Ivan Drnić

La Tène spearheads from south-eastern Pannonia and the northern Balkans: typology, chronology, ritual, and social context

Keywords: spearheads / typology / chronology / south-east Pannonia / La Tène Culture / Scordisci / ritual / warrior elite
Schlagwörter: Lanzenspitzen / Typologie / Chronologie / Südostpannonien / La Tène Kultur / Skordisker / Ritual / Kriegerelite

Summary
Celtic warriors used swords and spears as assault weapons, but their full equipment included shields, belts, and sometimes even helmets. From the 5th to the 1st centuries BC, warrior equipment evolved so that by the LT C1 phase, early La Tène spearheads had gradually lengthened and narrowed. By the late La Tène, some of these objects measured over 60–80 cm long. The same changes are also documented in the material culture of the Scordisci, a political and ethnic community occupying the territory of south-eastern Pannonia and the northern Balkans. Spearhead typology for this region is based on four elements: blade shape and cross-section, socket shape and length, and their mutual relationships. Four distinctive types have been defined with an additional division into sixteen subtypes. Like other weaponry, spears were put inside the graves of the warrior elite and their destruction, as well as placing them in specific positions in the graves, points to the special significance of these items in funerary rituals.

Zusammenfassung
Die von den Kelten gebrauchten Angriffswaffen waren Schwerter und Lanzen, die vollständige Ausstattung bestand jedoch auch aus Schild und Gürtel, manchmal auch aus einem Helm. In dem Zeitabschnitt zwischen dem 5. und 1. Jh. v. Chr. entwickelte sich die Ausstattung eines Kriegers so, dass die frühlatènezeitlichen Lanzenspitzen allmählich länger wurden. In der Phase LT C1, und in der späten La Tène Periode erreichten einige solcher Gegenstände eine Länge von 60–80 cm. Dieselbe Entwicklung kann man in der materiellen Kultur der Skordisker, eines Volkes, das die Gebiete Südostpannonies und den Nordbalkan bevölkerte, beobachtet werden. Die Typologie der Lanzenspitzen aus diesem Gebiet wird aufgrund von vier Elementen bestimmt: der Form und dem Querschnitt des Blattes, der Form und der Länge der Tülle, sowie dem Verhältnisse der beiden. So wurden vier ausgeprägte Typen mit einer weiteren Unterteilung in 16 Untertypen definiert. Lanzen wurden, wie auch andere Waffen, in die Gräber der Kriegerelite gelegt. Ihre Vernichtung, sowie spezifische Stellungen, in die sie gelegt wurden, zeigt eine besondere Bedeutung dieser Gegenstände in den Beisetzungsritualen.

Sažetak
Glavna napadačka oružja keltskih ratnika bili su mačevi i koplja, a puna oprema uključivala je i štitove, pojasne garniture, a ponekad i kacige. U razdoblju od 5. do 1. st. pr. Kr. ratnička se oprema razvijala pa su u stupnju LT B2 vrhovi kopalja imali kraći i širi list koji se u slijedećem, LT C1 stupnju, u prosjeku sužuju i produžuju. U kasnolatenskom razdoblju (LT D) pojedini primjerci dosežu dužinu od 60–80 cm. Ovu promjenu možemo pratiti i u materijalnoj kulturi Skordiska, političkoj i etničkoj zajednici koja je u mlađem željeznom dobu naseljavala prostor jugoistočne Panonije i sjevernog Balkana. Tipologija vrhova kopalja s ovog prostora temelji se na četiri elementa: presjeku i obliku lista te dužini i obliku nasadnika kao i njihovim međusobnim odnosima. Izdvojena su četiri osnovna tipa s dodatnom podjelom na šesnaest podtipova. Koplja su, kao i ostalo oružje, prilagana u grobove pripadnika ratničke elite, a njihovo oštećivanje, kao i polaganje u specifične pozicije unutar groba,

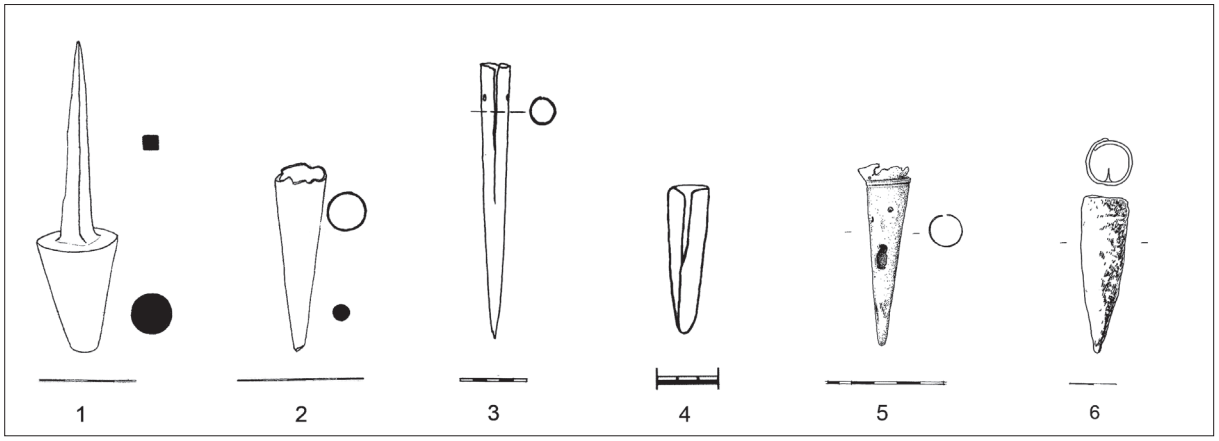

Fig. 1. *Spearbutts from south-eastern Pannonian sites: 1 Beograd-Karaburma, grave 22; 2 Beograd-Karaburma, grave 29; 3 Beograd-Rospi Ćuprija, grave 30; 4 unknown site in Syrmia; 5 Kupinovo; 6 Pećine near Kostolac.*

ukazuje na posebno značenje ovih predmeta u pogrebnom ritualu.

* * *

As is well known, warrior status was greatly valued in the La Tène social structure. This phenomenon is noted from archaeological contexts, in thousands of graves containing weapons spreading from France in the west to Romania and Poland in the east. These graves started in the earliest phases of the La Tène culture and lasted until the time of Roman conquest, in some areas even continuing under Roman reign for several decades. Apart from graves, a large amount of weapons are also found in numerous water deposits, the most famous being the eponymous site of La Tène at Lake Neuchâtel, as well as in many other ritual sites or sanctuaries, like Gournay-sur-Aronde and Ribemont-sur-Ancre in northern France.

Basic assault weapons used by Celtic warriors were swords and spears, but the full set of equipment included a chain belt, a wooden shield reinforced with iron fittings and, in some cases, a helmet. Development of this equipment progressed over the centuries, starting as an internal impulse driven by the innovation and creativity of early La Tène craftsman. It later intensified as the La Tène culture expanded and numerous conflicts between Celtic warriors and armies of the Mediterranean states, who fought in organized formations such as the phalanx, erupted (Rapin 1991; 1995; 1999). Naturally, internal conflicts between different continental European groups can also be seen as stimulating the development of warrior equipment. Shield bosses gradually became bigger and broader, while swords and spears became elongated and more massive.

This kind of weapon development can also be observed in the material culture of the Scordisci, a political and ethnic community that occupied parts of the middle Danube region and northern Balkans in the last three centuries BC (Božič 1984, 77–82; Jovanović 1987; Popović 1994a). According to the local chronological system established by D. Božič (1981), spearheads dated to the Belgrade 1 phase, and corresponding to the central European LT B2, have a broad and relatively short blade with a central rib. In the next phase, Belgrade 2 or LT C, the blades narrowed and lengthened, while in the final stage of Scordiscian material culture development (Belgrade 3), contemporary with the LT D phase, most of the spearheads had a narrow, very long, and massive blade with different cross-sections.

Spears

The spear is an assault weapon that consists of three elements: the head, the shaft, and the butt. In La Tène cultural material, three types of butts exist: conical, a nail with a massive conical ending, and a combination of these two concepts. This division was created by A. Rapin using butts from the Gurnay-sur-Aronde sanctuary (Rapin 1988, 104–107 Fig. 51). The butt as a constructional element had several functions: first, protection of the lower end of the wooden shaft when stuck in the ground; second, as a secondary point if the main one is damaged; and third, as a counterweight to achieve better balance when the spear was thrown. The first and second types are known from southeastern Pannonia, the second one being more numerous (Fig. 1). They have been documented in a few graves dated to all phases of the La Tène culture: graves 22 and 29 from Karaburma (Todorović 1972, 17, 19 Pls. VIII,5 and XI,2), grave G-3 1192 from Pećine near Kostolac (Jovanović 1984, 81 Fig. 9,6), and grave 30 from Rospi Ćuprija (Todorović 1963, Y 52, 11). Several stray finds are also known from Kupinovo (Drnić 2015a), Boljevci in Syrmia (AMZ, inv. no. P-14835), and several other locations.

Spearheads were attached to a wooden shaft by rivets through perforations on the socket. Specimens with one or two perforations are known, but a relatively large number of spearheads have none, suggesting they were stuck onto the shaft or fastened in some other manner, perhaps by using bands of organic material or metal wire.[1]

The scarce remains of wooden shafts from the area of the Scordisci have not been analyzed, but it is known that during the Early Roman Empire they were made from ash and hazel because of the strength and flexibility of the wood compared to other species (Bishop/Coulston 2006, 76).[2] Xenophon states that cornel-wood, due to its exceptional hardness, is the best material for making shafts (*Xen. Peri Hippikes* 12. 12; *Xen. Cynegeticus* 10. 3).

