The Role of Sunken-Floored Buildings in LBK Farmstead

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Abstract: Research into the development of LBK villages rarely focuses on those features that can be interpreted as sunken-floored buildings. The aim of this article is to draw attention to the presence of this type of feature and to analyse its significance in the context of village development based on several examples of LBK sites excavated in Małopolska (Lesser Poland). We believe that in many instances analysing the locations of sunken-floored buildings and their diversity in terms of their potential functions can lead to the identification of domestic/kitchen zones that centered around these features. Their location in the vicinity of longhouses, traces of fire, and the presence of pottery sherds and grain remains may indicate that sunken-floored buildings served as an important additional ancillary space for the residents of longhouses and constituted part of the farmstead.

Keywords: sunken-floored buildings, pit house, LBK, Małopolska, Targowisko, Brzezie, domestic zone

1 Introduction

The presence of sunken-floored buildings in the context of LBK villages, especially in the vicinity of typical longhouses is rarely discussed. Not only when it comes to their general identification, but also in determining their function (residential, workshop, etc.). In this paper we want to present our recent conclusions on the role of sunken-floored buildings based upon the analysis of several LBK settlements in Małopolska (Lesser Poland), southern Poland.

All analysed settlements have been excavated within the framework of a broad program of rescue excavations in the route of construction of the A4 motorway carried out in 2003-2007 by the Cracow Motorway Archaeology Unit. The settlements were located in loess highlands south of the valley of the Vistula River in close vicinity to one another (Czerniak et al. 2012, 2012a; Czerniak 2013: 43-67) (fig. 1).

The largest settlement, with 42 longhouses covering an area of over 15 ha., was Targowisko site no. 16 (TAR16). Based on spatial and chronological analyses we can divide it into one large settlement and two smaller, three-house hamlets (fig. 2). Another three settlement sites have been excavated in the immediate area adjacent to Targowisko 16. These are Targowisko site 12-13 (TAR12-13) (where we registered 24 longhouses) (fig. 3) and Targowisko site 14-15 (TAR14-15) (consisting of 5 longhouses). The settlement in Brzezie site no. 40 (BRZ40) was situated 3 km east of the Targowisko 16. This settlement consisted of at least 17 longhouses (fig. 4).
The buildings recorded at the sites represent multiple phases. Based on a comparative analysis of the stylistic traits of the ceramic assemblage the settlements have been inhabited during the early Neolithic period, particularly from the classic Music Note phase to the late Želiezovce phase and can be dated broadly to 5300–4900 cal BC. Considering the broader context of LBK we can synchronize the periodization for Malopolska region (which is based on the pottery ornamentation styles) with the southwestern Slovakia LBK chronology established by J. Pavúk (Kadrow 1990: 9–76; Pavúk 1969; see also Czekaj-Zastawny, Kadrow, Zastawny 2009: 20-21).

Sunken-floored buildings were associated with all chronological phases represented on the discussed sites (table 1). However, they seem to be more common in later phases (see fig. 9). During this subsequent period we can observe a particularly interesting form of household spatial organisation with the repeated location of sunken-floored huts to the south of pairs of contemporaneous longhouses.

1.1 Research History

Sunken-floored buildings are common in sites located in LBK origin areas - Carpathian Basin, mostly in the Starčevo region. For a long time it was believed that longhouses were typical only in the western part of the LBK territory because they were scarcely known from the Carpathian Basin. However recent research changed this view (Bánffy 2013; Pyzel 2010: 191).

Based on LBK sites from the Carpathian Basin, some researchers have suggested that LBK people lived in sunken-floored buildings because of climatic conditions (Bánffy 2013; Oross 2004: 65). These large pits were characterized by flat floors associated with hearths and, in many cases, also with a series of post-holes (Bánffy 2013: 125). These were interpreted as some sort of roofed structures providing protection against harsh weather during household activities performed outside, such as cooking and flint tool manufacture (Bánffy 2013: 128).
Figure 2: Plan of Targowisko site 16.

Figure 3: Plan of Targowisko site 12–13.
The presence of sunken-floored buildings in vast areas outside the Carpathian Basin and settled by LBK was pointed out by Volker Wüstehube (1993: 521–531). He presented 18 probable sunken-floored buildings from different phases of linear culture settlements from Germany. He also came to the interesting conclusion about the “invisibility” of sunken-floored buildings in LBK settlements. In his opinion, the discovery of longhouses carried out by Buttler in Köln-Lindenthal in 1936 caused a shift away from the earlier concept of residential pits (Kurvenkomplexbauten). The result was that researchers had gone from one extreme to the other and had stopped paying attention to pits similar to sunken-floored buildings, focusing entirely on the impressive longhouses (Wüstehube 1993: 521).

