ES-SADDA 1 EXCAVATIONS OF A POST-MEROITIC CEMETERY (TWO SEASONS)

Piotr Osypiński

Excavations of the site of Es-Sadda 1,¹ while a salvage project *par excellence*, were planned as a multidisciplinary research program including a study of the ancient population, the mortuary practices and material culture of a Post-Meroitic community. Every effort was made to secure relevant archeological, anthropological, archeozoological, paleobotanical and geomorphological data.

Two seasons were carried out in 2005: in January and in November. The spring

SPRING SEASON 2005

he six grave groups are determined by the graves' location on six separate bars between channels [*Fig. 2*]. The 74 grave structures visible on the surface were classified by types based on existing classifications.³ Excavations of tumuli in Group 1 revealed more graves where the entire surface structure has been eroded away or removed

Research was continued in the fall² with a survey of the area situated west of the tumuli in Group I. A site grid was traced with units 100 by 100 m and a contour plan completed [*Fig. 1*]. SON 2005 by hand. Only isolated stones coming from the broken blockages mark these plundered graves on the surface. They were most likely

season was dedicated to identifying the

differences between the six grave clusters followed by a detailed exploration of all

tombs from a selected group. The result was

a classification of burial forms, reflecting

a division into a number of categories.

small mounds of type 1 (see below). Apart from differences in the superstructures, the explored tumuli also differed in the underground part, which translated into variations with respect to grave contents.

- 1 For a general view of the site, see *PAM XVI*, *Reports 2004* (2005), 371 and Fig. 2. There also, map of the Polish concession and localization of Es-Sadda, Fig. 1 on p. 370.
- 2 Both seasons of excavations at Es-Sadda 1 were carried out thanks to the Polish Centre of Mediterranean Archaeology of Warsaw University, the Poznań Archaeological Museum and the Patrimonium Foundation. The present author, who directed the work in the field, wishes to thank the Director of the project, Dr. Marek Chłodnicki, and to acknowledge the contribution of those who worked with him on the site: Mr. Łukasz Gauza, photographer, field assistant; Mr. Michał Sip, surveyor; Ms Iwona Marciniak, textiles expert, documentalist. Not the least, he wishes to thank Mrs. Marta Osypińska, field assistant in the first season, who waited impatiently for the team's return from the field in autumn and subsequently provided her expertise in the fields of archaeozoological analysis, not to mention inking all of the documentation from the season.
- 3 D.A. Welsby, Survey above the Fourth Nile Cataract (London 2003); P. Wolf, The SARS Anglo-German Expedition at the Fourth Cataract of the Nile: the 2003/2004 season, *Sudan & Nubia* 8 (2004), 17-26.

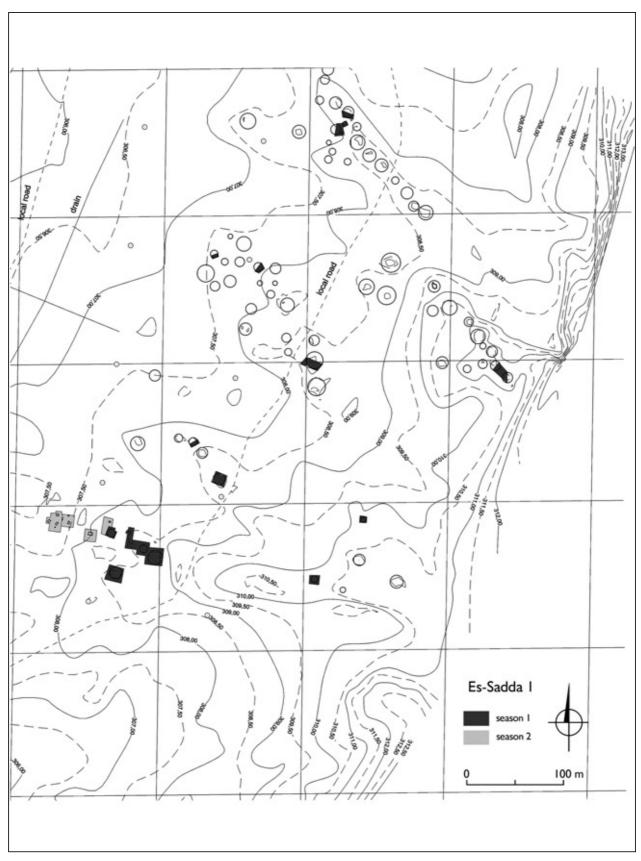


Fig. 1. Site plan of Es-Sadda 1, completed in 2005 (Drawing P. Osypiński, M. Sip)

The following categories have been distinguished:

1. Large graves with niche chamber situated on the west or southwest, usually broader than the vertical shaft leading to it. A dry-stone wall secured the entrance to the chamber at the bottom of the shaft [Fig. 3]. A declining ramp ran from the east, leading to the shaft. These were the richest graves in terms of inventory, including burial shrouds [Fig. 4], bronze artifacts denoting prestige and wealth [*Fig. 5*] and pottery in a variety F_{ij} of shapes and sizes [Fig. 6]. There is every reason to believe that the buried individuals were men of status in the local community. By the same, the graves attracted looters' attention. The skeletons show evidence of callous search with the heads and hands

having been severed in quest of precious ornaments.

