Kraków 2013

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TELL EL-FARKHA AND ITS IMPLICATIONS FOR UNDERSTANDING THE EARLIEST ARCHITECTURE OF LOWER EGYPT

Abstract: Discoveries made at Tell el-Farkha prove that the presence of mud brick was well rooted in Lower Egyptian building tradition. The oldest known examples from the site are breweries connected with the activity of Lower Egyptian culture. Soon thereafter, bricks were used in more innovative ways as separating walls. A period of stronger Nagadan influence, which started in Nagada IID1, resulted in the further development of mud brick buildings, initially in the creation of massive walls and rounded corners. From their very first appearance at Tell el-Farkha, these characteristically shaped corners accompanied monumental structures of special significance. A large mastaba from the site dated to Naqada IIIA2/B1, represents the next evolutionary stage of the rounded corner idea, which was continued during the Early Dynastic period by sepulchral enclosure no. 55. These two constructions show that the architectural legacy of the Delta contributed to the formation of the typical Egyptian mastaba. However, due to the scarcity of evidence from other sites, this picture is based mostly on data collected at Tell el-Farkha.

Keywords: Early Egyptian architecture; mastaba; monumental; rounded corners

Introduction

The history of Egyptian mud brick architecture is lengthy and begins in the period of Nagada II. Evidence for early building experiments with bricks comes not only from sites such as Hierakonpolis (Baba 2011), but also from the Lower Egyptian cultural context. One of the earliest sites where mud brick architecture has been discovered is Tell el-Farkha, which produced a whole sequence of brick buildings, ranging from simple brewery installations to an Early Dynastic tomb enclosure. This continuity gives us the unique chance to trace the process of architectural development at the site in particular and in the Delta in general, especially considering that neighbouring sites offer very little representative architectural data. Tell el-Farkha thus becomes the most vital source of information on the beginnings of mud brick architecture in Lower Egypt. With the new material now available to us, some obscure elements of the earliest Egyptian architecture may be interpreted from a fresh perspective and our present understanding of the matter may therefore become far deeper. One of these elements is the rounded corners which seem to accompany various monumental structures from the site. This feature is obviously important to the architectural development of the settlement but, due to the scarcity of data from other sites in the neighbourhood, its general significance in terms of early architecture in Lower Egypt is difficult to assess. Aside from this, evidence from Tell el-Farkha can also be helpful when examining the Lower Egyptian contribution to the evolution of ancient Egyptian architecture, with monumental mastaba graves being the most significant case in point.

Tell el-Farkha's background

Tell el-Farkha is located *c*. 120km north of Cairo in the Eastern Delta on the outskirts of the modern village of Ghazala (near Simbillawin in the Dakahlia Governorate). Polish excavations at Tell el-Farkha, which have been ongoing since 1998 (Chłodnicki *et al.* 2006; Chłodnicki *et al.* 2010), have revealed seven phases of occupation. The oldest is Phase 1 and is associated with Lower Egyptian culture and dates to the period of Naqada IIB-C, while Phase 2 (Naqada IID1) represents a cultural transition that, apart from its Lower Egyptian features, comprises the first appearance of Naqadan (i.e. Upper Egyptian) elements at the site. Phases 3 (Naqada IID2/IIIA1) and 4 (Naqada IIIA1-B) were dominated by Naqadan cultural features. Phase 5 (Naqada IIIB-C1) represents the Protodynastic period,

Phase 6 (Naqada IIIC1-D) – the Early Dynastic and, finally, Phase 7 belongs to the Old Kingdom (the 3rd and the 4th Dynasties).

Research at the site has demonstrated that different areas of the site, more precisely different mounds or 'koms', were dedicated to different functions. The Western Kom, except for a period of early beer production in the earliest Lower Egyptian times, was mainly a residential area and contained a series of Naqadan residences as well as an Early Dynastic administrative-cultic centre. This mound was also the first to be abandoned (by the end of Phase 5). The Central Kom was the heart of the Lower Egyptian settlement, but soon its character became somewhat industrial, as can be attested by numerous workshops and modest houses found here. The function of the Eastern Kom was more varied as it was used both as a settlement and, in some periods, as a cemetery.

