

ESZTER SOÓS

THE SETTLEMENTS OF THE PRZEWORSK CULTURE IN HUNGARY

Abstract: In the last decade, the Hungarian research of settlements belonging to the Przeworsk culture, generally identified with the Germanic Vandals, yielded important new results. The aim of this paper is to summarize these latest results based on which it also discusses the extension of the settlement territory, the problems of relative chronology, the evolution of material culture as well as the relations of the above-mentioned Germanic ethnic group in the Roman Imperial Age¹.

Keywords: Przeworsk culture, Vandals, Roman imports, pottery, settlements, chronology, dating

I. INTRODUCTION

For a long time, remains of cremation burials were the only phenomena which Hungarian and international research brought into relation with the expansion of the Przeworsk culture in the Carpathian Basin (Bóna 1986, 63; Olędzki 1992; Godłowski 1993; Olędzki 1999; Olędzki 2001). Meanwhile, the identification of settlements encountered many difficulties. From the 1950s onwards, pottery finds recovered during probe excavations were related to certain ethnic groups based on their typology and decoration. As a result, hand-formed, coarse ware with plastic decoration was usually identified as Dacian, while most of the wheel-thrown pottery was defined as Celtic, and hand-formed fine polished ware as Germanic (Lamiová-Schmiedlová 1969; Végh 1964; 1985; 1989; 1999). Accordingly, a *mixed Culture* including Dacian, Celtic and Germanic ethnic elements was identified in the Early Roman Period (Lamiová-Schmiedlová 1969, 458-466; Olędzki 2014). From the 1960s, the idea of Illyrian, Celtic, Púchov and

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Quadi identification also arose among Hungarian researchers, while the concept of the expansion of Vandal groups around Miskolc was only introduced later (Párducz 1957; Párducz, Korek 1958; 52-53; Salamon, Török 1960, 171; Salamon 1966, 86; Végh 1964; 1985, 106; 1999, 219).

In the Late Roman Period, the use of wheel-thrown ware became gradually more common in the settlements. Pottery production, based on techniques of Iron Age or Roman origin (Gindele 2015) cannot be attributed to a particular ethnic group, therefore researchers described 'ethnically not determinable' groups and stated that archaeological sites related to the Przeworsk culture can be dated up to the turn of the 2nd–3rd centuries AD or the first decades of the 3rd century AD the latest (Lamiová-Schmiedlová 1969; 1992). This was the same methodological approach which has led to the concept of the 'Bereg culture' as an independent cultural entity, actually indicating Late Roman Period wheel-thrown ware with stamped decoration and archaeological sites yielding this type of pottery².

These days, both the settlement network of the Przeworsk culture and the material culture characteristic of the settlements can be outlined with more certainty. Archaeological sites discovered during the reconstruction of main road no. 3 linking the city of Miskolc with Košice, such as Garadna-Kovács tanya and Hernádvécse-Nagy rét³ proved to be an important basis for Hungarian research. The results also allowed the re-evaluation of settlement finds recovered earlier at smaller scale excavations, for example Arka-Fónyi patak (Soós 2017), Mezőzombor-Temető (Csengeri 2015), Zalkod-Jakab domb (Salamon 1970), Beregdaróc-Zsid and Beregsurány-Barátságkert (Pintye 2010; Istvánovits 1997).

II. GEOGRAPHICAL SETTING

Based on our present knowledge regarding the extent of the Przeworsk settlement area in the Carpathian Basin (Fig. 1), a clear boundary was set to it by the Dacian *limes* towards the southeast as well as the Sarmatian settlement area in the Great Hungarian Plain to the south-southwest (Gindele 2010, 10, Karte 2; Masek 2012, 254-256). In the territory west of the river Sajó/Slaná the material culture characteristic of the Quads was more dominant (Soós, Tankó 2018, 295-296, Fig. 1-2). The find material of the settlements excavated in the vicinity of Miskolc show both Quadi and Przeworsk traits, thus it is possible that there existed a relatively wide transitional zone between these two Germanic cultural groups (Végh 1989;1999). The northeastern limits of the Przeworsk settlement area are

² In detail: Soós 2019.

³ The unpublished sites mentioned in this paper were processed and evaluated by the Author in the framework of her PhD dissertation (Soós 2015).

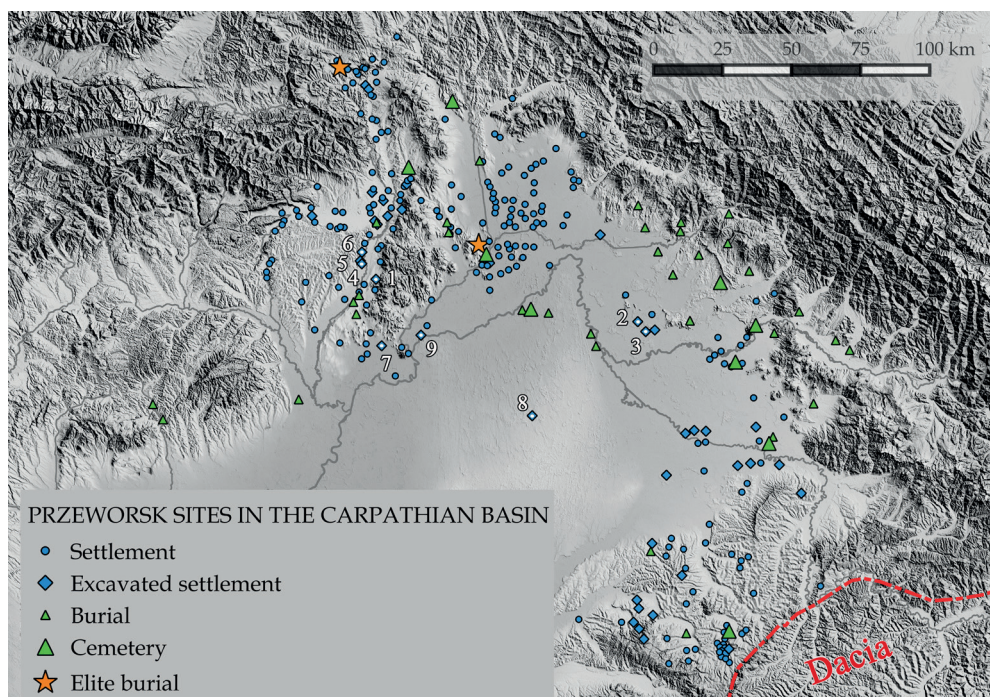


Fig. 1. Przeworsk sites in the Carpathian Basin. 1. Arka-Fönyipatak; 2. Beregdaróc-Zsid; 3. Beregsurány-Barátságkert; 4. Garadna-Kastély-zug; 5. Garadna-Kovács tanya; 6. Hernádvécese-Nagy rét; 7. Mezőzombor-Temető; 8. Pócspetri-M3 site 201; 9. Zalkod-Jakabdomb

even more vague. It is disputed if the burial mounds discovered in the territory enclosed by the Carpathian Mountain Range belonged to the Carpathian Barrow culture or only the tradition of building tumuli appeared at certain Przeworsk sites (Kobály 1998, 122-123; Vakulenko 2008, 141-142, 148, 165, Fig. 1; Istvánovits, Kulcsár 2017, 255-256, Fig. 204).

