

# Early Makuria Research Project Excavations at el-Zuma, 2017 Preliminary report

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**Abstract:** During the tenth season of excavations at el-Zuma the mission resumed the previously postponed excavation of the last two tunnels beneath tumuli T.1 and T.4. Both tumuli were classified as Type I burials, based on their large size and unique construction. The exploration of the said two tunnels was essential as each was expected to lead directly to the main burial chamber. Although the chambers were reached, yet they were found seriously rifled. Nonetheless, new modified elements of burial niche construction were discovered. The protection of the tumuli field was also completed during the course of the season.

**Keywords:** tumuli, el-Zuma, burials, Early Makuria, mound, tunnel, chamber

The tumuli field at el-Zuma has been known, erroneously, as the “El-Zuma Pyramids” since the first half of the 20th century. The first season of the Early Makuria Research Project in the cemetery field (2004–2005) revealed the presence of three types of superstructures still visible on the ground surface and the assumption was made that each of the three categories should have a different type of substructure. Thus, the largest size with a conical shape was designated as Type I. Consequently, the flat-topped middle-sized mounds were classified as Type II, while the smallest mounds, with flat top, were attributed to Type III. Excavation of different tumuli classified according to this system in the first and second seasons

confirmed in effect the proposed classification (Obłuski 2007: 400–403; El-Tayeb 2007: 389–399).

The unexpected financial reduction of this season’s budget (about 60%) obliged the mission to make some changes in the original fieldwork plan for the year 2017. It was decided to resume the excavation of tumuli T.1 and T.4. During the sixth season, in 2013, a limited sondage was opened on the southern fringe of tumulus T.4. The main objective was to establish whether or not this tumulus also had an underground tunnel like the other tumuli excavated at this site (i.e., T.2, T.3, T.5, T.6, T.7, and T.8). For the same reason a similar sondage was dug in T.1 during the 2015 season. In both cases, the

mission succeeded in reaching the external shafts and entrances to the tunnels, but neither of the tunnels themselves was explored. The second part of this year's

program focused on adding some more posts around the site perimeter to completely encircle the cemetery and protect it from vehicular traffic.

## TUMULUS 4

Tumulus 4 (T.4) is located on the southern side of the cemetery field [*Fig. 1*]. Like the abovementioned tumuli, it has a conical shape, and is built of earth and gravel, covered with small rough black stones. Its maximum preserved diameter is about 34 m with a height of up to 6.20 m, making it one of the largest tumuli designated as Type I burials.

A successful attempt to find the external shaft and the tunnel entrance was made at the end of the sixth season in 2013. Thereafter, for safety reasons the work was suspended till 2017. During the 2017 season work was resumed with the aim of exploring the tunnel in order to reach the burial chamber and thus gain a better

understanding of the burial practice and determine its date. To this end, the external shaft was fully unearthed revealing some damage done by robbers to the top of the tunnel entrance. The external shaft is rectangular in shape, oriented east–west, and measures 3.80 m (E–W) by 2.45 m (N–S) on the ground surface, narrowing towards the bottom, where it measures only 2.00 m × 2.60 m, with a maximum depth of about 3.30 m. Access to the bottom of the shaft was made easy by two steps cut into the southeastern and southwestern corners of the shaft at a depth of about 1.50 m below ground level. The entrance to the tunnel is about 2.70 m wide. During the 2013 season only a stretch 1.50 m from the edge of