Late Iron Age spearheads were produced in several forms with different blade shapes and cross-sections, as well as different socket shapes and lengths. Some of these elements were determined by the weapon's function, as spears were used both for thrusting and throwing. Numerous discussions have arisen about which characteristics could point to possible functions of individual spear types. Bishop and Coulston state that it is not the blade, but the shaft, which indicates whether the spear was used for thrusting or throwing. However, shafts are most often not preserved, so one should use the socket diameter instead (Bishop/Coulston 2006, 76). On the other hand, Y. L. Inall thinks that spears with a long socket and short, narrow blade were used for throwing because "*the long socket would distribute the weight of the point more evenly creating a more balanced spearhead better suited to a throwing action than a heavy spearhead with its weight concentrated in the blade*" (Inall 2009, 70–71). A. Rapin suggests a functional approach to answering this question, noting that spears with a central rib were used for thrusting because this element reinforces the blade and absorbs blows and spearheads without such ribs were probably used for throwing (Rapin 1999, 48). Sometimes these spearheads had additional grooves on the blade to loosen the structure of the spearhead, making it bend or break on impact so that the enemy could not reuse the weapon. Furthermore, A. Rapin argues that spears were used for both throwing and thrusting, and that they can be differentiated by analysing the cross-sections of different parts of the blade.

Spearhead typology

Several La Tène spearhead typologies have appeared in the last thirty years, and are based on several basic parameters. For example, A. Rapin's typology for spears found at the Gournay-sur-Aronde sanctuary is based on two elements – blade shape and socket length – and is separated into five groups with additional subtypes (Rapin 1988, 133–134 Fig. 66). Considering the time span during which the sanctuary was frequented, the spearheads can be dated to between the end of the Early (LT B2) and the end of the Middle La Tène (LT C2) periods.

By combining this typology to the somewhat more complex one created by J.-P. Guillaumet from the finds from the River Saône (Guillaumet 2003, 102–109), L. Pernet made a classification for the finds of spearheads from the Late Iron Age necropolis at Giubiasco. Based on blade cross-sections and lengths, as well as socket lengths, he was able to define six groups, and later, after a more detailed metric analysis, three additional subtypes (Pernet 2006, 54–60).

Y. L. Inall's typology of Late Bronze and Iron Age spears from southern Italy, presented in her PhD thesis, has proven to be a useful tool as well (Inall 2009). With respect to the analysed material, typological parameters were divided by primary characteristics, including, apart from those mentioned above, the type of material (copper alloy or iron) for making spearheads. They were then divided according to secondary features: specific length, cross-section, decoration, and perforations on the socket or blade base.

One should also mention the typology of spearheads from Beograd-Karabuma necropolis in the Republic of Serbia. While analysing the material from the graves, J. Todorović divided the finds into four groups and several subgroups using the blade cross-section as a basic criterion, and blade width, socket faceting, and decoration as secondary criteria. Unfortunately, this typology suffers from serious chronological and conceptual flaws (Todorović 1972, 73–75). Finally, in his work on the relative chronology of the Late Iron Age of the Middle Danube area, D. Božič noted several distinctive types of spearheads originating from Scordiscan graves from LT B2 until LT D1 phases (Božič 1981).

Using the experience of the authors listed above, the typology of the La Tène spearheads from the territory of south-eastern Pannonia and the northern Balkans (Fig. 2) is based on several traits and their mutual relationships: 1. blade cross-section, 2. blade shape, 3. socket

1 Y. L. Inall (2009, 71) lists several graves from southern Italy where fragmented wire was found that could have been used for fixing spearheads to shafts.

2 Several samples of preserved wooden spear shafts from the graveyard in Pottenbrunn in Lower Austria were analysed, but, regrettably, the analysis was unsuccessful (Ramsl 2002, 377).