2. Small graves with niche chamber situated on the south, southwest or southeast of an oval or rectangular shaft. The upper part of the chamber usually took the form of a narrow chimney and only the lower part was broader, but never more than was essential to deposit a constricted body with bent knees. The chambers were blocked with stone slabs resting against the shaft wall and bottom. These graves were looted just as often as the ones discussed above; however, the bodies were not dislodged in these cases, as if the looters were aware of the modest grave inventory, which consisted of body adornments in the form of beads and rings, and single vessels

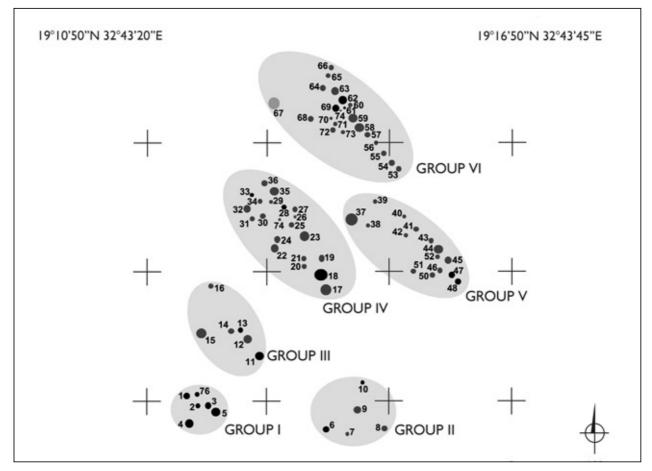
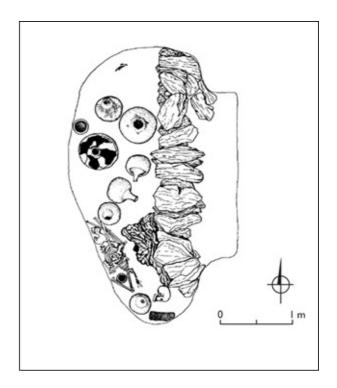


Fig. 2. Es-Sadda 1. Indication of the six grave groups identified on the site (Drawing P. Osypiński)

usually placed next to the body, by the head or chest.

3. Small graves with elongated chamber oriented N-S as a rule, situated centrally at the bottom of a rectangular shaft. Most graves were rather shallow, but the actual depth is quite varied. The blockage took the form of stone slabs laid in an orderly way at the bottom of the shaft. Unfortunately, all the discovered tombs of this type had been looted and the skeletons were found fragmented and dislodged. Judging by the size of the chambers, bodies were laid on the side, although a sitting position cannot be excluded; they could not be placed extended for lack of space. Items from the grave inventories left by looters include small ceramic vessels, as well as glass, faience and



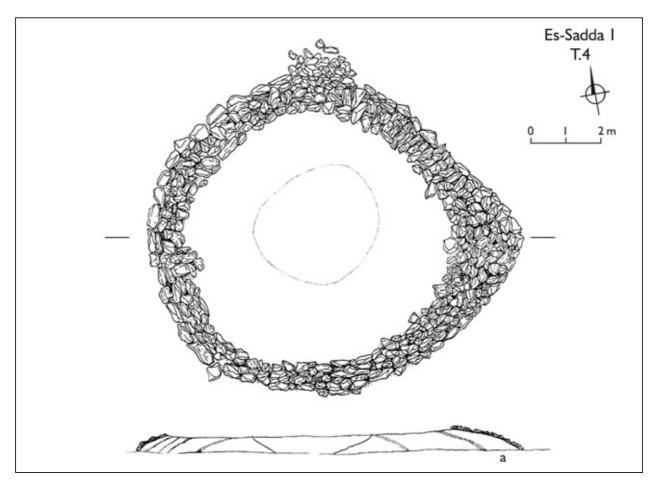


Fig. 3. Es-Sadda 1. Tumulus 4. Superstructure (bottom) and burial chamber (Drawing M. Osypińska)

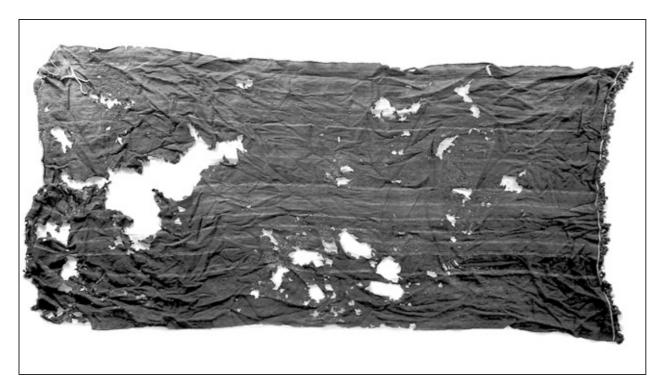


Fig. 4. Es-Sadda 1. Burial shroud from one of the graves with niche chamber (Photo P. Osypiński)

