

ARCHAEOLOGICAL TRACES OF ANCIENT HUNGARIANS IN SLOVENIAN TERRITORY – SMALL FINDS FROM VARIOUS FINDSPOT CONTEXTS

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Only a few artefacts that can be related to the presence of ancient Hungarians in the territory of present-day Slovenia have been discovered so far. These finds encompass items of equestrian equipment, as well as weapons, and a single item of attire set or jewellery: iron stirrups of various forms, parts of belt sets and straps, a chain with heart-shaped pendants, arrowheads and possibly the remains of an arrow quiver. They originate from various types of findspot: hilltop sites, settlements, cemeteries and a river. The prevailing type, however, is hilltops (Gradišče above Trebenče, Ljubična above Zbelovska Gora, Gradišče above Bašelj, Veliki Gradec near Drežnica, and Zidani Gaber above Mihovo). In the majority of cases the finds were discovered with metal detectors and therefore come without precise location data or stratigraphic contexts. Iron stirrups discovered at Tabor, above Tomaj, and in the Ljubljanica river, as well as a belt buckle from Zgornji Breg, in Ptuj, are also chance finds. In rare cases, finds of ancient-Hungarian character have been discovered in systematically-investigated sites, such as Ajdna above Potoki, Tonovcov Grad near Kobarid, and Pristava in Bled. Arrowheads from debris or charred

layers in these settlements likely testify to ancient-Hungarian invaders. Ancient-Hungarian burials in Slovenian territory have not been unambiguously confirmed yet. Only two graves of the Ptuj Castle cemetery have been purportedly ascribed to them. The artefacts collected from Slovenian sites have been studied predominantly from the typological perspective and dated on the basis of comparable sites and artefacts from neighbouring regions, especially from graves in the Carpathian Basin. Their presence at Slovenian sites can be explained by frequent incursions of ancient Hungarians to the West between the end of the 9th century and the middle of the 10th, which also crossed the territory of present-day Slovenia and are reported in historical sources. However, we cannot exclude the possibility that some of these items came to the findspots as a consequence of more peaceful contacts with ancient Hungarians whose area of settlement was not too far away.

Key words:

archaeology, Early Middle Ages, ancient Hungarians, Slovenia, archaeological sites, small finds

Ever transitional in character, in the period between the end of the 9th century and the middle of the 10th, the territory of present-day Slovenia was an important corridor for incursions of ancient Hungarians into the West, especially into Italy. While the incursions are recorded in numerous historical sources, relatively few artefacts of ancient-Hungarian character have been found at Slovenian archaeological sites. They mostly include weapons, horse tack and rider's equipment, discovered in findspots dispersed from the east to the west of the country: Zgornji Breg in Ptuj, Ptuj Castle, Ljubična above Zbelovska Gora, Zidani Gaber above Mihovo, Gradišče above Vintarjevec, Gradišče above Bašelj, Ajdna above Potoki, Pristava in Bled, Gradišče above Trebenče, Tabor above Tomaj, Tonovcov Grad near Kobarid, Veliki Gradec near Drežnica, and the Ljubljanica river (Fig. 1).

Characterization of finds of ancient-Hungarian character in Slovenian sites

Most common among artefacts that can be associated with ancient-Hungarian horsemen are stirrups of various shapes, chance finds at hilltop sites and in a river. The round stirrups from Gradišče above Trebenče (cat. no. 1), Gradišče above Vintarjevec (cat. no. 3) and Tabor above Tomaj¹ have a convex foot plate, reinforced with a rib on the underside. The arms of these stirrups are undecorated. According to the typological

1 Moser 1906, Fig. 1: 5.

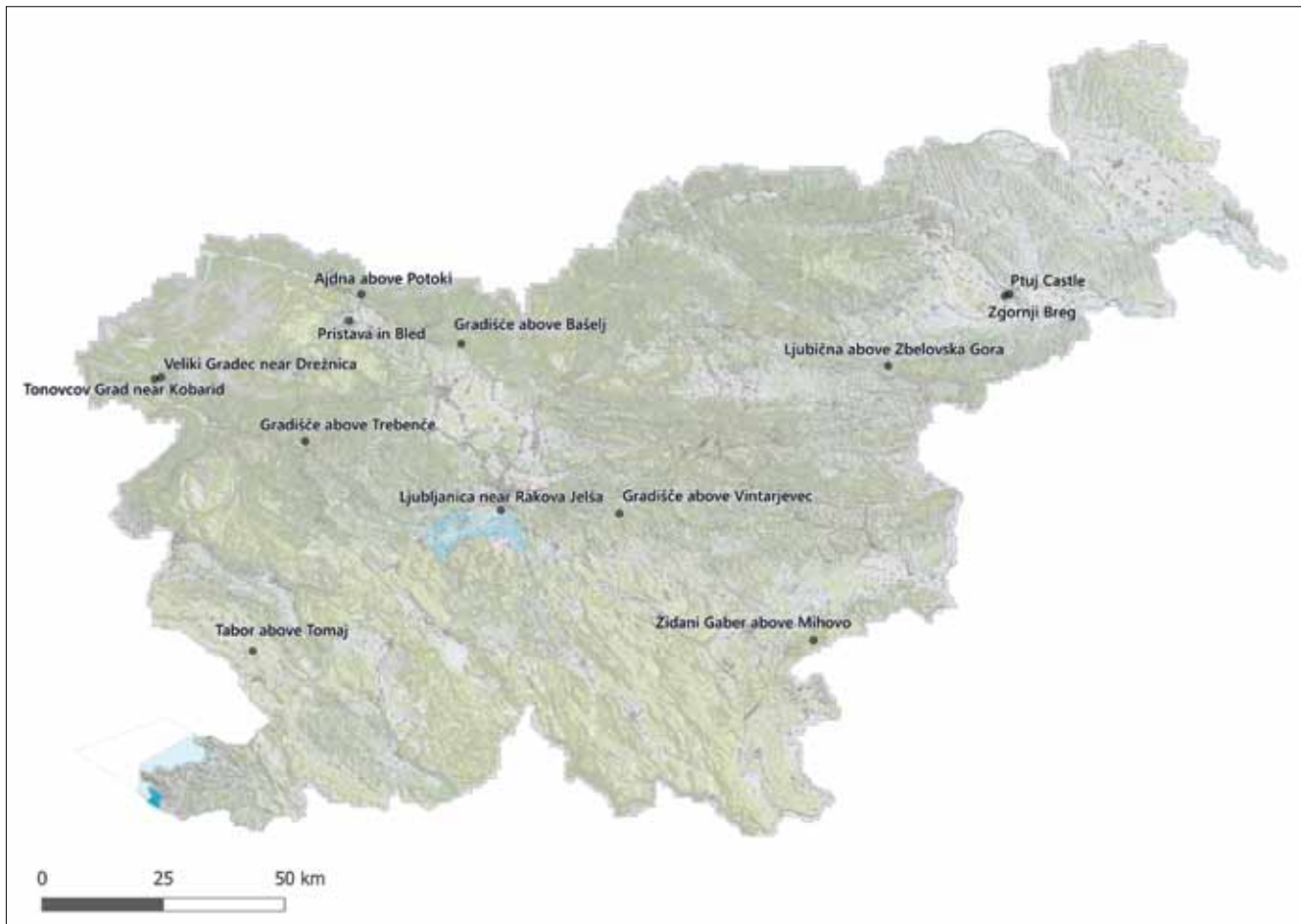


FIGURE 1. Archaeological sites with finds of ancient-Hungarian type in Slovenia (made by N. Kovačič).

classification by Alexander Ruttkay, all three artefacts belong to the group of round or oval stirrups with a rectangular or trapezoidal loop. Such stirrups are distributed throughout Eastern Europe, predominantly in cemeteries of the 10th and early 11th centuries in the Carpathian Basin,² but they also occur in other sites all over Europe.³ The stirrup from the Ljubljana river, discovered near Rakova Jelša in south Ljubljana, slightly diverges from the typical round stirrups (cat. no. 4). This stirrup is of an irregular, round, somewhat triangular shape; the foot plate and the arms are slightly convex, the arms are smooth, and an indistinct neck provides a transition into a loop with a small hole for a strap. Very similar in shape is one of the stirrups from the hoard of Streževo, in North Macedonia,⁴ as well as a stirrup from Grave 6 of the Slovak site of Sered' I,⁵ and a pair of stirrups from Grave 82 of the Malé Kosihy cemetery,⁶ the latter two sites are ancient-

Hungarian cemeteries dated to the 10th – 11th centuries. On the basis of analogies, the stirrup from the Ljubljana can be classified among stirrups of ancient-Hungarian character.⁷

The most common forms of ancient-Hungarian stirrups are pear- and trapezoid-shaped stirrups.⁸ In Slovenia, the only pear-shaped stirrup was discovered at Gradišče above Vintarjevec (cat. no. 2). It has a convex foot plate with a smooth top side and a rib down the middle of the underside. The undecorated arms, of round cross-section, have a nearly neckless transition into a square loop for a strap. According to the recent typology of pear-shaped stirrups by Erwin Gáll it can be classified as his Type Pe2a1.⁹ Some morphological characteristics of this type (square strap loop, neck, round cross-section of the arms) are supposed to have originated, at least partly, from stirrups of the 8th – 9th

2 Ruttkay 1976, 353–354, Fig. 74; Gáll 2015, 360–361, n. 20 with bibliographical references.

3 Schulze 1984, 486, Fig. 13; Goßler 2013, 132–136.

4 Јанакиевски 1983, Pl. 6: e.

5 Točík 1968, Pl. 32: 17.

6 Hanuliak 1994, Pl. 19: 25–26.

7 Karo 2004, 170.

8 Kovács 1986; Gáll 2015.

9 Gáll 2015, 362–370, Fig. 13, Pl. 1.



FIGURE 2. Ancient-Hungarian-type fittings with the image of a stag: 1, Ljubična, above Zbelovska Gora (Bitenc, Knific (eds.) 2001, 106, cat. no. 353); 2, Törtel-Demeter tanya (Mesterházy 1996, Fig. 4).

centuries. The same goes for the workmanship, while the pear shape is a new feature. A more detailed dating is not possible, due to the fact that these were useful artefacts, not subject to short-term fashion trends, but rather used over a longer period.¹⁰ In general, pear-shaped stirrups are predominantly distributed across the Carpathian Basin, where they could have arrived with ancient Hungarians from the territory between the Volga and the Dnieper as early as the end of the 9th century,¹¹ or they could have been the consequence of a new technology of stirrup manufacture in the 10th century.¹² The most common, however, are those in cemeteries dating to the 10th century and the early 11th.¹³

