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A HIGHWAY INTO OUR PAST. NEW DATA ON THE EARLY – AND LATE – IRON AGE LOWLAND SETTLEMENT IN THE MARIBOR AREA (NE SLOVENIA)

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Abstract: The Iron Age lowland settlement in the Maribor area is hardly known, as most of the sites excavated in the last 25 years have remained unpublished. Therefore, this paper presents Iron Age settlement remains discovered at four multi-periodical sites. The settlement traces at the sites Slivnica 2B, Malečnik and Spodnje Hoče date to the first half of the first millennium BC (Ha B and Ha C) and to the Late Iron Age (LT C and LT D), while the Iron Age settlement at Zgornje Radvanje dates to LT C and partly possibly to LT B. The presented Hallstatt lowland settlements are understood in the sense of the economic hinterland of hilltop settlements (Poštela, Čreta and Meljski hrib) and partly in the sense of managing strategic points in the system of land routes and a river route along the river Drava (Malečnik). The next phase of the lowland settlement in the Maribor region is related to the Celts, who (as it seems today) arrived to an almost completely uninhabited area around 300 BC. The reasons for the lack of settlement on the plain in the era between Ha C2/D1 and LT B2 are not yet known.

Keywords: North-eastern Slovenia, Maribor area, Early and Late Iron Age, lowland settlement

INTRODUCTION

The city of Maribor is situated on a plain, at the intersection of the eastern slopes of the Central Alps and the Pannonian World (NE Slovenia). The plain represents the most north-eastern part of the Drava Basin, which is traditionally an area of intensive agriculture. On the north-western side, the plain merges into the Drava valley, on the eastern side it borders the low hills of Slovenske gorice and on the western side the hills of Pohorje (Pak 1998; Ciglič, Perko 2012). Due to the transitional location of the area, this has been an important crossroad of routes in the Roman era and probably also in prehistory. Firstly, there was a water-route along the river Drava, which allowed passage from south-east to north-west, with a land route along it. Secondly, an important land connection between the areas of today's central Slovenia in the direction of Western Transdanubia and the Graz-Leibniz plain, i.e. from south-west to north-east and east, has been running along this area (Pahič 1968; 1970, 170; Pahič 1983; Teržan, Črešnar 2012, 8). The river Drava represented a significant natural barrier in the system of these land routes, therefore it can be assumed that it has conditioned the development and settlement (settlement activities) of the area throughout history.

Our knowledge about settlement of the north-eastern part of the Drava Basin in prehistory is mainly the result of research conducted by Stanko Pahič, a former curator at

the Regional Museum Maribor in the post-WWII period (e.g. Pahič 1965; 1972; 1973; 1974a; 1974b; 1974c; 1985; 1991; 1998), as well as excavations that took place near Maribor due to extensive construction projects in the last 25 years (Teržan 1999, 97–100; Teržan, Črešnar 2012; Teržan *et al.* 2012). During the construction of the last section of the A1 motorway, the Pesnica–Slivnica section, which represents a direct connection between the Slovenian coast in the south-west and Šentilj at the Austrian border in the north, and the associated bypasses, numerous sites were discovered. So far, Orehova vas (Grahek 2015), Hotinja vas (Gerbec 2015; 2019), Slivnica 2B (Kramberger 2021a), Spodnje Hoče (Kramberger 2021b) and Malečnik (Kramberger 2021c) have been published in the e-books *Archaeology on Slovenian motorways* by the Institute for the Protection of the Cultural Heritage of Slovenia (ZVKDS). Rogoza and Zgornje Radvanje were published as separate papers (Črešnar 2010; Kramberger 2010; 2014a; 2015a; 2015b) and additionally short reports of several excavations (Strmčnik Gulič 2003a; 2003b; 2003c; 2003d; 2003e; 2003f; 2006) and two overview papers (Strmčnik Gulič 2001a; 2001b) can be mentioned. In this paper, we present four sites: Slivnica 2B, Malečnik, Spodnje Hoče and Zgornje Radvanje. Traces of Early and Late Iron Age settlements from these sites will be analysed and discussed, finds and new ¹⁴C AMS will be presented. The aim is to contribute to a better understanding of the Iron Age lowland settlement in the Maribor area.

MATERIALS

Hilltop and lowland settlements from the Early and Late Iron Ages in the Maribor area

Archaeological research shows that there was intensive settlement activity in the Maribor area during the Late Bronze Age (Ha A and Ha B) (e.g. Teržan 1990, 13–20; 1999, 97–100; Teržan, Črešnar 2012; Teržan *et al.* 2012). Settlements, known from this period are Rogoza (Črešnar 2010), Orehova vas (Grahek 2015), Spodnje Hoče (Strmčnik Gulič 1989; 1990; 1996; 2003f), Spodnje Radvanje (Kavur 1997) and Pobrežje (Strmčnik Gulič 2003b, 206–207). The first three belong to Ha A and the last two have so far been assigned to Ha B. Several Late Bronze Age Urnfield cemeteries are also known. Worth mentioning are Pobrežje (Pahič 1972, 7; 1991, 2; Fig. 3–4: 3; Črešnar *et al.* 2014, 215), Spodnje Radvanje (Pahič 1968, 20–23, t. 4: 1–13, 5: 1–23; 1985a, 6–7; Teržan 1990, 337–338; Teržan, Črešnar 2012, 14–15, Fig. 5), Limbuš (Pahič 1964, 137, t. 2: 18; 1998, 599), Maribor-Mladinska ulica (Müller-Karpe 1959) and Miklavž (Murko, Črešnar 2014).

In the late 9th and early 8th century BC, at the beginning of the Early Iron Age (Ha B3/C1 according to Reinecke) new types of settlements and cemeteries appeared in the north-western part of the Drava Basin – hilltop settlements and tumuli. The Early Iron Age settlement, which are attributed to the Styrian-Pannonian group of the Eastern Hallstatt Culture (Teržan 1990; Teržan 2019), continues the Late Bronze Age tradition as it can be observed from the pottery finds, but the transition to a new era, characterized by new technology (iron smelting), may be partly connected with the arrival of new immigrants, which may be indicated by the reappearance of tumuli (Teržan, Črešnar 2014, 706–713). The central role in the established new settlement system in the north-western part of the Drava Basin had probably the largest hilltop settlement Poštela (Fig. 1a: 8), which visually controls almost the entire Drava Field and the part of the Drava valley with Kozjak (Mlekuž, Črešnar 2014). It is located on Pohorje just above Radvanje.

There were several cemeteries discovered on the hilltop. One is located on the first Pohorje terrace and consists of two groups of tumuli and a flat cremation cemetery (Fig. 1a: 9). A larger cemetery with smaller and medium sized tumuli, today mostly almost completely flattened, is located between Razvanje and Pivola (Fig. 1a: 11). Some larger tumuli have also been found on the slopes of Pohorje, between Lepa ravna and Razvanje (Fig. 1a: 10), and a tumulus cemetery could extend northwards of Poštela as Iron Age jewellery, discovered there during the construction of the E. Leclerc shopping centre, show (Teržan 1990, 256–337; Kavur 2008; Teržan, Črešnar 2012, 16).

Another hilltop site from the Early Iron Age near Maribor is Čreta. It is smaller and less known than Poštela, situated south of it, also on the slopes of Pohorje (Fig. 1a: 16; Pahič 1973, 525–529, Fig. 2; Pahič 1974b, 99–100, 1974c; Črešnar *et al.* 2019, 448–449).

West of Čreta is Hotinja vas. In contrast to Čreta and Poštela, it is a typical Early Iron Age lowland settlement,

with rectangular pithouses (Fig. 1a: 20; Gerbec 2015; 2019). Another lowland settlement in the foothills of Pohorje is probably indicated by the tumuli at Rogoza (Fig. 1a: 15; Strmčnik Gulič 2001a, 122–126, Fig. 9, Fig. 13, 2001b; Črešnar 2010, 96) and the finds from Slivnica 2B (Fig. 1a: 14; Strmčnik Gulič 2003e; Fig. 1a: 14); and another probably by the finds from the area of the Hofer shopping centre in Spodnje Hoče (Fig. 1a: 13), which are presented in this publication.

Less well known are Iron Age settlements on the right bank of the river Drava in the Maribor area. Among the sites, there is a treasure trove consisting of two bronze double-sided winged axes, four fragments of iron spearheads and an iron willow-leaf spearhead, which was discovered in the gravel of the river Drava during the construction of the Mariborski otok hydroelectric power plant (Fig. 1a: 5; Pahič 1985a, 14; Teržan 1990, 344, Pl. 69). Iron Age settlement activities on the right bank of the river Drava during the Early Iron Age are also indicated by a pit with a typical Iron Age dish, which was discovered during excavations on the Piramida hill above Maribor¹ and by surface finds from Meljski hrib (Fig. 1a: 1; Pahič 1985b, 214–215; Pahič 1985c, 231–232; Kavur 2001). This represents the only known hilltop site on the left bank of the river Drava so far, although another one on the Piramida hill could be assumed due to the above-mentioned dish and numerous other prehistoric pottery fragments found within the medieval settlement layers during the 2010 excavation campaign. Below Meljski hrib is Malečnik, where the finds from the earlier Iron Age were also discovered, as it will be shown in this paper (Fig. 1a: 2) and on the other side of the river Pobrežje, where a single Hallstatt grave was excavated between a larger Late Bronze Age settlement (Fig. 1a: 3)².

Research has shown that Poštela was abandoned in the middle or the end of the 6th century BC, which is similar to most Hallstatt period sites in north-eastern Slovenia (e.g. Teržan 1990; Teržan, Črešnar 2012, 18; Črešnar *et al.* 2019, 439–443). The same applies to the lowland settlement Hotinja vas (Gerbec 2015; 2019). Furthermore, no archaeological sites or finds in the Maribor area can be dated to the two centuries after.

On the basis of the data available so far, the repopulation of the Maribor area did not take place again until the end of the Early and in the Middle La Tène period when the Celtic tribes settled the plain. Lowland settlements were discovered during the construction of the motorway around Slivnica (Fig. 1b: 14, 18; Strmčnik Gulič 2003d; Strmčnik Gulič 2003e) and in Malečnik (Fig. 1b: 2; Strmčnik Gulič 2003a) as well as during the construction of the Maribor Western bypass in Radvanje (Fig. 1b: 12; Kramberger 2010, 311; 2014, 241, Fig. 15, 2015a, 250–251, Fig. 1). Settlement remains from Pobrežje (Teržan, Črešnar 2012, 18), fragments of La Tène pottery from Rogoza (Črešnar 2010, 96) and Orehova vas (Grahek 2015, 43) are also mentioned in the literature. A La Tène grave is also known from Pobrežje (Fig. 1b: 4; Pahič 1985a, 15; 1966, 312, Pl. 3: 7–8); it belongs to the Mokronog

¹ Unpublished. The pit was discovered during excavations in 2010 (ZVKDS, OE Maribor, M. Strmčnik Gulič).

² The site was discovered during construction of the motorway (Črešnar, Kramberger in preparatom).

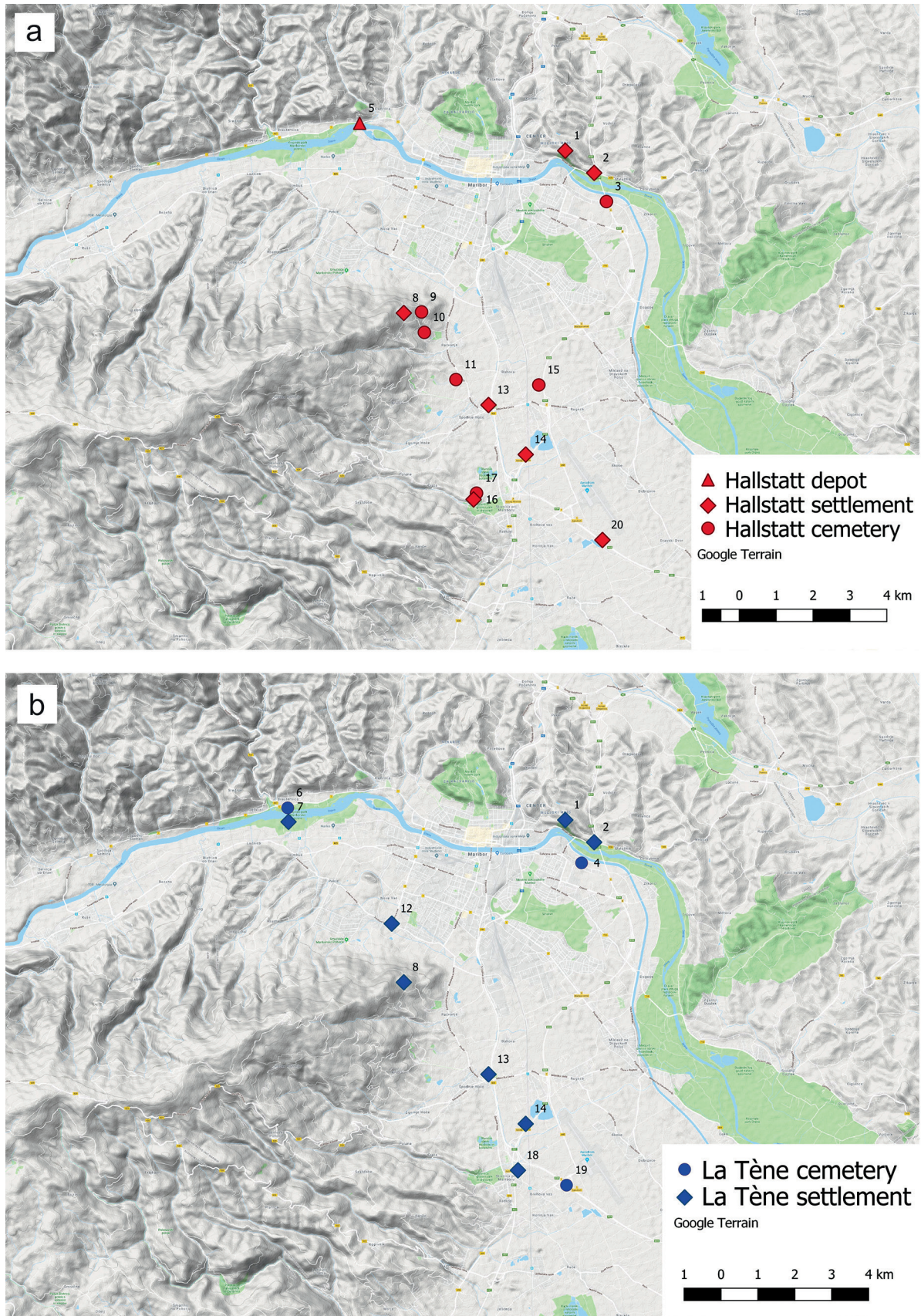


Figure 1. Maribor area: a Early Iron Age (Hallstatt) sites; b Late Iron Age (La Tène) sites. Sites discussed in this publication are marked with arrow.

List of the sites: 1 – Meljski hrib; 2 – Malečnik; 3 – Pobrežje; 4 – Pobrežje- unknown location; 5 – Mariborski otok; 6 – Bresternica; 7 – Limbuš; 8 – Poštela; 9 – Lepa ravna; 10 – Velika gomila nad Razvanjem; 11 – Pivola; 12 – Zgornje Radvanje; 13 – Spodnje Hoče; 14 – Slivnica 2B; 15 – Rogoza; 16 – Čreta; 17 – Čreta- tumuli; 18 – Slivnica 1; 19 – Orehova vas; 20 – Hotinja vas.

1 phase after D. Božič and M. Guštin, respectively the LT B2 phase according to the Central European scheme (Guštin 1977; Božič 1987, 869, Pl. 85: 1–2). In the gravel pit just above the river Drava near the present rowing centre and the former motel, location Bresternica near Maribor, grave goods from the Early Iron Age were also discovered in 1842, which are lost today (Fig. 1b: 6; Pahič 1966, 305). The location is particularly interesting, because on the other side of the river Drava in Limbuš, an almost rectangular fortified settlement is known, where a handle of a Roman mug, Hallstatt shards and the remains of La Tène pots were discovered during the excavations of W. Schmidt in 1912 (Fig. 1b: 7; Pahič 1985a, 86). For a long time, these were the only known grave goods from the La Tène period in the Maribor area. In 2006, however, during excavations in connection with the construction of the motorway in Orehova vas, three more graves from the LT B2 period were discovered (Fig. 1b: 19; Grahek 2015, 42–43, 349).

At the end of the 2nd and the beginning of the 1st century BC, the Poštela (Fig. 1b: 8) and Meljski hrib (Fig. 1b: 1) hilltops were resettled (Pahič 1985a, 16; Pahič 1985b, 214–215; Kavur 2001). However, a thoroughly-explored hilltop settlement Poštela, was probably quickly abandoned, as the finds show (Teržan, Črešnar 2012, 18). It is possible that the Celts came from lowland settlements during the turbulent times, mentioned in the Roman written sources (Teržan, Črešnar 2012, 18).

It is assumed that the river Drava was an important natural barrier, which must have caused the development and settlement of the area. In this respect, some have suggested that one of the Drava crossings might have been near Meljski hrib during prehistoric times (Kavur 2001, 360–361). The second crossing could be assumed north of Maribor, near Mariborski otok (“Maribor Island”), where the aforementioned earlier Iron Age metal objects were discovered during the construction of the power plant (Teržan, Črešnar 2012, 15). Such assumptions are also possible from a geographic point of view, as the riverbed of the river Drava below the Meljski hrib in Malečnik and near the Maribor Island is shallower than elsewhere, due to the more resistant marl sediments (Žiberna 2011, 123). It was therefore perhaps easier to cross in the prehistoric times.

In the following we will present the settlements Slivnica 2B, Malečnik, Spodnje Hoče and Zgornje Radvanje and analyse their material culture in details for the first time (Fig. 1a–b: 2, 12, 13, 14).

Slivnica 2B

Slivnica lies on at the foothills of the East Pohorje, at an altitude of 279 m asl. East and south-east of the village are Orehova vas with the graves from the Late Iron Age and Hotinja vas with the settlement from the Early Iron Age. North and north-east of the site is Rogoza, which, as mentioned above, is known, among other things, of the Early Iron Age tumuli and pottery fragments from the Late Iron Age, while on the slopes of Pohorje, west of Slivnica, an Iron Age hilltop settlement Čreta is located (Fig. 1a–b: 14).

Due to the construction of the motorway, three sites were investigated in the area of Slivnica: Slivnica 1, Slivnica 3B



Figure 2. Slivnica 2B, view on the site from the southeast.

and Slivnica 2B (Kramberger 2021a). The site Slivnica 1 was excavated in 1996–1997 and Slivnica 3B in 2007–2008. They are located just outside the village and are now registered as a Single Cultural Heritage unit (EŠD 6822). The third site is approximately one kilometer north-east of Slivnica, in the immediate vicinity of the Maribor-Ljubljana railway line, and was surveyed between 4 June and 8 July 1997 (EŠD 15522). With a surveyed area of 4821.64 m², the site is one of the smaller areas that were excavated during the construction of the Slivnica-Pesnica motorway section (Fig. 2)³.

The geological basis at the site is a silicate gravel of the river Drava (SE 003), which extended more than four meters deep, as was discovered after gravel extraction by a construction company at the edge of the site (Fig. 3: Destroyed). In most parts of the site above the gravel deposits there were only two layers of topsoil, both containing a significant amount of prehistoric pottery fragments (SE 2 and SE 1).

The archaeological excavation has shown that the area was used in the Late Bronze Age and Early Iron Age and again in the Late Iron Age (Fig. 3)⁴.

Malečnik

The site is located on the left bank of the river Drava, on a gently sloping terrain at the foot of Meljski hrib, in the village Malečnik (Fig. 1a–b: 2; Fig. 4: 1). Its location near the Iron Age hilltop settlement (Fig. 1a–b: 1; Fig. 4: 2) and the Middle- Late- Bronze Age and Iron Age site at Pobrežje (Fig. 1a–b: 3–4; Fig. 4: 3–4; EŠD: 6181; Pahič 1972, 1991, 1966; Ciglencečki, Strmčnik Gulič 2002; Strmčnik Gulič 2003b, 206–207; Kramberger, Črešnar 2021), is particularly interesting due to the hypothesis of a river crossing in this area in prehistoric times (Fig. 5).