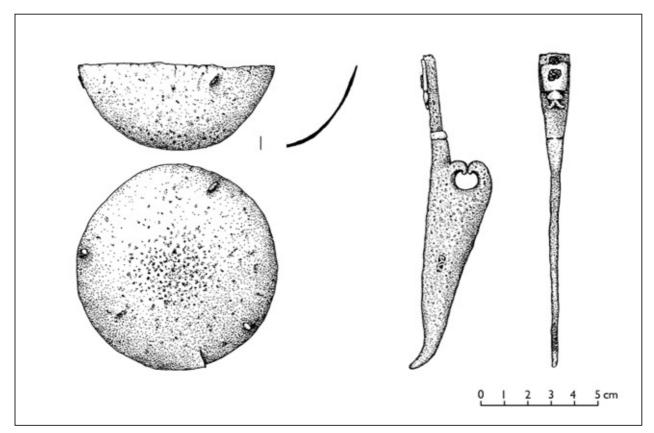


Fig. 5. Es-Sadda 1. Bronze cup and mirror handle from burials with niche chamber (Drawing M. Osypińska)

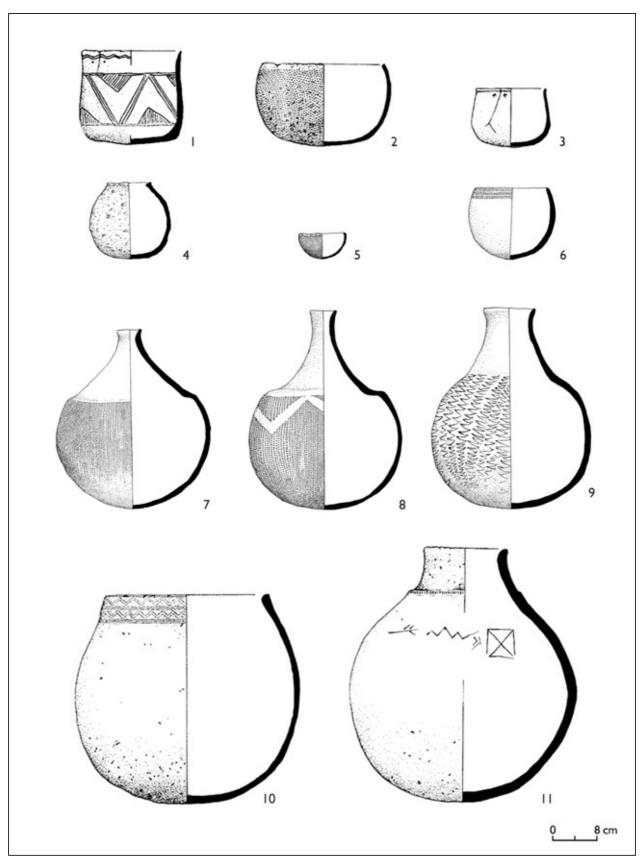


Fig. 6 Es-Sadda 1. Repertoire of pottery shapes from the burials with niche chamber (Drawing M. Osypińska)

stone beads. While the poor inventories are reminiscent of the group of smaller niche graves discussed above, these particular graves had been plundered as thoroughly as the rich tombs. The relatively easy access to the shallow chambers must have contributed to their more extensive destruction.

4. Tumulus 2 was absolutely exceptional as far as the underground section was concerned. Hence, it has been classified as a completely new category. A deep square shaft led to a large niche chamber situated off the northeastern corner of the shaft [*Fig.* 7]. Another unique element was the burial of a dog, most probably in the shaft. An analogous tomb (with diagonally situated chamber and dog burial) was found in the Kassinger region.⁴ The large dimensions of the chamber and evidence of thorough looting imply that originally the grave inventory must have been rather rich.

A sample of 19 explored graves provided data for an analysis of body placement principles, both in relation to the external world and to the micro-space of the grave chamber. In all cases where the original position could be identified, the body had been placed on the left side with bent knees (with no evidence of binding). Traces of organic mats or skins were found under some bodies, but no wooden beds. The orientation of most bodies indicates that the prevailing custom was to place the head to the south (particularly in the richer graves). In the poorer graves, the head was sometimes positioned more to the west. In one solitary case (grave of an infant), the head was placed eastward.

Spatial relationships between body and grave offerings could be observed only in the case of the larger graves [cf. *Fig. 3*]. In the smaller graves, offerings must have also had specified locations, but because of the size of the chamber they could not be placed at any distance from the body. In the larger chambers, bodies always occupied a place by the south wall, whereas the northern end of the chamber was allocated to large as-

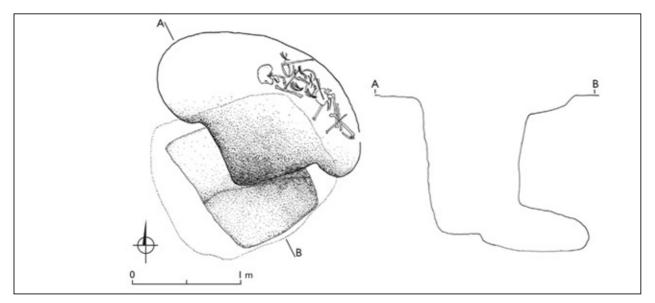


Fig. 7. Es-Sadda 1. Tumulus 2, plan and section through the burial chamber and shaft (Drawing M. Osypińska)

4 H. Paner, "The Hamdab Dam Project. Preliminary report on results from work in the Fourth Cataract region, 1996-1997", *GAMAR* 1 (1998), 115-132.