III. THE SETTLEMENTS

Garadna-Kovács tanya

In 2002-2003, rescue excavations were carried out at the site located close to the Hernád River. At the present state of research this is the second largest excavated and evaluated Przeworsk settlement in the Carpathian Basin after

the one unearthed at Csengersima-Petea (Gindele, Istvánovits 2009). Altogether 430 archaeological features were identified over a territory of 6100 square metres (Csengeri, Pusztai 2008). At the site 26 semi-subterranean post structure buildings were excavated, which constituted five groups (Fig 2). These were located about 20-30 metres from each other and included five to ten buildings each. In all, 27 huge clay pits as well as 134 storage pits of various sizes filled with domestic waste were excavated, which once belonged to the buildings. 22 pits contained either partial or full animal skeletons, among which mostly dogs (Fig. 2: 3,4), but also pigs, goats/sheep as well as cats were identified (Daróczi-Szabó 2009). In the area enclosed by the buildings a number of rectangular fireplaces were lined up in north to south and east to west rows (Fig. 2: 6). These features of unknown function yielded only pieces of charcoal and stones (Soós 2011; Gindele 2015b).

The buildings excavated at Garadna all belong to the characteristic building types of the Roman Age Barbaricum. The building with a single post in the axis of the shorter sides (Fig. 2. 1) belongs to the Droberjar A1/Kolník 2/1/Behm-Blancke 2/Leube A type, characteristic of the Late La Tène and the Early Imperial Age in Western Slovakia (Droberjar 1997, 19; Kolník 1998, 145-146, Abb. 1; Kolník *et. al.* 2007, 13-19, Obr. 7; Leube 2009, Abb 99).

In the case of most of the buildings of Garadna which had six posts, postholes were situated in a row along the shorter sides (Kolník 4/2/Leube C2/Donat C1–Kolník 1998, 145, Abb. 1; Leube 2009, 133, Abb. 99). In the Carpathian Basin, this structure type was frequent especially in the northwestern Romanian and Subcarpathian regions of the Przeworsk settlement area (Gindele, Istvánovits 2009, 13-14, Abb.1; Kotigorosko 1995, Fig. 75).

At Garadna, in the case of three buildings the posts were not placed in the corners but along the longer sides (Fig. 2. 2). The DroberjarB1/Kolník 3/1/Leube C1 type (Droberjar 1997, 22; Leube 2009, 147; Kolník 1998, 145, Abb. 1) is the most frequent building type in the Quadi settlement area. In the territories of the Przeworsk culture in the Carpathian Basin it mostly appears in the western regions adjacent to the Quadi sphere from the second half of the 2nd century AD (Lamiová-Schmiedlová 1969, 418, Abb 3/2, Abb 8; Soós 2017, 20).

The archaeological material reaching almost 13 000 entities mostly included pottery fragments. The majority of the typical hand-formed Przeworsk ware consisted of deep biconical bowls and pots (Fig. 3: 1, 3-4), beside which a few small bowls and cups, sometimes decorated with incised, grooved or impressed decoration also came to light (Fig. 3: 2,5). Wheel-thrown ceramics mainly included bowls with semispherical, biconical and articulated body (Fig. 3: 8-9), jugs with narrow neck as well as fewer pots, biconical vessels and cups (Fig. 3: 6-7). Although wheel-thrown ware was present in an impressive amount, the majority of the fragments were without decoration. Hand-formed coarse cooking vessels mainly included pots (Fig. 3: 10), but the same material and technique was

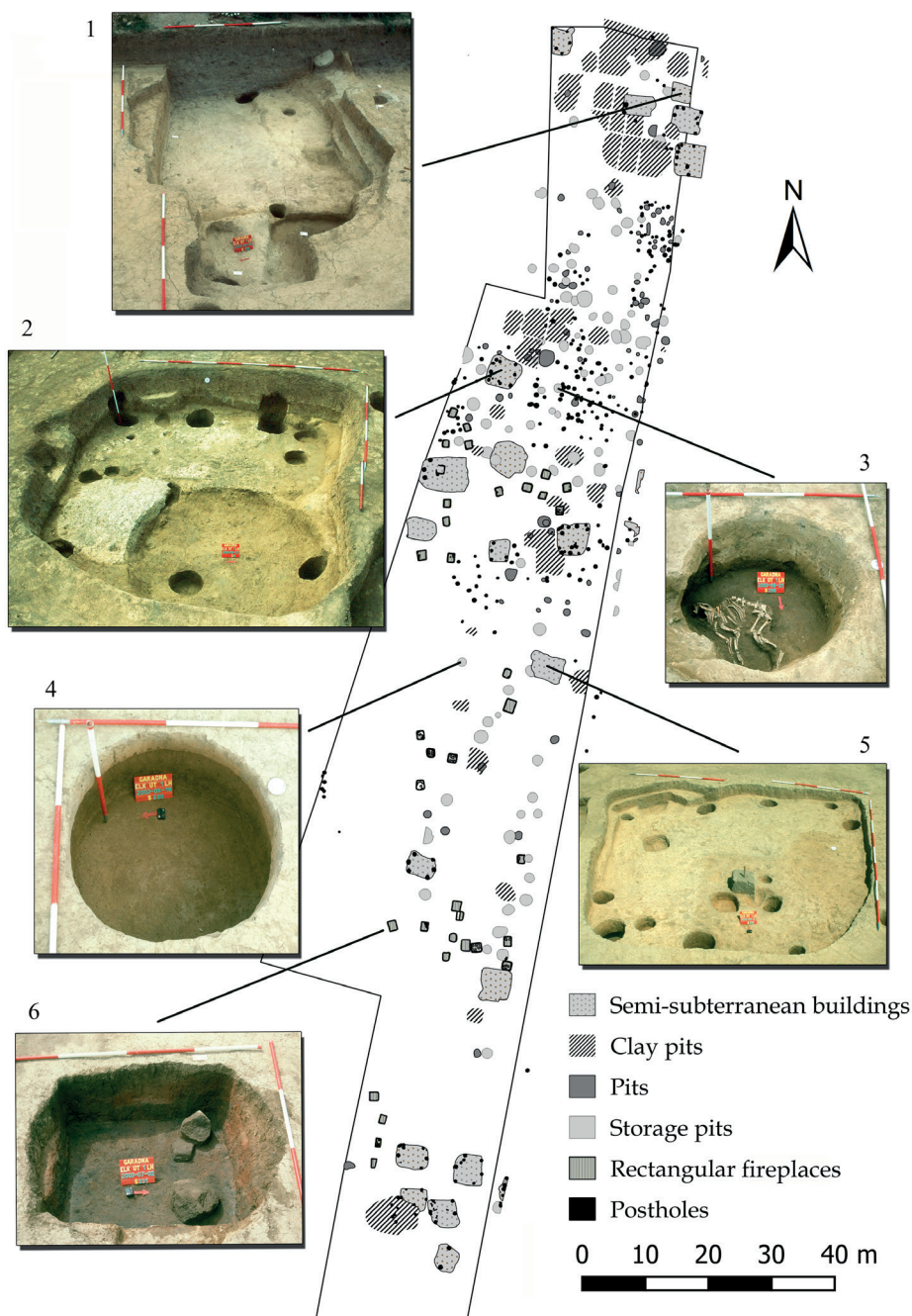


Fig. 2. Garadna-Kovács tanya. 1: s108; 2: s9; 3: s255; 4: s230; 5: s302; 6: s331



Fig. 3. Types of pottery from the Garadna-Kovács tanya site

used to produce vessels of various functions imitating the forms of fine Przeworsk ware, such as bowls of different sizes, small pots, mugs, cups, lids, miniature vessels and oven pans (Fig. 3: 11-14). The villagers used large sized granaries with broad, grooved rims to store agricultural products (Fig. 3: 15).

Evidences of intensive trade relations towards the Roman Empire are the almost 70 pieces of terra sigillata from the Rheinzabern, Westerdorf and Pfaffenhofen workshops (Gyalai 2009) as well as 47 pieces of Pannonian grey ware (*Pannonische Glanztonwäre*) and three fragments of rare glass beakers. Considering special forms and certain types of decoration present in the local ceramic assemblage, the influence of Sarmatian and Quadi material culture is also traceable.

