

Title: **Banganarti and Selib. Season 2010** With appendix: **Archaeological research report from Selib 2 (2010 season)**

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BANGANARTI AND SELIB SEASON 2010

Bogdan Żurawski¹

in cooperation with

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with appendix by Roksana Hajduga⁶

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The 2010 season was the last season of archaeological excavations at the churches in Banganarti. The big trial pit in the northern sacristy of the Lower Church and diverse other trenches were backfilled, including the massive Western Building excavation. Considerable effort was put in leveling the archaeological dumps beyond the outer perimeter of the enclosure. Conservation will be continued and the fortifications and architecture inside the enclosure wall will be studied further in future seasons.

At Selib, where in previous years a church was discovered within an enclosure (site 1), the complex continued to be explored as were other promising sites (2 and 3) in the neighborhood.

The aerial (kite) photography program this season produced 4000 images documenting the progress of work on both sites.

BANGANARTI

The excavations at Banganarti concentrated on the fortifications (for an in-depth review and discussion of the enceinte walls in Banganarti and Selib, see Drzewiecki 2013, in this volume). Two trial pits were traced on either side of the Northern Gate on the outside of the wall, 2/III/2010, 10 m by 14 m in size, 16 m to the east of the gate, and 1/IV/2010, 5 m by 3 m, 12 m to the west of it. The objective was to locate a cemetery (reportedly observed in this area by local residents planting palms in the late 1990s) [*Fig. 1*]. Culturally sterile sand was reached in both pits at a depth of approximately 2 m. No evidence of tombs of any kind was found.

Exploration of the Southeastern Corner Tower [see *Fig. 1*] was continued from the previous season (see Żurawski 2011: 273–276). The topmost layers produced fragments of richly decorated, wheel-thrown plates and bowls dated to the 10th–12th century. Digging through the lower layers yielded a collection of mud jar sealings (part of a deposit first tested in 2001). Altogether 49 mud bungs and a couple of ceramic stamps, one decorated with the Raphael monogram [see *Fig. 12*]

Team

Dates of work: 3 January-1 March 2010

Director: Dr. Bogdan Żurawski, archaeologist (then Research Center for Mediterranean Archaeology, Polish Academy of Sciences)

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Archaeologists/documentalists: Katarzyna Molga (undergraduate student, Institute of Archaeology, Nicolaus Copernicus University, Toruń), Roksana Hajduga (undergraduate student, Institute of Archaeology, Jagiellonian University, Kraków)

Iconologist, Christian wall painting specialist: Dr. Magdalena Łaptaś (Cardinal Stefan Wyszyński University, Warsaw)

Restorer: Tadeusz Badowski (freelance)

Acknowledgments

Fieldwork at Banganarti and Selib was carried out on the strength of an agreement between the Polish Centre of Mediterranean Archaeology (PCMA), University of Warsaw, and the National Corporation for Antiquities and Museums (NCAM) of the Republic of Sudan. The Project Director and staff members would like to express their thanks and appreciation to Mr. Hassan Hussein Idriss, Director General of the NCAM, and his deputy, Dr. Salah Mohammed Ahmed, Head of the Excavation Section, for their help, cooperation, interest and understanding. Last but not least, we would like to express our gratitude to PCMA Director Prof. Piotr Bieliński for his ongoing support of the Project.

on page 304] were found. A huge amount of animal bones was also unearthed inside the tower.

Another big trench (Unit 6, see *Fig. 1*) was opened in the western (riverward) part of the south wall. Excavations there brought to light a set of ceramic vessels from the 7th century, including a huge spouted jar decorated on the shoulders with a painted frieze of birds [*Fig. 2*].

Exploration of the area between the east wall of the Raphaelion and the Eastern Building (trial pit 1/E/2010, see *Fig. 1*) uncovered a red brick wall encircling the northeastern corner of the Lower Church and disappearing in the north trench wall. It was substructed with a deposit of unworked limestone and a layer of burnt soil set in pure sand in the northern part of the pit [see *Fig. 3*].