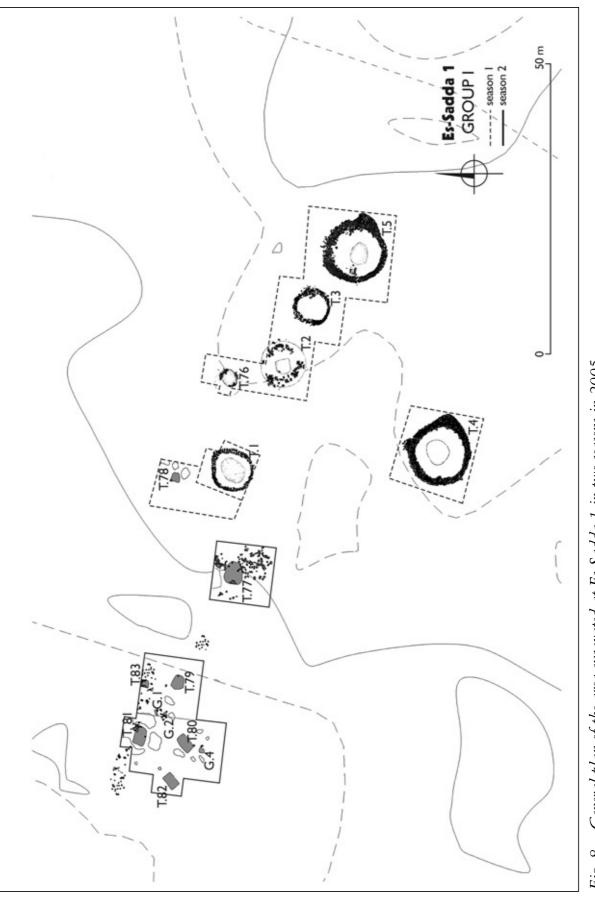


Fig. 8. General plan of the area excavated at Es-Sadda 1 in two seasons in 2005 (Drawing P. Osypiński, M. Sip)

semblages of pottery (beer jars, bottles, pots and bowls) and meat offerings (usually of small ruminants). Small ceramic (including wheel-made) and bronze vessels were placed next to the body, as were also leather bags (quivers?) and weapons, such as spears and arrows with iron heads.

Interestingly, nearly all the graves of categories 1 and 3 above were covered with Type IV and IVa mounds, either large or medium-sized [cf. *Fig. 3*]. Coupled with the characteristic dislodgment and dispersal of body remains, this could suggest some sort of connection between these two grave types. The poor niche graves (category 2 above) were covered with different kinds of

mounds, all of which, however, were medium-sized. This denotes a great degree of variability of visible superstructures of otherwise identical graves.

To recapitulate, the dead buried in the tumuli graves of Group I at Es-Sadda 1 received rich grave offerings. This is unlike other parts of the site where investigations have not confirmed this practice. The collected samples will give a better understanding of the nature of the burials, their age (absolute as well as in relation to burials from other groups) and family relationship. Also, anthropological studies of the population and individual aspects offer a promising research perspective.

FALL SEASON 2005

The area surveyed in the fall season [cf. *Fig.1*] was strewn with stones and full of sand-filled hollows. Post-Meroitic pottery sherds were also registered. In order to reveal all the features and verify whether the stone

scatters were actually remains of destroyed superstructures, the primary substrate (silt) was cleared on an area of c. 430 m² in total [*Figs* 8, 9]. No tangible proof of large mounds covering the graves was forth-



Fig. 9. General view of the excavated area from the west (Photo Ł. Gauza))

coming in this zone and the stones came most probably from the broken blocking walls of plundered burial chambers.

The second season of investigations yielded a total of 10 newly recorded sepul-

chral structures. To distinuish them from the structures with human remains which have been marked as T.x (Tomb), the structures where a body was not found were marked with the letters G.x (Grave).