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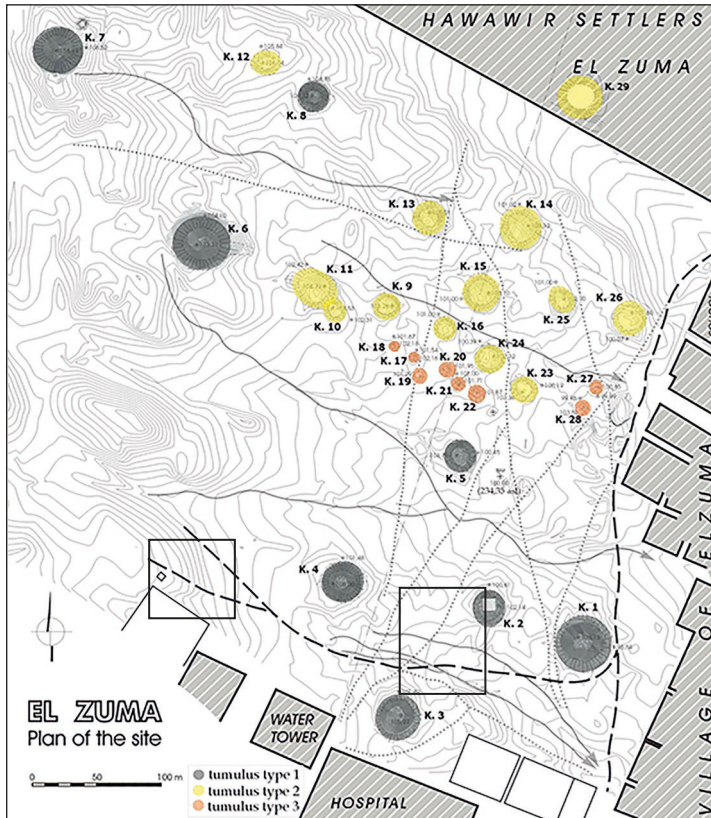
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### Acknowledgments

The Early Makuria Project is a joint research program of the Polish Centre of Mediterranean Archaeology of the University of Warsaw and the National Corporation for Antiquities and Museums. The project is sponsored by the Qatar–Sudan Archaeological Project and by PCMA UW.

the shaft had been cleared of fill. At a distance of about 2.00 m it appeared that the tunnel was divided into the east and west wings by a partitioning wall cut from the sandstone formation, rather than by pillars such as those constructed in tumuli T.1, T.6, and T.7 (for T.1, see *Fig. 8*; for T.6 and T.7 see El-Tayeb et al 2016: 110–126). The wall itself is about 5.50 m long, provided with one small hole made at a distance of 1.50 m from its southern end. The tunnel height at the entrance point is about 1.62 m, getting lower towards the central area, and measuring about 1.59 m at

its northern end. The eastern wing of the tunnel is only about 8.25 m long, while the western wing is 9.90 m long [*Fig. 2*]. Although both wings come to a dead end at their northern extremity, a small chamber is cut into the west wall of the western wing. The rear entrance of this chamber is cut at about 0.60 m above the floor level of the tunnel. The chamber itself measures approximately 2.70 m in length from north to south and 1.20 m east to west, with a 1.50 m-wide entrance. It was found full of earth from the side of the tunnel, as well as loose sand that had poured into it



*Fig. 1. Plan of the el-Zuma cemetery field (PCMA Early Makuria Research Project/drawing Yassin Mohamed Saeed, digitizing M. Puzskarski)*