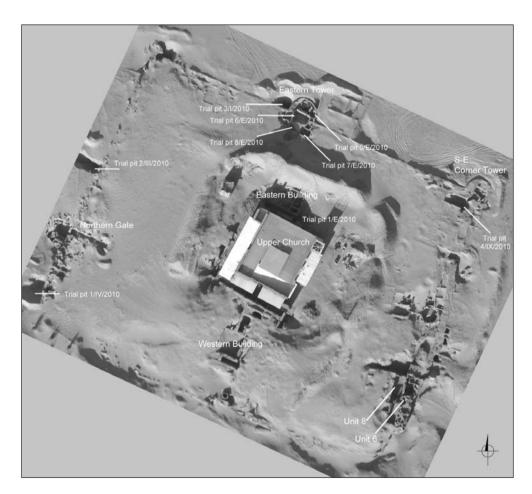


Fig. 1. Site of Banganarti 1 on 27 January 2010; marked trial pits and main structures on the kom; for a plan of the corresponding area, see below, Fig. 1 on page 296 (Kite photo B. Żurawski)

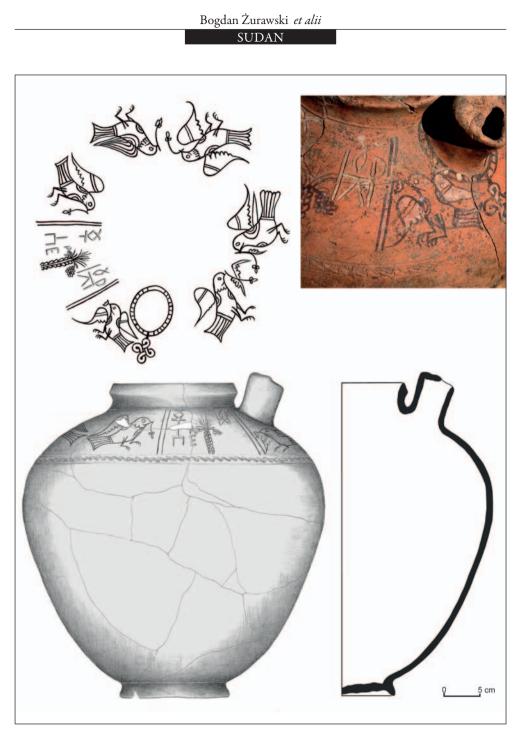


Fig. 2. Spouted jar with a painted frieze of birds on the shoulders (Drawing A. Cedro; photo M. Drzewiecki)

Trial pit 1/2010 excavated inside Chapel 4 of the Upper Church was designed to check ideas concerning the character of the so-called Eastern Annex to the Lower Church that lies directly beneath it. It has been the object of heated debate recently) whether this feature was associated with the baptism ritual [consignatorium?] or was raised as a commemorative chapel for the persons buried in the two impressive tombs located on either side (Żurawski 2004: 237-238). The south wall of the Annex and the eastern face of the west wall of the Lower Church were exposed down to the foundation level (see trench sections 1 and 2 in Fig. 4). The walls appeared to be interbonded from the second (counting from the bottom) brick course of the church (corroborative for the assumption that the Annex was a later addition). The brick pattern in both walls was identical,

clear and regular (courses of alternating headers and stretchers). The foundation foot of the Lower Church wall was found at 4.20 m depth beneath the top of the wall [*Fig. 4*].

The occupancy preceding church construction was attested by a distinctive layer (1) starting 0.50 m above the foundation level (see trench section 3 in Fig. 4). The foundation trench for the Lower Church was dug into this layer. Layer 2 was composed of drifted yellow sand from the time when the foundations were laid and the wall was plastered. On both exposed walls the lower edge of the plaster, marked by a conspicuous setoff, appeared at a height of 1.10 m above the foundation foot. It coincides with clear evidence of a prolonged occupancy registered in the earth profile. Layers 3 and 4 coincided with the liturgical use of

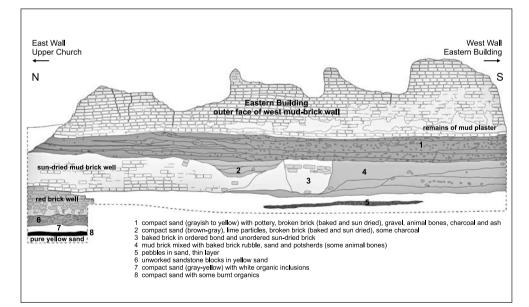


Fig. 3. Section through trial pit 1/E/2010, western face of the west wall of the Eastern Building (Drawing A. Cedro)

the Lower Church. Considerable amounts of charcoal, small fragments of red brick and pieces of lime found in layer 5(a) were suggestive of a conflagration that consumed the Lower Church. Superimposed was a layer of clean drifted sand 5(b), which must have accumulated when the ruins stood useless. Layers 6, 7 and 8 constituted fill associated with the construction of the Upper Church that was raised partly on the walls of its predecessor. The foundation of the Upper Church (10) was laid in the topmost layer of fill (9).