Based on the archaeological material, the types of settlement features as well as their relation to each other, the settlement was inhabited continuously for a long time. Its initial period can be dated to period B2/C1 but it was still in use in period C3/D1, therefore the life of the settlement can be documented from the second half of the 2nd century to the last third of the 4th century AD (Soós 2015, 206-254; 2016).

Hernádvécse-Nagy rét, sites no. 4-7.

In 2004, a Przeworsk settlement and a Hun period homestead (Soós *et al.* 2017) was unearthed at the sites Hernádvécse-Nagy rét no. 4-7, located also on a river terrace some 6 kilometres north of Garadna-Kovács tanya.

The core of the settlement unit consists of three semi-subterranean buildings with six posts and three more vaguely definable surface buildings with post structure situated some 10-20 metres from each other (Fig. 4: 1). Most part of the domestic waste – similarly to Garadna-Kovács tanya – came to light from small and large-sized pit complexes of irregular shape, unearthed some 40 metres to the north and south from the above-mentioned buildings. Three smaller semi-subterranean buildings with one or two posts (Fig. 4: 2) stood in the southern part of site no. 4, with cylindrical and beehive-shaped storage pits dug close by (Fig. 4: 5). At Hernádvécse, the rectangular fireplaces were lined up in rows about 40-50 metres north of the aboveground buildings (Fig 4: 3-4).

The types of the Hernádvécse semi-subterranean buildings with smaller floorspace and the structures with six posts correspond to the features excavated at Garadna-Kovács tanya.

The pottery find material of the settlement consists almost entirely of hand-formed vessels (Fig. 5). Beside the fine, polished, black Przeworsk type pots and larger or smaller bowls (Fig. 5: 1-4, 7-8) a large repertory of coarse ware of various forms and functions was also present: pots, bowls, cups, lids, miniature vessels and oven pans (Fig. 5: 5-6, 9-12). There were only a few wheel-thrown sherds,

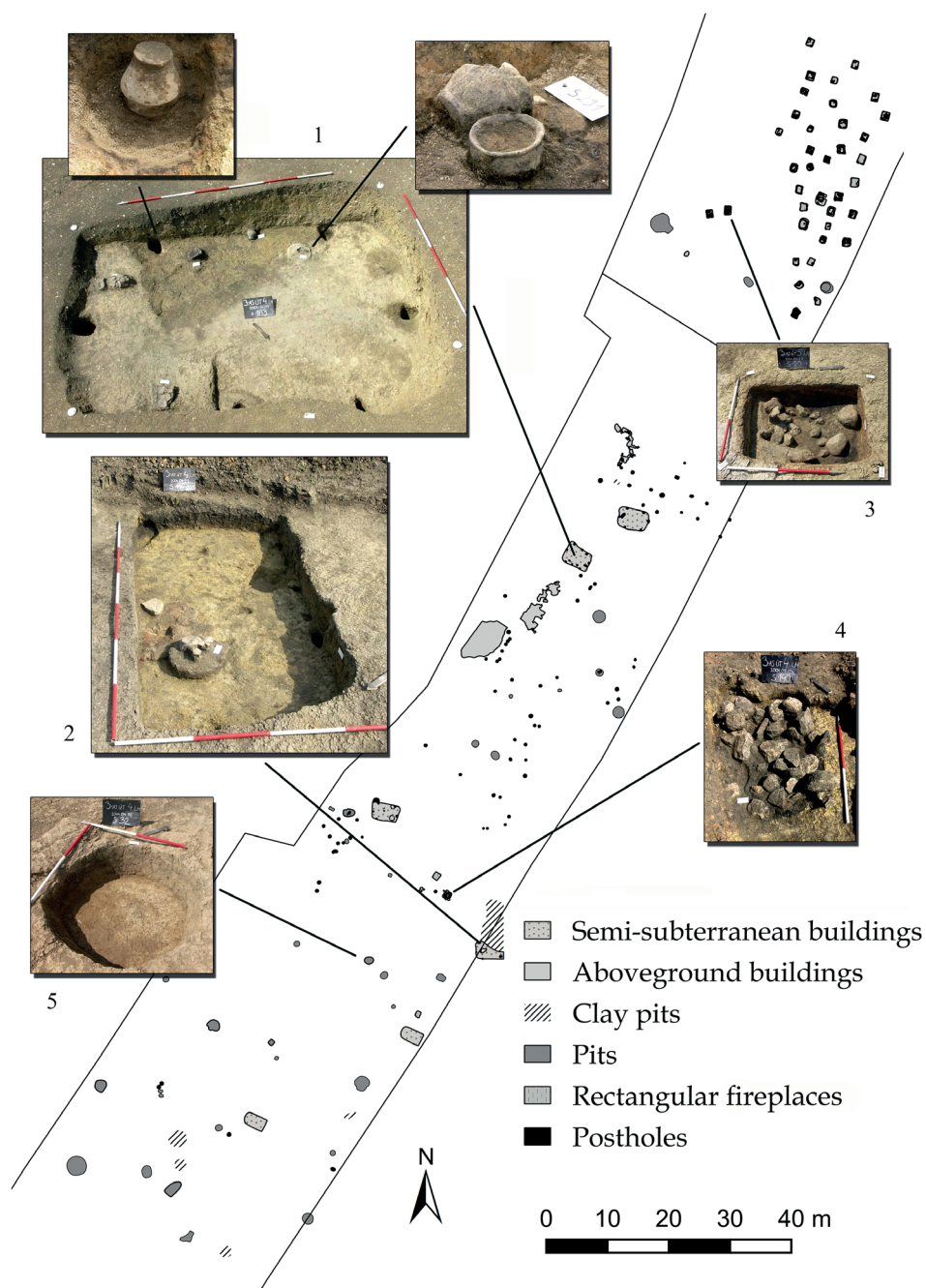


Fig. 4. Hernádvécse-Nagy rét, sites no. 4-5. 1: s183; 2: s114-115; 3: site 5. s10; 4: s140; 5: s32

all belonging to large-sized granaries. The pottery repertory of local origin was complemented by Roman import ceramics such as terra sigillata sherds from the Rheinzabern and Westerndorf workshops, as well as a fragment of an early *mortarium* and that of a green, rectangular glass bottle.

The settlement at Hernádvécse-Nagy rét was most probably established in period B2/C1 in the second half of the 2nd century, while the exact date of its abandonment in the 3rd century cannot be determined.

Despite the fact that for a certain period the settlements at Hernádvécse and Garadna-Kovács tanya were inhabited parallelly, their find material bears testimony to differing customs and traditions. Based on the archaic pottery forms, the almost total absence of wheel-thrown ware as well as the diffuse, homestead-like settlement structure, the Hernádvécse site can be identified as the archaeological imprint of a newly arrived group which settled in the Upper Tisa region in the time of the Marcomannic Wars (Gindele 2014, 141).



Fig. 5. Types of pottery from the Hernádvécse-Nagy rét, sites no. 4-5

IV. THE CHRONOLOGY OF PRZEWORSK SETTLEMENTS IN THE TERRITORY OF HUNGARY

The problematics of find material from the 1st century AD

In the Upper Tisa region the identification of the find material of the 1st century AD is difficult⁴. Certain researchers share the opinion that material cultures of Celtic and Dacian origin survived in the Early Roman Period, and mixed with Germanic elements (Salamon, Török 1960; Lamiová-Schmiedlová 1969, 461-463; Budinský-Krička, Lamiová-Schmiedlová 1990; Soós, Tankó 2018b). However, the dating of La Tène type pottery to the Roman Age found in Przeworsk settlements in the territory of Hungary cannot be proven directly.