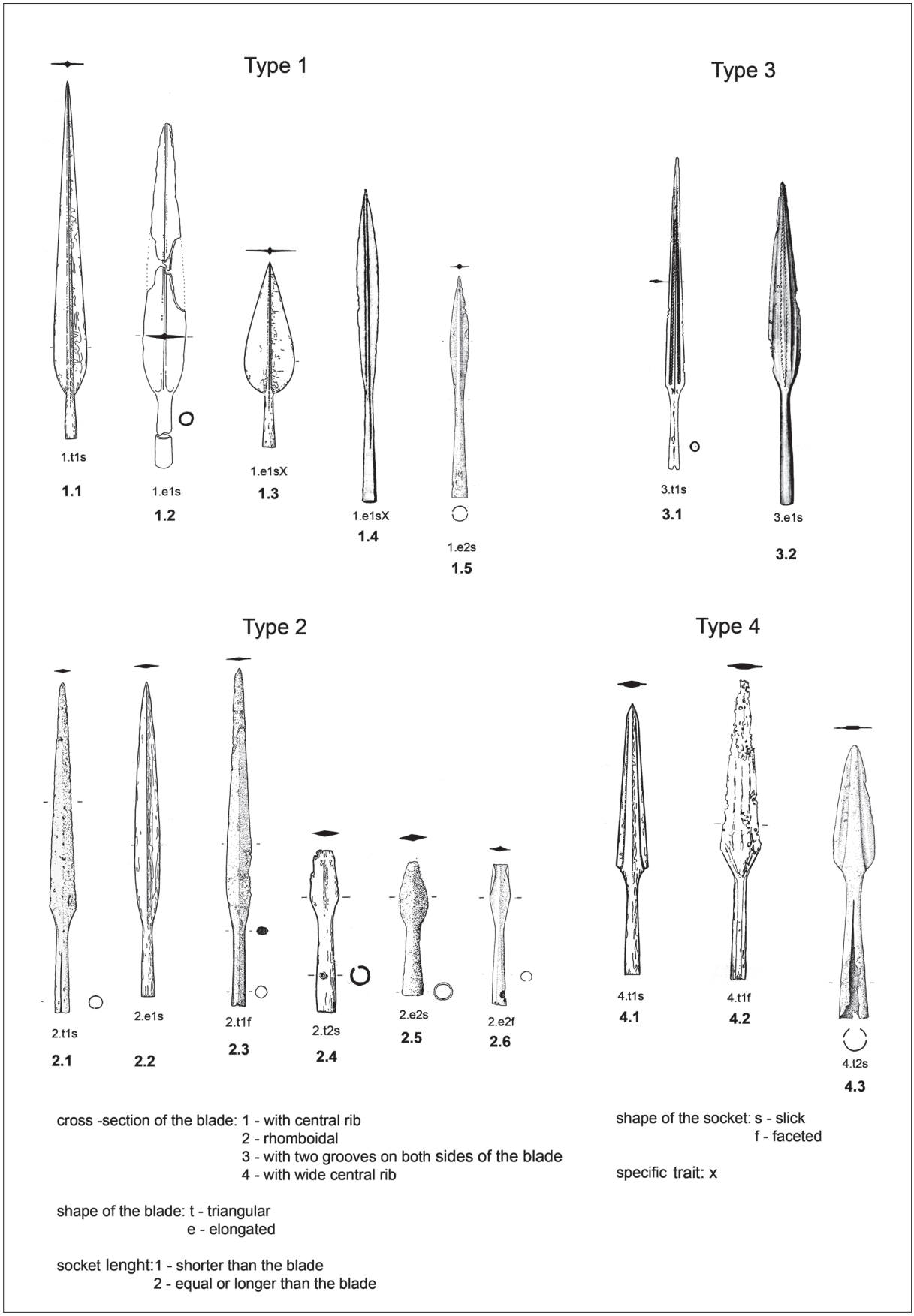

Fig. 2. *Typology of La Tène spearheads from south-eastern Pannonia.*

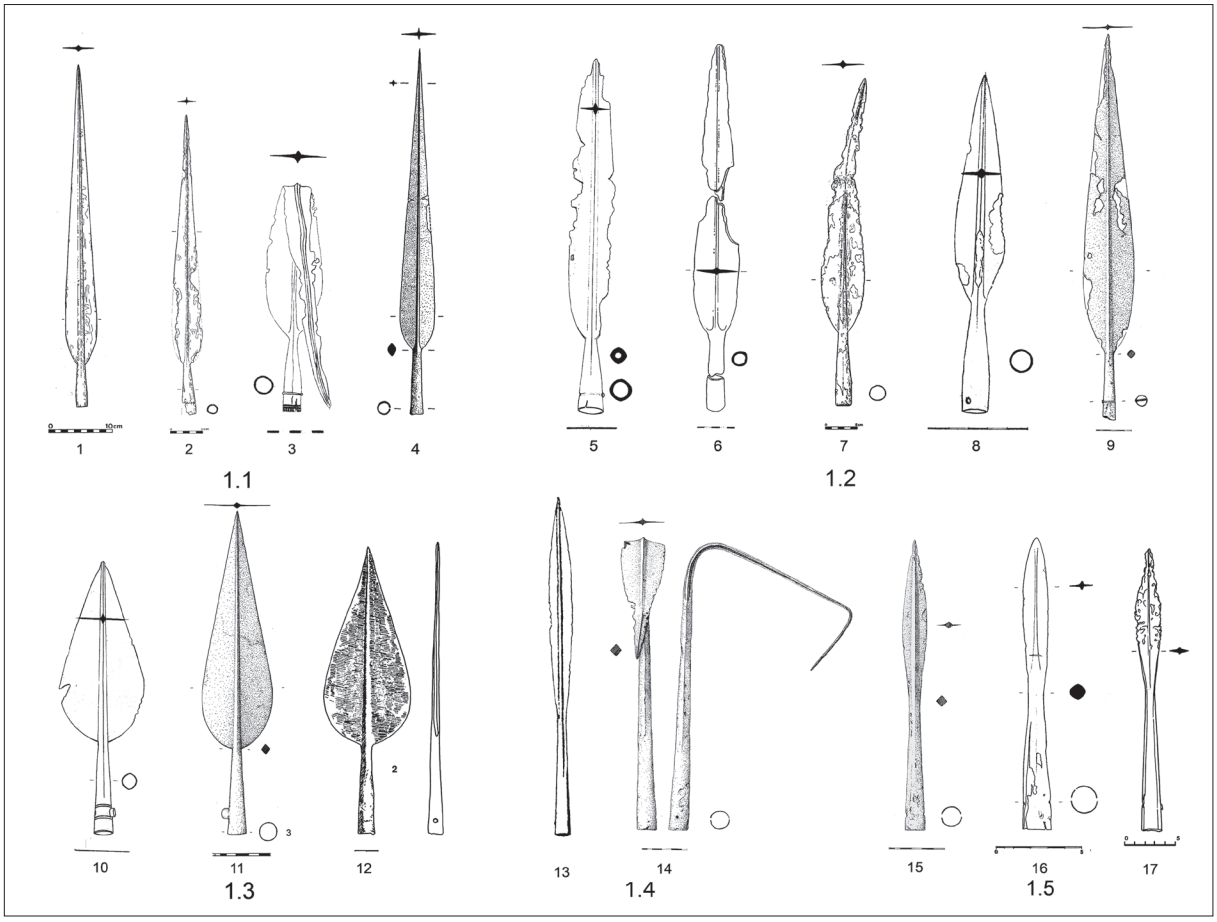

Fig. 3. *Type 1 spearheads: 1 Beograd-Karaburma, grave 13; 2 Brestovik; 3 Beograd-Karaburma, grave 29; 4 Plavinački potok near Ritopek; 5 Beograd-Karaburma, grave 26; 6 Beograd-Karaburma, grave 12; 7 Sotin, grave 3; 8 Beograd-Karaburma, grave 145; 9 Kupinovo; 10 Beograd-Karaburma, grave 51; 11 Kupinovo; 12 Pećine near Kostolac; 13 Odžaci; 14 Sremski Karlovci; 15 Sremski Karlovci; 16 Morović; 17 Bačko Gradište.*

length and its relation to blade length, and 4. socket shape. The analysed artefacts primarily originate from closed contexts (e. g. graves and the Veliki Vetren hoard), but several stray finds were also included if their shape unquestionably exhibited traits of the La Tène tradition.

Blade-cross section was chosen as the basic criterion for distinguishing between four groups of spearheads. An additional division was made based on blade and socket shape, as well as on their interrelation. Based on their shape, two groups of blades were defined – triangular and elongated.[3] Socket length proved to be a factor in distinguishing between two kinds of spearheads, those whose socket is longer than the blade and those whose blade is longer than the socket. Shaft faceting was also used as a classification element.

It is necessary to emphasize that this typology is subject to change in the sense that additional types and subtypes could be included. Unfortunately, in the case of spearheads from south-eastern Pannonia, it was not possible to make a more detailed classification based on metric relations between specific construction elements because I did not have access to most of the finds and I had to use data from published works only.

Type 1 (Fig. 3)

Spears with a flat-hammered blade and a midrib, usually rhombic in cross-section[4], represent the typical La Tène shape and has been found in graves dating from the beginning of the La

3 This division was taken from L. Pernet, who defines triangular blades as those which are widest in the first 20 % of the blade length starting from the base; while in elongated blades, the widest part is between 20 % and 50 % of the blade length (Pernet 2006, 55).

4 A few spearheads with midrib of rectangular or hexagonal cross-sections have also been recorded in this region, but the problem is that none of them originate from closed contexts. Fortunately, most of them have been found together with other La Tène objects, like the examples from Paka, Kupinovo or Surčin, so it is possible to assume they were manufactured in the Late Iron Age period (Dizdar/Potrebica

Tène culture in south-eastern Pannonia in the LT B2 until the LT D phase. These spearheads differ significantly from those of the Late Hallstatt period, which is understandable due to the change in material culture of this area at the transition between the Early and Late Iron Ages.

Among spearheads that belong to this group there are samples with a triangular blade (type 1.1) and those with an elongated blade (type 1.2). Blade width is an important chronological trait, spanning from 6,5 to 8 cm during the LT B2 phase and was thus used as a typological criterion for classifying these spearheads into a separate subtype (type 1.3). In the next chronological phase (LT C1) blade width significantly decreases, but the length increases, as can be seen in finds from graves 26, 29, 324, and 325 from the Karaburma cemetery (Todorović 1972, 18–19, 40–41 Pls. X,7, XII,8 and XLI,2–3), grave 1 from Brestovik (Popović 1994b, 52 Fig. 5), and Plavinački potok near Ritopek (Todorović 1973–1974, 79 Figs. 5–6).

In the LT C2 phase a specific type of spearhead evolved, characterized by an elongated blade that was widest in its central part and had a midrib and long socket, often rhombic in cross-section at the point of transition into the blade. This shape is classified as type 1.4. Spearheads, classified as type 1.5, have the same shape of the blade but the socket is longer than the blade. They are relatively short and light and could have been used as javelins. In the territory of southeastern Pannonia, one 1.4 type spearhead has been recorded from the dual grave at Odžaci (Guštin 1984, 121–122 Fig. 6,6) and another two (type 1.4 and 1.5) – one of them with a bent tip – at Sremski Karlovci. Though there is no data about the context of their discovery, other material from the site suggests the existence of destroyed graves from the LT C2 phase (Majnarić-Pandžić 1970, 94–95 Pl. XXXIX,1,3). The same type of spearhead was found in Syrmia among a group of items dated to the LT C2 period and was confiscated from smugglers on the Serbian – Hungarian border (Popović 2010, 85 Pl. 1,3). Type 1.4/1.5 is quite frequent in a wider European context. It is known from the territory of the neighbouring Mokronog group, for example, from grave 15 at the Zvonimirovo cemetery (Dizdar 2004, 442 Pl. 15B,1), dated to phase LT C2 phase, and from grave 199 at Kapiteljska njiva in Novo mesto (Križ 2005, 84 Pl. 59,1). A. Rapin placed finds from the Gurnay-sur-Arond sanctuary into his second group (type II c), and dated them to the late 2nd c. BC (LT C2) (Rapin 1988, 133 Fig. 66), while L. Pernet defined finds from Giubiasco as type 2B1 and dated them to the same phase (Pernet et al. 2006, 56). Spearheads of this shape have also been identified in graves from the phase LT C2 in cemeteries of Manching-Steinbichel and München-Obermenzing in southern Bavaria (Krämer 1985, 85–87, 121–122 Pls. 20,2, 21,2, 22,2, 59,2, 60,4).

Several type 1.1 and 1.2 spearheads were found from the LT D1 phase, such as those from graves 12 and 13 at Beograd-Karaburma (Todorović 1972, 14 Pls. IV,2 and V,4) and grave 3 from Sotin (Majnarić-Pandžić 1972–1973, 58 Pl. IV,8). In this period the length of specific finds, following a general trend, reaches over 60 cm. In some cases, lengths exceed 80 cm, like with the spearhead from grave 13 at Karaburma, which is 87, 3 cm long. Type 1.2 spearheads were found in graves from Beograd-Karaburma and were dated to the very end of the La Tène period or to the Early Roman period (Todorović 1972, 32, 37 Pls. XIII, grave 32,3 and XXXVI, grave 145,2), evidence of the longevity of the old burial rituals used by the warrior elite as a means of emphasizing their specific status within the community. This ritual survived the Roman conquest, probably through the incorporation of members of the warrior elite into Roman auxiliary troops. This phenomenon was noted at other sites from south-eastern Pannonia, including Ilok (Dizdar 2010, 244–245) and Sremska Mitrovica (Milošević 1987, 14–17), as well as among the neighbouring Taurisci of the southeastern Alps (Breščak 1989) and in northern Italy and France (Pernet 2010).

Type 2 (Fig. 4)

Spearheads with a rhomboidal cross-section are convincingly the most numerous Late La Tène type, although they have also been recorded in other regions of the La Tène Culture in much smaller amounts and from earlier periods. Spearheads with a triangular blade have been defined as type 2.1 and those with elongated blades as type 2.2.

At the Beograd-Karaburma cemetery, such spearheads have been found in a number of Late La Tène (LT D1) graves (Todorović 1972). They have also been recorded in graves 31, 33, and 37 at Rospi Ćuprija (Todorović 1963, Y51,2, Y53,5–6, Y55,1), in a grave at Kostolac (Božič 1981, 319 Pl. 8,1), and in grave 3 at Sotin (Majnarić-Pandžić 1972–1973, 58 Pl. IV,6–7) from the same period. Between one and four spears were deposited in Late La Tène graves, and those of type 2 have been found either on their own or in combina-

2014, 361–363 Fig. 4; Drnić 2015a). A midrib of rectangular or hexagonal cross-section is actually characteristic of Late Hallstatt spearheads, known from Donja Dolina or in larger numbers from the Dolenjska group (Marić 1964, Pl. 11,1,3,5; Tecco-Hvala 2012, 126–127 Fig. 49,3–5).

