

KASNOHALŠTSKE FALERE TIPO MAGDALENSKA GORA IZ ZAPADNOGA SRIJEMA (ISTOČNA HRVATSKA)

LATE HALLSTATT PHALERAE OF THE MAGDALENSKA GORA TYPE FROM WESTERN SYRMIA (EASTERN CROATIA)

Marko Dizdar

Institut za arheologiju
Jurjevska ulica 15
HR – 10000 Zagreb
marko.dizdar@iarh.hr

Marko Dizdar

Institute of Archaeology
Jurjevska ulica 15
HR – 10000 Zagreb
marko.dizdar@iarh.hr

UDK / UDC: 904:636.083.7(497.544)"638.3"
Izvorni znanstveni rad / Original scientific paper
10.52064/vamz.56.2

Razdoblje je kasnoga halštata u jugoistočnom dijelu Karpatske kotline definirano prepoznatljivom skupinom nalaza – većinom predmetima ženske nošnje i nakita – koji se pripisuju srijemskoj grupi. Za sada su na grobljima u manjem broju zabilježeni nalazi naoružanja i konjske opreme. Srijemska grupa tijekom svih faza razvoja bila je izložena različitim utjecajima, od kojih su najprepoznatljiviji oni s prostora srednjega Balkana te jugoistočnoalpskog područja, dok o kontaktima s prostorom donjeg Podunavlja svjedoče pojedini nalazi konjske opreme. Novi nalazi konjske opreme s nalazišta u zapadnom Srijemu predstavljeni su brončanim falerama tipa Magdalenska gora koje su za sada poznate na nalazištima jugoistočnoalpskog prostora te na grobljima Vekerzug kulture u sjeveroistočnom dijelu Karpatske kotline. Falere s nalazišta u zapadnom Srijemu mogu se datirati u 5. i prvu polovicu 4. st. pr. Kr. te vjerojatno potječu iz uništenih grobova. Na temelju usporedbi, vjerojatno se mogu smatrati kulturnim transferom s prostora Dolenjske, ali nije isključeno niti njihovo porijeklo na prostoru rasprostiranja Vekerzug kulture. Na kulturnu povezanost srijemske grupe s Vekerzug kulturom, uz neke predmete poznate od ranije, ukazuje i nalaz brončane zmijolike sljepoočničarke iz Novih Jankovaca.

Ključne riječi:

konjska oprema, falere, kasni halštat, srijemska grupa, kontakti, dolenjska skupina, Vekerzug kultura, sljepoočničarke

The Late Hallstatt period in the territory of the south-eastern Carpathian Basin is defined by a recognizable group of finds – mostly women's costume and jewellery items – which have been attributed to the Syrmian group. Few finds of weaponry and horse gear have been made in the cemeteries. In all its phases, the Syrmian group adopted various influences, the most recognizable being those from the central Balkans and the south-eastern Alpine region, while contacts with the lower Danube region are reflected in particular finds of horse gear. New finds of horse gear from the sites in western Syrmia are represented by bronze phalerae of the Magdalenska Gora type, which are known from sites in the south-eastern Alpine region and the cemeteries of the Vekerzug culture in the north-eastern Carpathian Basin. The phalerae from the sites in western Syrmia can be dated to the 5th century BC and the first half of the 4th, and they probably come from destroyed graves. Based on parallels, they can probably be considered a cultural transfer from the Lower Carniola region, but it cannot be excluded that they originated from the distribution area of the Vekerzug culture. The cultural connectivity between the Syrmian group and the Vekerzug culture, along with some objects known from before, is also indicated by the find of a serpentine (or snake-shaped) bronze temple ring at Novi Jankovci.

Key words:

horse gear, phalerae, Late Hallstatt period, Syrmian group, connectivity, Lower Carniola group, Vekerzug culture, temple rings

Uvod

U zaštitnim istraživanjima i terenskim pregledima, koji su provedeni posljednjih dvadesetak godina u Vinkovcima i okolici, otkrivena su brojna kasnohalštatska nalazišta koja potvrđuju pripadnost istočne Slavonije i zapadnog Srijema području rastrosanja srijemske grupe. Najbrojnije nalaze predstavljaju prepoznatljivi predmeti ženske nošnje i nakita koji svjedoče o smjeru i intenzitetu ostvarenih kulturnih kontakata sa susjednim i udaljenim područjima, posebno sa središnjim Balkanom i jugoistočnoalpskim područjem. S druge strane, predmeti konjske opreme ukazuju i na kontakte s prostorom Donjeg Podunavlja.¹ Zbog toga se srijemska grupa može promatrati kao jedna od najdinamičnijih kulturnih skupina starijega željeznog doba u južnom dijelu Karpatске kotline. U mreži kontakata srijemske grupe za sada je najslabije poznata povezanost sa zajednicama Vekerzug kulture naseljenima u sjevernim dijelovima Karpatске kotline. Međutim, neki novi nalazi iz zapadnog Srijema, uz one poznate od ranije s drugih nalazišta, ukazuju i na kulturne transfere između ovih zajednica.

Novi nalazi kasnohalštatske konjske opreme u zapadnom Srijemu

Jednu od prepoznatljivosti srijemske grupe predstavlja pojava ukopa konja koji su do sada pronađeni na grobljima u Vinkovcima² i Lovasu,³ zatim na nedalekom groblju Szentlőrinc⁴ i vjerojatno na groblju Doroslovo.⁵ Radi se o zasebnim ukopima konja s raznolikom konjskom opremom ili bez nje. O postojanju ovakvih ukopa i na drugim grobljima srijemske grupe svjedočili bi nalazi konjske opreme na nalazištima u zapadnom Srijemu koji vjerojatno potječu iz uništenih grobova (karta. 1).⁶ Radi se o falerama tipa Magdalenska gora, kasnohalštatskome obliku konjske opreme koji do sada nije bio poznat na nalazištima srijemske grupe.

Na nalazištu Vinkovački Banovci – Šuma, odakle je poznat veći broj nalaza srijemske grupe,⁷ pronađena je velika okrugla falera koja je blago oštećena s jedne strane, vjerojatno pri obradi zemlje (Sl. 1: 1). Falera je blago zaobljenog oblika, s dvije ušice s donje strane. Promjer falere iznosi 6,7 cm, njezina je debljina s ušicama 1,1 cm, dok je unutarnji promjer ušica 0,8 cm. Oštećena je falera pronađena na nalazištu Orolik – Rajterovo brdo (SL. 1: 2). Falera je blago zaobljena, s dvije ušice s donje strane, uz čije se unutarnje rubove i njezinom cijelom duljinom nalaze dva niska rebra. Falera je tamno sivo-zelene boje, što bi ukazivalo kako je izrađena od nešto drugačije slitine. Promjer falere iznosi 4,0 cm, debljina s ušicama 0,9 cm, dok je unutarnji promjer ušica 0,8 cm. S više nalazišta u Oroliku od ranije su poznati nalazi koji se

Introduction

The rescue excavations and field surveys conducted in the last twenty years in and around Vinkovci have uncovered numerous Late Hallstatt sites, confirming that the territories of eastern Slavonia and western Syrmia belong to the distribution area of the Syrmian group. The most numerous finds are recognizable items of women's costume and jewellery, which testify to the direction and intensity of the cultural contacts with neighbouring and distant regions, especially with the central Balkans and the south-eastern Alpine region. On the other hand, horse gear items indicate contacts with the lower Danube region.¹ For this reason, the Syrmian group can be considered to be one of the most dynamic cultural groups of the Early Iron Age in the southern Carpathian Basin. In the network of contacts of the Syrmian group, the least-known connectivity is that with the Vekerzug-culture communities, which inhabited the northern Carpathian Basin. However, new finds from western Syrmia, along with those already known from other sites, point to cultural transfers between these communities.

