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A case-study of the so-called “pottery depot” from Bessów, site 3, commune Bochnia, Małopolska Province. Archaeological material and functional re-interpretation

Abstract: Site 3 in Bessów is one of the sites located on the lower reaches of the Raba River, in the micro-region associated with the Przeworsk culture, dated mostly to the Younger and Late Roman Periods. In the results of excavations in Bessów, a group of archaeological features described as a “pottery depot” were discovered. In its fill and in its closest vicinity, about 8.330 fragments of pottery were found. Almost all of them represent wheel made pottery, and about half are sherds with abradable surfaces. Apart from pottery and about 180 pieces of daub, other categories of finds did not occur. In older publications the so-called “pottery depot” was interpreted as a place where ready-made vessels were stored. The basis for this interpretation was mainly the presence of a huge amount of pottery in the fill of this feature, with a relatively low share of materials bearing traces of different types of damage at the same time. Reanalysis of pottery material and the stratigraphy allowed for a new interpretation of the “pottery depot” as a potter’s workspace or workshop. The paper focuses on the pottery material from the “pottery depot”. It is an example of a case study of an untypical archaeological feature and the difficulties connected with its interpretation.

Keywords: Przeworsk culture, Younger Roman Period, wheel-made pottery, workshop

1. Basic information about the site

Bessów site 3 is one of the sites located on the right bank of the lower reaches of the Raba River, in a dense settlement microregion of the Przeworsk culture. The sites are situated on the alluvial fan of the Raba (Dobrzańska 2015, 396, 397). The size of the microregion is currently estimated to cover an area approximately 17 km long and 1.5 km wide, which is based on the results of field-walking surveys conducted in 1990–1992 (Fig. 1). The preliminary results of the surveys and excavations conducted in the area of the lower reaches of the Raba have already been published (Cetera, Okoński 1994; Okoński 1996; 1998; 1999–2000; Kordecki, Okoński 1999, 2001; Przychodni 1999–2000; Okoński *et al.* 2000). This area is very interesting due to confirmed local production of pottery in the Younger and Late Roman

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Periods, differing in certain elements from the typical Przeworsk culture pottery made on a potter's wheel. Despite the passage of time, this area and problematic aspects of locally produced pottery still provoke questions.

Site 3 in Bessów, Bochnia commune, Małopolskie Province, is located in the south-eastern part of the village (situated about 13 km east from Bochnia). It was discovered during a field-walking survey conducted by A. Cetera, E. Dworaczyński, and J. Okoński (Cetera, Okoński 1994). The area of the site is estimated as more than 15 ha (Okoński 1999–2000; Okoński *et al.* 2000). During the excavations conducted in Bessów in 1995, 1998, and 2000 (Fig. 2), a few features dated to the Early Roman Period, Younger Roman Period, and Early Medieval Period were uncovered. Among the explored features, the most interesting were the remains of a pottery kiln (probably with unsupported construction of the grid) and a so-called “pottery depot” from the Younger Roman Period. All the results of excavations conducted in Bessów site 3 were published (Cetera, Okoński 1994; Okoński 1996; 1998; 1999–2000; Kordecki, Okoński 1999; Bodzek 1999–2000; Przychodni 1999–2000; Okoński *et al.* 2000).

Fig. 1. Map of the micro-region on the right bank of the lower Raba River (after: Okoński 1999–2000, fig. 2)

2. Description of the so-called “pottery depot”

The “pottery depot” from Bessów was in fact a complex of archaeological features. During the excavations, parts of the complex were described as features 3/95 and 4/95 (main parts of the building), 5/95 (annex or waste pit), and 6/95 (hearth located at the bottom of feature 3/95). The complex was approximately 28 m² in area, and about 1 m in depth. The fills of the features were almost homogeneous. Close to the northern and eastern edges of the “depot”, two post holes 20 cm in diameter were discovered. All of them were parts of one construction (Fig. 3). This is confirmed by the configuration, fills, stratigraphy, and statistics of reconstructed material. The construction was interpreted previously as the remains of a building of a light, roofed construction which probably burned (Okoński 1999–2000, 124–125).

Moreover, in the vicinity of the “depot” features 1/95 and 2/95 (probably storage pits or waste-pits) were discovered. It is worth mentioning that the second of these was excavated only in part, as the rest of it was outside the excavated area. It should be emphasized that materials from each level and feature described above cross-joined with each other. Furthermore, the material from the topsoil cross-joined with the materials from the features as well. This means that all of the features excavated in 1995 have a common chronological position (Okoński 1999–2000, 122, 124).

Fig. 2. Bessów, site 3. The location of the trenches (after: Okoński 1999–2000, fig. 3)

3. Archaeological material

8,328 pieces² of pottery and 179 pieces (about 8.5 kg) of daub were discovered in the excavated area. About half of the finds were retrieved from the topsoil (with small sherds of pottery especially numerous). This share of the material was concentrated mostly above features 3/95 and 4/95. The remaining finds come from the fills of the features mentioned above (Table 1). It should be emphasized that only pottery sherds in huge amounts as well as daub were found³. The feature produced no bones, tools or other finds.

Among the pottery material from Bessów were 32 vessels which had been preserved in one piece, or which were successfully reconstructed in most part. All of them represent wheel-made pottery. Along with these vessels there were about 1,350 rim sherds, about 1,000 base sherds from different vessels, and thousands of uncharacteristic sherds of numerous vessels.

3.1. The case of the so-called “Pakoszówka-Bessów” type pottery

The term “Pakoszówka-Bessów” type was introduced into the literature as an auxiliary term by J. Okoński, in the context of wheel-made pottery with abradable surfaces (Fig. 4; Okoński 1999–2000, 163–164). Apart from the territories on the right bank of the lower Raba River, this kind of material occurred in the middle and upper San basin, mostly in the Bukowskie Foothills and in the Dynów Foothills, and occasionally also on other sites in Małopolskie Province. Outside of the Przeworsk culture territory such pottery can be found in the Dacian and Getho-Dacian cultures (Madyda-Legutko 1996, 73–78, map 5; 2004, 79–82, fig. 4; 2010, 28–29; Dobrzańska *et al.* 2004, 679–680).

The pottery with abradable surfaces in the Przeworsk culture in itself presents a complicated issue. The occurrence of this type of ceramic material was explained on the one hand as an influence from the Dacian cultures, mostly connected with the so-called Free Dacians (Madyda-Legutko 1996, 77–78, 90–91, 107–108; 2004, 80; 2010, 28; Okoński 1999–2000, 153, 163–164; Madyda-Legutko, Pohorska-Kleja 2004; Madyda-Legutko *et al.* 2004, 695; 2008, 11–12). On the other hand the abrasion of vessel surfaces is considered as a result of an incorrect production process: the use of raw materials with insufficient contents of clayey fractions, or incorrect firing (Dobrzańska *et al.* 2004; Dobrzańska 2015, 404–405). Thus far, only a few samples of pottery with abrasive surfaces from different sites have been analysed using archaeometrical methods (Dobrzańska *et al.* 2004; Stobierska *et al.* 2008).

