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## The Old Kingdom Upcountry Settlement Architecture in the Nile Delta – the Case of the 3<sup>rd</sup>-4<sup>th</sup> Dynasty Building at Tell el-Murra

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### Introduction

The current state of research on Egyptian settlements clearly indicates a gradual decay of the Nile Delta sites from the Early Dynastic period until the end of the Old Kingdom (Małecka-Drozd, forthcoming). The amount of settlements with attested architectural remains significantly decrease at least since the early Old Kingdom. Simultaneously, a decline of quality of buildings discovered on some of the sites which enjoyed prosperity in the Predynastic and Early Dynastic periods is noticeable (van den Brink 1993; Małecka-Drozd 2014). One of the sparse excavated sites with architectural remains dated to the Old Kingdom is Tell el-Murra.<sup>1</sup>

Tell el-Murra is located in the northeastern part of the Nile Delta, in the Sharq-iyah Governorate, *markaz* Kafr Saqr. A particular relevance of the area was con-

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<sup>1</sup> The excavations between 2010 and 2012 were financed by funds from the Ministry of Science and Higher Education, Poland, and the National Science Centre, Poland, grant no. 2195/B/H03/2009/36. Since 2014, the project has been financed by funds from the National Science Centre, Poland, which were allocated on the basis of decision number DEC-2013/09/B/HS3/03588.