Horse-tack items from Slovenian sites also include a gilded copper-alloy fitting from Ljubična, above Zbelovska Gora, which sports an impressed image of a stag on the front (cat. no. 5). The stag is surrounded by a slightly raised rib with a string of impressed triangles. Three sides are decorated with a granulated line, while the shorter, straight side is embellished with a stylized vegetative motif. A fitting with the same motif was discovered in a woman's grave at the site of Törtel, in Hungary. In addition to the deceased's personal items, this grave contained richly decorated horse tack: the bridle was ornamented with small rosettes, while other straps were embellished with larger rosettes and had two strap ends. A gilded silver fitting decorated with a leaping stag was attached to the breaststrap.¹⁴ At first glance, this fitting seems identical to the fitting from Ljubična, even in size (Fig. 2: 1–2). They differ in some barely noticeable features, such as the stag's tail and antlers. The fitting from Törtel dates to

the 10th century;¹⁵ the fitting from Ljubična can be dated to the same period.¹⁶

Another fitting with a stag was discovered in Grave 4 in the Lipová-Ondrochov cemetery in Slovakia.¹⁷ Compared to the above-discussed fittings, this image is more schematic. The small gilded cast silver fitting lay in the waist area and had originally been attached to a strap with four spikes, the remains of which can be seen on the back. When the spikes broke, two small holes were drilled in the sides of the fitting, and two silver rivets were inserted without any damage to the decoration.¹⁸

The stag on the fittings is one of the relatively few realistic animal depictions on artefacts of ancient-Hungarian character from the 10th century.¹⁹ Others include fittings with depictions of a fox, a wolf, a cow and a lion; these are often small copper-alloy or silver fittings with gilded surface.²⁰ Strap fittings with animal depictions are especially common in women's graves, but they occur also in male graves; these depictions could have a symbolic meaning associated with hunting or home protection.²¹

Strap fittings with animal images, Type Kenezlő according to Schulze-Dörrlamm, could have originated in the western part of Central Russia, in the river basins of the Volga and the Kama, and in the Caucasus, where similarly decorated belt-buckle plates occur as early as the 9th century. In the Carpathian Basin, the same motif became common on horse-tack fittings in the early 10th century.²²

10 Gáll 2015, 370–373, Fig. 15: 16.

11 Schulze-Dörrlamm 1991, 422–423, Fig. 47.

12 Gáll 2015, 372, 386–387.

13 Ruttkay 1976, 353–354, Fig. 74; Gáll 2015, 362, Fig. 7.

14 Mesterházy 1996, 356–357, Fig. 4.

15 Révész 2000.

16 Bitenc, Knific (eds.) 2001, 106, cat. no. 353.

17 Bialeková 1964, Fig. 3.

18 Bialeková 1964, 190–191.

19 cf. Révész 1997, 436–439, Fig. 16.

20 Bollók 2015, 344–347, Figs 105–107.

21 Révész 1997, 439.

22 Schulze-Dörrlamm 1991, 407–414, Fig. 33.

In addition to the fitting with a stag, a small iron double-loop buckle (cat. no. 6) – a so-called lyre-shaped buckle – was found at Ljubična, above Zbelovska Gora. It, too, has analogies in 10th-century cemeteries in the Carpathian Basin,²³ while its variants are spread from Central Russia to Western Europe.²⁴ In the territory of present-day Slovenia, a buckle of the same shape, but without a prong, was discovered at Zgornji Breg, in Ptuj (cat. no. 7). This buckle, however, has not been precisely dated.²⁵ On the basis of shape and decoration, László Révész distinguishes several variants of buckles. The buckles from Ljubična and Zgornji Breg could be classified as his Type A, i.e. buckles with an oval loop, round or oval cross-section, and usually without decoration. They are the most common in the Carpathian Basin.²⁶ Lyre-shaped buckles, also known as Type Kecel according to Schulze-Dörrlamm, occur in ancient-Hungarian graves in the early 10th century, and they are still in use in the second half of the 10th century.²⁷ These small buckles, usually 2.8 – 3 cm long and 2.3 – 2.5 cm wide, were attached to relatively narrow straps. Their position in graves indicates that they were used for attaching straps holding weapons, bags and clothes, as well as horse tack – for instance, in Grave 37 of the Hódmezővásárhely-Nagysziget cemetery, where a buckle was found on the skull of a horse, and it was, in all probability, employed as part of a horse harness.²⁸

The other large group of finds in Slovenian sites is parts of weapons, namely rhombic iron arrowheads with a tang (cat. nos 8–18). They have been discovered almost exclusively at hilltop sites, with one exception in the settlement of Pristava, in Bled. Only in rare cases was more than one arrowhead found at the same site, for example at Tonovcov Grad and at Veliki Gradec, near Drežnica. This, however, is probably not so much a reflection of their actual number and distribution, as it is a consequence of the insufficient state of research of some hilltop sites and the fact that most of the finds were discovered with metal detectors.

In most cases, the length of the arrowheads is between 7 and 8 cm. The arrowhead from Pristava, in Bled, is only 4.2 cm long (surviving length), and the longest arrowhead is from Zidani Gaber, measuring 11 cm. The rhombic shape varies from arrowheads with a wider head (cat. nos 11–12) to narrow arrowheads, almost in the shape of a willow leaf (cat. no. 18). A slightly damaged rhombic arrowhead from Gradišče, above Bašelj, has the head covered with wooden remains (cat. no. 8), as if the fired arrow was stuck in some wooden object.²⁹

Rhombic arrowheads with a tang can be associated with ancient Hungarians and are therefore more chronologically sensitive than other shapes of early-medieval arrowheads, which have a relatively wide time span. Such arrowheads occur at several sites in the Carpathian Basin, as well as in other areas of Europe that were the targets of ancient-Hungarian incursions between the end of the 9th century and the mid-10th.³⁰ They are common in graves of warriors, sometimes together with a bow and a quiver,³¹ as well as in settlements, where they bear witness to their raids across Europe.³² Their army was composed of light cavalry, and their fighting technique was based on fast manoeuvres and unexpected attacks, which is why they were usually armed only with a bow, and rarely with heavy weapons. The arrows were kept in a cylindrical quiver made of leather, wood or bark, and with attached metal fittings or ornamental plaques made of bone.³³ Remains of a quiver might have been found in Grave 262 at Ptuj Castle (Fig. 3). The supposed parts of the quiver are flat iron fragments and an iron fitting with a triangular loop and two rivets, found in the waist area of a male skeleton (Fig. 3: 1–3; cat. no. 19); it was purportedly used to attach the quiver to the belt. Arrows were either not discovered or had not survived. Paola Korošec presumed that their remains were in a rusty agglomerated lump which disintegrated after the excavation of the grave.³⁴ Comparable fittings with a loop with two rivets, which had been parts of quivers, are rare in ancient-Hungarian archer graves.³⁵ Due to the poor state of preservation of all the items in the grave, it is hard to confirm whether the Ptuj fragments are really quiver remains. Contrary to the view of Korošec, Željko Demo believes there is not enough evidence for such a claim.³⁶ Indeed, it seems more likely that the fitting with a loop belonged to a scabbard for the larger iron knife from the grave, as was the original interpretation.³⁷

So far, the only piece of decorative attire set or jewellery from Slovenian sites that can be associated with ancient Hungarians is a silver chain with heart-shaped pendants from a woman's burial in Grave 13 at Ptuj Castle (cat. no. 20; Fig. 4: 16a–c). The chain is composed of a string of segments made of thin silver wire; the surviving length is approximately 9.1 cm.³⁸ On the basis of the workmanship of the silver segments, it belongs to the group of so-called Spanish-style chains with soldered and bent circlets.³⁹ A heart-shaped sheet-silver pendant with a gilded almond-shaped recess in the centre is attached to the chain with a round loop. The grave contained two more heart-shaped pendants; all three

23 Révész 1987, Fig. 5.

24 Révész 1987, Fig. 7; Schulze-Dörrlamm 1991, 453–454, Fig. 6.

25 Sagadin 1979, 312, 323, Pl. 9: 8.

26 Révész 1987, 270, Fig. 6: 1.

27 Schulze-Dörrlamm 1991, 383, 385.

28 Révész 1987, 260–264, Figs 1–3.

29 Karo, Knific 2020, 188.

30 Kouřil 2019, 73.

31 Točík 1968, Pls 6, 10, 12–13 etc.; Ruttkay 1976, 329–330; Demo 2009, 424–436.

32 Cf. Schulze-Dörrlamm 2002, 113–114, Fig. 4; Profantová 2008, 154, 156–157, Figs 9, 12b; Kouřil 2008, 118–123, 128–131, Figs 5–13, 19, 2019, 82–84.

33 Révész 1996, 43–46; Demo 2009, 430–436.

34 Korošec 1985, 342–344, Fig. 2: 3; 1999, 70, Pl. 31: 1–3.

35 e.g. Éry 1968, 127, Pl. 17: 1–2; Točík 1968, Pl. 4: 3; Schulze-Dörrlamm 1991, Fig. 24: 15; Mesterházy 2008, 170–172, Figs 2, 5; cf. also Hedenstierna-Jonson 2012, 35–37, Figs 8–9.

36 Demo 2009, 430, n. 128.

37 Korošec 1950, 190–191.

38 Korošec 1999, 14.

39 Demo 2012, 91, Fig. 5: 1.

of them were damaged. In their upper part, two pendants have several small drilled holes for the attachment to the chain. The third pendant has a slightly larger central recess than the other two. Chains with pendants could either adorn the breaststraps of horses, as indicated by the finds from graves with horse burials, or they could be parts of female decorative attire sets for the head and chest.⁴⁰ Discovered in the neck area of a poorly preserved female skeleton, the chain from Ptuj Castle could be interpreted as jewellery.⁴¹

Heart-shaped and leaf-shaped pendants on chains are a distinctive form of ancient-Hungarian decorative attire sets. The multipart attire set, also known as the Várpalota Type, was composed of a headband with metal ornaments, two temple rings, chainholders, and a chain with pendants.⁴² Since these elements occur in various combinations, the absence of any one of them does not necessarily mean that the set is not preserved in its entirety.⁴³ These sets are widely spread, predominantly in the Carpathian Basin, in the late 9th century and in the 10th century, but they are very rare in the Pannonian area south of the Drava, Sava and Danube rivers; the Ptuj specimen is the westernmost example.⁴⁴

Findspot contexts of ancient-Hungarian finds at Slovenian sites

Only in rare cases are findspot contexts of ancient-Hungarian finds at Slovenian sites well-documented and therefore informative enough; one such example is the early-medieval settlement of Pristava, in Bled, where a rhombic arrowhead was found (cat. no. 10). It lay in a burnt layer in Building V, on the basis of which Andrej Pleterski linked it to ancient-Hungarian invaders, who made several incursions into the West between the end of the 9th century and the mid-10th century. Not later than the last years of the 9th century, they purportedly burnt down the building, which coincides with fragments of dateable pottery vessels in this building.⁴⁵ It is possible that other buildings of this settlement, which existed until the beginning of the second half of the 10th century, were burnt down in the same attack.⁴⁶