The pottery material from the right bank of the lower Raba basin was recently analysed, and the analysis demonstrated that the effect of surface abrasion on the pottery from Bessów is connected with the type of local raw material and the firing conditions (Daszkiewicz *et al.* 2018, 51–53; Okońska *et al.* 2018). Further analyses are still ongoing.

Thus, in the case of the pottery from Bessów, and probably other ceramic materials from the microregion on the right bank of the lower Raba basin as well, this aspect of pottery production cannot be associated with influence from other cultures. Furthermore, it could suggest that the untypical construction of pottery kilns from Strzelce Małe (Kordecki, Okoński

² The given data slightly differ from the number of 8,373 fragments previously quoted in the literature (Okoński 1999–2000, 125). These differences stemmed from various irrelevant reasons.

³ From topsoil from the excavation area come one piece of unretouched flint, one piece of a stone tool (?) and one small badly preserved piece of iron.

1999, 190–197; 2001) was the response of local craftsmen to conditions connected with local clay. This issue, however, requires further research.

Fig. 3. Bessów, site 3. Trench 1/95. Plans and profiles of features excavated in 1995 (1 – humus, 2 – burning layer, 3 – greyish clay with small amount of charcoal, 4 – greyish clay with charcoal and daub, 5 – brownish clay, 6 – brownish, sandy clay, 7 – burned clay; after: Okoński 1999–2000, figs 4, 5:a)

Table 1. Bessów, site 3. The quantitative presence of pottery material in particular levels and features

	FEATURE 1/95	FEATURE 2/95	FEATURE 3/95	FEATURE 4/95	FEATURE 5/95	FEATURE 6/95
TOPSOIL (0–40 CM)	4577					
40 CM	47					
40–60 CM			874	558	127	
60–70 CM			509	275	43	28
70 CM	37					
70 CM – BOTTOM			1087	57	19	46
TOTAL:	34	10	2470	890	189	74

3.2. Technology of pottery manufacture

In terms of technology, the excavated pottery is quite homogeneous, with wheel-made pottery strongly predominant (about 97% of the total) and occurring in variants with rough and fine surfaces. The most characteristic feature of the material from Bessów is the huge share of pottery with abrasive surfaces. The whole pottery collection from Bessów is characterized by a consistency clearly visible in technology and style, especially within the distinguished technological groups.

During the classification of pottery material from Bessów, seven technological groups of pottery were distinguished (Fig. 5). The groups were differentiated based on the method of production (with the use of a potter's wheel or not), the type of surfaces (fine or rough), and the type and quantity of temper. In the case of wheel-made pottery, it was referred to the groups known from the literature: I – pottery with fine surfaces, II – pottery with rough surfaces, and III – storage vessels (Godłowski 1977, 168; Dobrzańska 1980; 1990a; 1990b; Rodzińska-Nowak 2006).

The pottery material from Bessów was classified into the following seven technological groups:

Group I – wheel-made pottery with abrasive surfaces (the so-called Pakoszówka-Bessów type), sometimes covered by surface coating, with a small addition of temper – mainly grog and single grains of sand.

Group II – wheel-made pottery with fine surfaces, with a small addition of mainly grog and single grains of sand. The surfaces are mostly brown and black. It corresponds with group I according to Godłowski, Dobrzańska, and Rodzińska-Nowak.

Group III – wheel-made, well-fired grey pottery with fine, hard surfaces, without visible temper in the clay mass. It refers to group I according to Godłowski, Dobrzańska, and Rodzińska-Nowak, and is very similar to well-fired grey pottery with hard surfaces known from Igołomia.

Group IV – wheel-made pottery with rough surfaces, with significant amounts of fine-grained temper in clay. Mineral temper prevails, including mostly sand, fine-grained gravel, and pieces of crushed stone and grog. It refers to group II according to Godłowski, Dobrzańska, and Rodzińska-Nowak.

Group V – wheel-made pottery with rough surfaces, with significant amounts of medium-grained and coarse-grained mineral temper in clay. The temper includes primarily pieces of crushed stone and gravel. It refers to group II according to Godłowski, Dobrzańska, and Rodzińska-Nowak.

Group VI – it refers to group III according to Godłowski, Dobrzańska, and Rodzińska-Nowak, and is represented by pieces of storage vessels (mostly of the *Krausengefäss* type). This is pottery with rough surfaces, with varying quantities of temper. Clay paste is tempered with grog, mostly fine-grained and medium-grained gravel, and crushed stone.

Group VII – handmade pottery with rough surfaces. The clay mass contains significant amounts of varied types of temper, mostly sand, gravel, and crushed stone of varied size.

The technology of the Bessów pottery production could be determined thanks to some features visible on the surfaces and sections of the sherds. Various traces of the manufacturing process were observed on 4,539 (55% of total) fragments. They included such features as noticeable traces of forming on a potter's wheel (traces of finger pressure), traces of turning (parallel narrow striations), traces of cutting the vessels off from the potter's wheel, surface treatments, traces of bonding or repairing vessels before firing, and the colour of surfaces and cross-sections resulting from the firing atmosphere.

The basic criterion for distinguishing the technology of production is the method used for building vessels: by hand or using a potter's wheel. In the analysed material, spiral grooves

Fig. 4. Bessów, site 3. Vessel with abradable surface

made by finger pressure during throwing on a potter's wheel were observed on the inner side of 4.325 fragments, mostly belonging to technological groups I, II, and V. They were usually more clearly noticeable in the bottom parts, and were less prominent or completely unreadable in the upper parts of the vessels. The presence of such traces suggests throwing of the vessel from one piece of clay, or its formation with the use of the coiling method, in conjunction with subsequent throwing on a potter's wheel (Dobrzańska 1986, 135–136; 1990b, 18–19). The ultrasonographic analysis of pottery from Igołomia confirmed that some vessels were made by this latter method (Dobrzańska, Piekarczyk 1999–2000). However, traces of coil joints were not observed in cross-sections in the

fine pottery from Bessów. This could suggest that the vessels from Bessów were produced by a different method than those in Igołomia, which probably stemmed from the clay paste used or the vessels' function. Vessels produced in this site could have also been formed by forming the bottom part of the vessel from one piece of clay without coiling, and then by “pulling” the rest of the vessel upward on a wheel. Another presumable method, used especially to produce fine pottery, involved forming the bottom part by coiling, and then attaching a band of clay just below the maximum belly diameter and using a potters' wheel to shape the vessel. This method was suggested by J. Rodzińska-Nowak with respect to pottery from Jakuszowice, and was based on observations concerning the points of sherds breaking (Rodzińska-Nowak 2006, 55).

Fragments with visible spiral grooves left by the potter's fingers during throwing the vessel on a potter's wheel included a huge number of sherds from small, medium, and relatively large vessels. A similar view was expressed by S. Pazda, who suggested that vessels of different sizes could be formed on a potter's wheel. He also pointed out that, regardless of the size, vessels could have been made from a single piece of clay (Pazda 1966, 87).