Likewise, no pottery definable as Dacian (Lamiová-Schmiedlová 1969, 458-460; Luštiková 2007; Gindele 2004) was recovered from either Hungarian Przeworsk settlements, or in Sarmatian territory in North-eastern Hungary (Masek 2012, 257-258). Types of hand-formed coarse ware defined earlier as Dacian as well as most sorts of plastic decoration such as finger impressed ribs can be dated to the 2nd-3rd centuries AD (Végh 1975, 84; 1985, 103; 1989, 488; 1999, 212; Istvánovits 1997, 720-721, Fig. 10, 3, Fig. 11, 1, 3; Gindele 2013, 12).

The beginnings of Przeworsk settlement and the Severan Age (B2-B2/C1-C1a)

In the northeastern part of the Carpathian Basin the beginning of the Roman Period can be defined from the Dacian Wars of Traian, that is, period B2 (Gindele 2010, 128; 2013, 11). The first Germanic groups appeared in the region in parallel to the decline of the Dacian/Celto-Dacian power structures.

The military character of the region's occupation is suggested by the fact that the earliest Przeworsk type warrior graves known from the Carpathian Basin were discovered in close proximity to Late Iron Age fortified settlements and locations of strategic importance such as Zemplén-Burgwall and Mala Kopanya, the locations of strategic importance and river fords⁵.

The great majority of Przeworsk cremation burials including weapons can be dated to periods B2/C1-C1a, that is, between the second half of the 2nd century

⁴ The dating of archaeological material from the Roman Age is based on provincial imports and ceramic typology (Godłowski 1992; Tejral 1992).

⁵ Contrarily to the sometimes quoted dating to the 1st century AD (Kotigorsko *et al.* 2004; Istvánovits-Kulcsár 2017, 255). Based on the fragments of the chain mail found in it, the phase B1 grave discovered at Mala Kopanya can be related to the earlier, Dacian settlement (Kobály 1998, 116-117, 121; Vakulenko 2008, 164). In the case of Zemplén-Szélmalomdomb the location of the graves was identical, while at Mala Kopanya the Przeworsk burials were found isolated, on top of the hill next to the fortification (Hullám 2012, 85; Kotigorsko *et al.* 2004).

and the first decades of the 3rd century (Hullám 2012, 92) and comply with the group 5 and 6 of the weapon graves by K. Godłowski (Kontny 2008, Fig. 10). The find material of these graves shows close relations to the material culture of the Przeworsk culture occupying the southeastern part of Poland at about the same time (Madyda-Legutko, Rodzińska-Nowak 2012; Madyda-Legutko *et al.* 2013). Research has long correlated this migration wave with the arrival of the so-called Hasding Vandal, Victofal and Lacing groups, mentioned among the events of the Marcomannic Wars (Godłowski 1984).

Compared to the surprisingly small number of known burials (some 50 graves from approximately 37-38 sites – Godłowski 1993; Hullám 2012) the settlement structure can be considered quite dense. At the moment we know traces of Przeworsk settlements from more than 300 sites in the Carpathian Basin.

Period B2 is difficult to identify in the settlements (Gindele 2010, 128-131, Abb. 62; 2013, 14, Taf. I.). The dating of the sites excavated in the territory of Hungary starts from period B2/C1, based on the Roman import artefacts dating to the second half of the 2nd century.

The first wave of Roman glass items may have reached the area during the Marcomannic Wars, based on some fragments from Beregdaróc-Zsid and a rectangular bottle were found at Hernádvecse-Nagy rét site (Fig. 6: 1-3)⁶. The second half of the 2nd century is also *terminus post quem* for the early mortaria and the time when the use of the grey slip pottery (*Pannonische Glanztonwäre-PGW*) as well as the red painted yellow ware (Fig. 6: 4-8), both imported from Pannonia, became common (Groh, Sedlmayer 2002, Abb. 136; Lamiová-Schmiedlová 1969, 480; Kuzmová, Rákos 2016, 168).

Another part of the small finds dating to period B2/C1-C1a originate from the Barbaricum. A small sized bronze *Kniefibel* was found at Garadna-Kovács tanya with narrow, semicircular headplate, upper chord, strongly articulated bow and footknob (Fig. 6: 11). Considering the analogies, this piece can be dated to the end of the 2nd century/the turn of the 2nd/3rd centuries (Kovrig 1937, 104. típus, 121, X. t. 104; Maćzyńska 2001, 79, Abb 1:1, 3), similarly to the Sarmatian buckle (Fig. 6: 12) also from Garadna-Kovács tanya (Vaday, Kulcsár 1984, 165. jegyzet, Abb. 1, 13; Dinnyés 1991, 164-166; Istvánovits, Kulcsár 2002, 95).

The Almgren group VII. so-called 'Sarmatian' brooches found at Beregsurány-Barátság kert and Beregdaróc-Zsid (Fig. 6: 9) were most probably used in the C1 period (Istvánovits 1990, 103; 1997, 720, Fig. 7; Pintye 2010, 110, 38. Ábra 1; Cociș, Bârcă 2014, 196, 203, Fig. 6).

⁶ Pintye 2010, 109-110, 25. Ábra 8, 29. Ábra 8, 42. Ábra 8; Dévai 2012, 191-192. The unpublished glass finds mentioned in this paper were defined by Dr. Katalin Dévai (ELTE BTK RI). I would like to express my gratitude for her kind help.



Fig. 6. Finds of period B2/C1-C1a in Przeworsk settlements. 1-2, 9: Beregdaróc-Zsid; 3-4, 8: Hernádvécese-Nagy rét; 5-7, 10-15: Garadna-Kovács tanya (1-3, 9, 11-14: scale 1; 4-8, 10, 15: scale 2)

The spear of Kaczanowski Type XIII found at Garadna-Kovács tanya (Fig. 6: 10), is characteristic of period B2/C1-C1 cremation graves in Poland (Kaczanowski 1995, 22, Tabl. XI, 3-4, Tabl. XX; Kobály 1998, 122, VIII. t. 2-3). Another spear with short rhomboidal head and long shaft (Fig. 6: 15) was common in period B2 in the Przeworsk culture (Kaczanowski 1995, 21, Tabl. XI, 1-2, Tabl. XX; Kontny 2008, Fig. 10).

At Garadna-Kovács tanya, a fragment of a cylindrical beaker made of clear, yellowish green glass (Fig. 6: 13) was found along with another fragment belonging to a green beaker with pear-shaped or convex body (Fig. 6: 14). These Roman import artefacts also suggest a dating to the first half of the 3rd century (Barkóczy 1988, 69-70, 77, Form 29, Form 40 Kat. 60, Kat. 82; Dévai 2013, 95-96).

Terra sigillata sherds comprise the largest group of Roman import ware at Przeworsk settlements. Apart from a few fragments of Central Gaulish origin found at Arka (Soós 2017, 33; Gyalai 2012, 14-16), almost exclusively the products of workshops located in Northern Germania and along the Inn River were found in the Upper Tisa region.

Terra sigillata vessels from the Rheinzabern workshop were found at nearly every settlement excavated in Hungary (Gyalai 2009, 359). Part of these sherds can be dated to the Marcomannic-Sarmatian Wars, however most of them are from the Severan Age (Kuzmová 2014, 173; Kuzmová, Rákos 2016, 165-166). Also an early 3rd century dating is probable in the case of the fragments from Arka, Hernádvécse, Beregdaróc and Garadna-Kastély zug (Gabler 1968, 217, 2. kép 1; Gyalai 2009, 364; Ardeleanu 2014, Table 1).