According to Wüstehube, sunken-floored buildings could serve diverse roles; as workshops, warehouses, temporary homesteads (e.g. in the course of longhouse construction). The example of pit-house associated with ‘kitchen space’ excavated at Hofgeismar site is unique in its function and form. On the bottom of this pit quite a number of whole vessels were discovered. This shows us that sunken-floored buildings could serve as a backyard kitchen (Wüstehube 1993: 521).

Another researcher who drew attention to the presence of sunken-floored buildings on the LBK settlement is Jaromír Beneš. During archaeological research on a small settlement from the earliest phases of the LBK in Prague-Křeslice, he explored traces of two longhouses and a sunken-floored building (Beneš et al. 2003: 29–40).

2 Criteria Determining Sunken-Floored Buildings

The criteria we have adopted to characterise sunken-floored buildings are similar in some way to those presented by Wüstehube (1993: 523). These are:

1. large size
2. regular shape
3. flat floor
Further attributes were regularly observed in analysed features, but the presence of all of them was not necessary to recognise the particular features as a sunken-floored building.

4. straight, vertical walls
5. traces of construction (e.g. post holes)
6. traces of oven or hearth

The first three points do rather not require any special comment. By ‘large size’ we mean features with a diameter of a few meters, but placing any specific dimensions is pointless.

‘Regular shape’ is also not under strict guidelines. In the case of 26 sunken-floored buildings most of them had an oval, or sub-circular plan (see table 1). Square plans, due to the relatively strong erosion, are rarely preserved and appear only in the bottom layers of these features.

The most important issue is a ‘flat floor’. Assuming that sunken-floored buildings had to serve as utility features the flat floor, in at least part of the feature, was necessary.

The recognition of ‘straight walls’, ‘traces of construction’ or ‘hearths’ depends on the state of preservation of the features. Therefore the following three criteria (points 4–6) are not necessary to consider a pit as the sunken-floored building. However, we assumed that features should contain at least one of these features.

