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POTTERY FROM THE LATE ROMAN HILLTOP SETTLEMENT AT ANČNIKOVO GRADIŠČE (SLOVENIA)

The Late Roman hilltop settlement of Ančnikovo gradišče is situated in the south eastern part of the province Noricum Mediterraneum. Long-term excavations revealed beside architectural remains also an abundant number of pottery. In the pottery assemblage, locally made coarse pottery prevailed with 91%. We can assume that most of it was made in the proximity. The forms of coarse ware are known from a wider area between Pannonia and Italy, which shows a fairly universal level of pottery knowledge. Fine ware (e.g. burnished, glazed) was imported mostly from Pannonia. Surprisingly the number of Mediterranean imports is low. The reason for this is not completely clear. It can be noticed in the wider area of Pannonia and south eastern part of Noricum Mediterraneum, while contemporaneous settlements in Venetia et Histria, as well as in the northern part of Noricum Mediterraneum, in this time reveal a notable increase in the import of African pottery.

Slovenia – Ančnikovo gradišče – coarse pottery – glazed pottery – burnished pottery

1. Introduction

Ančnikovo gradišče is a Late Roman fortified hilltop settlement, situated in the southeastern part of the province *Noricum Mediterraneum*, as was established after the reforms of Diocletian at the end of the 3rd century. The settlement controlled the itinerary road leading from Aquileia towards east. This road became in the Late Roman period one of the main incursion roads to Italy (**fig. 1**).

Long-term excavations, which are ongoing with intermissions since 1984, have shown that the settlement belongs to the late Roman period (4th century and the 1st half of the 5th (Strmčnik Gulič and Ciglenečki 2003: 29). At that time, it was surrounded with a defensive wall, with wooden and stone buildings lining the inside.

After the fall of the Late Roman settlement, there is only a short-lived Early Medieval settlement documented on the hill, from the middle of the 8th to the middle of the 9th century. After that, the hill was abandoned. Today it is partially covered by forest and partially used as a pasture.

The result of the excavations was also a large number of ceramics, that hasn't yet been fully processed (Ravnik 2006). In the presented article we will focus on the material from the 2015 excavation, when the northwest part of the settlement has been explored.

Those excavations produced about 95 kg of ceramic material. In the pottery assemblage, locally made coarse pottery prevailed (91%). Of the imported pottery, common tableware (usually with red slip) are most plentiful (5%), with glazed pottery (3%) and burnished pottery (1%) also appearing. African Red Slip Ware (ARSW) is very rare and statistically undetectable.

2. Common tableware

Bowls of conical or semicircular body with an almost horizontally everted rim are the most common find within this group (fig. 2, 1-2). They have been made of purified clay and usually covered with red slip. They resemble glazed pottery by fabric and shape. Some have ribbed edges, which is an element that also commonly occurs within the group of glazed pottery. Pottery with red slip (mostly *mortaria* and bowls) is common in the area of today's Slovenia from sites of the 3rd century, but they also appear in the 4th century (Hrušica / Ad Pirum: Giesler 1981: pl. 37; Martinj hrib: Leben and Šubic 1990: pl. 13, 231; Frauenberg: Steinklauber 2013: 69, note 213). Jugs are represented rarely, typologically identifiable is only one-handled jug with a collared rim (fig. 2, 3). It was made of purified, but micaceous clay and fired firstly in a reduction and then in an oxidation atmosphere (the core is dark gray, the surface is beige). Such forms are already known in the region in the Early Roman period, with similar jugs from nearby Ptuj / Poetovio being dated in the Flavian period (Istenič 1999: 120, Fig. 105/1). In the Late Roman period, the shape is widely represented in Pannonia among common, glazed and burnished pottery (Horváth 2011: Fig. 6, 9-11, 613-614, with the quoted analogies; Ottományi 2016: Fig. 9, grave 230). They are also known further along the Danube, mostly in glazed variations (Cvjetićanin 2006: 57-60, LRG 80, with the quoted analogies).

3. Glazed pottery

Glazed pottery is mostly made very uniform. The majority was fired in an oxidizing atmosphere (bright orange or bright brown in color), with pottery first fired in a reduction and

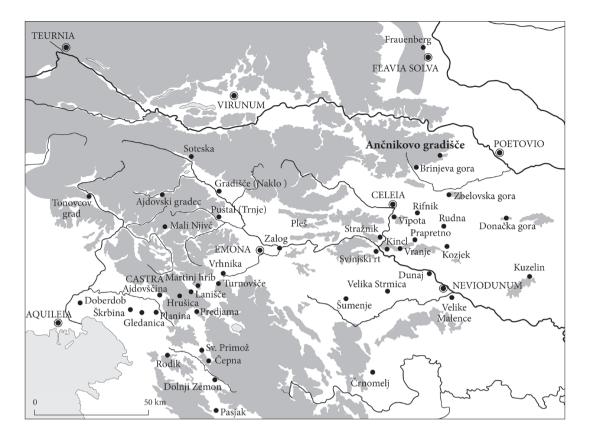


Fig. 1. Map of the discussed area with the location of Ančnikovo gradišče (after Ciglenečki 2015: fig. 6).