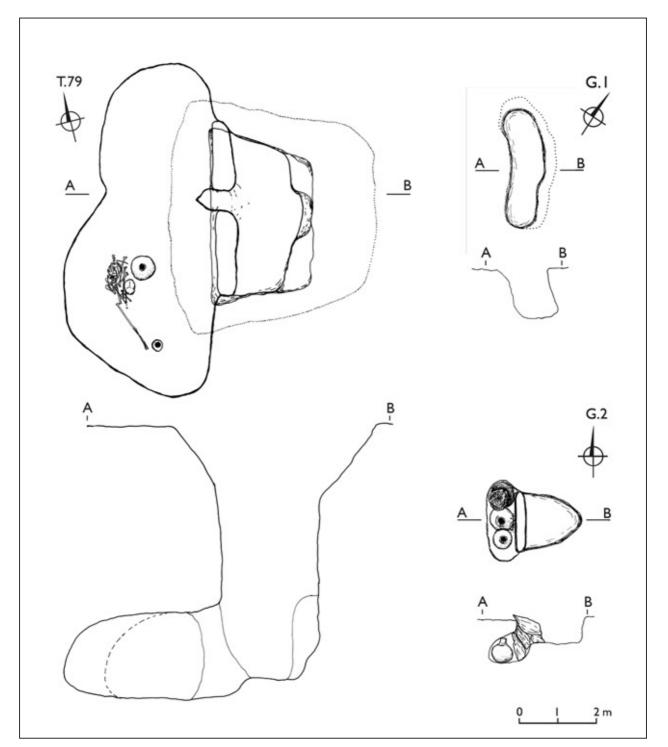


Fig. 10. Plans and sections of burial chambers from Es-Sadda 1: graves G.1 and G.2, and tumulus T.79 (Drawing P. Osypiński, M. Osypińska)

RESEARCH RESULTS

Structure G.1 had a small elongated chamber, more or less E-W oriented [Fig. 10]. It had been plundered completely and only a few faience beads remained at the bottom of the sandy filling deposit, testifying to its potential use as a grave. The form has no excavated parallels on Es-Sadda 1, although graves of this kind are known from other Post-Meroitic cemeteries, where they are sometimes covered with a small mound. They are interpreted as testimony of the penetration of the Christian burial rite into the Post-Meroitic world.

To date, G.2 is the only unplundered Post-Meroitic structure to be located at the Es-Sadda 1 site [*Figs 10, 11*]. It was constructed as a miniature grave with a shallow shaft from the east and a niche chamber below the west wall of the shaft.

A few medium-sized stone slabs were packed into the opening of the niche to block the entrance. All of the available space inside the chamber was occupied by gravegoods, leaving no place for the body. The furniture included two medium-sized handmade bottles with no decoration. Around the neck of one of the vessels there was a necklace made of stone drop-shaped beads, white, black and red in colour. The remains of two funnel-shaped grass-plaited baskets were registered in the northernmost part of the chamber.

Structure G.4 (for structure G.3, see below T.83) was constructed similarly to G.2, but the chamber was situated below the north wall of the shaft. It had been plundered, and grave goods, namely animal bones, a decorated hand-made mug and an

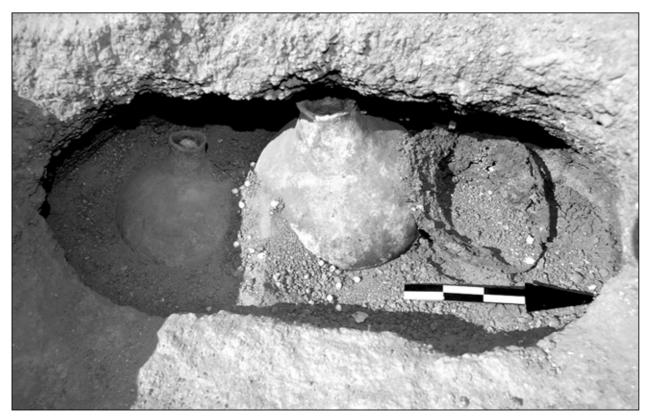


Fig. 11. The chamber of feature G.2. View from the east (Photo Ł. Gauza)

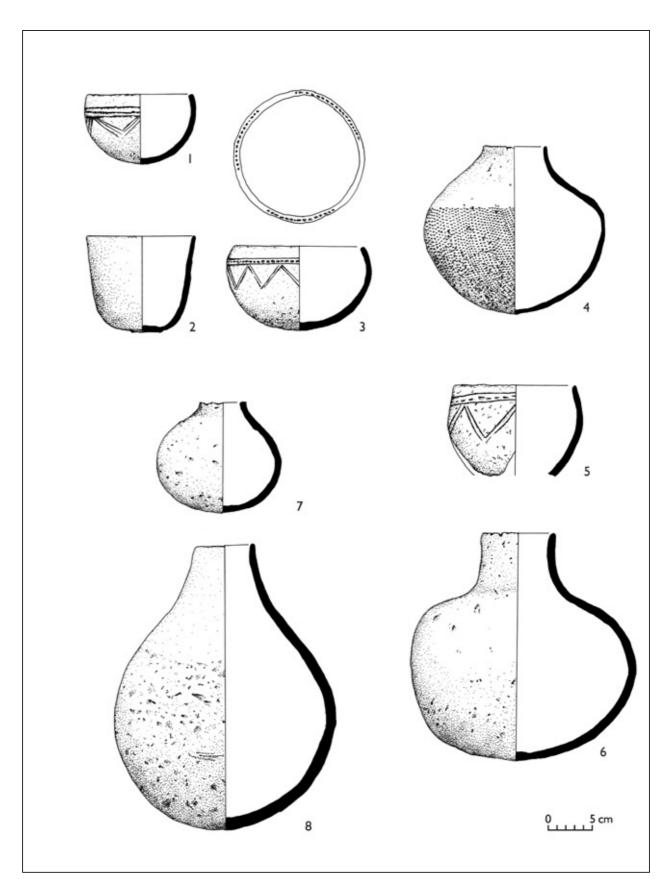


Fig. 12. Pottery recovered from the tombs in Es-Sadda 1: T.77 (1-3), T.78 (4-6), T.79 (7-8) (Drawing I. Marciniak, M. Osypińska)

iron arrowhead, were abandoned in the filling deposit of the plunder shaft. No human bones were registered.

