

Chapter 4

Lower Egyptian settlement system

Lower Egyptian culture communities settled and buried their dead in areas located above the level of annual inundations of the Nile. Settlements were clustered on sandy hills, known as *geziras* (typical geological formations in the Nile area, *e.g.* at Buto – Tell el-Fara'in, Mendes, Sais – Sa el-Hagar, Tell el-Farkha, Tell el-Iswid, Tell Ibrahim Awad, Tell el-Murra), or at the boundary of a high plateau and inundation terraces (Rizkana & Seeher 1989: 74; van den Brink 1989: 59-61; 1992b: 43-44; Wenke 1991: 298; von der Way 1997: 38; Chlodnicki & Ciulowicz 2000: 73; Butzer 2002: 83-97; Chlodnicki 2012). Furthermore, archaeological surveys' in the eastern Delta held from 1984 to 1987 revealed a concentration of archeological sites along water courses: *e.g.* Tell el-Farkha, Tell el-Iswid and Tell Ibrahim Awad, located at the currently non-existent canal running almost perpendicularly to the Tanitic branch of the Nile (van den Brink 1993: 296).

Necropolises were most probably set up near settlements, *e.g.* in Maadi some 180 meters from the southern boundary of the settlement. Cemeteries were located on prominences to prevent flooding by the Nile, *e.g.* in Wadi Digla, Heliopolis (Debono & Mortensen 1988: 9; Rizkana & Seeher 1990: 15, 29).

1. SETTLEMENTS

The size of a settlement depended on the natural conditions and topography of the local area. In Maadi, the settlement was 1300m long and 100 to 130m wide. In other sites (Buto, Mendes, Sais, Tell el-Farkha, Tell Ibrahim Awad and Tell el-Iswid) determining the exact size has not been possible either because excavation works are still in progress or due to the fact that the site was partially damaged by currently existing buildings.

In construction terms, the settlements of the Lower Egyptian culture differ from one another. For a long time it had been believed that Lower Egypt was characteristic for the use of organic materials and mud. Although a small number of single mudbricks were found in Buto, Tell el-Iswid or Sais, it was only in Tell el-Farkha that – next to wooden structures – mudbrick walls were discovered (Chlodnicki & Geming 2012).

1.1. Buto – Tell el-Fara'in

Among items registered during the exploration of Lower Egyptian culture layers, numerous pits, postholes and hearths were discovered. Round or oval pits had diameters from 0.5 to 1.5m and were 0.2 to 0.3m deep. Some of them, particularly those dug in a sandy surface, had walls reinforced with silt. The pits were most likely used for storage or processing. Silt-reinforced walls were also found in all postholes. Their diameter was approx. 20cm, and the depth was never greater than 30cm. Posthole cross-sections reveal two layers – one of clay and the other of ceramic material (crushed pottery), sometimes containing bigger pottery fragments. The relative position of the two layers differed between various postholes. According to T. von der Way (1997: 65-68), postholes most probably held posts forming regular structures. Between the posts there were woven mats made of reed or papyrus leaves, additionally clad with mud. Some postholes were found near hearths. They were probably used to hold light structures or roofs. Hearths discovered in Buto are approx. 2.5m in diameter. They are in the form of shallow bowls filled with a thick layer of ash, which indicates that they must have been frequently used for preparing food (von der Way 1997: Abb. 18-30).

An interesting find, recorded only in Buto phase II, are D-shaped blocks of burnt clay with coarse organic temper. Their shape is reminiscent of bricks. They are up to 30cm long, 7 to 9cm wide and 6 to 8cm high. According to T. von der Way (1997: 73-74), these bricks should be linked to vaguely defined structures used in beer production. In Buto, remains of a rubbish dump were discovered as well, containing a large amount of clay sherds (von der Way 1997: 75-76). Inside the settlement in Buto, exploration of layers dated to the Lower Egyptian culture revealed a single burial of a male aged 40 to 60. The body was laid on its left side, in a contracted position, with the hands resting in front of the face. The oval burial pit was 1.3m long, 0.7m wide and 0.4m deep. Right next to the skull a single pottery vessel was found. Furthermore, a small number of isolated children's bones were found in the settlement, such as a skull of a six-year old child and a mandible of a three-year old, both most probably coming from ruined graves (von der Way 1997: 74-75).

1.2. Maadi

Excavations held in Maadi revealed three types of residential structures: oval, rectangular and subterranean. Oval dwellings were characteristic for rows of postholes forming a more or less oval outline. Made of tamarisk wood and measuring 5 to 15cm in diameter, posts were sunk to a depth of 20 to 40cm, at intervals of 1 to 2m. Some postholes were lined with silt. Between the posts, walls made of light organic materials (such as reed) must have been installed. The posts supported a light-weight roof. The total dimensions of such a structure were approx. 4 x 2.5m, with the long edge along the EW axis. The entrance was in the southern wall. Such an arrangement was most probably determined by cold, northern winds blowing in the Delta in winter seasons. Inside each building there was a hearth, mortars, vessel pits, as well as storage jars sunk into the ground. Silt-lined holes could have been part

of a mobile structure, such as a wind guard or an enclosure for animals. The silt reinforcement made it possible to repeatedly put the posts in and out (Rizkana & Seeher 1989: 39-43, figs. 8-21).

As far as the second type of structures is concerned, one can distinguish large, shallow rectangular pits and rectangular structures the outline of which is formed by narrow shallow furrows. According to I. Rizkana and J. Seeher (1989: 45), the rectangular pits must have been remains of light, semi-subterranean dwellings. Inside them, smaller pits and holes serving some internal functions were registered. Rectangular, ditch-shaped structures were usually positioned along the NS axis, with the entrance located in either the southern or the northern wall. The ditches were formed by walls, most probably made of reed or mats. Roofs, made of similar materials, could have been supported by internal posts. However, the lack of any traces of holes, hearths, or vessel fragments indicates that these particular structures could have been used as enclosures for animals.

Subterranean structures are the third type of residential structures registered in Maadi. They were discovered in the northern part of the explored area. Their diameter ranged from 3 to 4.8m and they were 2 to 3m deep. The entrance was from the south, at the end of an inclined corridor, the stairs of which may have been paved with stones. Inside there were numerous pits and posts used to support a roof made of light-weight materials (*e.g.* wood, reed or straw mats). A hearth was positioned in the middle of the dwelling. In some cases, walls were reinforced from the inside with stones and dried Nile silt bricks. Exploration of this type of dwellings revealed vessels partially sunk into the ground, pottery fragments, flint tools and animal bones. Judging by those artefacts, researchers concluded that these semi-subterranean structures were used for residential purposes (Hoffman 1979: 201-202; Rizkana & Seeher 1989: 49-55, fig. 15; Midant-Reynes 1992: 198). It is generally accepted, Maadi dwellings are reminiscent of Late Chalcolithic subterranean structures known from the Beersheba Valley in Southern Levant (see Chapter 3; Perrot 1955; 1984; Watrin 2000: 163-184). However, it has been suggested in the recent years that the structures from Maadi seem far remote from the Beersheba sites (Commége & Alon 2002: note 14). E. Braun & E.C.M. van den Brink (2008: 649-650) even suggest their later chronology (early EB I).