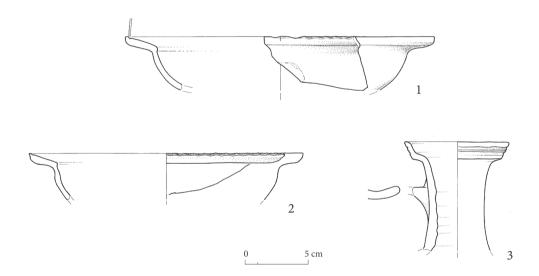


Fig. 2. Ančnikovo gradišče, selection of common tableware.

then in an oxidation atmosphere (a grey core and an orange surface) also being common. Cases of irregular firing, where a fracture on the same pot is orange on one end and grey on the other are also present.

We were able to define three different technological groups. Pottery made from refined clay, which may include pieces of crushed ceramic is the most numerous. The surface is smooth and dusty to the touch. Most pottery with such a fabric has a bright olive-green glaze that can pass into yellow or gold.

In the second technological group the fabric is rougher. A large quantity of mica is added to the clay, alongside rough ground up ceramic and grains of limestone. The pottery is fired orange on the outside and grey on the inside, with a thick dark olive green to brown glaze. Some jugs belong to this group, as well as one *mortarium*.

Pottery that is also made from refined clay with a lot of mica like the first group, but with a coarser surface, belongs to the third group.

Among the glazed pottery, bowls and plates are most common forms, with jugs, cups and *mortaria* also being present.

Bowls are mostly conical or semicircular with a slanted or almost horizontally everted rim (**fig. 3, 1-2**). It is a type that originates from classic Roman forms and became one of the most common form in the Danube region, as well as the neighboring provinces in the last third of the 4th and the beginning of the 5th century (Cvjetićanin 2006: 34-39, with the quoted analogies; Ottományi 2015: 708-710). Bowls are sometimes decorated with a groove along the mouth of the rim, in some cases the edge of the rim is also ribbed. On the other hand, there are no examples of rims decorated with imprints, incisions or wavy lines, which are known from some nearby settlements (Bausovac and Pirkmajer 2012: 33, fig. 3,1-5, with the quoted analogies). Some examples are more similar to plates (**fig. 3, 3**) (Cvjetičanin 2006: form LRG 71, 53-55).

Most bowls are of a similar fabric and belong to the first technological group. Their glaze is mostly bright olive-green and covers only the inside surface to the edge of the rim. In one case (fig. 3, 2) the bowl has a red slip on the outside surface.

Jugs are rarer among the glazed pottery, although an almost completely preserved one-handled jug was found (**fig. 3, 4**). It was exposed to fire and has a badly damaged glaze. It is a spherical one-handled jug that belongs to the classic Late Roman inventory, glazed as well as not glazed (Ottományi 2015: Fig. 10, 3; Hárshegyi and Ottományi 2013: Fig. 2, 4).

Mortaria are very similar by design – they are conical or slightly spherical, with a slanted or almost horizontal everted wide edge, that exceeds the rim. Example (**fig. 3, 6**) belongs to the most common type in the Danube region, as well as in the area of Noricum and Venetia et Histria (Cvjetićanin 2006: LRG 5, 26-28, with the quoted analogies). Example (**fig. 3, 5**) with a triangular edge would be most similar to form LRG 6 (Cvjetićanin 2006: 28, with the quoted analogies). They are both dated to the end of the 4th and the beginning of the 5th century (Cvjetićanin 2006: 26-28).

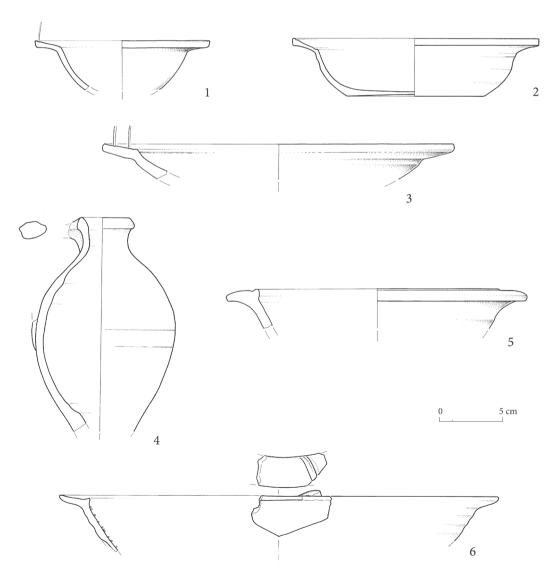


Fig. 3. Ančnikovo gradišče, selection of glazed pottery.

The glaze always covers the whole surface of the *mortaria*, not just the inner side. Such *mortaria* are generally rarer than those that have a glaze only on the inside to the rib (Bausovac and Pirkmajer 2012: 45).

