Artur Buszek, Mariusz A. Jucha

Tell El-Murra (North Eastern Nile Delta Survey) : Season 2008

Polish Archaeology in the Mediterranean 20, 177-182

2011

Artykuł został opracowany do udostępnienia w internecie przez Muzeum Historii Polski w ramach prac podejmowanych na rzecz zapewnienia otwartego, powszechnego i trwałego dostępu do polskiego dorobku naukowego i kulturalnego. Artykuł jest umieszczony w kolekcji cyfrowej bazhum.muzhp.pl, gromadzącej zawartość polskich czasopism humanistycznych i społecznych.

Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.



FGYPT

TELL EL-MURRA (NORTHEASTERN NILE DELTA SURVEY) SEASON 2008

Mariusz A. Jucha, Artur Buszek²

1,2 Institute of Archaeology, Jagiellonian University

Abstract: The Project aims at carrying out an archeological survey of the northeastern part of the Nile Delta and locating archeological sites from Predynastic and Early Dynastic periods. Sites visited during the first season included Tell Akhdar, Gezira Sangaha, Tell Gezira el-Faras, Tell Ginidba, Tell Abu Umran and Tell el-Murra, which – as the most interesting of these sites - was chosen for further research. It included magnetic prospection and geological core drillings. Most surface pottery material shows affinities to Old Kingdom forms, with some pieces similar to Early Dynastic shapes. The core drillings indicated that surface strata from the Old Kingdom may overlie older occupation layers. Regular (linear) anomalies observed on the magnetic map seem to correspond to remains of mud-brick walls.

Keywords: Tell el-Murra, Egypt, Nile Delta, Predynastic, Early Dynastic

The Project aims at carrying out an archeological survey of the northeastern part of the Nile Delta in the governorate of Ash-Sharqiyyah, locating in the process archeological sites from Predynastic and Early Dynastic periods. Sites visited during the first season included Tell Akhdar, Gezira Sangaha, Tell Gezira el-Faras, Tell Ginidba, Tell Abu Umran and Tell el-Murra.

The site of Tell Akhdar has been badly disturbed by modern military installations. The pottery situated on the surface suggests occupation also from periods later than

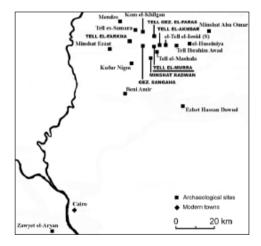


Fig. 1. Location of archaeological sites in the northeastern part of the Nile Delta (After S. Hendrickx, E.C.M Van den Brink, Inventory of Predynastic and Early Dynastic cemetery and settlement sites in the Egyptian Nile Valley [in:] E.C.M. Van den Brink, T.E. Levy [eds], Egypt and the Levant. Interrelations from the 4th through the Early 3rd Millennium BCE, London–New York: Leicester University Press 2002, 366, Fig. 23.2)

the Predynastic and Early Dynastic. In the surveyed part of Gezira Sangaha virtually no anthropogenic remains were attested. Several small, mud structures were visible in a section, but their function and dating remain uncertain for lack of pottery artifacts. Tell Gezira el-Faras is overbuilt by a village and a cemetery, so it was excluded from any further work. Several pottery fragments observed on the surface seem to belong to the Early Dynastic–Old Kingdom period shape repertoire. Tell Ginidba and Tell Abu Umran are presently under archaeological investigation by Egyptian teams.

Tell el-Murra [Fig. 1] proved to be the most interesting of the visited sites. It still stands several meters above the level of the surrounding fields and has remained undisturbed by modern activities except for a few parts of the site which have been leveled. Moreover, pottery fragments observed on the surface during the first visit at the site showed an affinity to pottery dated to the Old Kingdom, thus triggering further research which included geophysical prospection (for the results, see below) and geological core drillings.

The geological core drillings indicated that surface strata from the Old Kingdom

most likely overlie older occupation layers, presumably of Early Dynastic and even Predynastic periods. This conclusion seems to be confirmed by the presence of pottery material found at different depths. Core drillings revealed also that the underground water level in different parts of the tell occurs approximately 2–3 m below the level of the fields. There is reason to believe that the older layers are situated above the water level and are therefore archaeologically accessible.

The surface collection of sherds [Figs 2, 3] was classified by type and chronology, giving a preliminary idea of site chronology. The assemblage was also compared with other material collected during the survey and with the results for other sites in the Nile Delta (Tell el-Farkha among others).

