# TELL EL FARKHA (GHAZALA) INTERIM REPORT, 2000 

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The present campaign, sponsored by the Poznan Prehistoric Society, the Institute of Archaeology of Jagiellonian University in Cracow, and the Polish Centre of Archaeology of Warsaw University, lasted from May 6 to July 27, 2000.

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## EGYPT

## WESTERN KOM

Exploration of the western kom at Tell el Farkha, initiated in 1998, has progressed from the seriously eroded far southeastern end, through the central part ( 10 by 15 m ), where in view of the complicated stratigraphy and extensive assemblage of finds no more than the eastern half was exposed.

The western part was explored to a depth of c. 2 m in 1999 and completed over the course of the current season. Subsequently, three new squares, each 5 by 5 m , were opened north of the previously investigated eastern part of the trench (Fig. 1).


Fig. 1. Research carried out in the 2000 field season
(Drawing M. Żarska-Cbtodnicka)

Our earlier conclusions concerning the five main occupation phases of the western kom, ${ }^{2)}$ while requiring some revision, have generally been confirmed.

A characteristic ceramic horizon and typical architecture mark the oldest phase linked to Lower Egyptian culture. It is followed by a layer of a dozen or so centimeters, still yielding Lower Egyptian pottery, but no longer structures of any kind. It could mean, although not necessarily, a temporary abandonment of the site. Lower Egyptian pottery continues to be a characteristic of Phase 2, but complemented already with Nagadan forms. The same may be said of the architecture, with structures typical of the northern cultural sphere appearing right next to mudbrick buildings that are believed to be characteristic of settlers originating from the south. This seems to be a transitional stage, confirming the coexistence of these two assemblages at a time more or less contemporary with Nagada IId2 (after W. Kaiser's chronology) or else the beginning of IID2 (according to S. Hendrick's system). It should be treated as a terminal stage of Lower Egyptian Culture in this region and at the same time the earliest moment for the arrival of settlers from the south. Phase 3 is already fully Nagadan in character, dated by the potsherds to Nagada IId2/IIIa1-IIIa2(?) or the end of IID2-early IIIA1(?). The cultural tradition from the south seems to have been fully adopted by then. A prevalent set of vessels typical of Nagada IIIa2 and IIIb (IIIA1-IIIB) distinguishes Phase 4, while Phase 5, identified in the highest layers, is characterized by an assemblage typical of transitional Nagada IIIb/IIIc1 (terminal IIIB-IIIC1), that is,
the rule of the zero and early first dynasties. As chronologically younger pottery has been encountered only on the surface in the part of the kom explored so far, the putative suggestion is that the western kom had already been abandoned by the early First Dynasty.

In 2000 work concentrated primarily on the oldest phases of settlement on the site, that is, phases 1-3. The discovery of structures that are unique in not just the Delta, but all of Predynastic Egypt, has led to a considerable modification of currently held views on many issues. It should be kept in mind, however, that because of the monumental size of some of these structures, big parts of the buildings still remain unexplored. The ultimate description and interpretation of these complexes will be possible only after more seasons in the field.

At a depth of c. 2.10 m below ground level (c. 5 m a.s.l.) a mudbrick structure was outlined under two layers of deposits, of which the bottom one was undoubtedly a layer of burning with black, occasionally red burnt soil and lighter ashes. On top of this there was a layer of steel-gray clay, varying in thickness from a few centimeters in the south to over 20 cm in the north and practically devoid of archaeological artifacts. It provides indubitable proof of the structure burning down at some point and then being flooded by the Nile. The building had at least two occupational phases. To judge by the ceramic evidence, the older stage started sometime at the end of phase 2 and lasted into phase 3. The later stage is to be dated to phase 3, while the catastrophic fire and flood should presumably be placed in the early part of phase 4.
2) Cf. M. Chłodnicki, K.M. Ciałowicz, PA M XI, Reports 1999 (2000), 61-68.