The products of the Westerndorf workshop comprise the largest part of the terra sigillata finds recovered from Przeworsk settlements in the territory of Hungary. They can mostly be dated to the first decades of the 3rd century AD (Gabler 1968, 214; Gyalai 2009, 358; Kuzmová 2014, 173; Soós 2017, 33). Terra sigillata from the Pfaffenhofen workshop was only found at Garadna-Kovács tanya in larger amounts, where it can be dated to the first and second third of the 3rd century AD (Gyalai 2009, 364, 3. t.; Ardeleanu 2014, 18-19, Graph. 7).

Late Roman Period (C1-C2, C3)

As many find types cannot be dated more precisely within periods C1 and C2, the development of the settlements in the 3rd century AD can only be outlined within a broader timeframe.

Most of the brooches known from the settlements, including Garadna-Kovács tanya, Hernádvécse and Beregdaróc, are Almgren group VI. Type 158 (Fig. 7: 1-3). Brooches of this type became common from period C1a and their use continued up to the end of period C2 (Vakulenko 1998; Cociş 2014, 131). Robert Gindele suggests that in the transylvanian Przeworsk settlement territory they could have still been used in period C3 (Gindele 2010, 137-139, Abb. 66).

Composite arched-backed antler combs appear in Quadi settlements likewise from period C1. Their use can be traced up to the turn of the 4th and 5th centuries AD (Tejral 2008, Obr. 10-12; Pintye 2009; Gindele 2010, 136-141, Abb. 65-67; Masek 2016, 115-116, Fig. 6, Fig. 17). Specimens found in the territory of Hungary were most probably buried in the 3rd century AD. They appear more frequently west of the Tokaj Mountains, fragments of six combs are known from Garadna and one from Mezőzombor (Fig. 7: 4-7).

Two Almgren group VII brooches with at side returned foot (*Fibel mit spitzigem Fuß*) are known from Garadna-Kovács tanya (Fig. 7: 8). Specimens of this type are more characteristic in the northern part of the Carpathian Basin,

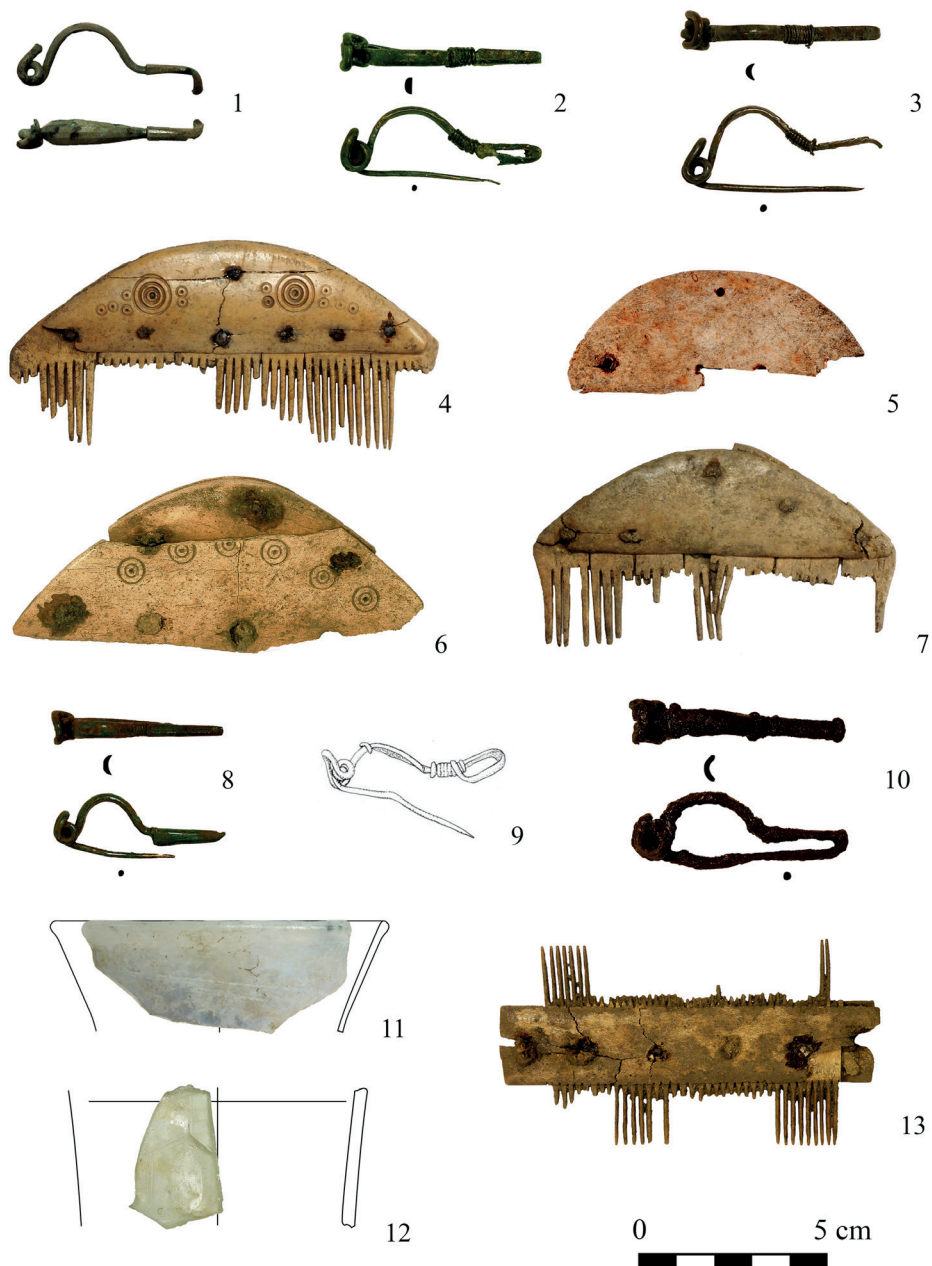


Fig. 7. Finds of periods C1-C2 and C3 in Przeworsk settlements. 1. Hernádvécse-Nagy rét;
2-4, 6-8, 10-11, 13. Garadna-Kovács tanya; 5. Mezőzombor-Temető; 9. Bodrogkeresztúr;
12. Garadna-Kastélyzug

while they are less frequent east of the Tokaj Mountains (Cociş 2014). In most territories they can be dated to periods C2-C3, that is, the second half of the 3rd century and the first decades of the 4th century (Peškař 1972, 118-119, Taf. 34; Godłowski 1992, 42; Varsik 2011, 194-199, Abb. 104). The dating of a Type Almgren VI. 166 iron brooch found at Garadna-Kovács tanya maybe corresponds with this (Fig. 7: 10). Specimens of the same type but made of bronze, such as a piece found at Bodrogkeresztúr (Fig. 7: 9), were widespread in periods C2-D1. Most pieces can be dated to period C3 (Peškař 1972, 112-113, Taf. 30; Pieta 1999, 185, Taf. 13, 5; Maćzyńska 2001, 81, Abb. 2, Abb. 4).

Part of the Przeworsk settlements surely subsisted until the end of the Roman Age. At the Garadna-Kovács tanya site, a double-sided, composite antler comb (Fig. 7: 13) was found in a clay pit. This artefact could not have been buried before the last decades of the 4th century AD (Pintye 2009, 169, 5. kép 3. és 4. Kép; Gindele 2010, 141, Abb. 67; Masek 2016, 106-107, Fig. 17). The whitish rim fragment of uncoloured conical glass beakers (Fig. 7:11-12) can also be dated to the middle third of the 4th century AD (Barkóczi 1988, 83; Dévai 2012, 163-164).

V. THE DEVELOPMENT OF THE PRZEWORSK SETTLEMENTS IN NE-HUNGARY

The conversion of the material culture

After determining the points of reference of relative chronology, a re-evaluation of the material culture once categorized on the basis of ethnicity became possible. The characteristics of pottery, representing the vast majority of archaeological material recovered from settlements, do not mirror ethnic differences, but mostly functional variance.