In general, sepulchral activities at the mound date from Naqada IIIA2/ B1 through to the Old Kingdom and are represented by a single monumental mastaba and three distinct cemeteries (see Dębowska-Ludwin 2012). The first of the three presently known necropole is belongs to the Protodynastic period approximately and includes graves dating to Naqada IIIB and Naqada IIIB/C1-C2. The second cemetery was mainly used during the Early Dynastic period (Naqada IIIC2-D), while the third, which contains the simplest graves of the site, dates to the Old Kingdom (most probably the 3rd and the 4th Dynasties).

Discoveries of early bricks in the Lower Egyptian cultural context

The oldest bricks at Tell el-Farkha are connected with breweries. The first complex of such structures (W201, W201A, W192, W200) known from the site functioned from Naqada IIB to Naqada IIC over two phases, namely the original phase and its rebuilding. The oldest breweries of the sequence were largely destroyed by others built atop them. Notably, all these breweries were constructed in a more or less similar manner (Cichowski 2008; Ciałowicz 2012a, 151-159). The outer walls were made of characteristic unfired D-shaped and secondarily fired (as a result of the structure's usage) bricks called 'fire dogs'. The bricks formed circles with large vats for brewed beer in their centres. Within the entire installation, the circles with vats were arranged in two rows. The successively flooded breweries, a common fate in the natural conditions of the Nile Delta, were rather large constructions which measured 10 x 17m. The most recent structure of this type found on the Western Kom (W 47) dates

to Phase 2 of Tell el-Farkha (Naqada IID1). It resembled a three-leaf clover in shape and was much smaller than the breweries described above (Ciałowicz 2012a, 155). Very similar and contemporary are the poorly preserved remains of brewery structures C485 and C490 in the Central Kom (Chłodnicki 2010, 108).

More typical of Egyptian architecture were regular rectangular mud bricks used to construct the walls which separated breweries from other buildings on the Western Kom in the period of Naqada IIC (Ciałowicz 2012a, 157). Around the same time, a similar wall of rectangular bricks was built on the Central Kom, where it replaced an older double fence surrounding the so-called Lower Egyptian residence (Chłodnicki 2011, 43-45). The wall was a massive mud brick construction built certainly before 3350 BC within the Lower Egyptian cultural context.

Large scale brick buildings of Naqadan context

Cultural change at Tell el-Farkha, which included the predominance of Naqadan traditions, also influenced the development of building techniques. One significant discovery from Tell el-Farkha is a vast mudbricked structure, built in Naqada IID1 (Chłodnicki *et al.* 2002; Chłodnicki *et al.* 2004; Ciałowicz 2012b, 163-171), the largest known associated with the Gerzean period. The structure was rebuilt at least three times. In its final phase (the end of Phase 3 at Tell el-Farkha in Naqada IIIA1) it was burnt down and the ruins were flooded with a layer of Nile mud.

In the oldest phase of the construction, it was a huge complex surrounded by thick mud brick walls (1.4-1.6m wide), inside of which the remains of poorly preserved rooms were found. These rooms were rectangular and square and probably surrounded an inner, open courtyard. The internal walls of the rooms were only 0.3-0.4m wide. It is possible that the main function of the thick outside walls was to separate the complex from the remainder of the settlement or perhaps they might have been defensive in nature.

The building was probably destroyed during an earthquake, but was very soon rebuilt. After the reconstruction, the enlarged size of the structure may be referred to as monumental, as it was composed of fewer rooms and still had an internal courtyard.

In its final phase, the building consisted of two clearly different segments (Pl. 1). The western part of the structure was separated from its eastern precinct by a 2.5m wide wall, which, at its southern extreme, ended in a rounded corner. The wall was actually made of two differently

constructed segments. Internally, it was formed by yellowish bricks made with a considerable amount of sand and set in dark-grey mud mortar. The outside face was definitely of dark-coloured mud bricks connected by light yellowish mortar tempered with sand.

The eastern part of the building consisted of a few rooms featuring a significant concentration of storage vessels which were found standing in their original position, as well as other finds which suggest that the rooms served as storage facilities. The western portion of the building comprised a room cluster of a different character and function that is difficult to interpret.

