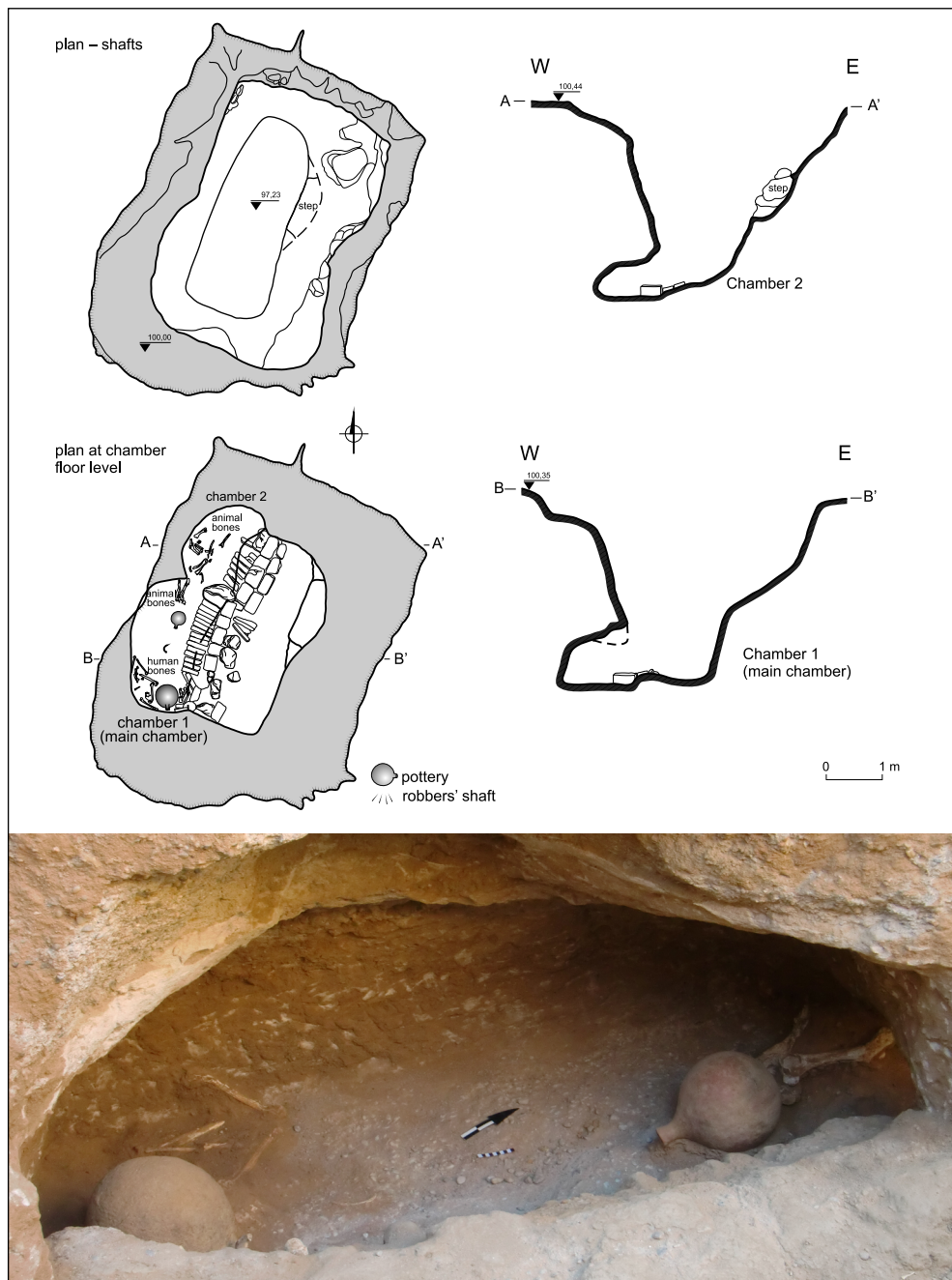


Fig. 8. Tumulus T.16: plan and sections; bottom, burial chamber, view from the east