However, spiral grooves were not observed on fragments of storage vessels. Vessels of this kind were probably made using coiling and only thrown on a potter's wheel afterwards

Fig. 5. Bessów, site 3. The presence of technological groups distinguished for pottery material from the “pottery depot”, expressed in percentages

(Pazda 1966, 87; Dobrzańska 1990b, 18; Wilk 2005, 347). This method is confirmed by only one storage vessel from Bessów. On the bottom part of this vessel one can notice the joining of coils. All the above observations suggest that the vessels were produced by varied methods. However, this technological aspect of the pottery material from Bessów requires specialist analysis.

Other traces connected with the process of vessel making were not observed, except one example. Traces observed on one sherd originating from a storage vessel indicate that a torn off fragment of the neck was reattached and the traces of joining smoothed from the outside.

Five bases show traces of cutting off from a potter's wheel by twine or wire. Four of them represent pottery with rough surfaces (Fig. 6: 1, 2), and one has smooth surfaces (Fig. 6: 3). This kind of technological aspect is relatively frequently distinguishable on wheel-made pottery, especially that with rough surfaces, for example in site C in Moszczenica Wyżna, Małopolska Province (Madyda-Legutko, Tunia 1978, 135, fig. 11:b, d).

The manner of surface treatment is another important aspect of pottery production. Only 10 fragments of vessels representing technological group II had the whole or major part of the surface burnished. Moreover, an interesting technological feature of the pottery from the "pottery depot" is the presence of engobe on the surfaces of the abradable pottery. The term "engobe" usually relates to a slip coating applied on the surface of a vessel before firing. Sometimes the presence of this kind of layer can be a result of intensive smoothing of an unfired, wet vessel with a smooth, hard tool, or of soothing (Godłowski 1977, 168; Łaciak, Stoksik 2010, 119). In the context of pottery from the lower reaches of the Raba this term is used to describe a very thin layer of fine coating (Fig. 6: 4, 5).

The presence of engobe coating applied on vessels with abradable surfaces was confirmed in the case of pottery from Bessów by archaeometrical methods. This treatment was also confirmed during the analysis of pottery from Pakoszkówka, site 26, and Sanok, site 54, in Podkarpackie Province. The results of these analysis proved that the surfaces of two fragments were covered by a differently prepared, more heavily slurring material (Madyda-Legutko *et al.* 2004, 695; Stobierska, Wyszomirski 2008, 27). The technology of coating used on the vessels from Bessów has not been precisely determined as yet (Daszkiewicz *et al.* 2018, 53; Okońska *et al.* 2018). Moreover, it was observed on only 439 of 8.576 (5.1 %) fragments of "abrasive" pottery from site 3 in Bessów. This number included 211 pieces from the "pottery depot" and 228 from a pottery kiln uncovered on the site. Usually, the coating was preserved only in small fragments, and in most cases was probably completely abraded. It was noticeable on outer surfaces alone or on both sides of the sherds. Very often it was visible on slightly sunken surfaces of the decorated parts (Fig. 6: 4). The most common colour of engobe was grey, less often beige or brown. Usually the engobe had the same colour as the vessel, but in a darker shade. The predominant variant was dark grey engobe on grey vessels, but vessels with orange or bright-brown surfaces with brown or bright-brown slip also occurred. The presence of coating eliminated the effect of abrasion on pottery with this kind of surface.

Another technological aspect of pottery production is the firing process. The treatments of this final stage of production were very clearly visible in the colour of surfaces and breaks of pottery fragments. Vessels fired in a reduction atmosphere (fragments with black or grey surfaces) and an oxidizing atmosphere (fragments with brown, bright brown, orange, or red surfaces) occurred amongst the pottery material (Dobrzańska 1990a, 14; 1990b, 25).

Among the material from Bessów, about 57% of the fragments were fired in a reduction atmosphere. This group includes mostly pottery of technological groups I and V. The rest had colours which suggested oxidizing atmosphere, or had heterogeneous surface colours. Pottery with brown surfaces represented 22% of sherds, almost exclusively those of group II.

Fig. 6. Bessów, site 3. Examples of some technological features of pottery (1–3: traces of cutting vessels from a potter's wheel; 4, 5 – examples of engobe; 6, 7 – bases with holes)

The rest of the pottery material had surfaces of orange, red, yellow, or bright brown colour. The presence of pottery with heterogeneous surfaces should be regarded as reflecting an incorrect process of firing in a reduction atmosphere (Dobrzańska 1990b, 25). The analysis of cross-sections of sherds proved that the firing process was varied, and not always carried out in optimal conditions. Apart from fragments with monochromatic breaks, the colour of breaks is frequently heterogeneous, often with a darker or lighter core. Three-coloured breaks also appeared sporadically. It was often observed that there were different colours of breaks on different sides of the same sherd. This suggests that the firing atmosphere was often non-uniform.

The analysed pottery material included two vessel bottoms with holes in the central part (Fig. 6: 6, 7). The better preserved one had a very shallow incised ornament on one side. The other was preserved only in part. A similar find was published by M. Hegewish in the context of a presumable element of a potter's wheel (Hegewish 2011, 125). However, vessel bases with similar holes were found in Przerzeczyn Zdrój, site 3, Commune Niemcza, Dolnośląskie Province, and Rybna, site 1, Commune Popielów, Opolskie Province, and were interpreted as the imprints of a potter's wheel's axle (Bohr 2008, 346–347, fig. 1:4, 10).

3.3. Traces of damage

In the analysed pottery material about 21% of sherds bore some traces of damage (Fig. 7). Some of the observed features (about 8%) could suggest incorrect production processes: deformations, cracks, heterogeneous surface colour, and over-burning. Furthermore, about 13% of the observed traces of damage are connected with post-depositional processes, such as scratches or abraded ornamentation.

3.4. Form analysis

The wheel-made vessels from Bessów represent a variety of forms, including various types of bowls and vases, pots, cups, jugs, miniature vessels, storage vessels (including the *Krausengefäß* type), and other forms (Figs 8, 9, 10). The classification is common to all technological

Fig. 7. Bessów, site 3. The presence of pottery with traces of damage, expressed in percentages (1 – well-preserved; 2 – abradable surfaces; 3 – traces connected with errors during production processes; 4 – damages connected with post-depositional processes)

groups of pottery. It was based on the classification system used for vessel shapes from Jakuszowice, site 2 (Rodzińska-Nowak 2006, 73–121).

The most numerous and diversified group is that of bowls and vases (group A). It is represented by pottery with fine and rough surfaces. The vessels from Bessów (see: Okoński 1999–2000, figs 6–11, 18–23; Figs 9, 11–13) find numerous analogies in the Przeworsk culture sites and in most cases have wide chronological frameworks. Vessels of similar form and proportion occurred, for example, in Jakuszowice: types IA 1–12, 14, 16, 19–24, and IIA (Rodzińska-Nowak 2006, 73–106, 123–126, 312, 313, fig. 10), Strzelce Małe, site 13, Szczurowa commune, Małopolska Province (Okoński 1999–2000, 160–161, fig. 28:a–g, j, fig. 29:a–n), Igołomia: types 1–6, 11, 12, 13, 15, 16, 29–35 (Dobrzańska 1990a, 84–86, figs 10–12; 1990b, 29–37, 40–42), Zofipole (Dobrzańska 2008), Kraków Nowa Huta-Mogiła, site 59 (Glanc-Kwaśny, Rodak 2000, 98–99), Kraków Nowa Huta-Cło: types 1–5, 8, 9 (Glanc-Kwaśny 1997, 49, figs 13, 45–51), site 54 in Sanok, commune *loco*, Podkarpackie Province (Madyda-Legutko *et al.* 2004, fig. 3:4–9), as well as on sites having a later chronological position, for example in Rajbrot site 1, Lipnica Murowana commune, Małopolska Province (Biborski, Zagórska-Telega 2007–2008, 436, fig. 4:1, 2) or in Bizoręda site 12, Sobków commune, Świętokrzyskie Province (Marchelak 2010, 108, fig. 8:7). Bowls are the most typical kind of wheel-made pottery, and due to their purpose and production method, they are similar in different cultures throughout Barbaricum.