CONSERVATION AND RESTORATION IN THE UPPER CHURCH

Eight patches with inscribed plaster, which had been cut off in 2009 from the eastern supports of the eastern chapel dividers, had been left resting on horizontal supports in the central nave of the church, the inscribed surfaces protected with layers of Japanese tissue paper and fabric. They were now transferred to new places on walls raised specially for this purpose in the western part of the church.

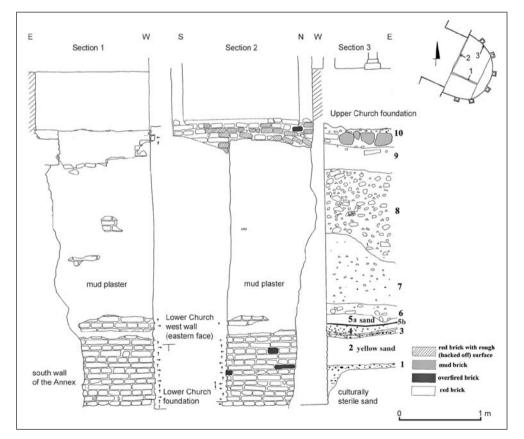


Fig. 4. Trial pit 1/2010 in Chapel 4 of the Raphaelion; for the legend, see accompanying text (Drawing T. Stępnik and B. Żurawski)

A standard transfer procedure was followed: scraping off the rough back side of the fragments, spackling the surface with a paste made of lime, sand and Nile silt (1:2:1) with 10% PRIMAL E-330, insulating the layer once it had dried with a film of 2.5% B-72 paraloid diluted in toluene and gluing an iron mesh to the insulated surface for reinforcement with a paste made of lime, sand, mud and MOWILITH DM-2 (1:2:1:1/4). The destination place for each of the inscribed pieces was crosshatched and consolidated when necessary (including the cutting in some cases of a shallow socket for better mounting stability), then moistened and covered with a paste made of Nile silt, sand, lime putty and MOWILITH D-5 (1:2:1:1/4). Gallets hammered into the wall below its lower edge were used to support the transfers; some of the transfers were also suspended on ropes attached to roof beams. They were then pressed against the wall until dry, after which the pressure pads and pressing stacks of palm ribs were removed and the inscribed surfaces exposed after removing of the protective layers (soaked first in a solution of water with ethanol). The edges were finished with lime putty mixed with sand. The transfers measured $31 \times 21 \text{ cm}$, $44 \times 16 \text{ cm}$, $37 \times 35 \text{ cm}$, $85 \times$ 126 cm, $26 \times 40 \text{ cm}$, $58 \times 48 \text{ cm}$, $53 \times 60 \text{ cm}$ and $16 \times 33 \text{ cm}$.

Topmost on the agenda was the dismantling of the pier that abutted the dividing wall between the second and third chapel of the Upper Church. Before it was done, all the inscribed plaster had to be detached from the wall. The wall was injected with a 10% water solution of PRIMAL E-330 (surface tension being relieved by injections of water mixed with ethanol in proportions 5:1) and a 2.5% solution of paraloid B-72 in toluene brushed onto the entire wall surface. Inscriptions were protected in the standard



Fig. 5. Interior of the Raphaelion with plastered upper section of the walls in the northern part of the khurus (Photo B. Żurawski)

technique with two layers of Japanese tissue and one layer of loosely-knit textile fixed to the ground with 7% gluten glue. The textile was nailed to a wooden frame that was suspended in turn (on ropes) from the roof beams. The red-brick abutment was dismantled brick by brick. At the end only a layer of plaster attached to the framed textile was left. Then the frames with the patches of plaster attached to the cloth were laid flat, face down, on wooden supports. The five new fragments (measuring 47 x 106 cm, 80 x 125 cm, 70 x 127 cm, 78 x 80 cm, 18 x 62 cm) were attached on the west wall following a standard transfer procedure outlined above.

Last but not least, the new brick walls raised on top of standing ancient walls were rendered with lime plaster and whitened with lime wash [*Fig. 5*]. By the end of the season, seven of the eastern chapels had been plastered, as were also four rooms in the southern part and five in the western one. The illumination of the interior of the church was dramatically improved by the whitening, which contributed to better reflection and dispersion of light streaming in through the roof windows (which were made of corrugated Plexiglas).

By the end of the 2010 season the eastern part of the Raphaelion had been brought to a state preceding the main rebuilding phase of the church in the 12th/13th century, which had left the vaults narrowed and the interior progressively smaller due to doubling of the pillars and the introduction of abutments wherever the walls had become excessively vulnerable. Adding to the effect was a new lime render on the exterior wall on the south, accomplished by a team of local plasterers under the supervision of the team's restorer.