height about 1.10 m and diameter about 20 m. The stone ring was not examined [Figs 7, 8]. A rectangular burial shaft measured 2.85 m to 2.95 m (north and south walls respectively) by 4.35 m to 4.25 m (east and west walls respectively; the east wall being most damaged by the robbers); it becomes narrower toward the bottom. A step was cut in the bottom of the shaft, by the east wall. The main chamber (No. 1) was cut in the southwestern side of the shaft; the front part was found collapsed, presumably because of the ancient break-in, which left dangerous cracks in the west wall of the chamber. The chambers were respectively 2.40 m x 1.40 m x 0.78 m (main) and 1.65 m x 1.20 m x 0.55 m (side), interconnected by a small opening, about 0.40 m wide, in a manner similar to other burials of Type I and II from the el-Zuma cemetery [Fig 8]. The entrances had been blocked with mud bricks, which were found scattered at the bottom of the shaft [Fig. 8, left]. The bricks were about 37 cm x 18 cm x 8 cm in size; the blockage was 2.10 m long in the case of the main chamber and 1.40 m for the side chamber. The height could not be reconstructed easily. In the lowest course of the blocking of the main chamber, bricks were laid on the narrowest side, similarly as in T.16 and T.17.

The fill of the main chamber, bearing evidence of heavy plundering in the past, contained two hand-made beer jars found at opposite ends of the chamber and disarticulated and mixed up human bones, such as vertebrae, ribs, long bones and a broken pelvis, in addition to a broken skull, by the beer jar on the southern side, indicating that it had been the main burial. Two small metal objects, that is, an iron cross and a copper-alloy bell, were found

near the skull (for a catalogue of metal artifacts and discussion, see Zieliński 2014, in this volume). Some large animal bones, probably of cattle, were found heaped near the second beer jar at the northern end of the chamber. The fill of the lateral chamber contained only some cattle bones. There is reason to believe that this chamber was intended solely for the grave offerings. More small objects were found in front of the main chamber (1). These are namely metal artifacts comprising a number of iron arrowheads, fragments of a broken spear blade, and different types of beads, all found scattered amongst the dismantled mud bricks of the chamber blocking.

TUNNEL IN TUMULUS T.7

A test trench, approximately 2.50 m by 3.50–4.00 m, explored a depression in



Fig. 9. Tumulus T.7: test trench on the spot of a tunnel running toward the burial chamber, view from the south

the southern slope of tumulus T.7, which was a tomb of type I located on the northwestern fringes of the cemetery [see *Fig. 1*]. The robbers' pit was almost rectangular in shape, measuring 2.40 m (W) x 1.80 m (N) x 2.35 m (E) x 3.50 m (S), and 2.90 m deep. The fill in the upper parts of the shaft (1.20–1.30 m) consisted of red soil, superimposed on a layer of white friable sandstone, in which the entrance to the tunnel leading inside the tumulus was excavated. The entrance was rectangular with rounded corners, 1.40 m wide and 1.60 m high, the depth at the entrance being 3.25 m. It turned out after partial clearing that this deposit was a natural fill that had blocked the entrance alone. The tunnel could be traced beyond it and it was possible to ascertain its length, width and general state of preservation without further exploration

The tunnel uncovered this season and others found earlier, in 2005 and 2007 (T.5 and T.2), appear to have been an inherent architectural element of tumuli of type I. Moreover, the care evident in the cutting of the original tunnels argues against their being made specifically for the purpose of plundering the burial [*Fig. 9*].

BURIAL EQUIPMENT

The burial equipment, apart from the pottery, for which see below, resembled the finds from other tombs. There was an abundance of beads, including faience ones (studied by bead specialist Joanna Then-Obluska), and metal finds, which comprised for the most part the fittings of a burial bed, nails, arrowheads and

knives. Interestingly, the arrowheads, which usually are not in good condition, were well preserved. A fragmentary spearhead, iron cross and two small bells are not common finds in the context of the el-Zuma tumuli (for a catalogue and discussion of this category of finds, see Zieliński 2014, in this volume).

Another artifact meriting interest is a stone-ring (Z16/13), made of hard yellowish sandstone, with a diameter of about 11 cm. A small hole about 3 cm wide was pierced in the middle. The object was found on the northwestern side of the robbers' hole dug in the top of the tumulus superstructure, hence its connection with the burial is tentative [*Fig. 10*]. To date, early Makurian and more generally, post-Meroitic burials in Nubia (from the 4th to the 6th century AD) have not yielded any find that could be considered as a parallel.