Structure T.77 was a tomb with very deep, slightly trapezoidal shaft and a vast chamber situated below the west wall of the shaft. A pillar dividing the entrance to the chamber rendered distinct the division into the northern and southern parts. The tomb had been plundered in the past, and the only remaining furniture included a fragmentarily preserved cloth with lengthwise redorange stripes and two tiny ceramic vessels, namely a decorated handmade bowl and a tulip-shaped wheel-made cup [Fig. 12:1,2]. Animal bones were registered by the west wall. Fragments of a human skeleton, a small number of faience, glass and stone beads, and two iron arrowheads [Fig. 13:1] were excavated in the opposite, southern part of the chamber. The sand filling the plunder shaft yielded more fragments of large

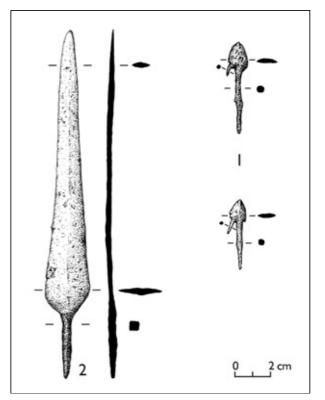


Fig. 13. Metal objects recovered from the tombs in Es-Sadda 1: T.77 (1), T.82 (2) (Drawing I. Marciniak, M. Osypińska)



Fig. 14. Burial chamber of Tumulus T.79 with the bones and grave goods in situ (Photo Ł. Gauza)

ceramic vessels along with a complete decorated bowl [*Fig.* 12:4]. Numerous stones from the entrance blockage were scattered around the mouth of the plunder shaft, giving the initial impression of a destroyed stone cairn. No trace of a mound, however, was registered.

Of all graves excavated during the second season, structure T.78 corresponds in the greatest extent to typological schemes developed after the first season. Like most graves from Group I, T.78 had a vertical shaft with a ramp approached from the east, leading to a niche chamber situated on the west side. A dry stone wall blocked the entrance at the bottom of the shaft. The tomb was plundered in much the same way as the previously explored T. 3, T.4 and T.5. Only a few stones of the blockage were removed from the southern part, where the body was expected to be found, and further penetration ceased after a search of the upper part (arms and chest) of the interred body. The large ceramic vessels in the northern part of the chamber remained intact. A small pot and large bottle were registered [Fig. 12:6,7], both vessels handmade and decorated with impressed textile patterns. Next to the vessels animal bones were recorded. Numerous beads of faience, glass and stone, as well as disk-like beads made of ostrich eggshells were found among the displaced bones of a child's skeleton. The sandy fill of the plunder shaft yielded a large fragment of handmade decorated bowl [Fig. 12:5], single faience beads and fragments of human bones. Just as in case of T.77, the stones of the dismantled blockage were scattered around the mouth of the plunder shaft, suggesting a destroyed cairn, although no traces of an actual mound could be found.

Like T.77, tomb T.79 had a very deep, slightly trapezoidal shaft and a vast chamber, the entrance to which was divided by a pillar [Fig. 10, left]. Although the blockage in the entrance to the northern part of the chamber was found undisturbed, the interior had been plundered. All that remained of the skeleton and grave goods lay in the southern part of the chamber [Fig. 14]. This included two small, plain handmade vessels: beer jar and globular vessel [Fig. 12:8,9], filled with some oily substance. The grave produced also animal bones, beads of faience, stone and glass, as well as a ring made either of bronze or of poor-quality silver. The human bones were greatly disturbed and deposited by the west wall of the chamber. In the sandy fill of the plunder shaft, large pottery sherds were recorded together with fragments of woollen cord, probably the remains of a cloth in which the body had been wrapped.

Structure T.80 was a big rectangular shaft oriented N-S, unlike anything discovered so far at Es-Sadda 1. The niche chamber was situated by the southern, shorter edge of the shaft. The tomb had been plundered and the few remnants of grave goods came from the secondary fill of the shaft: tiny pieces of cloth, stone beads and sherds of large ceramic handmade vessels. The skeleton was badly preserved, some bones revealing traces of erosion in damp conditions.

Structure T.81 had a big rectangular, stepped shaft approaching from the east. The niche chamber was situated on the west side. This tomb had also been plundered. Upon discovery, the body was lying in contracted position, on its right side, presumably turned over to this position by the robbers, who had removed the head and arms. A similar practice had been observed in tomb T.69, excavated in the previous season, albeit there the naturally mummified body had been left on all fours. In the northern part of the chamber, animal bones were excavated, whereas the body was

surrounded by a small number of beads made of faience, glass and stone, and disklike beads made of ostrich eggshells, as well as tiny fragments of iron objects, probably arrowheads. The secondary sand fill in the shaft yielded numerous fragments of large handmade ceramic vessels. The stones of the destructed blockage were abandoned on ground surface at the edges of the shaft and at some distance from it.