In 1985 and 1986, excavations in Maadi were carried out by an expedition from the El-Azhar University headed by F.A. Badawi (2003; Watrin 1999; 2000: 163-184). The team concentrated on the eastern, previously unexplored part of the site. Egyptian archeologists discovered a subterranean stone structure sized approx. 8.5 x 4m, embedded to a depth of 2m below surface level. The structure was rectangular, but its corners were rounded. Walls were built of stone and then plastered with light-brown mud. The entrance was situated in the longer, northern wall. Inside the structure there were 3 pits, most probably used to hold posts supporting a roof made of wooden beams covered with mud (Hartung 2004: figs. 1-2). Mortar used to bind stones together contained numerous pottery fragments. According to L. Watrin, the above facts indicate that the local builders explored their immediate surroundings; to some extent those facts also indicate the building's chronology, allowing one to

date it to the late stage of Maadi's habitation. According to him, the structure in question is reminiscent of structures known from the Gaza Strip in Ashkelon-Afridar F and at the Sidon-Dakerman site in southern Lebanon, dated to EB IA (Watrin 1999; 2000: 163-184).

From 1999 to 2002, Maadi was explored by an expedition from the German Archaeological Institute (DAI). German archeologists also identified a subterranean dwelling, but it differed clearly from the one discovered by F.A. Badawi. The dwelling consisted of an oval room sized 5 x 4m, dug into the bedrock without any lining or support, and of a sloping entrance corridor (5.5m long and 1 to 1.5m wide), with walls lined with stones and plastered with mud. Postholes registered inside both parts of the structure denote the presence of a roof. The height was determined to be 2 to 2.5m (Hartung 2004: 343-350, figs. 4-8). The structure was used as a dwelling and/or a storage facility. Attention is drawn by a typically household inventory, and some of its features are particularly remarkable: prevalence of larger flint implements, large percentage of fish bones and fragments of Southern Levantine jars. U. Hartung links this structure to buildings known from earlier explorations in Maadi. He believes that all of them combined illustrate the development of the settlement's architecture, resulting from the increasing experience of builders and the availability of a new building material (stone) used for erecting residential structures. According to U. Hartung, all known subterranean structures are related to buildings existing in Southern Levant. It should be noted that he associates the stone structure discovered by A.F. Badawi with buildings known from the northern sites of EB IA (*e.g.* En Shadud, Yiftahel), while he believes that the other dwellings are related to the structures from the Beersheba Valley (Hartung 2004: 352-353).

Excavations in Maadi have shown numerous remains of fences, storage pits, postholes and hearth accompanying residential structures. Fences were made of posts arranged in rows of approx. 10m, positioned either east-west or north-south. The function of these fences remains unclear. Some of them may have been part of destroyed residential structures, and in the case of larger dwellings they could have served as enclosures for animals.

Storage pits from Maadi have different shapes and dimensions. Small pits are approx. 50cm deep and have diameters of 20 to 50cm. The largest ones have diameters above 100cm and are approx. 150cm deep, and two distinct parts can be identified inside them (deep and shallow). The shallow part was a kind of a step-on platform formed while the pit was dug and used. Pit walls were lined with silt. Storage vessels or their fragments were commonly found in the fill (Rizkana & Seeher 1989: 57, figs. 19-20).

A fair number of hearths were also discovered within the boundaries of Maadi settlement. I. Rizkana and J. Seeher (1989: 61, figs. 22-23) distinguished 3 hearth types. The first type were simple hearths started without any particular preparations, which is why a thin layer of ash is their only remaining trace. Another type were hearths with a stone structure, usually made of 4 to 5 stones. The third type, represented by as few as 22 hearths, was made of stones arranged in a horseshoe-shaped design laid on a special silt slab. Their usual diameter was 100 to 150cm, although some hearths with diameters of 2 to 3 meters were also found. They could have been used for cooking or for pottery firing.

Some of the less usual objects registered in Maadi were human graves. Although Lower Egyptian communities generally buried their dead in separated cemeteries, some individuals were buried within the confines of the settlement. The Maadi necropolis was located to the south, some 180m away. Nonetheless, burials of adults, children and infants, as well as scattered human skeleton fragments were all discovered inside the settlement. In Maadi, two adult burials were fully confirmed. In one of them, a female aged 20 to 40 was buried. Her body laid in a shallow pit, on the left side, with the head directed southeast and the face to the southwest. Grave goods were rather scarce, consisting of two pottery vessels and a grinding stone. The pit's fill additionally included fragments of clay pottery and animal bones, as well as a handful of flint tools. The other adult grave was only partially preserved. The body, of unidentified sex, was laid in a shallow pit on its back, so in a position that is entirely absent from the Lower Egyptian tradition. I. Rizkana and J. Seeher (1989: 66) believe that this particular burial could have come from later stages of settling activity in the region. The researchers put forward that hypothesis on the basis of anthropologic analyses indicating that the bones were very well preserved and showed no traces of extended deposition in the ground. Nonetheless, it is not impossible that some bones belonged to damaged Lower Egyptian burials. One remarkable item in this group is a human skull. It belonged to an adult aged 20 to 80, whose sex is undeterminable. The skull was deposited in a hearth. I. Rizkana and J. Seeher (1989: 67) assume that the skull's presence was connected with some unidentified symbolic rituals.

The last category of burials found within the settlement are graves of children, infants, neonates and fetuses. A total of 54 of such graves were found. Children were buried in pottery vessels, usually in storage jars or in pits. Their bodies were covered with stones or pottery fragments. Most such graves had no grave goods whatsoever. In certain cases the body position was undeterminable. One remarkable finding is a rich grave of an infant, whose body was deposited in a contracted position on the left side, the head to the east. Grave goods included five pottery vessels and a grinding stone. According to I. Rizkana and J. Seeher (1989: 67), the Lower Egyptian culture had a tradition of burying dead infants and children within settlements, because cemeteries were reserved for adults. The problem of inhumation of the youngest community members inside habitation zones (and outside cemeteries) is known from many prehistoric communities all over the world. The underlying reasons vary depending on the site's chronology and location. The two most important ones include maintaining a connection with children after their death and children's incomplete status as community members, resulting in their exclusion from the cemetery area (*cf.* Pawleta 2004; 2009).

1.3. Sais - Sa el-Hagar

Still little is known about the Lower Egyptian settlement in Sais. Thus far, the Egyptian Exploration Society mission headed by P. Wilson managed to reach its levels in 2 test trenches (Excavations 3 and 8). While the results of Excavation 3 have been published, the publication

of the other findings is still pending, except for brief reports available on the mission's website. So far, the presence of a posthole and burnt mudbrick have been found (Excavation 3) (Wilson 2006: 86-88), as well as a mudbrick platform with postholes around it and pottery concentrated at the edges of the floor (Excavation 8) (Wilson 2005). While these elements seem to indicate the presence of larger structures, the lack of any detailed information renders in-depth analysis impossible.