The glazed pottery from Ančnikovo gradišče probably originates from the Pannonian production centers. The closest workshop that also produced glazed pottery, was a workshop of the potter Justinian (*officina Ivstiniana*) in Ptuj / Poetovio, which operated in the 3rd and the beginning of the 4th century (Istenič 1999: 193-194, fig. 185), however typical Justinian's forms and his stamps were not found on Ančnikovo gradišče. This is most likely due to the chronological difference, since the glazed pottery from Ančnikovo gradišče is dated in the second half of the 4th and the beginning or the 5th cent. In this period Justinian's workshop was already abandoned. The workshops of the Late Roman glazed pottery in *Noricum* have not yet been

found. Based on the finds of an experimental piece, a workshop is assumed on Frauenberg (Steinklauber 2013: 65), although the remains of the furnace were not found. Production is also assumed in Celje / Celeia, but the furnaces were not found there as well (Bausovac and Pirkmajer 2012: 38).

4. Burnished Pottery

This group consist of dark ceramic fired in a reducing atmosphere, that has a burnished outer surface, sometimes with an extra burnished pattern.

The shapes are badly recognizable due to poor preservation. Jugs are represented in greatest numbers, although none can be entirely reconstructed. Classic Roman one-handled spherical jugs with funnel rims are most common. Two such

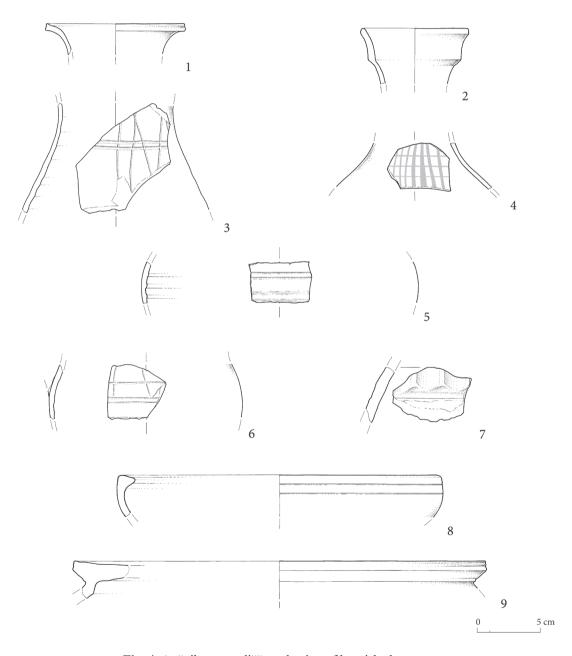


Fig. 4. Ančnikovo gradišče, selection of burnished pottery.

jugs were already known from excavations before 2015 (Strmčnik Gulič and Ciglenečki 2003: fig. 25, pl. 6, 1,2), and some were also found in 2015. Rim (fig. 4, 1) is not decorated. Example (fig. 4, 3) is decorated with horizontal and vertical grooves, which are additionally burnished (for the similar decoration on a jug from the Early Christian center in Emona see Plesničar-Gec 1983, pl. 41: 4). Jug (fig. 4, 4) has a polished lattice pattern, and jugs (fig. 4, 5-6) have an engraved pattern on a burnished surface. In the area of today's Slovenia, such jugs are mostly known from Late Roman graves (Ptuj-Zgornji Breg: Curk 1966: figs. 2, 11; 3, 2; Drnovo / Neviodunum: Knific 1994: figs. 16, 17; Kosoveli: Knific and Žbona Trkman 2011: figs. 7, 1,2; 8) and hilltop settlements (Rifnik: Bausovac 2011: pl. 5: 1-2,4; Tinje: Ciglenečki 2000: pl. 12, 8) as well as Roman towns (Ljubljana – Early Christian center: Plesničar-Gec 1983: pls. 39, 4-6,9; 41: 4; Kranj: Sagadin 2008: pls. 24, 5; 46, 5). In Pannonia they are characteristic of the first development phase of burnished pottery, from the middle of the 4th century onwards, and they also appear in the next phase (last quarter of the 4th, beginning of the 5th century) (Hárshegyi and Ottományi 2013: 501-503).

The rim of a jug (fig. 4, 2) could belong to the jugs with collared rims, the so-called Murga type jug, however the interpretation is not fully reliable due to poor preservation. The shape and decoration typical of the Murga type was supposedly brought to Pannonia by settlers from the east (Hárshegyi and Ottományi 2013: 501-503). On Ančnikovo gradišče, no typical Murga ornamentation was found.

The bowl (**fig. 4, 8**) also belongs to the traditional types from Roman Pannonia (Ottományi 2015: 718). Such bowls were made at the end of the 4th and the beginning of the 5th century by workshops in Leányfalu and Mautern (Ottományi 2015: 718; Sedlmayer 2002: pl. 28, 434). In Mautern they appear in the inventory as glazed as well as burnished pottery (Sedlmayer 2002, fig. 144: 728,848,814,984).