In general, however, over the entire present-day territory of Slovenia, ancient-Hungarian types of finds are most commonly found at hilltop sites. Tonovcov Grad rises on a hill above the right bank of the Soča river, north of the town of Kobarid, in western Slovenia. At the top there is an area protected by steep slopes as well as walls, where remains of masonry buildings from the Late Antique period have been discovered. Their ruins, however, also contained some later finds, which indicate that the site was, on

a limited scale, populated again between the late 7th and 9th or 10th centuries.⁴⁷ Early-medieval layers, and individual graves and finds, indicate that the inhabitants arranged temporary shelters in some of the buildings, i.e. in one of the houses, in the main church, and in the water reservoir on the highest part of the hill.⁴⁸ In contrast to other Slovenian hilltop sites with early-medieval finds of predominately military character, only a few of these were discovered at Tonovcov Grad.⁴⁹ They include four rhombic arrowheads with a tang; two were discovered in a mixed layer in the area of Building 1 (cat. nos 11–12), and the other two in the upper rubble layers of the north and south churches (cat. nos 13–14).⁵⁰ These arrowheads could indicate the presence of ancient Hungarians, or a siege of the settlement between the end of the 9th century and the mid-10th century. Tellingly, two rhombic arrowheads and one arrowhead in the shape of a willow leaf from the same period (cat. nos 16–18) were also found at nearby Veliki Gradec, near Drežnica, on the left bank of the Soča, about a kilometre from Tonovcov Grad.⁵¹ On its rocky hilltop, numerous iron artefacts were collected with a metal detector. Among them are pieces of equestrian equipment and weapons from the Early Middle Ages, including the above-mentioned iron arrowheads.⁵² These finds also include a partly preserved iron bridle bit with two cheekbars and a small ring linked through the outer loop. While this is a common feature among bridle bits from graves of ancient-Hungarian horsemen, no other typical elements that could undoubtedly characterize the bit from Drežnica as an artefact of ancient-Hungarian character survived.⁵³

Another archaeological site where the context of the finds discovered has not been explained yet is Gradišče, above Trebenče. On a rocky ridge surrounded by precipitous walls, a local person with a metal detector excavated numerous artefacts, predominantly iron, of the Early Middle Ages. Most of them were lying in a depression which divides the ridge laterally into two parts. The artefacts discovered included pieces of equestrian equipment, weapons, tools and everyday objects, dated to the 9th and 10th centuries.⁵⁴ Only a round stirrup can be associated with ancient-Hungarian horsemen (cat. no. 1). In central Slovenia, two more stirrups of ancient-Hungarian type were allegedly found on the hill of Gradišče, above the village of Vintarjevec (cat. nos 2–3). Archaeological excavations have confirmed that a fortified settlement protected by a rampart stood on top of Gradišče in the prehistoric period. The finds indicate that the settlement was populated in two periods: in the Early Iron Age, as well as the Late Iron Age / Early Roman period.⁵⁵ Since the site's being populated after this period has not been confirmed by excavations, the two stirrups almost certainly do not originate from this site.⁵⁶

40 Horváth 2004, 462–466; Demo 2012, 81.

41 Korošec 1985, 337.

42 The type is named after a multipart set found in a destroyed female grave at the site of Várpalota, 55 Semmelweis Street, in western Hungary (Perémi 1987, 121–123, 127–130, Fig. 15, Pl. 3: 5).

43 Demo 2012, 84–85.

44 Horváth 2004, 469–472, Fig. 4: 1; Demo 2012, 86–89, Fig. 3, Tab. 1 – with bibliographical references.

45 Pleterski 2010, 170–171.

46 Pleterski 2010, 175.

47 Milavec 2020, 177–178.

48 Milavec 2020, 178–181, 435–436, Figs 4–5.

49 Milavec 2020, 181.

50 Milavec 2011, 49.

51 Ciglenečki 2011, 43–45.

52 Karo, Knific 2020, 196, 209–210, Pl. 12.

53 Karo, Knific 2019, 215–216.

54 Karo, Knific 2020, 194, Pls 7: 3–7; 8: 1–6.

55 Stare 1999, 18–20, 30.

56 Karo 2007, 60–61.

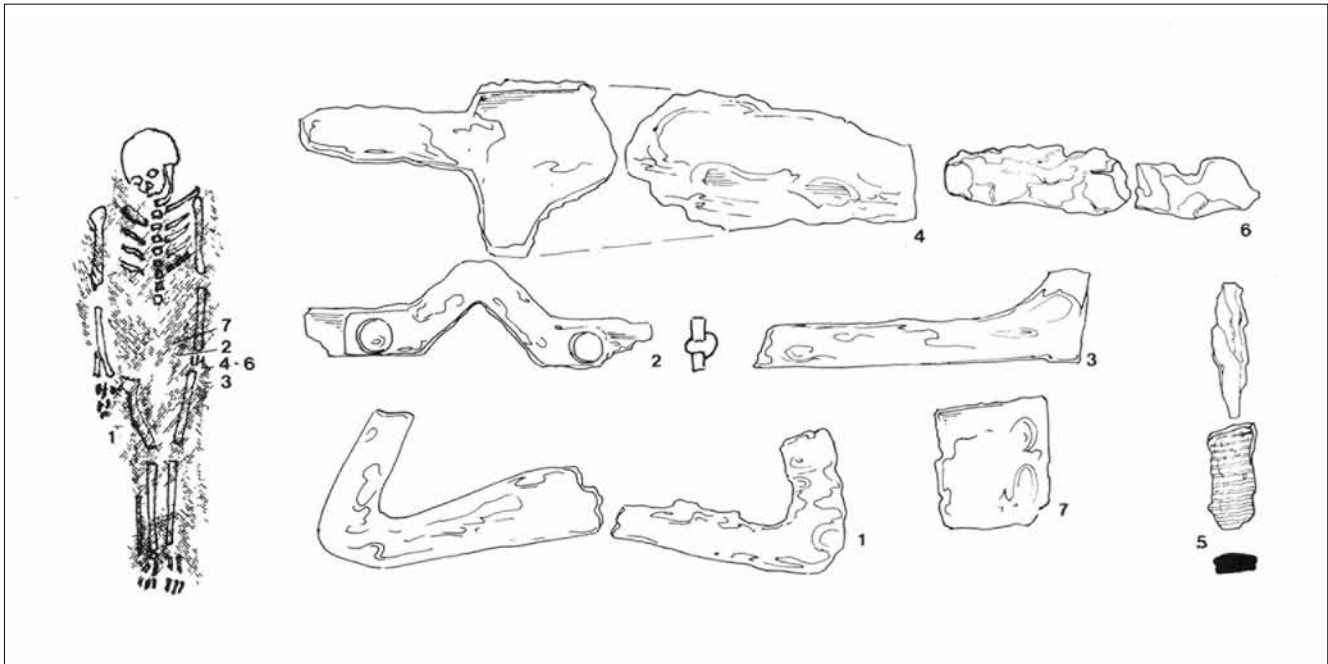


FIGURE 3. Grave 262, Ptuj Castle. 1–3, fragments of iron fitting (cat. no. 19); 4, large iron knife; 5, iron awl with a wooden handle; 6, small iron knife; 7, sheet-iron fragment (after Korošec 1999, Pl. 31: 1–7).

Rising on the edges of the Drava Plain, Ljubična, above Zbelovska Gora, has a hilltop suitable for a larger settlement. Archaeological traces from several periods have been discovered in test trenches, including fragments of early-medieval pottery.⁵⁷ An early-medieval horizon in this site is further confirmed by numerous finds discovered by amateurs with metal detectors, dated to the period between the 8th and the 10th centuries, including metal parts of equestrian equipment, fragments of iron tools and buckets, and rare pieces of jewellery.⁵⁸ Some of the artefacts were found close together and had been allegedly buried as a hoard.⁵⁹ The finds from the site include a double-loop buckle and a fitting with a stag of ancient-Hungarian type (cat. nos 5–6). Furthermore, some items of horse tack, e. g. a stirrup and a bridle bit, might also date to the 10th century.⁶⁰

In north-western Slovenia, a Late Antique settlement with early-medieval finds was discovered at Ajdna, above Potoki. From the area at the top of a steep rocky hill, the view opens up along the extensive upper Sava Valley. The excavations confirmed the existence of a settlement with about twenty masonry buildings, including the church. The settlement was at least partially revived in the 9th century. In the layer inside the dwelling house on the lower terrace, as well as elsewhere in the settlement, some early-medieval finds were found, including that of a rhombic iron arrowhead (cat. no. 9).⁶¹

Another Late Antique masonry hilltop settlement in the same region is Gradišče, above Bašelj, which boasts numerous early-medieval artefacts from the period between the late 8th century and the 10th. Many of these artefacts belong to horse tack or the equipment of a horseman/warrior. They were found in the upper layer of the test trench excavated in the western part of the site, as well as over the entire slope of the site, relatively shallow under the surface. Some of the items seem to have been deposited together and can be interpreted as hoards.⁶² A damaged rhombic iron arrowhead, found with a metal detector, can be attributed to ancient Hungarians (cat. no. 8).

The Late Antique fortified settlement of Zidani Gaber, above Mihovo, stood on a ridge between the valleys of the streams of Pendirjevka and Kobilja, on the steep slopes of the Gorjanci mountain range, in the extreme south of Slovenia. The layout of the stronghold, which measured approximately 300 × 50 m, was adapted to the natural shape of the long, narrow ridge. While the beginnings of the settlement date to the 3rd century, it peaked in the 6th century, when an early Christian church was built in the central part. Apart from the church, there were other smaller masonry buildings discovered on the ridge.⁶³ While the finds from Zidani Gaber indicate that the most intensive period of settlement was in the 5th and 6th centuries, some iron artefacts, found with a metal detector, date to a later time, thus proving that the

57 Ciglenečki 2016, 37–44.

58 Karo, Knific 2020, 195, Pls 9–11.

59 Bitenc, Knific 2015, 129, Fig. 17; Karo, Knific 2019, 220.

60 Karo 2004, 169–170, Fig. 6; Karo, Knific 2019, Pls 2: 16, 3: 17.

61 Vidrih Perko, Sagadin 2004, 221, Figs 7–8, 10; Karo, Knific 2020, 192–193, Pl. 1: 1–5.

62 Karo, Knific 2020, 193–194, Pls 2–6, 7: 1–2.

63 Tratnik 2020, 40–55.

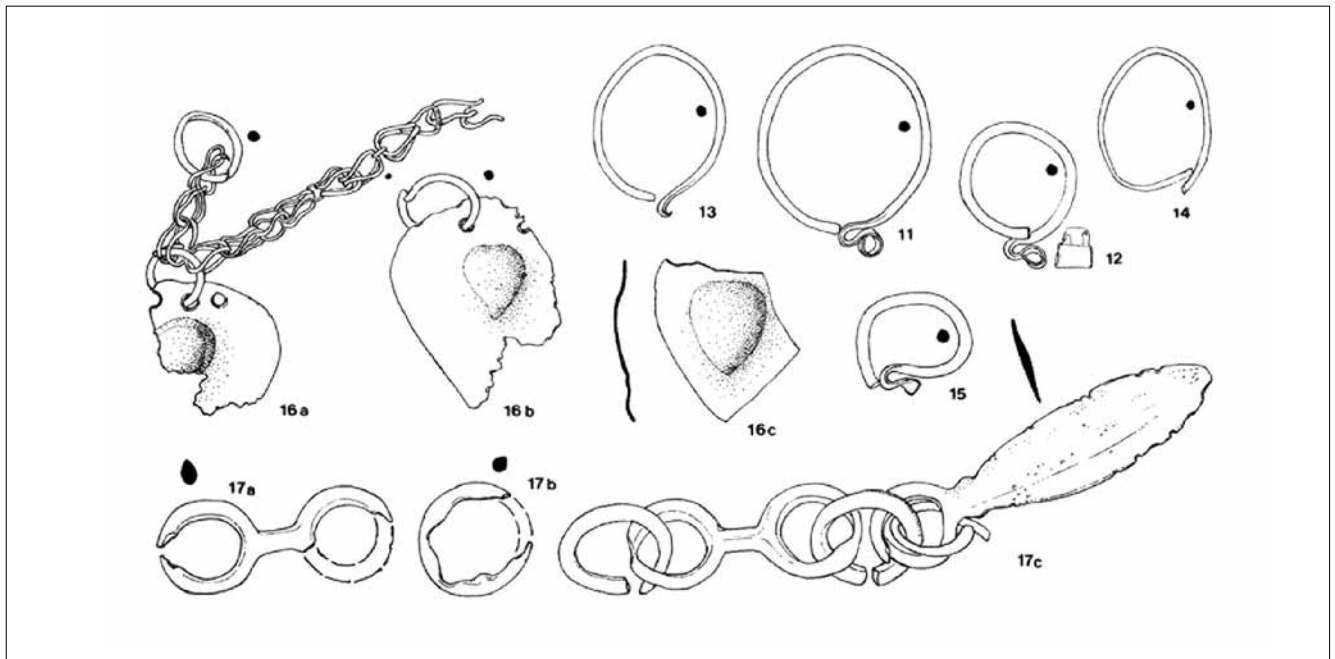


FIGURE 4. Grave 13, Ptuj Castle. 11–15, silver temple rings; 16a–c, silver chain with heart-shaped pendants (cat. no. 20); 17a–c, bronze chain with a leaf-shaped pendant (after Korošec 1999, Pl. 2: 11–17).

settlement was re-visited in the 9th century and in the early 10th century.⁶⁴ A hoard of iron tools also dates to the period between the late 8th century and the early 10th.⁶⁵ A rhombic arrowhead is a chance find (cat. no. 15).