In February 2002, a passer-by informed the Institute for the Protection of Cultural Heritage of Slovenia, OE Maribor, about the discovery of pottery vessels during the reconstruction of a local street in Malečnik. This was followed by excavations that took place over three seasons. Namely,

³ Cf. with Orehova vas (Grahek 2015, 5), Rogoza (Črešnar 2010, 7) and Hotinja vas (Gerbec 2015, 5).

⁴ For more detail description of the Iron Age settlement features see Site catalogue and Appendices 1–4.

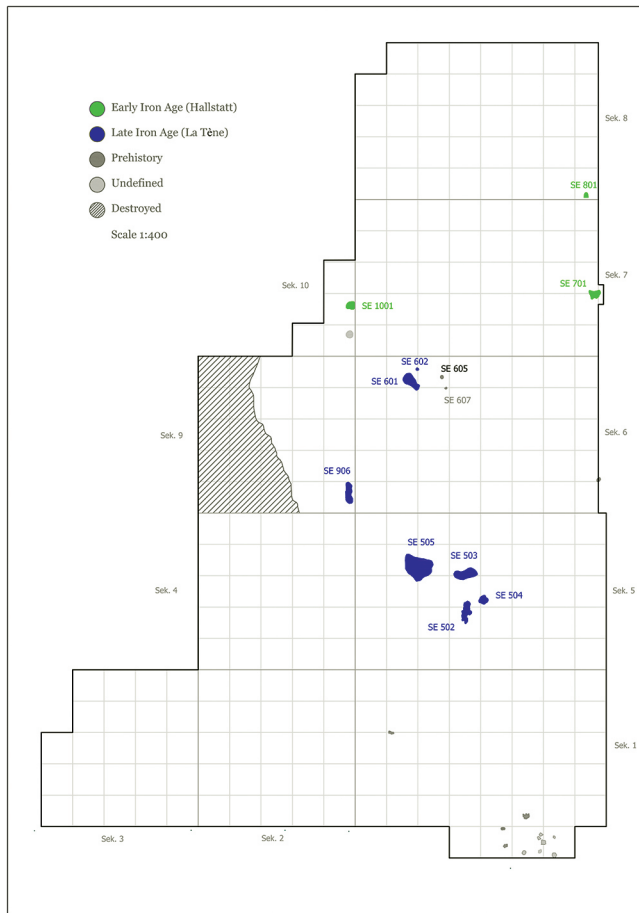


Figure 3. Slivnica 2B, pits from the Early- and the Late- Iron Age. Scale 1:400.

in 2002, at the foot of Meljski hrib during the above-mentioned construction works, in 2005 on the river terrace in connection with the construction of a new bridge over the river Drava, and finally in 2006 on the slope of Meljski hrib due to the discovery of a hollow way while the construction of the motorway (Kramberger 2021c).

Analysis of small finds revealed that the area was inhabited over ten different chronological horizons. The first settlement dates back to the Lasinja culture of the Early Eneolithic period. After a brief break, the area was settled in the Middle Copper Age, then again in the Middle Bronze Age, in the Early and Late Iron Ages, in the Early Middle Ages, and again in the High and Late Medieval Period. During the excavations campaign in 2002, several levels of the early modern road were also discovered, which can be found on military maps of the Habsburg Empire (Fig. 4)⁵. At least one find (metal wheel pendant; Fig. 27: 41) is from the Late Bronze Age, three pottery fragments from the Roman period, and several shards from the upper layers on the river terrace probably date to the Late Copper Age or Early Bronze Age.

Excavations at the foot of Meljski hrib proved to be particularly difficult, as the archaeological remains were found at a depth of between 4.58 m and 7.44 m, i.e. under several layers of eroded material. This is also where the archaeological

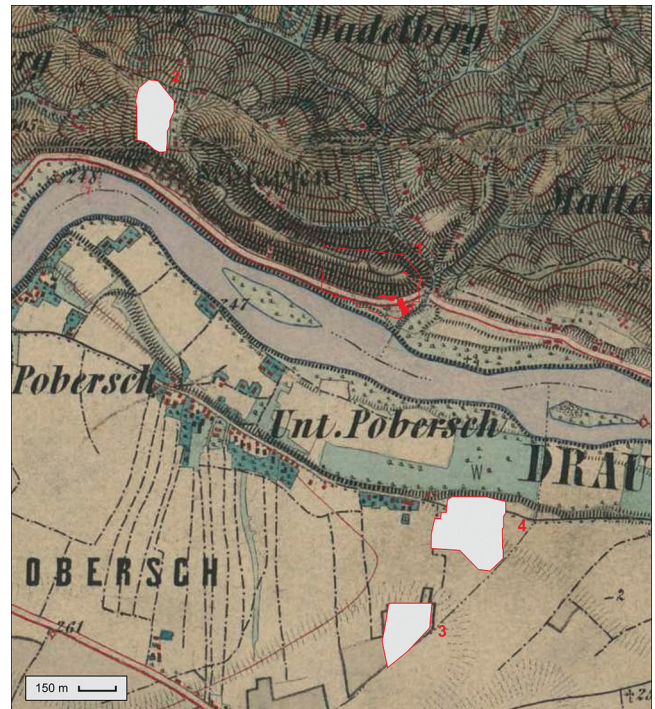


Figure 4. Archaeological sites in Malečnik and its surroundings. 1 Malečnik – Arheološko najdišče pod Meljskim hribom (EŠD: 15528); 2 Maribor – Arheološko najdišče Meljski hrib (EŠD: 6514); 3 Maribor – Prazgodovinsko grobišče na Pobrežju (EŠD: 6181); 4 Maribor – Prazgodovinska naselbina na Pobrežju (EŠD: 15526). Scale 1:15000; data: RKD; map: third military survey of the Habsburg Empire (1869–1887), ©2019 MAPIRE.

remains were most revealing, as the soils from different periods and pits were usually separated by layers of eroded clayey and marl material, created by lateral erosion (Fig. 6). Settlement remains from the first half of the first millennium BC were discovered on the river terrace, while the Late Iron Age settlement extended over the entire area. In fact, they were found at the foot of the Meljski hrib, in the area of the river terrace and in the lowest layers filling the hollow way



Figure 5. View on the Meljski hrib and Malečnik from the southeast. In the foreground is the river Drava, in the background Maribor and Pohorje (a drone photo). Locations of a hilltop on Meljski hrib, a lowland settlement in Malečnik, a sunken path and the site Pobrežje are marked.

⁵ <https://mapire.eu/en/>.

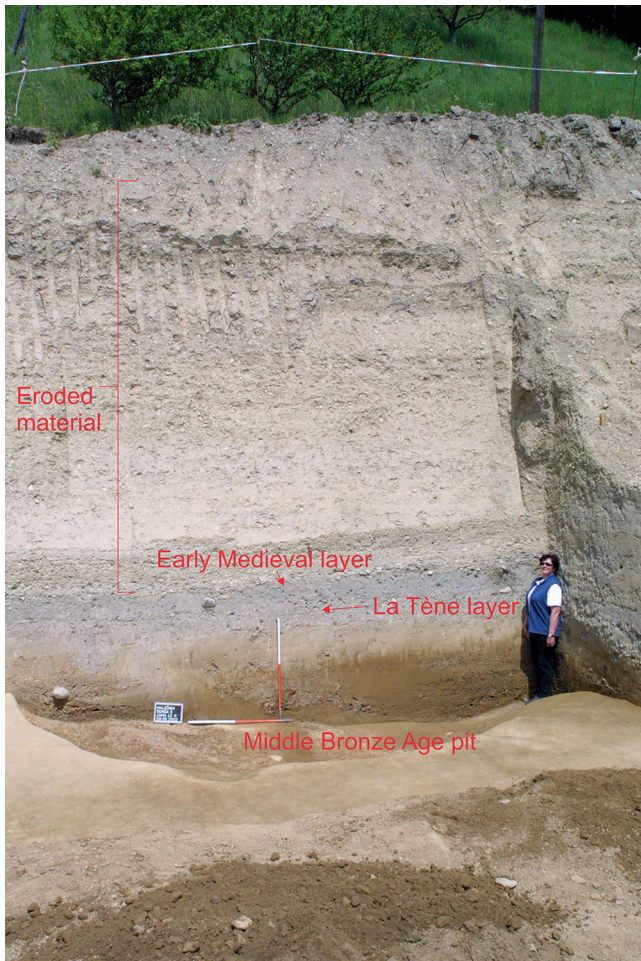


Figure 6. Malečnik, view from the southwest of the northern profile of probe 5 with a layer from the Late Iron Age (SE 02–005) (photo: I. Bizjak).

that was discovered at the top of the easternmost slope of the Meljski hrib (Fig. 5; Fig. 29: 66; Fig. 7)⁶.

Spodnje Hoče

The archaeological site is situated at an altitude between 278.2 and 279.9 m in the centre of the resent village of Spodnje Hoče, at the crossroads of the valley of the stream Hočki potok and the extensive Drava plain. The geological basis of the site consists of alluvial layers, mainly composed of silt and sand from the Upper Pliocene and Lower Pleistocene, deposited by streams flowing from the Pohorje hill above the Drava gravel (Žnidarčič, Mioč 1988).

Excavations carried out by the Institute for the Protection of Cultural Heritage of Slovenia and the company PJP between 1988 and 2018 showed that the plain was inhabited in the Early Copper Age, Late Bronze and Late Iron Ages, then in the Roman period and again in the early Middle Ages (Strmčnik Gulič 1989; 1990; 1996; 2003f; Ciglencečki, Strmčnik Gulič 2002; Kajzer Cafnik, Predan 2006, 141; Kramberger 2021b).

Southeast of the parish church St. Jurij in the centre of Spodnje Hoče, Iron Age settlement remains were discovered during the construction of the building of the Hofer shopping

⁶ Features of the Iron Age settlement are described in the Site catalogue (see also Appendices 5–8).

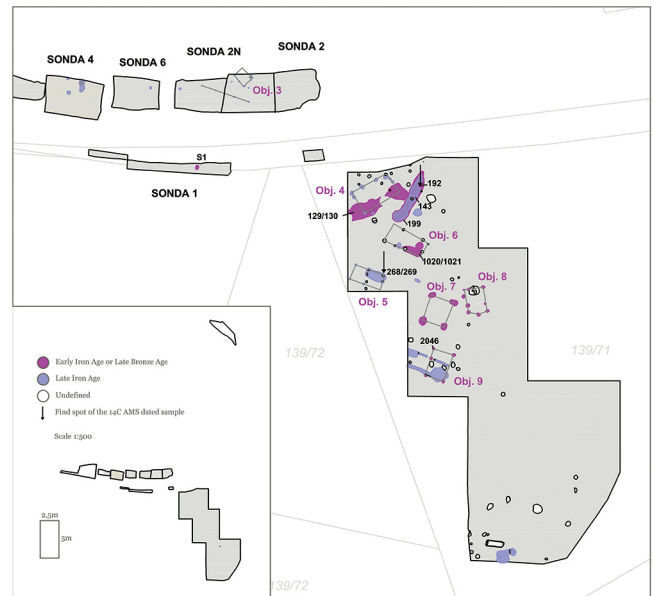


Figure 7. Malečnik, plan of the site with pits from the 1st half of the 1st millennium BC and the Late Iron Age (La Tène). Scale 1:500.

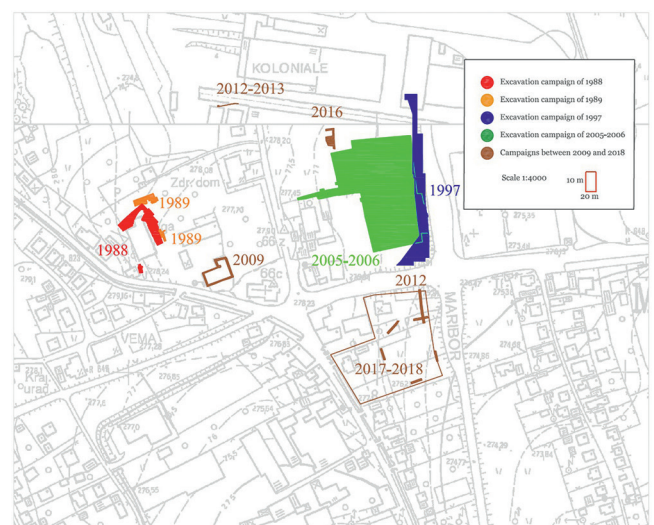


Figure 8. Spodnje Hoče. Excavation campaigns. Scale 1:4000.

centre and a car park next to it (Fig. 8: marked green). This is the largest excavation ever conducted in Spodnje Hoče. It took place in 2005 and 2006 and was led by Primož Predan (PJP company). On the part of the plain between the parish church and the motorway, an area of approximately 8,407 m² was explored on (plots nos. 650/2, 650/3, 650/6, 650/7 and 650/8, c.o. Spodnje Hoče). Here, settlement remains from the early Middle Ages, individual buildings from the Roman period, and at least two pits from the first millennium BC were discovered (Fig. 9; Predan, Kovač 2006)⁷.

Zgornje Radvanje

On the northern side of the Pohorje ridge with the Poštela hillfort on the plain, there is the archaeological site of Zgornje

⁷ For more information on the features from the first millennium BC from Spodnje Hoče see Site catalogue.

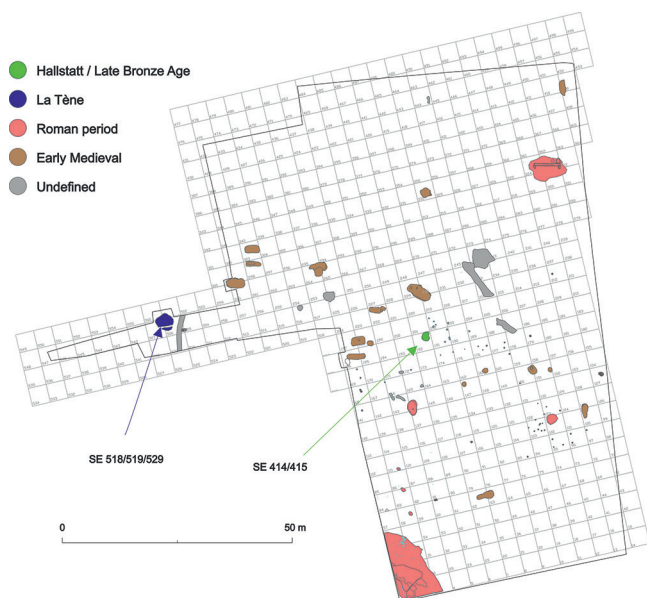


Figure 9. Spodnje Hoče, the plan of the site excavated in the years 2005–2006 with marked pits from the 1st millennium BC. Scale 1:1000.

Radvanje. The site is situated between Radvanjski and Pekrski potok streams, at a height of 283.5 m asl (Fig. 10).

Radvanje is known as a prehistoric site, mainly because of the Poštela hillfort and its cemeteries, namely the Late Bronze Age Urnfield cemetery of Spodnje Radvanje, which was discovered between 1903 and 1907 in the clay quarries of a former brickyard (Pahič 1968, 20–23, Pl. 4: 1–13, 5: 1–23; Pahič 1985a, 6–7; Teržan 1990, 337–338; Teržan, Črešnar 2012, 14–15, Fig. 5) and because of the archaeological area of Spodnje Radvanje, where surface finds were discovered, which probably date back to Ha B (Kavur 1997; EŠD: 14393⁸).

The site of Zgornje Radvanje (EŠD 28108) was discovered about 500 m north-west of the Spodnje Radvanje. It was excavated in 2007 during the construction of the western ring road of Maribor. The core of the site was excavated between 25 August 2007 and 29 September 2008 in the area of the present larger roundabout with pedestrian underpass, by ZVKDS, OE Maribor under the direction of Mira Strmčnik Gulič (Strmčnik Gulič 2009). Smaller excavations (total area of 1,600 m²) were carried out south of this site by the private company PJP d.o.o. due to the construction of a residential building in 2010 (Arh 2012, 12; Murko 2012, 141).

In 2007 and 2008, an area of approximately 4,200 m² was explored in Radvanje. The research has shown that the earliest settlement belongs to the period of the Lasinja culture of the Early Copper Age. More than 4000 years later, during the Late Iron Age, the area was resettled (e.g. Strmčnik Gulič 2009; Kramberger 2010; 2014; 2015a; 2015b). At that time or in the period between the Early Copper Age and the Late Iron Age, two people were buried here, as two badly preserved urn graves show. After that, the area remained uninhabited until the arrival of new settlers in the Roman period, as evidenced by traces of wooden houses and a stone wall in the westernmost part of the site, and then the same area was settled again



Figure 10. Aerial photo (from the west) on the roundabout in Radvanje, where the site was excavated in the years 2007 and 2008 (photo: A. Gulič).

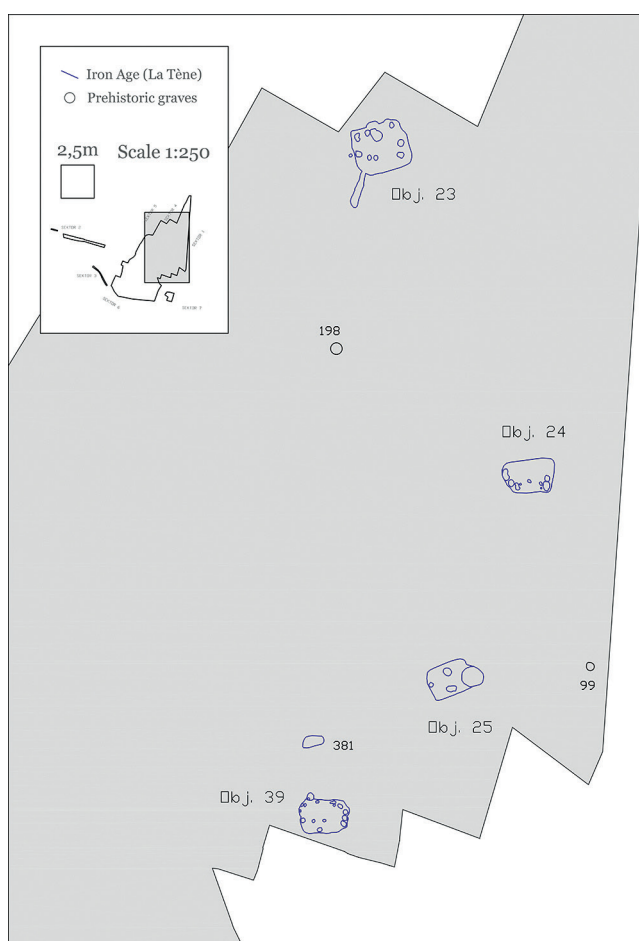


Figure 11. Zgornje Radvanje 2007–2008. Part of the site with the settlement remains from the Late Iron Age. Scale 1:250.

in the early Middle Ages. The amount of houses, pits and finds found indicate that the area was densely populated in the Early Copper Age, while settlements from the Late Iron Age (Fig. 11), Roman Era and Early Middle Ages produced only individual houses (Kramberger 2015a, Fig. 1)⁹.

⁹ For the description of the Iron Age settlement features from Zgornje Radvanje see Site catalogue and Appendices 9–11.

⁸ <https://www.gov.si/teme/register-kulturne-dediscine/>

DISCUSSION

Late Bronze Age and Early Iron Age

In continuation, a detailed chronological analysis of the settlements is presented. Due to the fact that sites yielded mainly pottery fragments the discussion is structured by different pottery types.

The earliest settlements activities within the first millennium BC were identified at the Slivnica 2B, Malečnik and Spodnje Hoče. The settlement phases, which are dating to the first half of the first millennium BC yielded pottery dishes, a bowl, pots, fragments of pithoi, portable pottery stoves, baking lids (Fig. 27: 42 and perhaps 45), a fire dog, loom weights, spindle whorls and a single bronze pendant in the form of a sun wheel (Fig. 27: 41).

Pots

At the Slivnica 2B site, three pits could be placed in the first half of the first millennium BC. These contained very little pottery, so only pit SE 800/801, from which the charcoal sample was analysed using the ¹⁴C AMS method (Appendices 1 and 2), can be dated more accurately. Further pottery fragments, which can be dated to the first half of the first millennium BC, were discovered at the site Slivnica 2B, in layers SE 1 and SE 2.