1.4. Tell el-Farkha

The layers linked to Lower Egyptian settlers revealed numerous remains of typical Lower Egyptian dwellings. These include rectangular NE-SW and NW-SE oriented constructions, marked by 10 to 50 cm wide furrows, which could be remains of foundations or walls woven of tree branches, reed, bulrush or straw, supported by poles placed in the corners or in the middle of the wall's length (Fig. 6; Pls. 1-2) (Chłodnicki 2012: 19-20, figs. 2-3; Chłodnicki & Geming 2012: 91-93, figs. 2-4, 7; Ciałowicz 2012a).

One of the more interesting objects dated to Tell el-Farkha's phase 1 is the structure discovered on the Western Kom, marked as W96-98, where as many as 5 construction phases have been identified, most probably connected with the Nile inundations and the ensuing

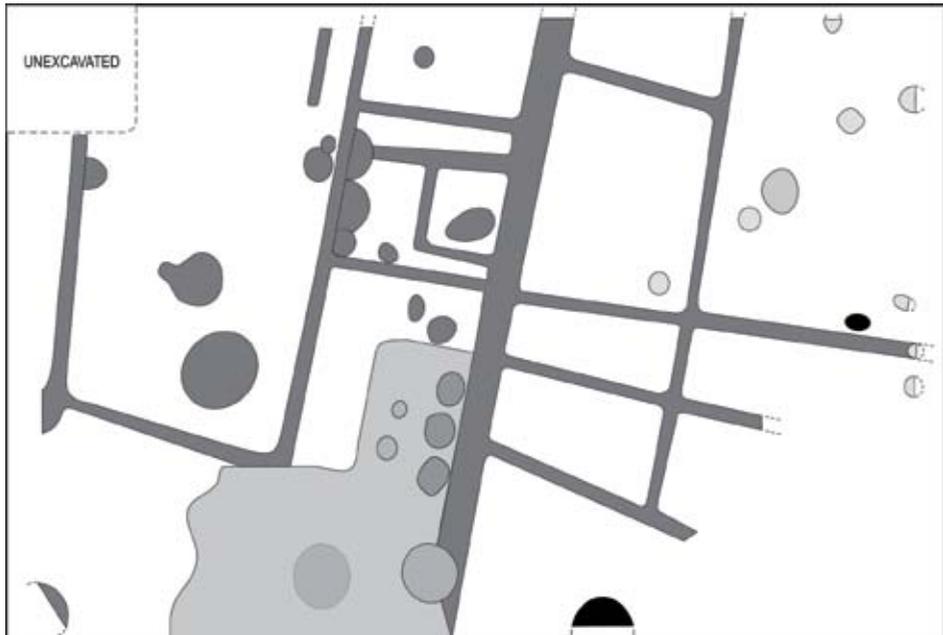


Figure 6. Tell el-Farkha. The Lower Egyptian settlement structures, Eastern Kom (Chłodnicki 2012: fig. 3).

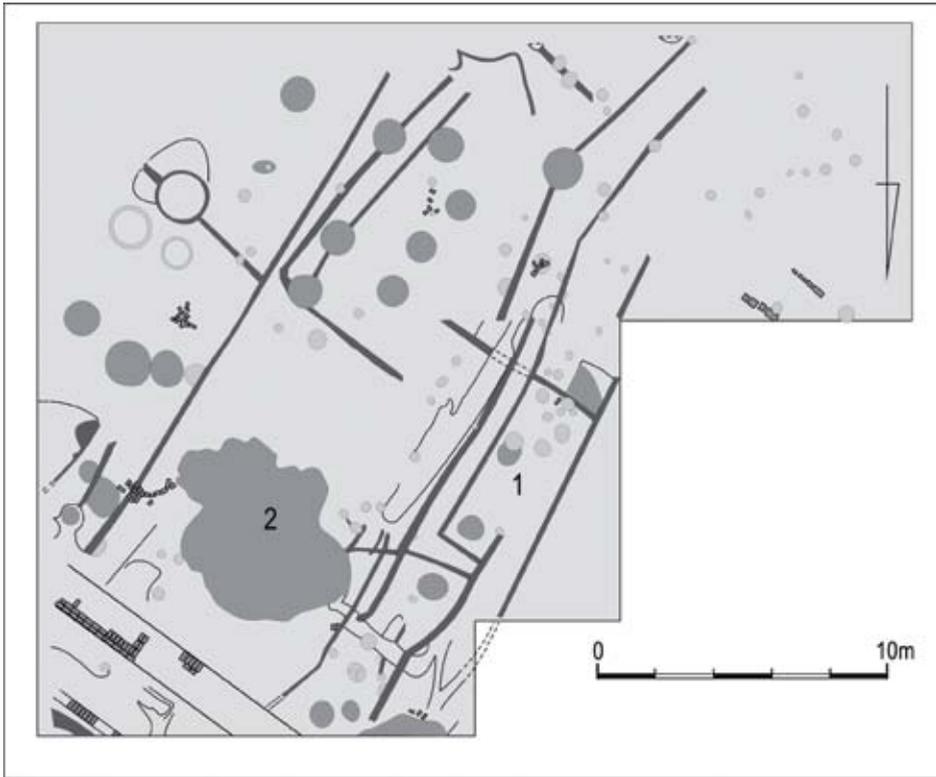


Figure 7. Tell el-Farkha. The settlement structure W96-98, Western Kom (1 - W96-98; 2 - brewery) (Chlodnicki & Ciałowicz 2005: fig. 2).

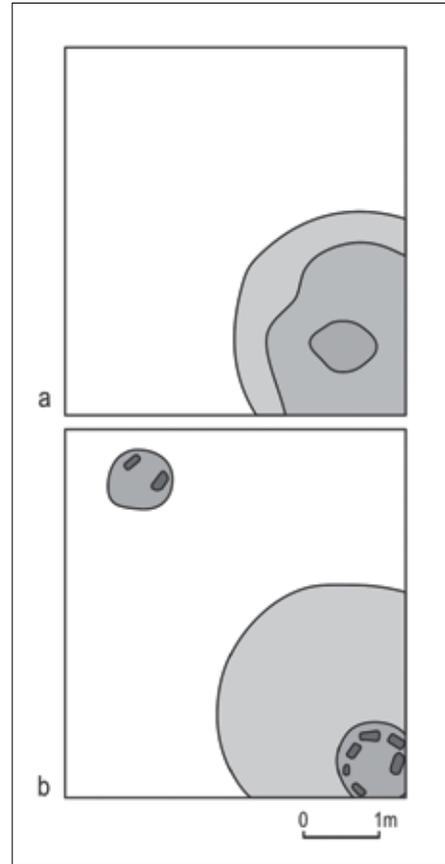
damage. Particularly remarkable is the younger construction phase (Fig. 7). Oriented NE, its longer axis within the explored area was approximately 11m long. Its width was 4.5m. The structure's outline as marked by 12 to 30cm wide furrows, filled with dark soil or silt, constituting remains of walls made of organic materials. The building had a fairly sophisticated internal layout, featuring a courtyard, a corridor and a number of adjacent rooms. It is likely that a layout like that reflected the division of the building into its northern and southern part. Inside the buildings, both structural and storage pits have been identified, as well as pits with traces of fire which must have been used as hearths. An interesting find from the courtyard were two clusters of thoroughly burnt, concave-convex bricks, most probably brought in from breweries discovered on the site. It seems likely that the older phase of the building was smaller (8 x 3.2m), but in fact one part of it remains outside the explored area (Chlodnicki & Ciałowicz 2003: 69, fig. 4). Structure W96-98 from Tell el-Farkha was the first known Lower Egyptian building of this kind, differing in terms of size and form from other objects discovered in the area. Since the structure was located in the central part of the

Figure 8. Tell el-Farkha. The Lower Egyptian oval structure, Central Kom.