Fig. 10. Stone ring from tumulus T.16

THE POTTERY

Pottery formed, as usual, an essential part of the grave goods. Despite the evident plundering, some 17 complete vessels and a number of fragmentary forms were found in these burials. The repertoire fitted well into the general framework of the pottery collection recorded from el-Zuma in earlier seasons. Featured are middle-sized beer jars/bottles, bowls, cups and one incomplete table amphora, as well as one handmade cooking pot. All the beer jars were handmade as well, while the small vessels were turned on the potter's wheel.

Beer jars represent nine out of 16 vessels in this excavation assemblage. They can be divided into two groups, depending mainly on morphological structure, which by turn can be taken as an indicator of vessel function or place of origin. Five vessels (Z9/3–5, Z16/2, Z20/5) are characterized by a rounded body, medium-to-short neck and medium-wide mouth, the standard size being 8 cm–10 cm in rim diameter, 33.7 cm–40 cm in maximum body diameter, neck length 3 cm to 9 cm and maximum height between 40 cm and 48.5 cm [Fig. 11]. All the vessels were handmade of Nile silt and shared external surface treatment: covered with red slip, burnished and smoothed. Only one jar, Z9/3, had a poor decoration in the form of incised lines: two vertical ones with short cross lines between them, imitating the trunk of a palm tree. The palm tree was a fairly common decorative motif in Nubia in the Meroitic and post-Meroitic periods. The nearest parallel found on a beer jar comes from tomb T.17 in el-Zuma (Klimaszewska-Drabot, Czyżewska 2012:

362–364, Fig. 1, Z17/2). The vessel type as such resembles middle-sized beer jars produced upstream from the Nile Fourth Cataract (see, e.g., Lenoble 1987: 92–101, 114 Pl. XII, 117 Pl. XV; Edwards 1991: 41–64; Rose 1998: 165–177).

Four other beer jars (Z16/ 3, Z20/1, 3, 4) formed the second group. They were also middle-sized, but slightly smaller than vessels in the first group, characterized by oval shape, or in some instances with a rounded body. The distinctive characteristics of this group were: low shoulders, narrow neck between 3.15 cm and 9 cm long, out-flared rounded rim and, frequently, two small bosses applied on the shoulder on opposite sides. Standard size featured rim diameters 4.5–8.5 cm, body diameters 21–37.5 cm, full height 25–40 cm, neck length 6–9 cm [see Fig. 11]. They were handmade of Nile silt and regularly red-slipped and burnished on the outside with only one exception, Z20/3, which was an unusual burnished blackish ware. None of the vessels in this group were decorated, which is rather the rule with very few exceptions in the case of middle-sized jars.

According to the current evidence, this type of beer jars appears to have been manufactured in the heartland of Makuria, between the Third and the Fourth Nile cataracts. It has never been found elsewhere in the region, apart from a very few examples from Lower Nubia (Mohammed, Kabashy 1999: 68, Figs 11,8, 11,10, 11,12; Klimaszewska-Drabot 2010a; 2010b; El-Tayeb 2012: 96–98).

Small vessels in this assemblage comprise three bowls, two cups, a table amphora and cooking pot. The bowls