New finds of Late-Hallstatt horse gear in Western Syrmia

One of the characteristics of the Syrmian group is the appearance of horse burials, which have been found in cemeteries in Vinkovci² and Lovas,³ and the nearby cemetery of Szentlőrinc,⁴ and probably in the Doroslovo cemetery.⁵ These are separate horse burials with different or no items of horse gear. The existence of such burials in other cemeteries of the Syrmian group seems to be evidenced by the finds of horse gear at the sites of western Syrmia that probably come from destroyed graves (map 1).⁶ These are phalerae of the Magdalenska Gora type, a Late Hallstatt form of horse gear that had been unknown at the sites of the Syrmian group.

The site of Vinkovački Banovci–Šuma, which has produced a large number of finds of the Syrmian group,⁷ included a large round phalera that is slightly damaged on one side, probably by agricultural work (Fig. 1: 1). The phalera is slightly rounded, with two hoops on the underside. It measures 6.7 cm in diameter, 1.1 cm in thickness with the hoops, and 0.8 cm in internal diameter of the hoops. A damaged phalera was found at the site of Orolik–Rajterovo Brdo (Fig. 1: 2). It is slightly rounded, with two hoops on the underside and two low ribs along the inside edges over its entire length. The phalera is dark grey and green in colour, which would indicate the use of a different alloy. It measures 4.0 cm in diameter, 0.9 cm in thickness with the hoops, and 0.8

1 Majnarić-Pandžić 2003; Dizdar 2019; 2020a.

2 Majnarić-Pandžić 2000; 2003.

3 Dizdar 2020b.

4 Jerem 1968.

5 Trajković 2008, 35.

6 Za podatke o nalazima s kasnohalštatskih nalazišta na vinkovačkome području, zahvaljujem kolegama Hrvoju Vuliću i Borisu Kratofilu iz Gradskoga muzeja Vinkovci.

1 Majnarić-Pandžić 2003; Dizdar 2019; 2020a.

2 Majnarić-Pandžić 2000; 2003.

3 Dizdar 2020b.

4 Jerem 1968.

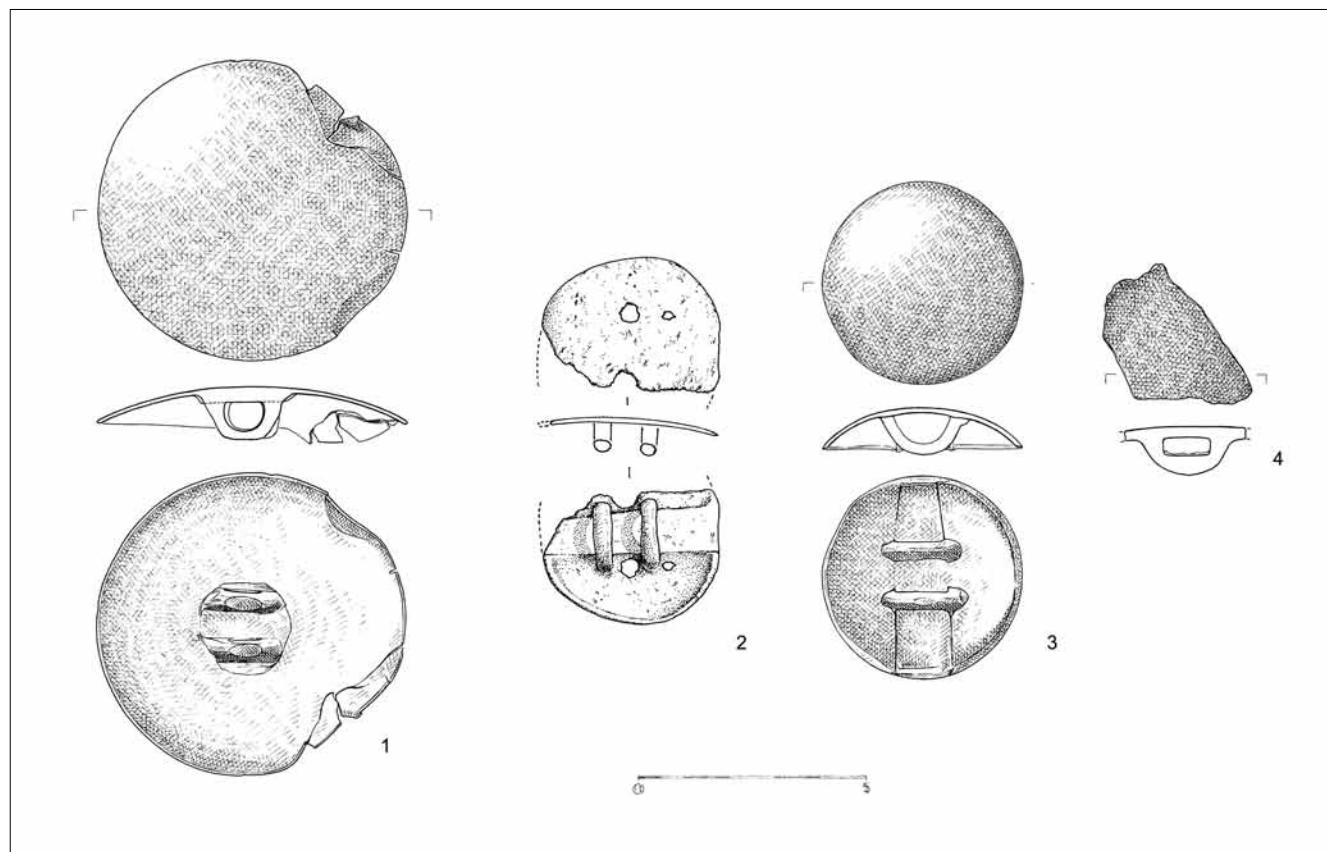
5 Trajković 2008, 35.

6 I would like to thank my colleagues Hrvoje Vulić and Boris Kratofil of the Municipal Museum in Vinkovci for the finds from Late Hallstatt sites in the Vinkovci region.



KARTA 1. Nalazišta falera u zapadnome Srijemu: 1 Vinkovački Banovci – Šuma; 2 Orolik – Rajterovo brdo; 3 Novi Jankovci – Velika Livada (izradio M. Dizdar).

MAP 1. Sites with finds of the phalerae from western Syrmia: 1 Vinkovački Banovci – Šuma; 2 Orolik – Rajterovo Brdo; 3 Novi Jankovci – Velika Livada (made by M. Dizdar).



SLIKA 1. Falere tipa Magdalenska gora iz zapadnoga Srijema: 1 Vinkovački Banovci – Šuma; 2 Orolik – Rajterovo brdo; 3–4 Novi Jankovci – Velika Livada (nacrtao M. Rončević).

FIGURE 1. Phalerae of the Magdalenska gora type from western Syrmia: 1 Vinkovački Banovci – Šuma; 2 Orolik – Rajterovo Brdo; 3–4 Novi Jankovci – Velika Livada (drawn by M. Rončević).

mogu datirati u starije željezno doba. Upravo su s nalazišta Rajterovo brdo poznate dvije brončane čunjaste fibule, kao i dvije staklene perle. Jedna je fibula na oba kraja luka ukrašena skupinom uskih poprečnih žljebova, dok druga fibula ima ukrašeno poprečno rebro na sredini luka, koje završava na oba kraja manjim izbočenjem. Fibule ovoga oblika ne predstavljaju čest nalaz na istočnoslavonskim i srijemskim nalazištima, a datirale bi se u drugu polovicu 7. i početak 6. st. pr. Kr.,⁸ odnosno nešto su starije od dosad definiranog početka srijemske grupe.⁹ Dvije falere tipa Magdalenska gora pronađene su na nalazištu Novi Jankovci – Velika Livada (Sl. 1: 3, 4). U cijelosti je sačuvana falera s dvije ušice s donje strane, na kojoj se nalaze i dva niska rebra. Falera je također tamno sivo-zelene boje. Promjer falere iznosi 4,3 cm, debljina s ušicama 1,0 cm, dok je unutarnji promjer ušica 1,1 cm. Od druge je falere sačuvan samo njezin središnji dio s dvije ušice, od kojih je jedna sačuvana i čiji je unutarnji promjer 1,0 cm. Falera je čini se bila većeg promjera i tamno sivo-zelene je boje. Inače, iz Novih Jankovaca poznat je nalaz ženskoga groba srijemske grupe iz kojega se sačuvalo 11 brončanih članaka astragalnog pojasa tipa Nikinci, brončana certosa fibula tipa V i 4 staklene perle.¹⁰