There is one example of a storage pot with a T-shaped rim (**fig. 4, 9**), made of gray clay with a black, somewhat burnished surface. Storage pots are quite common in Slovenia in the Late Roman period, but most are made from coarse ceramic (Rifnik: Bausovac 2011: pls. 12, 7; 13, 1-3; 14, 1-4; 42, 7-13; 43, 1-8; 44: 1-2, 4-5; Tinje: Ciglenečki 2000: 182, pls. 24, 5; 35, 32; 36, 9; Vipota: Ciglenečki and Pirkmajer 1987: pl. 2, 27). The pot from Ančnikovo gradišče is by fabric therefore closest to examples from Kranj, which are all fired gray, with two of them made from small grained and one from refined clay (Sagadin 2008: 233, 253, 291, pls. 8, 6; 20, 2; 48, 5). Such storage pots from Pannonia are also roughly made (Horváth 2011: fig. 14, 16-19). Their origin is assumed to be in southeast Europe, where they are known from many sites (Rodriguez 1997: 157). In Sadovec they are usually made from local fine ceramic with a red slip (Kuzmanov 1992: 205, pls. 55, 7-15; 56, 2-5), however roughly made storage pots also appear (Kuzmanov 1992: 215-216, pls. 102; 103). Because of their abundance on Rifnik, Maja Bausovac assumes local production also in the area of the southeast Alps under the influence from the lower Danube region (Bausovac 2011: 79).

The wall with indentations (fig. 4, 7) belong to a typologically narrower undefined form, however different types

of pottery with vertically indented walls are common among the inventory of burnished pottery in Pannonia (Horváth 2011: fig. 20).

Burnished pottery from Ančnikovo gradišče can be dated in the last quarter of the 4th and the beginning of the 5th century, while their origin is placed – similarly to glazed pottery – in the workshops of Roman Pannonia. The origin of some pieces (eg. the storage pot) is also possible in the lower Danube region.

5. Coarse pottery

Pots, bowls, and lids are the most common functional forms.

Among the pots is particularly noteworthy a group of smaller pots or cups with a short everted rim and the largest diameter in the lowest third of the vessel (**fig. 5, 1**). All those pots are ornamented with one or more single-line wavy lines, separated by grooves; the surface can have horizontal brush strokes and lines of punctures can be added.

Comparisons for this type can mostly be found on fortified hilltop settlements of eastern Slovenia and northern Croatia (Tinje: Ciglenečki 2000: pl. 13, 1-2, 4; Ajdovski gradec: Knific 1979: 755, 201; Brinjeva gora: Ciglenečki 2000: 83, fig. 93: 3-5; Rifnik: Bolta 1981: pl. 27, 68, Bausovac 2011: pl. 12, 2-6; Kuzelin: Ciglenečki 2000: 63, fig. 78: 1). They are also known from Late Roman settlement layers in towns (Celje: Bausovac 2014: pl. 22: 7, 8; pl. 27: 5; Emona – Early Christian center: Plesničar-Gec 1983: pl. 38:2) and from graves (Celje, Breg cemetery: Lazar 1997: pl. 1: 1). So far, the most western examples are known from Hrušica (Giesler 1981, 229, pl. 45: 27-28, 30).

Pots of this type from Ančnikovo gradišče have a quite uniform fabric. Most are reduced or incompletely reduced fired (pottery with a dark surface and light core). Incorrect firing is noticeable in some cases, where dark and light colors appear on the same pot. Their inner and outer surface is quite porous; we can assume an addition of limestone that had fallen out at higher temperatures. The remains of iron oxides are also noticeable, and a large quantity of mica. Some larger, irregular holes on the surface allow the possibility that weeds were also added in some cases.

Similar fabric is described for the cups from Brinjeva gora (Pahič 1980: 98) and Rifnik (Bausovac and Pirkmajer 2012: 77-78, 164-165, fractures K. 1.2 and K. 1.4). The uniform fabric and a distinct concentration in the area of eastern Slovenia can point to a local production somewhere in this area.

According to the analogies the pots are dated to the second half of the 4th and the first half of the 5th century. On Ančnikovo gradišče and Kuzelin, Ciglenečki even defined them more narrowly to the first third of the 5th century (Ciglenečki 2000, 64). Site data for pots found on Ančnikovo gradišče in 2015, which were mostly found in layers with glazed and burnished pottery, also correspond with this datation.

Pots with everted rim and bag shaped body, which diameter does not exceed the diameter of the rim, belong to the second group (**fig. 5, 2**). They are also known from Kučar and Korinjski hrib (Kučar: Ciglenečki 1995: pl. 83, 6; Ciglenečki 2000: fig. 102, 3) and from the Late Roman pottery