One of the pots from layer SE 1 has a hemispherical body and an everted rim (Fig. 24: 8). As only a small part of the pot is preserved, it is not clear whether it had a handle or not, so it could have present either type L13 (with a handle) according to the type-chronology of J. Dular, which is characteristic for the period between Ha B1 and Ha B2/3, or type L8, which occurs in the settlements of Burgstallkogel, Poštela and the cemeteries Pobrežje and Ruše 1, between the Ha B2/3 and Ha C0 periods (Dular 2013, 32–35). A fragment, probably of a pot, with “pseudo-string” decoration from Slivnica 2B can be roughly dated to the Late Bronze and Early Iron Age (Ha B1–Ha C0) (Fig. 24: 9; see Dular 2013, 52–53, Fig. 15: O 25; Teržan 1990, Pl. 67: 5; Tomanič Jevremov 1988/1989, Pl. 8: 3, Pl. 12: 3; Dular, Lubšina Tušek 2014, Pl. 4: 1).

Similar to the above-mentioned pot from SE 1 in Slivnica, but with less everted rim, is a fragment of a pot from the ¹⁴C AMS dated furnace complex in Malečnik (Fig. 28: 56). J. Dular notes that comparable pots are already present in Ha A settlement layers on Brinjeva gora and the contemporary lowland settlement in Rogoza near Maribor. However, they were also used continuously during the Ha B period and the beginning of the Hallstatt period, as the finds from stratified layers at Burgstallkogel and from the first settlement horizon at Poštela show (Dular 2013, 32–33, Fig. 8: L7). Very similar pots were also found in the 4th tumulus of Lepa ravnica below Poštela (Teržan 1990, p. 60:14), which B. Teržan dates to horizon D1 (Teržan 1990, 36), and in the lowland settlement of Hotinja vas from Ha C–D1 (Gerbec 2015, finds nos. 125 and 197).

Another type of pots discovered at the sites are barrel-shaped or neckless pots with convex walls. They are more common. One of these vessels was found in layer SE 002 at the

site Slivnica 2B (Fig. 24: 6), several in Malečnik (Fig. 27: 43, 46) and one in the pit SE 414/415 in Spodnje Hoče (Fig. 30: 77). Such pots do not appear before Ha B1, and are particularly characteristic of the Hallstatt period in Styria (Dular 2013, 34–35, Fig. 9: L 10). At Poštela hillfort, they are particularly characteristic of the third settlement horizon or Ha C–D1 (Teržan 1990, 33–34, 36, Fig. 3: 13). They are also characteristic of the lowland settlement at Hotinja vas (Gerbec 2015, 21, finds nos. 177–178, 196, 215, 238, 405).

Pithoi

At Malečnik, several fragments of pithoi were found the settlement phase (Fig. 27: 39–40, 44), dating to the first half of the first millennium BC, and another one was found in Spodnje Hoče, pit SE 414/415 (Fig. 30: 76).

Pithos from the posthole SE 2046/2047 of Obj. 9 in Malečnik (Fig. 27: 40) was decorated with the motif of an open triangle with extensions, which is a characteristic decorative element of the Urnfield period. It often appears as an integral part of motifs on richly decorated vessels in cemeteries, and on one of the vessels from grave 18 in the second cemetery in Ruše is represented as a single motif (Pahič 1957, vol. 8: Gr. 18: 1; Črešnar 2006, 133, 135, 136, 138, Fig. 32: XXX, Fig. 33: XXX).

Another comparatively better preserved pithos was found in the pit S1 in Malečnik (Fig. 27: 39). It has a high, rounded shoulder, a short everted rim and a rounded transition to the lower body. Pithoi, formed in this way, are typical in Styria for the younger Urnfield period and the Early Iron Age, Ha C0–C1 (Dular 2013, 28–29, Fig. 6: P1). Among the finds in the Podravje region, a pithos from Ormož (Dular, Tomanič-Jevremov 2010, Pl. 24: 1) and a pithos from Ptuj Castle (Dular 2013, Pl. 27: 1) are almost identical.

A fragmented pithos that was found in Spodnje Hoče, pit SE 414/415, is of a different type, barrel-shaped with a straight rim, a handle and applied horizontal rib with impressions on the shoulders (Fig. 30: 76). Similar pots with a horizontal rib with a conical neck are known from Ormož within Ha C0 (Tomanič Jevremov 1988–1989, Pl. 19: 2) and from Brinjeva gora, layers from Ha A and Ha B 1 (Oman 1981, Pl. 25: 5, Pl. 27: 3, Pl. 28: 2), which indicates their time span between Ha A and Ha C0 (Dular 2013, 30–31).

Dishes

Besides pots in layer SE 1 and on the top of layer SE 3 in Slivnica, dishes with inverted bevelled rim (Fig. 24: 10) and similar dishes with horizontal grooves (Fig. 24: 4) were discovered. Another dish with inverted rim was also found in pit SE 414/415 from Spodnje Hoče (Fig. 30: 74) and in layer SE 001 at Malečnik (Fig. 29: 64).

Dishes with inverted bevelled rim from Slivnica can be compared with dishes of types La 1–La 3 after J. Dular, which were recognized as characteristic for the period between Ha A and Ha D1 in north-eastern Slovenia (Dular 2013, 42–44, Fig. 12: La 1–La 3), while dishes with horizontal grooves are supposed to be characteristic for the period between Ha A and

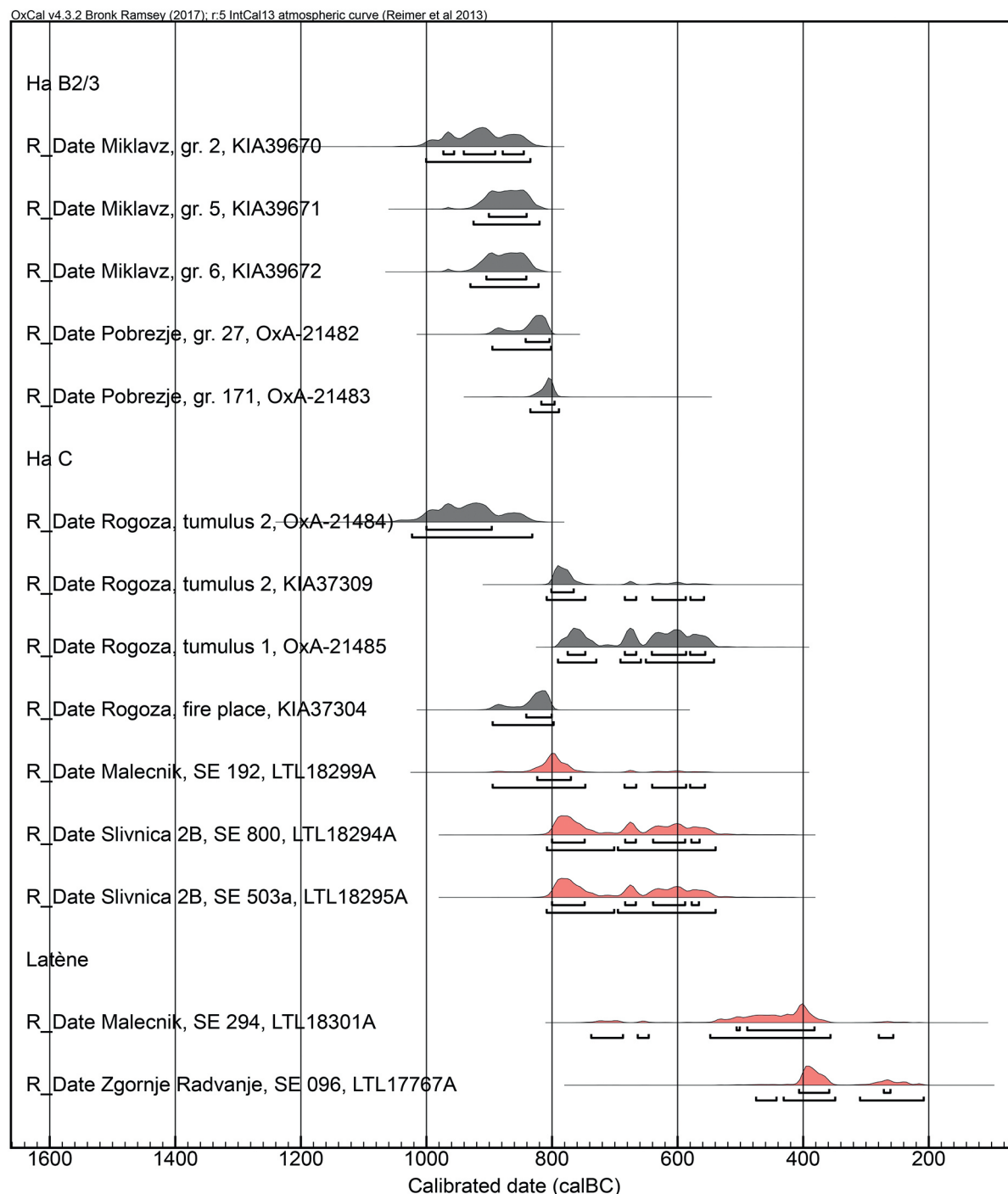


Figure 12. ^{14}C AMS dates from the Iron Age sites in the Maribor area. Dates marked in the red are presented for the first time; others after: Črešnar, Murko 2014; Črešnar, Clive Bonsall, Jayne-Leigh Thomas 2014; Črešnar 2014.

Ha C0 (Dular 2013, 44–46, Fig. 13: La 5; see also with Dular, Tomanič Jevremov 2010, Pl. 6: 1, Pl. 12: 2, Pl.14: 3, Pl.22: 8, Pl.37: 4; Tomanič Jevremov 1988/1989, Pl. 6: 1).

At the same time, i.e. approximately between Ha A and Ha D, an undecorated dish with an inverted rim from the pit SE 414/415 from Spodnje Hoče can be dated (Pl. 7: 74; cf. Dular 2013, 44–46, Fig. 13: La 7, La 8, La 9). In contrast, a dish with an inverted rim found in stratigraphic unit SE 001 in Malecnik was decorated with zigzag rows made with a decorating-wheel

tool, with sets of embossed circular impressions with crosses below (Pl. 6: 64). An almost identical dish was found in the Iron Age lowland settlement of Hotinja vas near Maribor (Gerbec 2015, 144–145, find no. 423). On the basis of numerous pottery finds, the settlement was dated from the Ha C phase to the transition to Ha D1 (Gerbec 2015, 21, 177). At the same time, comparable ornaments made with a decorating-wheel tool and embossing were found in Ormož (Dular 2013, 52, Fig. 15: type O21) and in the Early Iron Age hillfort Cvinger above Vir



Figure 13 Slivnica 2B. Pit SE 800/801 during the excavation.

near Stična (Grahek 2016, 210, 213, Fig. 60: O24c). This dish from Malečnik can therefore be dated to the Hallstatt period.

In ditch SE 192 in Malečnik, which is part of the furnace complex from the first half of the first millennium BC, the bottom of a vessel decorated with channelled decoration was discovered (Fig. 28: 58). Many dishes with inverted rims with similarly decorated bottoms were found at the large tumulus above Razvanje near Poštela. Six of them have been completely reconstructed and it can be seen that the bottoms of the vessels were decorated over the entire inner surface with four opposing groups of grooves, the ornament is also being visible in the mirror image on the outside of these vessels (Strmčnik Gulič, Kajzer, Kramberger 2021, Pl. 2: 2–3, Pl. 3: 2–3, Pl. 5: 1–2). Thus, also this dish and therefore the furnace in Malečnik can probably date back to the Early Iron Age.

In the group of prehistoric finds discovered in the upper layers at Slivnica 2B, some dishes can also be dated more precisely. This is the fragment of a dish with a conical neck, fired in a reduction atmosphere, hand-made from fine-grained clay, with a polished surface and a very dark grey colour. The vessel was decorated with horizontal grooves on the neck and fingerprints on the broadest circumference (Pl. 1: 7). The find has a good comparison in Ferik's trench from Poštela (Teržan 1990, 389, Pl. 13:11), several similar but much better preserved ones are known from the large tumulus above Razvanje (Strmčnik Gulič, Kajzer, Kramberger 2021, Pl. 9: 5–9). This find can therefore be dated to the Ha C-D1 period.

A cylindrical neck with shallow horizontal grooves and rounded shoulders from the layers SE 1 (Fig. 24: 11) from Slivnica 2B and SE 123 from Malečnik (Fig. 29: 62) characterizes the next type of a dish from the Early Iron Age. They were made of very fine-grained fabric and fired in a reduction atmosphere, the surface is shiny and it was probably polished. It is perhaps a part of a dish as found in a large tumulus above Razvanje (Strmčnik Gulič, Kajzer, Kramberger 2021, Pl. 9: 1–4, Pl. 10: 18), in the Hallstatt lowland settlement at Hotinja vas (Gerbec 2015, 56–57, finds nos. 69, 327). Several vessels found in tumuli at Velenik near Spodnja Polskava (Teržan 1990, 447, Pl. 71: 2, 3, 5, 6) and in the settlements at Poštela (Teržan 1990, 384, Pl. 8: 3) are formed similarly. Perhaps some other fragments from Malečnik also represent parts of similar dishes (e.g., Fig. 29: 61 and Fig. 28: 59).

A cup

Another pottery shard from layer SE 2018, excavated on the river terrace in Malečnik, probably represents fragment of a cup (Fig. 27: 48). The vessel was made of a very fine-grained fabric and fired under incompletely oxidised conditions, with the reducing conditions at the end of firing; the surface is smooth and of a very dark grey colour.

Similar vessels are known from the Early Iron Age settlement near Maribor. Five of them, almost completely preserved, were discovered in a large tumulus above Razvanje below the Iron Age hillfort at Poštela (Strmčnik Gulič, Kajzer, Kramberger Pl. 9: 5–9). Similar vessels are also known from the Iron Age hillfort itself (Teržan 1990, Pl. 13: 11, Pl. 15: 10, Pl. 15: 8, 12, Fig. 3: 8, 9, 12). They belong to the latest settlement horizon, Poštela 3, which dates to the end of Ha C or the beginning of the Ha D1 period (Teržan 1990, 32–36).

Portable pottery stoves, spindle whorls, loom weights, a firedog, and backing lids

Fragments of so-called portable pottery stoves can also be dated to the Hallstatt period. They were found in layer SE 1 or 2 in Slivnica 2B (Fig. 24: 12) and in layers SE 123 and SE 143 in Malečnik (Fig. 29: 60; 28: 52; see Gerbec 2015, 56–57, finds nos. 63, 65; Dular, Tomanič Jevremov 2010, Pl. 78: 7; Teržan 1990, 32–35, 384, Pl. 8: 1). Another object that can be associated with the Early Iron Age settlement activities at Slivnica 2B is a pyramidal weight, decorated with four impressions and a cross at the top (Fig. 24: 5; cf. e.g. Teržan 1990, Pl. 9: 7–8, Pl. 20: 1, Pl. 23: 21, Pl. 25: 13, Pl. 27: 5–7). On the other hand, at Malečnik a decorated spindle whorl found in layer SE 143 (Fig. 28: 53; Teržan 1990, Pl. 11: 11, Pl. 18: 14) and a decorated firedog found in layer SE 123 (Fig. 29: 63) can also be dated to the Early Iron Age. The latter has comparisons in Early Iron Age hillforts at Stična and Poštela (cf. Grahek 2016, 183, 274, Fig. 82, 284; see also Teržan 1990, 30–35, Fig. 1: 20, Fig. 2: 11, Fig. 3: 16).

Several fragments of backing lids were found at the sites Slivnica 2B (Fig. 24: 1) and Malečnik (Fig. 27: 42 and possibly 45). Backing lids are found in the north-eastern part of Slovenia in the settlements dating to the Early Urnfield period (Ha A; e.g. Črešnar 2010, 39, Fig. 16), the Late Urnfield period (Pobrezje; Črešnar, Kramberger 2021, Pl. 4: 7–8, Pl. 10: 3) and the Early Iron Age. Iron Age backing lids often have a plastic rib (Teržan 1990, Pl. 47: 25, Pl. 2: 19, Pl. 25: 10–11, Pl. 35: 1–6; Dular 2013, Pl. 10: 7, Pl. 24: 1–2, Pl. 35: 7, Pl. 36: 2, Pl. 44: 12; Grahek 2016, 175–181, Fig. 51: Pe 5). Most likely, they served as a support for the embers during baking, which is evident from ethnographic parallels (cf. e.g. Bobnjarić 1989, 74–75, Figs. 1 and 3).

A (bronze?) wheel pendant

One of the most interesting finds from Malečnik is a metal (bronze?) wheel pendant, found in a secondary position in the early medieval pit SE 135/136, which intersected ditch SE 129/130 and pit SE 182/183 (both containing pottery from the first half of the first millennium BC) (Fig. 27: 41). Wheel

pendants have been in use for centuries, in a wide area extending between the French Central Alps, the northern part of the Swiss plateau, the south-eastern Alps with Caput Adria, northern and central Italy and the Pannonian periphery (Žbona-Trkman, Bavdek 1996, 63, 70, Fig. 5; Trampuž Orel, Heath 2001, 155–156, Fig. 13; De Angelis, Gori 2017, 362). They differ from each other by the form and position of the eyelets for attachment to a rope and by the number and bar arrangement. The oldest pendants can already be found in the Middle Bronze Age, as part of the younger phase of the Middle Bronze Age tumulus culture in Germany and northern Italy. They differ from the pendant from Malečnik in that they have a tubular eyelet for fastening, although the pendant itself can be very similar (Urban 1993, 93–95, Figs. 48: 6). Wheel pendants with comparable eyelets for fastening are, however, particularly characteristic for the Late Bronze Age. Some researchers hypothesize that different variants of pendants may have had different symbolic meanings (De Angelis, Gori 2017, 361) or may even have served as ingots (Turk 2001, 253–255; see also De Angelis, Gori 2017, 363).

A larger group of wheel pendants (it consists of 43 pieces) is known from the first depot from Kanalski vrh (Teržan 1995, Pl. 100: 22–Pl. 103: 58), which is classified by P. Turk between the so-called third group of depots from Slovenia, dated to the Ha B1 and Ha B2 periods (Turk 1996, 112–114). N. Trampuž Orel and D.J. Heath divided them into seven types, depending on the number and arrangement of bars and depending on the presence or absence of an inner circle (Trampuž Orel, Heath 2001, Fig. 4). Among them, the pendant from Malečnik is most similar to the type 4. However, in contrast to our pendant, it has the eyelet, which is located in the middle of one of the empty spaces between two bars (Teržan 1995, Pl. 100: 23; Trampuž Orel, Heath 2001, Fig. 4: type 4), and that the eyelet is attached to a ring with a wider part of triangular form (cf. Fig. 27: 41 with Teržan 1995, Pl. 100: 22 – Pl. 103: 58; see also Žbona-Trkman, Bavdek 1996, 63).

Besides the depot from Kanalski vrh, there are two other known sites in Europe where a large number of wheel pendants have been discovered. These are Monte Cavanero di Chiusa di Pesio at the foot of the Alps in Italy and Villethierry in eastern France. In both cases these are depot finds of similar types to those found in the depot from Kanalski vrh. Both depots are dated to the Late Bronze Age, approximately in Ha A1–Ha B1 (De Angelis, Gori 2017). Among them, individual pieces from the Bronze Age depot at the site of Monte Cavanero di Chiusa di Pesio are especially comparable with the pendant from Malečnik (De Angelis, Gori 2017, 359, Fig. 5, Fig. 49).

Overall, a typo-chronological analysis indicates that the plain in Malečnik was settled during Ha B and Ha C. The wheel pendant (Fig. 27: 41) and the fragment of pithos from posthole SE 2046/2047, Obj. 9 (Fig. 27: 40) can be dated to the Late Bronze Age. Pottery fragments from layers SE 2018 (Fig. 27: 47–48) and some from layers SE 001 (Fig. 29: 64), SE 123 (Fig. 29: 60–63) and SE 143 (Fig. 28: 49–54) probably date to the Early Iron Age. The furnace complex (Fig. 28: 56–59) probably also dates to the Early Iron Age, with ¹⁴C AMS date from SE 192, associated to the furnace,

partly overlaps with the Iron Age dates from the tumuli in Rogoza (Fig. 12). Other pits from the first half of the first millennium BC from Malečnik can be from either the Ha B or Ha C period.