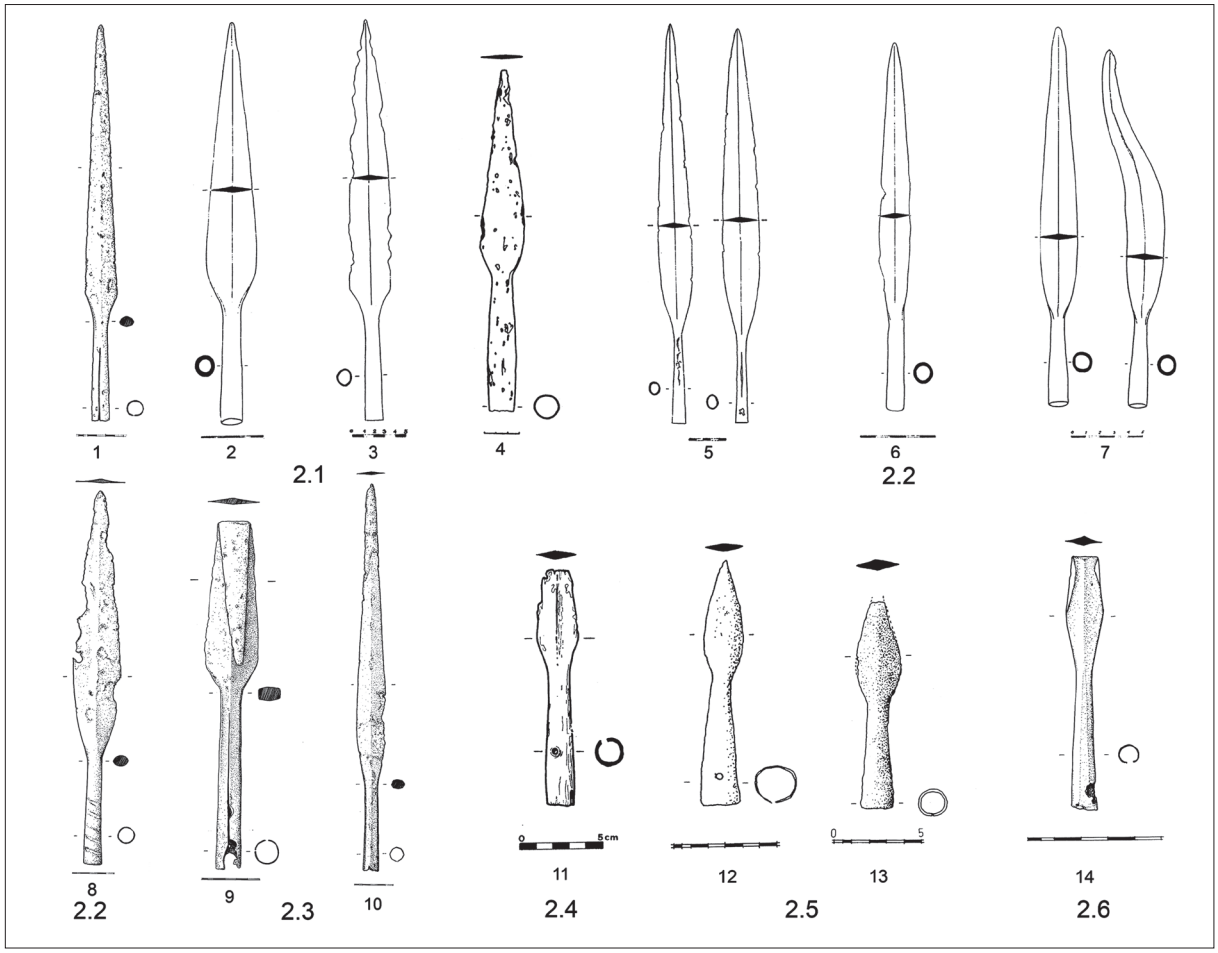

Fig. 4. *Type 2 spearheads: 1 Kupinovo; 2 Beograd-Karaburma, grave 105; 3 Beograd-Karaburma, grave 25; 4 Vajuga-Pesak, grave 3; 5 Beograd-Karaburma, grave 13; 6 Beograd-Karaburma, grave 94; 7 Beograd-Karaburma, grave 112; 8 Kupinovo; 9 unknown site in Slavonia or Syrmia; 10 Kupinovo; 11 Sotin, grave 2; 12 Stari Mikanovci; 13 Orolik; 15 Kupinovo.*

tion with spearheads of types 1 and 3, as was the case in graves 13, 28, and 97 at Karaburma (Todorović 1972, 14, 19, 32 Pls. V, grave 13,4–5, XI, grave 28,2–4, XXX,2–5) and in grave 3 at Sotin.

Finds classified as 2.4, 2.5, and 2.6 subtypes, with their sockets being longer than their blades, were most likely used as javelins. Artefacts with a faceted socket (type 2.3 and 2.6) are especially interesting when one considers this morphological element as a feature important for chronological determination. In grave 44 from Karaburma, dated to the early Roman period, a type 2.3 spearhead with a faceted socket was found together with a 2.1 spearhead, an iron knife, and a Roman ceramic vessel (Todorović 1972, 23 Pl. XVII, grave 44,1–4). Two additional spearheads with rhomboidal cross-section blades and faceted sockets are known from the site of Kupinovo (Drnić 2015a), and the upper part of a socket from an unknown site in Slavonia or Syrmia is also crafted in this manner (Drnić 2015a). It is also ritually bent, unequivocally indicating a Celtic rite.

Analogies for this kind of socket form can be found in Slovenia, northern Italy, and Switzerland, primarily from finds originating from graves of Roman auxiliaries dated to the end of the LT D2 phase and the Augustan period, for instance Verdun pri Stopičah, Vrhnika, Bela Cerkev, Sanzeno, and Gravelona Toce (Pernet/Schmid-Sikimić 2008, 374–375 Figs. 5–6). Six spearheads with a faceted socket were also found at a ritual site (*Brandopferplatz*) in Wartau-Ochsenberg, Switzerland, together with other weapons, and were interpreted as loot taken by the members of the Reti tribe from Roman auxiliary troops operating in the Alpine region at the end of the LT D2 phase (Pernet/Schmid-Sikimić 2008, 374 Fig. 1). Several spearheads with a rhomboidal blade cross-section and a faceted socket were found in the River Kupa near the protohistoric settlement of Segestica (today's Sisak in Croatia) that was conquered by Roman troops led by Augustus in 35 BC (Burkowsky 2004, 26 Cat. No. 59; Radman-Livaja 2004, 28 Pl. 3,11–12). These finds could point to the possible

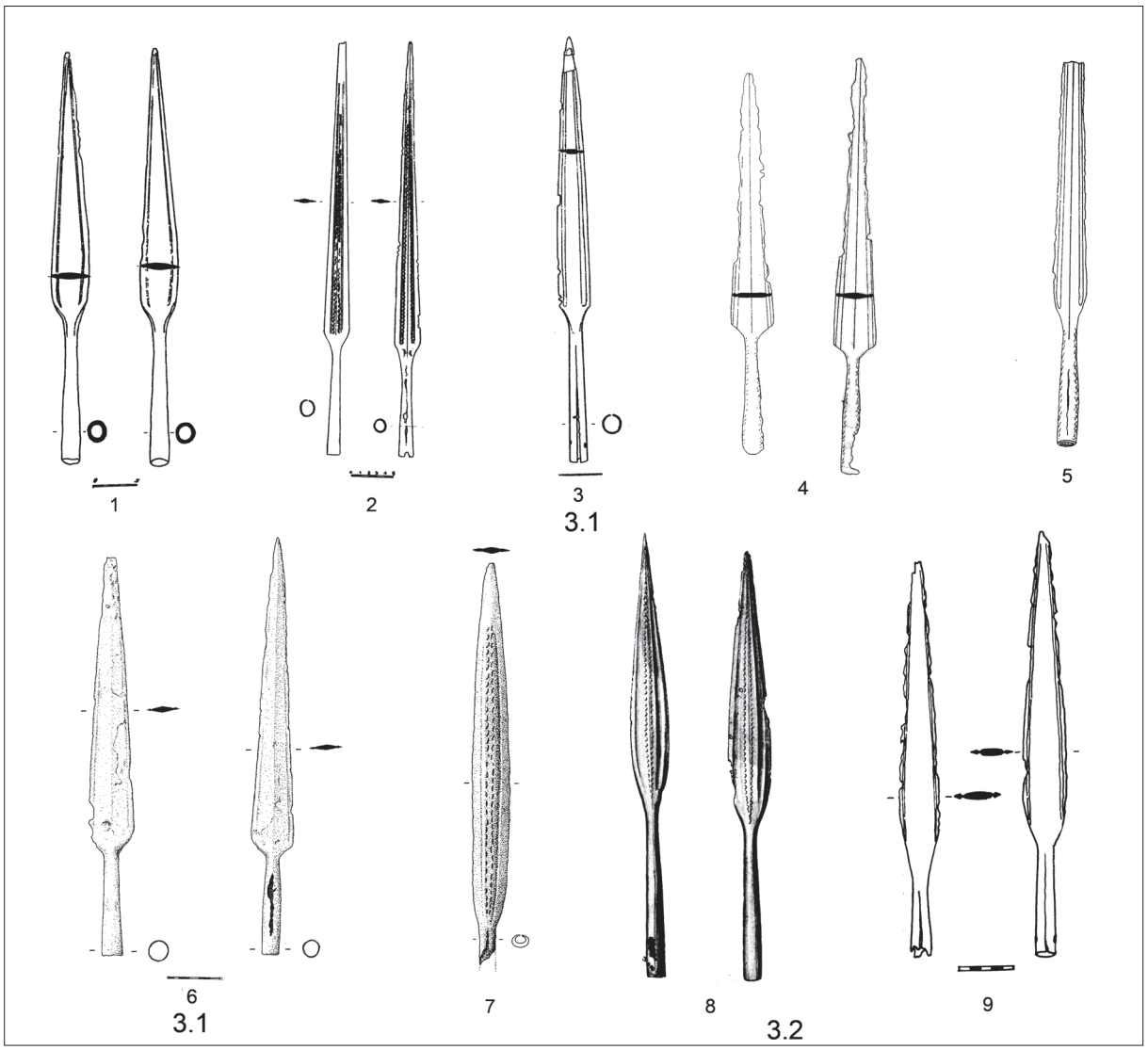

Fig. 5. *Type 3 spearheads: 1 Beograd-Karaburma, grave 137; 2 Beograd-Karaburma, grave 28; 3 Beograd-Karaburma, grave 11; 4 Mislođin near Obrenovac; 5 Beograd-Ada Huja; 6 Kupinovo; 7 Otok near Vinkovci; 8 Mala Vrbica-Ajmana; 9 Beograd-Rospi Ćuprija.*

direction of influences reaching Late La Tène south-eastern Pannonian workshops.