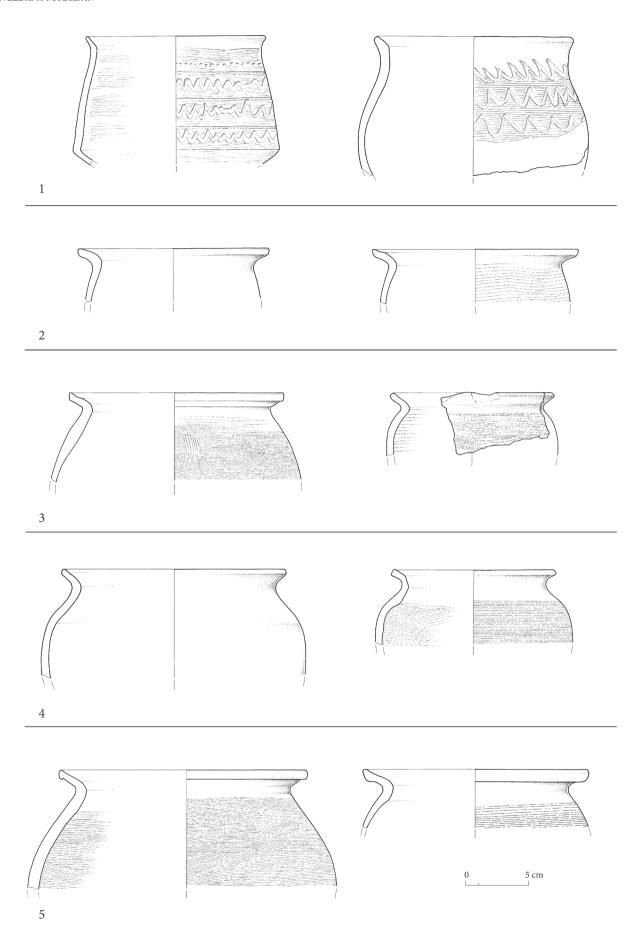


Fig. 5. Ančnikovo gradišče, coarse pottery, typology of pots.

workshop in Cogetinci (Horvat 2013: 401, 402, 494). Similar shapes are also present in the Early Medieval period in the discussed region, but their fabric is very different (Rifnik: Bausovac 2011: 83, pl. 15, 10-12; Duel: Steinklauber 2013: pl. 101, D 64).

Spherical pots with everted rims and short necks (**fig 5, 3**) belong to the third group. The edge of the rim is rounded or straightly cut off. It is a type common in the Late Roman period in a wide area along the Danube (Sedlmayer 2002: 285, fig. 464; Horváth 2011: 623, fig. 10). They are also common in hilltop settlements and fortresses of *Noricum* and *Venetia et Histria* (Rifnik: Bausovac 2011: pl. 19, 3-7; Brinjeva gora: Ciglenečki 2000: pls. 93, 8-10; 94, 7; Korinjski hrib: Ciglenečki 1985: pl. 6, 69; Kučar: Ciglenečki 1995: pls. 79, 6-7; 82, 9; Hrušica: Giesler 1981: pls. 46; 47: 5,7; Ajdna: Meterc 1981: pl. 2, 6,8).

Pots with fairly long, obliquely everted rims and a semicircular neck leading to a circular or slightly bag shaped body (fig. 5, 4), belong to type 4. The edge of the rim is semicircular or straightly cut off, sometimes grooved. They are the most represented type in Ančnikovo gradišče as well as in many other Late Antique settlements in the region (Bausovac 2011: pls. 16, 7-10; 17, 1-11, with the quoted analogies). This type also isn't chronologically more narrowly defined, as such pots are present from the Early Roman to the Early Medieval periods (Ciglenečki 2000, 65).

Type 5 consists of pots with a short everted, thickened rim, distinctively undercut on the lower side and concave on the inner side (**fig. 5, 5**). Some have a groove for the lid on the inside of the rim. The transition to the wall is sharp. They are linked to type 3 by the sharp transition to the walls and are not common on Ančnikovo gradišče. This type is also present from the Late Roman to the Early Medieval period (Bausovac 2011: 94, pl. 22, 1-10). In the 4th and the beginning of the 5th century they only appear sporadically and become more popular after the middle of the 5th and in the 6th century.

In addition to pots, bowls are also a common form. The bowls whose upper part is slanted inwards (**fig. 6, 1**) are prevailing. The upper part is usually decorated with wide and deep grooving. This is one of the most common Late Roman types in the southeast part of *Noricum* (Ančnikovo gradišče: Strmčnik 1997: 281, pl. 5: 2; Tinje: Ciglenečki 2000: pls. 28,

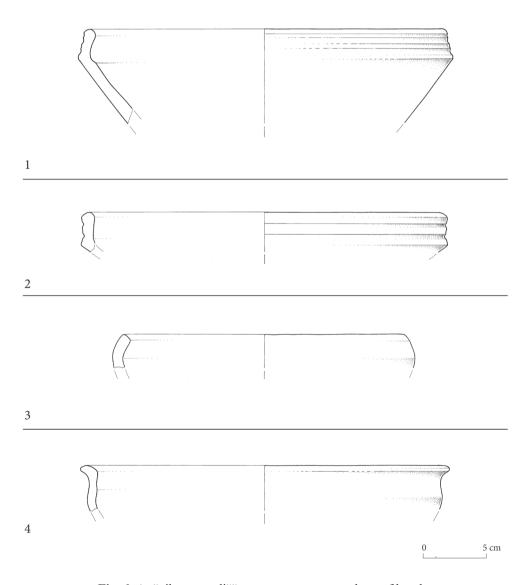


Fig. 6. Ančnikovo gradišče, coarse pottery, typology of bowls.