CONCLUSIONS

Field research in 2010 confirmed the idea that Banganarti 1 was a fortified settlement that grew around two successive churches dedicated to the Archangel Raphael. The burial of two important personages by the east wall of the Lower Church and the subsequent raising of a commemorative annex appear to stand behind the establishment of a pilgrimage centre that once flourished in Banganarti through the end of Christian occupation.

Admittedly, there has been no evidence for any kind of monastic community living within the enclosure. A group of monks charged with caring for the pilgrims may have lived in a small compound outside the east wall of the enclosure. A communal kitchen, latrines and a huge grain silo (Arabic *gusseba*) by the south enclosure wall were apparently intended for the pilgrims, as well as for the garrison troops stationed in the complex (assuming they were there at the time).

SELIB 1: CHURCH, SAQIYA AND ENCLOSURE

The enclosure at Selib, known locally as *murabba kebir* (Arabic for "big square") despite its rectangular shape [*Fig. 6*; see also *Fig. 2* on page 297], was now investigated (see also Drzewiecki 2013, in this volume).

In brief, it can be said that the wall is from 1.20 m to 1.50 m wide and its construction varied depending on the section. The oldest parts were raised as a core of smaller stones faced on both sides with bigger boulders

(rough and not dressed but laid in a way to produce a smooth surface). This mode of construction prevailed in the corner parts, whereas sections in between were made of mud brick (with some red brick) laid in different bondwork.

The main gate to the enclosure (three other entries have been suggested as well) was provided in its earliest phase with a huge, perfectly worked stone threshold (made of the same material and cut in a manner similar to the columns in the church). The pathway from the gate toward the church was found lined with poorly preserved mud-brick walls.

While the pottery from the exploration of the enclosure wall was mostly not diagnostic, one should note some well-

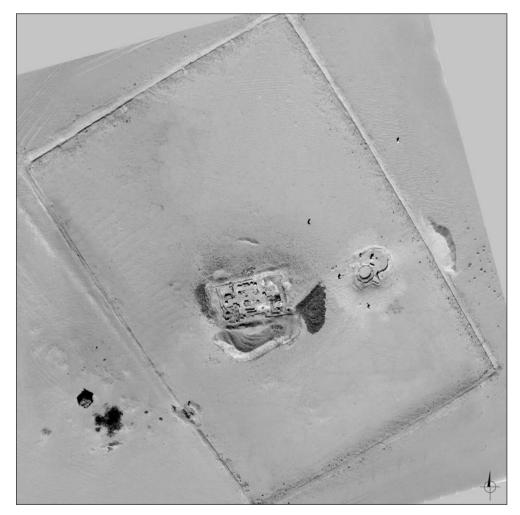


Fig. 6. The site of Selib 1, aerial view following the season in 2010 (Kite photo B. Żurawski)

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Fig. 7. Latest phase of the Selib church (=Red Brick Piers Church), view after clearing of the interior (Kite photo B. Żurawski)

fired red bricks found in the context of the gate; these bricks were partly whitewashed [see *Fig. 11* on page 304]. Similar bricks were found in the eastern part of the Selib church (see below). They were probably dipped in liquid lime to make the lime plaster stick stronger. At least one corner of the enclosure was strengthened with a reused Meroitic(?) column drum (with patches of lime plaster still stuck to it) [see *Fig. 4* on page 298].

CHURCHES

A considerable effort was exerted in the church, where archaeological investigations were resumed in a trench from 2008 in the eastern part of the kom (Żurawski 2011: 259–261). The end outcome was the

clearing of the entire church interior from the latest phase (Red Brick Piers Church = RBC) [*Fig.* 7].

Missing pavement in the eastern part of the church provided the opportunity to dig a stratigraphic trial pit in search of evidence for older phases of the church. It revealed relics of another (earlier) church with a pavement at least one meter beneath the pavement of the church that preceded RBC. This predecessor church was furnished with a baptistery tank in the southeastern corner of the diakonikon, a rectangular compartment rendered with lime plaster, possibly for baptism by aspersion. Another trial pit in the passage behind the apse revealed a wall that apparently belonged to the predecessor church.