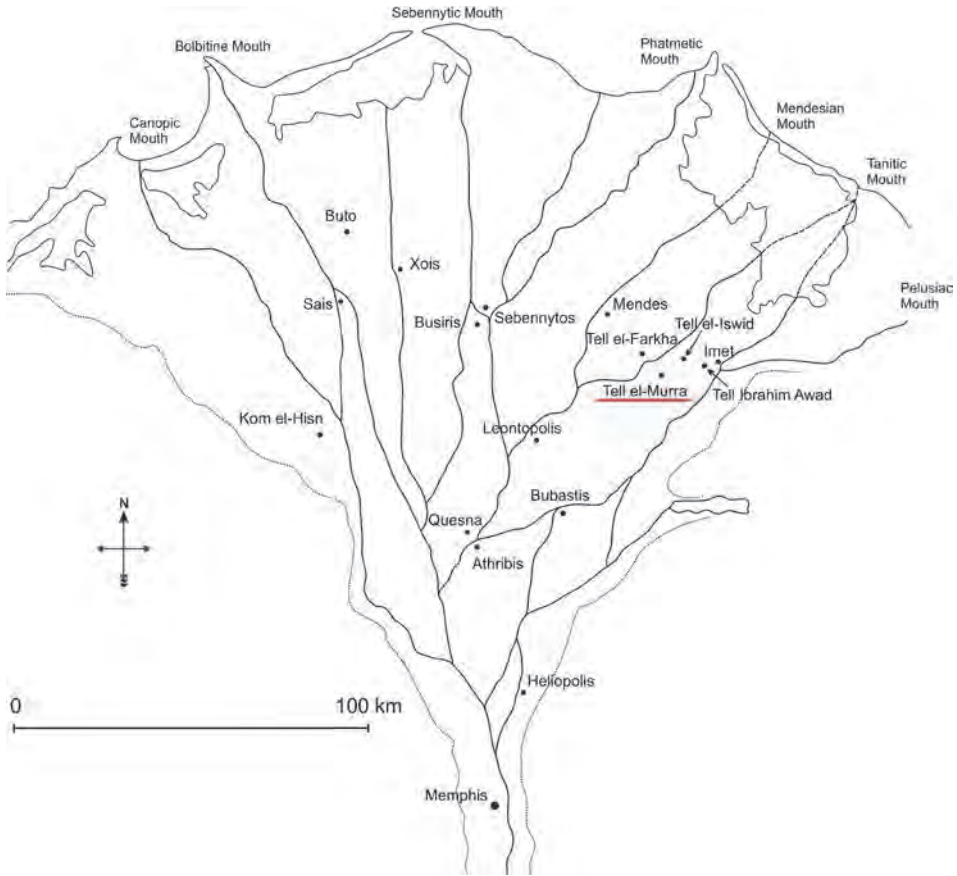


Fig. 1. The Nile Delta settlements during the Old Kingdom

firmed by numerous sites dated for the Late Predynastic and Early Dynastic periods (Fig. 1), recognized during former research (van den Brink 1993; Hendrickx and van den Brink 2002: 370-371; Jucha 2009; 2011). The site is situated only ca. 10 km to the east from the important Predynastic and Protodynastic centre at Tell el-Farkha, excavated since 1998 by a Polish expedition (Chłodnicki *et al.* 2012) as well as ca. 8 km to the south-west from Tell el-Iswid, where French expedition has carried out its research since 2006 (Midant-Reynes and Buchez 2014). Even closer – less than 4 kilometers – distance was attested between Tell el-Murra and other sites from the same period (Jucha 2016; Jucha and Bąk-Pryc, forthcoming). These include Tell el-Akhdar (about 3 km away) (Jucha 2012), Tell Mashala (about 3 km

away) (Rampersad 2006), Tell Gabarra (about 3.9 km away) (Rampersad 2008; 2015-2016), Tell el-Gherier (about 1.7 km away) and Tell Ginidba (about 3.5 km away) (Chłodnicki *et al.* 1992; van den Brink 1993: 294, tab. 3). One of the most important reasons for the development such a dense settlement network were the ancient Tanitic branch of the Nile and its distributaries flowing through this area as well as the important trade route from Egypt to the northern Sinai and Palestine, crossing the northeastern Delta (Oren 1973; van den Brink 1993: 294-297; Jucha 2010b: 379). It is appeared that Tell el-Murra was one of the settlement that have benefited from these favorable conditions.

Tell el-Murra has remained virtually undisturbed with only certain sections having been levelled by agricultural activity. The main part of the mound still rises about 3-4 m above fields and only its fringes are situated on the field level. Probably because of barren character of its soil (in Arabic *murra* means “bitter”), the entire tell has not been taken by agriculture so far. The mound spreads about 250 m from north to south and about 180 m along its east-west axis, covering an area of approximately 4.5 ha (Fig. 2). In the course of research that has been continued since 2008 (Jucha 2009; 2010a; 2010b; Jucha and Buszek 2011; Jucha



Fig. 2. Tell el-Murra, view from the west. Photo: M. A. Jucha

*et al.* 2013; 2014; 2015; 2016; 2017; Jucha and Bąk-Pryc 2017), a few test trenches was founded in various parts of the mound: S1 in its northeastern part, S2 in its southern end, S3 in its southwestern part and S4 in its eastern part. It allowed to establish an overall chronology of the site.

First settlers at Tell el-Murra were connected to the Lower Egyptian Culture, the one which was widespread throughout the Nile Delta during the most part of the Predynastic period. So far, no traces attesting to the existence of the Naqada II remains have been found. However, already during Naqada III, which corresponds to the Protodynastic and Early Dynastic periods, larger part of the site was covered by the settlement. At that time, two zones can be distinguished on the site: the settlement in the northern and eastern parts of the mound and the cemetery in its southwestern area. With the end of the Early Dynastic period, populated and exploited area of the site decreased one more time. The Old Kingdom traces were revealed only in northern and eastern parts of the tell. By all indications, the settlement was abandoned after the 6<sup>th</sup> dynasty, at the end of the Old Kingdom, i.e. ca. 2200 BC (Jucha 2010a; 2010b; Jucha *et al.* 2013; 2015; 2016; 2017; Jucha and Bąk-Pryc 2017).

## 1. Old Kingdom architecture

The Old Kingdom remains have been revealed within two test trenches: S1, explored in season 2010 (Jucha *et al.* 2013) and S4, explored in season 2011 (Jucha *et al.* 2014). However, the greatest part of the settlement architecture dated to that period was provided by works within trench T5. This trench is situated in the northeastern part of the tell, directly north of the former test trench S1. The work was already initiated there at the end of 2012 archaeological season but was restricted only to the area 10 m by 10 m (are R7) and exploration of the surface strata. Since the beginning of the subsequent 2013 season, the excavated area was enlarged to the dimensions 15 m by 21 m and the trench T5 included areas R7, R8, squares S7AC, S8AC and southern ends of squares R6CD and S6C (cf. Figs. 4 and 5). According to pottery assemblage collected during three seasons of excavations (2013-2015) two main chronological phases were recognized: the early Old Kingdom (mainly 3<sup>rd</sup> and 4<sup>th</sup> dynasties) and the late Old Kingdom (5<sup>th</sup> and 6<sup>th</sup> dynasties) (Kazimierczak 2016: 121-127). Several sub-phases were furthermore observed in the early Old Kingdom phase, basing on the observation of changes in the layout of buildings. There are remains related to the very end of the Early Dynastic or the very beginning of the Old Kingdom, slightly later relics