Falere tipa Magdalenska gora dosad nisu bile poznate s nalazišta srijemske grupe, a vjerojatno potječu iz uništenih ukopa konja s konjskom opremom, kakvi su već poznati s nekim drugih groblja srijemske grupe.¹¹ Tri zasebna ukopa konja, od kojih su dva imala konjsku opremu različitog porijekla, pronađena su na groblju Vinkovci – Nama koje je datirano u kraj 5. i 4. st. pr. Kr. Jedna konjska oprema s brončanim i ukrašenim falerama ima usporedbe na prostoru srednje Europe, dok druga s lijevanim zoomorfnim predmetima pokazuje povezanost s Donjim Podunavljem.¹² U nedavnjim istraživanjima u Lovasu, u zapadnom Srijemu, pronađeno je groblje koje se može datirati od faze Čurug do prijelaza ranoga u srednji laten. U grobu 6, pripisanom fazi Čurug, odnosno završnoj fazi srijemske grupe, pronađen je ukop konja koji je u ustima imao željezne žvale tipa VA1, dok nije bilo ostalih predmeta konjske opreme.¹³ Žvale ovoga tipa datirane su u 4. st. pr. Kr.,¹⁴ a najbliže usporedbe zabilježene su na groblju u Ritopeku.¹⁵ S istoga groblja potječu još jedne slične željezne žvale i lijevani brončani zoomorfni ukrasni dijelovi konjske opreme.¹⁶ Najveći broj ukopa konja zabilježen je na groblju Szentlőrinc s karakterističnom opremom i željeznim žvalama s kraja 5. i 4. st. pr. Kr.¹⁷ Još se može navesti ukop konja na groblju Doroslovo, gdje su u

cm in internal diameter of the hoops. Earlier finds from several sites in Orolik can be dated to the Early Iron Age. In fact, the site of Rajterovo Brdo included two bronze boat-shaped fibulae and two glass beads. One fibula is decorated with a group of narrow transverse grooves at both ends of the bow; the other has a bow with a decorated transverse rib in the middle, which seems to end with a small protrusion on each side. Fibulae of this form are rarely found at eastern Slavonian and Syrmian sites, and would be dated to the second half of the 7th century BC and the beginning of the 6th,⁸ meaning they are somewhat older than the beginning of the Syrmian group as it is currently defined.⁹ Two phalerae of the Magdalenska Gora type were found at the site of Novi Jankovci–Velika Livada (Fig. 1: 3–4). One of them has been preserved in its entirety; it has two hoops and two low ribs on the underside. It is also dark grey and green in colour. It measures 4.3 cm in diameter, 1.0 cm in thickness with the hoops, and 1.1 cm in internal diameter of the hoops. Of the other phalera, only the central part with two hoops remains; one of the hoops is completely preserved and has an interior diameter of 1.0 cm. This phalera seems to have had a larger diameter and is dark grey and green in colour. It should be mentioned that the site of Novi Jankovci included a female grave of the Syrmian group containing 11 bronze segments of an astragal belt of the Nikinci type, a bronze Certosa fibula of type V, and 4 glass beads.¹⁰

This was the first time that phalerae of the Magdalenska Gora type were found at a site of the Syrmian group. They probably came from destroyed horse burials containing horse gear, which were already known from other cemeteries of the Syrmian group.¹¹ Three separate horse burials, two of them with horse gear of different origins, were found at the cemetery of Vinkovci–Nama, dated to the 4th century BC or end of the 5th. One set of horse gear, with decorated bronze phalerae, has parallels in central Europe, while the other, with cast zoomorphic objects, shows affinities with the lower Danube region.¹² Recent excavations in Lovas in western Syrmia uncovered a cemetery that can be dated from the Čurug phase to the transition from the Early to the Middle La Tène. Grave 6, associated with the Čurug phase (the final phase of the Syrmian group), contained the burial of a horse with a type VA1 iron bit in its mouth, but no other horse gear items.¹³ This type of bit is dated to the 4th century BC,¹⁴ with the closest parallels in the Ritopek cemetery.¹⁵ The same cemetery

7 Dizdar 2019, 325.

8 Potrebica, Dizdar 2002, 81, 83, T. 1: 1, 3.

9 Na nekoliko nalazišta u okolini Orolika pronađene su brojne certosa fibule tipa V i XIII prema podjeli B. Teržan (1976) i članci astragalnih pojasa tipa Nikinci, koji pripadaju srijemskoj grupi.

10 Brunšmid 1902, 72, sl. 32; Dizdar 2019, 323.

11 Dizdar 2019, 319–323.

12 Majnarić-Pandžić 2000, 28–30, T. 1–4; 2003, 490–502, sl. 8–12.

13 Dizdar 2020b, 26, sl. 9–10.

14 Werner 1988, 36–38, 41, T. 18: 118–19; 124.

15 Todorović 1967, 156, T. III: 8; 1971: 95, br. 372, T. XLIV: 6.

16 Jovanović 1977.

17 Jerem 1968, 189–193, sl. 10–13, 15–17.

7 Dizdar 2019, 325.

8 Potrebica, Dizdar 2002, 81, 83, Pl. 1: 1, 3.

9 Several sites around Orolik contained numerous Certosa fibulae of types V and XIII after classification done by B. Teržan (1976) and segments of astragal belts of the Nikinci type belonging to the Syrmian group.

10 Brunšmid 1902, 72, Fig. 32; Dizdar 2019, 323.

11 Dizdar 2019, 319–323.

12 Majnarić-Pandžić 2000, 28–30, Pl. 1–4; 2003, 490–502, Fig. 8–12.

13 Dizdar 2020b, 26, Figs 9–10.

14 Werner 1988, 36–38, 41, Pl. 18: 118–19, 124.

15 Todorović 1967, 156, Pl. III: 8; 1971: 95, no. 372, Pl. XLIV: 6.

16 Jovanović 1977.

17 Jerem 1968, 189–193, Figs 10–13, 15–17.

grobu 11 pronađeni ostaci konja starog oko 3 godine.¹⁸ Radi se, dakle, o već poznatoj skupini ovakvih ukopa na grobljima sriješke grupe, za koju je karakteristično kako su konji sa ili bez konjske opreme bili ukopani u zasebnim ukopima, odnosno ne nalaze se zajedno u grobovima s pokojnicima. Za ove se ukope konja smatra kako pokazuju povezanost sa širokim prostorom od sjeveroistočne Italije, preko jugoistočnoalpskog prostora pa sve do Donjega Podunavlja, a datirani su u 5. – 4. st. pr. Kr.¹⁹ Da je ovakvih ukopa konja bilo i na drugim grobljima sriješke grupe, posebno u istočnoj Slavoniji i zapadnom Srijemu, svjedočili bi i nalazi falera tipa Magdalenska gora.

contained another similar iron bit and cast bronze zoomorphic decorative items of horse gear.²⁰ The greatest number of horse burials was found in the Szentlőrinc cemetery, with characteristic gear and iron bits from the 4th century BC and the end of the 5th.²¹ We should also mention the horse burial at the Doroslovo cemetery, where grave 11 contained the remains of a horse that was around 3 years old.²² Therefore, this is a known group of such burials in the cemeteries of the Syrmian group, characterized by separate burials of horses with or without horse gear: they were not buried together with humans. These horse burials are believed to be connected with a wide territory stretching from north-eastern Italy, across the south-eastern Alpine region, all the way to the lower Danube; they are dated to the 5th and 4th centuries BC.²³ The finds of phalerae of the Magdalenska Gora type also seem to indicate that there were horse burials of this kind in other cemeteries of the Syrmian group, especially in eastern Slavonia and western Syrmia.