Table 1: Characteristic of the features interpreted as sunken-floored buildings.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Phase</th>
<th>Size (m²)</th>
<th>Shape</th>
<th>Floor</th>
<th>Vertical walls</th>
<th>Traces of construction</th>
<th>Traces of fire</th>
<th>Palaeobotanical remains</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAR16-36</td>
<td>late Želiezovce</td>
<td>3.8</td>
<td>oval</td>
<td>flat</td>
<td>W-E</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR16-100</td>
<td>late Želiezovce</td>
<td>1.6</td>
<td>irregular</td>
<td>flat</td>
<td>ALL</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR16-244</td>
<td>late Želiezovce</td>
<td>7.3</td>
<td>square</td>
<td>flat</td>
<td>NO</td>
<td>- hearth</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR16-342</td>
<td>late Music Note</td>
<td>3.3</td>
<td>oval</td>
<td>not entirely flat</td>
<td>NO</td>
<td>YES hearth</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>TAR16-392</td>
<td>late Music Note</td>
<td>7.1</td>
<td>oval</td>
<td>flat</td>
<td>E YES</td>
<td>oven and 3 hearths</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR16-699</td>
<td>late Želiezovce</td>
<td>5.6</td>
<td>irregular</td>
<td>flat</td>
<td>NO</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR16-1207</td>
<td>early Želiezovce</td>
<td>5.4</td>
<td>oval</td>
<td>flat</td>
<td>? YES</td>
<td>oven</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR16-1374</td>
<td>late Želiezovce</td>
<td>4.3</td>
<td>oval</td>
<td>flat</td>
<td>W</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR16-1664</td>
<td>late Želiezovce</td>
<td>5.0</td>
<td>irregular</td>
<td>flat</td>
<td>W</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR16-2816</td>
<td>late Music Note</td>
<td>7.3</td>
<td>irregular</td>
<td>not entirely flat</td>
<td>S YES</td>
<td>oven</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAR16-3352</td>
<td>classic Music Note</td>
<td>2.5</td>
<td>oval</td>
<td>flat</td>
<td>S, W</td>
<td>oven</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR16-5040</td>
<td>late Želiezovce</td>
<td>4.8</td>
<td>irregular</td>
<td>not entirely flat</td>
<td>S YES</td>
<td>oven</td>
<td>knotweed (Polygonum sp.)</td>
<td></td>
</tr>
<tr>
<td>TAR16-7060</td>
<td>late Music Note</td>
<td>2.7</td>
<td>oval</td>
<td>not entirely flat</td>
<td>? YES</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>TAR16-7599</td>
<td>late Music Note</td>
<td>?</td>
<td>oval</td>
<td>flat</td>
<td>W-E</td>
<td>heathearth</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR12-13-1010</td>
<td>early Želiezovce</td>
<td>6.0</td>
<td>oval</td>
<td>flat</td>
<td>NO YES</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR12-13-3326</td>
<td>late Želiezovce</td>
<td>6.6</td>
<td>irregular</td>
<td>flat</td>
<td>S, W-E</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR12-13-3734</td>
<td>classic Music Note</td>
<td>2.7</td>
<td>square</td>
<td>flat</td>
<td>?</td>
<td>- hearth</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR12-13-3735</td>
<td>classic Music Note</td>
<td>5.5</td>
<td>circular</td>
<td>flat</td>
<td>?</td>
<td>- hearth</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR14-15-419</td>
<td>classic Music Note</td>
<td>2.6</td>
<td>square</td>
<td>flat</td>
<td>N, W-E</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR14-15-487</td>
<td>classic Music Note</td>
<td>5.8</td>
<td>irregular</td>
<td>flat</td>
<td>S YES</td>
<td>hearth</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TAR14-15-931</td>
<td>classic Music Note</td>
<td>4.5</td>
<td>irregular</td>
<td>flat</td>
<td>W-E YES</td>
<td>oven wheat (Triticum dicoccum)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>BRZ40-78</td>
<td>early Želiezovce</td>
<td>6.3</td>
<td>oval</td>
<td>flat</td>
<td>N</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>BRZ40-1083</td>
<td>early Želiezovce</td>
<td>6.7</td>
<td>irregular</td>
<td>flat</td>
<td>NO</td>
<td>-</td>
<td>-</td>
<td>goosefoot (Chenopodium album)</td>
</tr>
<tr>
<td>BRZ40-1093</td>
<td>early Želiezovce</td>
<td>5.7</td>
<td>oval</td>
<td>flat</td>
<td>?</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>BRZ40-1229</td>
<td>early Želiezovce</td>
<td>5.4</td>
<td>irregular</td>
<td>flat</td>
<td>?</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>BRZ40-1319</td>
<td>early Želiezovce</td>
<td>7.3</td>
<td>irregular</td>
<td>flat</td>
<td>S</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
3 Structure and Construction

In half of the analysed features we have found at least one vertical wall (table 1). One of the sunken-floored buildings has all of its walls vertical (feature 100 from TAR16). The poor condition of the walls of the sunken-floored building probably has to do with disturbances caused by a long process of backfilling and erosion. The process of erosion of the edges led to the collapse of the walls. As a result, only one of the sunken-floored buildings has a clearly visible rectangular cross-section (TAR 1213, feature 3734). Despite the erosion process in some sunken-floored buildings we can identify traces of an entrance. One of the walls of a pit is often formed in a different way to the others, shaped to accommodate either steps or a slope (fig. 5 and 6).

![Cross-section of feature 419, site Targowisko 14–15.](image1)

![Cross-section of feature 100, Targowisko site 16.](image2)
The usual depth of sunken-floored features is about one meter. However, we can assume that originally it was deeper. The comparison between the average depth of post-holes from Targowisko 16 and Bylany indicates that we have probably lost a surface layer with a depth of approximately half a meter as a result of intensive agriculture. In Targowisko the average depth of post-holes from the longhouse is about 30 cm. While in Bylany it is up to 80 cm and sometimes even more (Pavlů 2000: 194).

Sunken-floored buildings were probably covered by a vegetal ridge-roof, the same as LBK longhouses. The pitch was probably between thirty and forty-five degrees, as in the case of longhouses discussed by Coudart (2013). Traces of the roof supporting structure are visible in at least nine analysed sunken-floored buildings. However, considering the average area of these features (about 4 m²) and their oval plan, it must be noted that roof-supported construction is not needed inside them.