Fig. 2. Western Kom. Southern corner of the Nagadan building (Photo R. Staboński)


Fig. 3. Western Kom. Vertical cross-section through the Nagadan Building (Photo R. Staboński)

A structure of younger date and of a size that may be designated as monumental comprises a wall 2.5 m thick following a NE-SW direction, which is common in Tell el Farkha. At the southern extreme, it ends in a big rounded corner (Fig. 2). Since sections of the same wall have been identified in one of the new pits abutting the explored trench on the northeast, it may be said that the structure measured at least 17 m in length and 12 m in width. The wall was actually made of two differently constructed sections (Fig. 3). The inside part was erected of yellowish brick with a considerable amount of sand, bonded in a dark-gray mud mortar. The outside face is definitely of mudbrick bonded in a light yellowish mortar tempered with sand. Within the wall, at the junction of the inner and outer parts, three round pits ( 1 m in
diameter) were distinguished next to one another, the distance between them being 1.25 m and 1.00 m . As the same layer of burning and mud that covered the building lay on top of these installations, they must have been integrally connected with the structure. Small potsherds and ashes found inside these pits do not help in identifying the function. The pits may have had a structural purpose or they may have been used as a place for installing big storage vessels. In the latter case, however, the wall would have been of different width in the top part - from 0.5 to 1.00 m - something that seems fairly unlikely, considering the apparent homogeneity of the bottom part, constructed, as described above, of the two kinds of bricks (Fig. 4). Inside the building there was a much damaged brick floor (cf. cross-section of the structure in Fig. 3).


Fig. 4. Western Kom. Outer wall. View from the south (Pboto R. Staboński)

The layer of ashes yielded a great many thin "tiles" of clay, baked red-brown, with impressions of plants and human fingers. They are probably what is left of the clay coating that had once covered the roof made of organic substances.

The structure described above should be considered in connection with a building discovered in the previous season and already reported, featuring a considerable concentration of finds and storage vessels found in situ. Not only were the two structures recorded on the same absolute level, but also parts of the earlier excavated building have been noted in the trenches newly opened this year. Before describing the new discoveries, a brief review of the previous season's findings is in order.


Fig. 5. Western Kom. Storage vessel standing in a bowl (Photo R. Staboński)

A rectangular space was found to adjoin a thick ( 80 cm ) wall aligned NE-SW for 11.70 m in its northwestern part. This room was almost 7 m long (identified in the present campaign) and had 50 cm -thick walls on the west and south. Successive floors were made of clay and most probably covered with a kind of lime mortar. Inside this space, especially in the southern part, there were considerable quantities of artifacts - numerous potsherds, but also two complete storage vessels with conical bottoms, standing in pits thickly lined with mud. A third vessel was fragmentarily preserved and there were six small vases, two with fish bones, lying on the floor, next to a flint knife and the flat ledge of a big stone vessel. A structure with rounded corner ( $1.20 \times 1.50 \mathrm{~m}$ ) abutted the room on the south; it was surrounded with a low brick wall equal in width to the thickness of one length of brick (c. 30 cm ). A similar wall surrounded a semicircular space (c. $4.60 \times 4 \mathrm{~m}$ ) adjoining the main wall on the southeast. To the north of it, a few groups of bricks, scattered in different directions, could possibly reflect the presence of a floor. The walls of this complex have been preserved to a height of $40-50 \mathrm{~cm}$; they were constructed of layers of brick well visible in places, bonded in a kind of lime mortar and founded on an obvious layer of destruction. ${ }^{3)}$

This year a continuation of the described complex was discovered to the north of it. It is an almost square space (c. $4.5 \times 5 \mathrm{~m}$ ) with two bottomless storage vessels, one standing in a lump of pure clay, the other in a bowl (Fig. 5). The scatter of finds here included complete miniature vessels. The evidence clearly points to a rather sudden abandonment of the complex.
3) Cf. ibid., 63.

The building in the lower layers was fundamentally different. There is an obvious level of destruction under the southern part of the rounded corner, broadening toward the outside of the wall. In effect, the inner part, made of sand bricks, forms a rectangular corner on the south, while the mudbrick part is reduced to just one row of bricks. The width of the wall is 1.60 m . The main wall is further reduced in thickness and the division into smaller compartments is evident under the layer of destruction (Fig. 6). Since the uncovered part obviously constitutes the foundation, a casemate construction may be assumed: relatively thin walls ( 0.30 0.60 m ) forming spaces that were later filled with earth.

It is noteworthy that relatively thin walls have also been recorded east of the main wall, possibly constituting the remains of adjacent buildings that must have been much like the ones described above. They had abutted from the east buildings that belonged to on older phase of the complex and were presumably destroyed by the latter. Under the last layer of the building (Fig. 7) a level of mud that is practically sterile archaeologically may be evidence for a temporary abandonment of the site. This flooding of the Nile occurred before the Nagada settlers arrived at Tell el Farkha.