Fig. 3. Trench T5 with remains of the buildings dated to the 3rd-4th dynasties (photo: M. A. Jucha)

– probably dated to the beginning of the Old Kingdom (3<sup>rd</sup> dynasty presumably) and, the latest among them, structures dated to the 3<sup>rd</sup>-4<sup>th</sup> dynasties. Contrary to that, the late Old Kingdom seems to be represented only by a single settlement phase.

The most complete and the best recognized are structures dated to the latest part of the early Old Kingdom (3<sup>rd</sup>-4<sup>th</sup> dynasties). Relics of at least one large building complex and fragments of two others located next to it occupies an area almost the entire size of trench (Fig. 3) at Levels 7-20 (altitude 7.00-5.70 m)<sup>2</sup>. Preliminary analysis of revealed structures allow to consider few rebuildings within the area (Fig. 4-6). Set of rectangular rooms, courtyards and corridors are oriented along the NW-SE axis. Walls (from around 0.15 up to 0.60 m wide) were constructed in quite a careful manner of mainly bright, sand tempered bricks of conventional size (ca. 12 – 15 by 25 – 30 cm), however mud bricks occurred as well. Mud plaster was covering the walls in at least few compartments. In some places, narrow

<sup>2</sup> All attitudes are in meters above sea level.



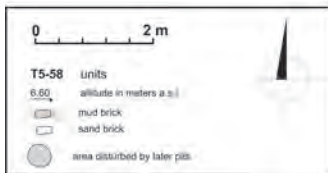
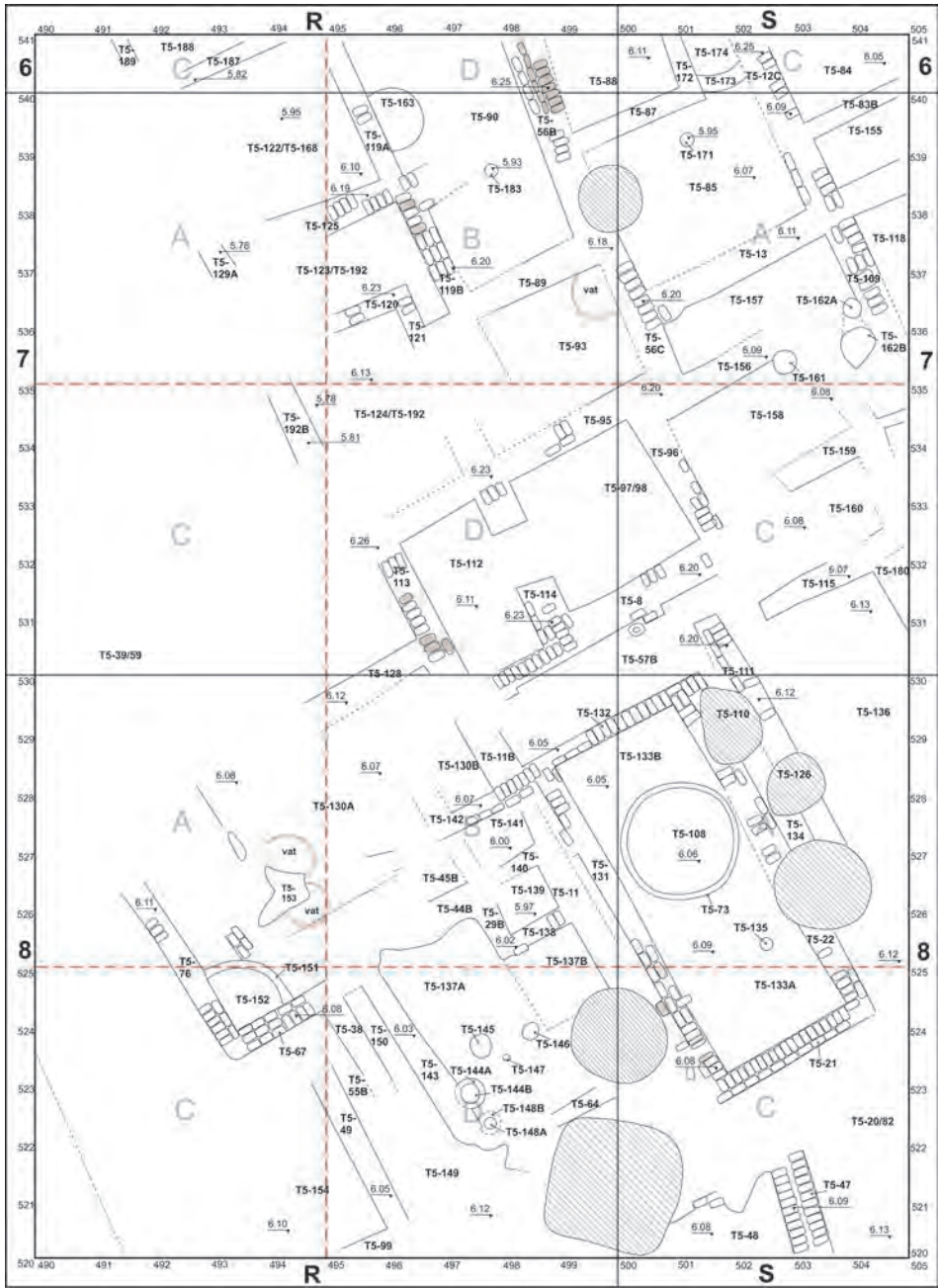