The second group of vessels is that of pots (group B), which are represented by three types. As in the case of vases and bowls, the pots from Bessów, especially types BI and BII, have numerous analogies in the Przeworsk culture (Okoński 1999–2000, figs 10:c, d, 13:f; Figs 9, 14: 4–7). The pots often have rough surfaces, but specimens with fine surfaces also occur. Pots from Bessów refer for example to types IIB 1 and 2 from Jakuszowice (Rodzińska-Nowak 2006, 126–128, 312, 313, fig. 10) or types 37–39 from Igołomia (Dobrzańska 1990a, Figs 12, 13; 1990b, 42). Analogically to vessels from group A, the pots in most cases also have wide chronological frameworks.

Cups (group C) were represented by two types, always with fine surfaces: bigger, of a decorative character (Okoński 1999–2000, fig. 9:c, f, p; Figs 9, 13:9), and smaller, unornamented specimens (Okoński 1999–2000, figs 9:d, 12:c, d; 13:f, h, n, s; Fig. 13:5, 6). The first group finds

Fig. 8. Bessów, site 3. Presence of distinguished forms of vessels, expressed in percentages (A – bowls and vases, B – pots, C – cups, D – jugs, E – miniature vessels, F – storage vessels, G – other forms)

Fig. 9. Bessów, site 3. The distinguished forms of vessels (groups A, B and C)

analogies in a few sites in Opolskie Province, for example in Szonów, Głogówek commune, in Dobrodzień, *loco* commune and in Kietrz, *loco* commune. They have a younger chronological position, and are dated to phase C3–D (Godłowski 1973, 285, 303, pl. VII:1, 2; 1977, 56, pl. III:12–14; Szydlowski 1974, pl. CXVI:a, d). Type CII has analogies for example in Igołomia, where similar vessels were described as type 22 (Dobrzańska 1990a, 38; 1990b, fig. 11), or in the cemetery in Tarnów, Opolskie Province, from phase C1b and the beginning of phase C2 (Godłowski, Szadkowska 1972, 35, 166, 194, pl. XXIII:5).

Among jugs (group D), two varieties were distinguished. Only jugs with fine surfaces occurred (Okoński 1999–2000, fig. 12; Figs 10, 14–3, 6). Jugs with a rounded body (type D.I) were distinguished as types I and II in group E (jugs) of Przeworsk culture pottery (Dobrzańska 1980, 122). Similar vessels occurred for example in Igołomia (Dobrzańska 1990a, pl. XXII:2), in Dobrodzień (Szydlowski 1974, pl. CV–CVIII, CVX), and in Jakuszowice (Rodzińska-Nowak 2006, pl. XLII: 2). Outside the range of the Przeworsk culture, vessels of similar forms

Fig. 10. Bessów, site 3. The distinguished forms of vessels (groups D, E, F and G)

occurred in the Cherniakhov culture in Mălăești, raj. Ohrej in Moldova (Rodzińska-Nowak 2006, 109; Magomedov 2011, 379, fig. 7:6). In the Przeworsk culture sites, jugs with biconical bodies occur relatively often (type D.II in Bessów). They were found for example in Igołomia, where they were classified as type 25 (Dobrzańska 1990a, pl. LXIII:5; LXXVI:22; 1990b, 39). Among the jugs from Jakuszowice, included in the IC type, there are vessels with rounded bodies, discussed above, as well as specimens with biconical bodies (Rodzińska-Nowak 2006, pl. XLIV:1). Similar shapes occurred for example in the Beskid zone, in Nowy Sącz-Biegonice, site 20 (Madyda-Legutko 1996, pl. XVII:8).

Sherds included in the group of miniature vessels (type E), i.e. those with rim diameters of less than 6 cm and base diameters less than 4.5 cm, occurred in the analysed collection rarely (Okoński 1999–2000, fig. 13:m; Fig. 10). Miniature bowls were in fact smaller analogies of regular-size vessels. The upper parts referred mostly to bowls of the A.IA type, while the state of preservation of miniature bases does not allow their forms to be determined.

Storage vessels from Bessów were divided into three types (Figs 10, 14: 10, 11). The F.I type is represented by fragments of one vessel with a fully reconstructed profile. It differs from typical *Krausengefässe* by the lack of a characteristic thick-walled rim. The proportions and form refer to pots, but the vessel is larger (its height exceeding 30 cm), and was manufactured using the technology typical for the *Krausengefäss* type (the same pottery mass, the same type of firing, similar grooving ornamentation just below the neck) (Fig. 10). The closest analogies for this type of vessel have been found in the area of Kraków and were included in the pots category. The form refers to type 42 in Igołomia, although the vessels found there are grey and are undecorated (Dobrzańska 1990a, pl. LVI:6, XVII:1; 1990b, 43). The same situation was observed in Kraków Nowa Huta-Cło, site 58 A, where they were classed as pots of type 10/b (Glanc-Kwaśny 1997, 51, pl. XVIII:15).

Vessels of type F.II have thick-walled rims typical for *Krausengefässe* and S-shaped profiles. In terms of proportions they are close to large vases. They are lower, and thus have different proportions and rounder, S-shaped forms. Similarly shaped vessels with flanged spouts are known for example from the North Carpathian Group in Rytro, Małopolska province site A, dated to phase C3–D (Madyda-Legutko, Tunia 1993, 60, 127, pl. XXV:a, b).

The typical *Krausengefäss* forms, included in the F.III type, find many analogies in the Przeworsk culture area. Direct analogies can be shown among vessels classified as type III/1 in Jakuszowice (Rodzińska-Nowak 2006, 132), type 44 in Igołomia (Dobrzańska 1990a, 87, fig. 13; 1990b, 45–46, 80–81), as well as type 11 in Kraków Nowa Huta-Cło (Glanc-Kwaśny 1997, 52). Numerous fragments of such vessels were found in Bessów, site 3, near the pottery kiln (Okoński 1999–2000, 151; 148, 149, figs 24:a, i, 25:a, c), or in Bessów, site 2 (Okoński 1999–2000, 137, 138, fig. 14:8–38, 5:1–4, 6–13, 15–28, 30–34). A wide set of vessels of analogous form from the area of south-eastern Poland has been included in the work of M. Wilk (2005).