Falere tipa Magdalenska gora

Falere pronađene na nalazištima u zapadnom Srijemu pripadaju tipu Magdalenska gora i smatraju se ukrasnim elementom konjske orme, pri čemu ih je kao poseban tip izdvojio H. Parzinger.²⁰ Falere su blago zaobljene i s gornje strane su glatke, dok se s donje strane nalaze dvije ušice, što je inače karakteristično za kasnohalšatske falere.²¹ Istaknuto je kako su u najvećem broju pronađene na nalazištima u Dolenjskoj te groblju Szentes – Vekerzug, a datirane su u horizonte 8 – 10, odnosno u kraj starijeg i početak mlađega željeznog doba.²² Falere Vekerzug kulture, s obzirom na dimenzije, u tri je skupine razdvojio J. Chochorowski koji ih smatra karakterističnim oblikom ove grupe koji se pojavljuje i na jugoistočnoalpskom prostoru. One velike promjera su od 8 do 9 cm te s gornje strane mogu biti presvučene zlatnom folijom, potom slijede one srednje, promjera oko 5 cm, koje su i najbrojnije te su izrađene od bronce, dok su falere promjera oko 3 cm malobrojne.²³ A. Kozubová falere također smatra ukrasnim dijelom konjske orme i ističe kako imaju promjer veći od 4 cm, dok su kao dugmad izdvojeni oblici promjera manjeg od 4 cm. Falere s donje strane imaju ušicu ili neki drugi dodatak za provlačenje uzdi. One s dvije ušice s donje strane izdvaja kao tip Magdalenska gora koje su za sada u najvećem broju poznate s

Phalerae of the Magdalenska Gora type

The phalerae found at sites in western Syrmia belong to the Magdalenska Gora type and are considered to be a decorative element of horse harness, singled out as a distinct type by H. Parzinger.²⁰ The phalerae are slightly rounded and smooth on top, while the underside has two hoops, which is a general characteristic of Late Hallstatt phalerae.²¹ It should be pointed out that they were found in greatest number at sites in Lower Carniola and the cemetery of Szentes–Vekerzug, dated to horizons 8–10, i.e. to the end of the Early Iron Age and the beginning of the Late.²² The Vekerzug-culture phalerae have been classified by size into three groups by J. Chochorowski, who considers them a characteristic form of this group, appearing in the south-eastern Alpine region, too. The large ones measure 8 to 9 cm in diameter and can be coated with gold foil on top; they are followed by the middle ones, measuring around 5 cm in diameter, which are the most numerous and made of bronze; those phalerae measuring around 3 cm in diameter are few in number.²³ It is A. Kozubová's belief that the phalerae are a horse harness decoration, and she points out that their diameter exceeds 4 cm, while the forms measuring less than 4 cm in diameter were classified as buttons. The underside of each phalera has a hoop or some other attach-

¹⁸ Trajković 2008, 35; Metzner-Nebelsick 2002, 205–206. U grobu 11 pokraj konja pronađeni su spaljeni ostaci pokojnika s keramičkim posudama i ulomkom brončane tordirane narukvice koji vjerojatno pripadaju starijem paljevinskom grobu daljske grupe. Groblje daljske grupe u Doroslovu s paljevinskim pokopavanjem datirano je od 11. do kraja 7. i početka 6. st. pr. Kr., ali onđe je pronađeno i nekoliko mlađih kosturnih grobova sriješke grupe (Ljuština 2010, 60–62, sl. 4–5, T. 5). Ukop konja iz groba 11 vjerojatno se može pripisati mlađoj fazi pokopavanja, odnosno sriješkoj grupi.

¹⁹ Metzner-Nebelsick 2002, 206; Kmet'ová 2013, 254; 2014, 267; 2017, 99–101; 2018, 276–280, sl. 4. O tri ukopa konja s konjskom opremom i na groblju u Donjoj Dolini: Žeravica 1976, 50.

²⁰ Parzinger 1995.

²¹ Metzner-Nebelsick 2002, 350–351. O falerama kao dijelu konjske opreme tijekom kasnoga brončanog i starijega željeznog doba, kada se pojavljuju najčešće u ostavama, a rijetko u grobovima: Metzner-Nebelsick 2002, 348–351, sl. 161.

²² Parzinger 1995, 71, 73, sl. 25: 4, s Popisom na str. 269.

²³ Chochorowski 1985, 109–111, sl. 36.

¹⁸ Trajković 2008, 35; Metzner-Nebelsick 2002, 205–206. Next to the horse in grave 11 there were cremated remains of the dead with ceramic vessels and a fragment of a bronze twisted arming, which probably belong to an older cremation grave of the Dalj group. The Dalj-group cemetery in Doroslovo with cremation burials is dated from the 11th century BC to the end of the 7th and the beginning of the 6th, but it also included several later inhumation graves of the Syrmian group (Ljuština 2010, 60–62, Figs 4–5, Pl. 5). The horse burial in grave 11 can probably be associated with the later phase of burials, i.e. with the Syrmian group.

¹⁹ Metzner-Nebelsick 2002, 206; Kmet'ová 2013, 254; 2014, 267; 2017, 99–101; 2018, 276–280, Fig. 4. On the three horse burials with horse gear in the Donja Dolina cemetery, see Žeravica 1976, 50.

²⁰ Parzinger 1995.

²¹ Metzner-Nebelsick 2002, 350–351. On phalerae as horse-gear items in the Late Bronze Age and the Early Iron Age, when they appear most often in hoards and rarely in graves, see Metzner-Nebelsick 2002, 348–351, Fig. 161.

²² Parzinger 1995, 71, 73, Fig. 25: 4, with List on p. 269.

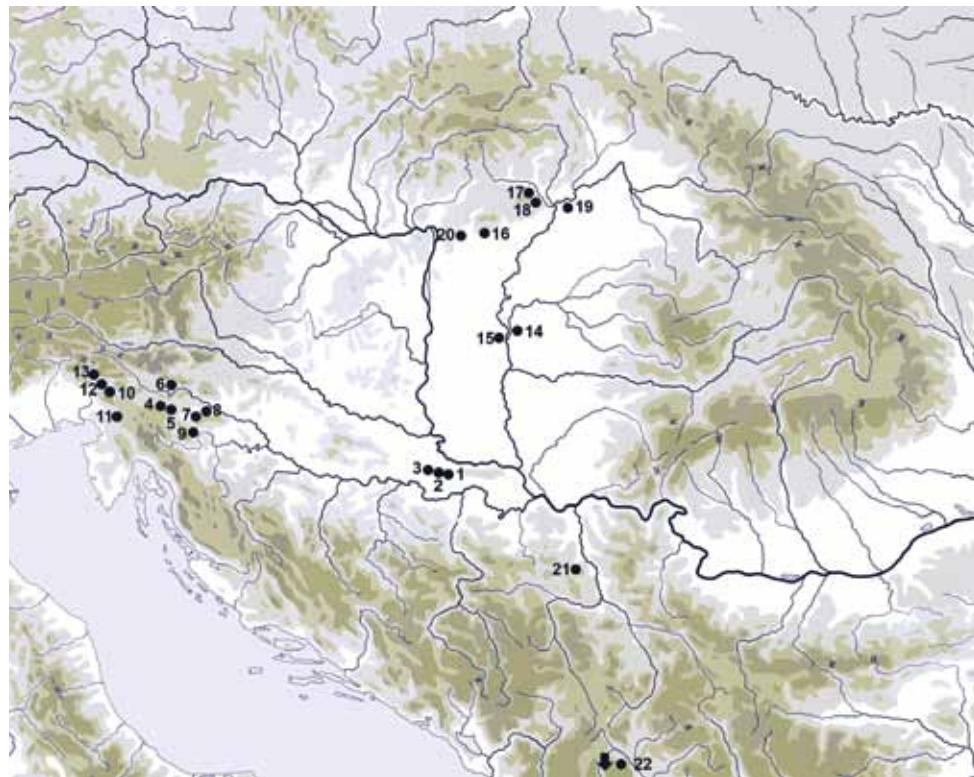
²³ Chochorowski 1985, 109–111, Fig. 36.