6-8, 29: 9; Rifnik: Bausovac 2011: fig. 15, pl. 29, 2-10). They also appear on some sites of the *Claustra Alpium Iuliarum* system and its hinterland (Hrušica: Giesler 1981: pls. 39, 14-16,18-26; 45, 21-26; Rodik: Ciglenečki 2000, fig. 116: 4; Križna gora: Ciglenečki 2000: fig. 108: 6; Tonovcov grad: Modrijan 2011: pls. 82, 1-4; 105, 3-4).

Bowls with a vertically placed upper part are also very common (**fig. 6, 2**). It is a very uniform group, in which all bowls have the upper part decorated with wide and deep grooves. They can be in use also as a tripod (Bausovac 2011: 105-106, pl. 33, 5.14).

Bowls of both discussed types originated from Early Roman types of the 1st and 2nd century, where they mostly appear as tripods and are common in the Noric-Pannonian area as well as in *Venetia et Histria* (Auer 2014a: 765-767, figs. 4-6; Horváth 2011: 615). In *Pannonia* they still appear in the 3rd century (Horváth 2011: 615). In the 4th and the beginning of the 5th century they are mostly used as bowls and not anymore as tripods, while the center of their popularity is still noticeably in the southeastern Alps. Local production in the 4th and 5th century is still proved by examples from the pottery workshop in Cogetinci (Horvat et al. 2013: 33, 376, 395, 443-357, 543, 556-557).

The next type consists of bowls, whose walls are rounded without a noticeable break in the upper part (**fig. 6, 3**). In the case of badly preserved examples the type is difficult to distinguish from type 2. These bowls also originate from Early Roman types, while the workshops in *Pannonia* supposedly made them to the middle of the 4th century (Horváth 2011: 617).

Biconical bowls with everted rims (**fig. 6, 4**) are rare on Ančnikovo gradišče. The most analogies are from nearby Rifnik, where they are among the most common types (Bausovac 2011: 101, pl. 30, 10-14), and they are also known from other neighbouring sites (Ajdovski gradec: Knific 1979: 63-69; Korinjski hrib: Ciglenečki 1985: pl. 5, 6; Gradec near Prapretno: Ciglenečki 1981: pls. 4, 43; 7, 85; Hemmaberg: Ladstätter 2000: pl. 17, 7; Rodriguez 1997: pl. 8, 77; Ulrichsberg: Rodriguez 1997: pl. 6, 56,57).

6. Conclusion

We can assume that most of the coarse pottery from Ančnikovo gradišče was made in the proximity, however the Late

Roman production in the area is not well known. The workshops in Ptuj, which was a strong pottery center in the 3rd century, didn't operate in the second part of the 4th century anymore. Their place is apparently taken by small rural workshops which are also very poorly known. The nearest known workshop in Cogetinci (Horvat et al. 2013) is located about 30 km away from Ančnikovo gradišče. The production in the settlements themselves is also possible, as part of the so called »household production« or »household industry«, where the pottery for the needs of a small household or community was burned in shallow pits. Such a production leaves behind little evidence and is therefore very hard to identify (Auer 2014b: 130-131). Among the city workshops, the ones in Celeia are mentioned, which supposedly still operated at least within the whole e 4th century.

Despite the fact that coarse pottery was made locally, the types are known from a wider area between Pannonia and Italy, which shows a fairly universal level of pottery knowledge (maybe a result of travelling potters).

As yet, there is no evidence for the production of glazed and burnished pottery in the region in the Late Roman period. It is very likely, that such pottery came from the Danube region (mostly from *Pannonia*, possibly also from *Moesia Prima*, *Dacia Ripensis* and *Dacia Mediterranea*).

If the connections with the Danube region are well documented, the almost complete lack of material from the Mediterranean is very surprising. African Red Slip Ware is almost completely unrepresented. So far we know of only two determinable pieces belonging to form Hayes 61 B of North-Tunisian production from the second half of the 4th century (Pröttel 1996: 201, Pl. 3, 7.) from the older excavations and a few undeterminable pieces belonging to the same production from the year 2015. Amphorae, similarly, are almost non-existent here – until now, only one fragment of an amphora of African production has been found (Pröttel 1996: Fig. 59, 1). The reason for such a distinct drop in material from the Mediterranean area is not completely clear. It can, though, be noticed in the wider area of Pannonia and south-eastern part of Noricum Mediterraneum (Pröttel 1996: 130, footnote 87; Magyar-Hárshegyi 2016: 630), while contemporaneous settlements in the western part of Slovenia (Venetia et Histria), as well as in Austrian Carinthia, in this time reveal a notable increase in the import of primarily African amphorae, but also ARSW and African oil lamps.

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Bibliography

Auer, M. 2014a. Pottery in Western Noricum. Questions of distribution and group identity. In *Rei Cretariae Romanae Fautorum Acta* 43, 765-770. Bonn, Rei Cretariae Romanae Fautores.