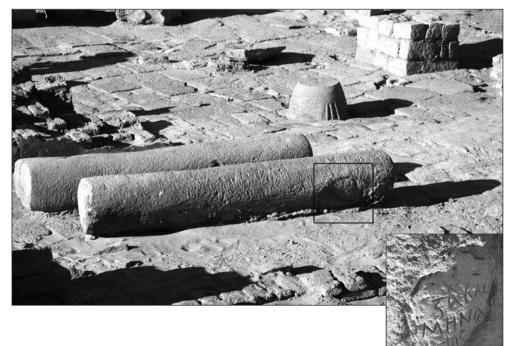


Fig. 8. Two columns lying on the pavement in the southern part of the Selib church; box and bottom right, dedicatory inscription of king Zacharias found on one of these columns (Photos B. Żurawski)

The uncovered, latest phase of the Selib church appeared to be raised on a basilical plan with an eastern passage behind the apse. The apse was uncovered and a stone altar was found next to it. The sacristies were paved with ceramic tiles (some decorated with geometric designs). Stone architectural elements lay on the pavement [*Fig. 8*]. The western part of the building was tripartite and a staircase was fitted into the northern unit. The gallery (if any) and vaulting were supported on massive piers that incorporated capitals from the previous phase of the church, reused as bases.

An inscription cut on one of the columns of ferruginous sandstone found lying on the pavement of the latest church [*Fig. 8*] tells of the building activity in the region of King Zacharias, who dedicated one of the Selib churches to St Menas. Whether the king in question is the Zacharias, father of King Georgios, of the 9th century has yet to be confirmed. The column, however, fits the 6th/7th century capitals found inside the church. If the donor of the church really lived in the 9th century, then the distinctly early Christian columns and capitals found at Selib must have been brought from outside (presumably from an early Christian church destroyed in the 8th/9th century).

SAQIYA COMPLEX

In any case, the dedication of the church at Selib was probably connected with the digging of a well (*matara*) and the installation of a *saqiya* device to draw water. The *saqiya* presumably served the architectural complex anticipated to the south of it. A huge amount of hydraulic lime plaster found scattered throughout the enclosure suggests a bath installation or an Epiphany tank(?). The *saqiya* also evidently watered a garden in the southeastern sector of the enclosure. Evidence of lenses of soil

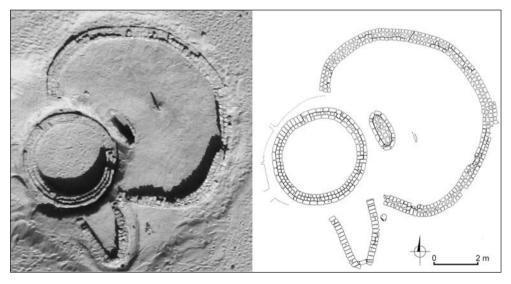


Fig. 9. Saqiya at Selib: bird's eye view and plan of the well (matara) (Drawing A. Cedro; kite photo B. Żurawski)

for planting trees or vines was registered by the geophysical prospection in 2008.

Explorations began with tracing a structure observed on the magnetic map of the area. It proved to be a circular wall of red brick, about 0.50-0.60 m high. It was clumsily built of loosely bonded brick without foundations. An ellipsoidal hollowing lined with red brick in the southern part of this feature [*Fig. 9*] looked like something that was designed to prevent people, who had come to draw water in buckets, from slipping into the well. Further digging led to the discovery of the well itself, which proved to be a couple of meters further to the south. The red brick masonry of this structure proved to be extremely well built. The inner diameter at the top was 5 m, while the depth could not be estimated for now.

SELIB 2: MEROITIC SETTLEMENT

The site of Selib 2 was discovered in 2008 when a huge building was spotted upriver from Selib 1 (see Żurawski 2011: 260) [for an aerial view, see *Fig. 11*]. Excavations showed that the huge building, raised without foundations, was divided into spaces too small for habitation. It seems to have been a storeroom.

The mud pavement of Building 1 (as it is now coded) was found approximately one meter below the present ground level. The fill of this complex and the buildings found to the east of it yielded pottery and a number of objects, like an iron adze and a ceramic tuyere, which suggested the presence of a blacksmith's workshop somewhere in the vicinity. The exploration of Unit 5 adjacent to Building 1 brought to light a rich deposit of ceramic vessels and other objects, including a set of grinding stones. The ceramics (with some imports confirmed) attest to extensive contacts between the Meroitic community living at Selib and the outer world. There is every reason to think at this point that a settlement of workmen, blacksmiths and weavers included, was located around the central storeroom (for more details on this excavation, see the appended report by Roksana Hajduga).