KARTA 2. Rasprostranjenost falera tipa Magdalenska gora:

1 Vinkovački Banovci – Šuma; 2 Orlík – Rajterovo brdo; 3 Novi Jankovci – Velika Livada; 4 Magdalenska gora; 5 Stična; 6 Vače; 7 Novo mesto; 8 Veliki Vinji vrh (Šmarjeta); 9 Podzemelj; 10 Gradišče pri Polju; 11 Čepna pri Knežak; 12 Most na Soči; 13 Kobarid – Bizjakova hiša; 14 Szentes – Vekerzug; 15 Csanytelek – Újhálastó; 16 Gyöngyös; 17 Miskolc – Diósgyőr; 18 Nyékládháza – Mezőnyék; 19 Tiszavasvári – Dózsa-telep; 20 Aszód; 21 Ljuljaci – Krčevine; 22 Pećka banja (izradio M. Dizdar).

MAP 2. Distribution of phalerae of the Magdalenska Gora type:

1 Vinkovački Banovci – Šuma; 2 Orlík – Rajterovo brdo; 3 Novi Jankovci – Velika Livada; 4 Magdalenska Gora; 5 Stična; 6 Vače; 7 Novo Mesto; 8 Veliki Vinji Vrh (Šmarjeta); 9 Podzemelj; 10 Gradišče pri Polju; 11 Čepna pri Knežak; 12 Most na Soči; 13 Kobarid – Bizjakova Hiša; 14 Szentes – Vekerzug; 15 Csanytelek – Újhálastó; 16 Gyöngyös; 17 Miskolc – Diósgyőr; 18 Nyékládháza – Mezőnyék; 19 Tiszavasvári – Dózsa-telep; 20 Aszód; 21 Ljuljaci – Krčevine; 22 Pećka Banja (made by M. Dizdar).



nalazišta u Dolenjskoj, gdje dolaze sa žvalama Vekerzug tipa, a datirane su od kraja 6. do kraja 5. st. pr. Kr. Ove su falere brojne i na groblju Szentes – Vekerzug u grobovima konja, pri čemu su neke s gornje strane presvučene zlatnom folijom. Na osnovi nalaza s određenim tipovima žvala, na ovome groblju datirane su u kraj 6. do prve polovice 5. st. pr. Kr. Falere se, uz željezne žvale, smatraju dokazom kontakata Vekerzug kulture s jugoistočnim alpskim područjem.²⁴

Kako je istaknuto, falere tipa Magdalenska gora za sada su u najvećem broju poznate u Dolenjskoj, gdje se pojavljuju u grobovima istaknutih pokojnika, najčešće po četiri falere u grobu (karta 2). Pojavljuju se u horizontu certosa fibule, kada također dolazi do pojave konjske opreme kakva se pojavljuje na grobljima Vekerzug kulture. Falere su potom zabilježene i u grobovima starije faze horizonta negovske kacige, odnosno datiraju se u posljednja desetljeća 6. st. do kraja 5. i početka 4. st. pr. Kr.²⁵ A. Preložnik falere tipa Magdalenska gora izdvaja u geometrijsku skupinu konjske opreme, zajedno s nekim oblicima razvodnika, a usporedbe također pronalazi na nalazištima Vekerzug kulture. Smatra ih inovativnim oblikom²⁶ u Dolenjskoj koji su potom počeli izrađivati domaći majstori.²⁷

24 Kozubová 2011, 69, 86–87; 2019a, 93–94; 2019b, 46, 52; 2021, 94–95; Kozubová, Horváth 2019, 150.

25 Gabrovec 1987, 62–63, 73, T.X. 6; Dular 2003, 136, 144, sl. 82: 9–10, 16–18; 87; 17; Tecco Hvala 2012, 161–162; Gabrovec, Teržan 2010, 291; Kmeťová, Barta 2018, 206–207, sl. 2: 1.

26 Neke od falera (npr. Magdalenska gora – Prelodge 2/13; Kobarid), osim dva rebra koja prolaze kroz ušice, još mogu imati dva poprečno postavljena rebra, što bi pokazivalo kako je drugi remen prolazio između ušica.

27 Preložnik 2007, 157, 163, T. 1: 1.

ment to pull the reins through. She classifies those with two hoops on the underside as the Magdalenska Gora type, currently most numerous at sites in Lower Carniola, where they have been found together with bits of the Vekerzug type; they are dated from the end of the 6th century BC to the end of the 5th. These phalerae are also numerous in horse graves in the cemetery of Szentes–Vekerzug, where some of them are coated with gold foil on top. In this cemetery, on the basis of finds with particular types of bit, they were dated from the end of the 6th century BC to the first half of the 5th. Along with iron bits, phalerae are believed to prove that the Vekerzug culture had contacts with the south-eastern Alpine region.²⁴

As has been pointed out, phalerae of the Magdalenska Gora type have been found in greatest number in Lower Carniola, where they appear in the graves of prominent people, usually four phalerae in each grave (map 2). They belong to the Certosa-fibula horizon, when there is also the appearance of horse gear such as appears in the cemeteries of the Vekerzug culture. Such phalerae have also been found in the graves of the older phase of the Negau-helmet horizon, i.e. they are dated from the last decades of the 6th century BC to the end of the 5th and the beginning of the

24 Kozubová 2011, 69, 86–87; 2019a, 93–94; 2019b, 46, 52; 2021, 94–95; Kozubová, Horváth 2019, 150.

Falere tipa Magdalenska gora pronađene su u Dolenjskoj u nekoliko grobova datiranih u horizont certosa fibule, često sa željeznim žvalama tipa IIA1 i IIA2²⁸: Magdalenska gora – Preloge grob 2/13, s bogatom konjskom opremom poput žvala tipa IIA1 i pet falera promjera 8,3 cm.²⁹ U Stični su ove falere pronađene u nekoliko grobova u tumulu 48³⁰ – u grobu 48/28 falera promjera 4,4 cm je bila izvan groba,³¹ grob 48/54 s falerom promjera 3,3 cm koja ima malo više razmaknute ušice,³² u oštećenom grobu 48/111 bile su dvije falere promjera 5,5 i 4,5 cm.³³ Iz konteksta 18 tumula 125 potječe falera s malo razmaka ušicama dimenzija 3,1 x 2,6 cm.³⁴ Još iz groba 4 tumula II potječu tri falere promjera oko 5,5 cm s tragovima željeza na donjoj strani³⁵ te iz groba VI/30.³⁶ Za falere s groblja Vače, s nalazišta Klenik – Pod Slemšekom, navodilo se kako potječu izvan konteksta,³⁷ ali novija istraživanja D. Božića pokazala su kako su četiri falere bile uz konja opremljenog sa žvalama tipa IIA1 koji se nalazio uz bogati ratnički grob, datiran u mlađu fazu horizonta certoske fibule.³⁸