Fig. 4. Earlier stage of the 3rd-4th dynasty building complex

(ca. 7 – 10 cm wide) bricks were attested as well. These were probably ordinary bricks but laid on their sides. They may be used, at least in some cases, to construct brick thresholds. Furthermore, single examples of limestone threshold (Fig. 7a) and yoke (Fig. 7b) were also found. Poor preserved pieces of limestone, which were recognized all around the trench, may suggest that more stone elements have been originally used to complete the described structures.

The greater part of the trench was occupied by a one, quite vast building complex, which appeared to be reorganized two or three times. However, due to the continuous occupation of the area, the clear distinction between stages remains somewhat vague. The best preserved are the lowest relics of the building complex, corresponding to its earliest stage of occupation (Fig. 4). It was better recognized in the northern part of the trench, where structures were explored up to their bottom at the Levels 19-20. Southern part of the trench has been already explored only up to the Level 17, however it is possible to establish an overall plan of that part of the building complex. Set of small, rectangular to square compartments were located around three main rooms, some of which may be considered as courtyards (T5-85, T5-90, T5-133). In case of all of them, small postholes have suggested that some kind of a roof constructed possibly of light materials covered at least part of their area. Within the biggest compartment, a courtyard T5-133, located in the southern part of the building complex, an oval pit with mud encasement (T5-73/T5-108) was revealed. This structure might be connected to some storage function with grain as the most probable product to store. Nevertheless, its chronological association, at the present stage of research, is not yet obvious. Some evidences may indicate that it supposed to be rather related to the later stage of the building complex (cf. T5-73 within courtyard T5-32, Fig. 5). West of the courtyard, there were two small compartments (T5-141 and T5-139) and one bigger, located further south (T5-137A/T5-137B). Within the latter space, traces of a few small, rounded structures (T5-144A/T5-144B, T5-145, T5-146, T5-147, T5-148A/T5-148B) were revealed. Some of them could have been a kind of mud supports for vessels put into them. At least one (T5-147) should be rather recognized as relic of the posthole. It may suggest that the area was also partially covered up with a roof constructed possibly of light materials. North of the courtyard T5-133 there was a small, narrow room (T5-57B). Further north of it, there was set of rooms that have surrounded possible courtyards T5-90 and T5-85. In one of the compartments (units T5-97/98) a large amount of burnt earth, ashes and pieces of pottery (mainly bread moulds) have been revealed. Since no traces of burning have been visible outside the room, these traces may be combined with