Western Kom, it may have played a major role in the architectural arrangement of the settlement, and thus also in everyday life of its inhabitants. It is not impossible that the building had a public function. It could have been connected to some unknown internal social organization of the Lower Egyptian culture. The building's location is significant also in the light of the fact that an administrative-cultic center existed in the very same place in the Proto- and Early Dynastic Period (Chłodnicki & Ciałowicz 2001: 91; Ciałowicz 2012b).

Other noteworthy elements of Lower Egyptian architecture from Tell el-Farkha include the remains of an oval hut, 350cm in diameter, sunk to a depth of 40 to 50cm, with a centrally positioned hearth (Fig. 8). Numerous oval storage pits were found nearby. The hut is the only structure of its kind found thus far in Tell el-Farkha. Oval huts were one of the elements of the Delta's architectural traditions. The oldest ones come from the Merimde and el-Omari culture settlements (Chłodnicki & Ciałowicz 2000: 61; 2002: 90, 99; Mączyńska 2003a: figs. 2-4).

Residential structures in Tell el-Farkha were accompanied by numerous oval storage pits, approx. 130cm in diameter and 30cm deep. Excavations on the Western and Central Koms revealed numerous pits with diameters varying from 120 to 220cm and depths from 50 to 80cm. As some of them were lined with silt, they could have been used as granaries (Pls. 1-2). Their fill contained a large number of pottery fragments and complete pottery vessels (Chłodnicki & Geming 2012: 90). Another typical Lower Egyptian element were clusters of small round or oval pits with diameters ranging from 20 to 30cm, lined with silt (burnt in some cases) (Pl. 5). In most pits, the fill did not contain any artefacts. Therefore, the pits are interpreted as postholes, parts of undeterminable installations used for cooking, or as stands for vessels with round or pointed bottoms (von der Way 1997: 35; Chłodnicki & Ciałowicz 2002b: 90; Chłodnicki & Geming 2012: 92-93, figs. 5-6). Hearths have also been



discovered in Tell el-Farkha. They took the form of either campfires used on a one-off basis (their only traces being poorly visible streaks of burnt soil) or purpose-made mud platforms with depressions (Cichowski 2001: 47-48; 2008).

Another unique structure revealed by excavations in Tell el-Farkha are breweries. Until 2013, 7 breweries had been discovered at the site, each preserved to a different degree (Adamski & Rosińska-Balik *in press*: tab. 1). Six of them are located on the Western Kom, and the seventh one on the Central Kom (Chłodnicki & Geming 2012; Ciałowicz 2012a). The best preserved brewery is structure W200 (Pl. 3). According to K.M. Ciałowicz (2012a: 151, figs. 6, 8) the general shape of this structure was designed in detail long before the building process began. The structure measured 9 x 3.4m, stretching along the S, SW-N, NE axis and featured 2 rows of 4 big vats. The smallest brewery from Tell el-Farkha, marked as W47, had the shape of a three-leafed clover (Pl. 4). Its dimensions were 3.60 x 4m. The layout had the form of three connecting circles, surrounded radially by characteristic D-shaped bricks. The central part of each circle was occupied by a sort of a fireplace holding a large vat used for beer brewing. Thanks to structure W201, where 2 partially preserved vats were discovered *in situ*, we know that vats were supported by two rings of diagonally arranged D-shaped bricks. On the outside of the brewery there were postholes which could have been used to support the building's roof made of organic materials and additionally covered with a thin layer of mud (Chłodnicki & Ciałowicz 2003: 69-70; Ciałowicz 2012a).

The breweries from Tell el-Farkha are the only ones known from Lower Egypt. The oldest breweries in Egypt dated to NIB-IIA are known in the south - at Mahasna, Abydos and Hierakonpolis, where they are connected to some of the most important centers of the Naqada culture (Peet & Loat 1913: 3-4; Geller 1992; Takamiya 2008). As the breweries from Tell el-Farkha were erected later and additionally were well developed and fully organized, it seems that the idea of beer production had been borrowed from the south (Adamski & Rosińska-Balik *in press*).

Another important discovery from Tell el-Farkha was a structure named by the excavators as the "Lower Egyptian residence" with a sophisticated interior consisting of multiple rooms, 20m long and 25m wide (Pl. 6). The residence's layout was marked by furrows constituting the remains of structural timber elements. The entire building was surrounded by a double wooden fence, subsequently replaced by a massive mudbrick wall. The wall was 1.6m wide at the base and 1.2-1.3m wide at the top, with slightly oblique sides (Pl. 7). The mudbricks used to construct it were of different sizes, and additionally were arranged in diverse ways in different parts of the walls (Chłodnicki & Geming 2012: 92-97, figs. 8-10). A similar wall surrounding the brewery center was discovered on the Western Kom (Ciałowicz 2012a: 161).

The form and size of the "residence" are unlike those seen in other examples of Lower Egyptian architecture. The emergence of a mudbrick-only wall building technique is also important. Although the use of bricks is known from Maadi, and mudbricks were also found in Buto, Tell el-Iswid and Sais, it was in Tell el-Farkha that a wall made of this material was

discovered for the first time. Over a long period of time the Upper Egyptian origin of the new technique of erecting walls was generally accepted (*cf.* von der Way 1992a: 3; Wilkinson 1996: 95; Wengrow 2006: 82). However, the discoveries in Lower Egypt showed that the earliest known use of mudbrick comes from Lower Egypt (Tristant 2004).

Excavation projects carried out in Tell el-Farkha made it possible to identify – for the first time ever – the functional arrangement of a settlement. Such an arrangement is particularly visible in the case of the Central Kom, where each of the 3 zones was separated by a wooden fence or a mudbrick wall (Chłodnicki & Geming 2012: fig. 7). The Western Kom with breweries and the structure W96-98 also show division into zones serving different purposes (Ciałowicz 2012a).

1.5. Tell el-Iswid

Excavations carried out in Tell el-Iswid brought to light numerous hearths, rubbish dumps and irregular pits of unknown purpose, all found in Lower Egyptian layers (Phase A). The most characteristic Lower Egyptian elements were clusters of small circular silt-lined pits (approx. 30 to 35cm in diameter and 25 to 30cm deep). In some of the pits the silt lining was burnt. Pits lined with both burnt and unburnt silt were identified as well. According to E.C.M. van den Brink (1989: 59, fig. 4), this may indicate that the same pits could have been used repeatedly. Since the horizontal arrangement of the holes was irregular, their function remained unexplained.