SELIB 3: EARLY CHRISTIAN(?) HOUSE

Another kom concealing remains of early Christian date presumably was located previously half a kilometer from Selib 1 in the direction of the river. Although no graves were found there, it is locally known as *gubbab en-nassara* (Arabic for "tombs of the Christians"). Residents of Selib claim that worked stone blocks were found on the kom in the recent past and that red brick was seen there in 1984 (Grzymski 1987: 9), but neither could be located during the present excavation. Relics of mud-brick walls traced on the surface suggested a squarish enclosure with markedly heightened corners and an elevated central part, standing on a low mound in the middle of flat terrain spattered with Meroitic potsherds. The earlier survey had shown the presence of early Christian pottery on the kom and had also produced fragments of two archer's rings and some potsherds dated to Kushite and Kerma times (Żurawski 2003: 169).

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Testing of the mud-brick remains revealed a single-phase structure, composed of two rooms, one provided with steps leading to the (unpreserved) rooms upstairs [*Fig. 10*]. The outer dimensions of the building were 8 m by 7.70 m. Wall structure suggested the presence of an upper floor. The entrance was in the southeastern corner, approximately 0.70 m above the pavement, and it led onto a platform filled with mud-brick debris, from which three steps descended to the pavement level. The rooms, which were similar in size, that is, 6.70 m by 3 m and 6.70 m by 2.50 m, were devoid of windows and were apparently entered from above. The walls were at least

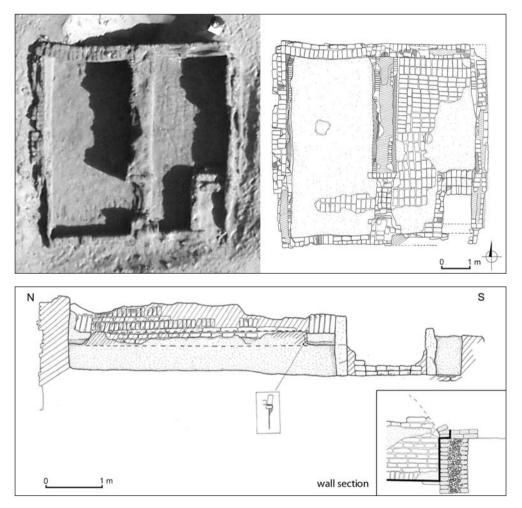


Fig. 10. Bird's eye view and plan of the early Christian house excavated at Selib 3 (top); N–S section (looking E); bottom right, section through an outer wall to show construction technique (Drawing K. Molga and B. Żurawski; kite photo B. Żurawski)

1.80 m high and had barrel vaulting as indicated by the spring of the vault placed 0.70 m above floor level. The floors were paved with mud brick, laid in different arrangements and ultimately covered with mud mortar. The passage between the rooms (in the southern part of the divider) was provided with a threshold (three bricks high).

The outer walls were constructed in mixed technique, their subterranean part being built of a rubble core lined on both sides with brick, whereas the aboveground section was raised in typical brick bond [see *Fig. 10*, bottom right]. The top walls were wider than the lower parts (difference of a single brick) and projected from the outer face (a feature not observed from the outside as the lower part of the wall was concealed under sand).

A trial pit dug against the north wall of the structure indicated that the outer wall was founded approximately 0.30 m beneath the pavement level. The trial pit reached a level one meter beneath the wall foundation. The earth profiles recorded only loose, yellow sand with no traces of human activity (except for a few potsherds). Exploration of the interior yielded mostly fragments of coarse storage vessels, which could be assigned to a late Christian horizon, although the high quality of the masonry, the unusual plan and the ceramics collected outside at a corresponding level would suggest rather a very early Christian dating. An analysis of the stratigraphy showed that the structure had been raised on a layer of drifted sand of unknown thickness and that it had been squatted in at a later time, already after the vaults had collapsed.

In architectural terms, the building sits well in the typology of so-called bipartite houses that appeared in the Middle Nile region already during the Kerma period. The so-called *maison escargot* from Dukki Gel (Bonnet 1986: 35) and houses from the fortress of Sabagura (Deichmann, Grossmann 1988: 63–67, Figs 29a–f; 30, 31) and an "X-Group to Christian site" at Gezira Dabarosa (Hewes 1964: 180, Fig. 3 on page 181) make for good analogies, although in some cases separated by more than two millennia (see also Fitzenreiter 1999: 135–136).