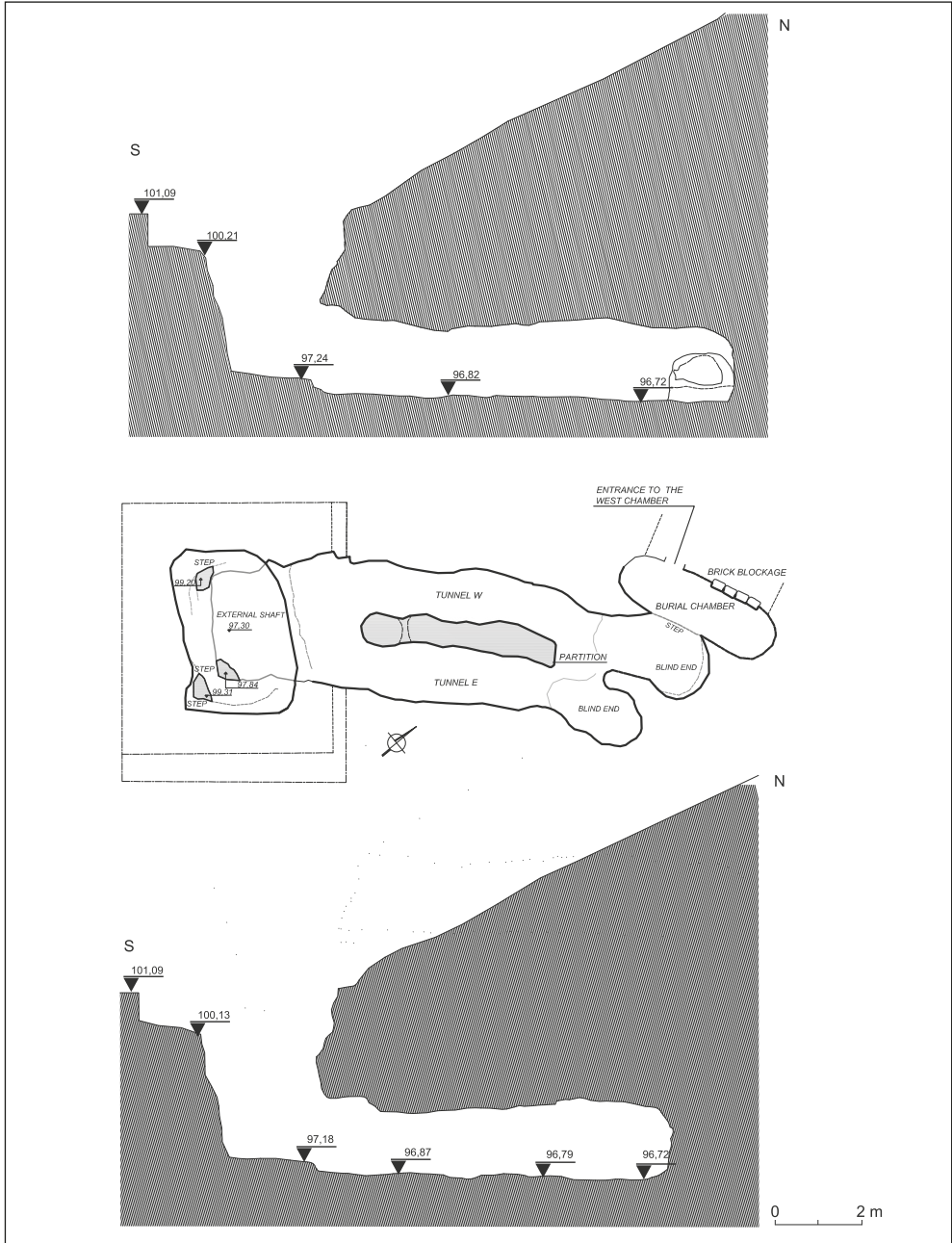


Fig. 2. T.4, plan of the superstructure and tunnels  
(PCMA Early Makuria Research Project/drawing M. Antos, E. Czyżewska-Zalewska)



through a hole in its roof, which was later discovered to be dug into the summit of the tumulus [see below, *Fig. 5*]. Part of a wall built of reused red blocking bricks was noted on the far north side of the chamber, almost entirely covered by the sand pouring into it [*Fig. 3*]. Although the location of this relatively small chamber is quite unusual, it was found to contain the remains of offerings that had escaped the robbers' attention and lay mixed with the sand in front of the chamber's rear entrance. These leave no room for doubt that this was the main burial chamber [*Fig. 4*]. Evidently, the grave robbers had forced their way into the burial chamber through the west wing of the tunnel. This is attested by several small finds, pottery vessels and broken human bones which were found

scattered across the floor of the tunnel during the course of excavation. However, the question concerning the hole at the top of the mound remains unresolved. This hole measures about 0.65 m in width and is of irregular shape. It reached down roughly to the northeastern side of the burial chamber directly from the top. The question is did this represent a second attempt to rob the burial, or did it result from structural movement of the sandstone bedrock that caused some damage, including the partial splitting of the roof? Unfortunately, in view of this situation and the serious risk of impeding danger, the burial chamber was not explored. Work in it was suspended. The chamber and the northern end of the tunnel's west wing were tightly sealed with sacks full of pure sand. Thereafter, the hole