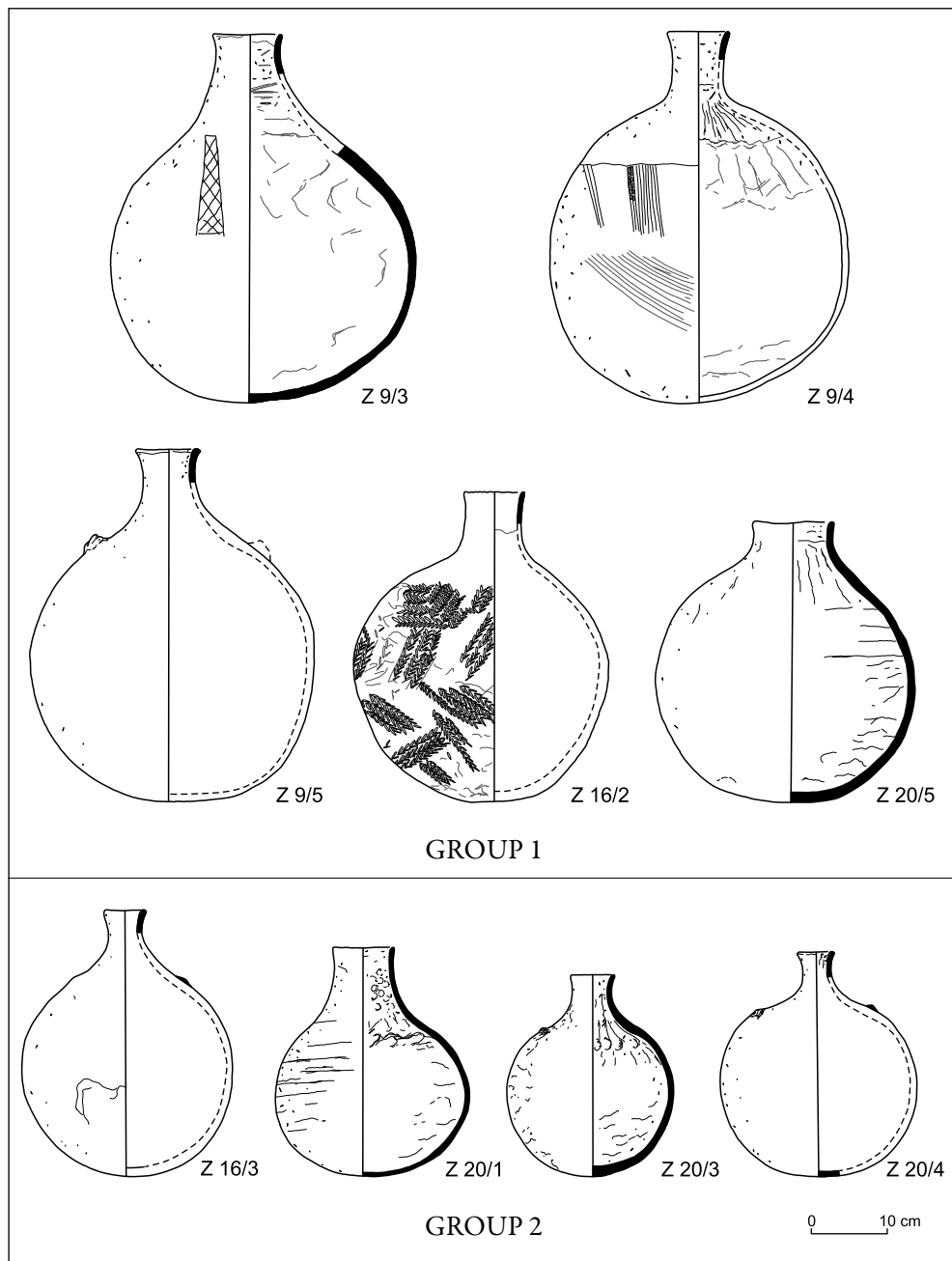


Fig. 11. Two distinctive groups of beer jars, differentiated by size: larger (top and center rows) and smaller (bottom row)

(Z9/1, 6, 7) are generally attributed to one broad category of wheel-made, hard-medium red ware, covered with red slip in and out [Fig. 12]. Nonetheless, there are some obvious differences in their production. The variant, represented by bowl Z9/1, is usually decorated with

distinctive grooves encircling the rim or mid body or frequently encircling both of them. Bowl Z9/7 represents an earlier version, which appeared in Early Makuria Phase I (about AD 340–450). It is hemispherical, coated with red slip in and out, burnished and smoothed,