Type 3 (Fig. 5)

Another Late La Tène type is represented by spearheads with two grooves on both sides of the blade with triangular-shaped (Type 3.1) and elongated blades (Type 3.2). They are registered in several LT D1 graves, for instance graves 11, 28, 97, and 137 from Karaburma (Todorović 1972, Pls. III,3, XI, grave 28,2–3, XXX,4, XXXVI, 8–9), grave 30 from Rospi Ćuprija (Todorović 1963, Y 52,1,3–4), and grave 1 from Mala Vrbica-Ajmana in the area of the Iron Gates (Stalio 1986, 33 Figs. 43–44).

When observing the spatial distribution of this type of spearheads (Fig. 6), it is clear that they represent an autochthonous feature produced in local Scordiscian workshops, probably located in the territory of Syrmia and the confluence of the Sava and Danube Rivers. A few such items are known from the area of the Padea-Panagjurski Kolonii group in modern-day south-west Romania, as well as in north and north-western Bulgaria (Łuczkiewicz 1998, 256 Fig. 3). This is to be expected considering the close contacts between warrior elites of the two regions in the Late La Tène period.[5]

Type 4 (Fig. 7)

This relatively small group of finds is characterised by a triangular blade with flattened edges and a rhomboidal or flattened cross-section. The

5 P. Łuczkiewicz suggested that a sword blade with grooves from Dębicz in Poland, together with round shield bosses from the area of the Przeworsk culture, could also indicate possible contacts between two remote areas (Łuczkiewicz 1998, 253–254 Fig. 1,1).

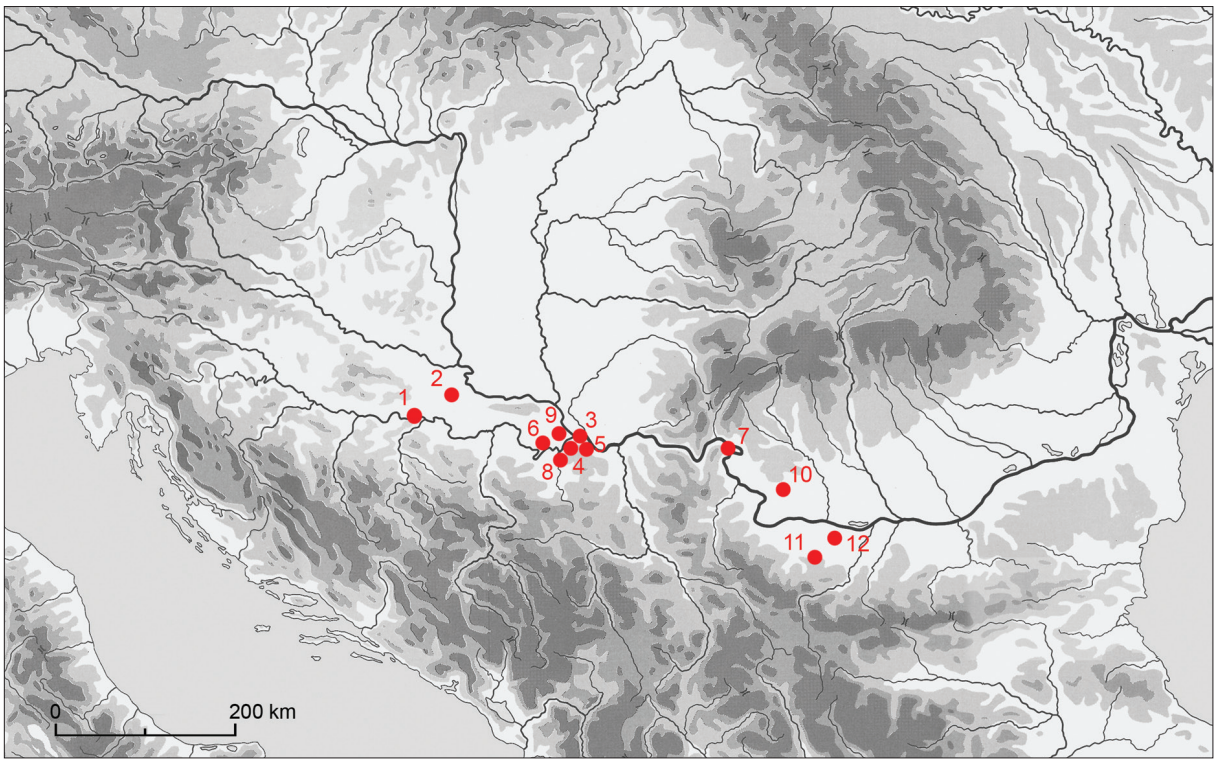

Fig. 6. *Distribution of the type 3 spearheads: 1 Slavonski Šamac; 2. Otok near Vinkovci; 3 Beograd-Ada Huja; 4 Beograd-Karaburma; 5 Beograd-Rospi Ćuprija; 6 Kupinovo; 7 Mala Vrbica-Ajmana; 8 Obrenovac-Ćupakovac; 9 Surčin; 10 Cetate; 11 Borovan ?; 12 Tarnava.*

group is divided into three subtypes. The first subtype (4.1) is represented by several finds, two of them coming from graves dated to the LT D1 phase – grave 70 from Karaburma (Todorović 1972, 28 Pl. XXV, grave 70,1–2) and grave G from the Transdanubian site of Pecs-Höerömü (Maráz 2008, 80 Fig. 11,5). Stray finds are recorded from the Syrmian sites of Krčedin and Morović (Majnarić-Pandžić 1970, 88 Pl. XXIV,6,8; Drnić 2015b, 202 Fig. 1,3), as well as at Beograd-Karaburma (Todorović 1971, 123 Pl. LVII,6) and Ostrvo near Vršac in Banat (Todorović 1968, 151 Pl. XLVII,2).

The spearhead from the Late La Tène grave 2 at Brestovik, found together with a type 2.1 spearhead, has a faceted socket and was classified as type 4.2 (Popović 1994b, 52 Fig. 23). It is the same as two pieces from Sremski Karlovci (Majnarić-Pandžić 1970, 95 Pl. XXXIX,6–7) and Kupinovo (Drnić 2015a). The use of faceted sockets on these Scordiscian-style spearheads, not seen in Roman contexts, along with the fact that some of them were mutilated in the La Tène tradition, suggest that local blacksmiths produced this type at the end of the LT D2 phase.

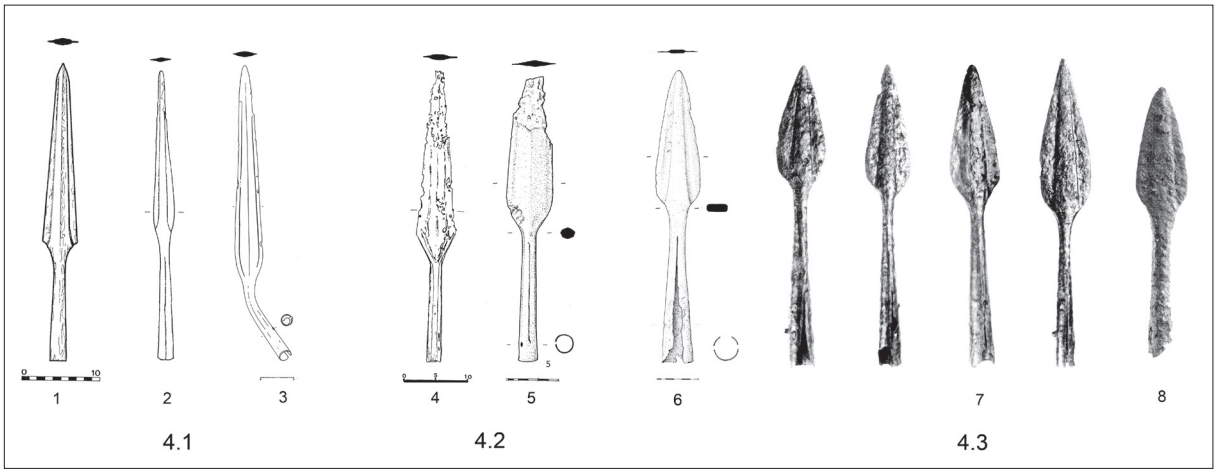

Fig. 7. *Type 4 spearheads: 1 Beograd-Karaburma, grave 70; 2 Pecs-Höerömü, grave G; 3 Morović; 4 Brestovik; 5 Kupinovo; 6 Surčin; 7–8 Veliki Vetren, hoard and megalithic structure.*

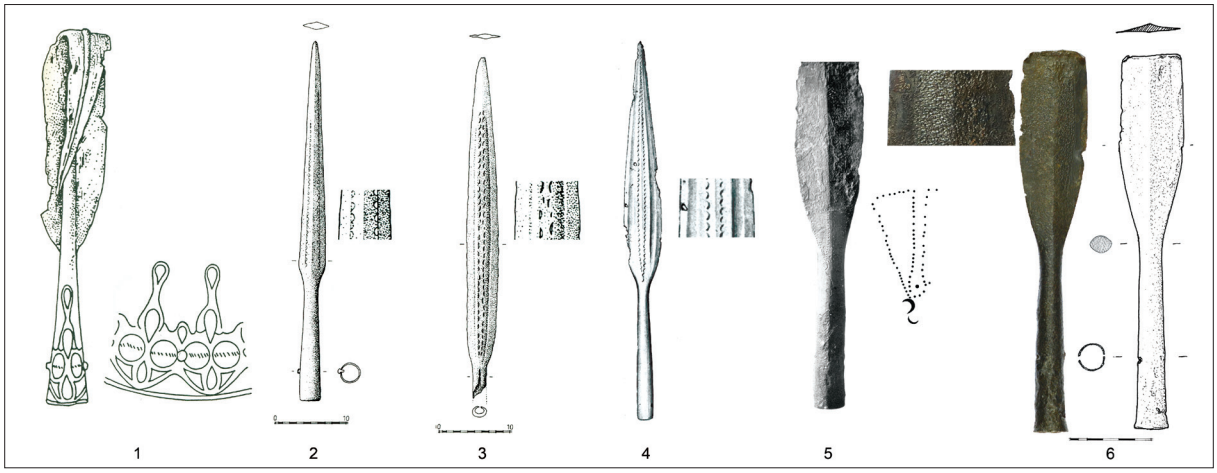

Fig. 8. *Decorated spearheads: 1 Dalj; 2 Ivankovo; 3 Otok near Vinkovci; 4 Mala Vrbica-Ajmana; 5 Zemun; 6 Kupinovo.*

A spearhead with a similar blade cross-section was also found in a grave at Osen in north-western Bulgaria in the territory of the Padea-Panagjurski Kolonii group (Łuczkiewicz/Schönfelder 2011, Fig. 28,2), again suggesting certain contacts mentioned in the previous chapter.