The pottery repertory which can be reconstructed was diverse in composition. At first, table ware only consisted of hand-formed, fine, polished, black Przeworsk vessels. In the early period biconical bowls, biconical or semispherical cups, strongly profiled pots were characteristic. Their use can still be traced in the 3rd century AD, however their proportion in the pottery material of settlements fell back significantly with time. Strong profiles gradually became more rounded, for example in the case of bowls from Garadna-Kovács tanya (Fig. 3: 3), and small-sized vessels disappeared from the pottery material (Fig. 8).

Hand-formed, coarse cooking and storage vessels, mainly pots, were also produced locally. In the early period the biconical forms were common along with vessels widening in the upper third of the body. In the Late Roman Age, however, simple S-profile vessels widening in the middle of the body comprised the majority of the pottery material. In the case of bowls we can also observe the tendency

leading from biconical forms towards more curved profiles. In the early period, west of the Tokaj Mountains numerous vessel types were produced from coarse material: smaller and slender pots, mugs, lids, small bowls, miniature vessels and wide, flat oven pans. This wide spectrum of forms narrowed with time, in the Late Roman Period mostly pots and bowls were in use (Fig. 8).

Contrarily to the Quadi settlement area (Švaňa 2011), the use of the potter's wheel spread relatively early among the Przeworsk settlements of the Carpathian Basin, already from the second half of the 2nd century AD, most probably due to Roman provincial influence from Dacia. Contrastively to the fine and coarse hand-formed ware, the production of wheel-thrown vessels was not carried out at the individual settlements but in specialised pottery workshops, which probably had a certain clientele. In the pottery find material of the early period, wheel-thrown vessels imitating the sharp biconical profiles of fine, black hand-formed Przeworsk vessels were common. Thus it were not the wheel-thrown products of the new pottery workshops which influenced the local pottery production but the biconical forms of traditional Germanic pottery were being copied on the potter's wheel. The result of this process was a peculiar potter's tradition, explicitly different from the Sarmatian pottery production of the Great Hungarian Plain.

The spread of wheel-thrown ware with typical stamped decoration interpreted earlier as representing an individual cultural entity, the so-called 'Bereg culture', can be explained with the influence of the pottery workshops of the neighbouring Dacia provincia. The Porolissum workshops, operating from the 2nd century AD, mainly supplied local demand (Gudea, Filip 1997, 15, 28; Filip 2008). Quickly, stamped pottery became widespread in the Upper Tisa region parallelly to the appearance of the potter's wheel in the Barbaricum. Provincial craftsmen could have had an important role in the establishment of pottery workshops in the Barbaricum, who thus gained a new market outlet for their products (Filip 2008, 277-278).

The characteristic stamped ware called 'Beregurány' or 'Blažice type' produced in the Barbaricum spread over a large territory mainly west of Dacia in periods C1b–C2–C3. Its production started somewhat earlier in the surroundings of Zalău and we cannot exclude the possibility that in certain geographical regions workshops still produced this type of pottery at the turn of the 4th and 5th centuries (Gindele, Istvánovits 2011, 148-149, 160, Karte 2)⁷.

In Przeworsk settlements, large sized, thick walled granaries with bulky, grooved rims were used to store agricultural products. Until now, the typological and technological features of these heavy vessels of 80-120 cm height did not show any chronological differences. Their origin and trade routes are barely

⁷ Recently about this topic: Soós 2019.

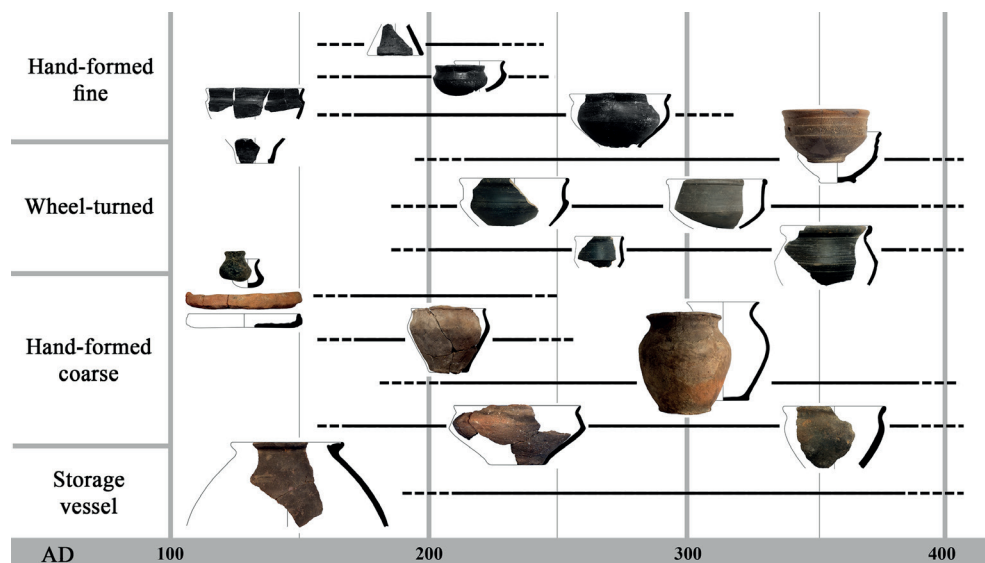


Fig. 8. The evolution of the potteries from Przeworsk settlements

known. The evaluation of the pottery workshop excavated at Mediešu Aurit, which specialized in producing granaries from the 2nd century AD, will certainly yield important new data in this regard (Gindele 2013b; 2015).

The settlement at Garadna-Kovács tanya has been continuously inhabited from period B2/C1 to period C3/D1, its archaeological material shows consistent development. Beside the neighbouring Sarmatian and Germanic territories, its inhabitants also had trade connections with the Roman provinces. Similarly to other sites such as Arka-Fónyi patak, Beregdaróc-Zsid and Mezőzombor-Temető as well as Garadna-Kastély zug and Zalkod-Jakab domb, from the turn of the 2nd/3rd centuries onwards the repertory of hand-formed table ware was complemented with wheel-thrown vessels.

Another group of Przeworsk settlements was also established in period B2/C1, however, based on their distinct traditions and the lack of wheel-thrown pottery, they did not have as wide regional contacts as the above-mentioned sites. Still, Roman imports do appear in their find material. Beside Hernádvécse-Nagy rét, the site of Beregsurány-Barátság kert (Istvánovits 1997) can also be included in this archaeological horizon together with the Romanian Przeworsk settlements (Gindele 2014). The site of Pócspetri with a single, burnt-down building (Masek 2012, 239-240, 254-255, 30-31. tábla 37. tábla 8-14, 39. tábla 1.3) should also be mentioned, being an important evidence that in a certain period

of time, Przeworsk occupation affected a larger geographical area than its later settlement range⁸.

These two different types of settlements can probably be brought into relation with the multiple waves of Przeworsk settlers in the Carpathian Basin. During the time of the Marcomannic-Sarmatian Wars, new settlers arrived, complementing the Przeworsk population already occupying the Upper Tisa region during the 2nd century AD (Lamiová-Schmiedlová 1969, 492; 1992, 78; Vakulenko 2008, 175; Gindele 2013, 19; 2014). The material culture, building types as well as the close location of the settlements and the total lack of evidence suggesting hostility between these two groups speaks of a shared cultural background.