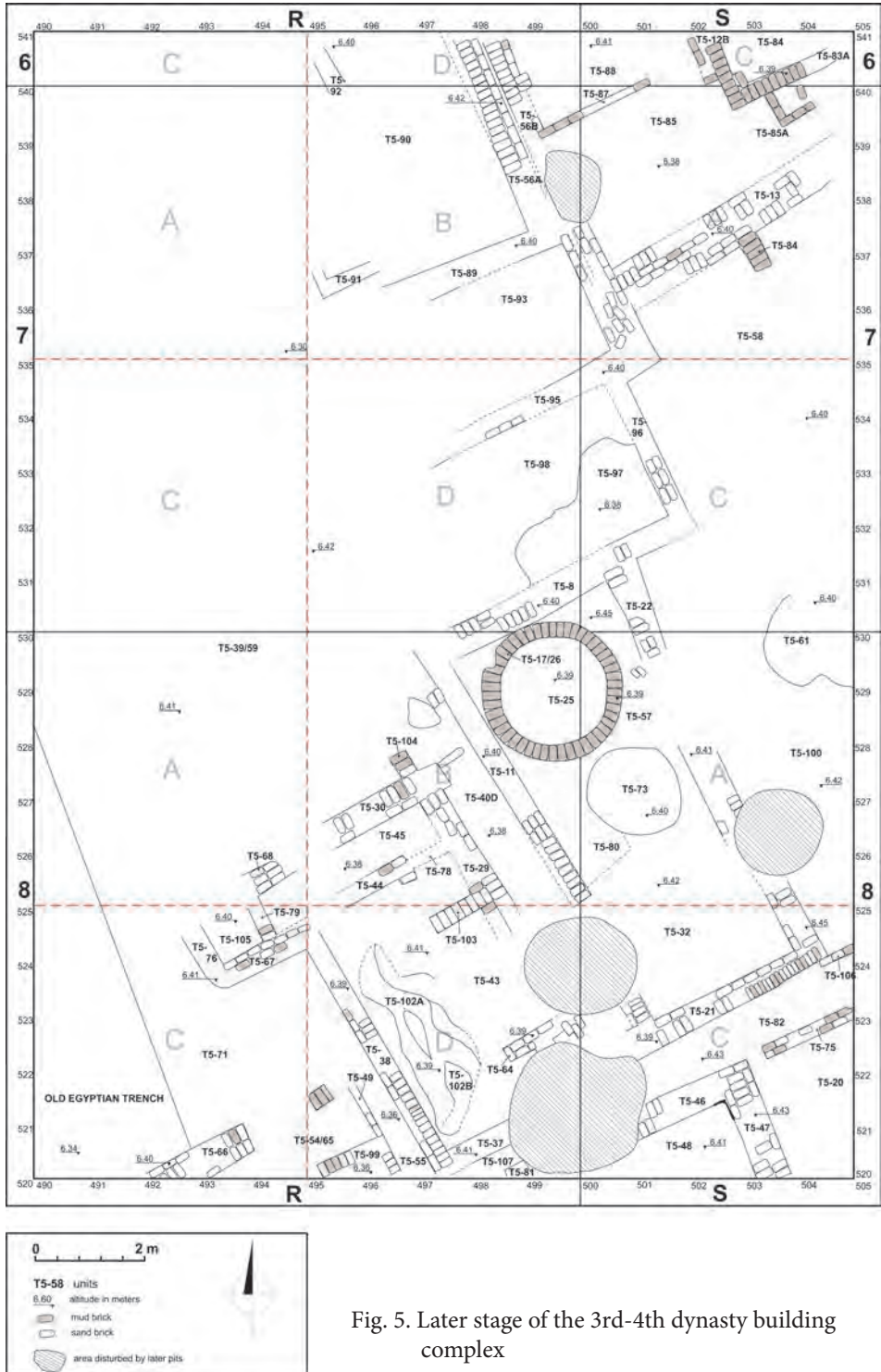


Fig. 5. Later stage of the 3rd-4th dynasty building complex



some cooking activity in the compartment. The other rooms are more difficult for interpretation, however the range of the findings (see below) may suggested the other economic activities.