*Fig. 3. T.4, view of the burial chamber. Note the red-brick blocking wall and the entrance to a secondary chamber (PCMA Early Makuria Research Project/photo A. Kamrowski)*



Fig. 4. T.4, top left and bottom close-up, objects visible in the sand layer in front of the burial chamber; top and center right, chain with crosses and bronze ring in situ (PCMA Early Makuria Research Project/photos A. Kamrowski)





*Fig. 5. T.4, hole in the top of the mound, the tunnel excavation in the background (PCMA Early Makuria Research Project/photo A. Kamrowski)*



*Fig. 6. T.4, view of the mound from the south, with the roof cover in place (PCMA Early Makuria Research Project/photo A. Kamrowski)*

at the top of the tumulus was also filled with sand to avoid any further destruction, and above all as a safety measure [Fig. 5].

At the end, safety measures were also undertaken by constructing a solid cover over the external shaft. Two thirds of the shaft were covered using iron beams

(*kamar*, Arabic كمر) and red bricks, creating a type of vault known in Arabic as *aged* (عقد). The last portion was covered with a metal grid provided with a door that offers easy access to the tunnel whenever needed, until a suitable and permanent solution is found [Fig. 6].

## TUMULUS 1

Tumulus 1 (T.1) is located on the far southeastern fringes of the cemetery [see Fig. 1]. It measures about 34 m in diameter and has a preserved height of about 5.37 m. Here also work was resumed by unearthing the external shaft. Apparently, while searching for the shaft, the grave robbers had made at least three attempts to find it on the southern side. They partly succeeded in their fourth attempt, although they missed the center of the external shaft, thus causing serious damage to the roof of the tunnel entrance. The external shaft is rectangular in shape and aligned east–west. It measures 3.70 m in length and 1.70 m in width with a maximum depth of about 2.60 m. The shaft is provided with two steps cut into its southeastern and southwestern corners at respective depths of about 1.13 m and 1.33 m below ground level [Fig. 7].

Initial cleaning of the external shaft proved the existence of a wide tunnel aligned north–south. The entrance of the tunnel is about 3.00 m wide and about 1.60 m high. It is supported on four pillars which divide it into two wings: east and west [Fig. 8]. The first pillar is located at a distance of 5.45 m from the south wall of the external shaft. Analogous to the construction in tumulus 4, the east wing of the tunnel, which measures 13.30 m in length, was found to terminate in a rounded

dead-end at the north. The western wing was a bit longer, measuring 14.20 m, with a wider rounded dead-end. Nine meters into the west wing of the tunnel, there was a highly unusual construction, unlike any ever noted in this type of burial at the el-Zuma cemetery. It was discovered hewn into the west wall of the west wing and took the form of an open niche measuring about 2.00 m by 1.20 m. It is not clear, however, if the original plan had been to construct a side chamber, which was never completed, or if the western lateral niche, provided with a bench-like feature, represented a new aspect in the burial tradition of the period. One large cattle bone (scapula) was the only item found on top of the bench [Fig. 9].

Another innovation in burial practices is the location and construction of the main burial chamber. It was found hewn into the east wall of the west wing of the tunnel, with a rear entrance opening due west. The burial chamber was cut into the sandstone formation at about 1.50 m above the tunnel floor. It was covered by a mixture of sand, earth and partly collapsed roof. Thorough exploration revealed that the burial had been badly ransacked in the past [Fig. 10].