Falere tipa Magdalenska gora pronađene su i u grobovima rane faze negovske kacige: Magdalenska gora – Laščik grob V/6-7-a s četiri falere uz glavu konja koji je bio pokopan pokraj ratnika;³⁹ grob V/29 s dva cijela konja i dijelovima još dva konja, a u blizini groba bilo je sedam većih falera i još šest manjih.⁴⁰ Na groblju Novo mesto – Kandija/Znančeve njive u dvojnome grobu IV/3 pronađene su tri željezne falere promjera 4,6 cm, koje su se nalazile uz južni rub groba sa željeznim žvalama tipa IIA2 (tip 6), pri čemu je u grobu bila i glava konja.⁴¹ Na groblju Novo mesto – Kapiteljska njiva u dvojnome grobu VII/19, u kojem je konjska oprema bila položena pokraj nogu drugoga ratnika, pronađene su četiri falere promjera 4,4 cm.⁴² Grob je datiran u drugu polovicu 5. ili početak 4. st. pr. Kr.⁴³ Za datiranje falera tipa Magdalenska gora od velike je važnosti bilo otkriće na nalazištu Kobarid – Bizjakova hiša. Radi se o ritualnom kontekstu s ukopom sedam različito

4th century BC.²⁵ Phalerae of the Magdalenska Gora type are classified by A. Preložnik as a geometric group of horse gear together with some forms of distributors, and he finds parallels at Vekerzug-culture sites. He considers them an innovative form²⁶ in Lower Carniola, which was then taken over by local craftsmen.²⁷

Phalerae of the Magdalenska Gora type in Lower Carniola have been found in several graves dated to the Certosa-fibula horizon, often with iron bits of types IIA1 and IIA2²⁸: Magdalenska Gora-Preloge, grave 2/13 with rich horse gear such as bits of type IIA1 and five phalerae measuring 8,3 cm in diameter.²⁹ In Stična, these phalerae were found in several graves in tumulus 48:³⁰ grave 48/28 with a phalera (diameter 4,4 cm) outside the grave,³¹ grave 48/54 with a phalera (diameter 3,3 cm) with hoops that are slightly farther apart,³² and damaged grave 48/111 with two phalerae (diameters 5,5 and 4,5 cm).³³ Context 18 of tumulus 125 contained a phalera with hoops slightly apart, measuring 3,1 x 2,6 cm.³⁴ Also, grave 4 of tumulus II contained three phalerae, around 5,5 cm in diameter, with traces of iron on the underside³⁵ and from grave VI/30.³⁶ The phalerae from the Vače cemetery, at the site of Klenik-Pod Slemšekom, were described as originating outside a context,³⁷ but recent research by D. Božić showed that four phalerae were next to a horse equipped with bits of type IIA1, which was next to a rich warrior's grave dated to the earlier phase of the Certosa-fibula horizon.³⁸

Phalerae of the Magdalenska Gora type have also been found in graves of the early Negau-helmet phase: Magdalenska Gora-Laščik, grave V/6-7-a with four phalerae next to the head of a horse buried next to a warrior;³⁹ grave V/29 with two entire horses and parts of another two horses, and seven larger phalerae and six smaller ones close to the grave.⁴⁰ In the cemetery of Novo Mesto-Kandija/Znančeve Njive, double grave IV/3 contained

²⁸ Tecco Hvala 2012, 161–162. Podjela konjih žvala prema W. M. Werner (1988).

²⁹ Tecco Hvala, Dular, Kocuvan. 2004, 36, Pl. 27: 39–43; Tecco Hvala 2012, 159, 161, sl. 12; Dular 2003, 136, sl. 82: 9–10, 16–18.

³⁰ Božić 2016, 162, T. 2: 17.

³¹ Gabrovec et al. 2006, 36, T. 23: 3.

³² Gabrovec et al. 2006, 51, T. 34: 6.

³³ Gabrovec et al. 2006, 83–84, T. 64: 2–3.

³⁴ Gabrovec et al. 2006, 245, T. 199: 1.

³⁵ Wells 1981, 52, sl. 43b.

³⁶ Wells 1981, 80, sl. 160.

³⁷ Tecco-Hvala 2012, 162.

³⁸ Božić 2014, 277–278, Sl. 3: 9–12.

³⁹ Tecco Hvala 2012, 158, 161, sl. 4; Dular 2007, 741, sl. 2.

⁴⁰ Tecco Hvala 2012, 158, 161, sl. 61: 16–17; Dular 2007, 741, sl. 3; Hencken 1978, 30, 37, sl. 112j; 144c; 148a–c; Egg 2003, 335, 345, sl. 21: 14–17.

⁴¹ Knez 1986, 89, T. 34: 9, 61; Egg 2003, 343–344, sl. 19; Dular 2003, 143–144, sl. 87: 17; Križ, Jereb, Teržan 2014, 489, sl. 27.3.4: 17. Zub konja je radiokarbonski datiran u prvu polovicu 4. st. pr. Kr., odnosno u rano 4. st. pr. Kr.: Teržan, Črešnar 2014, 721, 724, sl. 43.

⁴² Egg 2003, 334–335; sl. 2, 10: 2–5, T. 17: 2–5; Križ 2022, 128, 131, T. 40: 11–14. U grobu su još bile tri falere s koncentričnim rebrima na gornjoj strani promjera 3,5 cm te željezne žvale tipa IIA2 (tip 6).

⁴³ Egg 2003, 342.

²⁵ Gabrovec 1987, 62–63, 73, Pl. X: 6; Dular 2003, 136, 144, Fig. 82: 9–10, 16–18; 87: 17; Tecco Hvala 2012, 161–162; Gabrovec, Teržan 2010, 291; Kmetová, Barta 2018, 206–207, Fig. 2: 1.

²⁶ Some of the phalerae (e.g. Magdalenska Gora-Preloge 2/13; Kobarid) can have not only two ribs passing through the hoops, but also two transverse ribs, which would indicate that the second strap went between the hoops.

²⁷ Preložnik 2007, 157, 163, Pl. 1: 1.

²⁸ Tecco Hvala 2012, 161–162. The classification of the horse bits is according to W. M. Werner (1988).

²⁹ Tecco Hvala, Dular, Kocuvan 2004, 36, Pl. 27: 39–43; Tecco Hvala 2012, 159, 161, Fig. 61: 12; Dular 2003, 136, Fig. 82: 9–10, 16–18.

³⁰ Božić 2016, 162, Pl. 2: 17.

³¹ Gabrovec et al. 2006, 36, Pl. 23: 3.

³² Gabrovec et al. 2006, 51, Pl. 34: 6.

³³ Gabrovec et al. 2006, 83–84, Pl. 64: 2–3.

³⁴ Gabrovec et al. 2006, 245, Pl. 199: 1.

³⁵ Wells 1981, 52, Fig. 43b.

³⁶ Wells 1981, 80, Fig. 160.

³⁷ Tecco-Hvala 2012, 162.

³⁸ Božić 2014, 277–278, Fig. 3: 9–12.

³⁹ Tecco Hvala 2012, 158, 161, Fig. 4; Dular 2007, 741, Fig. 2.

⁴⁰ Tecco Hvala 2012, 158, 161, Fig. 61: 16–17; Dular 2007, 741, Fig. 3; Hencken 1978, 30, 37, Figs 112j, 144c, 148a–c; Egg 2003, 335, 345, Fig. 21: 14–17.

sačuvanih ostataka odraslih konja uz koje su pronađeni naoružanje, konjska oprema i u manjem broju nakit. Konjskoj opremi, osim triju željeznih žvala i četiri mala dugmeta promjera 1,3 – 1,6 cm, pripadaju i tri brončane falere ovoga tipa koje su promjera 4,5 cm. Kontekst je datiran u početak mlađega željezne doba (LT B2), odnosno oko 300. godine pr. Kr.⁴⁴ Radi se o najmladem dosad datiranom kontekstu s falerama tipa Magdalenska gora.