Settlement remains from the first half of the first millennium BC at Slivnica 2B can also be dated to the Early Iron Age, more precisely to Ha C0–C2/D1, and some pottery shards could already date from Ha B, i.e. the Late Bronze Age. The pit SE 800/801 is dated between 809 and 540 cal BC (95.4% probability), corresponding mainly to Ha C0–Ha C1–2. A sample from pit SE 503a/503 has also been dated to the same period and it was probably infiltrated in this pit from the upper layer where it was found mixed with pottery fragments from the Late and Early Iron Age (Fig. 12).

The only pit from the first half of the first millennium BC in Spodnje Hoče, was, as mentioned above, discovered during excavations in 2005 and 2006 (SE 414/415). The most important for dating this pit are a pot decorated with a horizontal rib and a conical neck (Fig. 30: 76) and a neckless pot (Fig. 30: 77). Comparisons for the first vessel suggest their time span between Ha A and Ha C0 (Dular 2013, 30–31). In contrast, neckless pots do not appear before Ha B1, and are particularly characteristic of the Hallstatt period (Dular 2013, 34–35). Pit SE 414/415 from Spodnje Hoče can therefore roughly be dated between H B1–Ha C0, which means that it is later than the Late Bronze Age settlement remains discovered during the excavation campaigns 1980–1981 and 1997 (Strmčnik Gulič 1989; 1990.; 1996; 2003f).

Late Iron Age

After a several centuries-long void, some lowland sites were resettled in the Late Iron Age. Late Iron Age settlement remains were discovered at Slivnica 2B, Malečnik, Spodnje Hoče and Zgornje Radvanje. In Spodnje Hoče, there is only one pit from this period, probably the remains of a pit-house, while at other sites several pits and layers with pottery fragments dating to the Late Iron Age period have been discovered. The following pottery forms can be identified:

Pots

A large quantity of fragments of La Tène pottery vessels was discovered in pits SE 505a/505 and SE 503a/503 in Slivnica 2B. The material is quite uniform. One of the most characteristic finds is the fragment of a wheel-made pot of grey graphite clay with a pronounced transition to the rim and a horizontal groove on the shoulders (Fig. 26: 32). It is most likely a part of a barrel-shaped pot with a thickened lips. Such pots were often decorated in the lower part with a vertical broom decoration or a hatched broom decoration, which is supported not only by the form but also by the fact that it is graphite pottery (cf. Guštin, Tiefengraber, Pavlovič, Zorko 2017, find no. 2310 and with Teržan 1990, Pl. 16: 19). The same type of pot made of a graphite clay, but in a smaller size, was discovered in the pit SE 503a/503 (Fig. 26: 26) and probably SE 601 (Fig. 25: 22).

Many barrel-shaped pots have also been discovered in Malečnik; e.g. in SE 143 (Fig. 28: 55), in the fill of a hollow way

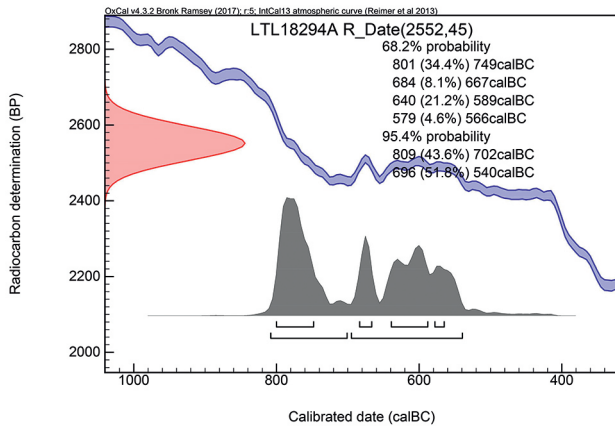


Figure 14 Slivnica 2B. Radiocarbon date of the charcoal sample found in pit SE 800/801.

(Fig. 29: 66), in buried soil from the Late Iron Age (Fig. 29: 68, 70) and in a pit house represented by SE 268/269, which was C14 dated by a charcoal sample from a posthole (Fig. 30: 73; Fig. 14–15). Barrel-shaped pots with thickened rim are generally characteristic for the Late Middle La Tène and LT D in a wide area from the Lower Danube to the Central Europe (e.g. Dular, Tomanič Jevremov 2009). A variant with a simply thickened rim (Fig. 26: 26; 29: 66, 68) can be found near Maribor at Poštela (Pahič 1966, Pl. 17: 5; Teržan 1990, Pl. 13: 10; Pl. 16: 19), Meljski hrib above Malečnik (Pahič 1985b, 214, fig. 25: 4, 9; Kavur 2001, sl. 8: 7), in the complex of the La Tène furnace from Spodnja Hajdina (Tomanič-Jevremov, Guštin 1996, Fig. 5: 7; Fig. 6: 3; Fig. 7: 1–3) and in Ormož (Pahič 1966, Pl. 13; Dular, Tomanič Jevremov 2009, Pl. 4: 1–7, Pl. 5: 3–7, 10). On the south-western slopes of Pohorje, the type of barrel-shaped pots made of graphite clay with a thickened rim is known from the hilltop settlement at Brinjeva gora (Pahič 1985d, 1–2, 4, 10, 13, Fig. 1: 21). Worth mentioning are some comparisons from nearby sites from the neighbouring Austrian Styria, e.g. from the Late La Tène settlement of Frauenberg near Leibnitz (Tiefengraber 2015, 635) and Södingberg and Leibing, which are dated to Middle (LT C) and especially to Late La Tène phases (LT D; Tiefengraber 2009, 261–277, Fig. 18: 1, Fig. 23: 4, 6).

For the variant of a barrel-shaped pot with a semi-circular thickened rim from pit SE 268/269, Obj. 5 in Malečnik (Fig. 30: 73), the best comparisons can be found at the following Middle and Late La Tène sites in Styria and Prekmurje: Södingberg (Tiefengraber 2009, Fig. 18: 1), Trnava (Novšak *et al.* 2006, finds nos. 72, 119) and Kotare-Baza (Kerman 2011b, find no. 920). It is worth mentioning that they were identified as characteristic for the pottery repertoire of the so-called Södingberg 2a phase, which represents the earliest settlement phase of the important settlement, and is chronologically dated to LT C (Tiefengraber 2009, 273). Obj. 5 can therefore be dated to LT C, although the ¹⁴C AMS dating indicates a period that coincides with the early La Tène period (Fig. 15). This is perhaps due to the old wood effect.

A slightly different version of a barrel-shaped pot was found in a Late Iron Age layer (SE 02–005), buried by eroded

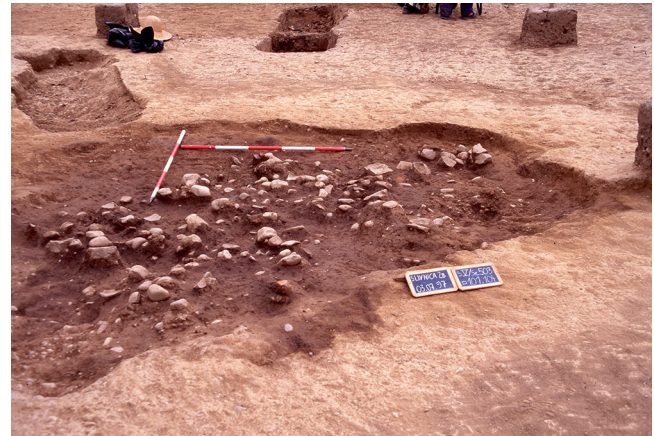


Figure 15 Slivnica 2B. Pit SE 503a/503 during the excavation.

material in Trench 1 in Malečnik (Fig. 29: 70). The nearest site of such pots is Ormož (Dular, Tomanič Jevremov 2009, Pl. 3: 8, 10, Pl. 7: 11). A completely preserved vessel with a similar rim was also obtained in Novo mesto–Okrajno glavarstvo (Božič 2008, 115, Pl. 26:10); fragments of vessels with such rims are also known from La Tène sites in eastern Austria (Urban 1996, 199–200, Fig. 2: 1,8). Dragan Božič dates the finds from Novo mesto–Okrajno glavarstvo to Mokronog IIIa and IIIb, which, according to the Central European chronological scheme correlate with LT D and, according to Mitja Guštin, with the horizons Mokronog 5 and 6 (Božič 2008, 119–123, tab. 3). The La Tène settlement in Ormož (Dular, Tomanič Jevremov 2009, 172–173) and the above mentioned pots from East Austrian sites are dated to the same period (Urban 1996, 199–200, Fig. 2: 1, 8).

Several differently formed pots were also discovered at Slivnica 2B (Fig. 25: 13, 15, 18). Among them, three pieces from pit SE 505a/505 deserve special mention. They belong to two different types: a barrel-shaped pot with an almost angularly thickened lips (Fig. 25: 13, 15) and a pot with a curved, rounded rim and a wide groove below it (Fig. 25: 18). All these vessels are handmade, one of the barrel-shaped pots being decorated with impression on the thickened rim (Fig. 25: 13), and another very similar vessel, which is undecorated (Fig. 25: 15). None of the vessels mentioned has a fully adequate comparison with the nearby La Tène sites, which could indicate a local peculiarity.

However, a pot with a groove under a rounded rim, is of a more common type (Fig. 25: 18). Comparisons can be found e.g. at Nova tabla near Murska Sobota, where they were recognized as important for the definition of the end of LT C2 and the beginning of LT D (Guštin *et al.* 2017, 101–102, 105, Fig. 54: L1, finds nos. 1930, 1978–1979, 2029). Similar vessels are also found at other sites in the Slovenian region of Prekmurje, as well as in northern Croatia such as Kotare-Krogi (Kerman 2011c, find no. 407), Pri Muri pri Lendavi (Šavel, Sanković 2011, 48, 49, find no. 381), Zatak pri Lendavi (Guštin, Tomaž 2014, finds nos. 3, 4), Banjščina-Bukovje (Bekić 2006, 75, Pl. 1: 7), Jakopovec-Blizna (Bekić 2006, 159–164, Pl. 13: 3; 15: 1, 3, 16: 2, 4), Sisak (Drnić, Miletić Čakširan 2014, 231–244, Pl. 5: 9, 8; 12, 9; 3, 13; 12, 14: 5, 25, 18: 29; see also Guštin *et al.* 2017, 102). According to these comparisons, pit

SE 505/505a from Slivnica 2B dates to the end of LT C2 or the beginning of LT D.

Dishes

Fragments of dishes were discovered at the sites Slivnica 2B, Malečnik and Zgornje Radvanje. Several types can be distinguished. They can be divided into handmade hemispherical dishes (Fig. 25: 17, Fig. 26: 25, 27, 28, 30, 31, Fig. 31: 82) and wheel made dishes with everted rim (Fig. 26: 23–24, Fig. 29: 69, Fig. 30: 71, Fig. 31: 80–81). Dishes with an everted rim are more important for chronological determination.

In the La Tène period, dishes with an everted rim are a common vessel form in a wider area and have been in use for a long time. They were part of the drinking sets already in LT B and appear in LT C as well as in LT D.

The earliest specimens from the Drava plain are known, for example, from grave 4 in Srednica near Ptuj (Kavur, Lubšina Tušek 2016, 49–72, Figs. 14 and 23) and from grave 2 in Orehova vas (Grahek 2015, 43, find no. 1094), which are dated to the end of the LT B phase. Both dishes have a groove on the inside of the rim, similar to the dish from structure 23, pit SE 314/315 at the site Zgornje Radvanje (Fig. 31: 81).

Dishes with an everted rim from the La Tène period are not often decorated with a groove, similar to the specimens from Slivnica 2B (Fig. 26: 23–24) and Malečnik (Fig. 29: 69, Fig. 30: 71), and one of the two vessels from structure 23 in Radvanje, which differs from those from Slivnica and Malečnik by the form of the rim (Fig. 31: 80). The best comparisons for these dishes can be found on the Drava plain, in settlements that are dated to the transition from LT C to LT D phase and to the LT D phase: e.g. Spodnja Hajdina (Tomanič-Jevremov, Guštin 1996, 276–277, Fig. 5: 2–5, Fig. 6: 4–6), Ormož (Dular, Tomanič-Jevremov 2009, 189–193, Pl. 9: 2–7, Pl. 13: 12), Slivnica I (Strmčnik Gulič 2001b, 104, 115, Fig. 9) and Poštela (Teržan 1990, 427, Pl. 51: 1). Among the Prekmurje sites, similar dishes from Kotare-Baza near Murska Sobota are known, which are dated to the transition from LT C2 to LT D phase (Kerman 2011a, 45, 65–82, finds nos. 21–26, 39, 44, 47; see also Kerman 2011b, 219, find no. 1090). The same type of dish is also found in Murska Sobota–Nova Tabla (Guštin *et al.* 2017, 542–635, finds nos. 1884, 2235–2237, 2269, 2342, 2360, 2361), Nova Tabla – Oskrbni center jug (Pavlovič 2007, 83–89, finds nos. 1, 9) and Kotare–Krogi near Murska Sobota (Kerman 2011c, 99, find no. 369).

In central Slovenia, similar dishes with an everted rim are also known from the Mokronog group (Gabrovec 1966, 181–183). A typical cemetery from the LT C2 and LT D phase is Roje pri Moravčah (Guštin 1977, 72–73, Fig. 2). Similar vessels were discovered there in graves 39 (Knez 1977, Pl. 1: 13) and 7 (Knez 1977, Pl. 3: 11). Similar vessels are also known from the area of today's Serbia, which was inhabited by the Celtic tribe of the Scordisci. For example, the Kale-Krševica site is dated to the end of the Middle La Tène and the Late La Tène. There, many bowls with horizontal grooves on the shoulders were discovered in the so-called ritual pits (Popović 2011, 158, finds nos. 2–4, 10).

Goblets

Goblets represent characteristic La Tène drinking vessels (Guštin *et al.* 2017, 104). Fragments of such vessels were discovered at Slivnica 2B and Malečnik. They are poorly preserved and can be divided into two different types.

The first type is represented by smaller spherical vessels with thickened rims. Two fragments were discovered in pit SE 505a/505 (Fig. 25: 19–20) at Slivnica 2B, and one in pit SE 268/269 at Malečnik (Fig. 30: 72). The goblets show parallels at Nova Tabla (Guštin *et al.* 2017, 103–104, Fig. 55: K1), where they were dated to the developed LT D (Guštin *et al.* 2017, 105, G1866, G2420, G2421). A completely preserved vessel is known, for example, from grave 201 at Novo mesto–Beletov vrt (Guštin 1984, fig. 25:13).

Another type of goblet is represented by a fragment of a ribbed wall of a wheel-made vessel from layer SE 123 in Malečnik (Fig. 29: 65). Vessels with similarly ribbed walls are typical for the Mokronog group in the Dolenjska region, where they appear both as a cup and a goblet. Cups are known, for example, from graves 35 and 40 in Roje pri Moravčah, which are dated to the phase Mokronog 4 according to M. Guštin (Knez 1977, Pl. 3: 12, Pl. 5: 7; Guštin 1977, 72–73, Fig. 2), and a goblet with a ribbed wall from grave 151 in Beletov vrt, which is dated to the phase Mokronog 6 (Guštin 1977, 73, Pl. 17: 6). The researchers found that goblets occur in the early Late La Tène period (LT C2) in the Dolenjska region and, the variant with the ribbed walls, remain in use until the end of the Late La Tène period (LT D), and even until the early Roman Era (Guštin 1977, 72–74; Guštin 1984, 337–338, Fig. 26: 3). Graves 98, 134, 168 and 180 at Beletov vrt in Novo mesto point to the latter (Knez 1992, Pl. 35: 8, Pl. 48: 6, Pl. 58: 6, Pl. 65: 2).

Bottle-like vessels

A fragment of an upper part of a wheel-made vessel with a thickened rim and a diameter of about 9 cm, discovered in pit SE 503a/503 at Slivnica 2B (Fig. 25: 21) and a fragment of a similarly formed rim from structure 23 in Zgornje Radvanje (Fig. 31: 83) were probably part of bottle-like vessels.

Vessels with such narrow necks are presented both at the end of the early La Tène period, as indicated by vessels from grave 4 in Srednica (Kavur, Lubšina Tušek 2016, 52, Fig. 14) and grave 2 in Orehova vas (Grahek 2015, 289, G1093), as well as at the transition from Middle to Late La Tène periods, as indicated by a vessel from grave 123 at Nova tabla (Guštin *et al.* 2017, 101, 102, 678–679, find no. 2552). These vessels differ from each other in their body form, but only top parts of vessels are preserved as fragments from Zgornje Radvanje and Slivnica 2B. According to other finds from pit SE 503a/503, however, it seems that the vessel from Slivnica is of a later type¹⁰. In contrast, a vessel from structure 23 at Zgornje

¹⁰ Besides the one from grave 123 in Nova tabla, such vessels are also known from, for example, grave 49 in Moravče (Knez 1977, 117, Pl. 6:49) and grave 169 from Beletov vrt in Novo mesto (Božič 1987, 878–879, Fig. 46: 23).

Radvanje, could represent an earlier variation with regard to the accompanying pottery material (especially Fig. 32: 81).

In summary, La Tène settlements from Slivnica 2B and Malečnik date mainly to the late Middle and Late La Tène period. According to the presence of fragments of graphite pots in pit SE 518/519/529 from Spodnje Hoče, it probably belongs to the same period. However, the presented part of the La Tène settlement from Zgornje Radvanje probably dates earlier, namely from the Middle La Tène period (LT C1; perhaps partly to LT B2), since no later types of La Tène pottery, such as graphite pots, hand-made pots with a wide groove or goblets could be identified within the Late Iron Age pottery assemblage.

CONCLUSION

Until the construction of the A1 motorway, section Pesnica–Slivnica, the western ring road of the city of Maribor and the Hofer shopping centre in Spodnje Hoče, only three confirmed Early Iron Age settlements in the Maribor area were published, all of them situated on hills and attributed to the Styrian-Pannonian group of the Eastern Hallstatt Culture (Teržan 1990; Teržan 2019): Poštela, Čreta and Meljski hrib. The newly discovered sites presented in this paper (Slivnica 2B, Malečnik, Spodnje Hoče) together with the previously published settlement at Hotinja vas (Gerbec 2015, 2019) and tumuli at Rogoza (Črešnar 2010) show that the plain was also settled as previously expected. Early Hallstatt lowland settlements can be understood in the sense of the rural hinterland of these hilltop settlements and partly perhaps also in connection with managing important strategic points, as can be suggested for the sites Malečnik and Pobrežje. Indeed, both sites are separated only by the river Drava and were contemporary at different time periods, so various researchers suggested a possible prehistoric crossing across the river Drava at this location (Kavur 2001, 360–361; Teržan, Črešnar 2012, 15).

In this context, it is important that our study shows that the sites were contemporary in five different horizons: Middle Bronze Age, Late Bronze Age, Early Iron Age, Late Iron Age, and Early Medieval period. In addition, the plain was used for different purposes at both riverbank sites, as settlement remains were uncovered at Malečnik, while in Pobrežje, single graves from the Middle Bronze Age, Early Iron Age and Late Iron Age and a large cemetery dating to the Late Bronze Age, as well as a contemporary settlement were found. The hillfort located above Malečnik, Meljski hrib, which was also contemporary with the settlement in Malečnik at various periods, probably controlled this river crossing and the possible land route to the Pesnica valley, a natural transition to the Graz-Leibniz plain as well as the waterway along the river Drava and the land route running along it. The settlements at Meljski hrib and in Malečnik were probably connected by a hollow way during the Iron Age, which was discovered at the construction of the motorway on the slope of Meljski hrib above Malečnik.

The lowland settlement traces discovered in Slivnica 2B and Spodnje Hoče are located near hilltop settlements

Čreta and Poštela, which, due to their size and location, probably had the central role in the established Early Iron Age settlement system. Hilltop settlements were abandoned in the middle of the 6th or at the latest at the end of the 6th century BC, respectively in Ha C2 or D1. A similar situation can be proposed on the basis of the surface finds for the Early Iron Age hilltop settlement Meljski hrib on the other side of the river Drava and for the newly discovered lowland settlements, based on the finds and the available ¹⁴C AMS data. The following two centuries, between Ha C2/D1 and LT B2, are recorded without any settlement activity. The reasons for the lack of settlement between Ha C2/D1 and LT B2 are not yet known, but it was suggested that it could be related to the Scythian invasion or the black plague (Teržan 1998, 526; Teržan *et al.* 2012).