An early example of monumental architecture

Another important structure of mud bricks (E119) was discovered at the edge of the Eastern Kom in a small test trench. It was preserved to a height of 0.52m and is notable for its well preserved (for Delta conditions) walls with nicely rounded corners. The walls were c. 1m thick, built of darkcoloured mud bricks and formed a rectangular room c. 2.5 x 6m in size with two entrances, one in the middle of the northern longer wall and the other just opposite in the southern wall, giving the impression of a gate installation (Pl. 2: 1). The whole construction was oriented along a NW-SE axis. As it almost completely filled the test trench, in which it was found, it seems obvious that it belonged to a larger complex which extended beyond the trench's limits. The structure was built directly on the sands of the gezira, although below present groundwater level. Pottery material collected inside the room was very scarce and fragmentary and could not provide precise dating, although it can be estimated that the room dates to Phase 3 of Tell el-Farkha (Nagada IID2/IIIA1). Additional finds, also few in number, included several mollusc shells and a large stone with a depression in its centre, found close to the northern entrance, which was probably used as a door socket. The partially excavated building was found covered by a compact layer of mud which included some barely recognizable brick fragments. This was probably a destruction layer and possibly contained the very scant remains of a roof construction.

It is too early to speculate on the significance of the structure as more in-depth studies must first be completed on the material. However, it can be said that it was not a sepulchral construction, as there was neither a burial nor intentionally deposited offerings. Instead there were two clear entrances. It was also not a typical dwelling, as no hearths were associated with it and only a very small amount of mass material was discovered inside. Remains of its massive walls suggest a structure of special significance, so it could be something like an enclosure wall (what could be enclosed?), a fortification system (where would the rest of it be?) or an anti-flooding device (why would it have a gate-like feature?). However, its actual function may only be guessed at without further exploration of its remains. The only issue clear about the construction is that it was built according to a design for a monumental edifice and it therefore merits the status of architecture.

Rounded corners, the mastaba and the concept of monumentalism

From the period of Phase 3 at Tell el-Farkha, mud brick buildings became standard, although they typically used short and thin walls. The previously mentioned examples were older or spectacular in comparison to ordinary houses and workshops and thus differed from contemporary norms. In the Lower Egyptian cultural context, basic construction materials were generally of organic origin (mats of reeds, branches, wood), while the usage of bricks was associated with contact with an open fire. It was particularly true of breweries, where the concept of building material had to be changed dramatically and where relatively massive enclosing walls were necessary.

In the case of the Western Kom, the presence of an additional wall separating breweries from other buildings can be easily explained as a kind of device facilitating control of the brewing process, but at the Central Kom the situation is more complex. The wall fencing off the Lower Egyptian residency could have played the role of a symbolic separator or that of an actual security system, dividing a zone of fabrication from one of habitation, where people of lower or common status dwelled. This suggests that some special significance could be attached to mud bricks and therefore further examples of later and increasingly monumental structures could have been a development of the concept. The idea of monumentalism indicates power, durability and the symbolic representation of physical force. It makes an even larger impression when significant size is combined with additional and clearly recognizable markers. The rounded corners of mud brick structures, which first appeared in construction no. E119 from the Eastern Kom (Pl. 2: 2) and were soon repeated in the last phase of the large Nagadan building from the Western Kom, seem to have been one such marker. They were apparently used to distinguish between

'regular' and 'special' buildings, since they have been found exclusively in the context of edifices of extraordinary function. Therefore, this element must have had formal or even propaganda value. Another building which is an example of a special structure with rounded corners is the large mastaba at Tell el-Farkha.

The impressive construction, found on the Eastern Kom of Tell el-Farkha (Pl. 3), seems to have been a burial-related structure and numerous factors seem to support this theory. The most significant is its surprising size (for the period) of c. 16 x 18m and its massive brick walls. The mastaba's layout is symmetrical in the southern and eastern parts with two rectangular units flanking an almost square 'central chamber' with a deep shaft. The entire structure is surrounded by thick walls (up to 2.5m) composed of two or three adjacent segments. Three corners of the main chamber (the two on the northern side [Pl. 4: 1] and the southwestern one), were rounded in shape. They were then cased in walls forming the northern and western facades of the uncovered part of the construction. The southeastern corner of the central chamber was rectangular, but at this flank there were outside rooms adjoining it. This manner of building could suggest that the structure was designed this way and executed according to a specific plan.