The pottery collection shows affinities mostly to forms characteristic of the Old Kingdom, though some pieces are similar to Early Dynastic shapes. Forms included different types of coarse ware jars with simple rim or lip-rim [Fig. 2:7], among them fragments of beer jars [Fig. 3:6], typical of the Old Kingdom period. Different types of fine ware jars with direct or lip-rim [Fig. 3:5]

Team

Dates of work: 15-23 April 2008

Director: Dr. Mariusz A. Jucha (Institute of Archaeology, Jagiellonian University)

SCA representative: Abd el-Salam Mansour Abd el-Salam (Faqus Inspectorate)

Archaeologists: Prof. Krzysztof M. Ciałowicz (Institute of Archaeology, Jagiellonian University, Kraków), Dr. Marek Chłodnicki (Archaeological Museum in Poznań), Marcin Czarnowicz (PhD candidate, Institute of Archaeology, Jagiellonian University)

Archaeologist and Geophysicist: Artur Buszek (PhD candidate, Institute of Archaeology, Jagiellonian University, Kraków)

Student-trainees from the Institute of Archaeology of the Jagiellonian University in Kraków

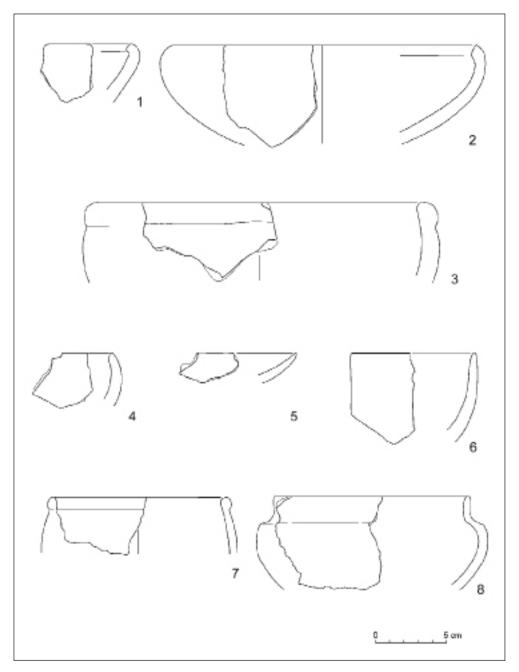


Fig. 2. Pottery: bowls with thickened internal rim (1-2), convex-sided bowls with lip rim (3) and plain rim (4-6), jar with lip rim (7), Meidum bowl (8) (Drawing M.A. Jucha)

were also found, as was a fragment of a fine ware cylindrical jar [Fig. 3:4]. Other forms included bowls with convex sides and a simple rim [Fig. 2:4–6] or lip-rim [Fig. 2:3], as well as forms with thickened internal part of the rim [Fig. 2:1–2]. Several examples of typical Old Kingdom Meidum bowls [Fig. 2:8] were also attested. Other

rough ware forms included trays, vats with lip-rims, and bread moulds [Fig.3:1-3]. The latter occur very frequently and featured examples belonging to shallow forms (generally wider than their height), slightly deeper ones, as well as medium-deep to deep ones with an angular transition dividing the body into two zones [Fig. 3:1].

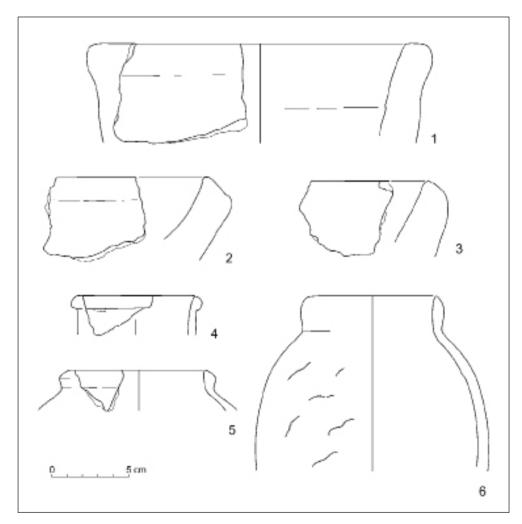


Fig. 3. Pottery: bread molds (1–3), fine-ware cylindrical jar (4) and jar with lip rim (5), beer jar (6) (Drawing M.A. Jucha)

180

Occurring among them were examples with rounded, flat or slightly concave rim top as well as examples with slightly thickened internal part of the rim.