At the other end of Slovenia, on the slight elevation of Tabor, above Tomaj, on the Karst plateau, several animal bones and artefacts from different periods were found during the construction of a school extension at the beginning of the 20th century. Some of the artefacts were from the Early Middle Ages, including a round ancient-Hungarian type of stirrup and a well-preserved iron bridle bit with an iron chain made of narrow links, but they are without precise data. Karl Moser, who reported the find, learned from the locals that human bones had been discovered next to the artefacts, but had not survived.⁶⁶

The only burial finds with purportedly ancient-Hungarian origin in the territory of Slovenia have so far been found in Ptuj, on both banks of the Drava river. The area of Zgornji Breg lies on its right bank, where intensive Roman-period settlement has been confirmed, including workshops and a cemetery.⁶⁷ Among the Roman-period finds from Zgornji Breg there is a double-loop buckle, which is certainly later, most likely from the 10th century (cat. no. 7).⁶⁸ In that time, the inhabitants of Ptuj buried their

dead in the nearby cemeteries in Spodnja Hajdina⁶⁹ and on the castle hill on the left bank of the Drava. Located in the tournament grounds of the castle, the cemetery, with more than 400 graves, was in use between the early 9th century and the late 11th century, or perhaps even as late as the 12th century.⁷⁰ Two of the graves were classified by Paola Korošec into the so-called “Old Hungarian horizon”.⁷¹ Grave 262 contained a man lying on a plank and covered with another plank. In the waist area next to the well-preserved skeleton, the grave contained fragments of a large knife and a small one, fragments of an awl with a wooden handle, and fragments of iron fittings, supposedly belonging to a quiver (Fig. 3), on the basis of which the grave was attributed to ancient Hungarians.⁷² There is, however, not enough firm evidence to support this claim, since the grave contained no other quiver fragments, nor any other items that would confirm the hypothesis of an ancient-Hungarian archer.⁷³ In Grave 13, heart-shaped pendants attached to a silver chain (cat. no. 20), five silver temple rings and a bronze chain with a leaf-shaped pendant were found next to the neck of the deceased woman (Fig. 4). The artefacts in the grave date to different time periods: the bronze chain to the prehistoric period, the chain with the heart-shaped pendants to the late 9th century or to the 10th century, the temple rings to the Bijelo Brdo horizon. If the latter somehow came into the grave during some later works in the cemetery, as alleged by

64 Karo, Knific 2020, 199–200, Pl. 14: 12–15.

65 Bitenc, Knific 2015, 104–106.

66 Moser 1906.

67 Mikl-Curk 1966.

68 The belt buckle was discovered in 1909 in terrain where excavations unearthed Late Roman graves dug into the remains of Roman buildings (cf. Mikl-Curk 1966, 46–47, 59–60). The author is grateful to Aleksandra Nestorović of the Ptuj–Ormož Regional Museum for this information.

69 Korošec 1947, 28–35.

70 Korošec 1999, 82–84; Tomičič 1993, 557.

71 Korošec 1985; 1999, 70.

72 Korošec 1999, 70, Pl. 31: 1–7.

73 Cf. e.g. fragments of quivers in graves of archers in the Vukovar-Lijeva Bara cemetery (Demo 2009, 432, Tab. 13).

Paola Korošec, the grave could be dated to the turn of the 10th century, or before the mid-10th century.⁷⁴ As pointed out already by Ciprián Horváth, this dating is too early, and the grave should be dated to a time after 960.⁷⁵ Željko Demo's dating, on the other hand, was based on the rest of the grave goods (temple rings) and the finding that heart-shaped pendants indicate a secondary or even multiple use, due to the differences between them (the size of the central recess) and the re-drilled holes for the attachment to the chain. According to him, the grave dates to the beginning of the 11th century at the earliest, based on the prevailing form of temple rings with a wide S-loop.⁷⁶ They date the grave to the latest horizon of the Ptuj Castle burials with Bijelo Brdo elements. This is the most prominently represented horizon, and it shows a rise in the population, as well as contacts with the inhabitants of other lands.⁷⁷ In that time, Ptuj was an important regional centre: around 970 at the latest it was called *civitas*, i.e. a fortified walled settlement; it consisted of several settlement cores, it had a bridge, a toll station, and the right to host markets.⁷⁸

An exception among the sites under consideration here is a discovery from a river; one of the stirrups was found in the Ljubljana riverbed (cat. no. 4). Despite the fact that the many artefacts from the river include a number of horse-tack items, the only one that can be associated with ancient Hungarians is an iron stirrup found in the southern periphery of Ljubljana, near Rakova Jelša.⁷⁹

Ancient-Hungarian incursions across Slovenian territory in the light of historical and archaeological sources

A quick glance over the here-discussed archaeological finds from Slovenian sites clearly shows that the prevailing type of artefacts is those that can be associated with mounted warriors. This is hardly surprising, given the fact that ancient Hungarians were a people of horsemen who, between the end of the 9th century and the mid-10th century, pushed towards the West several times across present-day Slovenian territory, as reported by historical sources. After crossing the Danube in 894 and causing devastation in Pannonia, their raids continued until the battle of Lechfeld, near Augsburg, in 955. The end of the Carolingian period and Frankish rule in Slovenian territory was related to their incursions.⁸⁰

Towards the end of the 9th century, Slovenian territory thus became, for more than half a century, an area of contact and incursions from Pannonia to Italy. During that time, it was crossed by ancient Hungarians in both directions more than twenty times,⁸¹ the first time as early as 898, when they invaded northern Italy to the Brenta river.⁸² An even stronger army came the following year, defeating king Berengar I and penetrating all the way to Pavia. In the summer of 900, having made an agreement with Berengar I, they withdrew from northern Italy, and on their way home devastated and occupied Pannonia.⁸³ In 901 attacks on the territory of the East Frankish state continued: this time they targeted Carantania, from where they again returned home across Slovenian territory. The reason why so many incursions, not only into northern Italy but also into Bavaria, took this route, was that the route along the Danube was well fortified, protected by the fortress of Ennsburg, which ancient Hungarians tried to avoid at all costs, especially after the defeat of 900.⁸⁴

In 904 they crossed Slovenian territory two more times. Their 907 defeat of the Bavarian army near Bratislava meant that the Frankish kingdom lost the Eastern March along the Danube and that the border was moved to the river Enns. Most of the present-day Slovenian territory then came under their sphere of influence.⁸⁵ The route along the Danube into Germany and, farther, into France was thus opened to them.⁸⁶ Incursions into Italy followed again in the decades after the death of Berengar in 924. The last time they crossed Slovenian territory was in 954, when they returned to Pannonia from Italy.⁸⁷

The route from Pannonia to Italy, which ancient Hungarians rode so many times, probably led along the former Roman road past Ptuj (Roman *Poetovio*), Celje (*Celeia*), Ljubljana (*Emona*) and either through the upper Sava Valley or the Vipava Valley into Friuli (Fig. 5). The journey took slightly less than ten days,⁸⁸ which means they had to spend several nights in Slovenian territory. With so many marches, it is slightly surprising that only a relatively small number of the artefacts so far discovered can be linked with ancient Hungarians. A larger number of finds of ancient-Hungarian type could be expected at least in the eastern part of the Slovenian territory, on the fringe of the settlement area of ancient Hungarians in the Carpathian Basin,⁸⁹ and along the main routes where they pushed towards the West, for instance around Ptuj, which was, in the Early Middle Ages, one of the major towns in Slovenian territory. Its significance as a

74 Korošec 1999, 70. However, the author herself notes that the chain with pendants had a secondary use as an item of jewellery, a necklace or an applique on the dress (Korošec 1985, 340).

75 Horváth 2004, 466.

76 Demo 2012, 94.

77 Tomičič 1993, 556–557; Korošec 1999, 58–69; Kosi 2009, 51–52.

78 Kosi 2009, 41–43.

79 Knific 2009.

80 Štih 1983 with the list of historical sources; 2001, 79–82.

81 In 898 (twice), 899 (twice), 901 (twice), 904 (twice), 919 (once), 922 (once), 923 (twice), 927 (twice), 931 (twice?), 935 (twice), 937 (once), 942 (twice), 943 (twice), 947 (twice), 951 (twice), and 954 (once; Štih 1983, 191).

82 Kos 1906, no. 323a; Štih 1983, 187.

83 Kos 1906, no. 323b; Štih 1983, 188.

84 Štih 1983, 189.

85 Štih 1983, 190.

86 Schulze-Dörrlamm 2006, 43–44, Figs 1–3.

87 Štih 1983, 190–191.

88 Štih 1983, 192–193; 1999a, 106.