Type 4.3 is represented by eight finds and is characterized by a broad short blade with a wide central rib and a flattened cross-section, whose socket is longer than the blade. The construction of these spearheads is very interesting, as a long socket could indicate that the weapon was used for throwing though broad blades are more suitable for thrusting. Furthermore, the diameter of the socket of the spearhead from Surčin is 2.8 cm wide, much wider than those of longer and respectively heavier pieces. This could indicate the presence of a long shaft. Besides the find from Surčin, six spearheads of this type were found in a hoard containing over 400 objects from the Veliki Vetren site in central Serbia, and one was found in a megalithic structure from the same site (Stojić 2003, 44–45, 88 Figs. 158–163 and 297). The hoard includes 14 horse-bits (one of type XIV A and 13 of type XVI according to W. M. Werner's typology) (Werner 1988, 64–65, 81–106), as well as other parts of horse equipment. This type of finds is quite common in the archaeological record of the LT D phase on the territory of the Scordisci and the neighbouring areas, and it could, along with the usage of long swords, indicate an extensive reliance on cavalry in this period. While considering the wide socket of this spearhead type, we can also reference one note by Polybius from his book *Histories*, where he explains that the thin spear shaft of Roman Republican spears was undesirable for cavalrymen as the motion of the horse could cause the shaft to break (Bishop/Coulston 2006, 54; Polyb. Hist. 6. 25). We could make a bold assumption that type 4.3 spearheads were used by members of the Scordiscian cavalry. Interestingly, similar spearheads were found at the beginning of the 20th century at the probable ritual site (*Brandopferplatz*) of Mahrevići in eastern Bosnia, which apparently functioned in the Early and Late Iron Ages, including the 2nd–1st centuries BC (Truhelka 1912, 19 Pl. X,1–7).

Decoration (Fig. 8)

In the La Tène Culture, spearheads were decorated and finds with diverse motifs have been recorded at sites in the wider territory of western and central Europe, including the countries of Austria, Slovenia, and Hungary (Szabó/Petres 1992, Pls. 9, 27, 59, 73, 78, 81,1, 86,2, 87,2, 113; Megaw/Megaw 2009, 166–168; Ramsl 2011, 157). Additionally, spearheads with various openwork blades have also been found and interpreted as ceremonial or military standards, rather than weapons, given that their structural compactness was compromised (Megaw/Megaw 2009, 166).

With the exception of one spearhead of type 1.2 from Dalj (Szabó/Petres 1992, 109–110 Pl. 105,1) exhibiting a socket decorated in the so-called Hungarian Sword Style, other spearheads discovered in southeastern Pannonia were decorated mostly with simple motifs, such as dotted lines and semi-circles.

It is important to stress the fact that a lack of decoration in certain cases can be caused by corrosion, but also by unprofessionally performed restoration resulting in permanent damage of the surface of some objects. An additional problem in the analyses of this material is posed by old publications in which drawings are more schematic, most often without emphasis on details, or include black and white photographs of poor quality.

Nevertheless, several type 2 and 3 spearheads are decorated with simple motifs. For

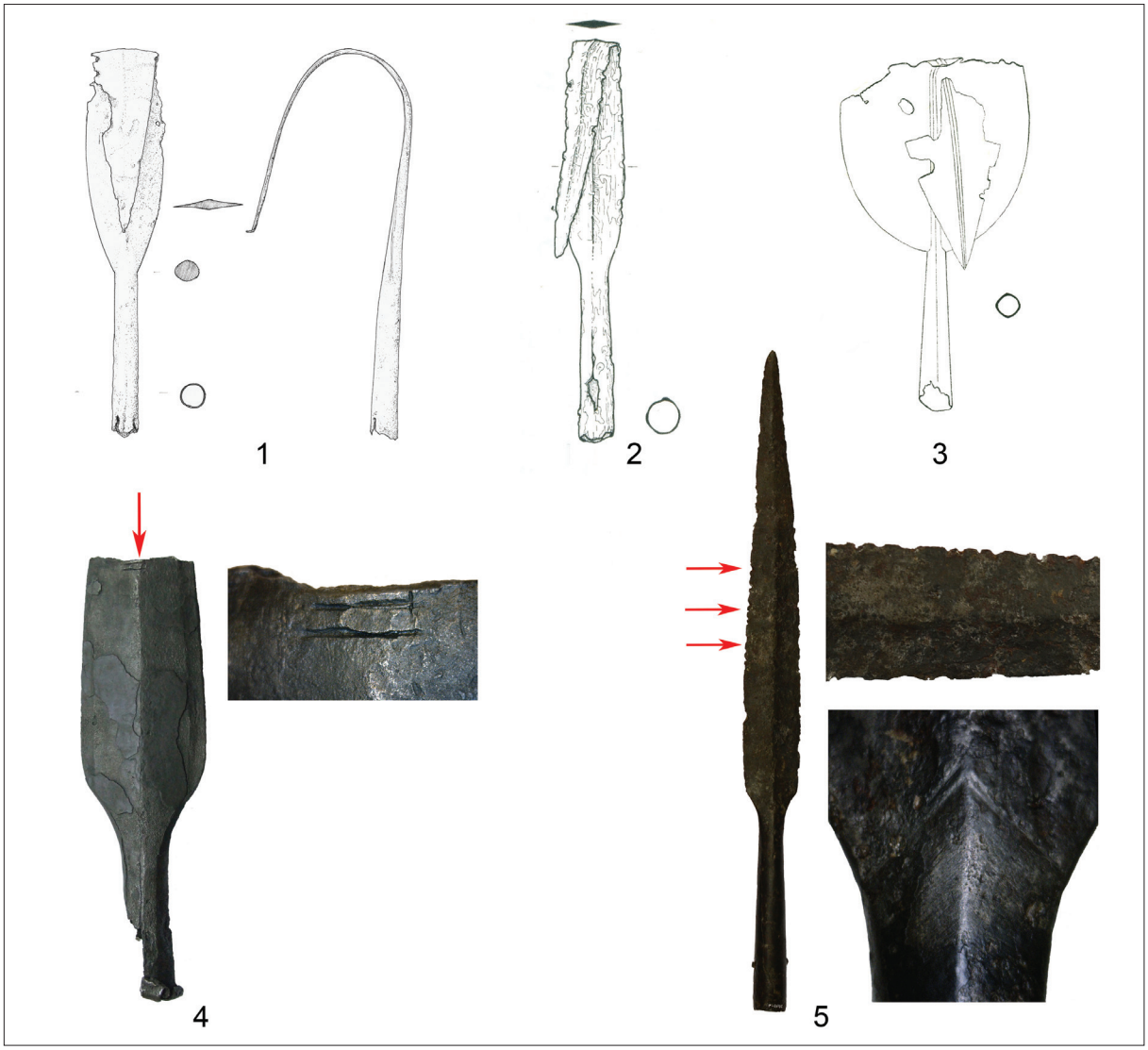

Fig. 9. *Ritually destroyed spearheads (1–3 bending, 4–5 cutting): 1 Kupinovo; 2 Sotin, grave 3; 3 Beograd-Karaburma , grave 62; 4 Kupinovo; 5 Surčin.*

example, two items from grave 1 at the Mala Vrbica-Ajmana cemetery have two vertical rows of semi-circles in the central part of the blade (Stalio 1986, 33 Figs. 43–44), the same as the finds from Otok and Ivankovo in eastern Croatia (Dizdar 2001a, 113 Pl. 1,6–7) and grave 28 from Beograd-Karaburma (Todorović 1972, 18–19 Pl. XI, grave 28,3–4). The central part of the blade on some spearheads from the Kupinovo cemetery is decorated with dots in what is called the *chagrinage* technique (Drnić 2015a). The blade of a spearhead from Zemun is also decorated in this manner, with two triangular fields on both sides of the base carried out with dots and two stamped crescents which could have different meanings, from a sign or mark of the workshop in which the spearhead was produced to apotropaic symbols protecting the warrior in combat (Majnarić-Pandžić 1966, 6 Pl. VI,1). Stamped crescent decorations are also present on the type 3.1 spearhead from grave 28 in Karaburma, as well as on a find from grave 3 in Sotin (Božič 1981, Pl. 9, 11). Additionally, a spearhead from Surčin has a V-shaped motif incised at the transition between the socket and the blade.