The plain around Maribor was later populated again, this time more densely, in the La Tène period, at least from the LT B2 period onwards, as graves from Orehova vas and a grave from Pobrežje show. The settlement in Zgornje Radvanje dates to the Middle La Tène period (LT C1 phase) and one house possibly to the LT B2 phase, as the results of ¹⁴C dating show. All other lowland settlements (Malečnik, Slivnica 2B, and Spodnje Hoče) are mainly from the end of the Middle and the Late La Tène period, including the excavated part of the settlement in Malečnik, where only Obj. 5 probably falls into to Lt C. The small numbers of graves and settlements with individual houses indicate that these are small farmsteads rather than larger Celtic settlements (oppida). Larger central settlements have not yet been discovered, although it cannot be excluded that the hilltop settlement Meljski hrib, known only by surface finds, was inhabited for over a longer period of time.

Resettling of the hilltop settlement Poštela at the end of the 2nd and in the middle of the 1st century BC may be related to the turbulent times known from Roman written sources (Pahič 1966, 296; Teržan, Črešnar 2012, 18). More precisely, with the invasion of Cimbri and Teutons near Norea around 113 BC, who defeated the Roman army somewhere in Carinthia and possibly with the invasion of the Dacian ruler Burebista, who, in the middle of the 1st century BC plundered the land of the Boii, a Celtic tribe in Pannonia.

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SITE CATALOGUE

In the Site catalog, we present settlement contexts from individual sites in which the finds were discovered, which indicate the Early Iron Age settlement of the area. So far available ^{14}C AMS dates are also provided. The sites are listed in the same order as in the Chapter 2 of this article.

Slivnica 2B

Occasional use of the space in the first half of the 1st millennium BC is indicated by three small pits discovered in the northern part of the archaeological site (SE 1000/1001; SE 800/801; SE 700/701) as well as a significant amount of pottery fragments discovered in the upper two layers SE 2 and SE 1 (e.g., Fig. 24: 5–12). One vessel lay just above the geological base, SE 003 (Fig. 24: 4), and it may perhaps be related to layer SE 2.

Of particular interest is the oval-shaped pit SE 800/801 (0.61 × 0.51 m, 0.2 m deep), which contained pieces of charcoal and burnt soil, and the lower part of a shallow vessel, probably a baking lid (Fig. 24: 1; cf. Teržan 1990, 26–36, Pl. 35: 9, 11, 12, 15, 16; Gerbec 2015, finds nos. 54–56, 104, 119, 120, 190, 281–289, 346, 369). The pit might have served as a short-lived hearth in which food was being prepared (Fig. 14). ^{14}C AMS dating of a charcoal sample revealed the age of the pit: LTL18294A, 2552±45, -23.7 ± 0.2, 801–566 BC, 809–540 BC (Fig. 14).

The remaining pits also contained pieces of burnt clay and pottery fragments, but less. Pottery fragments found in pit SE 1000/1001 belong to various storage vessels, and the fragments found in pit SE 700/701 to fragmented pottery loom weights (Fig. 24: 2) and shards of the body of a vessel with a conical neck (Fig. 24: 3).¹¹

Most of the pottery fragments the Late Iron Age at Slivnica IIB come from shallow pits of medium size SE 505a/505 (Fig. 25: 13–21), SE 503a/503 (Fig. 26: 23–38), SE 504a/504, SE 502a/502 in the central part of the site (Fig. 3). Some pieces of vessels were also discovered within a burnt loam concentration, SE 601 (Fig. 25: 22), the rest came from the upper layers. Pits from the Late Iron Age may present waist pits and indicate that the Late Iron Age houses must be located near the excavated area.

Of particularly interest is the stratigraphic unit SE 503a/503 (Fig. 15). It was originally defined as a cluster of the Later Iron Age pottery fragments, but during the excavation it turned out to be a 2.5 × 2 m large and 0.22 m deep pit, filled with dark brown soil containing a lot of gravel. Charcoal, 101 pieces of burnt clay and 199 pottery fragments were found in the pit. Most of them show different parts of vessels (Fig. 26: 23–36) and among them were also two spindle whorls (Fig. 26: 37–38).

A charcoal sample from the stratigraphic unit SE 503a was dated using the ^{14}C AMS method: LTL18295A, 2553 ± 45, -20.8 ± 0.4, 801–567 BC (68.2% probability), 809–540 BC (95.4% probability) (Fig. 16). According to the radiocarbon dating results, the sample was probably infiltrated into the pit and is related to the Early Iron Age settlement.

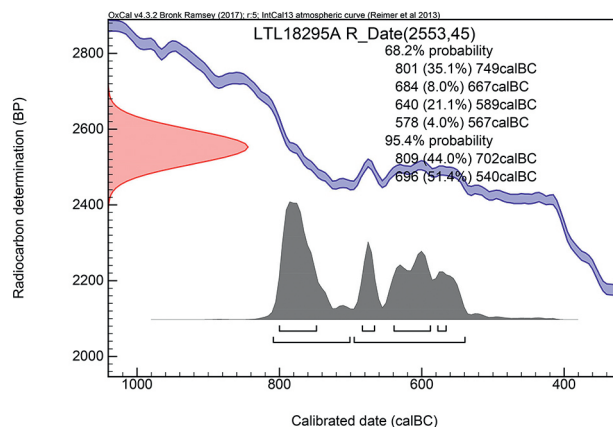


Figure 16 Slivnica 2B. Radiocarbon date of the charcoal sample found in pit SE 503a/503.

Malečnik

The pottery fragments from the first half of the first millennium BC were discovered in various pits, in the postholes of three different houses (Fig. 7: Obj. 7, 8 and 9; Fig. 27–28) and in the upper mixed layers: SE 123 (Fig. 29: 60–63), SE 001 (Fig. 29: 64) and SE 2018 (Fig. 27: 47–48). It is important to mention that the majority of the finds from the upper layers come from the areas where pits and buildings from this period were identified: from the area around pits and ditches SE 199, SE 193, SE 129/130 and SE 1020/1021, and the houses 9, 7 and 8. In addition, the younger pits found in the area of the river terrace often damaged the earlier ones due to less intensive sedimentation in the past and consequently shallower stratigraphy.

One of the most interesting archaeological remains from the first half of the first millennium BC is ditch SE 129/130, which contained 18 pottery fragments (Fig. 27: 42–45), 8 pieces of burnt clay and 5 bronze fragments. Because of the bronze fragments, this is perhaps the original location of the bronze pendant that was found in pit SE 135/136, which was dug in pit SE 129/130 in the early medieval period (Fig. 27: 41).¹² In the immediate vicinity of the ditch there was a larger pit SE 182/183, which is also dated to the first half of the first millennium BC. The pit contained 29 prehistoric pottery fragments, 12 pieces of burnt clay, one piece of bronze fragment and one piece of an iron object.

On the south-eastern side, pit SE 192/183 was connected to another interesting structure from the first half of the first millennium BC, which can be interpreted as the remains

¹² These are only bronze pieces that can be associated with the prehistoric settlement at this site.

¹¹ The thickening at the upper part of the shoulders of this vessel could represent a transition to the handle, which would mean that the fragment is a part of an amphora (cf. Dular 2013, 36–37, Fig. 10: A 2; Črešnar 2010, Pl. 18: 9). However, the poor preservation of the vessel does not allow a more precise analysis.



Figure 17. Malečnik. Early Iron Age furnace with a combustion channel (SE 192, SE 199).



Figure 19. Malečnik, SE 268/269. Pit from the Late Iron Age (Obj. 9).

of a furnace with a combustion channel (Fig. 7: SE 199 and SE 193; Fig. 17). The layer found at the bottom of this structure was of light olive green in colour and contained charcoal fragments and pieces of burnt clay (SE 1004). In this layer a stone structure was discovered in the pit SE 199 (SE 1012). Above SE 1004, there was another layer of olive green colour (SE 192) in ditch SE 193 and in the pit SE 199 in the same stratigraphic position a layer of charcoal (SE 1013). In the charcoal layer, a total of five pottery fragments and 28 pieces of burnt clay were found (SE 1013); layer SE 192 contained 62 pieces of burnt clay, a grinding stone (Fig. 28: 57) and 59 pottery fragments (including: Fig. 28: 56, 58, 59).

After use, pit SE 199 and ditch SE 193 were backfilled with gravel layer SE 143 (Fig. 7: 143). This layer contained 104 pieces of burnt clay, and a total of 27 pottery fragments (Fig. 28: 49–55), some of which probably date from the Hallstatt period (Fig. 28: 52), others are undoubtedly from the Late Iron Age (Fig. 28: 55). We therefore assume that the top of the ditch and the pits were filled with gravel during the Late Iron Age, perhaps to flatten the terrain or to stop waterlogging in the depression.

A charcoal sample was dated from layer SE 192 using the ^{14}C AMS method: LTL18299A, 2609 ± 45 , -21.2 ± 0.5 , 824–770 BC (68.2% probability), 894–555 BC (95.4% probability) (Fig. 18).

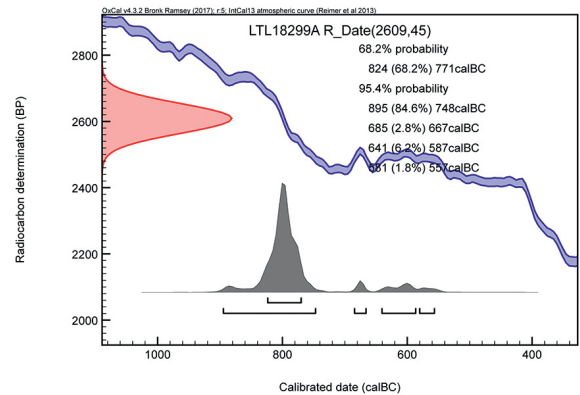


Figure 18. Malečnik. Radiocarbon date of the charcoal sample found in combustion channel of the Early Iron Age furnace (SE 192).

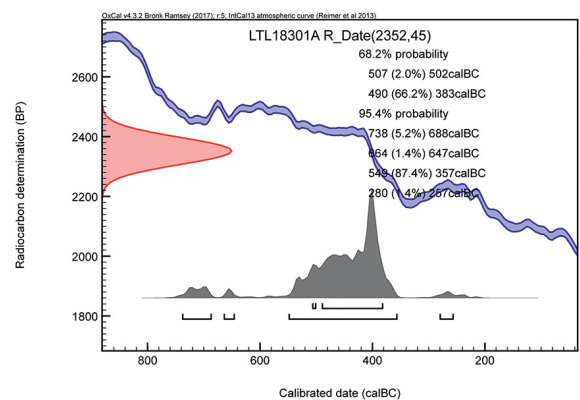


Figure 20. Malečnik. Radiocarbon date of the charcoal sample found in posthole SE 294/295 (Obj. 9).

In trenches 1–6 and trench 2N, the archaeological team of the ZVKDS, OE Maribor, discovered a “cultural layer” or a layer of buried soil from the Late Iron Age (SE 02–005) directly below the early medieval layer (Fig. 6; SE 02–004). Numerous Late Iron Age pottery fragments (Fig. 29: 67–70) and two shards from the Roman period can be attributed to this layer. Below the layer of buried soil from the Late Iron Age, postholes and medium-sized pits were discovered. Five postholes excavated in trench 2N represent the ground plan of a partially explored rectangular house (Fig. 7: Obj. 3). To the south, four postholes were found, possibly representing traces of a fence.

In the area of the river terrace most of the finds come from pits, some were discovered in the upper layers (e.g. SE 123–Fig. 29: 65). Two Late Iron Age rectangular houses were discovered (Fig. 7: Obj. 4 and Obj. 5). Obj. 4 – perhaps a canopy – was oriented in northeast-southwest direction and measured 5.3×3.3 m. Less than 7 m south of it Obj. 5 was discovered, measuring 4.1×2.1 m and oriented in a northwest-southeast direction. This building contained a rectangular, 2.75×1.3 m large pit (SE 268/269; Fig. 19), in which four postholes and one of the largest concentrations of La Tène pottery at the site were discovered (including: Fig. 30: 71–73). A charcoal sample from one of the postholes (SE 294/295) was ^{14}C AMS dated: LTL18301A, 2352 ± 45 , -16.2

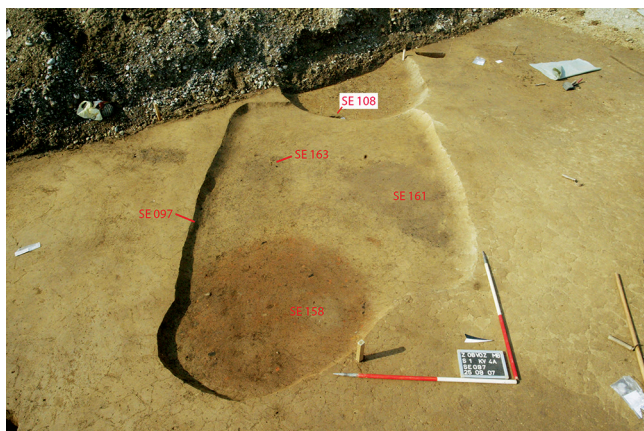


Figure 21. Zgornje Radvanje. Early Iron Age structure, Obj. 25, during the excavation. Stratigraphic units are marked.



Figure 22. Zgornje Radvanje. Early Iron Age structure, Obj. 23, during the excavation.

± 0.3 , 506–382 BC (68.2% probability), 735–256 BC (95, 4% probability) (Fig. 20).

Several other pits in the area of the river terrace also belong to the Late Iron Age, some of which were located in the southernmost part of the archaeological site. This area is located about 71 m south-east of the south-eastern corner of the La Tène house in trench 2N (Obj. 3), which represents the minimal extension of the Late Iron Age settlement.

Spodnje Hoče

A rectangular pit in which a hearth (SE 529) and a brown layer (SE 518) with rare pottery fragments were discovered, among them some fragments of walls of graphite pots (SE 518/519/529), represents traces of a Late Iron Age settlement (Fig. 9). The pit had rounded edges, it was 3.64×3.44 m large, 0.4 m deep; it was dug into a gravelly sand layer that contained no finds and was cut by a modern ditch (Predan, Kovač 2006, 9–10, Fig. 6). Due to the shape of the pit and its size, it can be interpreted as the remains of a house with sunken floor (pit-house).

The second pit (SE 414/415) was located about 55 m east of the first (Fig. 9; Predan, Kovač 2006, 10–11, Fig. 8). It had an irregular shape, was 2×1.56 m large and 0.15 m deep, filled

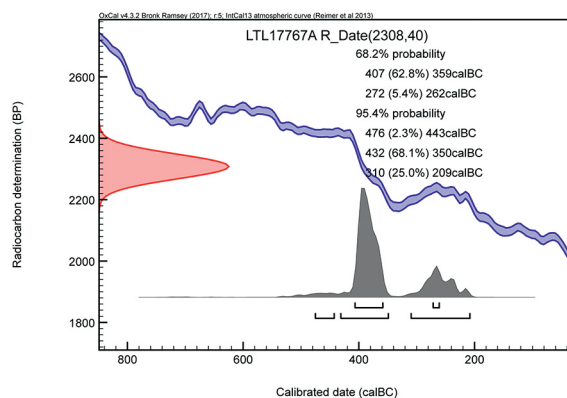


Figure 23. Zgornje Radvanje. Radiocarbon date of the charcoal sample found in pit SE 096/097 (Obj. 25).

with a dark brown sand layer containing stones and pottery fragments. Six typologically characteristic pottery fragments are presented from the pit, which can be dated approximately to the first half of the first millennium BC (Fig. 30: 74–79).

Zgornje Radvanje

Four houses with sunken floor – e.g. pit-houses or semi-pit houses (structures Obj. 23, 24, 25 and 39) and a heart SE 380/381 (Fig. 11) can be dated to the Late Iron Age. The houses were fairly standardized. The central part of the living unit consists of a medium-sized rectangular pit (size approx. 4×2.5 m – Obj. 24, 25 and 39) or square pit (size 4.2×3.9 m – Obj. 23) with rounded edges, represents floor of the house, sunken into the layer of the clayey loam geological base. The pits were between 0.32 and 0.36 m deep, only pit SE 96/97 was shallower (0.12 m). In this pit, a fireplace was discovered (SE 158/159).

The houses differ in the number of postholes and their position within the rectangular or square pit. Thus, only one posthole (SE 107/108) can be assigned to structure Obj. 25 (Fig. 21), which is also objectified by a shallower pit and a hearth. Most of the postholes were discovered inside pit SE 1025/1026 (structure Obj. 39), namely 14, Obj. 23 (pit SE 314/315) contained 11 postholes (Fig. 22) and Obj. 24 (pit SE 540/541) nine. Traces of burnt clay and charcoal fragments scattered in the fillings of these pits suggest that the walls of the houses were covered with clay plaster, but no major concentrations of burnt clay were found. The roofs of the houses seems to be two-sided, at least on structures Obj. 23 and 39, with the ridge running parallel to the longer side of the pits. The latter can be easily recognized by the arrangement of postholes, as two pits that served for the posts supporting the ridge of the roof can clearly be seen (Fig. 11).

We use the pottery fragments found in the pit fillings (Fig. 31) as a basis for the dating of the Late Iron Age settlement, as well as the result of radiocarbon dating of the charcoal sample found in pit SE 096/097 (Obj. 25): LTL17767A, 2308 ± 40 , -24.8 ± 0.5 , 407–261 BC (68.2% probability), 474–208 BC (95.4% probability) (Fig. 23).

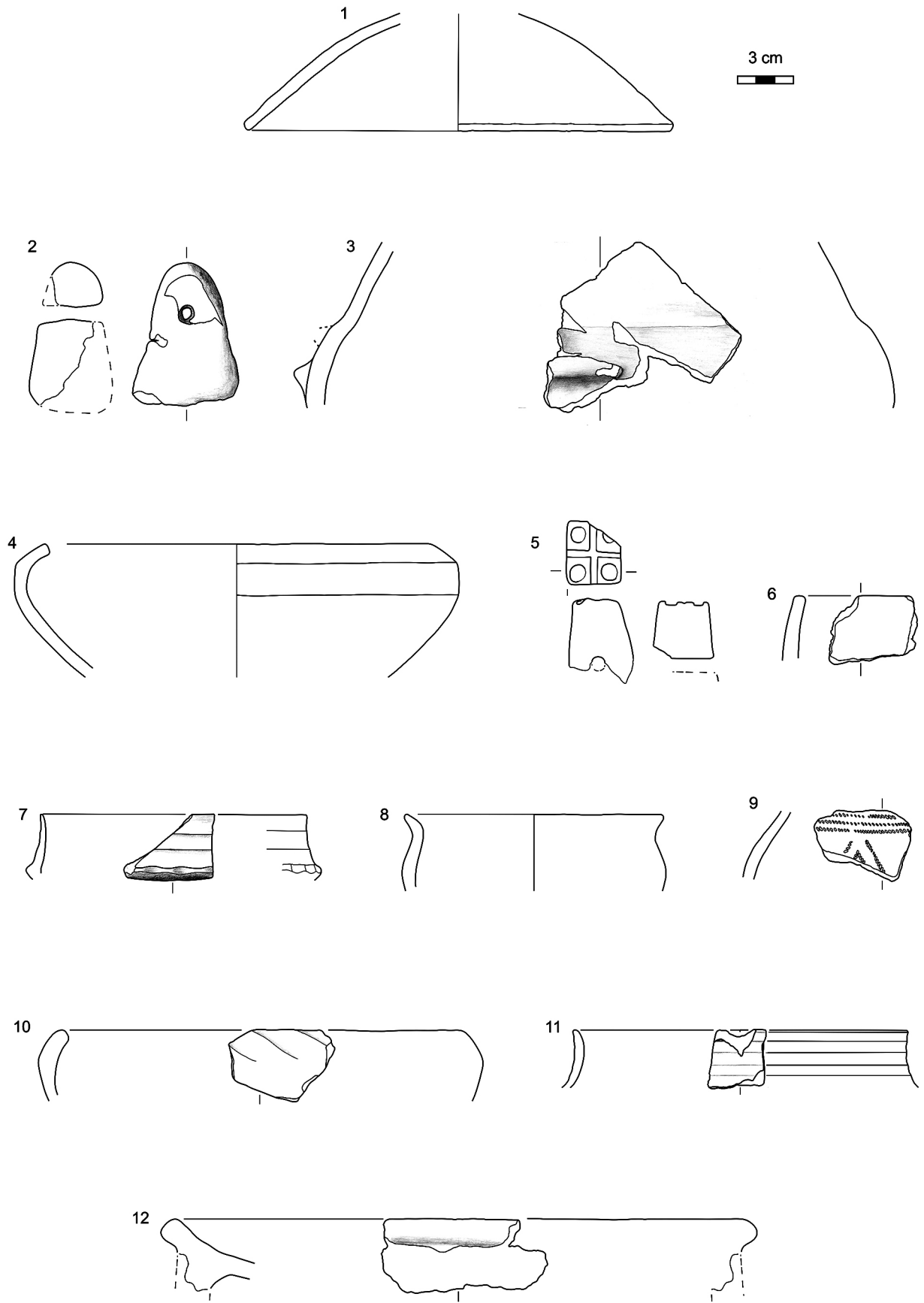


Figure 24. Slivnica 2B, finds from the Early Iron Age. 1 pit SE 800/801, 2-3 pit SE 700/701, 4 layer SE 3, 5-7 layer SE 2, 8-11 layer SE 1, 12 layer SE 1 or SE 2. All pottery. Scale 1:3.