Structure T.82 was almost identical in shaft orientation and chamber position to T.80. The tomb had been plundered. Remaining grave goods included a small handmade bowl decorated with textile imprint, recorded in the westernmost part of the chamber. The skeleton, as well as other items of the grave inventory were totally displaced. A small number of stone and faience beads together with a large iron spearhead [*Fig. 13:2*] and tiny fragments of cloth were registered among the bones, just as in the case of T.80. The grave also produced animal bones.

Structure T.83 was called G.3 initially due to its small size. The construction resembled tomb T.81, albeit much smaller. The niche chamber, situated on the west side, was shifted asymmetrically to the south. The plundered remains of grave goods were found in the secondary fill of the shaft. Finds included animal bones, a small number of faience and stone beads and tiny fragments of human bones (necessitating a change of designation to T.83). The small size of the chamber suggests that a child had been interred there. The stones of the disassembled blockage were scattered around the mouth of the plunder shaft, resembling elements of a destructed cairn. However, no traces of a regular mound were found.

CONCLUSIONS

The second season at Es-Saada 1 has provided information about the extent of the Post-Meroitic cemetery, the variety of sepulchral structures and differences in grave orientation. Samples collected for DNA and C^{14} analysis will undoubtedly enrich the picture of the burial rite at the time in question.

The current research yielded tombs with mounds that appeared to be completely destroyed (or had never existed in the first place). This has complemented the picture of burial rites practiced on the site, albeit the reasons for such diversification will be explained once data on the absolute dating of the graves is in.

Two new grave types, utterly different from the previously excavated graves of Group I, should be noted here:

1) graves with deep, slightly trapezoidal shafts and large chambers, the entrances

divided into two by small pillars (T.77 and T.79). Barely preserved grave goods including colorful fabrics and wheel-made pottery point to a high level of affluence of the dead interred in these tombs;

2) graves with large, but not very deep rectangular shafts, oriented northwestsoutheast, with niche chambers on the southwest, by the shorter side of the shaft (T.80 and T.82). The extent of plundering precluded any kind of even tentative reconstruction concerning body orientation and spatial organization inside the chamber. Fragmentarily preserved elements of the grave inventory confirmed the presence of certain ritual elements, like burial shrouds (woolen) and body orna-ments in the form of a couple of stone beads.

Another discovery of the season were grave-like structures that failed to contain human bones, even though to all apparent

likelihood they resembled the tombs with rich inventories (G.2). Moreover, excavation in areas apparently devoid of burials revealed graves of previously unknown construction relating to the Christian burial rite (G.1).

Structures excavated beyond the zone of the mound graves had another characteristic in common that distinguished them from graves excavated in the previous season. Of the 10 excavated structures, as many as six (compared to 2 out of 19 in the previous season) contained animal bones, representing meat offerings. For analysis and discussion of faunal remains from the tomb, see appendix below.

The next season will be devoted to exploring the actual number and spatial relations between graves in Group I in an effort to establish a reference point for the study of burial rites in other parts of the cemetery. This wider-context methodology should vastly contribute to research on Post-Meroitic cemeteries, which, to date, have commonly been associated with grand flat-topped tumuli.

APPENDIX

FAUNAL REMAINS FROM THE POST-MEROITIC CEMETERY IN ES-SADDA 1 (SEASON 2005)

Marta Osypińska

Research conducted in the fall of 2005 in the tumuli field of Es-Sadda 1 has yielded abundant skeletal material of animal origin. During the first season on the site (in February 2005), post-consumption evidence of animals was recorded in the chambers of only two of the graves. In both cases, these were goat remains (Capra aegagrus f. domestica). Fragments of a dog skeleton (Canis lupus f. domestica) were also discovered, including a full skull and metacarpal bones, scattered among the stones thrown out of the shaft by the robbers. Originally, the bones must have been deposited at the bottom of the burial shaft.

The present season in November 2005 abounded in faunal remains, evidence being found in six out of the ten investigated graves (tumuli nos 77, 79, 81, 82, 83 and feature G4). This amounts to a complete change of frequency of such grave offerings in the examined section of the cemetery.

The osteological material was preserved in good condition. All of the bones, including very small fragments, were excavated. They were considerably brittle, however, due to extremely dry conditions of deposition which eliminate organic compounds.

The remains recovered from Tumulus 77 consisted of 24 bones and fragments of bones, all of them belonging to a single specimen of goat (Capra aegagrus f. domestica). The bones originated most probably from the right part of the animal, the most meaty parts of the carcass. This being an adult specimen, the only adult goat so far recorded on site, osteometrical analysis was possible, permitting an approximate reconstruction of the morphological type. Based on the osteometrical data [Table 1], it was found that the animal had been 63 cm high at the withers.¹ This assemblage was also the only one to provide evidence of tools used to quarter the carcass into smaller pieces. Cuts were noted on the outside of the base of the nearer radial bone (elbow vicinity).