Auer, M. 2014b. Zur Organisation des Töpferhandwerks in Noricum – Familienunternehmen oder Grossbetrieb? *Ethnographisch-Archäologische Zeitschrift* 55, 1/2, 119-156.

- Bausovac, M. 2011. Študija poznoantične lončenine iz utrjene višinske naselbine Rifnik pri Šentjurju. Unpublished PhD thesis, University of Ljubljana.
- Bausovac, M. 2014. Vivas felix Celeia. Arheološko najdišče Osrednja knjižnica Celje / The Osrednja knjižnica Celje archaeological site. Celje, Pokrajinski muzej Celje.
- Bausovac, M. and Pirkmajer, D. 2012. Late Roman glazed pottery from Rifnik near Celje. In *Rei Cretariae Romanae Fautorum Acta* 42, 33-39. Bonn, Rei Cretariae Romanae Fautores.
- Bolta, L. 1981. Rifnik. Poznoantična naselbina in grobišče (Katalogi in monografije 19). Ljubljana, Izdaja Narodni muzej.
- Ciglenečki, S. 1981. Rezultati prvih raziskovanj na Gradcu pri Prapretnem. Arheološki vestnik 31, 417-453.
- Ciglenečki, S. 1985. Potek alternativne ceste Siscia-Aquileia na prostoru zahodne Dolenjske in Notranjske v času 4. do 6. stol. Preliminarno poročilo o raziskovanjih Korinjskega hriba in rekognosciranjih zahodne Dolenjske. *Arheološki vestnik* 36, 255-284.
- Ciglenečki, S. 1995. Zgodnjekrščanski stavbni kompleks / Frühchristlicher Gebäudekomplex. In J. Dular, S. Ciglenečki and A. Dular, Kučar. Železnodobno naselje in zgodnjekrščanski stavbni kompleks na Kučarju pri Podzemlju / Eisenzeitliche Siedlung und frühchristlicher Gebäudekomplex auf dem Kučar bei Podzemelj (Opera Instituti Archaeologici Sloveniae 1): 71-190. Ljubljana, Znanstvenoraziskovalni center SAZU.
- Ciglenečki, S. 2000. *Tinje nad Loko pri Žusmu. Poznoantična in zgodnjesrednjeveška naselbina / Tinje oberhalb von Loka pri Žusmu. Spätantike und frühmittelalterliche Siedlung* (Opera Instituti Archaeologici Sloveniae 4). Zagreb, Institut za arheologiju.
- Curk, I. 1966. Poznoantično grobišče na Zgornjem Bregu v Ptuju (La nécropole de l'antiquité avancée de Zgornji Breg à Ptuj). *Časopis za zgodovino in narodopisje* n. v. 2, 46-62.
- Cvjetićanin, T. 2006. Late Roman glazed pottery. Glazed pottery from Moesia Prima, Dacia Ripensis, Dacia Mediterranea and Dardania.