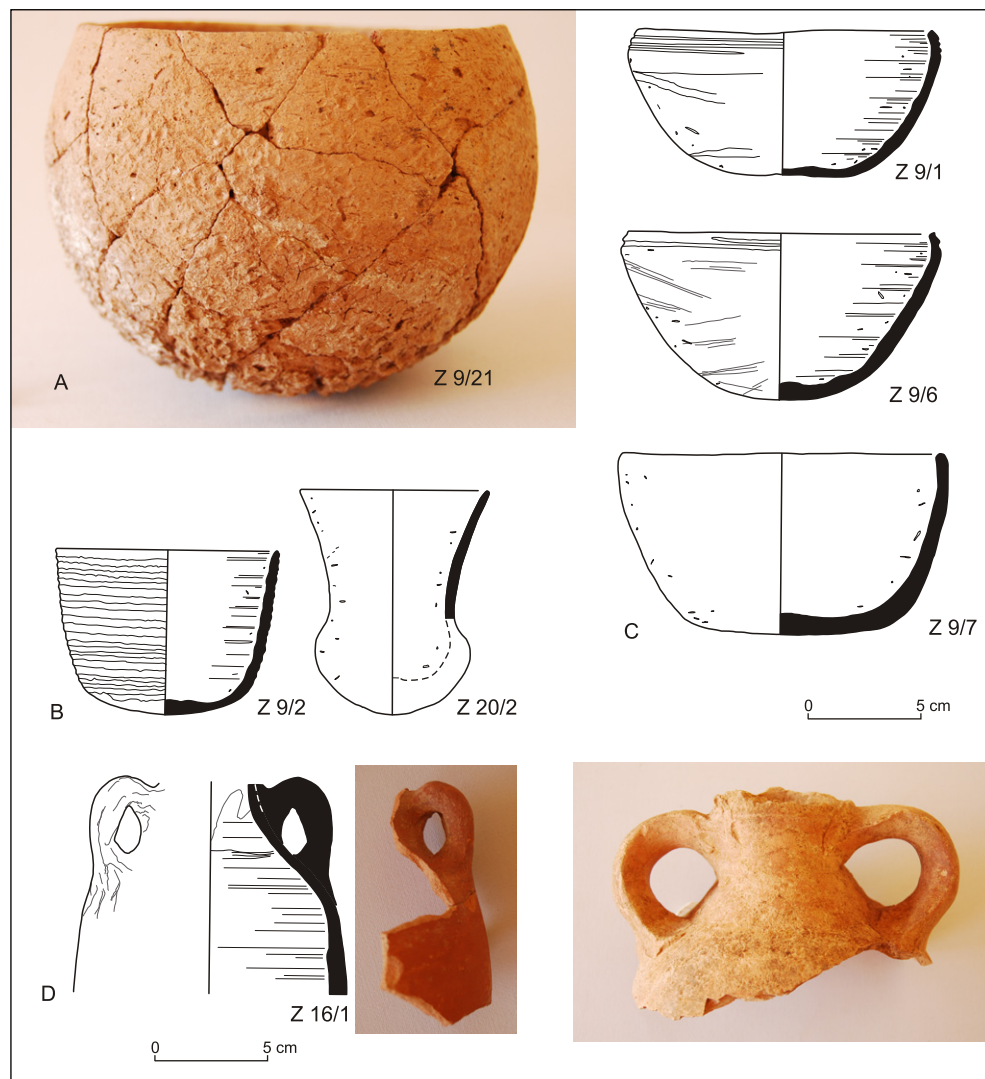


Fig. 12. Pottery from the burials: A – cooking pot; B – cups; C – bowls; D – table amphora

and featuring an undecorated external surface. However, bowls of this variant appear to be less perfectly fashioned than the other ones. There are other minor details apart from the decoration differentiating the two variants, on the vessel base (conical, round, flat or semi-flat) and walls (degree of inclination and shape, in- or out-flared). Standard dimensions for this type of vessels fall within the following ranges: rim diameter 12–14 cm, height 6–8 cm, wall thickness 0.3–0.9 cm. The type was first discovered at the South Cemetery of Jebel Ghaddar (El-Tayeb 1994), thereafter being recorded at other sites in Makuria, between the Third and Fourth Cataracts, e.g., el-Haraz near Jebel Kulgeili and el-Kassinger Bahry about 20 km upstream from Kareima (El-Tayeb 1998; Mohammed, Kabashy 1999: Fig. 11; El-Tayeb, Kołosowska 2007: 37–50).