The interpretation of this complex cannot be fully undertaken at the present stage. The size of the structure and the thickness of the main wall are noteworthy and it is apparently the biggest Nagadan structure discovered in Egypt so far. One wonders what role it had served and who were the people inhabiting it. Why was it erected in a place that could not have been presumably an important center of the emerging state? The undecorated clay seals found inside the building, along with
numerous small finds (small clay cones and perforated and unperforated pellets), which could have served for counting purposes, and potsherds possibly of Palestinian origin may constitute evidence of the considerable role of commerce in the life of the site's inhabitants. Perhaps we are dealing with a residence combined with stores, serving the trade between Upper Egypt on one hand and the Delta and Palestine on the other.

Indubitably connected with phase 2 at Tell el Farkha is a structure, which following the investigations of the previous season was construed as related to some domestic activities requiring the use of fire. Of interest were bricks of a characteristic shape, different from the common sort in that they were flat on one side and convex on the other, resembling the letter " $D$ " in section. Bricks of this kind, commonly designated as fire-dogs, are also present in other layers at Tell el Farkha, as well as at many other sites, but they have never been found in any recognizable arrangement outside of Abydos and Hierakonpolis. The highest level of the building was found on the same absolute level as the deepest layers of the Nagadan structure discussed above. The 4 by 4 m structure comprised (as it turned out in the lower layers) three adjacent circles. Its edges were surrounded by stacked and inconsistently burned D-shaped bricks, ranging from mudcolored to red and even entirely black. It is noteworthy that mudbricks constitute a significant majority in the lowermost layer, suggesting apparently that the firing was quite accidental. Outside the circles three post-holes were recorded, the posts presumably supporting the roof. Numerous flat pieces of clay, thin and baked, with impressions of plants and human fingers (similar to the ones discovered in the

Fig. 6. Western Kom. Outer wall and "casemates". On the right a phase 2 structure (Photo R. Staboński)


Fig. 7. Western Kom. Last layer of the older phase of the Nagadan building (Pboto R. Staboński)

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structure described above), coming from the layer of ashes and burnt earth inside the structure, are also in this case suggestive of a roof that had been made of organic substances and coated with mud.

Below the burnt earth, a layer of D-shaped bricks following a different arrangement was uncovered. The next level finally yielded conclusive evidence of a circle, $0.40-0.60 \mathrm{~m}$ in diameter, formed of D-shaped bricks inside each of the circular elements of the structure (Fig. 8). In the center there was a flat brick and around it, a number of bricks set into the ground at an angle, intended as a support for the big, relatively narrow-bottomed vats that had once stood on the round substructures (some sherds of thick-walled vessels of this variety were found in the fill). Another
interesting feature is the white burnt clay deposited inside the installations.

The difference in brick shapes should also be emphasized. Some are simple (of different length) with sections ranging from practically semicircular to trapezoid and even almost triangular. Others, which are also of different length, are flatter and evidently concave at one of the ends, the depression having been made carelessly with finger impressions clearly visible on the side walls. The two kinds of bricks can be put together so that the convexity of one fits the concavity of the other. The flat bricks presumably either lay on the ground or were dug into it, and the convex ones lying in the depressions projected upwards, supporting the vat or vessel.


Fig. 8. Western Kom. Bottom layer with visible circular supports for vats and bricks sticking out at an angle (Photo R. Staboński)

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Fire was used inside the substructures to heat whatever was inside the vats. It may have been a place for brewing beer. Assuming this conclusion is borne out, then what we have here is the oldest known brewery from the Nile Delta, the only older one being the brewery from Hierakonpolis. ${ }^{4)}$

The most recent discoveries that refer to phase 1 at Tell el Farkha are also surprising and unparalleled on the whole. While fragmentary structures of the kind discussed above are known from other sites in Lower Egypt (e.g. Maadi and Buto),
nowhere have they been preserved in such condition and nowhere are they equally big. About 0.60 m below the bottom of the Nagadan building of phase 3, a Lower Egyptian structure was found to extend over practically the entire excavated area (10 by 7 m ). The thick layer of silt covering it hindered explorations considerably (Fig. 9), proving, however, that the flooding of the gezira at Tell el-Farkha (before human activity resulted in a significant raising of its level) and more or less extensive periods of abandonment were relatively frequent. The building,