Ritual and social context

In the La Tène culture weapons were placed in graves as part of the formal burial ritual. One of these rituals was the symbolic destruction of weapons, including spearheads, before depositing them into graves or other ritually constructed locations. This custom probably started at the end of the 4th century BC with the transition from inhumation to incineration burial. There are several explanations of this custom, including the symbolic death or killing of the weapon together with the warrior who owned it. Aside from its functional purpose, the warrior equipment had an external symbolic value, as it expressed the warrior's identity and affiliation

Fig. 10. *Spearheads stuck in the grave pits: 1 Beograd-Karaburma, grave 11; 2 Zvonimirovo-Veliko polje, grave LT 48.*

to the social group, and made its members recognisable both within their communities and outside of them. In this context, some of the mutilated weapons could represent loot and may have been part of victory-related rituals performed in sanctuaries and other ritual places.

Destroyed spearheads are well recorded in graves in south-eastern Pannonia. Most frequently they were bent (Fig. 9,1–3), but there is some evidence of cutting (Fig. 9,4–5), like that on type 4.2 and type 2.6 spearheads from the Kupinovo cemetery (Drnić 2015a) or type 2.1 spearhead from Surčin.

The positioning of some objects in the grave can also carry certain symbolic meaning. For example, the spearhead in grave 11 from Beograd-Karaburma was stuck in the ground with the tip pointing down (Todorović 1972, 13) (Fig. 10,1), analogous to the spearheads in LT 26 and 48 graves from Zvonimirovo (Fig. 10,2) in the territory of the Taurisci and some other finds in cemeteries from Slovenia and Hungary (Dizdar 2005, 90 Fig. 6).

The communities of the La Tène culture were, more or less, socially stratified, with warrior elite undoubtedly holding a prominent position in the hierarchy. This is verified by literary sources and rare depictions, such as on the Gundestrup cauldron (Kaul 1995). This social reality was, at least partially, reflected in the structure of the cemeteries.

After analysing grave assemblages from the LT D1 phase in the territory of the Scordisci, and noting the presence of feasting equipment, Egri and Rustoiu defined three social categories with the status of "*organizer*" (grave 92 from Beograd-Karaburma) being at the top of the hierarchy (Egri/Rustoiu 2009). When comparing this pattern to the presence of weapons in the graves of the same period, certain differences can be noted, but this type of find undoubtedly points to certain stratification within the warrior elite. The first group of graves contains swords, round shield bosses, and between one and four spearheads; the second group contains spearheads and sometimes parts of shields together with exclusive goods like Roman bronze vessels; and the third group contains only spearheads and iron knives (Todorović 1963; 1972; Majnarić-Pandžić 1972–1973; Stalio 1986).

The number of spearheads in graves is also interesting. While in the earlier phases usually one spearhead was placed in the grave, from LT C2 on their number increases, as attested to by the double grave from Odžaci (Guštin 1984, 121–122 Pl. 6,6–10). In the LT D1 phase, their number varies between one and four, like in grave 97 from Karaburma (Todorović 1972, 32 Pl. XXX,2–5). The number of spearheads in LT D1 graves does not correspond to the above mentioned social stratification since there are "rich" graves with only one spearhead and "modest" ones with two or three. This could be a reflection of an alteration in the fighting method, but the possible symbolic function of these objects should not be disregarded either given the previously mentioned role of weapons as markers of warrior identity. Different numbers of spearheads and combinations of various types found in graves could have carried a message – unknown to us – within the symbolic system of the community which performed the burial ritual.

Conclusion

As shown above, spears, along with swords, were the main assault weapons used by the warrior elite of the population of south-eastern Pannonia and the northern Balkans during the Late Iron Age, known from written sources as the Scordisci. The shape and number of spearheads left in graves changed between the end of the 4th and the end of the 1st c. BC. Although these finds were often considered to be primarily functional

Spearhead type	LT B2	LT C1	LT C2	LT D1	LT D2	Early Roman period
1.1						
1.2						
1.3						
1.4						
1.5						
2.1						
2.2						
2.3						
2.4						
2.5						
2.6						
3.1						
3.2						
4.1						
4.2						
4.3						

Fig. 11. *Chronology of La Tène spearheads from the territory of south-eastern Pannonia and the northern Balkans.*

and were thought of as having no additional stylistic features important for chronology, several studies, this hopefully being one of them, have shown that a typological analysis of these and accompanying finds from grave units can yield good quality results. This analysis has shown that most spearheads were probably used for thrusting, but, certain artefacts, based on their morphological features, like long sockets, narrow blades, and their overall shortness and weight, were used as javelins.

By using four criteria – blade shape and cross-section, socket shape and the relation between blade and socket – La Tène spearheads from south-eastern Pannonia and the northern Balkans were divided into four basic types and sixteen subtypes. Type 1 spearheads, with a forged blade and an accentuated midrib, were used from the beginning of the La Tène culture in this region until the Early Roman period. However, there is a notable difference in blade shape in some periods (Fig. 11), for example, the blades are shorter and wider in the LT B2 phase and they become narrower and longer in Middle La Tène. The LT C2 phase is characterized by a spearhead defined as type 1.4/1.5 with an oval blade which is widest in the middle part. They become longer in the LT D1 phase, spanning over 50–60 cm in length, in some cases more than 80 cm.

The Late La Tène period is characterized by the remaining three groups of spearheads (Fig. 11), the most numerous one containing finds whose blades have a rhomboidal cross-section of type 2, as is also the case in some other areas of the La Tène culture. Type 3 and 4 spearheads are characteristic of the Scordisci culture, and a few finds with grooves along the edge of the blade in the cultural contexts of the Padea-Panagjurski Kolonii group are evidence of mutual contacts between these regions, either from exchange or through the mobility of certain groups like warriors or craftsmen.

Considering the noted position of warrior elites within social hierarchies, observed partly through ritual depositions of weapons in graves and at ritual sites, spears and other pieces of warrior equipment had an important symbolic role within group ideology. Ritual destruction by bending, cutting, burning, and placing spear-

heads into the grave bottoms, only serve to support this fact.

Translated by Ana Đukić
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References

Polybius (Πολύβιος), Ἱστορίαι.
Xenophon (Ξενοφών), Περὶ ἱππικης.
Xenophon (Ξενοφών), Κυνηγετικός.

Bishop/Coulston 2006 – M. C. Bishop/J. C. N. Coulston, Roman Military Equipment (Oxford 2006).

Božič 1981 – D. Božič, Relativna kronologija mlajše železne dobi v jugoslovanskem Podonavju. Arh. Vestnik 32, 1981, 315–336.

Božič 1984 – D. Božič, Naoružanje keltskog ratnika mlađeg željeznog doba. In: D. Božič/L. Bakarić (eds), Keltoi (Ljubljana 1984) 77–82.

Breščak 1989 – D. Breščak, Verdun pri Stopičah. Arheološke raziskave antičkega grobišća 1983–1989 (Novo mesto 1989).

Burkowsky 2004 – Željezno doba u Sisku i Moslavini (Sisak 2004).

Dizdar 2001a – M. Dizdar, Nalazišta latenske kulture na vinkovačkom području. Prilozi 18, 2001, 103–134.

Dizdar 2001b – M. Dizdar, Latenska naselja na vinkovačkom području (Zagreb 2001).

Dizdar 2004 – M. Dizdar, Latenska kultura na području središnje Hrvatske. Unpublished PhD thesis. Faculty of Humanities and Social Sciences, University of Zagreb (Zagreb 2004).

Dizdar 2005 – M. Dizdar, Groblje latenske kulture u Zvonimirovu – prilog proučavanju pogrebnih običaja i vjerovanja Tauriska u Podravini. Histria Antiqua 13, 2005, 85–98.

Dizdar 2010 – M. Dizdar, cat. 29, Inventory of grave 5, In: I. Radman-Livaja (ed.), Nalazi rimske vojne opreme u Hrvatskoj (Finds of the Roman military equipment in Croatia) (Zagreb 2010) 244–245.

Dizdar/Potrebica 2014 – M. Dizdar/H. Potrebica, Late La Tène warrior grave from Mali Bilač (Požega valley, Croatia). In: S. Tecco-Hvala (ed.), Studia Praehistorica in honorem Janez Dular. Opera Instituti Archaeologici Sloveniae 30 (Ljubljana 2014) 355–376.

Drnić 2015a – I. Drnić, Kupinovo. Groblje latenske kulture. Katalozi i monografije Arheološkog muzeja u Zagrebu 12 (Zagreb 2015) forthcoming.

Drnić 2015b – I. Drnić, Late Iron Age water finds from southern Pannonia. Simple stray finds or indicators of possible ritual activities? In: M. Guštin/W. David (eds), The Clash of Cultures? The Celts and the Macedonien World. Schriften des Kelten-Römer-Museums Manching 9 (Manching 2014 [2015]) 201–210.

Egri/Rustoiu 2009 – M. Egri/A. Rustoiu, The social significance of conviviality in the Scordiscan environment, In: V. Sîrbu/D. L. Vaida (eds), Funerary practices of the Bronze and Iron Ages in Central and South-Eastern Europe (Cluj-Napoca 2009) 83–93.

Guillaumet 2003 – J.-P. Guillaumet, Paléomanufacture métallique, méthode d'étude (Gollion 2003).

Guštin 1984 – M. Guštin, Prazgodovinski vozovi na ozemlju Jugoslavije. In: M. Guštin/L. Pauli (eds), Keltski voz (Brežice 1984) 111–132.

Inall 2009 – Y. L. Inall, A Typological Assessment of Iron Age Weapons in South Italy. Unpublished MA thesis. School of Philosophical and Historical Inquiry, University of Sydney (Sydney 2009).

Jovanović 1984 – B. Jovanović, Les sépultures de la nécropole celtique de Pećine près de Kostolac (Serbie du Nord). Études Celtiques 21, 1984, 63–93.

Jovanović 1987 – B. Jovanović, Keltska kultura u Jugoslaviji. Istočna grupa. In: S. Gabrovec (ed.), Praistorija jugoslavenskih zemalja 5 (Sarajevo 1987) 815–854.