Of the two cups in the collection, Z9/2 is a red-ware ribbed cub [see *Fig. 12*] of a form that developed most probably from classic Meroitic forms and was widely produced in various versions in Lower Nubia during the X-group period (see Mills 1982; El-Tayeb 2010: 9–11). It has a wide rim of about 9.5 cm in diameter and height not exceeding 7.2 cm, wall thickness 0.4–0.6 cm. The whole body is decorated with incised lines at close intervals, encircling the body from rim to base. To the best of our knowledge, this decoration has no parallel either in the Meroitic or the post-Meroitic period in Upper Nubia. The only analogy is a cup from cemetery 193 grave 145 at Qasr Ibrim (Mills 1982: 47–67, Pl. LXIX, 145.3). Worth noting is the fact that a similar motif was practiced only during the C-group (2400–2000 BC) and Old Kush II (middle Kerma 2050–1750 BC) periods.

The other cup, Z20/2, is absolutely unparalleled in form in this category of vessels [see *Fig. 12*]. It is a wheel-made, red-ware vessel, covered with dark red slip in and out, but undecorated. The rim diameter is about 8 cm, full height reaches 9.7 cm. The lower part is a bulbous rounded bottom, while the upper part of the body has outflared sides, terminating in a simple, rounded, plain rim. To some extent this cup looks like a miniature version of a calciform vessel widely known in the Late Neolithic from el-Kadada near Shendi to el-Kadero north of Khartoum, with a production range reaching as far as upper Egypt (see Reinold 2000: 61; Chłodnicki, Kobusiewicz, Kroeper [eds] 2011: 223–226, Figs 2, 5).

The table amphora (Z16/1) represented a wheel-made, hard, light brown ware. Only the upper part with one loop handle has been preserved [see *Fig. 12*]. The rim diameter was 10.5 cm. The fabric and form of the vessel point to Egypt and Lower Nubia as the source of this amphora type, manufactured with either one or two loop handles and sometimes without. Imported table amphorae were found at different sites in Nubia, as far south as Gabati near Atbara in the region of the Fifth Cataract, a find that indicates some economic relations between Upper Nubia and its northern neighbors (Smith 1998: 184–186, Figs 6.31, 6.32).

The last vessel in this assemblage is a handmade cooking pot made of light brown ware, 10 cm high and with a rim 12 cm in diameter, found shattered into small pieces [see *Fig. 12*]. The type was very common in Nubia in general, manufactured from different wares in various versions, but usually handmade and sometimes fairly careless in the making.

The surface was often left plain, only smoothed. The base featured an extra clay layer added to it, finger-pitted probably to enable heat dispersal during the cooking process (see El-Tayeb 2012: 98–101, Fig. 39; Klimaszewska-Drabot, Czyżewska 2012: 372, Figs Z11/44, Z11/46, Z11/45).

Some other small rim fragments of wheel-made red-ware bowls of both versions, decorated with incised grooves

or undecorated, were found in the fill of the tunnel of tumulus T.7. Finds also included some body pieces of handmade beer jars, as well as one upper fragment of an amphora neck with two loop handles (Z7) [see Fig. 12]. The beer jars were of local origin, but the amphora appears to be an imported item (El-Tayeb 2012: 103–104; for more on such amphorae, see Mills 1982).

COMMENTARY

Excavations in the fourth season at el-Zuma have contributed new data for a study of burial traditions in the region between the Third and Fourth Nile Cataracts (Makuria's heartland). Above all, the results have confirmed a class division in Early Makurite society reflected in burial practice. Tomb construction and its apparent adherence to Meroitic beliefs was an important part of this tradition. The L-shaped burial shaft, which is a variant shape for tumuli of type II, was first observed in tumulus T.11, excavated in 2009. This form of tomb substructure has not been paralleled so far by finds upstream from the Fourth Cataract, hence it may be considered as originating in northern Nubia, where it was first recorded by L. Kirwan at Firka (Kirwan 1939). Another variant tomb form, discovered for the first time in the el-Zuma cemetery this season, consisted of two lateral chambers cut in the west side of a large rectangular shaft that was oriented north–south and accessed via a kind of bench-step, cut in the east wall of the shaft, facilitating access to the bottom of the burial shaft. This variant appears to be a direct outgrowth of the standard rectangular shaft, known in the Dongola Reach since the Early

Makuria Phase I (i.e., early post-Meroitic period, AD 350–450), but the practice of locating the main burial chamber on the west side was another evident survival from Meroitic times.