89 Takács 2006, 233–235.

town is reflected by two churches, which are mentioned in historical sources; the first was consecrated by the Salzburg bishop Liutpram in the time of prince Pribina,⁹⁰ the second was ordered by Kocel and consecrated in 874 by archbishop Teotmar.⁹¹ Ptuj furthermore held a strategically significant bridge across the Drava river.⁹² Nevertheless, the two graves from the large contemporary cemetery on the castle hill are most probably not burials of members of the ancient-Hungarian people,⁹³ and the discovery context of the double-loop buckle from Zgornji Breg does not allow a more precise interpretation, either. Along their route farther towards the West, some horse-tack items that can be associated with ancient Hungarians were found at Ljubična, above Zbelovska Gora, on the edges of the Drava Plain, but again without a known context. In the territory of Ljubljana, only one stirrup has so far been identified as an item of ancient-Hungarian type. It was found at the confluence of the Ljubljanica and Ižica rivers, where a military fortress might have stood in the Early Middle Ages.⁹⁴

In western Slovenia, archaeological finds suggest two possible routes into Italy (Fig. 5). One could have run along the upper Sava Valley, where one rhombic arrowhead was found in each of the Late Antique hilltop settlements of Ajdna, above Potoki, and Gradišče, above Bašelj, as well as in the settlement of Pristava, in Bled. The arrowhead from Gradišče, above Bašelj, bears traces of wood and was perhaps fired in an attack. An attack is also implied by the arrowhead found in the burnt material of one of the buildings in Pristava, in Bled, where several buildings might have ended in fire during an ancient-Hungarian raid.⁹⁵ Another piece of evidence of their incursions along this northern route might be a female skeleton from Grave 61 of the Iskra cemetery in Kranj.⁹⁶ The deceased died due to an injury from a stone bullet that hit the back of her head; at the time of the excavation it was still embedded in the skull.⁹⁷ The grave is dated to the 10th century on the basis of bronze temple rings and a finger ring.⁹⁸

The second route most likely ran through the Vipava Valley, a natural pass to Italy (Fig. 5).⁹⁹ Even though we have no direct archaeological evidence yet, the route could be reflected in the toponym Vogrsko in the lower Vipava Valley, which is analogous to the

many “*ungarus*”-type toponyms in Friuli.¹⁰⁰ Ancient-Hungarian presence is obvious in the westernmost part of Slovenia, i.e. the area around the town of Kobarid, where several rhombic arrowheads were found at Tonovcov Grad, near Kobarid, and at Veliki Gradec, near Drežnica. This area was part of Friuli at the time, i.e. the first contact area at the entrance into the riches of Italy, which suffered many ancient-Hungarian raids after 898.¹⁰¹

In Slovenian sites, the collection of artefacts that can be associated with ancient Hungarians is comparable to other sites in Central and Western Europe.¹⁰² There, too, weapons and equestrian equipment are the most common type, usually discovered as individual finds in settlements and fortresses, only exceptionally in graves.¹⁰³ Especially numerous are rhombic arrowheads with a tang from settlement contexts, which often indicate attacks and violent ends of some settlements.¹⁰⁴ Archaeological remains tell us that, in time of raids, people fled to fortified settlements or refuges, sometimes additionally fortifying them with walls, ramparts or wooden palisades.¹⁰⁵ Especially notable among the settlements in Moravia is the case of the central place of Mikulčice, which experienced a dramatic downfall. The destruction of the stronghold is evidenced by widespread fire damage, and many rhombic arrowheads speak of a fierce attack. The arrowheads concentrate predominantly in the central area of the settlement, in ecclesiastical buildings and palaces with stone walls, which might have been the last refuge from the attackers.¹⁰⁶ Ancient Hungarians probably attacked some other Moravian settlements, such as Strachotín-Petrova Louka, Znojmo, and Staré Zamký in Brno-Líšeň; some of them contained not only arrowheads but also destruction layers or traces of fire.¹⁰⁷

In Lower Austria, i.e. the territory that became an area of ancient-Hungarian influence after the defeat of the Bavarian army near Bratislava in 907 and the transfer of the border to the river Enns, the situation resembles that in the neighbouring regions. In the northern and southern Lower Austrian area – but not in its Danube region – rhombic arrowheads in various quantities occur within the context of settlements, while graves with finds of ancient-Hungarian type are an exception.¹⁰⁸

90 Kos 1906, no. 163.

91 Kos 1906, no. 232; Štih 2001, 75.

92 Kosi 2009, 41–42.

93 Graves of ancient-Hungarian warriors are rare also in other areas of Europe that were the targets of their raids. This is because they were buried not in cemeteries, but rather in individual graves, which are in most cases only discovered by accident (Schulze-Dörrlamm 2006, 55, Fig. 17; cf. Daim, Lauremann (eds.) 2006).

94 Knific 2009, 138, Fig. 135.

95 Pleterski 2010, 175.

96 Sagadin 1987, 65, 68, Pl. 11: 7–15.

97 Mechthild Schulze-Dörrlamm made a collection of some graves which purportedly contained victims of ancient-Hungarian attacks. In most cases they were killed by arrows – arrowheads were found in skeletons – or hit by a sabre (2002, 111, Fig. 2; 2006, 53–54, Figs 14–16). See also Kouřil 2019, 82–85, n. 66.

98 Bitenc, Knific (eds.) 2001, 112, cat. no. 374.

99 Cf. Štih 1999a, 103.

100 Štih 1999b, 108–111.

101 Štih 1999b, 106–107 with the list of historical sources.

102 Cf. Schulze 1984; Schulze-Dörrlamm 2002; 2006; 2010; Kouřil 2008; 2019.

103 Schulze-Dörrlamm 2006, 49–56, Fig. 13; Profantová 2008, 152–162, Fig. 2: 3–5; Tab. 1; Kouřil 2019, 73; Kotowicz, Glinianowicz, Michalak 2019, 410–411, 415–416, Fig. 7.

104 Schulze-Dörrlamm 2002, 112–114, Fig. 4; 2006, Fig. 12; 2010, 23–25, Fig. 10. 1; Kouřil 2008, 117–123, Figs 4–13; Profantová 2008, 153–155, Fig. 1.

105 Schulze 1984, 487–495; Schulze-Dörrlamm 2006, Figs 4–8; 2010, 22–23, Figs 7, 8.1; Kouřil 2008, 128–129, Figs 17–19.

106 Kouřil 2019, 74–79, Fig. 3. 1.

107 Kouřil 2008, 122–123, Figs 12–13; 2019, 82, Figs 3.3–3.4.

108 Felgenhauer-Schimmedt 2006, 254–259, Fig. 1.

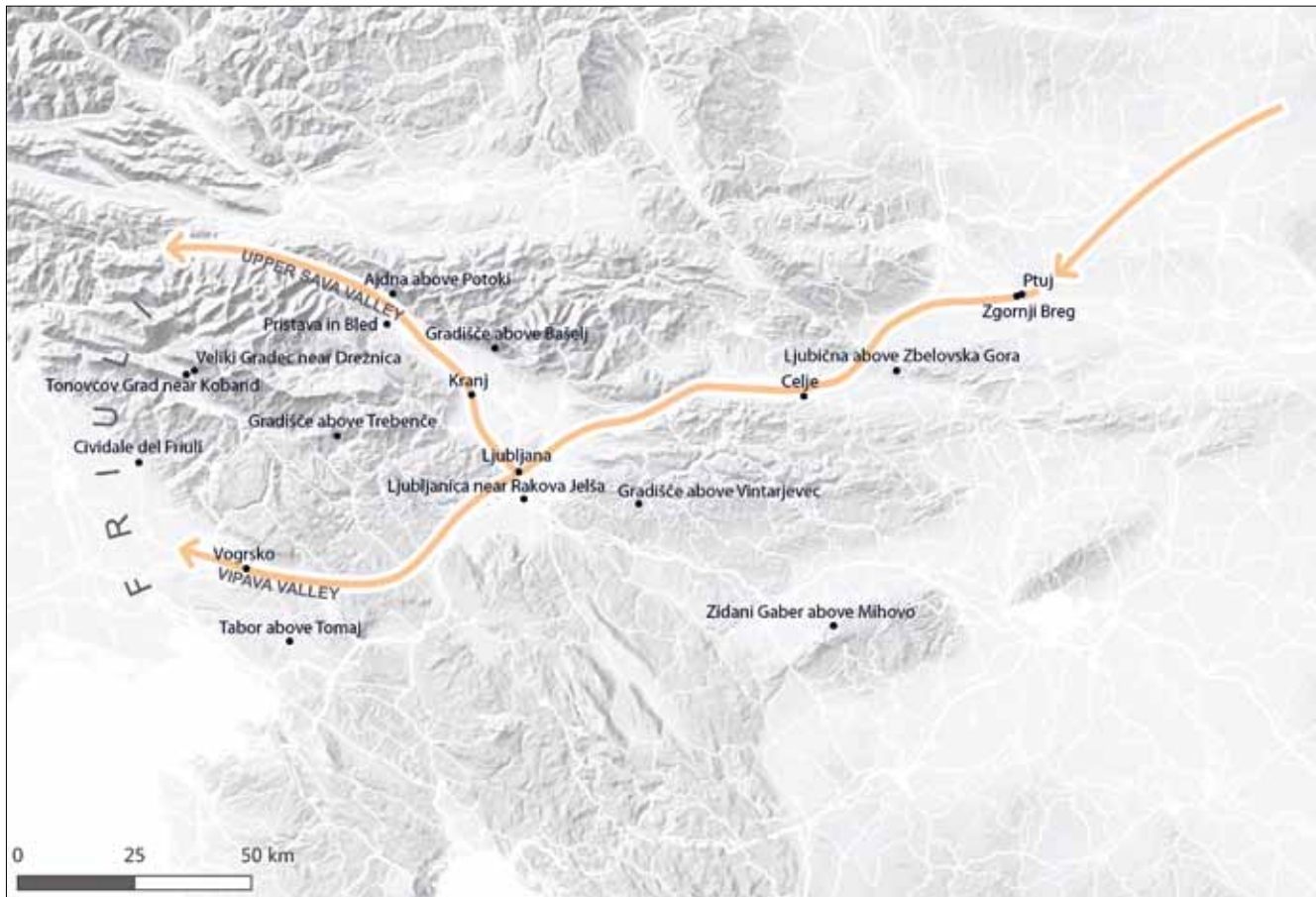


FIGURE 5. Presumed directions of ancient-Hungarian incursions across Slovenian territory (made by N. Kovačič, and B. Lindič).

On the other hand, individual finds of ancient-Hungarian character do not necessarily speak of hostile relations with the arrivals from the East. In Bohemia, for instance, the collection of these artefacts in strongholds is more numerous and more diverse than in Moravia; in addition to arrowheads, it encompasses other elements of material culture of ancient-Hungarian character (strap fittings, horse-tack items, decorative elements of female attire, etc.), which might have been either brought as gifts, or acquired by exchange or as spoils of war.¹⁰⁹

A more ambiguous interpretation of artefacts of ancient-Hungarian character can thus be presumed also for the here-presented finds from Slovenian findspots, even if their archaeological contexts have not yet been satisfactorily explained. Perhaps

those hilltop sites within Slovenian territory where the largest numbers of military artefacts of ancient-Hungarian type were found could be seen as temporary refuges in the time of incursions, while we cannot exclude the possibility that individual items could have been acquired through friendlier diplomatic relations or by trade with the ancient-Hungarian neighbours. This is especially true for the finds from the eastern part of the territory under discussion, such as the fitting with a stag – and the perhaps related double-loop buckle – from Ljubična, above Zbelovska Gora. Such items were often used as parts of equestrian equipment and discovered in graves with burials of women in the Carpathian Basin, which offers a possibility of a different – not solely military – starting point for the interpretation of some ancient-Hungarian finds in the Slovenian area.

109 Kouřil 2019, 89–90.

Catalogue of artefacts¹¹⁰

1. Round iron stirrup with a convex foot plate. The upper surface of the foot plate is smooth, and a rib runs down the middle of the underside. The arms are undecorated. In the lower part they widen semicircularly towards the foot plate, while in the upper part they have a neckless transition into a rectangular loop for a strap. Height 14.9 cm, width 13 cm, foot plate width 4.4 cm, weight 188 g.

Gradišče, above Trebenče. Kept by the National Museum of Slovenia, inv. no. S 3428.