Contacts with the Sarmatian territories

Research related to Sarmatians has dealt with the question of Germanic-Sarmatian contacts on several occasions. In Sarmatian territory, finds representing long-range contacts were almost exclusively found in burials with richer grave goods, while Germanic artefact types only scarcely appear in settlements (Istvánovits, Kulcsár 2017, 285-289, 293-294). Based on the available data, the find material of Przeworsk and Sarmatian settlements is clearly distinct in the Upper Tisa region (Masek 2012, 255), which is remarkable as at about the same time a wide transitional zone existed between the Quadi and Sarmatian settlement territory in the vicinity of Aquincum (Kulcsár 1997, 377). There is no trace of contacts with the Sarmatian elite in Przeworsk graves. The lack of Sarmatian artefacts in Przeworsk settlements is even more conspicuous: only single buckle was found at Garadna-Kovács tanya (Fig. 6: 12). Most of the semispherical bowls which appeared in the course of the 3rd century AD in the pottery material of Przeworsk settlements inhabited for a long time were produced locally⁹. The possibility of Sarmatian import origin may only be mentioned in the case of a few fine, wheel-turned bowls and granaries Garadna-Kovács tanya (Fig. 9: 1-3).

Contacts with Quadi

Certain vessel forms and types of decoration characteristic of Western Slovakian settlements appear in the pottery material of the Przeworsk culture, especially west of the Tokaj Mountains.

A small, squat, rectangular vessel (*wannenförmige Gefäss*) came to light at Arka (Fig. 9: 4), the closest analogies of which are only known from the

⁸ Likewise no Przeworsk settlements are known from the vicinity of the graves excavated at Sirok and Terpes (Heves county).

⁹ Researchers relate the wheel-thrown semispherical bowls common in the Szamos Region to provincial pottery workshops and to the Drag. 37 type sigillata (Gindele, Istvánovits 2009, Abb. 49).



Fig. 9. Finds from Przeworsk settlements suggesting contacts with Sarmatians and Quads.
1-3, 5, 8-9: Garadna-Kovács tanya; 4, 7: Arka-Fónyipatak; 6: Hernádvécse-Nagy rét

vicinity of Nitra (Soós 2017, 29-30). From the same site a conical beaker with barbotine decoration is also known, representing a type of decoration (Fig. 9: 7) common in the Quadi settlements of Western Slovakia (Soós 2017, 26). Although rarely, simple bowls with inverted rim and conical or curved body were also made of coarse material, as proven by the fragments found at Hernádvécse, Arka and Garadna (Fig. 9: 5-6). These forms were actually more frequent west of the Sajó/Slaná River (Soós, Tankó 2018, 289). Furthermore, the form and decoration of a large-size, polished pot from Garadna (Fig. 9: 9) resembles Quadi pottery (Varsik 2011, Abb. 30). The vertical and horizontal row of pinches observable on another pot from Garadna-Kovács tanya is a frequent decoration

on Western Slovakian vessels (Varsik 2011, Abb. 35, Abb. 39), although the form and production technique of the pot from Garadna does not differ from the local pottery material (Fig. 9: 8).

In the case of Przeworsk settlements we can rather speak of a Quadi influence and not so much of an actual mixing of the two cultural entities.

Contact with the Roman provinces

Based on the find material, the contacts between the Przeworsk settlement area in the Carpathian Basin and the provinces of Pannonia and Dacia cannot be considered as homogeneous. In the Imperial Age settlements of the Košice Basin Roman imports are considerably more frequent than on the northwestern confines of Dacia (Gindele 2010, 146, 491; Kuzmová 2014, Map. 1). The large amount of Roman import in the valleys of the rivers Hernád and Torysa strengthen the assumption that a trade route could have lead trough here, connecting the region around Aquincum and the northeastern passes in the Carpathian Mountains (Ardeleanu 2014, 19-20).

Beside terra sigillata fragments, a considerable number of bowls with grey slip also came to light along the Hernád River. This vessel type is absent from the Sarmatian settlement territory as well as most of the Przeworsk area, aside from a concentration of finds around Miskolc (Végh 1964, 49, II. t. 18-19; 1989, 7. Kép 26, 22. Kép 4; 1999, 211-212; 1985, 103) and in the Košice Basin (Lamiová-Schmiedlová 1969, 420, Abb 14; Jurečko 1983, Obr. 40, 3).

Based on the pottery find material of the settlements in the Hernád Valley, especially Garadna-Kovács tanya, it can be stated that in the milieu of the Barbaricum formal types of Roman vessels were definitive in contrast to the pottery workshops. The small-size vessels such as type Drag. 33 cups and type Drag. 52/54 small pots were present in the settlements only as long as locally produced small-sized vessels comprised an element of the domestic pottery assemblage. With the transformation of the pottery repertoire these vessels disappeared. In this period the majority of fine ware consisted of bowls, complemented with type Drag. 37 vessels¹⁰.

¹⁰ It is probable that the differences between the vessel forms of Roman import ceramics to the Sarmatian and the Germanic territories can be related to the divergence of the dinner set used by the two cultural groups. In Sarmatian territories the type Drag. 33 was present in significantly larger numbers. The volumetric capacity of this terra sigillata vessel form has probably fit the Sarmatian spherical vessels better, which were also produced in small sizes. On the contrary, in Przeworks territory the domestic pottery repertoire either included smaller cups and bowls or larger bowls, to the volumetric capacity of which, types Drag. 54 or Drag. 37 fit better. This phenomena was mentioned earlier by several researchers (Gabler, Vaday 1992, 91; Kuzmová 2014, 178).

Farming

On the terraces along the rivers Hernád, Tisa and Bodrog sedentary, self-sufficient communities living off agriculture and animal husbandry have settled, cultivating regional contacts with the neighbouring areas.

We can only vaguely guess at the exact way of life in the settlements. Fragments of grinding stones used to grind cereals as well as the large number of granaries suitable to store crops both suggest the significant role of agriculture. These finds are present at almost all Przeworsk settlements but still we have almost no data on farming methods, the crop types cultivated and their utilization. Based on the archaeozoological remains from the settlements, almost exclusively domesticated animals, primarily cattle were consumed, while hunted animals were unimportant. Beside cattle, pork occupied the second most important place on the list of consumed domestic animals (Daróczy-Szabó 2009; Vörös, Soós 2014).

Settlement structure and households

The find material of Hernádvécse-Nagy rét and Garadna-Kovács tanya provided the opportunity to conduct a multivariate statistical analysis on the data stored in the data base. One of the main aspects of the survey regarded the use of space, that is, if it was possible to differentiate between areas of diverse function within a certain settlement based on the spread of the find material (domestic waste). For the sake of the model the find material was categorized on the basis of household function (Soós 2015; 2016).

Considering the results, beside the above-mentioned differences in the material culture of the two settlements, divergences in the use of space were also observable.

At Garadna-Kovács tanya, the contemporary economic units or households showed a unified picture. All units, located 15-20-30 metres from each other, consisted of a building with multiple posts and two or three buildings with six posts as well as two or three smaller and a large-sized clay pit, filled gradually with domestic waste. The rectangular fireplaces, some 4 to 20 features per domestic unit, came to light strictly within the space bordered by the buildings of the unit.

According to the functional study, this strictly defined, 30-35 metres wide space served as premises for various domestic activities. Beside the preparation, cooking and consumption of food, textile production could have been carried out in the same space. The place of storing and preparation of food was not explicitly different from that of hide processing or other domestic production activities. It was not possible to relate certain activities to certain building structures (Fig. 10).