The inhumation practice in tumulus T.16 is noteworthy. Despite the plundering that disturbed the burial in the main chamber, a close observation of the position of the long bones in particular made it possible to see that the body had been laid originally on its right side, in contracted position, with hands in front of the chest and head due south facing east (the skull was found facing west due to the plundering of the grave). Here again one would say that the inhumation and orientation were strictly Meroitic, even though not that popular in this region. The iron nails and the iron fitting fragments, which were found among the debris in front of the main burial chamber 1, offer clear evidence that the body had been resting on a wooden bier. Inhumation on a bed, the so-called *angareeb*, or simple wooden frame, was a known practice in Nubia during this period. Thus, its roots can be traced back to as early as the Old Kush III period (Classic Kerma 1750–1500 BC). The small iron cross from the main

burial chamber at T.16 is apparently of Byzantine origin and may have been used by the grave owner as a decorative element, similarly as the accompanying copper bell. The nearest analogy to this object is a copper cross pendant found in tomb Q 143-13 at the cemetery in Qustul (Williams 1991: 305, Fig. 145 c). Another iron cross was discovered recently during salvage excavations in the Fourth Cataract region, in child grave 9 at cemetery 4 in El-Ar, on the left bank of the Nile (Żurawski 2010: 192–193, Fig. 9).

Last among the small finds is a stone-ring from a disturbed context and entirely unparalleled in post-Meroitic burial

accommodations. Artifacts of this type have been found in Mesolithic and Neolithic contexts, in settlements rather than cemetery fields and the biggest problem is their typological classification, as well as differentiation between finished and unfinished pieces. The purpose of these rings, which differ in size and shape, is an even greater riddle, scholars arguing between club handles, weights attached to a digging stick and, according to A.J. Arkell, working bone or wood in much the same way as sandpaper today (for more information on this subject, see Arkell 1949: 63–64, 1953: 50–51; Magid 1995: 68; Jórdeczka 2011: 310–316, Fig. 5).

Assist. Prof. Mahmoud El-Tayeb

Polish Centre of Mediterranean Archaeology, University of Warsaw

00-497 Warsaw, Poland, ul. Nowy Świat 4

mahmoudeltayeb@hotmail.com

Katarzyna Juszczak-Futkowska

PhD candidate, Institute of Archaeology, Jagiellonian University

31-007 Kraków, Poland, ul. Gołębia 11

k.juszczak@onet.eu

Ewa Czyżewska-Zalewska

Polish Centre of Mediterranean Archaeology, University of Warsaw

00-497 Warsaw, Poland, ul. Nowy Świat 4

ewa.czyzewska@uw.edu.pl

REFERENCES

Arkell, A.J.

1949 *Early Khartoum. An Account of the Excavations of an Early Occupation Site Carried out by the Sudan Government Antiquities Service in 1944–5*, London: Oxford University Press

1953 *Shaheinab. An Account of the Excavation of a Neolithic Occupation Site Carried out for the Sudan Antiquities Service in 1949–50*, London: Oxford University Press

Chłodnicki, M., Kobusiewicz, M., Kroeper, K. (eds)

2011 *Kadero. The Lech Krzyżaniak Excavations in the Sudan*, Poznań: Muzeum Archeologiczne

Edwards, D.N.

1991 Three cemetery sites on the Blue Nile, *ANM* 5, 41–64

El-Tayeb, M.

- 1994 Excavation at El-Ghaddar – Old Dongola [in:] C. Bonnet (ed.), *Études nubiennes. Conférence de Genève. Actes du VII^e Congrès international d'études nubiennes, 3–8 septembre 1990*, II. *Communications*, Geneva: C. Bonnet, 65–82
- 1998 The Fourth Cataract Archaeological Survey Project. Kareima – Abu Hamed Section. Comments on the ceramic assemblage of the first season (1996), *Sudan & Nubia* 2, 35–41
- 2005 Early Makuria Research Project excavations at El-Zuma. Preliminary report, *PAM* 16 (*Reports* 2004), 389–399
- 2012 *Funerary Traditions in Nubian Early Makuria* [=GAMAR 9; Monograph Series 1], Gdańsk: Gdańsk Archaeological Museum

El-Tayeb, M., Kołosowska, E.