There are at least a few possible types of roof construction. We present three, in our opinion the most feasible types, in figure 7. Considering the presence of traces of post-holes inside sunken-floored buildings we may distinguish 3 types of structures:

– post-holes in some linear structure
– with one central pillar
– without preserved post-holes.

Traces showing that a central pillar was used to support the roof structure can be found in one sunken-floored building (feature 2816 from TAR 16) (e.g. fig. 7b). In several cases we can spot a trace of one post, but not located in the centre. Perhaps it is the only surviving part of a more complex construction. This assumption can be confirmed by the fact that in cases where more post-holes were found inside a pit house they form a linear array of three (TAR 16, features 5040 on WE axis, 7060 on NS axis, or TAR 14-15, feature 931 on WE axis) (fig. 7a and 8a, b, c).

The largest group of sunken-floored buildings is that without preserved traces of the posts supporting the roof. The lack of traces can mean they have not been preserved, as in the case of posts from many longhouses, or the roofing construction was based on a ground level (fig. 7c).

More often than traces of the roof support structure we can see traces indicating the existence of fireplaces used as hearths or ovens. Evidence of fire use inside sunken-floored buildings was identified in 12 of the 26 analysed features (see table 1).

An important issue in dealing with the construction of small-sized buildings are the LBK wells discovered e.g. in Altscherbitz (Tegel et al. 2012: 1–8). Timber constructions of wells are extraordinarily sophisticated. It is shown that LBK people were versed with corner joints and log constructions. Therefore it is likely that they could use similar constructions at ground level. Unfortunately, because this kind of construction does not require foundation trenches it is impossible to verify this hypothesis.

4 The Location of Sunken-Floored Buildings in LBK Settlement

26 features excavated at the discussed sites meet the criteria for sunken-floored buildings: fourteen from TAR16, four from TAR12-13, three from TAR14-15 and five from BRZ40. They were associated with all chronological phases of those settlements. From the classic Music Note phase to the late Želiezovce phase (table 1, fig. 9).

Throughout the occupation of the settlement complex in Targowisko and in Brzezie site 40, the number of sunken-floored buildings remained at a similar level, with a slight upward trend. At the same time, the number of longhouses had doubled (up to the period of the early Želiezovce phase) and then fell during the final phase. There were six sunken-floored buildings during the earliest phase of LBK occupation (one in TAR16, two in TAR12-13 and three in TAR14-15) and five during the late Music Note phase (all in TAR16).

 Afterwards, during the early and late Želiezovce phase the number of sunken-floored buildings increased up to seven and to eight, respectively. During the early Želiezovce phase the sunken-floored buildings appeared mainly in BRZ40 (five), whereas the youngest sunken-floored buildings were most common in TAR16 (seven).
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Figure 7: Different types of a roof construction: a) with inside pillars in a line b) with one central pillar c) with the roofing based on a ground level.

Figure 8: Plans of the features with post-holes inside.

Figure 9: The comparison of a number of the sunken-floored buildings and longhouses in various stages of occupation.
We have noticed two distinct trends in the location of sunken-floored buildings within the settlement structure. Almost half of all of them were located in the vicinity of the longhouses (figs. 2–4). This refers to 12 features where average distance from the nearest house was about 4 m.

The second group of sunken-floored buildings (14 features) was located at the centre of clusters of pits. Clusters of pits appear at each of the mentioned settlements. They form tight complexes, often concentrated around one ‘central’ feature (usually the sunken-floored building). The clusters were distinguished because of their autonomy. In most cases, they are located a short distance from the nearest longhouses (a few meters), in the centre rather than on the outskirts of the village (e.g. BRZ40, clusters A–C, fig. 4). The exceptions were two sunken-floored buildings (BRZ40 cluster D, feature 1319 and TAR16 cluster G, feature 1664) located about 30 m to 40 m from the nearest house (fig. 2 and 4).

5 The Interior of Sunken-Floored Buildings

Sediments on the floors of sunken-floored buildings could represent an extremely important data source, inaccessible in the case of longhouses where we do not observe these kinds of layers. This offers us a chance to get significant results from palaeobotanical analysis. Unfortunately, the sunken-floored buildings have been treated with neglect and were rarely sampled for palaeobotanical remains. This is associated with the above-described problem of distinguishing such features in the LBK settlements.

In the bottom parts of two sunken-floored buildings TAR16-392 and TAR14-15-931 we have discovered the remains of burned wheat (emmer wheat). In one case, it was *Triticum dicoccum*. In two other pit houses we have recorded the remains of knotweed (*Polygonum* sp.) and goosefoot (*Chenopodium album*).