Publ.: Karo 2004, 170, 172, no. 12, Fig. 7; Knific, Nabergoj 2017, 87, Fig. 102; Karo, Knific 2020, 206, Pl. 8: 1.

2. Pear-shaped iron stirrup with a convex foot plate. The upper surface of the foot plate is smooth, and a rib runs down the middle of the underside. The arms are undecorated. In the lower part they are slightly flattened at the transition into the foot plate, while in the upper part they have a nearly neckless transition into a square loop for a strap. Height 17 cm, width 12.2 cm, foot plate width 4.5 cm, weight 218 g.

Gradišče, above Vintarjevec. Kept by the National Museum of Slovenia, inv. no. S 5225.

Publ.: Karo 2007, 61, Fig. 70: 1.

3. Oval iron stirrup with a slightly convex foot plate. The upper surface of the foot plate is smooth, and the edges of the lower surface are turned inside and forged. The arms are undecorated. In the lower part they widen into the foot plate, while in the upper part they have a neckless transition into a flat rectangular loop with a small hole for a strap. Height 14.5 cm, width 13.3 cm, foot plate width 3.2 cm, weight 194 g.

Gradišče, above Vintarjevec. Kept by the National Museum of Slovenia, inv. no. S 5226.

Publ.: Karo 2007, 61, Fig. 70: 2.

4. Triangular iron stirrup with a slightly convex foot plate. The upper surface of the foot plate is smooth, and a rib runs down the middle of the underside. The arms are smooth and have a triangular cross-section. In the upper part an indistinct neck provides a transition into a rectangular loop for a strap. Traces of tinning survive on the underside of the foot plate. Height 15.1 cm, width 12.8 cm, foot plate width 3 cm, weight 164 g.

The Ljubljanica river near Rakova Jelša. Kept by the National Museum of Slovenia, inv. no. V 358.

Publ.: Karo 2004, 170, 172, no. 13, Fig. 8.

5. Gilded copper-alloy fitting, decorated with an impressed image of a stag. The image is surrounded by a raised rib with a string of impressed triangles. The rounded side and the two longer sides are decorated with a granulated line; the shorter straight side is decorated with an impressed stylised vegetative motif. Size 5.7 × 3.8 cm.

Ljubična, above Zbelovska Gora. Kept by the Celje Regional Museum; inv. no. 1576.

Publ.: Ciglencčki 1994, Pl. 3: 17; Bitenc, Knific (eds.) 2001, 106, cat. no. 353.

6. Iron belt buckle with an oval ring and a perforated chape. Size 3.8 × 3.4 cm.

Ljubična, above Zbelovska Gora. Kept by the National Museum of Slovenia, inv. no. S 2694.

Publ.: Karo, Knific 2020, 207, Pl. 9: 10.

7. Cast copper-alloy belt buckle with an oval ring and a perforated chape. Size 2.3 × 2.2 cm.

Ptuj, Zgornji Breg. Kept by the Ptuj–Ormož Regional Museum, inv. no. 3104.¹¹¹

Publ.: Sagadin 1979, Pl. 9: 8.

8. Iron arrowhead with a partly preserved tang and a rhombic head. Wood remains on the head. Length 4.2 cm, width 1.9 cm.

Gradišče, above Bašelj. Kept by the National Museum of Slovenia, inv. no. S 3220.

Publ.: Karo, Knific 2020, 204, Pl. 5: 10.

9. Iron arrowhead with a tang and a rhombic head. Length 7.7 cm. Ajdna, above Potoki. Kept by the Gorenjska Museum, Kranj, inv. no. AJ 335.

Publ.: Karo 2007, 15, Fig. 7: 1.

10. Iron arrowhead with a tang and a rhombic head. Length 4.2 cm.

Pristava, in Bled. Kept by the National Museum of Slovenia, inv. no. S 4881.

Publ.: Belak, Pleterski, Knific 2008, 180, Pl. 30: 17.

11. Iron arrowhead with a tang and a rhombic head. Length 7 cm. Tonovcov Grad, near Kobarid. Kept by the Tolmin Museum, inv. no. 22241.

Publ.: Modrijan, Milavec 2011, 412, Pl. 10: 8.

12. Iron arrowhead with a tang and a rhombic head. Length about 7 cm.

Tonovcov Grad, near Kobarid. Misaid.

Publ.: Ciglencčki 1997, 21; Modrijan, Milavec 2011, 412, Pl. 10: 9.

13. Iron arrowhead with a tang and a rhombic head. Length 7.7 cm.

Tonovcov Grad, near Kobarid. Kept by the Tolmin Museum, inv. no. 23479.

Publ.: Modrijan, Milavec 2011, 425, Pl. 47: 4.

14. Iron arrowhead with a tang and a rhombic head. Length 8.3 cm.

Tonovcov Grad, near Kobarid. Kept by the Tolmin Museum, inv. no. 23449.

Publ.: Modrijan, Milavec 2011, 426, Pl. 49: 10.

¹¹⁰ Cat. nos of items 1–18 match the item numbers in Plate 1, while cat. nos 19 and 20 are parts of the grave inventory in Figs 3 and 4.

¹¹¹ The buckle is kept by the Ptuj–Ormož Regional Museum, and not by the Celje Regional Museum, as incorrectly stated in the publication.

15. Iron arrowhead with a tang and a rhombic head. Length 11 cm. Zidani Gaber, above Mihovo. Kept by the Institute of Archaeology, Research Centre of the Slovenian Academy of Sciences and Arts, without inv. no.
Publ.: Ciglencčki 1994, Pl. 12: 12.
16. Iron arrowhead with a tang and a rhombic head. Length 7.4 cm, width 1.6 cm.
Veliki Gradec, near Drežnica. Kept by a private owner.
Publ.: Karo, Knific 2020, 209, Pl. 12: 9.
17. Iron arrowhead with a tang and a narrow head in the shape of an elongated rhombus. Length 5.9 cm, width 1.1 cm.
Veliki Gradec, near Drežnica. Kept by a private owner.
Publ.: Karo, Knific 2020, 209, Pl. 12: 10.
18. Iron arrowhead with a tang and a willow-leaf-shaped head. Length 7.9 cm, width 0.9 cm.
Veliki Gradec, near Drežnica. Kept by a private owner.
Publ.: Karo, Knific 2020, 209, Pl. 12: 11.
19. Fragments of iron fitting. Lengths 5.3, 5.0 and 8.3 cm.
Ptuj Castle. Kept by the Ptuj–Ormož Regional Museum, inv. nos S 492 and 493.
Publ.: Korošec 1999, 24, Pl. 31: 1–3.
20. Silver chain with three heart-shaped pendants. Chain length about 9.1 cm, pendant sizes 2.8 × 2.5, 3.9 × 2.8 and 2.6 × 2.9 cm.
Ptuj Castle. Kept by the Ptuj–Ormož Regional Museum, inv. no. S 80.
Publ.: Korošec 1999, 14, Pl. 2: 16a–c.