Jovanović 1991 – M. Jovanović, Keltski grob iz Bačkog Gradišta. Rad Vojvodanskih Muz. 33, 1991, 29–40.

Kaul 1995 – F. Kaul, The Gundestrup Cauldron Reconsidered. Acta Arch. (København) 66, 1995, 1–38.

Krämer 1985 – W. Krämer, Die Grabfunde von Manching und die latènezeitlichen Flachgräber in Südbayern. Ausgr. Manching 9 (Wiesbaden 1985).

Križ 2005 – B. Križ, Novo mesto 6. Kapiteljska njiva. Mlajšeželeznodobno grobišče, Carniola Archaeologica 6 (Novo mesto 2005).

Łuczkiewicz 1998 – P. Łuczkiewicz, Zu ausgewählten balkanischen Waffen der spätlatènezeitlichen Przeworsk-Kultur in Polen. Arch. Korrbl. 28, 1998, 253–267.

Łuczkiewicz/Schönfelder 2011 – P. Łuczkiewicz/M. Schönfelder, Untersuchungen zur Ausstattung eines späteisenzeitlichen Reiterkriegers aus dem südlichen Karpaten- oder Balkanraum. Jahrb. RGZM 55, 2008 (2011) 159–210.

Majnarić-Pandžić 1966 – N. Majnarić-Pandžić, Nalaz keltskog oružja iz Zemuna. Opuscula Arch. (Zagreb) 6, 1966, 5–14.

Majnarić-Pandžić 1970 – N. Majnarić-Pandžić, Keltsko-latenska kultura u Slavoniji i Srijemu. Acta Musei Cibalensis 2 (Vinkovci 1970).

Majnarić-Pandžić 1972–1973 – N. Majnarić-Pandžić, Kasnolatenski grobovi iz Sotina. Vjesnik Arh. Muz. Zagreb, 3/6–7, 1972–1973, 55–75.

Maráz 2008 – B. Maráz, Archäologische Angaben zur mittleren und Späten La Tènezeit in Südosttransdanubien, Commun. Arch. Hungariae, 2008, 65–93.

Marić 1964 – Z. Marić, Donja Dolina, Glasnik Zemaljskog Muz. Sarajevo Arh. 19, 1964, 5–128.

Megaw/Megaw 2009 – J. V. S. Megaw/M. R. Megaw, Hare or hind? The decorated spear from Kandija grave K44. In: G. Tiefengraber/B. Kavur/A. Gaspari (eds), Keltske študije II, Studies in Celtic Arhaeology (Montagnac 2009) 235–245.

Milošević 1987 – P. Milošević, Naoružanje i oprema rimskog ratnika u doba osvajanja i konsolidacije doline Save. In: O. Brukner/V. Dautova-Ruševljan/P. Milošević (eds), Počeci romanizacije u jugoistočnom delu provincije Panonije (Novi Sad 1987) 11–24.

Pernet 2006 – L. Pernet, Les armes. In: L. Pernet/E. Carlevaro et al., La necropoli di Giubiasco (TI), vol. II. Les tombes de La Tène finale et d'époque Romaine. Collectio archaeologica 4 (Zurich 2006) 27–84.

Pernet 2010 – L. Pernet, Armament et auxiliaries galouis (IIe et Ie siècles avant notre ère). Protohistorie européenne 12 (Montagnac 2010).

Pernet et al. 2006 – L. Pernet/E. Carlevaro/L. Tori/G. Vietti/P. Della-Casa/B. Schmid-Sikimić, La necropoli di Giubiasco (TI). II, Les tombes de La Tène finale et d'époque romaine (Zürich 2006).

Pernet/Schmid-Sikimić 2008 – L. Pernet/B. Schmid-Sikimić, Les fers de lances à douilles facettées de la fin de l'Age du Fer du Brandopferplatz de Wartau-Ochsenberg (cant. Saint-Gall, Suisse). Arch. Korrbl. 38, 2008, 365–377.

Popović 1989–1990 – P. Popović, Mlađe gvozdeno doba Đerdapa. Starinar 40–41, 1989–1990, 165–176.

Popović 1994a – P. Popović, The Territories of Scordisci. Starinar 43–44, 1992–1993 (1994), 13–21.

Popović 1994b – P. Popović, Latenski nalazi iz Brestovika. Zbornik Narod. Muz. Arh. (Beograd) 15/1, 1994, 51–56.

Popović 2010 – P. Popović, Oružje iz keltskih grobova sa nepoznatog lokaliteta. Starinar 60, 2010, 85–93.

Radman-Livaja 2004 – I. Radman-Livaja, Militaria Sisciensia – Nalazi rimske vojne opreme iz Siska u fundusu Arheološkog muzeja u Zagrebu. Katalozi i monografije Arheološkog muzeja u Zagrebu 1 (Zagreb 2004).

Ramsl 2002 – P. C. Ramsl, Das eisenzeitliche Gräberfeld von Pottenbrunn. Fundberichte aus Österreich, Materialheft A 11 (Wien 2002).

Ramsl 2011 – P. C. Ramsl, Das Latènezeitliche Gräberfeld von Mannersdorf am Leithagebirge, Flur Reinthal Süd, Niederösterreich. Mitt. Prähist. Komm. Österr. Akad. 74 (Wien 2011).

Rapin 1988 – A. Rapin, Boucliers et lances. In: J.-L. Brunaux/A. Rapin, Gournay II (Paris 1988) 7–142.

Rapin 1991 – A. Rapin, Weaponry. In: S. Moscati (ed.), The Celts (Milano 1991) 321–331.

Rapin 1995 – A. Rapin, Propositions pour un classement des équipements militaires celtiques en amont et an aval d'un repère historique: Delphes 278 avant J.-C. In: J.-J. Charpy (ed.), L'Europe celtique du Ve au IIIe siècle avant J.-C. Contacts, excanges et mouvements de populations. Chronotèque 1 (Sceaux 1995) 275–290.

Rapin 1999 – A. Rapin, L'armement celtique en Europe: chronologie de son evolution technologique du Ve au Ier s. av. J.–C. Gladius 19, 1999, 33–67.

Stalio 1986 – B. Stalio, Le site préhistorique Ajmana a Mala Vrbica. In: V. Kondić (ed.). Đerdapske sveske III. Cahiers des Portes de Fer III (Beograd 1986) 27–50.

Stojić 2003 – M. Stojić, Veliki Vetren (Beograd 2003).

Szabó/Petres 1992 – M. Szabó/É. F. Petres, Decorated Weapons of the La Tène Iron Age in the Carpathian Basin (Budapest 1992).

Tecco-Hvala 2012 – S. Tecco-Hvala, Magdalenska gora. Družbena struktura in grobni rituali železnodobne skupnosti. Opera Instituti Archaeologici Sloveniae 26 (Ljubljana 2012).

Todorović 1963 – J. Todorović, Rospi Ćuprija – nécropole de l'époque de la tène à Beograd. Inventaria archaeologica, Jugoslavija, fasc. 6, Y47 – Y56 (Bonn 1963).

Todorović 1968 – J. Todorović, Kelti u jugoistočnoj Evropi (Beograd 1968).

Todorović 1971 – J. Todorović, Katalog prethistorijskih metalnih nalaza (Beograd 1971).

Todorović 1972 – J. Todorović, Praistorijska Karaburma I - nekropola mlađeg gvozdenog doba. Disserationes et Monographiae 13 (Beograd 1972).

Todorović 1973–1974 – J. Todorović, Dvojni ratnički grob Skordiska iz Ritopeka. Starinar 24–25, 1973–1974, 79–83.

Truhelka 1912 – Ć. Truhelka, Ein Tumulus der La-Tène-Periode in Mahrevići (Bez. Čajnica). Wiss. Mit. Bosn.-Herzegowin. Landesmus 12, 1912, 12–28.

Werner 1988 – W. M. Werner, Eisenzeitliche Trensen an der unteren und mittleren Donau. PBF 16/4 (Stuttgart 1988).

References of Figures

Fig. 1: 1–2 after Todorović 1972; 3 after Todorović 1963; 4 after Popović 2010; 5 after Drnić 2015a; 6 after Jovanović 1984.

Fig. 3: 1, 3, 5, 6, 8, 10 after Todorović 1972; 2, 7 after Božič 1981; 4 after Todorović 1973–1974; 9, 11, 14 after Drnić 2015a; 12 after Jovanović 1984; 13 after Guštin 1984; 15 drawing AMZ; 16 after Drnić 2015b; 17 after Jovanović 1991.

Fig. 4: 1, 8–10, 15 after Drnić 2015a; 2, 3, 5–7 after Todorović 1972; 4 after Popović 1989–1990; 11 after Božič 1981; 12 after Dizdar 2001b; 13 after Dizdar 2001a.

Fig. 5: 1–3 after Todorović 1972; 4, 5 after Todorović 1971; 6 after Drnić 2015a; 7 after Dizdar 2001a; 8 after Stalio 1986; 9 after Todorović 1963.

Fig. 7: 1 after Todorović 1972; 2 after Maráz 2008; 3 after Drnić 2015b; 4 after Popović 1994b; 5 after Drnić 2015a; 6 AMZ, P-20783; 7–8 after Stojić 2003.

Fig. 8: 1 after Szabó/Petres 1992; 2, 3 after Dizdar 2001a; 4 after Stalio 1986; 5 after Majnarić-Pandžić 1966; 6 after Drnić 2015a.

Fig. 9: 1, 4 after Drnić 2015a; 2 after Božič 1981; 3 after Todorović 1972; 5 photo AMZ.

Fig. 10: 1 photo Belgrade City Museum; 2 photo M. Dizdar.

MA Ivan Drnić
Arheološki muzej u Zagrebu
Trg Nikole Šubića Zrinskog 19, 10000 Zagreb
E-Mail: idrnic@amz.hr