The traces indicating a reorganization within the building complex were revealed above Levels 15-16 (6.20 – 6.10 m), however its general layout has not been changed. The range of a potential rebuildings that have occurred in structures located in the northern part of the trench are difficult to recognize due to their bad state of preservation. Western part of the complex (squares R7AC, R8A) was completely vanished (Fig. 5). Within its central part (squares R7D and

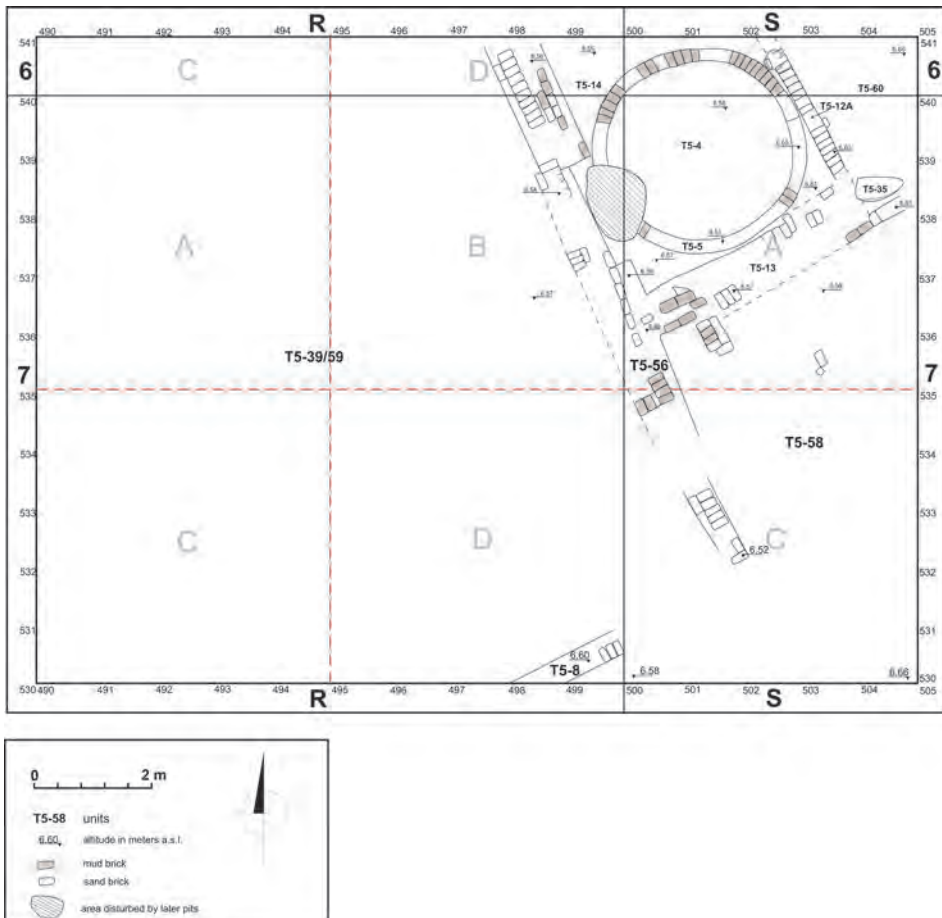


Fig. 6. The latest rebuildings within northern part of the 3rd-4th dynasty building complex



Fig. 7. A) Limestone threshold from the later stage of the building complex; B) Limestone yoke from the earlier stage of the building complex (photo: M. A. Jucha)

S7C), east of the room T5-97/T5-98, a single space disturbed by animal holes have occurred (T5-58). Only small rebuilding was attested also further north, where probable courtyard T5-85 has come with a new access from the north-east (T5-85A). Definitely, more of the alterations might be seen in the better preserved, southern part of the building complex. The main feature at the later stage of occupation is about 6 m long corridor (T5-40D), disturbed at its southeastern end by the late Old Kingdom pit. The corridor is approached from the north-west by a doorway with limestone threshold, which might be a main entrance to this part of the building complex that time. North-east of it, there is a large, rectangular courtyard (T5-32/T5-57) with big mudbrick silo located at its northern end (T5-17/26). South-west of the corridor, there is a rectangular compartment (T5-43) with layers of burnt soil and shallow pits filled by ash (T5-102A/T5-102B) located along its south-western wall. At least one access to the room was recognized as leading from the north by a small corridor T5-45. This approach was probably somehow related to the western, currently vanished, part of the building complex.