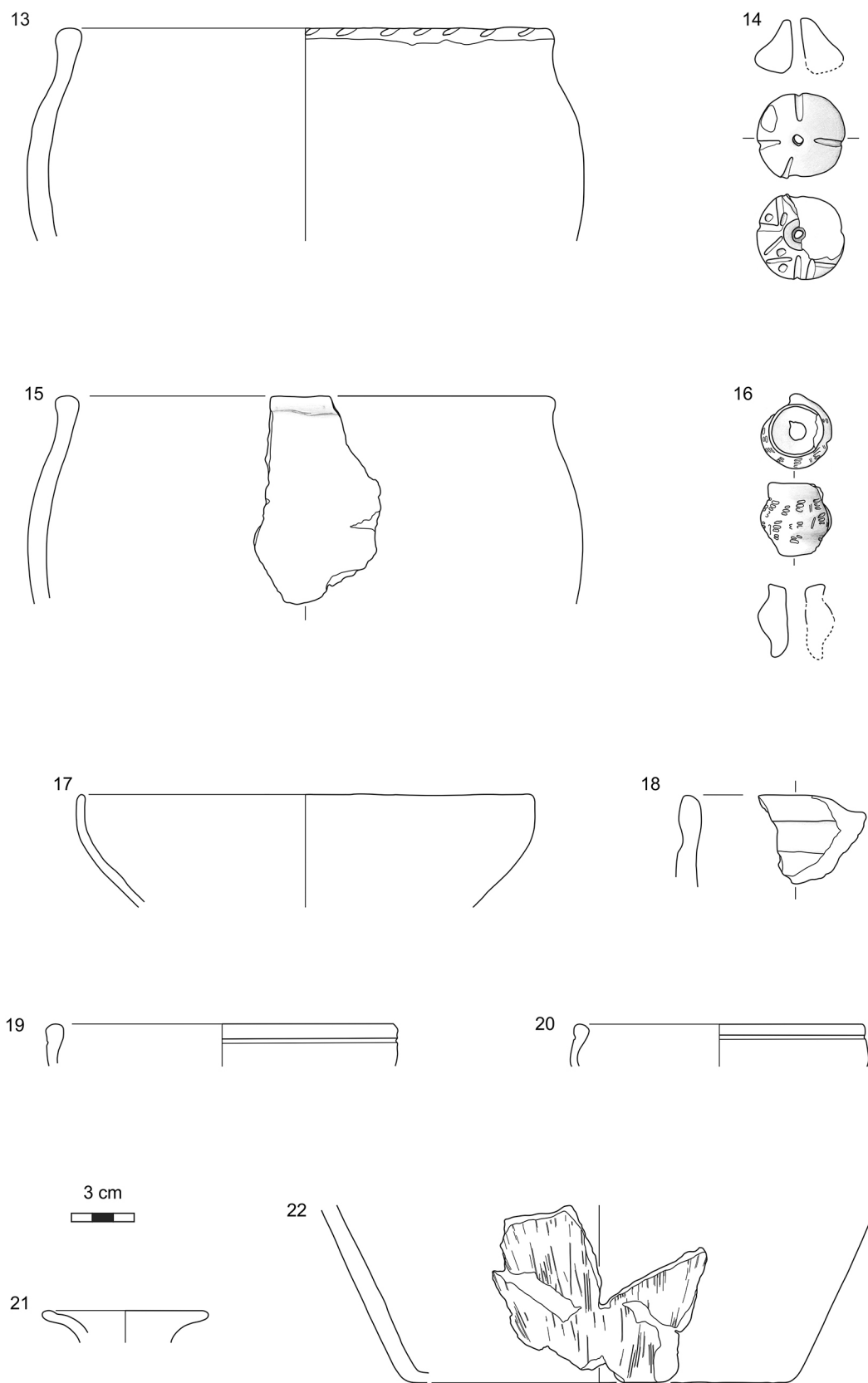


Figure 25. Slivnica 2B, finds from the Late Iron Age. 13–21 pit SE 505a/505, 22 pit SE 601. All pottery. Scale 1:3.

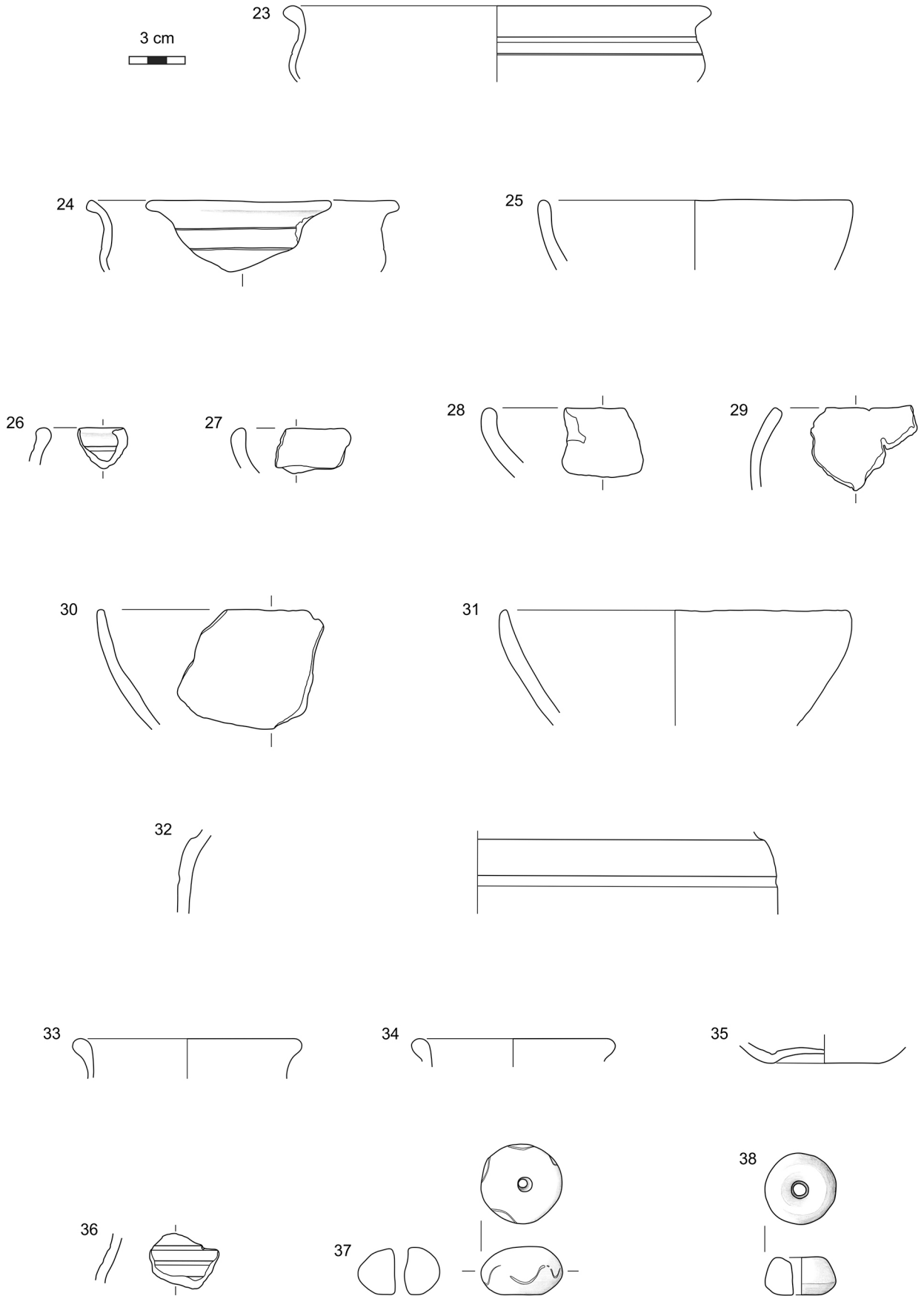


Figure 26. Slivnica 2B, finds from the Late Iron Age. 23–38 pit SE 503a/503. All pottery. Scale 1:3.

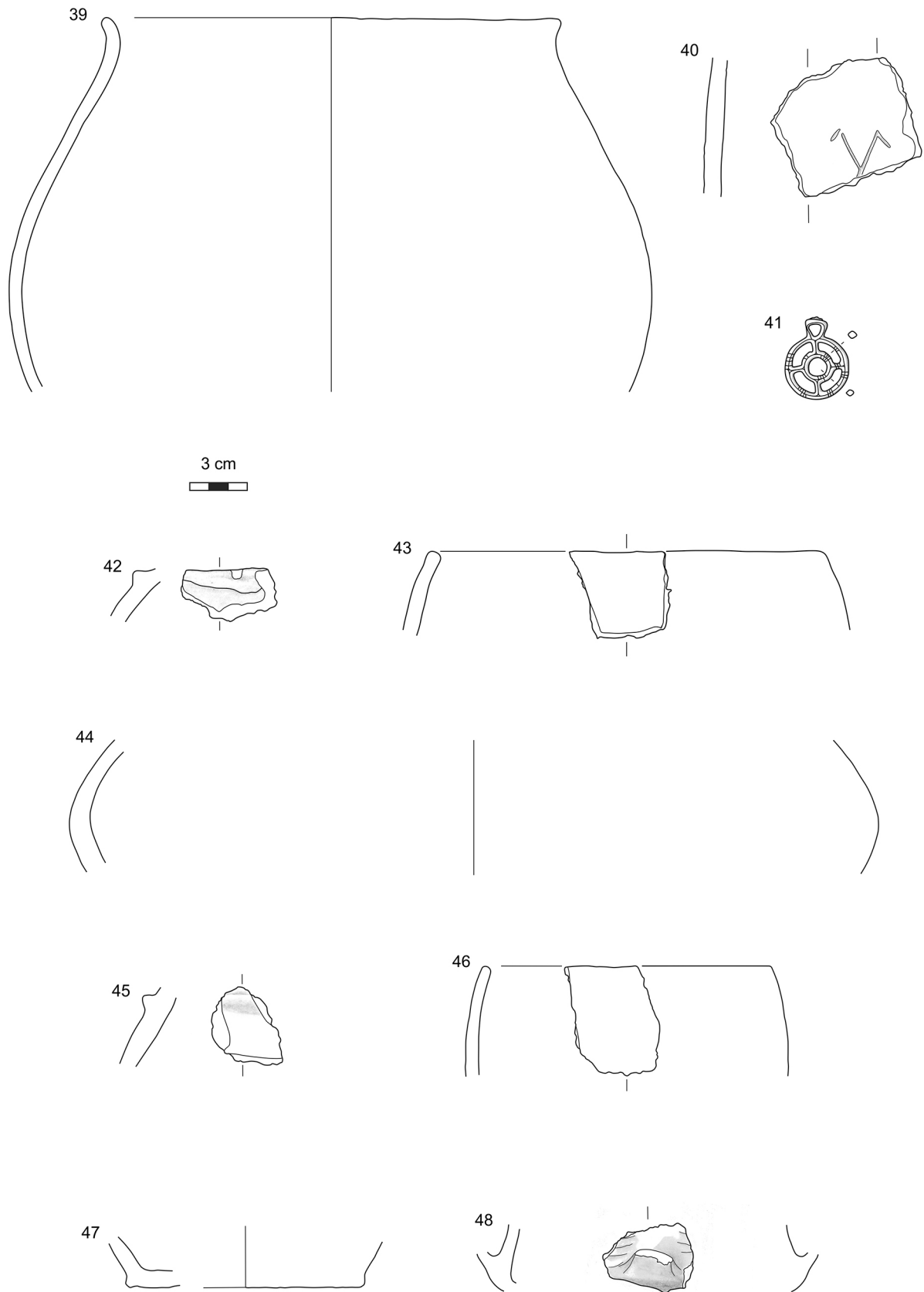


Figure 27. Malečnik, finds from the Late Bronze Age and Early Iron Age. 39 pit S1, 40 pit SE 2046/2047 (Obj. 9), 41 pit SE 135/136 (infiltrated), 42–45 ditch SE 129/130, 46 pit SE 1020/1021, 47–48 layer SE 2018. 41 metal (bronze?), others pottery. 41 scale 1:2, others scale 1:3.

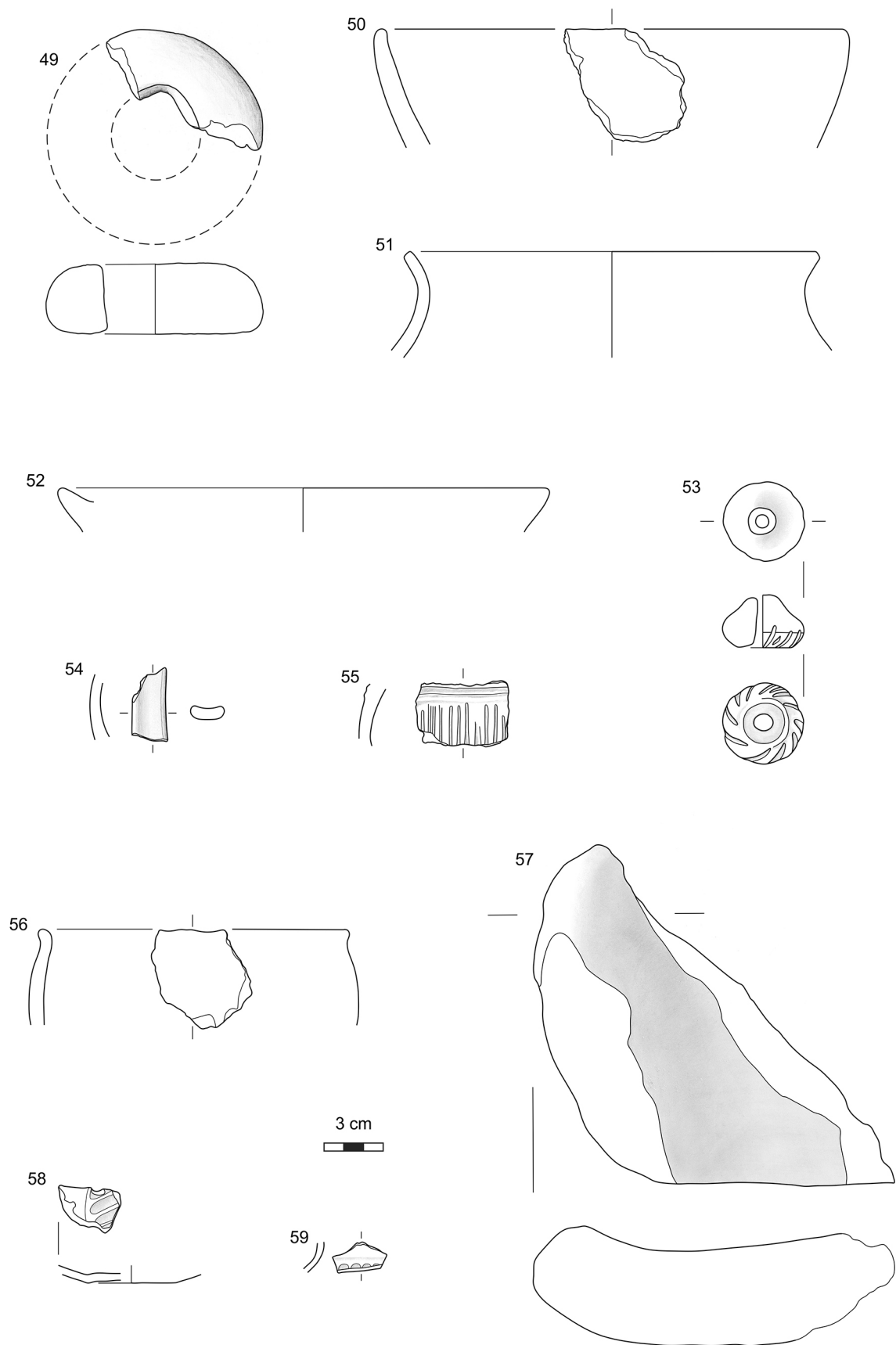


Figure 28. Malečnik, finds from the Early- and Late- Iron Age. 49–55 layer above ditch 1 (SE 143), 56–59 ditch 1 (SE 192). 57 stone, others pottery. Scale 1:3.

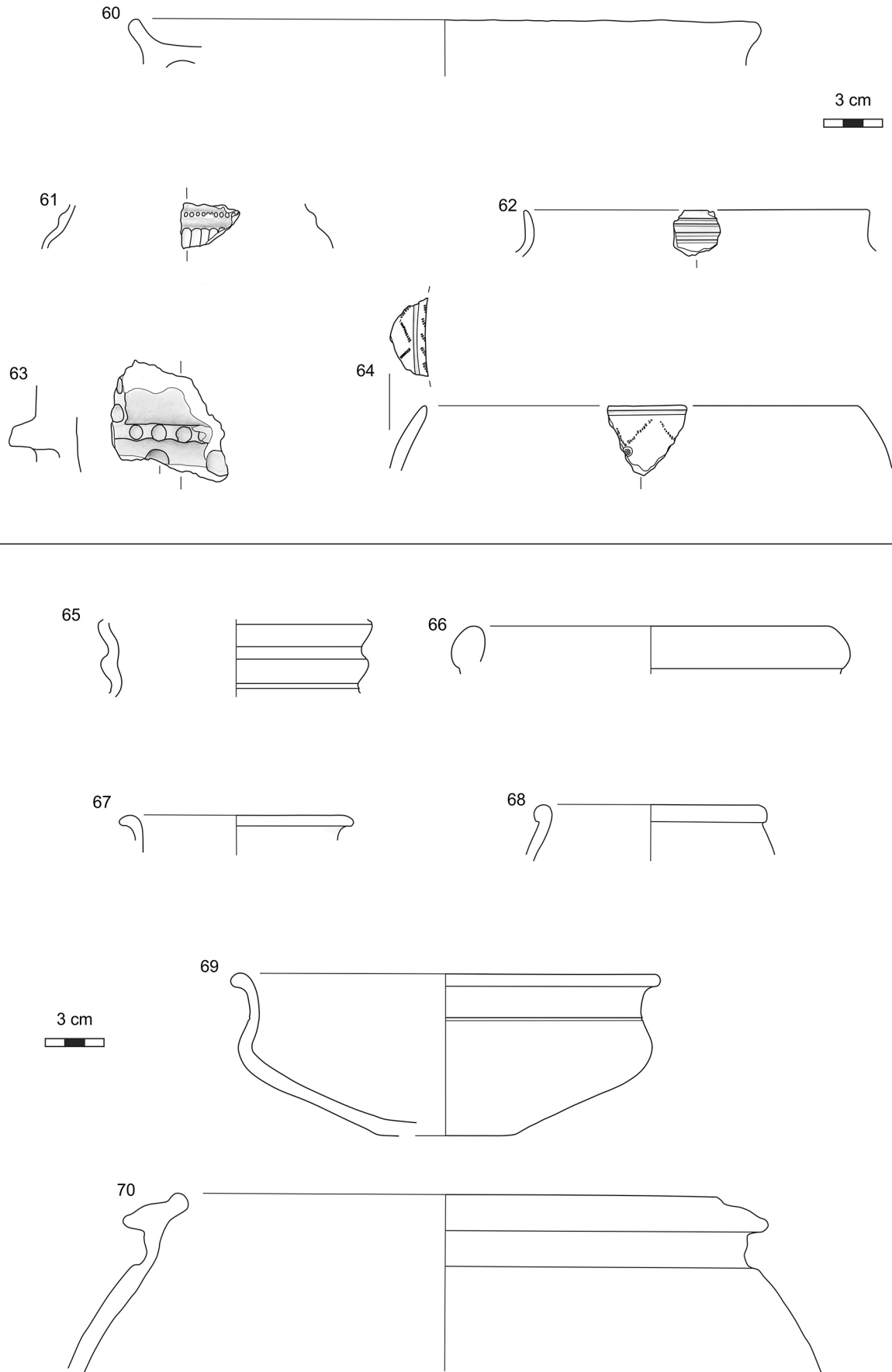


Figure 29. Malečnik, finds from the Early- and Late- Iron Age. 60–63 layer SE 123, 64 layer SE 001, 65 layer SE 123, 66 hollow way (excavations 2006), 67–70 layer SE 02–005 (excavations 2002). All pottery. Scale 1:3.