Fragments of a disarticulated human skeleton, one middle-sized beer jar, pottery



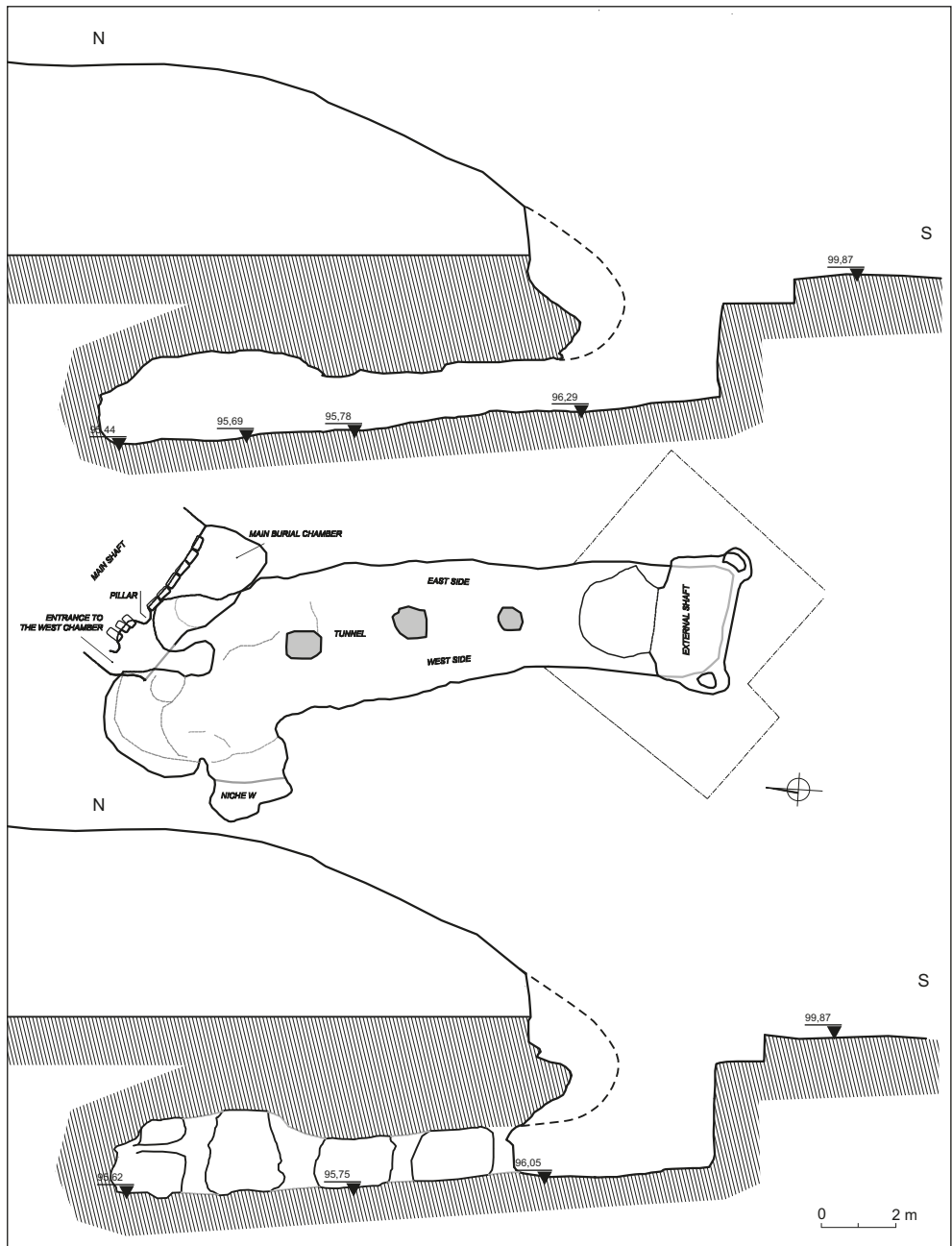


Fig. 7. T.1, plan of the superstructure and tunnels  
(PCMA Early Makuria Research Project/drawing M. Antos, E. Czyżewska-Zalewska)