The last reorganization was revealed only within the northern part of the complex, at Level 11 (6.60 m). Fragment of the rectangular courtyard T5-14, with large silo (T5-5) situated at its southern end, was discovered directly above the room (or possible small courtyard) T5-85 (Fig. 6). The area south and west of this younger courtyard was heavily destroyed by animal burrows. Due to that, there is no possibility to recognize if the layout of these parts of the complex was rebuilt as well. On the other hand, it is appeared that southern part of the structure was used without major changes until the end of the existence of the entire building complex.

The southern fringe of the trench T5, at least at Levels 12-17 (altitude 6.50-6.00 m), was occupied by structures which were separated from the large building complex described above by a kind of narrow lanes (Fig. 5). Their walls were oriented on the axis slightly shifted to the east with respect to the above-mentioned structures. Among them, fragment of a possible building (walls T5-66, T5-49 and T5-99) located in the southwestern part of the trench T5 was recognized in a very limited way. A section of the building in the southeastern part of the trench was better preserved. Two walls (T5-46 and T5-47) formed a corner, probably of a room (T5-48), which continued to the south under the unexplored area and might be somehow related to the structures discovered within test trench S1 (Jucha *et al.* 2013).

## 2. Preliminary interpretations

Among 3<sup>rd</sup>-4<sup>th</sup> dynasty structures, that were discovered so far within trench T5, the best recognized is layout of the largest building complex (cf. Fig. 4 and Fig. 5). It is appeared to be designed as an actual multiplication of the basic elements occurring within the Egyptian houses: the courtyard or main room, adjoining by smaller compartments that might surrounded it from all sides (cf. Roik 1988: Abb. 3-4; Ziermann 2003: Abb. 32; Kemp 2006: il. 77). At this moment of research, there is some ambiguity which concerns the exact relationships between individual compartments and passages. Were they create the same, large edifice or are part of several adjacent buildings? Currently, the most likely is appeared to be the first of these interpretations. The significant is, however, the size of the complex: its remains during the earlier stage occupied an area up to about 209 m<sup>2</sup> (cf. Fig. 4). Moreover, since structures are continued further to the north and east into the unexcavated parts of the tell, the actual area of the building complex seems to be even larger. For comparison, the excavated part of the 4<sup>th</sup> dynasty Royal Administrative Building in Heit el-Gurob at Giza Plateau occupied an area of larger than 1300 m<sup>2</sup> (Lehner 2015: Fig. 2), the standarize priest house in the neighboring cult complex of Queen Khentkaues had about 180 m<sup>2</sup> (Hassan 1943: il. 1) and a typical Old Kingdom two-story house at Elephantine – about 60 m<sup>2</sup> (Ziermann 2003: Abb. 32). According to that, if Tell el-Murra building complex is part of a single edifice, it is appeared to be something more than an ordinary private estate. However, its precise function and the role that it played within the settlement may be recognized so far only in a limited way.

Undoubtedly, the large building complex and adjacent remains of other buildings were associated with various economic activities, what was confirmed by the nature of the revealed structures as well as associated findings. At least two or three silos located within rectangular courtyards attested that grain was stored inside it. Two openings that have been visible in the bottom parts of one of the silos (T5-17/26, Fig. 5) allow to recognize it as the most popular type of the Old Kingdom granary (Badawy 1954: 58-59). The function of the grain storing might be also related to a pit lined with mud (T5-73/T5-108) that was located within one of the courtyards (cf. T5-133, Fig. 4). Similar structures discovered recently in Edfu have been already recognized as kinds of grain containers (Moeller and Marouard 2012-2013: 116). A number of mill-stones and grinders, which were discovered within some compartments, provided evidence that grain had been milled into flour already there as well.

A considerable amount of pottery have attested that various food products might be stored and processing in the area (Kazimierczak 2016: 123-127). There are for instance Meidum bowls (Kazimierczak 2014) and beer jars, which may indicated on some liquid and semi-liquid meals (cf. Hendrickx *et al.* 2002: 278ff). The most common forms were, however, bread moulds. They were related, among others, to the layers of ashes and pits of strongly burnt soil that were revealed within few compartments. These may suggest baking activities that could have been undertaken in some of the rooms of the Tell el-Murra buildings complex, i.e. units. T5-43 (layers of ash T5-36, T5-102A/T5102B), T5-48 and T5-97/98 (Fig. 4-5). A good reference for them are similar remains that have been recognized in Heit el-Gurob at Giza Plateau (Lehner 1992: Fig. 8; 2002: 57 ff). Quite small, rectangular rooms with rows of shallow ash pits along one of its wall have been already identified as bakeries.