Nalazi falera Magdalenska gora na jugoistočnom alpskom prostoru još su zabilježeni bez sačuvanoga konteksta na nalazištu (karta 2): Veliki Vinji vrh (Šmarjeta) s promjerom 4,1 – 4,2 cm te 6,9 i najčešće 7,1 cm, pri čemu je jedna falera popravljena s tri zakovice;⁴⁵ Podzemelj – oštećena falera promjera oko 5,8 cm;⁴⁶ Gradišće pri Polju – falera promjera 3,8 cm;⁴⁷ Čepna pri Knežak u Notranjskoj – falera promjera 3,6 cm;⁴⁸ Most na Soči – falera promjera 6,4 cm.⁴⁹

Osim na nalazištu na jugoistočnom alpskom prostoru,⁵⁰ fale- re tipa Magdalenska gora pronađene su i na nekim nalazištima na području srednjeg Balkana (karta 2). Tako je na groblju Ljuljaci – Krčevine u blizini uništenoga groba 2, u tumulu I, pronađena bronačana falera presvučena srebrnim limom koja je datirana u prvu polovicu 5. st. pr. Kr. Promjera je 4,9 cm, a s donje strane nalaze se dvije ušice trokutastoga presjeka.⁵¹ Nekoliko brončanih falera, vjerojatno njih šest, koje su također bile presvučene srebrnim limom, pronađeno je u kneževskom grobu Pećka banja na Kosovu. Radi se o bogato opremljenome ratničkom grobu datiranom u 6. – 5. st. pr. Kr. Falere su promjera 6,5 cm, pri čemu se smatralo kako se radi o ukrasima na tijelu ratnika. Povezane su s nalazima Vekerzug kulture budući da su u grobu pronađene i brončane trobridne strelice.⁵² Još se mogu spomenuti željezne falere presvučene srebrom u kneževskom grobu s kolima tumula II u Atenici. Za faleru promjera 3,5 cm navodilo se kako je s donje strane imala dvije ušice,⁵³ dok. E. Teleaga navodi kako falera s donje strane ima cilindrični nastavak s četiri otvora za remen.⁵⁴

44 Mlinar, Gerbec 2011, 41, 75, sl. 22, kat. br. 45; Gerbec, Mlinar 2022, 91, sl. 4: 3; za zooarheološku analizu vidjeti: Toškan 2011.

45 Stare 1973, 27, T. 17: 41–42, 46, 59: 5–8.

46 Dular 1978, T. 14: 27.

47 Laharnar 2018, 374, sl. 6: 1.

48 Guštin 1979, 33, T. 3: 14.

49 Teržan, Lo Schiavo, Trampuž-Orel 1985, 388, T. 271: 25.

50 S prostora Hrvatske još su poznati nalazi falera u bogato opremljenom ratničkom grobu s ukopom konja na groblju Sv. Križ Brdovečki, koji je istražen 2001. godine. U grobu se nalazio naoružanje, od kojeg se izdvaja brončana kaciga, zatim keramičke posude, dijelovi nošnje te konjska oprema, od koje se spominju žvale i falere koje nisu bile položene uz konja: Cvitković, Škoberne 2003, 221, sl. 5; Škoberne 2004, 164–170, sl. 24–28. Falere nisu preciznije tipološki određene, ali vjerojatno pripadaju nekom starijem tipu s obzirom na preliminarno datiranje groba u 6. st. pr. Kr.

51 Srejović 1991, 144–145, T. I: 2.

52 Tasić 1998, 208, 582, kat. br. 221. U katalogu su prikazane 4 falere promjera 5,1 cm: Gospodari srebra 1990, 187, kat. br. 137/12.

53 Djuknić, Jovanović 1965, 10, T. XXI: 10.

54 Teleaga 2017, 124, T. 37: 9.

55 Chochorowski 1985, 109–111.

three iron phalerae, 4.6 cm in diameter, along the south edge of the grave together with iron bits of type IIA2 (type 6), and the grave included a horse head.⁴² In the cemetery of Novo Mesto-Kapiteljska Njiva, double grave VII/19, where horse gear was laid next to the feet of another warrior, contained four phalerae, 4.4 cm in diameter.⁴³ The grave was dated to the second half of the 5th century BC or the beginning of the 4th.⁴³ A discovery at the site of Kobarid-Bizjakova Hiša was very important for the dating of phalerae of the Magdalenska Gora type. It is a ritual context with the burial of seven variously preserved remains of adult horses together with weaponry, horse gear and some jewellery. The horse gear included not only three iron bits and four small buttons, 1.3–1.6 cm in diameter, but also three bronze phalerae of this type, measuring 4.5 cm in diameter. The context was dated to the beginning of the Late Iron Age (LT B2), i.e. around 300 BC.⁴⁴ It is the latest dated context with phalerae of the Magdalenska Gora type.

Phalerae of the Magdalenska Gora type in the south-eastern Alpine region, without a preserved context, have also been found at these sites (map 2): Veliki Vinji Vrh (Šmarjeta), with diameters of 4.1–4.2 cm, 6.9 and, most often, 7.1 cm, where one phalera was repaired with three rivets;⁴⁵ Podzemelj – a damaged phalera, 5.8 cm in diameter;⁴⁶ Gradišće pri Polju – one phalera, 3.8 cm in diameter;⁴⁷ Čepna pri Knežak in the Notranjska region – one phalera, 3.6 cm in diameter;⁴⁸ Most na Soči – one phalera, 6.4 cm in diameter.⁴⁹

Phalerae of the Magdalenska Gora type have been found not only at sites in the south-eastern Alpine region,⁵⁰ but also at some sites in the central Balkan region (map 2). The cemetery of Ljuljaci-Krčevine, near the destroyed grave 2 in tumulus I, contained a bronze phalera coated with silver sheet and dated to the first half of the 5th century BC. It measures 4.9 cm in diameter; on the underside, there are two triangle-sectioned hoops.⁵¹

41 Knez 1986, 89, Pl. 34: 9; 61; Egg 2003, 343–344, Fig. 19; Dular 2003, 143–144, Fig. 87: 17; Križ, Jereb, Teržan 2014, 489, Fig. 27.3.4: 17. Radiocarbon dating placed a horse tooth in the first half of the 4th century BC or the early 4th century BC. Teržan, Črešnar 2014, 721, 724, Fig. 43.

42 Egg 2003, 334–335, Figs 2, 10: 2–5, Pl. 17: 2–5; Križ 2022, 128, 131, Pl. 40: 11–14. The grave included three phalerae with concentric ribs on top, measuring 3.5 cm in diameter, and iron bits of type IIA2 (type 6).

43 Egg 2003, 342.

44 Mlinar, Gerbec 2011, 41, 75, Fig. 22, cat. no. 45; Gerbec, Mlinar 2022, 91, Fig. 4: 3; for zooarchaeological analysis, see Toškan 2011.

45 Stare 1973, 27, Pl. 17: 41–42, 46, 59: 5–8.

46 Dular 1978, Pl. 14: 27.

47 Laharnar 2018, 374, Fig. 6: 1.

48 Guštin 1979, 33, Pl. 3: 14.

49 Teržan, Lo Schiavo, Trampuž-Orel 1985, 388, Pl. 271: 25.

50 In Croatia, phalerae have also been found in the richly furnished warrior grave with a horse burial in the cemetery of Sv. Križ Brdovečki, explored in 2001. The grave contained weaponry, notably a bronze helmet, and ceramic vessels, costume items and horse gear, with a mention of bits and phalerae that were not laid next to the horse: Cvitković, Škoberne 2003, 221, Fig. 5; Škoberne 2004, 164–170, Fig. 24–28. The phalerae were not typologically defined in more detail, but they probably belong to an older type, considering the preliminary dating of the grave to the 6th century BC.