*Fig. 8. T.1, view of the pillars in the tunnel, looking south  
(PCMA Early Makuria Research Project/photo A. Kamrowski)*



*Fig. 9. T.1, the western niche, facing west  
(PCMA Early Makuria Research Project/photo A. Kamrowski)*

sherds and broken pieces of different ornaments, as well as metal fragments including a gold earring, were noted; they were scattered in the burial chamber and all along the tunnel (see Then-Obluska 2017: 693ff., in this volume). The results of the preliminary bone analysis conducted in the field are of special interest, for they point to the discovery of fragments from at least seven human skulls, in addition to 11 fragments of human right thighbones (femurs). An anthropological examination of the human bones is planned for 2018. The burial chamber is approximately rectangular in shape, oriented NW–SE, measuring 4.56 m in length by 1.30 m in width on the northwestern side and 1.86 m by 0.85 m respectively on the southeastern side, the height being 0.95 m. Its entrance, from the side of the main burial shaft, is about 1.30 m wide and is divided by a small, fragile pillar, incomparable to the one discovered in the burial chamber of T.6 (El-Tayeb et al. 2016). The blocking wall (about 0.85 m high), separating the main shaft and the burial chamber, consists of nine rows of mud bricks lightly bonded with a thin layer of mud mortar [Fig. 11].

Two weeks after the mission left el-Zuma, I received information from the foreman who was in charge of the workers during my absence that a large hole had appeared in the top of the tumulus, similar to the one noted in tumulus 4. On site it appeared that the situation was even worse and more frightening than that of tumulus 4. In contrast to T.4, the top pit on T.1 reached the bottom of the main burial shaft directly in front of the burial blocking wall. The pressure of the falling sand was strong enough to have caused serious damage to the mud bricks of this wall. In consequence, sand had filled half of the burial chamber and poured down on to the tunnel floor. The only suitable way to secure the pit from the top of the tumulus was to seal it with heavy concrete slabs, since these mounds are the favorite playground for the local village children.

The external shaft of the tumulus has been protected by building the same type of construction as in T.4 (a vaulted roof), using metal beams and red bricks. A metal grid was also installed for safety purposes and to provide an easy means of descending to the bottom of the shaft.



Fig. 10. T.1, the burial chamber, before (left) and after (right) exploration, facing southeast (PCMA Early Makuria Research Project/photos A. Kamrowski)





*Fig. 11. T.1, view of the fragile pillar which divides the burial blocking wall (PCMA Early Makuria Research Project/photo A. Kamrowski)*

The protection plan for the tumulus field was completed by adding some 197 concrete posts directly around the perimeter of the site and its buffer zone.

Hence, no more buses, trucks or cars will be able to drive across the site, as long as these posts remain in place [Fig. 12].

## GRAVE OFFERINGS

Exploration of tumuli 1 and 4 revealed that both of them had been penetrated, plundered and devastated repeatedly, most probably since ancient times, and even in the same manner: access being gained through the west side of the tunnel. As mentioned above, the floor of the burial chamber in T.1 was found covered with earth sediment. Beneath this fill the burial contained various types of material in fragmentary states of preservation, including two human lower-limb bones, as well as damaged fragments of a human skull. Among the other objects noted was what

seemed to be a gold earring (Z1/32), one complete middle-sized red bottle (Z1/28) and some sherds of small, red, wheel-made, grooved bowls. There was also a small bronze bell (Z1/33) and fragments of iron nails and other unidentified iron finds. Further material was found scattered along the floor surface of the west side of the tunnel. It included several fragments of human skulls, which appear to represent seven individuals, and eleven fragments of human right thighbones (femurs). In addition to the human bones, grave offerings recovered from the west tunnel comprised a mixture