Fig. 9. Western Kom. Uppermost level of the Lower Egyptian structure (Photo R. Staboński)
4) J. Geller, "From Prehistory to History: Beer in Egypt", in: R. Friedman, B. Adams (eds.), The Followers of H orus. Studies Dedicated to M.A. H offman (Oxford 1992), 19-26.
which like all the later ones was oriented to the NE, must have had walls of organic substances. All that remains of the structure are relatively narrow furrows (from 10 to 30 cm wide) filled with a brown soil or flood silt. Explorations revealed two or even three phases of rebuilding. The principal part of the youngest structure was at least 11 m long and 4.50 m wide, divided into many small compartments and containing many mudlined pits (from 0.20 to 1.00 m in diameter). Some of these, especially the ones within the outline of the furrows,


Fig. 10. Western Kom. Last layer of the furrow structure (Photo R. Staboński)
must have been of structural importance, serving to position posts that had once supported the walls and roof. Other pits, which were found inside the room, could have served as vessel stands. The biggest of these pits, sometimes bearing obvious evidence of burning and yielding D-shaped bricks, could have been used as fireplaces.

West of the main building there is a room or courtyard with a wall of organic substances to the north, but without the interior division into compartments. The rest of the structure is to be found presumably in the as yet unexplored part of the site.

The older phase is characterized by reduced dimensions on both the east and the south. The building measured 8 by 3.20 m , although the northern extent is still hidden in the unexplored part of the structure. The number of mud-lined pits drops significantly, and in their place there appear storage pits filled with black soil and dissected by the structural furrows, pits that are characteristic of the oldest occupational phase on Tell elFarkha. ${ }^{5)}$ This is particularly evident in the lowest layer (Fig. 10), where traces of the described building are practically nonexistent, while the pits remain very well visible. It should also be noted that on this level we are probably dealing with two structures located next to each other. One is open to the east and divided into at least two rooms. The other, open to the west, bears no evidence of divisions. Instead, it yielded a considerable, if unshapely scatter of D-shaped bricks burned a bright red - apparently the remains of a fireplace.
5) Cf. PAM XI, op. cit., 61.

## CENTRAL KOM

A trench 22.5 by 22.5 m was traced on the summit of the central kom. This was the place where in 1990 the Ligabue Research and Study Center from Venice (Italy) had excavated a 20 by 20 m pit. The maximum depth reached then was 1.2 m , not exceeding, however, 0.5 m over most of the area. The discoveries then included architecture of the Old Kingdom and some settlement remains that could be dated to the Early Dynastic period (Nagada III).

The first step this season was to clear the old trench down to the unexplored layers and to identify the architecture uncovered by the Italian expedition in order to be able to continue the investigations in relation to the previous findings. The architecture in the trench consisted of much destroyed mudbrick structures with walls oriented NE-SW. The occupational layers yielded potsherds in quantity, animal bones and stone and flint tools. The best preserved structures were located in the northern part of the trench and this was where the excavations were concentrated this year. The trench, which was narrowed down to 7.5 by 22.5 m , revealed mudbrick structures that could be interpreted at least in part as stores (Fig. 11). These rooms contained big storage vessels (a bowl and jars), as well as bread moulds, bowls (Fig. 12, top left) and numerous small quern stones. The objects that deserve particular attention among all the small finds are fragments of bifacial flint knives (Fig. 12, bottom left), ceramic nails (Fig. 12, bottom right) and the impression of a cylindrical seal bearing a number of hieroglyphic signs (Fig. 12, top right).


Fig. 11. Central Kom. Early Dynastic structures. Circles indicate position of vessels (Drawing E. Mrowiec)

## GEOPHYSICAL SURVEY

The geophysical survey, involving the magnetic method, was carried out over an area of c. 2.5 ha on the central and eastern koms, identifying in the process the scatter of architectural remains along the edges of
the site. A fluxgate magnetometer was used in a 0.5 m grid. The research brought to attention wall outlines forming rectangular rooms, particularly in the southern part of the central kom.


Fig. 12. Central Kom. Clockwise from top left: jar with spout, clay seal with bieroglyphic inscription, ceramic nail, flint knife
(Photo and drawing H. Żarska-Chtodnicka)