Another category of finds that occurred in large quantity within almost all compartments were flints. These included mostly sickle blades but also several knives and their fragments were attested. Besides an amount of stone flakes revealed in some rooms, at least one knife made of stone was confirmed as well. In addition to the findings attesting the most common economic activities, some number of personal adornments were discovered within the buildings remains. There are a few faience and bone beads, two fragments of stone bracelets and two copper pins, were noted as well. Interesting findings were also small examples of arts. There are: a faience head of a baboon, a frog made of bone as well as a fragmentarily preserved clay figurine of a pregnant woman, with the sexual characteristics marked by dots within the frame made by an incised line (Jucha *et al.* 2016: Figs. 31-33). The way in which it was marked clearly refers to similar finds dated from the Predynastic to the Early Dynastic and the Old Kingdom periods in Egypt (cf. Kemp 2006: 113-142).

Unfortunately, no epigraphic material was found at the site so far and the ancient name as well as more detailed history of the settlement located at Tell el-Murra is not known. Based on its size and location in the northeastern Nile Delta, Tell el-Murra might be just one of the many others settlements flourished within this densely populated area during the Predynastic period. Its development was continued during the Early Dynastic period and probably the entire area of the site was inhabited then (see above). It is appeared that the settlement was diminished in size at the beginning of the Old Kingdom, however, the it was continued to exist until the end of the III millenium BC (Jucha and Bąk-Pryc, forthcoming). During the 3<sup>rd</sup> and 4<sup>th</sup> dynasties, settlement at Tell el-Murra was an integral part of the national economy system. Agriculture was the primary sector of it and the



period of the Old Kingdom was not an exception to this rule. Crops was the main currency in which taxes were collected and then forwarded to the state administration's agents. Moreover, it was the Nile Delta that has been perceived then as a major reservoir of agricultural products during the period. In this case, there is no surprise that the vast majority of the archaeological remains in exposed part of Tell el-Murra settlement was related to the crops storage and their later processing.

The nature of the large building complex and accompanying findings indicate that links between the settlement and the outer world were not just confined for paying taxes. Tell el-Murra was not self-sufficient settlement and some products and resources had to be provided from the outside. Therefore, there had to be an adequate surplus to provide trade exchange to the other parts of the country. The important evidence for the existence of such an exchange is limestone occurring at the site, for which the nearest sources are located beyond the Nile Delta. Its intentional transfer to the small settlement in the northeastern Nile Delta had to be cost-effective to be able to exist. It also applied to the other products and raw materials commonly attested at the site, for example flints and small sandstones as well as – more scarce – copper. The possible existence of a production zone, associated with the manufacture of tools made of these materials, remains an open question. It might be located in the unexcavated part of the settlement.

Excavations at Tell el-Murra have already provided the unique possibility to recognize the Old Kingdom provincial settlement in the Nile Delta. Thanks to the current research, we have obtained first data for its chronology, layout and architecture, as well as first insights into upcountry economy during the age of pyramids. Works in the area of trench T5 have not provided until now any traces of more residential rooms or compartments and we can only assumed that they had to be located in the unexcavated part of the tell. Due to the thickness of the walls, their possible presence at the upper floor is appeared to be precluded. In this case, the 3<sup>rd</sup>-4<sup>th</sup> dynasty building complex is appeared to be purely an economic area within a bigger layout, mansion presumable. The issue of its possible connection with a regular settlement buildings or some kind of estate remains open. The lack of the epigraphic material as well as still ongoing analysis of the revealed material do not allow at the moment to precise the identification. On the basis of the scale of the explored structures as well as their quality, such a mansion may be assumed as an important element of the Old Kingdom settlement landscape at Tell el-Murra. However, only further works and extension of the excavations to other parts of the site may complement our knowledge about the functions of the settlement during the 3<sup>rd</sup> and 4<sup>th</sup> dynasties.

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