Above layer I in Tell el-Iswid a relatively thick layer of silt was registered, which – according to E.C.M. van den Brink (1989: 61) – had not been deposited naturally. Within the silt layer four oval pits (150cm in diameter) were found. Two of them were accompanied by a large number of holes lined with silt. In addition, two perpendicular rows of small holes (5 to 7cm in diameter) arranged at intervals of approx. 15cm encompassed one of the pits featuring a small hearth. The structure could have been part of a hut-like dwelling made of wickerwork of small poles and twigs, embedded in silt and built of light organic materials, mostly reed. Numerous impressions of reed have been preserved on fragments of clay which was probably used as plaster for the entire structure.

Other traces of permanent settlement include pits lined with wicker baskets mud, most probably used for grain storage. The pits formed a kind of a circle and served as a granary. Similar findings are known from the sites in the Faiyum Oasis and in Merimde (Caton-Thompson & Gardner 1934; Eiwanger 1984; 1988; 1992).

In Tell el-Iswid, small temporary hearths were accompanied by large hearths with fairly thick layers of ash, indicating their regular use.

Other items found in the younger layers of the Lower Egyptian culture include numerous furrows interpreted as remains of animal enclosure fences built of light organic materials, as well as fragments of the first irregularly shaped silt bricks (van den Brink 1989: 59-64, fig. 5.3).

Since 2007, on-site excavations have been carried out by an expedition from the French Institute of Oriental Archaeology in Cairo (IFAO) headed by B. Midant-Reynes. The French archeologists have also managed to unearth some remains of the Lower Egyptian culture.

1.6. Tell el-Masha'la

The site in Tell el-Masha'la was explored from 2002 to 2004 by an expedition from the University of Toronto, headed by S.R. Rampersad (2006). The project resulted in a surprisingly small amount of information about residential structures, represented first of all by small and round reinforced pits with diameters ranging from 22.5 to 35cm and depths from 13 to 44cm. Some of them were in clusters, while others were found separately. It was impossible to determine an overall model of their arrangement that could indicate the pits' function as part of a wall or building. Some of them were lined with mud, some only with potsherds, and some with a combination of both. S.R. Rampersad (2006: 792-797, fig. 2) interprets those holes as cooking pits, given the presence of black fills indicating burning and burnt faunal remains discovered inside them. Since some of the pits show traces of repair, they could have been used repeatedly.

Near the western borders of the site 7 graves were identified as well. All bodies were in contracted positions and were laid on the left side. In five cases the head was oriented to the north with the face to the east. In the other two cases the bodies were slightly skewed from this preferred direction. In 5 graves remains of (probably flaxen) fabric were discovered, used to wrap the body. Two graves were oval (1.10m long, 0.62m wide and 30cm deep). The other 5 graves were rectangular with rounded corners (1.96 x 1.92cm). According to S.R. Rampersad, the grave pits were not purpose made in advance, and the body was deposited right after the pit was dug. Due to the poor condition of bones, it was not always possible to determine the deceased's age and/or sex. Grave goods were scant in some cases or non-existent in others. One remarkable exception is a grave with two complete vessels and a half of an oyster shell, on which 3 fingers of the right hand were placed (Rampersad 2006: fig. 3).

S.R. Rampersad (2006: 824) dates the whole site to Naqada II to IIIc1. Thus, its chronology would include the Lower Egyptian culture. The dating is supported by vessel forms: elongated jars with pointed or flat bases similar to those known from Maadi and bowls with impressed dots just below rim (Rampersad 2006: figs. 5, 8). At the current stage, any more accurate dating would be quite challenging.

1.7. Tell Ibrahim Awad

In Tell Ibrahim Awad, levels dated to the Lower Egyptian culture (Phase 7) revealed a large number of storage pits, silt-lined postholes and hearths (van den Brink 1992b: 53). The site is an important point of reference in studying the Delta's settlement network from

the middle Predynastic period until the reign of the 12th Dynasty. However, researchers' attention concentrated first of all on the remains of temples dated to the period of the Old and Middle Kingdom. Therefore, most published papers do not discuss the oldest traces of Lower Egyptian communities found on the site (van Haarlem 1996: 7-34; 1998: 509-513; Belova & Sherkova 2002; Eigner 2003: 162-170).

2. CEMETERIES

Thus far, 8 Lower Egyptian necropolises have been discovered in Maadi, Wadi Digla, Heliopolis, Merimde, Sedment J, Kom el-Khilgan, Beni Amir and Minshat Abu Omar. Two isolated graves were additionally found in Haraga. Only in two cases (Maadi / Wadi Digla and Minshat Abu Omar) researchers found links connecting the necropolis with its accompanying settlement (Rizkana & Seeher 1987; 1988; 1989; Krzyżaniak 1992a; 1993). In the case of Maadi, both the necropolis and the settlement have been thoroughly examined. In Minshat Abu Omar excavation works were carried out in the cemetery only. On the other sites (Heliopolis, Sedment J, Merimde and Kom el-Khilgan) the location of the accompanying settlement remains unknown. Due to the fact that reports from Sedment J, Merimde and Beni Amir necropolises (as well as from Haraga graves) concentrated on the description of pottery found in graves, those three sites will be omitted from the description of Lower Egyptian burial customs (Engelbach 1923; Badawi 1980: 70; Williams 1982: 214-219; el-Moneim 1996).

2.1. Heliopolis

One of the key challenges faced by the authors of the publication concerning this site, F. Debono and B. Mortensen (1988: 41), was to determine the original size of the necropolis in Heliopolis. The said issue was caused by the lack of detailed plans and data from excavations carried out in the 1950s. Relying on whatever information was available, the researchers determined that the cemetery originally consisted of approximately 200 graves and was probably operated for a brief period of time (50 to 60 years) by a small Lower Egyptian community. As part of salvage projects carried out in the 1950s, 63 graves were examined, 45 of which contained human skeletons and 11 contained skeletons of animals (goats and dogs). The graves differed in terms of size and depth, which were correlated to the amount of grave offerings. The graves had a form of oval pits, sometimes lined with matting or wood. In some cases, wood was used to cover the body. According to F. Debono and B. Mortensen (1988: 38), the wood could be remains of a roof above the grave. In most cases bodies were deposited in a half contracted position on the right side, with the head to the south and the face to the east. The deceased's hands were placed in front of the face. There are only six exceptions from the above rule. Nearly a half of the bodies were wrapped in matting and/or animal skin. It seems that this particular custom was quite common and it is only due to the poor preservation that no traces of wrapping materials were not found in some cases.

In a number of graves a black or brown substance was found, which could constitute remains of undefined materials. In one grave a Nile shell was found in the deceased's mouth. F. Debono and D. Mortensen (1988: 38) identified 4 groups of graves:

1. Graves of children with no traces of matting or animal skin;
2. Graves of adults with no traces of matting or animal skin and with no (or only a few) grave goods;
3. Graves of adults wrapped in skins and matting, with a few grave goods;
4. Graves of adults wrapped in skins and matting, with numerous grave goods.