Excavation of this impressive construction has not vet been completed. However, it seems the eastern façade of the building also represents the oldest example on the site of a so-called niche decoration, albeit with an additional white plaster coating. Although the structure was preserved to the impressive height of over 2m, no entrances or openings of any kind were found. The side chambers were densely filled with brick rubble, but were notably devoid of any objects that might be associated with mortuary-related functions. At the bottom of the shaft, which was also filled with rubble, nothing but a few small pottery vessels were discovered, all badly eroded by groundwater. Since no human bones were found, the actual function of the impressive structure remains uncertain. However, it is highly possible that the remains of the structure's occupant simply did not survive in the strongly adverse soil conditions and because of the high and fluctuating groundwater level. Another possibility is that the structure was a kind of cenotaph and never included an actual burial. Independent of all these questions and propositions, the presence alone of such a complicated structure can be taken as proof that social stratification existed at the time and as a signal of the beginning of burial monumentalism. This is provided that the most probable, though not certain, sepulchral interpretation of the edifice function is accepted. The most important aspect of the mastaba is its surprisingly early date, obtained thanks to mass material and stratigraphy analyses, which date it to the transition between the Naqada IIIA2 and Naqada IIIB1 periods. This early date makes it the oldest structure of this type in northern Egypt (Ciałowicz 2008, 505-510) found thus far.

In the case of the older brick structures noted above, their functions appear to have been more or less practical, although the interpretation of the mastaba (with rounded corners also in its body) is more problematic. Most important is the structure's form, which was intended to distinguish it from contemporary buildings. Interestingly, all the buildings described above, regardless of their function, show numerous structural similarities. It is possible that they were constructions of varying practical function, but of a similar importance with additional, propaganda-related associations stressing the high statuses of their owners. Making this assumption, the mastaba, with its primary function as a tomb or cenotaph, could be interpreted as a formal, even propaganda-related, symbolic structure.

Further development of rounded corners

The history of rounded corners in Tell el-Farkha does not terminate with the mastaba. The next example is a wall with four such corners, which surrounded burial enclosure no. 55 and is the only fully excavated sepulchral complex found at the site (Pl. 4: 2) to date. The tomb contained four richly furnished underground chambers in a brick superstructure surrounded by a perimeter wall and at least one subsidiary burial (no. 64) and possibly another (no. 62). The complex measured 9.16 x 6.74m and it was dated, on the basis of stratigraphical hints and analyses of materials deposited inside the grave, to the period of Nagada IIIC2 (Phase 6 of Tell el-Farkha). The tomb's superstructure was preserved to an impressive height (for the site) of over 1.5m. It was constructed with a relatively thin wall of sand and mud bricks which encompassed the building's core of dark mud bricks and was arranged in layers and stabilized with rather loose earth in a way similar to that in which the large mastaba was enclosed. Every third layer of bricks was interspersed with matting, most probably reinforcing the construction, and the walls were built of two different types of bricks for the same reason.

Additionally, the eastern façade of the superstructure was decorated with two niches, one close to the northern corner, the other to its southern corner. The perimeter wall was c. 0.3m thick and much lower than the preserved

height of the main structure. To the south was a kind of entrance leading into the whole enclosure. The most important feature is the wall's corners, which were clearly rounded. The main body of the superstructure (c. 8 x 5.5m) and the perimeter wall represent the highest level of workmanship as they were perfectly shaped, carefully built and plastered.

Rounded corners from other sites

A very close analogy to burial enclosure no. 55 from Tell el-Farkha was unearthed at Tell Ibrahim Awad. Here, a sequence of temples dating from the Protodynastic period through to the Middle Kingdom was discovered (Eigner 2002, 12). The most interesting for the present discussion was Phase 2c, dated to the 4th and the 5th Dynasties. It was an elongated, rather small (c. 2.62 x 7.85m), rectangular and centrally located building, surrounded on its western and northern side by an outer enclosure wall. The wall was separated from the main temple structure by a narrow corridor closed at both ends (Eigner 2002, 18; fig. III: 5). The northern corner of the outer and rather thin wall was clearly rounded (an example strikingly similar to grave no. 55 from Tell el-Farkha, although its dating is much later). Interestingly, it seems that the whole tradition of rounded corners vanishes more or less with the structure from Tell Ibrahim Awad and the only continuation of the atypical corner shape can be found in sinusoidal/wavy walls.