In older publications it was suggested that *Krausengefässe* occurred in the Przeworsk culture only in phase D (Godłowski, Szadkowska 1972, 155–157; Godłowski 1977, 185; Dobrzańska 1990b, 47; Madyda-Legutko, Tunia 1993, 62). The analysis of the materials from Jakuszowice proved that this form started to occur as early as phase C2 or even earlier (Rodzińska-Nowak 2006, 135). The early chronological position may also be exhibited by the materials from Bessów, site 3, as well as those from the pottery kiln from Sanok, site 54 (Madyda-Legutko *et al.* 2004, 699, fig. 4:1), or from Grodzisk Dolny, site 22, Podkarpackie Province, which presumably may be dated to the turn of the Early and Younger Roman Periods and phase C2 (Wilk 2005, 318, 361–362).

In addition to the vessel types mentioned above, there were fragments of two vessels which represent other forms: a cup with one handle (Fig. 10, type G.I) and fragments of a vessel

(Fig. 10, G.II) defined by J. Okoński as a lid (Okoński 1999–2000, fig. 10:f). The presence of the hole may suggest that the lid handle was made of wood or other organic material.

Hand-made pottery was significantly less diverse in terms of technology, as well as in terms of vessel forms and ornaments. All the pieces come from vessels with rough surfaces. The state of preservation in the dominant part of the material made it impossible to determine the vessel forms, but probably most of them come from pots or kitchen ware (Okoński 1999–2000, fig. 8:d, g; Figs 8, 9).

Fig. 11. Bessów, site 3. Selected examples of wheel-made pottery

3.5. Ornaments and decoration of surfaces

Ornaments were observed on 1,104 of the wheel-made sherds from Bessów. The ornamentation of fine pottery is varied, and is represented mostly by plastic elements (plastic stripes were hugely predominant), burnished ornaments (wavy lines, zig-zag lines, bands or crosswise lines), and incised motifs (mostly lines). Other kinds of decoration, for example oval depressions or profiling of the surfaces, occurred occasionally. Surfaces of fine pottery were decorated mostly by a burnished wavy line between two plastic stripes on the upper part of the vessel. Pottery with rough surfaces was generally unornamented, or ornamented by incised or plastic lines. Storage vessels were ornamented mostly by typical grooving. The majority of handmade sherds were unornamented, although in 25 cases plastic or incised ornamentation occurred.

3.6. Daub and clay

Apart from the pottery material, 179 pieces (about 8.5 kg) of daub were discovered. The daub occurred mainly in the bottom part of feature 3/95 and in the topsoil. Among the analysed material there were pieces with imprints of wooden elements, probably parts of construction of the building. Next to them, two medium-sized pieces of burned clay with imprints of textile were discovered.

4. Possible interpretations of the function of the “pottery depot”

The analysis of function of the “pottery depot” is difficult because of several factors, mostly stemming from the methods of exploration and documentation. Moreover, the limited scale of excavations in Bessów had an impact on its interpretability.

The presented complex was previously interpreted as a place where ready-made vessels were stored or waiting for sale (Okoński 1999–2000, 124, 126). The basis for this interpretation was mainly the presence of a huge amount of pottery in the fill of the feature, with a relatively low share of materials bearing traces of different types of damage at the same time. Re-analysis of pottery material and reflection on the arrangement of the relics of the structure allowed this interpretation to be rejected. An interpretation as a dwelling connected to a potter’s workshop was also recently suggested (Dobrzańska 2015, 402).

The reanalysis of the pottery material and stratigraphy allows us to propose a different possible function of the “depot”. Taking all factors and data into account, the analysed complex could have functioned as a place of potter’s activity: a depot of damaged vessels, an untypical kind of potters’ workshop (compare other features interpreted as workshops in the “Analogies” part of this paper), a dryer, or some other undetermined kind of workspace connected with pottery production. Interpretations of this feature as a storage pit or as a relic of a badly preserved pottery kiln or waste pit have been also considered. At the same time it is possible that the feature’s fill was created by a one-time deposition of pottery waste, after the workshop ceased to function. It should be emphasized, however, that due to its construction it is almost certain that it was not the original purpose of the feature to serve as a waste-pit.

The most important factors forming the basis for interpretation of the function of the feature are its complex construction and almost exclusive presence of pottery sherds. The absence of other categories of finds, such as bones, strongly indicates that pottery material was intentionally stored in this place.

It must be emphasized that the feature contained vessels preserved in one piece as well as very small shards of numerous vessels. The considerably fragmented and mixed materials

which cannot be reconstructed strongly prove not only the presence of well-preserved vessels, but mostly damaged specimens as well. The share of well-preserved vessels in relation to the huge amount of crushed material from more than 1,000 vessels suggests that this feature could not have been a depot of ready-made vessels. Even considering the post-deposition processes, the percentage of reconstructed vessels would very likely be higher in such a case.

The plan of the complex is difficult to interpret as well. It is difficult to propose the reconstruction of the described complex of features, but it was probably a kind of shed, and not a building, as previously suggested (Okoński 1999–2000, 124; Dobrzańska 2015, 402). The analysed feature has a form which is not typical for pit-houses or semi-sunken dwellings. The feature is irregular in plan and the post holes are spread irregularly. Moreover, the slanted rather than flat bottom of the feature is also quite untypical of Przeworsk culture buildings. Features 3/95 and 5/95 were divided by a loess stripe, but materials from these two parts can be cross-joined. Furthermore, the fill of the complex is quite untypical as well. The lack of tools and finds connected with daily life strongly indicates that this complex was not used as a dwelling, as was suggested by H. Dobrzańska (2015, 402).

Another issue is the presence of a hearth at the bottom of the building. Feature 6/95 did not have its profile documented, so it is difficult to comment on the previously presented interpretation of this part of building as a “(...) hearth. It had a trough-shape profile and 44 cm of depth from the level of 70 cm” (Okoński 1996, 342). The feature was dug into the ground and had burned walls. In the fill of feature 6/95 pieces of pottery occurred, which in some cases were cross-joined with fragments from upper levels of the complex, and very small pieces of clay and charcoal were also found.

The location of the hearth next to the edge of the feature raises some doubts, as it seems to be non-functional. As well, the lack of stones and the type of the features’ fill were untypical for a hearth. This observation suggests that this feature could have had another, undetermined function. It could have been a kind of basin with walls hardened by burning. Perhaps this pit could have performed some function connected with potter’s activity. In ancient workshops pits dug into the ground were uncovered, and are explained as places for preparing clay, like levigation or clay moistening tanks, or as storage pits for already prepared raw material. However, such pits were usually bigger (Ziomecki 1965, 68; Peacock 1982, 19, 42, 47, 53–55).

As mentioned above, interpretations of the “pottery depot” as a storage pit or a relic of a badly preserved pottery kiln with on-ground construction or a waste pit were also considered. However, the form and size of the complex, the presence of a hearth or a kind of pit (?) at the bottom of the complex, the presence of post holes, and the very homogeneous character of archaeological material discovered in the fill suggests that these interpretations are incorrect.