 Beograd, Belgrade National Museum.
- Giesler, U. 1981. Die Kleinfunde. In P. Ulbert (ed.), Ad Pirum (Hrušica). Spätrömische Passbefestigung in den Julischen Alpen: der deutsche Beitrag zu den slowenisch-deutschen Grabungen 1971-1973 (Münchner Beiträge zur Vor- und Frühgeschichte 31): 53-147. München, Beck.
- Hárshegyi, P. and Ottományi, K. 2013. Imported and local pottery in late Roman Pannonia. Late Antique Archaeology 10, 471-528.
- Horváth, F. 2011. Das spätantike Keramikspektrum in Keszthely-Fenékpuszta erste Ergebnisse. In O. Heinrich-Tamáska (ed.), *Keszthely-Fenékpuszta im Kontext spätantiker Kontinuitätsforschung zwischen Noricum und Moesia (*Castellum Pannonicum Pelsonenese 2): 597-652. Rahden, M. Leidorf.
- Horvat, M., Djurić, B., Mlekuž, D., Celin, V. and Pinter, I. 2013. *Cogetinci pri Lenartu* (Arheologija na avtocestah Slovenije 37). Ljubljana, Zavod za varstvo kulturne dediščine Slovenije.
- Istenič, J. 1999. *Poetovio, Zahodna grobišča 1 / Poetovio, the Western Cemeteries I* (Katalogi in monogafije 32). Ljubljana, Narodni Muszej Slovenije.
- Knific, T. 1979. Vranje pri Sevnici. Drobne najdbe z Ajdovskega gradca (leto 1974). Arheološki vestnik 30, 732-785.
- Knific, T. 1994. Vranje near Sevnica. A Late Roman Settlement in the Light of Certain Pottery Finds. Arheološki vestnik 45, 211-237.
- Knific, T. and Žbona Trkman, B. 2011. Poznorimski grobovi pri Kosovelih v Vipavski dolini. Goriški letnik 35, 31-47.
- Kuzmanov, G. 1992. Die lokale Gefässkeramik. In S. Uenze (ed.), *Die spätantike Befestigungen von Sadovec (Bulgarien): Ergebnisse der deutsch-bulgarisch-österreichischen Ausgrabungen, 1934-1937* (Münchner Beiträge zur Vor- und Frühgeschichte 43): 201-223. C.H. Beck'sche Verlagsbuchhandlung.
- Ladstätter, S. 2000. Die materielle Kultur der Spätantike in den Ostalpen. Eine Fallstudie am Beispiel der westlichen Doppelkirchenanlage auf dem Hemmaberg (Mitteilungen der Prähistorischen Kommission 35). Wien, Österreichische Akademie der Wissenschaften.
- Lazar, I. 1997. Poznorimske najdbe iz Celja (Spätrömische Funde aus Celje). Arheološki vestnik 48, 325-331.
- Leben, F. and Šubic, Z. 1990. Poznoantični Kastel Vrh Brsta pri Martinj Hribu na logaški planoti (Das spätantike Kastel Vrh Brsta bei Martinj Hrib auf dem Karstplateau von Logatec). *Arheološki vestnik* 41, 313-354.
- Magyar-Hárshegyi, P. 2016. Supplying the Roman army on the The Pannonian *Limes*. Amphorae on the territory of Budapest (Aquincum and Albertfalva), Hungary. *Rei Cretariae Romanae Fautorum Acta 44*, 619-632. Bonn, Rei Cretariae Romanae Fautores.
- Meterc, J. 1981. Slučajne najdbe z Ajdne. Arheološki vestnik 32, 405-416.
- Modrijan, Z. 2011. Pottery. In Z. Modrijan and T. Milavec (eds.), *Poznoantična utrjena naselbina Tonovcov grad pri Kobaridu. Najdbe / Late Antique fortified settlement Tonovcov grad near Kobarid. Finds* (Opera Instituti Archaeologici Sloveniae 24). Ljubljana, Inštitut za arheologijo ZRC SAZU.
- Ottományi, K. 2015. Veränderungen des Töpferhandwerks in der ersten Hälfte des 5. Jhs. anhand der Keramik der Befestigung Visegrád-Gizellamajor. In T. Vida and P. Rance (eds.), *Romania Gothica II. The Frontier World. Romans, Barbarians and Military Culture.* Budapest, Eotvos Loránd University.
- Ottományi, K. 2016. A vezetőréteg sírjai a budaörsi vicus késő római temetőjében (The graves of the ruling social stratum in the Late Roman cemetery of the Budaörs vicus). In *Beatus homo qui invenit sapientiam*, 35-70. A-R Editions, Inc.
- Pahič, S. 1980. Prvi podatki o grobi hišni lončenini z Brinjeve gore. Arheološki vestnik 31, 89-112.
- Plesničar-Gec, L. 1983. Starokrščanski center v Emoni / Old Christian Center in Emona (Katalogi in monografije 21). Ljubljana.
- Pröttel, P. M. 1996. *Mediterrane Feinkeramikimporte des 2. bis 7. Jahrhunderts n. Chr. im oberen Adriaraum und in Slowenien* (Kölner Studien zur Archäologie der römischen Provinzen 2). Espelkamp, M. Leidorf.
- Ravnik, M. 2006. Zaščitne raziskave Ančnikovega gradišča pri Jurišni vasi v letih od 1986 do 1994. Unpublished degree, University of Ljubljana.

- Rodriguez, H. 1997. Die Zeit vor und nach der Schlacht am Fluvius Frigidus (394 n. Chr.) im Spiegel der südostalpinen Gebrauchskeramik. *Arheološki vestnik 48*, pp.153-177.
- Sagadin, M. 2008. Od Karnija do Kranja. Unpublished PhD thesis, University of Ljubljana.
- Sedlmayer, H. 2002. Römische Gebrauchskeramik. In S. Groh and H. Sedlmayer (eds.), Forschungen im Kastell Mautern-Favianis. Die Grabungen der Jahre 1996 und 1997 (Der Römische Limes in Österreich 42), 196-321.
- Steinklauber, U. 2013. Fundmaterial spätantiker Höhensiedlungen in Steiermark und Kärnten. Frauenberg im Vergleich mit Hoischügel und Duel (Forschungen zur geschichtlichen Landeskunde der Steiermark 61). Graz, Im Selbstverlag der Historischen Landeskommission für Steiermark.
- Strmčnik, M. 1997. Mariborski-bistriško območje v poznorimski dobi (Der Raum Maribor und Bistrica in spätrömischer Zeit). *Arheološki vestnik* 48, 269-288.
- Strmčnik Gulič, M. and Ciglenečki, S., 2003. *Ančnikovo gradišče pri Jurišni vasi. Poznoantična in zgodnjesrednjeveška naselbina na Pohorju / Late Antique and Early Medieval settlement on Pohorje*. Slovenska Bistrica, Zavod za kulturo.
- Svoljšak, D. 1985. Sv. Pavel nad Vrtovinom. Rezultati sondiranj leta 1966. Arheološki vestnik 36, 195-236.