- 2007 Pottery analysis report: sites HP45 and HP47, *GAMAR* 5, 37–50

Jórdeczka, M.

- 2011 Stone implements [in:] M. Chłodnicki, M. Kobusiewicz, K. Kroeper (eds), *Kadero. The Lech Krzyżaniak Excavations in the Sudan*, Poznań: Muzeum Archeologiczne, 299–323

Juszczak, K.

- 2011 Early Makuria Research Project. Report on burial architecture of tumuli T.11 and T.13, *Sudan & Nubia* 15, 119–123

Kirwan, L.P.

- 1939 *The Oxford University Excavations at Firka*, Oxford: Oxford University Press

Klimaszewska-Drabot, E.

- 2010a Pottery from the cemetery in el-Zuma (2007 season), *PAM* 19 (*Reports* 2007), 480–487
- 2010b Pottery assemblage from the Tanqasi cemetery. Early Makuria Research Project (PCMA) [in:] W. Godlewski, A. Łajtar (eds), *Between the Cataracts. Proceedings of the 11th Conference for Nubian Studies, Warsaw University, 27 August–2 September 2006*, II.1. *Session Papers* [=PAM Supplement Series 2/2.1], Warsaw: Warsaw University Press, 219–226

Klimaszewska-Drabot, E., Czyżewska, E.

- 2012 The pottery from four tumuli graves in el-Zuma (2009), *PAM* 21 (*Research* 2009), 361–376

Lenoble, P.

- 1987 Trois tombes de la région de Méroé. La clôture des fouilles historiques d'el Kadada en 1985 et 1986, *ANM* 2, 89–120

Magid, A.A.

- 1995 The lithic material from the sites of Aneibis, Abu Darbein and El Damer [in:] R. Haaland, A.A. Magid (eds), *Aqualithic Sites along the rivers Nile and Atbara, Sudan*, Bergen: Alma Mater Forlag, 52–83

Mills, A.J.

- 1982 *The Cemeteries of Qasr Ibrīm. A Report of the Excavations Conducted by W.B. Emery in 1961*, London: Egypt Exploration Society

Mohammed, A.R.A., Kabashy, H.

- 1999 Two seasons in the Fourth Cataract region. Preliminary results, *Sudan & Nubia* 3, 60–70

Reinold, J.

- 2000 *Archéologie au Soudan. Les civilisations de Nubie*, Paris: Éditions Errance

Rose, P.J.

- 1998 The Meroitic pottery [in:] D.N. Edwards, *Gabati. A Meroitic, Post-Meroitic and Medieval Cemetery in Central Sudan I* [=BAR IS 740], Oxford: Archaeopress, 142–177

Smith, L.

- 1998 The post-Meroitic and medieval pottery [in:] D.N. Edwards, *Gabati. A Meroitic, Post-Meroitic and Medieval Cemetery in Central Sudan I* [=BAR IS 740], Oxford: Archaeopress, 178–193

Williams, B.B.

- 1991 *Excavations Between Abu Simbel and the Sudan Frontier IX. Nubadian X-Group Remains from Royal Complexes in Cemeteries Q and 219 and from Private Cemeteries Q, R, V, W, B, J, and M at Qustul and Ballaṇa*, Chicago: Oriental Institute of the University of Chicago

Zieliński, Ł.

- 2014 Metal objects el-Zuma cemetery, season 2011, *PAM 23 (Research 2011)*, 375–390

Żurawski, B.T.

- 2003 *Survey and Excavations between Old Dongola and Ez-Zuma* [=Nubia 2; *Southern Dongola Reach Survey 1*], Warsaw: ZAŚ PAN; Neriton
- 2010 Facing the deluge. A preliminary report on the salvage operations conducted in the Manatiq of Umm Saffaya, El-Ar, Ashkot and Shemkhiya in 2007–2009 [in:] H. Paner, S. Jakobielski (eds), *Proceedings of the International Conference The Fourth Cataract Archaeological Salvage Project 1996–2009, Gdańsk, 2–4 July, 2009* [=GAMAR 9], Gdańsk: Muzeum Archeologiczne w Gdańsku, 189–215