An important element of sunken-floored buildings is an oven or hearth. In all settlements from Targowisko (TAR12-16) they were located most commonly in the northern part of pit houses (fig. 10). In BRZ40, by contrast, inside none of the five distinguished sunken-floored buildings such traces were found. Here, in three cases, the hearth can be found in close proximity to sunken-floored building (features 1083, 1093 and 1319).

Figure 10: Feature 408 (remains of oven) inside the sunken-floored building 392, Targowisko site 16.
6 Backfilling

The analysis of backfilling of sunken-floored buildings shows in most cases two stages of usage.

The first stage was associated with the primary function. This stage was distinguished based on observations of a bottom layer from 18 features. Its thickness was up to 40 cm, and averaged about 20 cm. Most often the layer was characterized by a dark brown colour, sometimes with traces of charcoal. In two pit houses (TAR16, pit 1664 and BRZ40, pit 1319) we found remains of large storage vessels lying at the bottom.

The second stage is associated with an infill of these features. The layers formed at this stage were mostly rubbish-type. This probably arose during several separate episodes involving the backfilling of collected material from middens located in the vicinity (see Bosquet et. al 2010). In profiles of sunken-floored buildings, we can establish the existence of a layer of refuse covering the original floor. Probably there was an intention to quickly backfill the out of use pit, which could hamper movement or were dangerous for animals living in the village.

7 The Function of the Sunken-Floored Buildings

The most basic question when it comes to the issue of sunken-floored buildings in the structure of the LBK settlement is their function. As may be seen from the above-mentioned examples they are very diverse in almost every analysed aspect. Therefore, it is difficult to give one clear answer on this issue. The approximate area of analyzed sunken-floored buildings was about 4 m². It seems not enough to serve as a dwelling feature but sufficient to serve as an ancillary domestic/kitchen space for the residents of longhouses. Because of the lack of clear, repeatable pattern in placement of the sunken-floored buildings and the difference between them, one can assume that they were built in response to various everyday needs. They could have played a complementary role for longhouses as farm buildings, serving as multipurpose additional space for inhabitants of one or even more houses.

Another aspect that should be considered here is the issue of building material and the time needed to build a timber house. Perhaps not every built structure had to be constructed in the same way as the longhouses. Construction of sunken-floored buildings did not require the same volume of timber and was less time consuming than the construction of typical LBK house. Moreover, even if the whole village community (not only the future residents) participated in the construction of a longhouse it was still a long process. Some of the sunken-floored buildings could have served as temporary shelters during the construction of longhouses.

The basic elements that may give us an indication as to the function of these features are the remains of equipment and grain remains preserved in the bottom part of the features. These are mainly remains of ovens and hearths, but also remains of storage vessels. These artefacts support a hypothesis that the sunken-floored buildings could have been used as backyard kitchens or storage areas. However, the first one may not apply to all the features of this type because, as we have already mentioned, we have registered the traces of fire in just half of them.

The other possibility is that the sunken-floored buildings served as additional, multipurpose domestic zones that allowed people to perform their daily activities outside in a roofed place, safe from harsh external conditions such as rain or wind. However, they did not serve as workshops dedicated to one, specialised manufacturing activity. We would rather exclude flint workshops because flint finds are rarely found within sunken-floored buildings or in their vicinity. Therefore, if the flint knapping was performed within sunken-floored buildings, the scale of this activity was very limited (ad hoc?) and the debitage was cleaned out and dumped outside, into rubbish pits. Within the interior of the buildings, the majority of flints was present only in the upper layers of the back-filling and was connected with the backfilling stage. Moreover the amount of flints (calculated: the number of ceramics per the number of flints) found there is lower than in other pits associated with the average longhouse. The reason for this is not clear, but most likely this is due to the management of this type of waste.

It is also unlikely that the pit houses served as pottery workshops. The feature that served as a kiln has been found in nearby site, Brzezie 17. The whole construction collapsed during the firing process. It was
similar in size to other sunken-floored buildings with hearths situated on the ground and filled with the remains of many complete vessels (Rauba-Bukowska 2013: 93–96). In case of the pit houses from Targowisko (sites 12-16) the number of pottery fragments coming from the lower layers is small. There is also a lack of fragments of failed/undone vessels and traces of thermally discoloured loess are few and very weak.