Testing and regular excavations are expected to follow the geophysical survey,

which has demonstrated that the Tell el-Murra site goes back to the Old Kingdom period and may also include remnants of occupation in the Early Dynastic and Predynastic periods.

[MAI]

MAGNETIC SURVEY AT TELL EL-MURRA

Magnetic prospection of the site was carried out anticipating the presence of mud-brick architecture. Geophysical investigations at several sites in the Delta region have already proved the high efficiency of the magnetic method in detecting structures built of Nile mud (Herbich 2003).

FM 256 fluxgate gradiometers by Geoscan Research were used.1 sampling grid was 0.25 m by 0.50 m (measurements were taken every 0.25 m along lines traced 0.50 m apart). A parallel mode of measurements was applied, i.e., the instrument was moved in one direction only. The measured units were 20 m by 20 m. A log zero drift procedure at the reference point was performed after completing every unit. The measurements were processed preliminarily using Geoplot 3.0 software (by Geoscan Research); gray-tone magnetic maps (i.e., maps of changes of intensity of the Earth's magnetic field) were plotted using Surfer 8.0 (by Golden Software). The range of recorded readings was between $-20 \, \text{nT} \text{ and} + 20 \, \text{nT}.$

Two areas of the site were investigated, one at the foot of the tell, the other in the high part of the mound [Fig. 4].

No manmade structures were detected in the low part of the site, thus a hypothesis that settlement remains have been preserved in the area around the tell could not be confirmed. One should bear in mind, however, that the prospected area was small and that

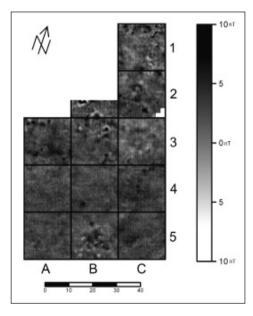


Fig. 4. Magnetic map of Tell el-Murra. Fluxgate Geoscan Research FM36 gradiometers. Sampling grid 0.25 m by 0.50 m, interpolated to 0.25 m by 0.25 m. Dynamics -10 nT (white)/+10 nT (black). Grid lines every 20 m (Processing A. Buszek)

I would like to thank Tomasz Herbich (Institute of Archaeology and Ethnology, Polish Academy of Sciences) for the loan of geophysical surveying instruments.

the credibility of any survey covering a small area is low, the data being rather difficult to interpret.

Prospection of the high part of the site gave more information. Features observed on the magnetic map seem to correspond to remains of a settlement. It also seems that the magnetic map reflects the orientation of buildings, which parallels the cardinal directions. Irregularly shaped anomalies in squares B2 and C2 correspond to small dumps of potsherds. Regular (linear) anomalies could correspond to mud-brick walls of different thickness, although the low amplitude of readings and low contrast with values for the surrounding area hinders a detailed reconstruction of the building layout. The structure visible in the northern part of the surveyed area, to the left of squares C1-2, could reflect a wall corner, most probably the north-eastern corner of a bigger structure. In the south-eastern part (upper, right part of square C5), an

anomaly running north-south could be a reflection of a wall. Taken together, these anomalies could represent fragments of an enclosure wall (approximately 2 m thick). Anomalies next to the wall (in square B5) correspond to modern animal burrows. In the central part of the map (squares B3–C3), structures of smaller size can be seen.

Magnetic values in the low ranges are typical of mud architecture. The weak distinctiveness of features interpreted as mud-brick walls could result from the depth at which the mud remains are preserved.

Although magnetic mapping failed to produce an intelligible site plan, it reflected the existence of settlement remains and demonstrated the efficiency of the magnetic method in recording structures not discernible on the surface. The present results have shown potential for this method in further prospection of the site.

[AB]

Dr. Mariusz A. Jucha Institute of Archaeology, Jagiellonian University 31-007 Kraków, Poland ul. Gołębia 11 e-mail: m.jucha@uj.edu.pl

Artur Buszek Institute of Archaeology, Jagiellonian University 31-007 Kraków, Poland ul. Gołębia 11 e-mail: artur.buszek@gmail.com

REFERENCES

Herbich, T.

2003 Archaeological geophysics in Egypt: the Polish contribution, *Archaeologia Polona* 41, 13–55

182	