Taking all factors and data into account, the interpretation of the “pottery depot” as a place of potter’s activity – a warehouse for pottery waste or a part of a potter’s workshop are the most probable. The intentionally stored pottery material could have been used as, for example, material for grog production or some other undetermined purpose.

5. Analogies

Kilns are the most common type of features connected with pottery production. Other features, like hollows for the storage of raw material, workshops, and places for drying vessels prior to their firing are rarer in archaeological sites in Barbaricum (Dobrzańska 2008, 175; Domański 2010, 37). The complex from Bessów does not have any close analogies, but it could be compared with features related to pottery production from other sites.

The “depot” is quite similar to a feature from the above-mentioned site 26 in Pakoszówka, which was about 7 to 9 meters in plan and about 70 cm in depth. The feature was quite irregular in plan, but had a regular, rectangular profile. Its fill yielded about 2,000 sherds of wheel-made ceramics, almost exclusively with abrasive surfaces. The pottery material from Pakoszówka revealed some features in terms of technology and vessel forms which connected it with the Dacian cultures (Madyda-Legutko 1996, 76–77; Madyda-Legutko, Pohorska-Kleja 2004). The feature has been interpreted as probably a potter’s depot (Rodzińska-Nowak 2018, 315).

As mentioned above, the complex from Bessów could be interpreted as a place where vessels were dried. A building of an analogical function was discovered at Šebastovce-Barca, okr. Košice in Eastern Slovakia (Lámiová-Schmiedlová 1962, 800, 806–814; 1963, 65–67). The feature was about 4.2 to 6 m in size, and had a rectangular, regular shape and regular profile. It also had regularly spaced post holes. The building had a hard earthen floor made of stones and a layer of clay. The fill produced a huge amount of pottery material, represented by well-preserved vessels and crushed material (Lámiová-Schmiedlová 1962, 811; 1963, 66, 65, fig. 4).

It is also worth mentioning feature 805 from site 27 in Nyíregyháza-Oros “Úr-Csere” in North-East Hungary. This feature, dated to the La Tène period, was interpreted as a pottery workshop or a pottery dryer (Almássy, Pop 2014, 173). It was 3.5×2.5 m and regular in plan, with two regularly spread post holes in the middle of the shorter walls. The profile was regular, and the feature had a flat bottom. The complex, according to the authors of the research, had light roofing (see: Almássy, Pop 2014, 174, fig. 2, 180, pl. 4).

Features interpreted as pottery workshops are also known from Przeworsk culture settlements. One of them is feature 288 from Dobrzeń Mały, Dobrzeń Wielki commune, Opolskie Province (Pazda, Tomczak 2008) and another is a relic of a building (feature 1/66) probably connected with pottery production, from Radłowice, Domaniów commune, Dolnośląskie Province (Pazda 1969; Pazda 2008, 272). Both had regular constructions, typical of Przeworsk culture pit-houses, with regularly spread post holes and flat bottoms (Pazda 1969, 336, fig. 1; Pazda, Tomczak 2008, 256, fig. 4).

The mentioned features from Šebastovce, Nyíregyháza-Oros “Úr-Csere”, Dobrzeń Mały, and Radłowice, and other features interpreted as dryers or workshops (see Dušek 1992, 17, 66, figs 4, 19), differed in certain elements from the Bessów complex. The most important difference is the regularity of construction. All of them are pit-houses with regular post holes and regular profiles as well. The bottoms are always flat, and in the case of the feature from Šebastovce also additionally reinforced. The features with regular construction with post holes are typical and numerous in the territory of the Przeworsk culture (Michałowski 2011). Thus, the construction of the complex from Bessów stands out among other features referred to as workshops, and represents a different kind of construction.

6. Chronology

The chronology of the Bessów complex is hard to determine. The forms of vessels occurring in the fill of the “pottery depot” have wide chronological frameworks. Most of the discovered sherds come from vessels that appear in the Przeworsk culture starting from the Younger and Late Roman Periods and in the Early Migration Period, which means from the C1a phase to the C3–D phase. This remark, as proved by the research conducted by J. Rodzińska-Nowak, refers to the majority of wheel-made pottery forms occurring in the Przeworsk culture. Only a few features of wheel-made pottery material may have a more precisely defined chronological position (Rodzińska-Nowak 2010; 2011).

The ornamentation patterns also have wide chronological frameworks. Among the decorated pottery, only fragments of four vessels have some elements that may suggest a slightly later chronology. One of them is the zonal, vertical burnished ornament on the upper part of a jug (Fig. 14: 6). It was regarded as a determinant of materials from phases C3–D, although the analysis of pottery from Jakuszowice proved that this type of surface decoration occurred already from phase C2 or even earlier (Rodzińska-Nowak 2006, 152–153, with further literature there). Another premise for limiting the chronology is the decoration by profiling, noticed on fragments of one vessel (Fig. 13: 9). This kind of shaping of the vessel surface occurs on wheel-made pottery from phase C2, and is widespread in the C3–D phases (Dobrzańska 1980,

Fig. 12. Bessów, site 3. Selected examples of wheel-made pottery

130–131; Rodzińska-Nowak 2006, 156). A vessel with surface decorated by profiling (Fig. 12: 8, 11) finds some analogies in the vicinity of the pottery kiln in Bessów (Okoński 1999–2000, 162–164, fig. 18:b, c, h, i). However, similar vessels also occurred on a site of a relatively late chronological position, i.e. in Turawa, Opolskie Province, in a burial ground dated to phases C3–D (Godłowski 1977, 219–220, pl. XXXIX:5). Another, and the last, example of decoration which could suggest a younger chronology is an oval hole on the upper part of one bowl (Fig. 12: 7). In the Przeworsk culture this kind of ornamentation is dated to phase C2 and less often to C3–D, and is considered as referring to Roman glass vessels (Dobrzańska 1980, 30; Rodzińska-Nowak 2006, 157). However, it cannot be excluded that the above-mentioned

Fig. 13. Bessów, site 3. Selected examples of wheel-made pottery

types of ornamentation, which date to phase C2 on other sites, could have occasionally occurred earlier.

Accordingly, it is worth paying attention to the pottery kiln from site 3 in Bessów. This feature has a precisely determined dating. The kiln was located only about 60 m from the “depot”. It is worth emphasizing that the character and forms of the pottery from the kiln clearly coincide with the ceramics from the “pottery depot” (Okoński 1999–2000, figs 18–25). Probably both features functioned at a roughly similar time or simultaneously. As a result of the radiocarbon dating, as well as thanks to the dating of a *terra sigillata* fragment (Przychodni 1999–2000, 170), the kiln has been dated to the turn of the third and fourth quarters of the 2nd

Fig. 14. Bessów, site 3. Selected examples of wheel-made and hand-made pottery (6 – after: Okoński 1999–2000, Fig. 12: b)

century (Okoński 1999–2000, 151). However, it should be emphasized that only three of the obtained radiocarbon dates indicate such an early dating, while the remaining results indicate a later chronology (Okoński 1999–2000, 150, 151, fig. 17:c). At the same time, the *terra sigillata* fragment does not mark the moment when the kiln was used, but only determines its *terminus post quem* (Kaczanowski, Przychodni 2015, 293). Therefore, the chronological position given in the literature should be approached with caution and may be slightly later.