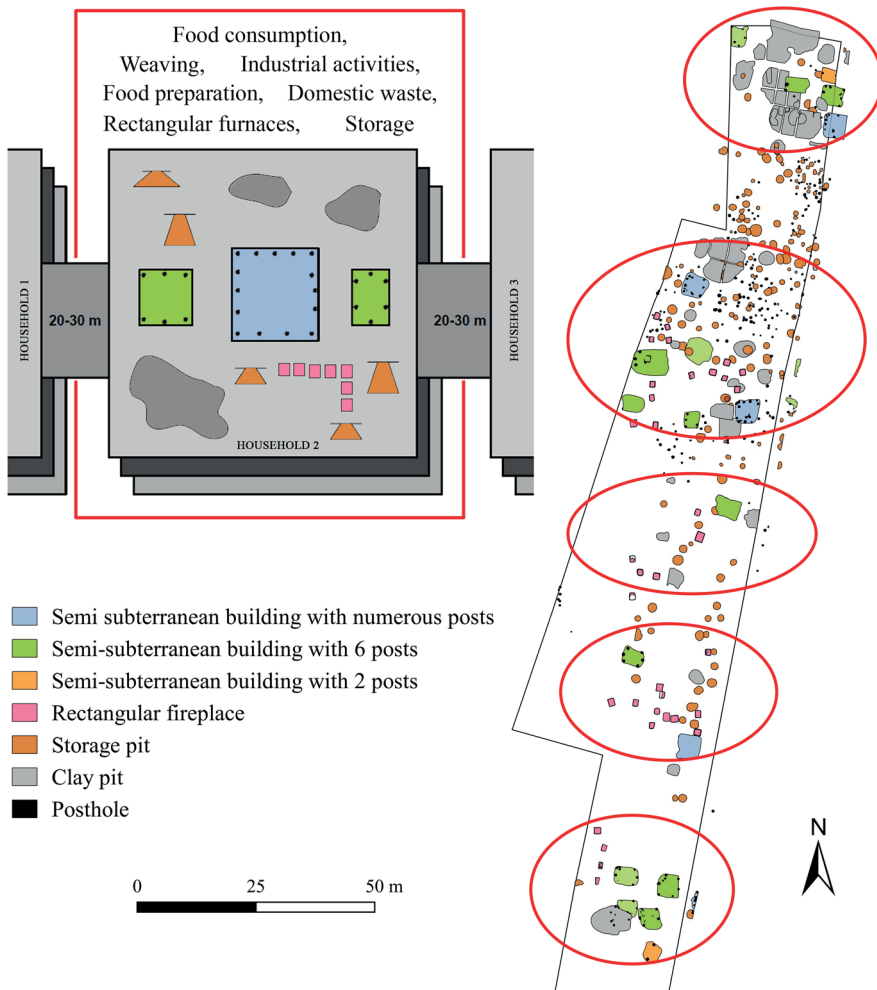


Fig. 10. Use of space at the Garadna-Kovács tanya site

Households were renovated within the same zone. The fact that the buildings, clay pits and rectangular fireplaces were lined up in rows, close to each other or sometimes even cutting each other, also suggests a continuous use of space.

At the Hernádvécse-Nagy rét sites a settlement representing a different type came to light. The core of the household extending over 100-120 metres, was probably occupied by a larger aboveground building with post structure and a semi-subterranean building with six posts. Some 40 metres to the north and south of these, groups consisting of a larger and two smaller clay pits filled with

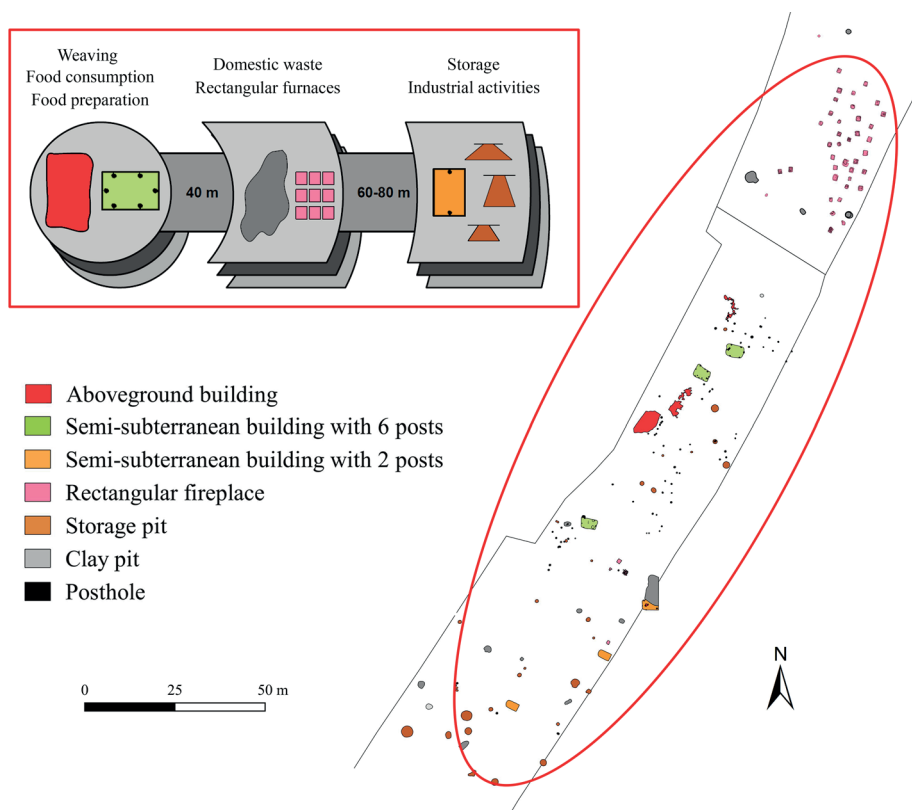


Fig. 11. Use of space at Hernádvécse-Nagy rét, sites no. 4-5

domestic waste were located. Rectangular fireplaces comprising groups were placed in about the same distance from the core of the household, separately from other features. The household unit was completed by a smaller building with two posts or no post at all and storage pits concentrating around it, located some 30-40 metres away from the above-mentioned clay pits.

According to the functional study, at Hernádvécse different domestic activities were carried out at different places. The production and consumption of food as well as textile production took place in the aboveground buildings as well as the buildings with six posts. Domestic waste from these buildings was dumped in the clay pits situated 35-40 metres away from them. Based on their find material, the smaller buildings with two posts served as places for the preparation of food and maybe other economic activity while the pits concentrating around them were used for storage (Fig. 11).

Consequently, at Hernádvécese we can count with a differentiated use of space respective of domestic activities. However, similarly to Garadna-Kovács tanya, households were renovated within the same zone, thus their territorial limits did not change with time.

VI. SUMMARY

The aim of this paper was to summarize the latest research results on the Przeworsk settlements in the Roman Age in the Carpathian Basin. The core territory of this cultural entity was located in Poland, while it reached its largest extension in the Carpathian Basin during the Marcomannic Wars and the subsequent decades. A clear boundary was set to it by the Dacian *limes* towards the southeast as well as the Sarmatian settlement area in the Great Hungarian Plain to the south-southwest. Based on the available data, the western limits towards the Quadi settlement area cannot be unambiguously defined. In contrast to the scarce cremation burials, most of which can be dated between the second half of the 2nd century and first half of the 3rd century AD, the life of the settlements located densely along waterways continued into the Late Roman Age, some sites were even used until the last third of the 4th century AD.

The agricultural settlements consisted of semi-subterranean buildings with post structure, characteristic of the Germanic Barbaricum, storage pits, large-sized pit complexes filled with domestic waste and rectangular fireplaces. These features formed domestic units which were established one after another beside the waterways. In the archaeological find material of these settlements, from the second half/end of the 2nd century onwards the traditional Germanic hand-formed black, polished fine tableware and the hand-formed coarse cooking vessels were complemented by wheel-thrown ware produced in pottery workshops. Crops were stored in large-sized granaries.

Based on the find material, the inhabitants of the Przeworsk settlements maintained trade or exchange relations mainly towards Pannonia. The influence of the material culture of the neighbouring Sarmatian and Quadi territories can be observed not so much in the form of imported artefacts but in the appearance of certain pottery forms and decorations.

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