The chamber of Tumulus 79 yielded 29 bones of goat (*Capra aegagrus f. domestica*), all coming from a single individual. The

¹ Z. Schramm, Kości długie a wysokość w kłębie u kozy, Roczniki Wyższej Szkoły Rolniczej w Poznaniu (Poznań 1967), 36.

remains represented the right front leg and left back limb. In similarity to Tumulus 77, all the bones represented the most meaty parts of the carcass. Based on bone fusion, it can be said that the goat deposited in Tumulus 79 was butchered before attaining four months of age.²

Tumulus 81 contained 24 bones, again representing a single individual. In this case, the left side of the animal, coming from the meatiest part of the carcass, had been deposited in the burial chamber. The degree of bone fusion observed indicates an almost mature animal, aged around three years. Osteometrical analysis was carried out where possible, reconstructing in effect the animal's height at the withers at 60 cm [*Table 2*].

The faunal remains explored in Tumulus 82 amounted to 19 bones. All represented goat (*Capra aegagrus f. domestica*), most likely a single specimen. They came from both the left and right parts of the body, but in all cases from consumptionally attractive parts of the carcass. Evidence of fusion on the long bones indicated that the butchering took place before the animal was four months old.

The most numerous assemblage of animal remains was noted in Tumulus 83.

Table 1. Osteometrical results for goat remains from Tumulus 77

	Osteometry
Scapula	SLC-16, GLP-31, HS-128, LG-25, BG-20
Scapula	SLC-19
Humerus	Bd-27, SD-15
Radius	Bp-30, SD-16, Bd-30, GL-159
Femur	Bd-33, SD-16, GL-173, GLC-169
Tibia	Bd-27, SD-15

Table 2. Osteometrical results for goat remains from Tumulus 81

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	Osteometry
Humerus	Bd-27, GL-157
Tibia	Bd-26, SD-13
Radius	Bp-29
Scapula	SLC-20, GLP-32
Tibia	Bp-41
Talus	GLm-26, GLI-28, Bd-19
Calcaneus	GL-58

2 A. Lasota-Moskalewska, Podstawy Archeozoologii. Szczątki ssaków (Warszawa 1997).

Altogether 36 pieces, all of them from a single specimen of goat (*Capra aegagrus f. domestica*). The archeozoological analysis demonstrated that only the left part of the skeleton was present in the grave and in this case as well, the parts represented belonged among the most meaty parts of the carcass. The animal was not mature from the morphological point of view (hence no osteometrical measurements were taken), bone fusion analysis revealing that it had not been quite three years old.

Faunal remains were also discovered in Feature G4, which was not a grave and has been interpreted as a cenotaph. It held 19 bones, mostly ribs and lumbar vertebrae. In the absence of diagnostic traits, all that could be said was that the bones belonged to a ruminant. A thigh bone was identified as belonging to a goat and an analysis of bone fusion indicated that the animal had not been quite three years old. However, judging by the size alone, the animal had been a very young representative of its species.

SUMMARY

The frequency of deposits of animal bones in this part of the Es-Sadda burial field leads to the assumption that for some reason it was the rule to make offerings of meat to the dead buried in this part of the cemetery. The species uniformity is interesting to note. The meat of young goats was obviously preferred, although slightly older specimens were also encountered. Osteometrical analysis of the material, as well as an ecofact from this part of the cemetery (a piece of goatskin) have made the morphological type of the animal more specific. Height at the withers oscillating around 60 cm and the long black hair of the piece of goatskin suggested that the offerings were made of a Nubian breed of goats of Mamber type. This particular species was brought into Nubia from Egypt in antiquity.³ The goats are characterized by a height up to 70 cm (males), a long black or brown-black coat and hanging ears. These animals also have an exceptional resistance to difficult desert conditions and nomadic grazing. Further osteometrical analyses, especially of skulls, if any are found, should either confirm or

reject the conjecture that goats of the Mamber type were deposited as meat offerings in the graves at Es-Sadda.

The absence of skulls and lower limbs in the material was sufficient proof of the character of these remains and the role they served in the burial chambers. The presence of the meatiest parts of the carcass demonstrated beyond any doubt that the offerings were made as a means of assuring food, in this case meat, for the dead. It should be noted that these were the best cuts of meat available.

The fact that no other species beside goat is represented in the assemblage from Es-Sadda indicates that goats constituted the chief source of meat for the local inhabitants. The reason for such preferences could have lain in the easy breeding of these animals and their resistance to difficult conditions. Cattle is much more demanding in terms of fodder and is not suited to traveling over long distances, while mutton is in the modern evaluation of the Sudanese people (Mahmoud El-Tayeb, pers. comm.) meat of

³ H. Epstein, The origin of the domestic animals of Africa (Leipzig 1971).

slightly worse quality. These could be indications determining the character of the breeding economy and the kind of animals bred by the ancient population whose dead lie buried in the burial ground at Es-Sadda.