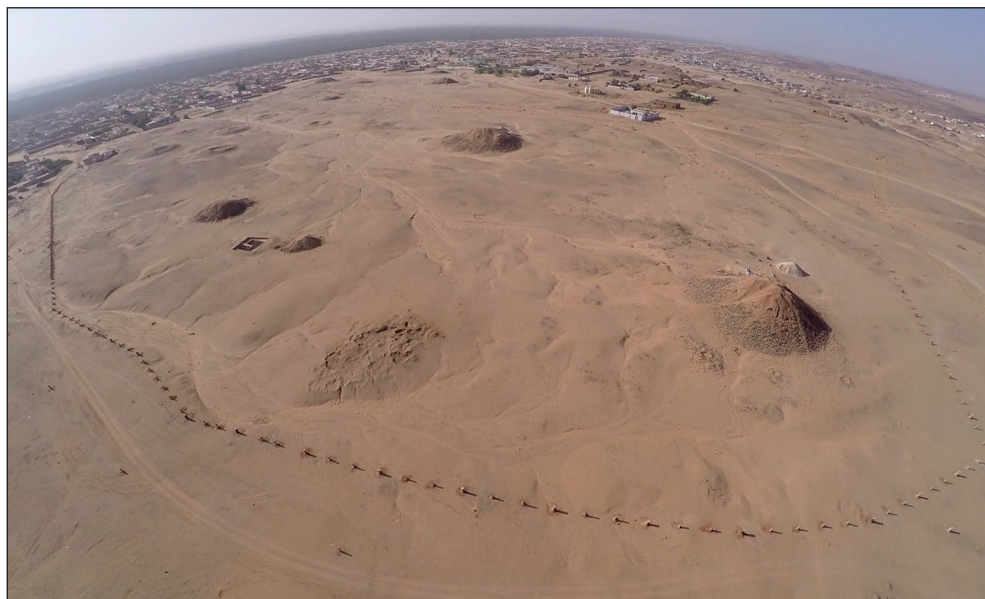


Fig. 12. General view of the line of posts protecting the site  
(PCMA Early Makuria Research Project/photo T. Wojtczak)

of fragmented animal bones representing cattle, sheep, goat, donkey, camel, gazelle, bird and probably horse.

Earlier exploration of the external shaft and part of the tunnel of tumulus 4 during the 2013 season had provided ample evidence attesting to the richness of that burial. Amongst the objects found was a very fine gold earring, the upper part of a finely made, decorated amphora and a wonderful decorated bone fragment, which could be part of an ivory kohl container, as suggested by Joanna Then-Obluska (2017: 693ff., in this volume). Thorough cleaning of the entire tunnel in the 2017 season, up to the main burial chamber, clearly revealed how severely the grave had been rifled. Large numbers

of small objects were found covering the whole surface of the west side of the tunnel. The scattered human bones seem to be from a single skeleton, although incomplete. Animal bones of different species, mentioned above, were noted as well. A complete pottery bowl and many sherds of small vessels were also amongst the finds (for the pottery see Czyżewska-Zalewska 2017, in this volume), as were some single barb arrowheads. The wide range of valuable adornments recovered from the west tunnel is particularly noteworthy. The most significant items amongst them are a very fine gold earring (Z4/12), two small, finely made golden crosses attached to a chain (Z4/98), and a gold finger ring.

## SOME REMARKS AND COMMENTS

The two tumuli, T.1 and T.4, excavated during the 2017 season deserve some remarks concerning their construction in the context of the burial traditions noted hitherto at this site. First of all, a common feature shared by these and other Type I tumuli (the largest at this cemetery) is the location of the external shaft on the southern edge of the mound. Next, is the almost precisely north–south alignment of the tunnel, which, as is the case with tumuli 6 and 7, is also divided into two wings: east and west (see El-Tayeb et al. 2016: 122, Fig. 7; 123–124, Pl. 33). However, the tunnel in tumulus 4 was found to be divided by a kind of wall cut in the sandstone rock — the first recorded instance of such a feature at this cemetery. Moreover, a small hole had been made in the wall, about 1.50 m from its southern end. What was the purpose and practical function of such a cut? Is it possible that the initial aim was to construct some pillars out of

this rock, but for some reason the idea had been abandoned? At present the answers to these questions remain obscure.