Due to the above, there is no certainty as to the precise dating of the feature and pottery materials from Bessów. It seems that it should be dated to the Younger Roman Period, probably to a period between phase C1a and phase C2. However, it should be emphasized that these conclusions are based mainly on such premises as the lack of characteristic forms of vessels or ornaments, as well as on comparisons between the materials from the “pottery depot” and those from the kiln. Moreover, the chronological interpretation should be treated with caution because of the lack of finds being good chronological indicators.

7. Conclusions

The aim of the study of the pottery material from site 3 in Bessów, originating from excavations carried out in 1995, was to re-analyse the function of the complex previously interpreted as a pottery depot, and to specify its chronology. As a result, the analysis allowed us to reinterpret the function. The lack of close analogies to this untypical complex in terms of construction, and shortcomings in the documentation caused a lot of doubts. Furthermore, the presence of a huge amount of pottery material which contained well-preserved specimens next to the heavily crumbed or damaged sherds made the feature more complicated to interpret.

The “pottery depot” from Bessów is an example of an untypical archaeological feature with no analogies in Przeworsk culture sites. The obtained data indicate that it could have functioned as a place of potter’s activity: a depot of damaged vessels (stored for example as raw material for preparing grog), a dryer, a kind of potters’ workshop or another, undetermined kind of workspace connected with pottery production, dated to the Younger Roman Period (phases C1a–C2). Other potter’s workshops known from Barbaricum are regular pit-houses, so the workshop or workspace from Bessów represents another type of construction. At the same time it remains possible that the feature was filled with production waste after the workshop operation terminated.

The pottery collection from Bessów represents a wide range of vessel forms comprising one large archaeological assemblage with common chronology. This note is particularly important and suggests that the mentioned types of ornamentation which on other sites are dated to phase C2 could have in fact occasionally occurred earlier. It could also show that the presence of some kinds of ornamentation and forms depends on the workshop or region where the pottery was produced. Additionally, in the Przeworsk culture area some elements of ceramic production could have occurred to differing degrees.

Despite previous interpretations which identified some elements typical for Dacian cultures in the described pottery, or even suggested it may have been produced by migrants from the peripheral Dacian cultures (Okoński 1999–2000, 153), such claims have not been confirmed by the analysis of vessel forms. Forms typical for the Przeworsk culture pottery occur among the vessels from Bessów, with many analogies in Przeworsk culture sites, which was also mentioned by H. Dobrzańska (2015, 402, 404). At the same time no wheel-made lids, storage vessels made from untempered clay, Dacian cups, pots having slender proportions, or other forms typical for the Dacians have been recorded (see: Bichir 1973; 1976a; 1976b; Bader, Gindele 2014; Gindele, Istvánovits 2011).

This fact, as well as the above-mentioned observations concerning the “abrasive” pottery, which cannot be treated as technological influence from other cultural circles, indicates that there is no reason to associate the microregion on the right bank of the lower Raba River with the Dacian culture, or regard it as strongly influenced by the Dacian culture in the Younger Roman Period. Moreover, there are no grounds to challenge the full association of this region with the Przeworsk culture. The opposite observation can be made in the case of the pottery material from Pakoszówka. The presence of a huge amount of pottery with abradable surfaces in the upper San basin is connected with ceramics untypical for the Przeworsk culture. The vessels from Pakoszówka, site 26, and Sanok, site 54, besides the untypical technological aspects, also find many analogies in Dacian cultures (Madyda-Legutko 1996, 76–77; Madyda-Legutko, Pohorska-Kleja 2004; Madyda-Legutko *et al.* 2004; 2008). The understanding of the technological aspects connected with abradable pottery from this region requires further analysis.

The re-analysis of the assemblage from Bessów provides information about pottery production and specifications of one of the pottery workshops which functioned on the right bank of the Raba, and sheds new light on possible interpretations of pottery production in this area.

Studium przypadku tzw. składu garncarskiego z Bessowa, stan. 3, pow. bocheński, woj. małopolskie. Materiał archeologiczny i reinterpretacja funkcji

Stanowisko 3 w Bessowie, gm. i pow. Bochnia, woj. małopolskie, jest jednym ze stanowisk mikroregionu osadniczego na prawym brzegu dolnego biegu Raby. Problematyka tego obszaru, a także wyniki prowadzonych tu badań powierzchniowych i wykopaliskowych były niejednokrotnie wzmiankowane w literaturze (por: Cetera, Okoński 1994; Okoński 1996; 1998; 1999–2000; Okoński *et al.* 2000; Kordecki, Okoński 1999; 2001). Jednym z przebadanych tu obiektów jest „skład garncarski” z Bessowa (Kordecki, Okoński 1999, 189; Okoński 1999–2000, 120–135), którego dotyczy niniejszy artykuł.

Tak zwany „skład garncarski” stanowił kompleks obiektów 3/95, 4/95, 5/95 i 6/95. W jego najbliższej okolicy znajdowały się dodatkowo dwie jamy (Ryc. 3). Z wypełniska wszystkich wymienionych obiektów, a także z warstwy ornej zlokalizowanej bezpośrednio nad nimi, pochodziło łącznie 8328 fragmentów ceramiki i około 8,5 kg polepy, w tym także fragmenty o charakterze konstrukcyjnym. Wśród materiału ceramicznego 97% stanowiły fragmenty naczyń wykonanych przy użyciu koła garncarskiego. Obiekt ten zinterpretowany został uprzednio jako pozostałości budynku, pełniącego funkcję składu naczyń (Kordecki, Okoński 1999, 189; Okoński 1999–2000, 120–135). Podstawą tej interpretacji była obecność dużej liczby fragmentów ceramiki w wypełnisku obiektu, przy relatywnie niskim udziale materiałów noszących ślady uszkodzeń produkcyjnych. Ponowną analizę materiału ceramicznego podjęto celem potwierdzenia zaproponowanej przez J. Okońskiego funkcji obiektu, oraz uściślenia jego pozycji chronologicznej.

Przeprowadzona analiza materiału ceramicznego, uzupełniona w ostatnim czasie wynikami analiz archeometrycznych (Daszkiewicz *et al.* 2018; Okońska *et al.* 2018), a także refleksja nad układem stratygraficznym i relikami konstrukcji, doprowadziły jednak do reinterpretacji funkcji tego obiektu. W świetle wyników ponownej analizy uznano, że tak zwany „skład garncarski” mógł funkcjonować jako miejsce związane z procesem produkcji garncarskiej: magazyn odpadów produkcyjnych (mogących stanowić np. źródło tłuczni ceramycznego), suszarnia, rodzaj warsztatu garncarskiego o konstrukcji odbiegającej od innych tak interpretowanych obiektów lub jako inny, nieokreślony element pracowni garncarza. Nie można także wykluczyć, że pozostałości warsztatu zasypano odpadami produkcyjnymi po zaprzestaniu jego użytkowania. Konstrukcja obiektu sugeruje jednak, że jego pierwotnym przeznaczeniem nie mogła być jama odpadowa. Ponadto, brak znalezisk wiązanych z życiem codziennym, takich jak kości czy narzędzia,

często występujących na stanowiskach i w pozostałościach budynków kultury przeworskiej sugeruje, że założenie to nie mogło pełnić funkcji budynku mieszkalnego, jak sugerowała H. Dobrzańska (2015, 402).