APPENDIX

ARCHAEOLOGICAL RESEARCH REPORT FROM SELIB 2 (2010 SEASON)

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Selib is located in northern Sudan between the Third and Fourth Cataracts, on the right bank of the Nile, upstream 9 km from the Christian site of Banganarti and 20 km from Old Dongola. In 2008, resurveying of the site which had originally been investigated by the Southern Dongola Reach Survey in 1997–1998 and 2003 (Żurawski 1998; 1999; 2004) following earlier surveys by K. Grzymski (1987),

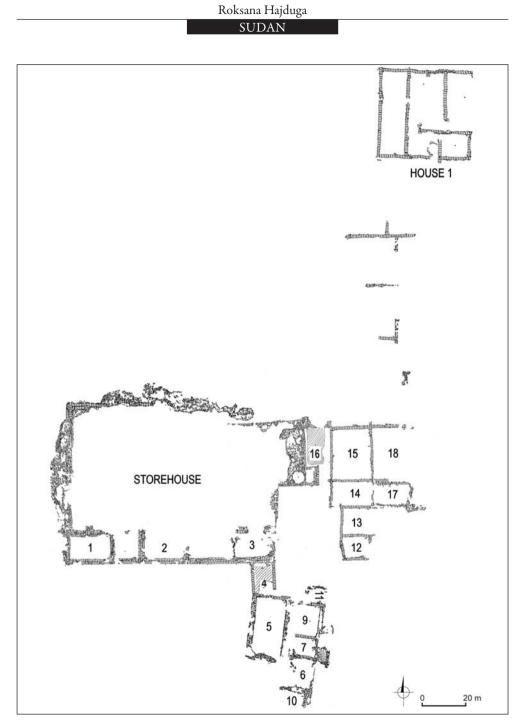


Fig. 11. General plan of Selib 2 following explorations in 2010

uncovered a large urban-type Meroitic settlement, which was coded Selib 2 [*Fig. 11*]. The stratigraphy and chronology of the site was established in effect of archaeological testing in 2010.

The architectural complex (approximately 900 m²), which was mapped, consisted of a large central structure surrounded by a cluster of dwelling houses. Surface clearing of wall tops revealed the plan of the building and its interior divisions [*Fig. 11*]. The walls were preserved only a few courses above the foundation. Nine rooms were explored, three (1-3) in the main complex and the remaining five (4-9) to the southeast of it. Room 4 was attached directly to the wall of the main complex, whereas the big rectangular room 5 and adjacent rooms to its east appeared to have a slightly skewed orientation. This unit, which was explored completely this season, yielded large quantities of pottery, as well as grinders, querns and a substantial set of animal bones.

A series of units was traced to the east of the complex as well. The houses appeared to be rectangular in plan, following a characteristic bicameral configuration, where the smaller room was accessed through the larger one. Of these, unit 16 with a floor of mud mixed with chaff appeared to be a kind of vestibule. A tumbled wall ran from the northwestern corner of this unit straight to the west, then turned to the south reaching room 1 in the main complex. Mud bricks measuring 34 cm by 17 cm were used in construction; the walls were preserved barely a few courses above the mud-brick foundations.

The assemblage of pottery from the Selib 2 site comprised different forms

and styles identified as being of Meroitic provenance, dated to the 1st/2nd century AD (Bagińska forthcoming). Most of the finds were kitchen vessels and simple storage jars. There was also a sizable share of fine tablewares, mostly representing group M in W.Y. Adams' classification. The most numerous group, however, was composed of simple wheel-made kitchenware vessels, group N, which shared certain features with group M, but which were produced of Nile silt [Fig. 12, top]. These came in much bigger sizes. The best known fabrics had a cream or gray surface. Such large jars or bottles may have been used for two different purposes: transport and/ or storage of diverse products. The forms found at Selib 2 had short, narrow necks (or were neckless), and narrow mouths for easy closing and sealing. They also had a narrow or pointed bottom, which did not guarantee stability, hence the need to place the vessels in special stands or to stick them in the ground. The large vessels from Selib 2 usually had no handles. Four storage jars were found in place, one of them neckless [Fig. 12, bottom row]. Several examples of typical storage vessels had large-diameter mouths for easy access to the products stored inside, a large capacity and a wide, flat, stable base.

Large quantities of local amphorae bring to mind the fact that ancient Selib was an insular site located on Tanqasi Island, which is believed to have sustained a substantial viniculture economy. It cannot be excluded, however, that some of these vessels were traded empty, their value inherent in their properties as durable containers.