Translation: Meta Osredkar

BIBLIOGRAPHY

- Belak, Pleterski, Knific 2008 – M. Belak, A. Pleterski, T. Knific, Katalog predmetov / Katalog der Gegenstände, in Pleterski, A. (ed.), *Zgodnjesrednjeveška naselbina na blejski Pristavi. Najdbe / Frühmittelalterliche Siedlung Pristava in Bled. Funde*, Opera Instituti Archaeologici Sloveniae 14, Inštitut za arheologijo, Znanstvenoraziskovalni center Slovenske akademije znanosti in umetnosti, Založba ZRC, 2008, 171–227.
- Bialeková 1964 – D. Bialeková, Staromadžarské hroby a včasnostredoveké sídliskové objekty v Lipovej–Ondrochove, *Študijné zvesti Archeologického ústavu Slovenskej akadémie vied* 14, 1964, 187–196.
- Bitenc, Knific (eds.) 2001 – P. Bitenc, T. Knific (eds.), *Od Rimljanov do Slovanov*, Narodni muzej Slovenije, 2001.
- Bitenc, Knific 2015 – P. Bitenc, T. Knific, Zgodnjesrednjeveški zakladi železnih predmetov z Gorjancev, Starega gradu nad Uncem in Ljubične nad Zbelovsko Goro / Early medieval ironwork hoards from the Gorjanci Hills, Stari grad above Unec and Ljubična above Zbelovska Gora, *Arheološki vestnik* 66, 2015, 103–146.
- Bollók 2015 – Á. Bollók, *Ornametika a 10. századi Kárpát-medencében. Formátörténeti tanulmányok a magyar honfoglalás kori díszítőművészethez / The ornamental vocabulary of the tenth century in the Carpathian Basin. Form-historical studies in the decorative arts of the Hungarian Conquest period*, Magyar Tudományos Akadémia Bölcsészettudományi Kutatóközpont Régészeti Intézet, 2015.
- Ciglencečki 1994 – S. Ciglencečki, Höhenbefestigungen als Siedlungsgrundeinheit der Spätantike in Slowenien, *Arheološki vestnik* 45, 1994, 239–266.
- Ciglencečki 1997 – S. Ciglencečki, Poznoantični in slovanski sledovi na Kobariškem, in Likar, Z., Raspet, A., Cimprič, Ž. (eds.), *Kobarid*, Kobariški muzej, 1997, 17–28.
- Ciglencečki 2011 – S. Ciglencečki, Uvod / Introduction, in Ciglencečki, S., Modričan, Z., Milavec, T., *Poznoantična utrjena naselbina Tonovcov grad pri Kobariidu. Naselbinski ostanki in interpretacija / Late Antique fortified settlement Tonovcov grad near Kobarid. Settlement remains and interpretation*, Opera Instituti Archaeologici Sloveniae 23, Inštitut za arheologijo Znanstvenoraziskovalni center Slovenske akademije znanosti in umetnosti, Založba ZRC, 2011, 9–64.
- Ciglencečki 2016 – S. Ciglencečki, Ljubična nad Zbelovsko goro in Homec nad Žičami: dve mogočni, a slabo poznani arheološki postojanki na Štajerskem / Ljubična nad Zbelovsko goro and Homec nad Žičami: Two Mighty Yet Lesser Known Archaeological Settlements in Styria, in Boldin, A. (ed.), *Konjice: 870 let prve pisne omembe*, Občina Slovenske Konjice, 2016, 36–47.
- Daim, Lauremann (eds.) 2006 – F. Daim, E. Lauremann (eds.), *Das frühungarische Reitergrab von Gnadendorf (Niederösterreich)*, Monographien des Römisch-Germanischen Zentralmuseums Band 64, Verlag des Römisch-Germanischen Zentralmuseums Mainz, 2006.
- Demo 2009 – Ž. Demo, *Ranosrednjovjekovno groblje bjelobrdske kulture: Vukovar-Lijeva Bara (X–XI. stoljeće) / An Early Medieval Cemetery of the Bijelo Brdo Culture: Vukovar-Lijeva Bara (10th–11th Centuries)*, Musei Archaeologici Zagrabienensis Catalogi et Monographiae / Katalozi i monografije Arheološkog muzeja u Zagrebu 6/1–2, Arheološki muzej u Zagrebu, 2009.
- Demo 2012 – Ž. Demo, Srebrni ukrasni komplet za glavu i prsa iz Arheološkog muzeja u Zagrebu / A Silver Attire Set for the Head and Chest from the Archaeological Museum in Zagreb, in Šeparović, T. (ed.), *Dani Stjepana Gunjače 2, Zbornik radova sa znanstvenog skupa "Dani Stjepana Gunjače 2", Hrvatska srednjovjekovna povijesno-arheološka baština – međunarodne teme, Split, 18.–21. listopada 2011*, Muzej hrvatskih arheoloških spomenika, 2012, 81–105.
- Éry 1968 – K. K. Éry, Reconstruction on the tenth century population of Sárbogárd on the basis of archaeological and anthropological data, *Alba Regia* 8–9, 1968, 93–147.
- Felgenhauer-Schmiedt 2006 – S. Felgenhauer-Schmiedt, Niederösterreich im 10. Jahrhundert, in Daim, F., Lauremann, E. (eds.), *Das frühungarische Reitergrab von Gnadendorf (Niederösterreich)*, Monographien des Römisch-Germanischen Zentralmuseums Band 64, Verlag des Römisch-Germanischen Zentralmuseums Mainz, 2006, 253–267.
- Gáll 2015 – E. Gáll, An attempt to classify the stirrups dating from the 10th century and the first quarter of the 11th century in the Transylvanian Basin, the Crişana/Partium and the Banat with an outlook to the Carpathian Basin, in Cosma, C. (ed.), *Warriors, weapons, and harness from the 5th–10th centuries in the Carpathian Basin*, Interferențe etnice și culturale în mileniile 1 a. Chr. – 1 p. Chr. / Ethnic and cultural interferences in the 1st millennium B.C. to the 1st millennium A.D 22, Mega Publishing House, 2015, 355–406.
- Goßler 2013 – N. Goßler, Die mittelalterlichen Steigbügel aus dem Berliner Bestand der Prussia-Sammlung (ehemals Königsberg/Ostpreußen). Studien zu Typologie, Chronologie und Kulturgeschichte, *Acta Praehistorica et Archaeologica* 45, 2013, 109–215.
- Hanuliak 1994 – M. Hanuliak, *Malé Kosihy. Pohrebisko z 10.–11. storočia*, Materialia Archaeologica Slovaca 12, Archeologický ústav Slovenskej akadémie vied Nitra, 1994.
- Hedenstierna-Jonson 2012 – C. Hedenstierna-Jonson, Traces of contacts: Magyar material culture in the Swedish Viking Age context of Birka, in Tobias, B. (ed.), *Die Archäologie der frühen Ungarn, Chronologie, Technologie und Methodik*, Römisch-Germanisches Zentralmuseum Mainz, Tagungen 17, Verlag des Römisch-Germanischen Zentralmuseums Mainz, 2012, 29–46.
- Horváth 2004 – C. Horváth, Lánccészerek a honfoglalás kori leletanyagban / Kettenschmucksachen in dem landnahmezeitlichen Fundmaterial, *A Móra Ferenc Múzeum Évkönyve – Studia Archaeologica* 10, 2004, 459–482.
- Јанакиевски 1983 – Т. Јанакиевски, Кале, с. Стражево – Битолско. Извештај од заштитно археолошко истражување, Прилози кон македонската археологија / *Macedoniae Acta Archeologica* 6, 1983, 97–110.
- Karo 2004 – Š. Karo, Die Typologie der frühmittelalterlichen Steigbügel aus slowenischen Fundorten, in Fusek, G. (ed.), *Zborník na počesť Dariny Bialekovej*, Archaeologica Slovaca monographiae, Communicationes Instituti Archaeologici Nitriensis Academiae Scientiarum Slovacae 7, Archeologický ústav Slovenskej akadémie vied Nitra, 2004, 165–173.
- Karo 2007 – Š. Karo, *Ozemlje današnje Slovenije med avarskimi vojnama in madžarskimi vpadi v luči arheoloških najdb*, unpublished PhD thesis, Univerza v Ljubljani, Filozofska fakulteta, Oddelek za arheologijo, 2007.
- Karo, Knific 2019 – Š. Karo, T. Knific, Zgodnjesrednjeveške brzde z najdišč v Sloveniji / Bridle bits in the Early Middle Ages: evidence from Slovenia, *Arheološki vestnik* 70, 2019, 185–228.
- Karo, Knific 2020 – Š. Karo, T. Knific, Die frühmittelalterlichen Militäriefunde von Höhenfundorten in Slowenien, in Diesenberger, M., Eichert, S., Winckler, K. (eds.), *Der Ostalpenraum im Frühmittelalter. Herrschaftsstrukturen, Raumorganisation und archäologisch-historischer Vergleich*, Forschungen zur Geschichte des Mittelalters 23, Verlag der Österreichischen Akademie der Wissenschaften Wien, 2020, 185–211, 437–458.
- Knific 2009 – T. Knific, The Ljubljana and the early Slavs, in Turk, P., Istenič, J., Knific, T., Nabergoj, T. (eds.), *The Ljubljana a River and its past*, Narodni muzej Slovenije, 2009, 136–141.
- Knific, Nabergoj 2017 – T. Knific, T. Nabergoj, *Medieval Stories from the Crossroads*, Narodni muzej Slovenije, 2017.
- Korošec 1947 – J. Korošec, *Staroslovenska grobišča v severni Sloveniji*, Tiskarna Družbe Sv. Mohorja, 1947.
- Korošec 1950 – J. Korošec, *Staroslovensko grobišče na Ptujem gradu*, Dela 1, Slovenska akademija znanosti in umetnosti, 1950.
- Korošec 1985 – P. Korošec, Ungarische Elemente aus der Nekropole auf der Burg zu Ptuj, *Arheološki vestnik* 36, 1985, 337–350.
- Korošec 1999 – P. Korošec, *Nekropola na Ptujem gradu, turnirski prostor / Das Gräberfeld an dem Schloßberg von Ptuj, Turnierplatz*, Pokrajinski muzej Ptuj, 1999.
- Kos 1906 – F. Kos, *Gradivo za zgodovino Slovencev v srednjem veku. Druga knjiga (l. 801 – 1000)*, Leonova družba, 1906.
- Kosi 2009 – M. Kosi, *Zgodnja zgodovina srednjeveških mest na Slovenskem. Primerjalna študija o neagrarnih naselbinskih središčih od zgodnjega srednjega veka do 13. stoletja*, Tesaurus memoria Opuscula 1, Založba ZRC, Zgo-

dovinski inštitut Milka Kosa, Znanstvenoraziskovalni center Slovenske akademije znanosti in umetnosti, 2009.

Kotowicz, Glinianowicz, Michalak 2019 – P. N. Kotowicz, M. Glinianowicz, A. Michalak, Elements of Weaponry from the 9th- and 10th-Century Trepcza Complex near Sanok, South-Eastern Poland, in Poláček, L., Kouřil, P. (eds.), *Bewaffung und Reiterausrüstung des 8. bis 10. Jahrhunderts in Mitteleuropa*, Internationale Tagungen in Mikulčice 9, Archeologický ústav Akademie věd České republiky Brno, 2019, 403–420.

Kouřil 2008 – P. Kouřil, Archeologické doklady nomádského vlivu a zásahu na území Moravy v závěru 9. a v 10. století, in Štefanovičová, T., Hulínek, D. (eds.), *Bitka pri Bratislave v roku 907 a jej význam pre vývoj stredného Podunajska*, Slovenský archeologický a historický inštitút, 2008, 113–135.

Kouřil 2019 – P. Kouřil, The Magyars and Their Contribution to the Collapse and Fall of Great Moravia: Allies, Neighbours, Enemies, in Macháček, J., Wihoda, M. (eds.), *The Fall of Great Moravia. Who Was Buried in Grave H153 at Pohansko near Břeclav?*, Brill, 2019, 62–93.

Kovács 1986 – L. Kovács, Über einige Steigbügeltypen der Landnahmezeit, *Acta Archaeologica Academiae Scientiarum Hungaricae* 38, 1986, 195–225.

Mesterházy 1996 – K. Mesterházy, Törtel-Demeter tanya, in Fodor, I., Révész, L., Wolf, M., Nepper, I. M. (eds.), *The Ancient Hungarians*, Hungarian National Museum, 1996, 356–357.

Mesterházy 2008 – K. Mesterházy, Taktika Maďarov v čase príchodu do Karpatskej kotliny a ich zbrane so zvláštnym zreteľom na tulce, in Štefanovičová, T., Hulínek, D. (eds.), *Bitka pri Bratislave v roku 907 a jej význam pre vývoj stredného Podunajska*, Slovenský archeologický a historický inštitút, 2008, 169–175.

Mikl-Curk 1966 – I. Mikl-Curk, Poznoantično grobišče na Zgornjem Bregu v Ptujju, *Časopis za zgodovino in narodopisje* 2, 1966, 46–62.

Milavec 2011 – T. Milavec, Kovinske najdbe / Metal finds, in Modrijan, Z., Milavec, T., *Poznoantična utrjena naselbina Tonovcov grad pri Kobaridu. Najdbe / Late Antique fortified settlement Tonovcov grad near Kobarid. Finds*, Opera Instituti archaeologici Sloveniae 24, Inštitut za arheologijo, Znanstvenoraziskovalni center Slovenske akademije znanosti in umetnosti, Založba ZRC, 2011, 21–81.

Milavec 2020 – T. Milavec, Early Medieval finds and contexts from the hilltop settlement of Tonovcov grad near Kobarid, in Diesenberger, M., Eichert, S., Winckler, K. (eds.), *Der Ostalpenraum im Frühmittelalter – Herrschaftsstrukturen, Raumorganisation und archäologisch-historischer Vergleich*, Forschungen zur Geschichte des Mittelalters 23, Verlag der Österreichischen Akademie der Wissenschaften Wien, 2020, 177–184, 434–436.

Modrijan, Milavec 2011 – Z. Modrijan, T. Milavec, Katalog / Catalogue, in Modrijan, Z., Milavec, T., *Poznoantična utrjena naselbina Tonovcov grad pri Kobaridu. Najdbe / Late Antique fortified settlement Tonovcov grad near Kobarid. Finds*, Opera Instituti Archaeologici Sloveniae 24, Inštitut za arheologijo, Znanstvenoraziskovalni center Slovenske akademije znanosti in umetnosti, Založba ZRC, 2011, 407–450.

Moser 1906 – K. Moser, Über prähistorische Funde vom Gradišče und Tabor von Tomaj im österreichischen Littorale, *Mitteilungen der Anthropologischen Gesellschaft in Wien* 36, 1906, 140–141.

Perémi 1987 – Á. S. Perémi, Honfoglaláskori leletek Veszprém megyében (előzetes jelentés) / Funden aus der Zeit der Landnahme im Komitat Veszprém, *A Veszprém Megyei Múzeumok Közleményei* 18, 1987, 115–133.

Pleterski 2010 – A. Pleterski, *Zgodnjesrednjevska naselbina na blejski Pristavi. Tafonomija, predmeti in čas / Frühmittelalterliche Siedlung Pristava in Bled. Taphonomie, Fundgegenstände und zeitliche Einordnung*, Opera Instituti Archaeologici Sloveniae 19, Inštitut za arheologijo, Znanstvenoraziskovalni center Slovenske akademije znanosti in umetnosti, Založba ZRC, 2010.

Profantová 2008 – N. Profantová, Problém interpretace staromaďarských nálezů v Čechách, in Štefanovičová, T., Hulínek, D. (eds.), *Bitka pri Bratislave v roku 907 a jej význam pre vývoj stredného Podunajska*, Slovenský archeologický a historický inštitút, 2008, 149–168.