Z analizowanego obiektu i jego bezpośredniej okolicy pochodzi liczny zbiór ceramiki wykonanej przy użyciu koła garncarskiego. Fragmenty naczyń lepionych w ręce wystąpiły nielicznie. Analiza materiału ceramicznego pozwoliła wyróżnić wiele typów naczyń, wśród których wyróżniono różnego rodzaju misy, garnki, puchary, dzbanki, naczynia miniaturowe, naczynia zasobowe, a także pojedyncze egzemplarze naczyń o innych formach (Ryc. 8, 9, 10). Całość materiału ceramicznego posiada liczne analogie na obszarze kultury przeworskiej.

Ważnym aspektem związanym z materiałami znad dolnej Raby jest kwestia ceramiki tak zwanego typu Pakoszówka-Bessów, a więc ceramiki wykonanej na kole, o ścieralnych powierzchniach (Okoński 1999–2000, 163, 164; Madyda-Legutko 2004, 79–82). Przeprowadzone analizy archeometryczne dowiodły, że ścieralność ceramiki w tym regionie nie jest związana, jak wcześniej sugerowano, z wpływami z innych obszarów kulturowych, ale z rodzajem lokalnego surowca i procesem wypału naczyń (Daszkiewicz *et al.* 2018; Dobrzańska *et al.* 2004; Dobrzańska 2015, 402; Okońska *et al.* 2018). Także analiza form naczyń dowiodła, że brak tutaj analogii do materiałów z dackiego kręgu kulturowego. Uwaga ta jest o tyle istotna, że rzuca nowe światło na możliwości interpretacyjne mikroregionu nadrabskiego. Kwestią wymagającą dalszych badań jest natomiast obecność ceramiki ścieralnej na stanowiskach nad górnym Sanem, w którym naczynia o takich powierzchniach mają formy znajdujące liczne analogie na obszarach zasiedlanych przez plemiona dackie (Madyda-Legutko 1996, 76–77; Madyda-Legutko, Pohorska-Kleja 2004; Madyda-Legutko *et al.* 2004; 2008).

Najważniejszym czynnikiem, który stanowi podstawę do interpretacji prezentowanego obiektu jest obecność niemal wyłącznie fragmentów ceramiki. Brak innych kategorii znalezisk pokazuje, że materiał ceramiczny był tu celowo magazynowany. Podkreślić trzeba, że w wypełniku obiektu wystąpił zarówno rozdrobniony materiał, jak i całe, nieszkodzone formy, w tym także misy o nieścieralnych powierzchniach, a więc o pełnych walorach użytkowych. Procentowa obecność dobrze zachowanych lub dających się w większym stopniu zrekonstruować egzemplarzy (jest ich 32), przy jednoczesnej obecności fragmentów przeszło 1000 naczyń świadczy, że obiekt ten nie mógł funkcjonować jako magazyn gotowych, nieszkodzonych wyrobów. Ponadto, wśród materiału ceramicznego około 10% stanowiły fragmenty noszące ślady błędów produkcyjnych (przepalone, zdeformowane, źle wypalone).

Pozostałości konstrukcji pozwalają sądzić, że obiekt prawdopodobnie interpretować można jako pozostałości zagłębionej w ziemię wiaty lub szopy o lekkiej konstrukcji dachu. Ważnym elementem dla interpretacji tak zwanego „składu” jest obiekt określony uprzednio jako palenisko, zlokalizowany na dnie obiektu 3/95. Ze względu jednak na jego lokalizację w obrębie konstrukcji oraz charakter jego wypełniska, taka interpretacja może budzić wątpliwość. Ta niewielka, wydrążona w lessie jama o przepalonych ściankach, stanowić mogła np. dół do przechowywania przygotowanej uprzednio gliny. Podobne obiekty odkrywane są w antycznych warsztatach, jednakże, co należy podkreślić, zazwyczaj są one znacznie większe (Ziomecki 1965, 68; Peacock 1982, 19, 42, 47, 53–55).

Obiekty interpretowane jako suszarnie lub warsztaty rozpoznawane są na stanowiskach środkowoeuropejskiego Barbaricum rzadko. Jako obiekty o analogicznych funkcjach, związane z procesem produkcji naczyń, wskazać można obiekt ze stanowiska 26 w Pakoszówce, gm. Sanok (Madyda-Legutko 1996, 76–77; Madyda-Legutko, Pohorska-Kleja 2004), a także obiekty interpretowane jako suszarnie ze stanowiska Šebastovce-Barca, okr. Košice na Słowacji (Lámiová-Schmiedlová 1962, 800, 806–814; 1963, 65–67) i datowany na okres lateński obiekt 805 ze stanowiska 27 in Nyíregyháza-Oros „Úr Csere” na Węgrzech (Almássy, Pop 2014, 173). Ze stanowisk kultury przeworskiej znane są także dwa budynki związane z produkcją garncarską: obiekt 288 z Dobrzenia Małego, gm. Dobrzeń Wielki, woj. opolskie (Pazda, Tomczak 2008) oraz obiekt 1/66 z Radłowic, gm. Domaniów, woj. dolnośląskie (Pazda 1969; 2008, 272). Wszystkie te, jak i inne obiekty interpretowane jako warsztaty lub suszarnie (por. Dušek 1992, 17, 66, ryc.

4, 19), mają jednak zawsze regularne konstrukcje i są budynkami słupowymi lub ziemiankowymi. Z tego względu, konstrukcja obiektu z Bessowa stoi w opozycji do nich.

Chronologia analizowanego obiektu jest niemożliwa do uściślenia, ze względu na obecność w wypełnisku wyłącznie niedystyngtywnych chronologicznie form naczyń wykonanych na kole garncarskim (por: Rodzińska-Nowak 2010; 2011). Tylko kilka elementów z analizowanego zbioru ceramiki posiada nieco węższe ramy chronologiczne (Ryc. 12: 7, 8, 11, 14: 4). Niemal zupełny brak materiałów o relatywnie późnych cechach chronologicznych wskazywać może, że materiały z Bessowa datować można przypuszczalnie na okres od fazy C1a do fazy C2 włącznie. Także porównanie z ceramiką z pieca garncarskiego rozpoznanego na tym stanowisku, a datowanego na trzecią ćwierć II wieku naszej ery (Okoński 1999–2000, 151, ryc. 18–25) wykazuje, że oba obiekty funkcjonować mogły jednocześnie lub w niewielkim odstępnie czasowym. Należy mieć na uwadze, że tylko kilka z uzyskanych dla wspomnianego pieca oznaczeń radiowęglowych wykazuje tak wczesne datowanie, a fragment *terra sigillata* nie określa pozycji chronologicznej obiektu, stanowi jedynie jego *terminus post quem* (por. Kaczanowski, Przychodni 2015, 293). Z tego względu, podana w literaturze pozycja chronologiczna pieca może być nieco późniejsza.

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