The oldest remains of such sinusoidal walls were discovered in Locality 29A at Hierakonpolis, where they belonged to a larger structure interpreted as a Predynastic ceremonial centre (Friedman 1996; Friedman 2009). Unfortunately, the wall itself was badly preserved and therefore does not facilitate closer comparison. However, an example of a sinusoidal wall in Narmer's mace-head suggests its usage and significance in the early period. In later Egyptian history, sinusoidal walls are also present, as they are known from Middle Kingdom architecture (Śliwa 1992).

Apart from the quoted examples, the authors could not make any other analogies to rounded corners from Lower Egypt in the Pre- or Early Dynastic period. This is provided oval silo constructions, which clearly belong to another tradition, are not taken into consideration. The presence of buildings with such corners at Tell el-Farkha may reflect the site's privileged status and may suggest the appearance of rounded corners in a cult context or may, in a more complex interpretation, be the result of a combination of several factors.

Conclusions

Tell el-Farkha offers a unique chance to trace the evolution of Egyptian architecture at its earliest stage. Analyzing data from the site, it becomes possible to observe the moment of transition between organic building materials and mud bricks. From the very beginning, bricks had a special character, being first introduced in breweries as a fire-resistant material. Soon after and as early as the Lower Egyptian cultural complex, bricks were used for separation walls, both around breweries, but also in a more symbolic sense around the Lower Egyptian residency at the Central Kom. With the appearance of a Nagadan presence at Tell el-Farkha, mud bricks became the basis of large scale structures and the multifunctional building on the Western Kom and the gate-like construction on the Eastern Kom both contained a new characteristic element - the rounded corners of thick and massive walls. The idea of building larger, more regular and spectacular constructions was then developed as evidenced by the large mastaba, which was clearly a monumental building with rounded corners and an innovative niche facade. The final example mentioned from Tell el-Farkha, burial enclosure no. 55, although smaller in size (probably due to the settlement being in decline), still adhered to the same monumental concept with a mass of bricks, niches and rounded corners of the enclosure wall. Unfortunately, the picture is poorly supplemented by evidence from other sites of a similar date and location, thus the pattern observed is not necessarily representative of the whole area. However, it does seem to be important to the detailed analyses of particular building types such as the mastaba.

It is worth, then, looking at the mastaba within its wider context as a monumental building of cult and also as a form of propaganda, which was developed locally through a series of small innovations in buildings of various function. What later became a typical mastaba structure is, in fact, the result of local evolution with some elements adopted (such as niches) and others given up (rounded corners), but the significance, if not the key importance, of the Delta contribution to the mastaba's final form should not remain underappreciated. Within this context, the mastaba can be defined as a type of monumental mud brick construction requiring an unusually high degree of investment in energy and resources, albeit on a local scale. A large scale, extraordinary monument in the Delta would be considered medium-sized in Saqqara North. In the Delta, due to its superstructure, a mastaba was meant to impress living people, while its subterranean structure functioned as a place of eternal rest for its owner. The actual scale of such structures can differ depending on local circumstances and the social organization of the communities in which they were built.

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Pl. 1. Latest stage of the Naqada residence. Drawing by L. Szumlas



Pl. 2. 1 – Structure no. E119. Photo by R. Słaboński 2 – Southwestern corner of structure no. E119 close-up. Photo by R. Słaboński



Pl. 3. General plan of the mastaba (the niche decoration of the eastern facade remains unmarked due to the preliminary state of fieldwork in the area). Drawing by M. Czarnowicz



- Pl. 4. 1 Rounded corners in the northern wall of the mastaba main chamber. Photo by R. Słaboński
 - 2 Enclosure wall around burial complex no. 55. Photo by R. Słaboński