Another hypothetical function of the sunken-floored buildings is of a temporary shelter. Of particular interest in this aspect is the already mentioned feature BRZ40-1319 (central feature for cluster of pits located at the east edge of the settlement, cluster D) that is clearly separated from the rest of the village (almost 30 m away from the nearest longhouse) (fig. 4). This separation seems to be crucial in this case. That the lower layers of the feature consist of many thin layers with a total thickness of 20 cm is clear evidence of long-term use. The remains of two large storage vessels and an adze were found within these layers. A hearth was situated outside, in the immediate vicinity. Perhaps the feature could have served as a shelter for people who were living on the edge of village.

The location of the sunken-floored buildings in relation to the longhouses appears to be important. The sunken-floored buildings located in the immediate vicinity of the longhouse, or a pair of houses, as is the case of Targowisko 16 (houses 24 and 25, 29 and 30, 33 and 35) (fig. 2) were probably used by the residents of these houses. It is difficult to clearly identify the affiliation of the sunken-floored buildings located in clusters of pits. Perhaps they served a similar function for the wider community e.g. a group of neighbours or clan.

The secondary function of the sunken-floored buildings seems to be much easier to interpret. Features located near the houses and containing little material were quickly backfilled. In their case, it is difficult to speak about secondary function. Sunken-floored buildings located in clusters of pits, at some distance from the houses functioned as waste pits.

8 Household Relations

According to the most general definition a household is a group of people who cooperate at social, material and behavioural levels (Wilk, Rathje 1982: 617-639). However this does not necessarily means people living under one roof. It is possible that members of more than one household share one building as well as when members of one household live in a few houses (Souvatzi 2012: 15-43). In the case of LBK settlements where houses are usually interpreted according to the Hofplatzmodell (Boellicke 1982) it is assumed that a house functioned as an independent farmstead with one family living in a single house. However, perhaps we should ask whether one house should be still considered as one household? The recent studies suggest that the household is a more complicated issue. If we start considering houses as a part of a much bigger picture of a village (not only as independent farmsteads), we can see that there is a place for more complex social organisation composing a village community (see Czerniak 2016: 35). Some complex neighbourhood relations may be indicated by features placed between the longhouses, like ovens and fireplaces, interpreted as communal installations for special events such as feasts (Pechtl 2008: 77–78, 2016: 294–295). Probably the sunken-floored buildings and hearths described as the cluster A in BRZ40, located between the houses 4, 4A and 5, flanking the village from the south-west (fig. 4) were also used by inhabitants of more than one house.

The coeval houses located in a close proximity might function as one household. The best examples are two pairs of contemporary houses from TAR12-13 connected by fences (Czerniak 2013, 2016). Admittedly this situation seems to be evident and extraordinary but not necessarily unrepeatable. Most likely the presence of sunken-floored buildings in the area immediately adjacent to the following pairs of contemporary houses from TAR16: 24-25, 29-30 and 33-35 (fig. 2) may be interpreted as another form of connection between two houses that functioned as a household.

Based on the spatial analysis of the villages in Targowisko and Brzezie we can assume that the sunken-floored buildings have not functioned as independent structures. They were rather part of an individual farmstead as some kind of farm buildings. The only exception is the feature 1319 in BRZ40 (cluster D), located away from the nearest longhouse, on the edge of the village.
9 Summary

Despite being noticed by Wüstehube, the sunken-floored buildings still remain outside the list of features distinguished in LBK settlements. Usually they are hiding under the general category of borrow pits. Probably due to the fact that the LBK built their impressive longhouses, suggesting other structures to have functioned as a shelter may seem unlikely. It seems the earliest history of LBK researches and misinterpretation of lateral pits as sunken-floored buildings has played some role here. Resumption of this subject and the study of its distinctive features (regardless of the specific definition of the function) brings a lot of new content to the interpretation of the features’ structure within the farmstead. The use of space around the longhouses and the interpretation of economic functions performed by them may also be reconsidered.

Their location in the vicinity of longhouses, traces of fire, and the presence of pottery sherds and grain remains points to the fact that sunken-floored buildings served as an important additional ancillary space for the residents of longhouses and constituted part of the farmstead. 26 sunken-floored buildings from four LBK sites from different phases (from a classic Music Note phase, to late Želiezovce phase) testify to the fact that in the Malopolska region they were permanently a part of the context of the settlement and should not be overlooked in the interpretation of other settlements.

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