Révész 1987 – L. Révész, Lyraförmige Schnallen in dem Karpatenbecken, *Acta Archaeologica Academiae Scientiarum Hungaricae* 39, 1987, 257–285.

Révész 1996 – L. Révész, The archaeological Heritage of the Ancient Hungarians, in Fodor, I., Révész, L., Wolf, M., Nepper, I. M. (eds.), *The Ancient Hungarians*, Hungarian National Museum, 1996, 37–52.

Révész 1997 – L. Révész, Ein landnahmezeitliches Frauengrab in Békéscsaba-Erzsébethely, *Acta Archaeologica Academiae Scientiarum Hungaricae* 49/4, 1997, 419–451.

Révész 2000 – L. Révész, Riemenzunge vom Pferdegeschirr (Cat. No. 03.02.09). Törtel-Demeter-tanya (Ungarn), in Wiczorek, A., Hinz, H.-M. (eds.), *Europas Mitte um 1000. Katalog*, 2000, 70.

Ruttkey 1976 – A. Ruttkey, Waffen und Reiterausrüstung des 9. bis zur ersten Hälfte des 14. Jahrhunderts in der Slowakei 2, *Slovenská archeológia* 24/2, 1976, 245–395.

Sagadin 1979 – M. Sagadin, Antične pasne sponne in garniture v Sloveniji, *Arheološki vestnik* 30, 1979, 294–338.

Sagadin 1987 – M. Sagadin, *Kranj-Križišče Iskra. Nekropola iz časa preseljevanja ljudstev in staroslovanskega obdobja / Iskra Crossroads. A Cemetery from the Migration Period and the Early Slavic Period*, Katalogi in monografije 24, Narodni muzej Slovenije, 1987.

Schulze 1984 – M. Schulze, Das ungarische Kriegergrab von Aspres-lès-Corps. Untersuchungen zu den Ungarneinfällen nach Mittel-, West- und Südeuropa (899 – 955 n. Chr.), *Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz* 31, 1984, 473–514.

Schulze-Dörrlamm 1991 – M. Schulze-Dörrlamm, Untersuchungen zur Herkunft der Ungarn und zum Beginn ihrer Landnahme im Karpatenbecken, *Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz* 35/2, 1991, 373–478.

Schulze-Dörrlamm 2002 – M. Schulze-Dörrlamm, Die Ungarneinfälle des 10. Jahrhunderts im Spiegel archäologischer Funde, in Henning, J. (ed.), *Europa im 10. Jahrhundert. Archäologie einer Aufbruchzeit. Internationale Tagung in Vorbereitung der Ausstellung "Otto der Große, Magdeburg und Europa"*, Mainz am Rhein: P. von Zabern, 2002, 109–122.

Schulze-Dörrlamm 2006 – M. Schulze-Dörrlamm, Spuren der Ungarneinfälle des 10. Jahrhunderts, in Daim, F. (ed.), *Heldengrab im Niemandsland. Ein frühungarischer Reiter aus Niederösterreich*, Begleitbuch zur gleichnamigen Ausstellung der Römisch-Germanisches Zentralmuseum Mainz 14, September bis 19. November 2006, Verlag des Römisch-Germanischen Zentralmuseums Mainz, 2006, 43–66.

Schulze-Dörrlamm 2010 – M. Schulze-Dörrlamm, Ungarneinfälle in die Schweiz im Spiegel archäologischer Funde, *Helvetica Archaeologica* 161, 2010, 13–29.

Stare 1999 – V. Stare, Naselbina na Gradišču nad Vintarjevem pri Litiji, *Argo* 42/1, 1999, 18–34.

Štih 1983 – P. Štih, Madžari in slovenska zgodovina v zadnji četrtini 9. in prvi polovici 10. stoletja, *Zgodovinski časopis* 37/3, 1983, 171–201.

Štih 1999a – P. Štih, O vzhodni meji Italije in o razmerjih ob njej v zgodnjem srednjem veku, in Mihelič, D. (ed.), *Gestrinov zbornik*, Znanstvenoraziskovalni center Slovenske akademije znanosti in umetnosti, 1999, 103–123.

Štih 1999b – P. Štih, *Villa quae Sclavorum lingua vocatur Goriza. Študija o dveh listinah cesarja Otona III. iz leta 1001 za oglejskega patriarha Johanessa in furlanskega grofa Werihena (DD. O. III. 402 in 412)*, Goriški muzej, 1999.

Štih 2001 – P. Štih, *Ozemlje Slovenije v zgodnjem srednjem veku. Osnovne poteze zgodovinskega razvoja od začetka 6. do konca 9. stoletja*, Univerza v Ljubljani, Filozofska fakulteta, Oddelek za zgodovino, 2001.

Takács 2006 – M. Takács, Siedlungsgeschichtliche Auswertung, in Daim, F., Laueremann, E. (eds.), *Das frühungarische Reitergrab von Gnadendorf (Niederösterreich)*, Monographien des Römisch-Germanischen Zentralmuseums Band 64, Verlag des Römisch-Germanischen Zentralmuseums Mainz, 2006, 211–252.

Točík 1968 – A. Točík, *Altmagyarische Gräberfelder in der Südwestslowakei*, *Archaeologica Slovaca* Catalogi 3, Vydavateľstvo Slovenskej Akadémie vied, 1968.

Tomičić 1993 – Ž. Tomičič, Prilog istraživanju kronologije bjelobrdskeg segmenta srednjovjekovnog groblja Ptuj-Grad, *Ptujski arheološki zbornik*, 1993, 543–579.

Tratnik 2020 – V. Tratnik, *Višinska naselbina Zidani gaber nad Mihovim in poselitev Dolenjske v pozni antiki*, unpublished PhD thesis, Univerza v Ljubljani, Filozofska fakulteta, Oddelek za arheologijo, 2020.

Vidrih Perko, Sagadin 2004 – V. Vidrih Perko, M. Sagadin, Gorenjska v antiki, *Kamniški zbornik* 17, 2004, 207–224.

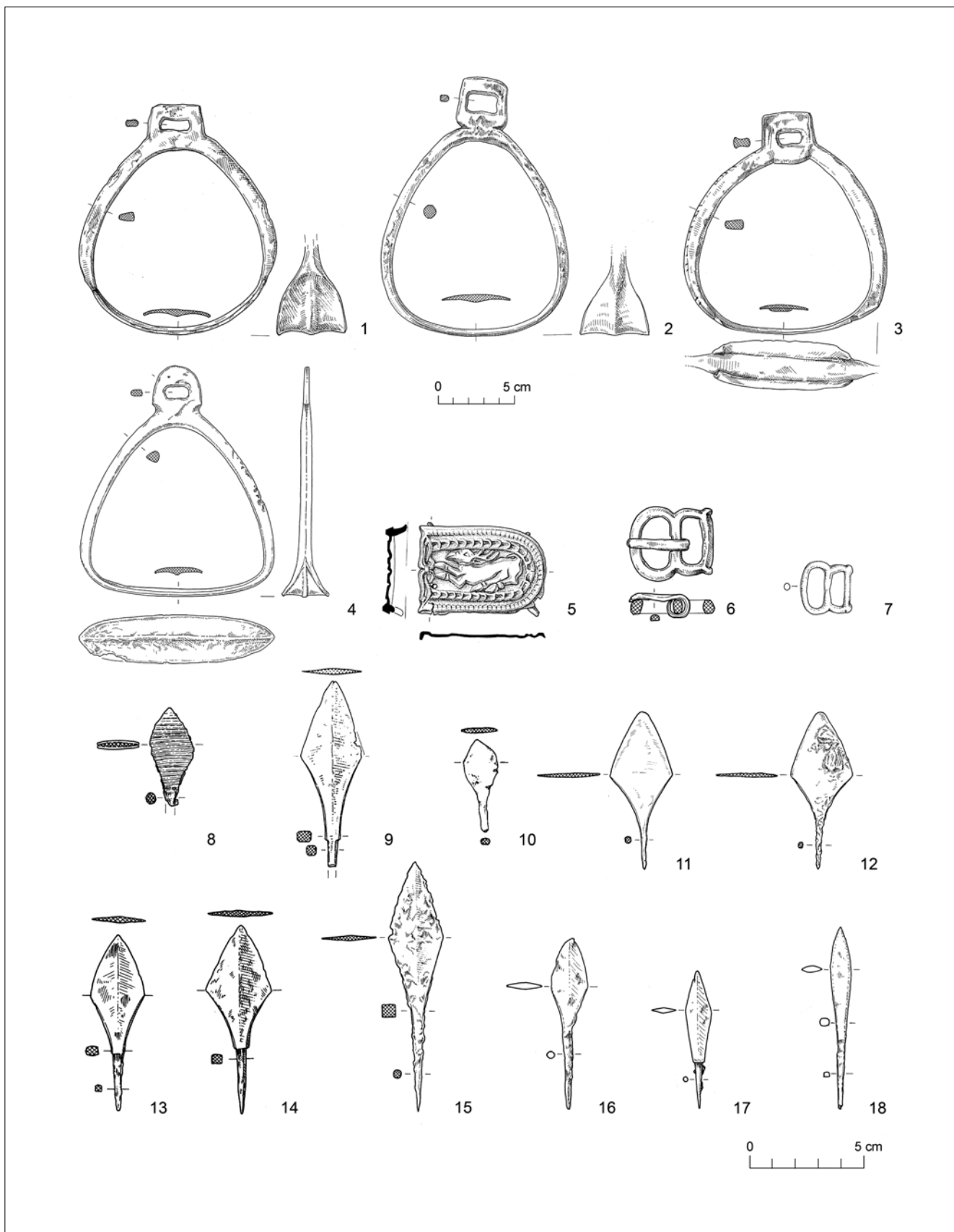


PLATE 1. Finds of ancient-Hungarian type at Slovenian sites. 1, Gradišče, above Trebenče (Karo, Knific 2020, Pl. 8: 1); 2–3, Gradišče, above Vintarjevec (Karo 2007, Fig. 70: 1–2); 4, Ljubljana at Rakova Jelša (Karo 2004, Fig. 8); 5–6, Ljubična, above Zbelovska Gora (Ciglenečki 1994, Pl. 3: 17; Karo, Knific 2020, Pl. 9: 10); 7, Ptuj, Zgornji Breg (Sagadin 1979, Pl. 9: 8); 8, Gradišče, above Bašelj (Karo, Knific 2020, Pl. 5: 10); 9, Ajdna, above Potoki (Karo 2007, Fig. 7: 1); 10, Pristava, in Bled (Belak, Pleterski, Knific 2008, Pl. 30: 17); 11–14, Tonovcov Grad, near Kobariid (Modrijan, Milavec 2011, Pls 10: 8, 9; 47: 4; 49: 10); 15, Zidani Gaber, above Mihovo (Ciglenečki 1994, Pl. 12: 12); 16–18, Veliki Gradec, near Drežnica (Karo, Knific 2020, Pl. 12: 9–11). 1–4, 6, 8–18 iron; 5 copper alloy, gilded; 7 copper alloy (made by D. Knific Lunder [2–6, 9–15], I. Murgelj [1, 8, 16–18], M. Sagadin [7]).