The grave goods from Heliopolis consisted mostly of pottery vessels placed near the head. The number of vessels ranged from 1 to 10. In some graves, pottery was accompanied by flint knives (2 graves) and palettes used for pigments (5 graves). In one grave, a fragment of a necklace made of *Ancillaria* shells was preserved (grave I 65). In addition, in grave I 34 remains of copper items were found: piece of a bracelet and an undeterminable tool. Other noteworthy finds include lumps of malachite and two fragments of stone vessels.

Animal graves known from Heliopolis are smaller than human graves. They contained a fairly large amount of grave goods. Goat bodies were laid on the right side, in a contracted position, the head to the south and the face to the east. In some cases bodies were wrapped in matting or skin. The number of vessels in the grave was never greater than 8. Unlike in goat graves, bodies in dog graves were not oriented in any particular direction. Likewise, no offerings were found inside dog graves. The role of both goat and dog graves was probably symbolic (Debono & Mortensen 1988: 47).

The third type of objects from Heliopolis are clay pottery groups (sometimes wrapped in matting) and hearths. Some of them could be remains of funeral feasts or other inhumation rituals.

2.2. Kom el-Khilgan

The necropolis in Kom el-Khilgan was explored by an expedition of the French Institute of Oriental Archaeology in Cairo (IFAO) headed by B. Midant-Reynes. During 4 years of excavation works researchers found 239 graves with remains of the members of the Lower Egyptian and the Naqada communities. N. Buchez & B. Midant-Reynes (2011: 835) identified 3 phases of the necropolis's operation, the first two of which were connected with the Lower Egyptian culture. Phase 1 (KeK1) was represented by 20 graves, mostly containing vessels with polished surface and oblique rims (Maadi types 4b-c) and necked vessels (Maadi type 5a). Phase 2 is formed by 30 graves, with lemon-shaped jars being the main item among grave goods. In the materials published so far the excavators emphasize that for all Predynastic graves (Phases 1 to 3) there were no rules regarding body orientation. Most bodies were laid on either side, in a contracted position with upper limbs flexed and the hands placed most often in front of the face. According to the researchers, the general body position was

not influenced by the deceased's age or sex. Grave goods were innumerable and mostly consisted of pottery vessels. Usually there was one vessel only, placed near the body, principally beside the head or the feet (Midant-Reynes *et al.* 2004: 475-478, figs. 6-7; Buchez & Midant-Reynes 2011: fig. 3).

Phase 1 of the necropolis in Kom el-Khilgan is related to Wadi Digla II and Buto I, while Phase 2 is correlated to Buto II and – in the relative Upper Egyptian chronology – to Naqada IIC (Buchez & Midant-Reynes 2011: 835).

2.3. Maadi

The cemetery in Maadi was situated 180m from the southern edge of the settlement. Graves were clustered in a 10 to 20m wide strip of land running east-west. A total of 75 human graves (including 18 children graves) and one dog grave were discovered. Bodies were deposited in simple, oval pits. The deepest ones were 140 to 180cm below the contemporary ground level and 50 to 100cm from sterile soil. The pits' length varied from 11 to 75cm, and the width was 60 to 95cm. Bodies were placed in a contracted position, on the side, with legs pulled up and with the hands in front of the face. No rule regarding body orientation in the grave was identified. Bodies in the Maadi necropolis were deposited on either right or left side, the head positioned in various directions (south being the most common one). In the case of bodies lying on the left side, the face was directed to the west, while those lying on the right side had faces directed to the east. In two graves only bodies were laid on the back, and in one grave the body was split in two parts prior to inhumation. No traces of grave-related overhead structures were recorded in Maadi. Likewise, no traces of matting, skins or fabric used to cover the body were found. However, given the fact that in some cases the body was very strongly contracted, it is likely that the deceased was wrapped in skin, matting, *etc.* Grave goods in Maadi were very scarce. In a total of 76 pits researchers found only 27 pottery vessels, one pottery cover, one flint flake and two *Aspatharia* shells. Furthermore, fragments of pottery vessels were found in six graves (Rizkana & Seeher 1990: 22-28).

Apart from human graves, a single dog grave was also discovered in Maadi. The animal's body was placed in a shallow pit, on the right side, with the face to the east. No goods were found in that grave (Rizkana & Seeher 1990: 27).

2.4. Minshat Abu Omar

The necropolis in Minshat Abu Omar is located on the top of a large gezira in the northeastern Delta. Graves in this cemetery fall into 4 main chronological categories. The oldest one, marked with the Roman numeral I, coincides with Naqada IIC-d. Groups III and IV are dated to Naqada III – 0 Dynasty and 1-2 Dynasty, respectively. Group II was identified on the basis of the body position, but its chronology has not been confirmed due to the lack of characteristic pottery (Kroeper 2004: tab. 1). Originally it was believed that the necropolis in Minshat Abu

Omar belonged to a Naqada culture community, just like necropolises in Gerzeh or Harageh (Midant-Reynes 1992: 178; Ciałowicz 2001: 92; Wengrow 2006: 84; Stevenson 2009: 48-49; Brewer 2012: 77). Preliminary reports (Kroeper 1986/87; 1988), using grave division into groups marked with Arabic numerals (1a-b, 2, 3a-c, 4) present W-ware and D-ware pottery as characteristic forms for group 1. Those are accompanied by rather limited R-ware vessels: conical jars with flat bottom and lemon-shaped jars (Kroeper 1988: 13, figs. 23-72). A comprehensive overview of part of the graves from Minshat Abu Omar (Kroeper & Wildung 1994; 2000), using the division into groups marked with Roman numerals, made it possible to take a closer look at the content of group I graves. According to Ch. Köhler (2008: 528) ca. 55% of vessels uncovered in graves dated to MAO I can be classified with Petrie's type R65-69. Assuming that those forms, including in particular R69, referred to in literature as lemon-shaped jars, are cultural markers of the Lower Egyptian culture (Buchež & Midant-Reynes 2007; 2011), the cultural identity of group I graves from Minshat Abu Omar should be reconsidered. In Minshat Abu Omar a total of 255 group I graves were explored. Thus far, reports discussing only 139 graves have been published. 5 of those graves contained D-ware vessels, and another 14 contained wavy-handles vessels. Interestingly, in nearly all cases there was only one such vessel and it was accompanied by a very high number of bag shaped jars, lemon shaped jars and conical jars with pointed or flat bases (Petrie's R76 and R84), *i.e.* typical Lower Egyptian forms (see Chapter 6). The small number of Upper Egyptian vessels is comparable to Southern Levantine imports found in this group of graves (9 items). Local pottery, mostly rough ware, constitutes the prevalent type of goods in the oldest graves, while southern or eastern imports are merely a distinctive addition (Maćczyńska *in press c*).