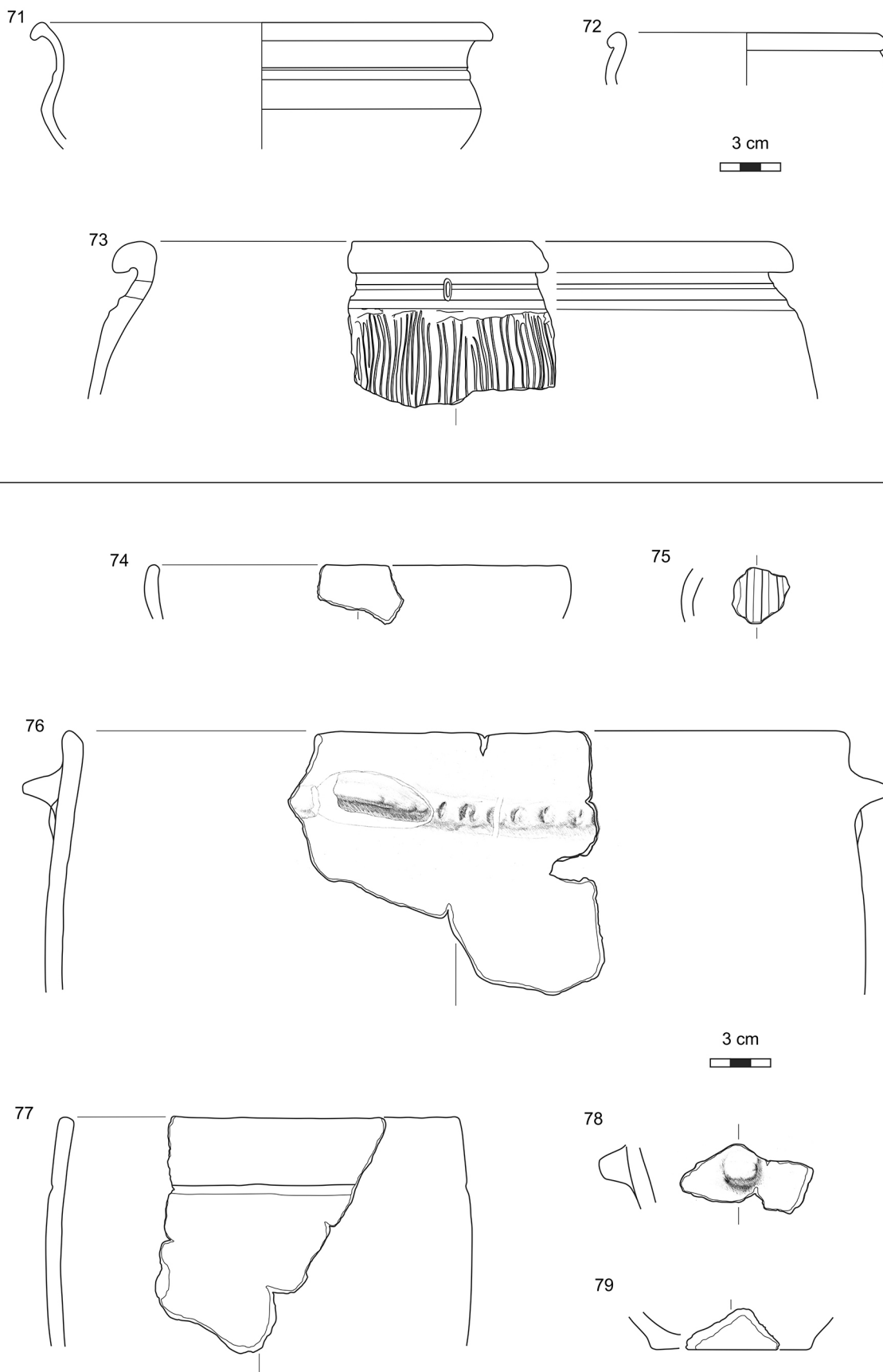


Figure 30. 71–73 Malečnik, finds from the Late Iron Age, Ob. 5 (pit SE 268/269). 74–79 Spodnje Hoče, pit SE 414/415. All pottery. Scale 1:3.

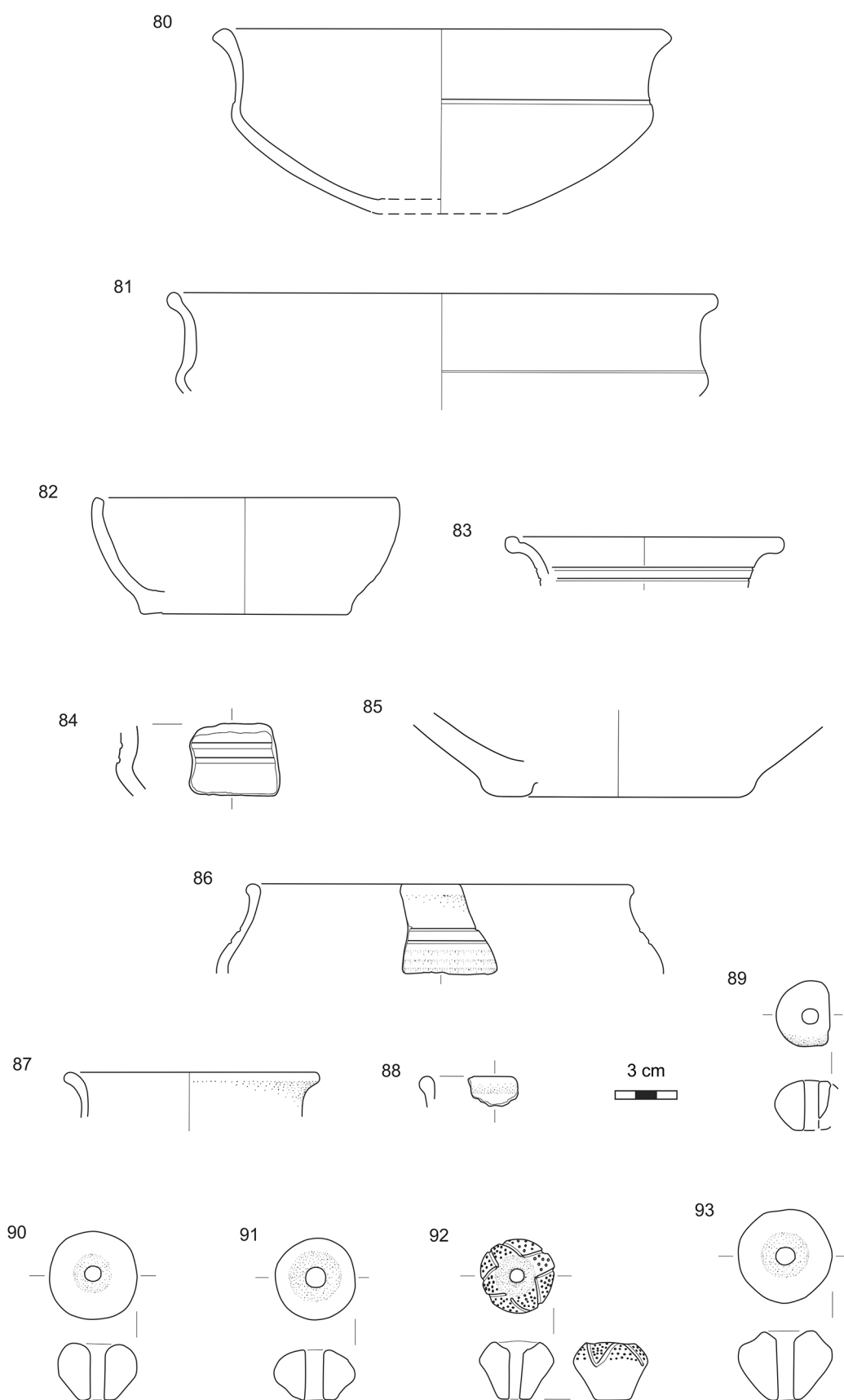


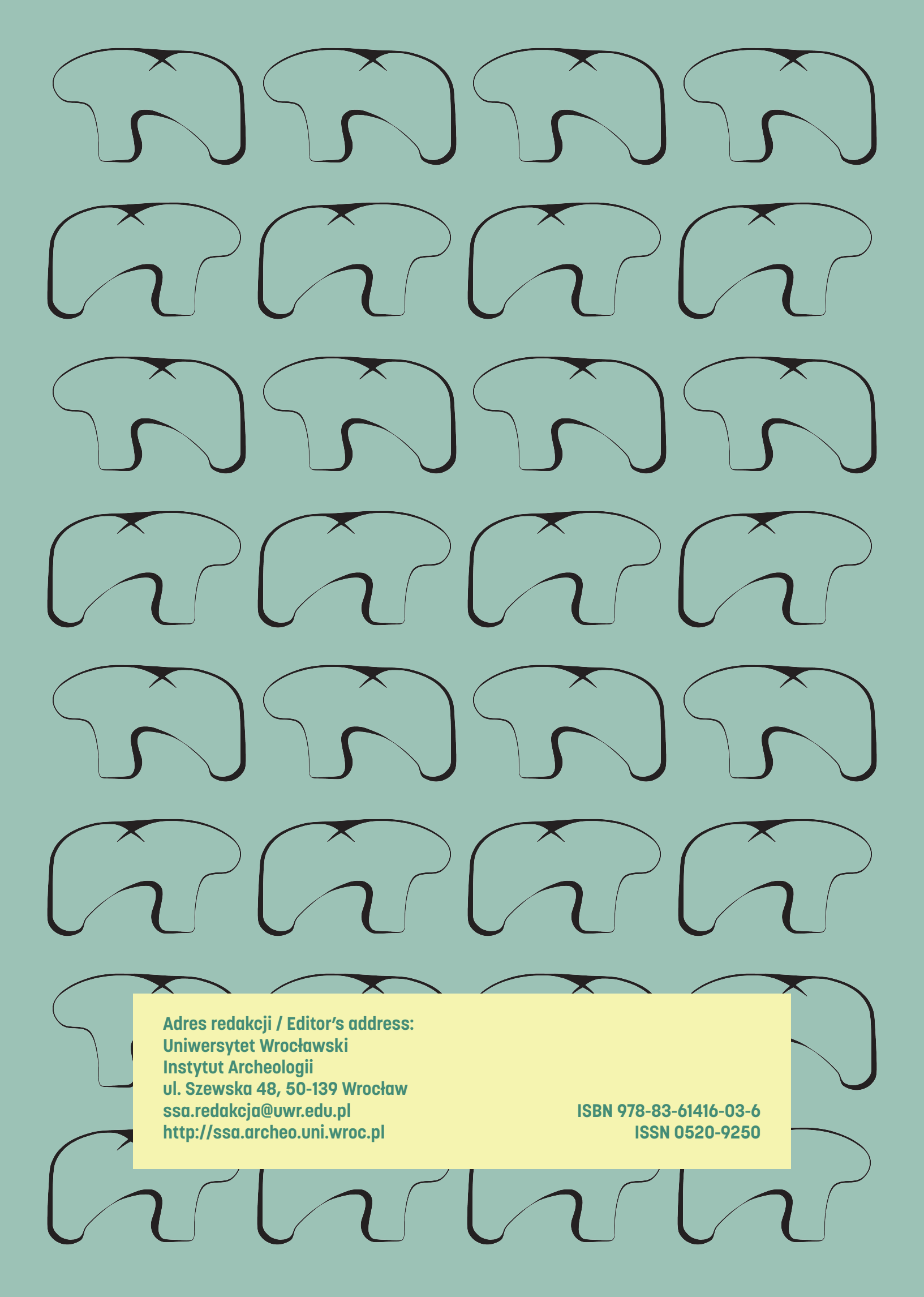
Figure 31. Zgornje Radvanje, finds from the Late Iron Age. 80–85 Obj. 23 (SE 314/315), 86 Obj. 24 (SE 540/541), 87 hearth SE 380/381, 88 Obj. 25 (SE 158/159), 89 layer SE 370 (infiltrated), 90–93 Obj. 39 (SE 1025/1026). All pottery. Scale 1:3.

REFERENCES

- Arh M. 2012. Neo/Eneolitska naselbina Zgornje Radvanje – Habakuk 2, Unpublished Undergraduate thesis. Ljubljana: Oddelek za arheologijo, Filozofska fakulteta Univerze v Ljubljani.
- Bekić L. 2006. Zaščitna arheologija u okolici Varaždina. Arheološka istraživanja na autocesti Zagreb – Goričan i njezinim prilaznim cestama/Rescue archaeology in the Varaždin environs. Archaeological research on the Zagreb – Goričan Highway and its access roads, Zagreb: Ministarstvo kulture RH.
- Bobnjarić, V. 1989. O pojavi pekve u koprivničkom kraju, Muzejski vjesnik 12, 74–76.
- Božič, D. 1987. Keltska kultura u Jugoslaviji. Zapadna grupa, (in:) A. Bemac (ed.), Praistorija jugoslavenskih zemalja 5: Željezna doba. Sarajevo: Svjetlost, 855–897.
- Božič, D. 2008. Poznolatsensko – rimsko grobišče v Novem mestu. Ljubljanska cesta in Okrajno glavarstvo. Študije o fibulah in o relativni kronologiji pozne latenske dobe/Late La Tène – Roman cemetery in Novo mesto. Ljubljanska cesta and Okrajno glavarstvo. Studies on fibulae and on the relative chronology of the Late La Tène period, Katalogi in monografije 39. Ljubljana: Narodni muzej Slovenije.
- Ciglić R., Perko D. 2012. Slovenia in geographical typifications and regionalisations of Europe, Geografski vestnik 84/1, 23–37.
- Ciglencečki S., Strmčnik Gulič M. 2002. Sledovi zgodnje slovanske poselitve južno od Maribora, (in:) M. Guštin (ed.), Zgodnji Slovani. Ljubljana: Narodni muzej Slovenije, 67–75.
- Črešnar M. 2006. Novi žarni grobovi iz Ruš in pogrebni običaji v ruški žarnogrobiščni skupini (Die neuen Urnengriber aus Ruše und das Bestattungsritual in der Ruše-Gruppe der Urnenfelderkultur), Arheološki vestnik 57, 97–162.
- Črešnar M. 2010. New research on the Urnfield period of Eastern Slovenia. A case study of Rogoza near Maribor (Nova spoznanja o pozni bronasti dobi vzhodne Slovenije na primeru naselja Rogoza pri Mariboru), Arheološki vestnik 61, 7–119.
- Črešnar M., Vinazza M., Mušič B. 2019. Nove raziskave višinskih naselij na vzhodnih obronkih Pohorja in v severnih Slovenskih goricah (New research of hilltop settlements on the eastern fringes of Pohorje and the northern Slovenske gorice (NE Slovenia)), Arheološki vestnik 70, 437–472.
- Črešnar M., Bonsall C., Thomas J.-L. 2014. Pobrežje pri Mariboru, (in:) B. Teržan, M. Črešnar (eds), Absolutno datiranje bronaste in železne dobe na Slovenskem/Absolute dating of the Bronze and Iron Ages in Slovenia, Katalogi in monografije 40. Ljubljana: Narodni muzej, 215–224.
- De Angelis S., Gori M. 2017. The wheel and the sun: 'Glocal' symbolologies of wheel-pendants across Europe, (in:) S. Bergerbrant, A. Wessman (eds), New Perspectives on the Bronze Age, Proceedings of the 13th Nordic Bronze Age Symposium held in Gothenburg 9th to 13th June 2015, 2017. Oxford: Archaeopress, 355–366.
- Drnić I., Miletić Čakširan I. 2014. Naselje iz mlađega železnog doba na lijevoj obali Kupe u Sisku: Strabonova »Σισκία«?, Vjesnik Arheološkog muzeja u Zagrebu 47, 147–251.
- Dular, J. 2013. Severovzhodna Slovenija v pozni bronasti dobi/Nordost-slovenien in der späten Bronzezeit, Opera Instituti archaeologici Sloveniae 27. Ljubljana: Inštitut za arheologijo ZRC SAZU.
- Dular J., Tomanič Jevremov M. 2009. Sledovi poznolatsenske poselitve v Ormožu, Arheološki vestnik 60, 159–193.
- Dular J., Tomanič Jevremov M. 2010. Ormož. Utrjeno naselje iz pozne bronaste in starejše železne dobe/Befestigte Siedlung aus der späten Bronze- und der älteren Eisenzeit, Opera Instituti archaeologici Sloveniae 18. Ljubljana: Inštitut za arheologijo ZRC SAZU.
- Dular J., Lubšina Tušek M. 2014. Zwei Gräber mit Brandbestattungen aus Ptuj (Dva grobova z žganim pokopom s Ptuja), Arheološki vestnik 65, 9–33.
- Gabrovec S. 1966. Srednjelatsensko obdobje v Sloveniji, Arheološki vestnik 17, 169–242.
- Gerbec T. 2015. Hotinja vas pri Mariboru, Arheologija na avtocestah Slovenije 45. Ljubljana: Institute for the Protection of Cultural Heritage of Slovenia. [http://www.zvkds.si/files/uploads/files/publication/45_hotinja_vas_pri_mariboru.pdf.pdf]
- Gerbec T. 2019. Hotinja vas in nižinska poselitve na zahodnem obrobju Panonske nižine v starejši železni dobi. Ureditev naselja in njegovo časovno mesto (Hotinja vas and lowland settlement on the western edges of the Pannonian plain in the Early Iron Age. The organization of the settlement and its chronological position), Arheološki vestnik 70, 473–486.
- Grahek L. 2015. Orehova vas, Arheologija na avtocestah Slovenije 46. Ljubljana: Institute for the Protection of Cultural Heritage of Slovenia [http://www.zvkds.si/sites/www.zvkds.si/files/uploads/files/publication/046_orehova_vas.pdf.pdf]
- Grahek L. 2016. Stična. Železnodobna naselbinska keramika/Iron Age Settlement Pottery, Opera Instituti archaeologici Sloveniae 32. Ljubljana: Inštitut za arheologijo ZRC SAZU.
- Guštin, M. 1977. Relativna kronologija grobov 'Mokronoške skupine', (in:) M. Guštin (ed.), Keltske študije, Posavski muzej Brežice 4. Brežice: Posavski muzej, 67–104.
- Guštin, M. 1984. Die Kelten in Jugoslawien. Übersicht über das Archäologische Fundgut, Sonderdruck aus Jahrbuch des Römisch-Germanischen Zentralmuseums 31. Mainz: Römisch-Germanischen Zentralmuseums, 305–369.
- Guštin M., Tomaž A. 2014. Zatak pri Lendavi, Arheologija na avtocestah Slovenije 51. Ljubljana: Institute for the Protection of Cultural Heritage of Slovenia [www.zvkds.si/sites/www.zvkds.si/files/uploads/files/publication/zatak_pri_lendavi_ii.pdf].
- Guštin M., Tiefengraber G., Pavlovič D., Zorko M. 2017. Nova tabla pri Murski Soboti. Prazgodovina, Arheologija na avtocestah Slovenije 52/1. Ljubljana: Institute for the Protection of Cultural Heritage of Slovenia [http://www.zvkds.si/sites/www.zvkds.si/files/uploads/files/publication/nova_tabla_-_prazgodovina_web.pdf].
- Kajzer Cafnik M., Predan P. 2006. Spodnje Hoče, Varstvo spomenikov, poročila 42 (2005), 141–142.
- Kavur B. 1997. Spodnje Radvanje, Varstvo spomenikov 36, 201–202.
- Kavur, B. 2001. Meljski hrib and the late prehistoric regional settlement pattern, (in:) A. Lippert (ed.), Die Drau-, Murund Raab-Region im 1. vorchristlichen Jahrtausend. Akten des Internationalen und Interdisziplinären Symposiums vom 26. bis 29. April 2000 in Bad Radkersburg, Universitätsforschungen zur prähistorischen Archäologie 78. Bonn: Rudolf Habelt, 355–364.
- Kavur B. 2008. Izgubljeni grob/Lost grave, Annales 18, Ser. hist. sociol. 18 (Koper 2008), 397–406.
- Kavur B., Lubšina Tušek M. 2016. Na stičišču svetov/On the Crossroad of Worlds. Koper: Založba Univerze na Primorskem.
- Kerman B. 2011a. Celtic settlement in Prekmurje, (in:) M. Guštin, M. Jevtič (eds), The Eastern Celts: the communities between the Alps and the Black Sea. Koper: Annales Mediterraneae, 65–82.
- Kerman B. 2011b. Kotare – Baza pri Murski Soboti, Arheologija na avtocestah Slovenije 17. Ljubljana: Institute for the Protection of Cultural Heritage of Slovenia [<http://www.zvkds.si/sites/www.zvkds.si/files/uploads/files/publication/kotareI.pdf>].
- Kerman B. 2011c. Kotare – Krogi pri Murski soboti, Arheologija na avtocestah Slovenije 20. Ljubljana: Institute for the Protection of Cultural Heritage of Slovenia [http://www.zvkds.si/sites/www.zvkds.si/files/uploads/files/publication/20_kotare-krogi_pri_murski_soboti.pdf].
- Knez T. 1977. Keltski grobovi iz Roj pri Moravčah, (in:) M. Guštin (ed.), Keltske študije, Posavski muzej Brežice 4. Brežice: Posavski muzej, 105–125.
- Knez T. 1992. Novo mesto 2. Keltsko-rimsko grobišče/Keltisch-römisches Gräberfeld, Carniola Archaeologica 2. Novo mesto: Dolenjski muzej.