Another marked departure from the grave construction practices noted thus far in Type I tumuli is the completely different location of the main burial chamber. Equally unexpected was the side niche found hewn into the west wall of the west wing of the tunnel, just short of its rounded dead-end. Unfortunately, due to the complications caused by the damage to the chamber roof and the continuous pouring in of sand, it was impossible to explore the chamber. Nonetheless, part of a blocking wall built of reused red bricks was observed on the north side of the chamber, while at its southern end, a hole about 0.60 m wide appeared to lead to what could be a secondary west chamber. Even if that were the case, it would be difficult to say if the chamber under observation is the main burial chamber or not, especially



given that it has not been excavated. The only indicator supporting this assumption is the type and quantity of offerings which were found just in front of the rear entrance to the burial, as well as along the west side of the tunnel, including the human bones. There is no doubt that the quality of the adornments and other small finds discovered there can be compared to the royal objects from Lower Nubia, namely the royal burials at Qustul and Ballaña (for comparison see Emery and Kirwan 1938).

The situation in tumulus 1 is more complicated. While the first, southern, part of the tunnel falls within the norm of tunnel construction noted in T.6 and T.7, its northern end appears to be totally different. It presented the first recorded instance of a kind of a niche cut into the west wall of the tunnel and provided with a bench-like feature (*mastaba*), which was found under a thick layer of accumulated earth. To date, such a construction has not been noted anywhere in late antique Nubia. In view of the fact that the burial had been badly plundered, it is even hard to guess what this bench had been constructed for. The single large cattle bone (scapula) and rat droppings found on it suggest that it may have been a place for depositing grave offerings. On the opposite wall of the same west wing, an absolutely unique feature of burial construction was noted. It is difficult to understand how it came about that a chamber was cut at about 1.50 m above the floor surface of the tunnel, while the construction of the blocking wall inside the chamber points to the main burial shaft having been positioned at a higher level. It is worth mentioning that there are two known instances of a burial chamber being located beneath

the level of a tunnel. The first one comes from tumulus 4 at Hammur Abbasiya and the second from T. 6 at el-Zuma (El-Tayeb 2003: 132–134, Fig. 13; 2016: 122–123, Fig. 7, Pl. 29). In the case of T.1, it is uncertain if the location of the main burial chamber was an intentional innovation, or if it was the result of inaccurate estimation and a lack of coordination of the work being carried out in two locations: in the main shaft on one side and the tunnel on the other.

One of the most intriguing problems faced in T.1 is that posed by the disarticulated fragments of human bones. As stated above, fragments representing at least seven human skulls, in addition to 11 fragments of human right thighbones (femurs), were recovered mainly from the west wing of the tunnel. At the current stage of research, it is not possible to determine how these bones found their way into the burial. One of the main obstacles to any further investigations is the state of preservation of the incomplete skeletons. Since only negligible amounts of human bone have been found in the hitherto excavated burials, no conclusions or assumptions can be reached based on previous experience. A range of explanations for their presence spring to mind, including human sacrifice, multiple interment, or sequential family interment. All these are burial traditions deeply rooted in ancient Nubian societies. However, only detailed analysis of these remains may shed any light on this matter.

Finally, Joanna Then-Obluska's study of the personal adornments found in these two burials clearly points to the considerable influence of royal Lower Nubian traditions. On the other hand, the pottery, especially the small, red, wheel-made, grooved bowls, firmly attests a production tradition

originated in the Dongola Reach. Hence, at this stage of research it is safest to identify the owners of these burials as members

of a social elite, because even though there are some indications of royalty, there is still no irrefutable evidence.

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