In the oldest group of graves the inhumation method also shows similarities to the Lower Egyptian culture. Since 96% of all graves of MAO I left no traces of any pit, grave pits must have been shallow and the body was deposited without any preparations. The oldest graves also differ significantly in terms of size and shape. Bodies were deposited on the right side, with the face turned west. As far as grave goods are concerned, over 50% of all graves in the oldest group contained from 2 to 5 offerings. Nearly 25% graves had 1 offering only, and another 13% contained 6 to 10 offerings. Less than 4% of all graves had more than 10 offerings (Kroeper 2004: tab. 6, fig. 8.a), and the richest one had 33. The prevalent type of goods deposited in the graves were pottery vessels, although flints, shells, bone implements were also fairly common.

The chronological position of the necropolis in Minshat Abu Omar was analyzed by N. Buchež and B. Midant-Reynes (2007; 2011) and compared to the chronology of the graves from Kom el-Khilgan. In their opinion, Phase II of the graves from Kom el-Khilgan, dated to Naqada IIC, can be correlated to the oldest graves from Minshat Abu Omar (MAO1a). Unfortunately, in Kom el-Khilgan no graves dated to Naqada IID, contemporary to MAO1b (*cf.* Jucha & Maćczyńska 2011: tab. 1) were identified. The pottery from Minshat Abu Omar is comparable to the pottery registered in the settlement of

Tell el-Farkha, the first two phases of which are also dated to the 2nd half of Naqada II (see Chapter 6; Chlodnicki 2012). It is thus possible that the necropolis in Minshat Abu Omar was used by a community similar to the one inhabiting the gezira in Tell el-Farkha (Maćczyńska *in press c*).

2.5. Wadi Digla

The necropolis in Wadi Digla was located on an open air prominence in the middle of the delta-shaped mouth of the wadi. Excavations held in the 1960s revealed 471 human graves and 14 animal graves. The original size of the entire cemetery is unknown due to considerable damage caused during 2nd World War.

After an analysis of grave goods and body positions I. Rizkana and J. Seeher (1990: 65) chose to divide the burials into two chronological groups. The first one was contemporary to the oldest phase of Maadi settlement (Naqada IC). The chronology of the other group corresponded to the graves from Heliopolis (Naqada IIAB). Despite different chronologies, both groups used narrow oval grave pits. Their average depth measured from the contemporary ground level was 80 to 100cm, and 10 to 40cm from sterile soil. In terms of size, the pits were similar to those registered in Maadi. Bodies were laid in a contracted position, on either side, the knees pulled up in front of the body and the hands placed in front of the face. There were only a few exceptions from this rule and they most probably resulted from various post-depositional processes. In 145 graves the body was laid on the left side and in 229 graves it was laid on the right side. Deposition on the right side with the head oriented to the south dominates in graves from the younger phase of the cemetery. In the older phase it is impossible to identify any principles governing body orientation. Traces of matting were registered in some graves. Due to the characteristic shape of the pits, their walls could not be lined with mats, which implies that mats were either placed under or wrapped around the body.

In 50 graves from the older group unshaped blocks of limestone were found. They were probably used to reinforce pit walls. In four graves from the younger group blocks of silt were found near the body's pelvis. Their function is unclear. Silt could have lined the bottom of the grave pit, but it could also be used to manufacture an unspecified object. Blocks of silt could also imitate food. In four graves from Wadi Digla rocks were placed under the head in the form of a pillow. According to I. Rizkana and J. Seeher (1990: 71), the low number of such rock pillows does not necessarily indicate that this particular custom was marginal. The tradition of placing a pillow under the head of the body could have been fairly common, but in most cases the pillow was made of organic material (*e.g.* reed). A similar custom in the Lower Egyptian tradition was previously observed in the el-Omari culture. On the other hand, the low number of rock pillows could also imply a different function. Flat rocks could have been used as palettes for pigments and therefore were deposited in the grave near the head.

In the cemetery of Wadi Digla, grave goods consisted mostly of pottery vessels. 223 graves contained one or two such vessels. Rich graves containing three vessels are very rare. In over a half of all the graves no offerings were found at all. Technological differences between grave pottery from Wadi Digla's Phase I and Phase II can be observed. Vessels from older graves have red and reddish-brown burnished surface. Phase II graves mostly contain black and dark brown pottery with burnished surface. Younger graves also contain the only Levantine imports registered in the necropolis (see Chapter 8). In terms of morphology, the pottery from Wadi Digla does not differ greatly from the pottery found in Maadi settlement and it is represented mostly by jars. Only a handful of fragments of bowls (used as lids for jars) were found.

In as few as 38 graves bodies were accompanied by items other than pottery. Those items include stone vessels, *Aspatharia* shells, palettes, flints tools, ornaments, combs, bone tools and color pigments. One complete stone jar and two fragments of such a jar were found too. The barrel-shaped jar was made of light greenish calcite. Its shape was reminiscent of pottery vessels typical for the Lower Egyptian culture. Other interesting finds from the necropolis in Wadi Digla include a fragment of the rim of a wide-brimmed basalt jar and a fragment of the rim of a limestone bowl. In 5 graves of adult humans flat stone and slate items were found, most probably used as palettes for pigments. They were placed near the head of the deceased. The presence of palettes is characteristic for Phase II only. Pigments found in Wadi Digla include green copper ore and grey manganese ore pyrolusite. Stone implements were present in 35 graves only and most of them were blades, bladelets and flakes, as well as a single retouched blade and a scraper. No relationship between the sex of the deceased and the presence of flint tools in the grave were identified. In older graves from Wadi Digla (Phase I) shells were fairly common. Some of them, including in particular large shells of *Aspatharia rubens*, were used as containers, e.g. for pigments. Shells were deposited in the grave near the head or the upper part of the body. Shells of sea snails *Nerita polita* and *Ancilla acuminata*, were used as beads. In several graves bracelets made of tens of drilled-through shells were found. Other bracelets found in Wadi Digla were made of disc shaped stone beads and tabular bone beads.

Other noteworthy ornaments from Wadi Digla include a bone comb, most probably used to hold hair, found in the grave of a young female (aged 19 to 28), and a narrow spatula found in the grave of a young male (aged 23 to 40).

Apart from human graves, also 14 animal burials (dogs and unidentified quadrupeds) were found in Wadi Digla. Each of the animals was buried in a separate pit, the size of which corresponded to the size of the animal. Approximately half of the graves contained pottery, and some had traces of copper ores or copper items. Bones of young animals were also found in three human graves. Only in one case it was possible to determine the species (pig). According to I. Rizkana and J. Seeher (1990: 93), only parts of carcasses were deposited in graves (as food offering).

Table 15. Graves of the Lower Egyptian culture.