- Kramberger B. 2010. Zgornje Radvanje, Cluster 10—a Late Neolithic pit with a structure and smaller pits, *Documenta Praehistorica* 37, 311–337, <https://doi.org/10.4312/dp.37.27>
- Kramberger B. 2014. The Neolithic/Eneolithic sequence and pottery assemblages in the fifth millennium BC in north-eastern Slovenia, *Documenta Praehistorica* 41, 237–282, <https://doi.org/10.4312/dp.41.13>
- Kramberger B. 2015a. Svetilka iz zgodnjeeneolitske naselbine Zgornje Radvanje v Mariboru/Eine Lampe aus der früh-äneolithischen Siedlung von Zgornje Radvanje in Maribor, *Arheološki vestnik* 66, 249–273.
- Kramberger B. 2015b. Forms, function, and use of Early Eneolithic pottery and settlement structures from Zgornje Radvanje, Slovenia. *Documenta Praehistorica* 42, 231–250, <https://doi.org/10.4312/dp.42.16>
- Kramberger, B. 2021a. Slivnica 2B. Arheologija na avtocestah Slovenije 91, Ljubljana. [https://www.zvkds.si/sites/www.zvkds.si/files/uploads/files/publication/aas_91_slivnica2b.pdf].
- Kramberger B. 2021b. Spodnje Hoče. Arheologija na avtocestah Slovenije 90, Ljubljana. [https://www.zvkds.si/sites/www.zvkds.si/files/uploads/files/publication/aas_90_spodnje_hoce_web.pdf].
- Kramberger B. 2021c. Malečnik. Arheologija na avtocestah Slovenije 89, Ljubljana. [https://www.zvkds.si/sites/www.zvkds.si/files/uploads/files/publication/aas89_-_malecnik.pdf].
- Kramberger, B., M. Črešnar 2021. Pobrežje v Mariboru–Naselbina iz mlajše kulture žarnih grobišč/Pobrežje in Maribor—A settlement of the Late Urnfield Period, (in:) B. Teržan and M. Črešnar (eds), *Pohorsko Podravje pred tremi tisočletji. Tradicija in inovativnost v pozni bronasti in starejši železni dobi/Pohorsko Podravje three Millennia ago. Tradition and innovation in the Late Bronze and Early Iron Ages. Katalogi in monografije* 44, 55–107.
- Mlekuž D., Črešnar M. 2014. Landscape and identity politics of the Poštela Hillfort/Pokrajina in politika identitet utrjene naselbine na Pošteli, (in:) S. Tecco Hvala (ed.), *Studia Praehistorica in Honorem Janez Dular, Opera Instituti Archaeologici Sloveniae* 30. Ljubljana: Inštitut za arheologijo ZRC SAZU, 197–211.
- Müller-Karpe H. 1959. Beiträge zur Chronologie der Urnfelderzeit nördlich und südlich der Alpen, *Römisch-Germanische Forschungen* 22. Berlin: De Gruyter.
- Murko M. 2012. Maribor – arheološko najdišče Zgornje Radvanje, *Varstvo spomenikov* 47 – Poročila, 139–142.
- Murko M., Črešnar M. 2014. Miklavž na Dravskem polju, (in:) B. Teržan, M. Črešnar (eds), *Absolutno datiranje bronaste in železne dobe na Slovenskem/Absolute dating of Bronze and Iron Ages in Slovenia*, *Katalogi in monografije* 40. Ljubljana: Narodni muzej, 205–214.
- Novšak M., Djurić B., Orengo L., Fluzin P. 2006, Trnava, *Arheologija na avtocestah Slovenije* 2, Ljubljana: Institute for the Protection of Cultural Heritage of Slovenia [http://www.zvkds.si/sites/www.zvkds.si/files/uploads/files/publication/002_trnava.pdf].
- Oman, D. 1981. Brinjeva gora 1953 (Obdelava prazgodovinske keramike), *Arheološki vestnik* 32, 144–216.
- Pahič, S. 1957. Drugo žarno grobišče v Rušah, *Razprave 1. razreda SAZU* 4/3. Ljubljana: Inštitut za arheologijo ZRC SAZU.
- Pahič S. 1964. Limbuš pri Mariboru, *Varstvo spomenikov* 9 (1962–1964), 137.
- Pahič S. 1965. Morje pri Framu, Nova Dobrava pri Zrečah, *Varstvo spomenikov* 9, 170.
- Pahič S. 1966. Keltske najdbe v Podravju, *Arheološki vestnik* 17, 271–336.
- Pahič S. 1968. Maribor v prazgodovini, *Časopis za zgodovino in narodopisje*, Nova vrsta 4 (39), 9–63.
- Pahič S. 1970. Maribor v Rimski dobi, *Časopis za zgodovino in narodopisje*, Nova vrsta 6 (41), drugi zvezek, 159–243.
- Pahič S. 1972, *Pobrežje*, *Katalogi in monografije* 6, Ljubljana: Narodni muzej.
- Pahič S. 1973. Najdišča starejše železne dobe v Podravju, *Arheološki vestnik* 24, 521–543.
- Pahič S. 1974a. Bukovec nad Zg. Polskavo, *Varstvo spomenikov* 17–19/1, 95–96.
- Pahič S. 1974b. Čreta pri Slivnici, *Varstvo spomenikov* 17–19/1, 98–100.
- Pahič S. 1974c. Čreta pri Slivnici, *Varstvo spomenikov* 17–19/1, 122–123.
- Pahič S. 1983. Arheološka preteklost Maribora. *Kronika: časopis za slovensko krajevno zgodovino* 31, 114–126.
- Pahič S. 1985a. Arheološka dediščina mariborskega kraja, *Doneski k pravadnini Podravja* 1, Maribor: Pokrajinski muzej Maribor.
- Pahič S. 1985b. Meljski hrib pri Mariboru, *Varstvo spomenikov* 27, 214–215.
- Pahič V. 1985c. Meljski hrib pri Mariboru, *Varstvo spomenikov* 27, 231–232.
- Pahič S. 1985d. Brinjeva gora 1954, *Doneski k pravadnini Podravja* 2. Maribor: Pokrajinski muzej Maribor.
- Pahič S. 1991. Moji poslednji pobreški grobovi, *Doneski k pravadnini Podravja* 6. Maribor: Pokrajinski muzej Maribor.
- Pahič S. 1998. Topografski zapiski 1954–1955, *Doneski k pravadnini Podravja* 11. Maribor: Pokrajinski muzej Maribor.
- Pak M., 1998. Dravska ravan, (in:) D. Perko, M. Orožen Adamič (eds), *Slovenija – pokrajine in ljudje*. Ljubljana: Založba Mladinska knjiga, 592–605.
- Pavlovič D. 2008. Novi izsledki arheoloških terenskih raziskav na Novi tabli pri Murski Soboti (Neue Ergebnisse der archäologischen Feldforschungen in Nova tabla bei Murska Sobota), (in:) M. Guštin (ed.), *Srednji vek. Arheološke raziskave med Jadranskim morjem in Panonsko nižino/Mittelalter. Archäologische Forschungen zwischen der Adria und der Pannonischen Tiefebene*. Ljubljana: Narodni muzej Slovenije, 49–52.
- Popović P. 2011. Late Iron Age ritual pits at Kale-Krševica (southeastern Serbia), (in:) M. Guštin, M. Jevtić (eds), *The Eastern Celts: the communities between the Alps and the Black Sea*. Koper: *Annales Mediterraneae*, 151–162.
- Predan P., Kovač M. 2006. Poročilo o opravljenih terenskih raziskavah na arheološkem najdišču na lokaciji Spodnje Hoče-TC Hofer 2005, Unpublished report (archived by: Primož Predan, PJP d.o.o and ZVKDS, OE Maribor).
- Strmčnik Gulič M. 1989. Hoče, *Varstvo spomenikov* 31, 224–226.
- Strmčnik Gulič M. 1990. Hoče, *Varstvo spomenikov* 32, 173–175.
- Strmčnik Gulič M. 1996. Novosti o arheološkem bogastvu Hoč, (in:) J. Fridl (ed.), *Hoče – 850, Območje hoške prazgodovine* 1. Hoče: *Krajevna skupnost*, 105–126.
- Strmčnik Gulič M. 2001a. Nova podoba prazgodovinske poselitve na zahodnem obrobju Dravskega polja (Das neue Bild der prähistorischen Besiedlung am östlichen Rand der Draufeldes), *Arheološki vestnik* 52, 117–130.
- Strmčnik Gulič M. 2001b. The First Millenium BC between Drava and Pohorje, (in:) A. Lippert (ed.), *Die Drau-, Murund Raab-Region im 1. vorchristlichen Jahrtausend, Akten des Internationalen und Interdisziplinären Symposiums vom 26. bis 29. April 2000 in Bad Radkersburg, Universitätsforschungen zur prähistorischen Archäologie* 78. Bonn: Rudolf Habelt, 103–120.
- Strmčnik Gulič M. 2003a. Malečnik pri Mariboru, (in:) B. Djurić, D. Prešeren (eds), *Zemlja pod vašimi nogami: arheologija na avtocestah Slovenije: vodnik po najdiščih*. Ljubljana: Institute for the Protection of Cultural Heritage of Slovenia, 181–182.
- Strmčnik Gulič M. 2003b. Pobrežje pri Mariboru, (in:) B. Djurić, D. Prešeren (eds), *Zemlja pod vašimi nogami: arheologija na avtocestah Slovenije: vodnik po najdiščih*. Ljubljana: Institute for the Protection of Cultural Heritage of Slovenia, 206–207.
- Strmčnik Gulič M. 2003c. Bohova, (in:) B. Djurić, D. Prešeren (eds), *Zemlja pod vašimi nogami: arheologija na avtocestah Slovenije: vodnik po najdiščih*. Ljubljana: Institute for the Protection of Cultural Heritage of Slovenia, 98–99.

- Strmčnik Gulič M. 2003d. Slivnica pri Mariboru 1, (in:) B. Djurić, D. Prešeren (eds), *Zemlja pod vašimi nogami: arheologija na avtocestah Slovenije: vodnik po najdiščih*. Ljubljana: Institute for the Protection of Cultural Heritage of Slovenia, 237–238.
- Strmčnik Gulič M. 2003e. Slivnica pri Mariboru 2, (in:) B. Djurić, D. Prešeren (eds), *Zemlja pod vašimi nogami: arheologija na avtocestah Slovenije: vodnik po najdiščih*. Ljubljana: Institute for the Protection of Cultural Heritage of Slovenia, 239.
- Strmčnik Gulič M. 2003f. Spodnje Hoče, (in:) B. Djurić, D. Prešeren (eds), *Zemlja pod vašimi nogami: arheologija na avtocestah Slovenije: vodnik po najdiščih*. Ljubljana: Institute for the Protection of Cultural Heritage of Slovenia, 242–243.
- Strmčnik Gulič M. 2006. Malečnik – arheološko najdišče, (in:) A. Tomaz (ed.), *Od Sopota do Lengyela (prispevki o kamenodobnih in bakrenodobnih kulturah med Savo in Donavo)/Between Sopot and Lengyel (contributions to stone age and copper age cultures between the Sava and the Danube)*. Koper: *Annales Mediterranea*, 195–201.
- Strmčnik Gulič M. 2009. Arheološko najdišče Zgornje Radvanje, *Varstvo spomenikov* 45, 118–120.
- Strmčnik Gulič M., Kajzer M., Kramberger B. 2021. Gomile iz starejše železne dobe pod Poštelo: II. Velika gomila nad Razvanjem/Early iron Age tumuli of Poštela: II. Large tumuli above Razvanje, (in:) B. Teržan and M. Črešnar (eds), *Pohorsko Podravje pred tremi tisočletji. Tradicija in inovativnost v pozni bronasti in starejši železni dobi/Pohorsko Podravje three Millennia ago. Tradition and innovation in the Late Bronze and Early Iron Ages*. *Katalogi in monografije* 44, 347–400.
- Šavel I., Sankovič S. 2011. Pri Muri pri Lendavi. – Arheologija na avtocestah Slovenije 23, Ljubljana: Institute for the Protection of Cultural Heritage of Slovenia [http://www.zvkds.si/sites/www.zvkds.si/files/uploads/files/publication/23-pri_muri_pri_lendavi.pdf].
- Teržan B. 1990. Starejša železna doba na Slovenskem Štajerskem/The Early Iron Age in Slovenian Styria, *Katalogi in monografije* 25, Ljubljana: Narodni muzej Slovenije.
- Teržan B. 1995 (ed.). Depojske in posamezne kovinske najdbe bakrene in bronaste dobe na Slovenskem I, *Katalogi in monografije* 29, Ljubljana: Narodni muzej Slovenije, 31–71.
- Teržan, B. 1998. Auswirkungen des skythisch geprägten Kulturkreises auf die hallstattzeitlichen Kulturgruppen Pannoniens und des Ostalpenraumes, (in:) B. Hänsel, J. Machnik (eds), *Das Karpatenbecken und die Osteuropäische Steppe. Nomadenbewegungen und Kulturaustausch in den vorchristlichen Metallzeiten (4000–500 v.Chr.)*, *Südosteuropa-Schriften Band 20, Prähistorische Archäologie in Südosteuropa Band 12*, München, Rahden/Westf.: Leidorf, 511–560.
- Teržan B. 1999. An Outline of the Urnfield Culture Period in Slovenia/Oris obdobja kulture žarnih grobišč na Slovenskem, *Arheološki vestnik* 50, 97–143.
- Teržan B. 2019. Štajersko-panonska halštatska skupina. Uvodnik in kratek oris/The Styrian-Pannonian Hallstatt Group. An introduction and brief outline, *Arheološki vestnik* 70, 319–334.
- Teržan B., Črešnar M. 2012. Oris preteklosti vzhodnih obronkov Pohorja od prazgodovine do zgodnjega srednjega veka/History of the eastern edges of the Pohorje mountain range from Prehistory to the Early Middle Ages, (in:) A. Gulič, M. Črešnar (eds), *Arheološka pot po Mariboru z okolico/Archaeological Trail of Maribor and its Surroundings*, Maribor: Društvo mladih raziskovalcev, 8–23.
- Teržan B., Črešnar M. 2014. Poskus absolutnega datiranja starejše železne dobe na Slovenskem. In M. Črešnar, B. Teržan 2014 (eds), *Absolutno datiranje bronaste in železne dobe na Slovenskem/Absolute dating of Bronze and Iron Ages in Slovenia*, *Katalogi in monografije* 40, Ljubljana: Narodni muzej, 703–724.
- Teržan B., Črešnar M., Mušič B. 2012. Pogledi v preteklost: Poštela – »staro mesto« na obronkih Pohorja in njena okolica (arheološke raziskave), *Dialogi* 1–2/12, 17–58.
- Tiefengraber G. 2009. Befestigte mittel- und spätlatènezeitliche Flachlandsiedlungen im Südostalpenraum. In G. Tiefengraber, B. Kavur, A. Gaspari (eds), *Keltske študije II, Studies in Celtic Archaeology. Papers in honour of Mitja Guštin, Protohistoire Européenne* 11, Montagnac: Édition Mergoil, 259–282.
- Tiefengraber G. 2015. Eine ausgewählte Fundstelle: Die latènezeitliche Siedlung am Frauenberg bei Leibnitz. In B. Hebert (ed.), *Geschichte der Steiermark. Band 1, Urgeschichte und Römerzeit in der Steiermark, St. Stefan im Lavanttal: Theiss*, 621–645.
- Tomanič-Jevremov M. 1988/1989. Žarno grobišče v Ormožu, *Arheološki vestnik* 39/40, 277–304.
- Tomanič-Jevremov M., Guštin M. 1996. Keltska lončarska peč s Spodnje Hajdine pri Ptuj, *Arheološki vestnik* 47, 267–278.
- Trampuž Orel N., Heath D.J. 2001. Depo Kanalski Vrh – študija o metalurškem znanju in kovinah na začetku 1. tisočletja pr. n. š., *Arheološki vestnik* 52, 143–171.
- Turk P. 1996. Datacija poznobronastodobnih depojev, (in:) B. Teržan (ed.), *Depojske in posamezne kovinske najdbe bakrene in bronaste dobe na Slovenskem II*, *Katalogi in monografije* 30, Ljubljana: Narodni muzej Slovenije, 89–124.
- Turk P. 2001. The Weight of objects in Late Bronze Age hoards in Slovenia and possibilities for determining weight standards, *Arheološki Vestnik* 52, 249–279.
- Urban, T. 1993. Studien zur mittleren Bronzezeit in Norditalien, *Universitätsforschungen zur prähistorischen Archäologie* 14, Bonn: Rudolf Habelt.
- Urban O.H. 1996. Zur Chronologie der jüngeren Latènezeit in Ostösterreich, *Arheološki vestnik* 47, 197–207.
- Žbona-Trkman B., Bavdek A. 1996. Depojski najdbi s Kanalskega Vrha, (in:) B. Teržan, (ed.), *Depojske in posamezne kovinske najdbe bakrene in bronaste dobe na Slovenskem II*, *Katalogi in monografije* 30, Ljubljana: Narodni muzej Slovenije, 31–71.
- Žiberna I. 2011. Naravnogeografske determinante razvoja Maribora s posebnim ozirom na reko Dravo/Natural Geographical Determinants of Development Maribor with particular Reference to the Drava River, *Ekonomika i ekohistorija/Economic- and Ecohistory, Volumen 7, Broj 7, Zagreb – Samobor: Društvo za hrvatsku ekonomsku i ekohistoriju, Meridijani*, 116–128.
- Žnidarčič M., Mioč P. 1988. Osnovna geološka karta SFRJ 1: 100 000, list Maribor in Leibnitz, Beograd: Zvezni geološki zavod.



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