Pottery with a plain red surface was the most common, but typical classic Meroitic black and white patterning was also

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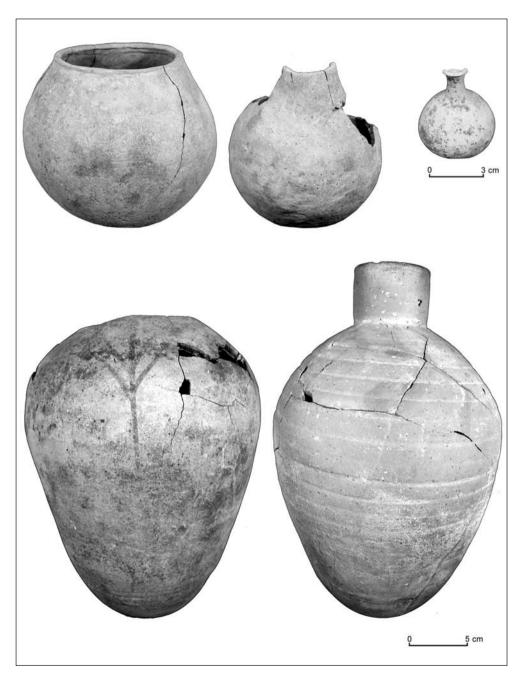


Fig. 12. Handmade kitchen vessels (top two from left), small bottle (top right, note the different scale) and storage jars (bottom) (Photo K. Molga)

encountered. This group also contained a significant number of small cups, bowls and bottles [*Fig. 12,* top right].

Thin-walled "eggshell ware", characterized by high quality and exquisite workmanship, was present in many contexts. Small decorated cups, goblets and bowls were common (Adams 1986: 435). The repertoire of tableware from the excavation indicates extensive contacts between the inhabitants of Selib 2 and several different production centers.

A small percentage of the assemblage was made up of hard pink pottery (Adams' group A), produced in or near Aswan and imported to Nubia in significant quantities, from the late Meroitic until the end of the Christian period. Incomplete forms of these vessels (mainly bases, handles and body sherds) found at Selib 2 were concentrated in the eastern part of the warehouse. Two clay discs with red slip, identified as lids closing a pot before it was sealed with a mud stopper, were found in room 1 of the presumed warehouse and room 5 of the dwelling quarter adjoining it. Similar forms, made on the wheel, were found at Naga (Karla Kroeper, personal communication). Neither of the Selib lids had any signs of being used [*Fig. 13*]. Mud stoppers as such were found in quantity (15 pieces in room 1), but fragmentary. Seven bore stamps, including one of a walking man [*Fig. 15*, center].

Faience beads of globular shape with fluted body were one of the types of beads represented in the assemblages. The socalled arched beads, slightly spherical, with a hole drilled through a long appendage, were the most common. A single example of a quartz bead was located in room 16 [*Fig. 15*, top]. A significant number of

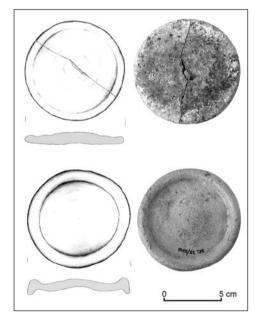


Fig. 13. Wheel-made lids for closing storage jars (Drawing R. Hajduga; photo K. Molga)

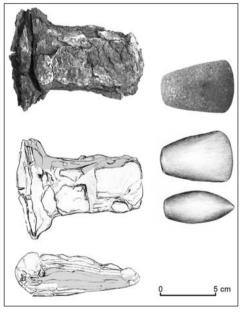


Fig. 14. Adzes: iron (left) and stone (Drawing R. Hajduga; photo K. Molga)

Roksana Hajduga SUDAN Not to scale 5 cm Not to scale

Fig. 15. Faience and quartz beads (top); fragment of mud stopper or sealing with a stamped image of a walking man (center); bronze seal ring with image of an elephant(?) in sunken relief (Drawing A. Cedro, R. Hajduga; photo K. Molga)

ostrich eggshell beads (approximately 150) and semi-processed pieces (approximately 200) were found without context in the northern part of the site. Pieces of polished ostrich eggshells prepared for cutting beads attested to on-site production. The commercial nature of this undertaking is suggested by the sheer quantity of finds.

Remains of a blacksmith's workshop in the form of a ceramic tuyere and two iron objects were found. Two adzes came from unit 5, one of gray granite and the other one of iron. The stone adze is double-edged, 6.6 cm wide, with convex cheek and symmetrical blade about 5 cm long. It was found near a heavily corroded iron adze also with a symmetrical blade approximately 5 cm long and raised helve that is 12 cm long [*Fig.* 14].

Stone finds included also a significant number of stone grinders, pounders and smaller querns. Among other artifacts of metal one should mention a bronze seal ring with sunken stamp image, probably of an elephant, found by a resident of Selib [*Fig. 15*, bottom].

The character of the finds at Selib position the site as a trade and crafts center operating in the 1st and 2nd century AD. Excavations have forced a reexamination of the issue of contacts and Meroitic influence reaching into the area from the political center in Meroe.

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