	PHASE OF THE LOWER EGYPTIAN CULTURE	NO. OF GRAVES	PIT SHAPE	BODY POSITION	POSITION OF				AVERAGE NO. OF OFFERINGS	NO. OF ALL OFFERINGS IN THE RICHEST GRAVE (NO. OF CERAMIC VESSELS)
					BODY	HEAD	FACE	HANDS		
MAADI	1	75	OVAL	CONTRACTED, IN SOME CASES WRAPPED	LEFT OR RIGHT SIDE	NORTH SOUTH	WEST EAST	IN FRONT OF THE FACE	1-2	4 (3)
WADIDIGLA	1	471	OVAL	HALF CONTRACTED	LEFT OR RIGHT SIDE WDII – MOSTLY RIGHT SIDE	NORTH SOUTH SOUTH	WEST EAST EAST	IN FRONT OF THE FACE	1-2	48 (1)
HELIOPOLIS	1	71	OVAL	HALF CONTRACTED WRAPPED	RIGHT SIDE	SOUTH	EAST	IN FRONT OF THE FACE	1-10	12 (10)
KOM EL-KHILGAN	1-2	226 ¹	OVAL	CONTRACTED	LEFT OR RIGHT SIDE	NORTH WEST	WEST EAST NORTH SOUTH	IN FRONT OF THE FACE	1-2	?
MINSHAT ABU OMAR	2-3	255	OVAL	HALF CONTRACTED	RIGHT SIDE	NORTH	WEST	IN FRONT OF THE FACE	2-5	33 (16)

¹ All graves dated to phases 1 to 3 including Naqadian graves (Bachez & Midant-Reynes 2011: 835)

Other items registered in the necropolis in Wadi Digla include a hearth (70 to 80 cm in diameter) made of burnt blocks of limestone, most probably connected with unknown burial rituals. Small pits with pottery vessels found near graves are also likely to have been linked to burial customs. Traces left on some vessels indicate that they must have been damaged prior to deposition in the pit.

3. SUMMARY

Excavation projects carried out on Lower Egyptian settlement sites made it possible to identify the type of residential buildings typical for this particular culture (Tab. 14). On all the sites explored thus far, rectangular structures supported by posts sunk in the ground were found. Their walls were made of organic materials and then plastered with mud. Some shallow and narrow furrows could be remains of animal enclosures accompanying residential buildings. The exploration of Tell el-Farkha revealed structures whose size was far beyond the size of other previously discovered buildings erected in a manner typical for the Lower Egyptian culture. The sophisticated layout of rooms in the Lower Egyptian residence from the Central Kom and the layout of the structure W96-98 showed that the inhabitants of the settlement erected not only small and simple isolated houses known from other sites. From architectural perspective, adaptation of mudbrick by a Lower Egyptian community seems very important. Mudbrick walls became an element of the local architecture, simultaneously denoting a special character of the accompanying structure.

On the Western Kom, a mudbrick wall separated a large beer brewing center from the remaining part of the settlement. In the case of the Lower Egyptian residence its separation by a mudbrick wall most probably denotes the residence's practical importance for the inhabitants of the settlement. The finds discovered inside the residence, including basalt and bone maceheads, golden and stone beads probably forming a necklace, copper and flint knives, and a fragment of a ripple flake knife also confirm its special character (Chłodnicki & Geming 2012: 96-99; Czarnowicz 2012a: 352, fig. 1:2). It is worth mentioning that 75% of fragments of vessels imported from Levant were excavated westwards of the fence/wall of the residence (Czarnowicz 2012b: 261, fig. 15). An additional aspect discovered during the excavations in Tell el-Farkha is the functional division of the settlement, previously unknown from other settlements of the Lower Egyptian culture.

Another important site is Maadi, where subterranean dwellings (unique in Egypt) were found. They were linked to objects from the Chalcolithic or EB I context in Southern Levant (see Chapter 3).

Human graves are a rare finding within the boundaries of Lower Egyptian settlements. On the basis of the discoveries made thus far one can claim that burials within settlements could have been reserved for neonates, infants and small children, buried in pottery vessels or in shallow pits. Older children, adolescents and adults were buried in separate necropolises, most probably located near the settlement (Tab. 15).

The dead were buried in pits, in a contracted position on either side. In Maadi and in the older phase in Wadi Digla no body orientation principle was identified. In Wadi Digla's Phase II and in Heliopolis it was customary to lay the body on the right side with the head to the south. In Minshat Abu Omar the body also rested on the right side, but the head was to the north and the face to the west. In the necropolis of Kom el-Khilgan, whose first phase is correlated to the Wadi Digla II cemetery no body position rule was identified either. The body was sometimes wrapped in mats, skins or fabrics.

Grave goods were usually scarce and consisted of pottery vessels. Shells, stone and flint tools or palettes were sometimes offered as well. In the necropolis of Minshat Abu Omar, vessels imported from the south and the east were discovered apart from those manufactured locally. Thus far no rules governing grave goods were identified. The current condition of skeletons in the necropolises varies considerably and therefore age and/or sex determination was not always possible in the case of graves with remarkable amount or quality of offerings. Shells of *Aspatharia rubens* were found in 30 graves at Wadi Digla, but the sex of the deceased was identified in 6 of them only. Two skeletons were identified as female, another two as probably female, and the last two as male. Similar difficulties were encountered in the case of flint tools found in graves. Likewise, identifying a relationship between the deceased's age and the amount of offerings is rather challenging. In anthropological terms, the largest amount of information was collected from the necropolis in Minshat Abu Omar, where 80% of skeletons were identified (Kroeper 2004). However, no data regarding relationships between sex, age and grave offerings have been published.

The maximum number of grave goods in adult human graves in Lower Egyptian necropolises varies significantly. In Maadi the maximum number is two, as compared to eight in Wadi Digla and ten in Heliopolis. While the richest grave in Minshat Abu Omar contained 33 offerings, over 50% of the oldest graves from that cemetery had 2 to 5 offerings. It seems that the differences in the number of goods between each necropolis are linked to grave chronology. Older graves (Maadi, Wadi Digla I) were poorly equipped, with either one or two offerings. The number of goods grew significantly in younger graves (necropolises in Heliopolis, Wadi Digla II, Minshat Abu Omar).

Spatial analysis of Lower Egyptian necropolises revealed the existence of clusters of certain grave types. In Maadi and Heliopolis such clusters were formed by children graves. In Heliopolis such graves were located in the western part of the necropolis. In Wadi Digla the boundaries are not so clear-cut, but it is nonetheless possible to identify somewhat irregular clusters of children graves in the central and (probably) southern part of the necropolis. Additionally, in Heliopolis graves without offerings were clustered in the southeastern row, and animal graves in the northeastern section. The spatial arrangement of the necropolis in Wadi Digla is primarily determined by grave chronology. Phase I graves stretched

from the southwest to the northeast. Younger graves were concentrated in the central part of that belt and to the southeast off it. Also in Minshat Abu Omar grave distribution was determined by chronology. Group I graves were more highly concentrated in the south and spread north along the eastern part of the hill.

Human graves in Lower Egyptian necropolises were accompanied by graves of animals (dogs, goats and unidentified quadrupeds). Their interpretation is not straightforward. As far as dogs are concerned, it is generally believed that most prehistoric communities attributed symbolic religious and ritual importance to those animals. The dog was thus a companion, a guardian and a keeper. It was frequently linked to chthonic deities and the underworld, where it was the sentry of hell, the soul hunter or the harbinger of death (Ablamowicz 2002; 2012). Dog burials could have played the role of grave offerings. As a result, the animal could continue to watch over and accompany its master in the afterlife. Burials of other animals also could have been treated as offerings to the dead.

Within necropolises traces of unspecified inhumation rites, such as clusters of vessels or pits with vessels, were found as well.