51 Srejović 1991, 144–145, Pl. I: 2.

Falere tipa Magdalenska gora u većem se broju pojavljuju i na grobljima Vekerzug kulture u sjeveroistočnome dijelu Karpat-ske kotline (karta 2), što je već istaknuo J. Chochorowski.⁵⁵ T. Kemenczei također smatra kako se radi o važnome funkcionalnom i dekorativnom dijelu konjske orme koji izdvaja u posebnu skupinu s obzirom na dvije ušice koje se nalaze s donje strane. Falere su imale funkciju razvodnika remenja, a datirane su 7. – 4 st. pr. Kr., a ističe se kako se pojavljuju na širokom prostoru od Kavkaza do srednje Europe i sjevernoga Balkana. Ponekad su brončane falere s gornje strane prekrivene zlatnim limom ili elektrumom,⁵⁶ a smatra se kako se radi o lokalnom obliku konjske opreme.⁵⁷

Na grobljima Vekerzug kulture falere tipa Magdalenska gora u najvećem su broju – u šest grobova – pronađene na eponimnoj groblju Szentes – Vekerzug,⁵⁸ a nalazile su se na glavi i oko vrata konja. Ukopi konja s falerama i drugom konjskom opremom datirani su u kraj 6. i prvu polovicu 5. st. pr. Kr.⁵⁹ U grobu 12 s ukopom dva konja⁶⁰ te s dijelovima kola i konjskom opremom, pronađeno je osam falera – svaki konj imao je četiri falere koje su promjera 4,5 – 4,8 cm (konj 1) i 4,5 – 6,2 cm (konj 2);⁶¹ u grobu 13 s dva konja s kolima na četiri kotača, velika falera bila je na čelu sjevernoga konja (konj 1) te još četiri falere promjera oko 4,5 cm i 30 manje dugmadi s jednom ušicom,⁶² a konj 2 imao je jednu falera promjera 5,6 cm;⁶³ u grobu 16 s ukopom konja⁶⁴ nalazile su se četiri falere promjera 8,9 cm, obložene elektrumom i nalazile su se sa strane glave konja;⁶⁵ u grobu 18 s ukopom konja bile su četiri falere promjera 8 cm;⁶⁶ u grobu 19 s ukopom konja bile su četiri falere promjera 4 cm;⁶⁷ u grobu 139 s ukopom konja bile su tri falere promjera 6 cm, a u grob je još bio i ukopan pas.⁶⁸ Još se izvan grobova navode nalazi falere promjera 3,3 cm u sondi CXXXI te falere promjera 2,8 cm u sondi CXXXI.⁶⁹

Several bronze phalerae, seemingly six of them, also coated with silver sheet, were found in a princely grave in Pećka Banja in Kosovo. This is a richly furnished warrior grave dated to the 6th and 5th centuries BC. The phalerae, measuring 6.5 cm in diameter, were believed to be decorations on the warrior's body. They are associated with finds of the Vekerzug culture, since the grave included bronze three-edged arrows.⁵² We should also mention the silver-coated iron phalerae from the princely grave with a chariot in tumulus II in Atenica. The phalera, measuring 3.5 cm in diameter, was described as having two hoops on the underside,⁵³ while E. Teleaga mentions that the underside of the phalera has a cylindrical extension with four openings for straps.⁵⁴

Large numbers of phalerae of the Magdalenska Gora type also appear in the cemeteries of the Vekerzug culture in the north-eastern Carpathian Basin (map 2), as already pointed out by J. Chochorowski.⁵⁵ They are also considered to be an important functional and decorative item of horse harness by T. Kemenczei, who classifies them as a separate group because of the two hoops on the underside. The phalerae served as strap distributors and are dated from the 7th to the 4th century BC. It is pointed out that they appear in a wide stretch from the Caucasus to central Europe and the northern Balkans. Bronze phalerae are sometimes coated with gold sheet or electrum on top⁵⁶ and are considered to be a local form of horse gear.⁵⁷

In the cemeteries of the Vekerzug culture, the greatest number of the phalerae of the Magdalenska Gora type were found in six graves in the eponymous cemetery of Szentes-Vekerzug,⁵⁸ on the horse's head and around its neck. Horse burials with phalerae and other horse gear are dated to the end of the 6th century BC and the first half of the 5th.⁵⁹ Grave 12, with the burial of two horses⁶⁰ and parts of a chariot and horse gear, included eight phalerae: each horse had four phalerae, with diameters between 4.5 and 4.8 cm (horse 1) and between 4.5 and 6.2 cm (horse 2).⁶¹ In grave 13, with two horses and a four-wheeled chariot, a large phalera was found at the front of the northern horse (horse 1) along with four other phalerae measuring around 4.5 cm in diameter and 30 smaller buttons with a single hoop,⁶² while horse

56 Kemenczei 2009, 52–53.

57 Teleaga 2010, 178, 180.

58 Konjska oprema, osim u ukopima konja, još je samo pronađena u paljevinskom grobu 142: Párducz 1955, 9, T. X: 5–7, 16; XI: 3; XII: 12; XIII: 1, 3, 8.

59 Kemenczei 2009, 147, sl. 6–7 na str. 159 s rekonstrukcijskom; Teleaga 2017, 100, sl. 48 s rekonstrukcijom.

60 O različitom određivanju spoli i dobi konja u grobovima 12 i 13, vidjeti: Teleaga 2017, 98, 101.

61 Párducz 1952, 144–146, T. XLII: 1; XLIII: 12; XLIV: 1–4, 7–10; XLV: 1–3, 5–7; XLVI; Kemenczei 2009, 52, 135, T. 65: 11; 66: 1–7, 10; Teleaga 2017, 98–101, T. 13: 1; 14: 1–4; 15: 4–7.

62 Npr. falere s jednom ušicom: Szentes – Vekerzug grob 13 (Kemenczei 2009, 53, T. 68: 7; Teleaga 2017, 28); Nyíregyháza – Pazonyi utca (Kemenczei 2009, 53, T. 52: 3); paljevinski grob 59 s grobljima Algyő – Bartók Béla utca (Bende 2003, 66, sl. 4–6; Kozubová 2019a, 148, sl. 39; 2019b, 52, sl. 10: 1–21), itd.

63 Párducz 1952, 145–146, 157–158, sl. 5, T. XLIII: 1; L; Kemenczei 2009, 52–53, 135, T. 66: 2; 68: 1, 3, 5, 9; Vörös 2010, 54–61, Tab. 1–4, sl. 1–6; Teleaga 2017, 101–107, T. 16–17; 22: 2–5; 23: 2.

64 Konj je u vratnome kralješku i desnoj lopatici (Párducz 1952, 147, T. 53; Kemenczei 2009, T. 65: 6–7) imao zabijene dvije trobridne strelice varijante I1 prema podjeli A. Kozubová (2009, 70–71, sl. 1).

65 Párducz 1952, 147, T. LII–LIII; LIV: 1–3; LV: 1–3; LVI: 3; LVII: 3; Kemenczei 2009, 52, 135, T. 65: 1–5.

66 Párducz 1952, 147, T. LXVIII: 2; LIX: 1–3; LX: 1–2; LXI: 1; LXII: 1–2; LXIII: 1–2.

67 Párducz 1954, 26–27, sl. 2, T. I: 1; 3–4; II: 10–12; Kemenczei 2009, 52, 135, T. 69: 1, 5–6.

68 Párducz 1955, 8–9, sl. 2: 1, T. VI: 16–18; Kemenczei 2009, 52.

69 Párducz 1955, 10, T. XII: 15–16.

52 Tasić 1998, 208, 582, cat. no. 221. The catalogue shows 4 phalerae measuring 5.1 cm in diameter: Gospodari srebra 1990, 187, cat. no. 137/12.

53 Djuknić, Jovanović 1965, 10, Pl. XXI: 10.

54 Teleaga 2017, 124, Pl. 37: 9.

55 Chochorowski 1985, 109–111.

56 Kemenczei 2009, 52–53.

57 Teleaga 2010, 178, 180.

58 Aside from the horse burials, horse gear was found only in cremation grave 142: Párducz 1955, 9, Pls X: 5–7, 16; XI: 3; XII: 12; XIII: 1, 3, 8.

59 Kemenczei 2009, 147, Figs 6–7 on p. 159 with reconstruction; Teleaga 2017, 100, Fig. 48 with reconstruction.

60 For different estimations of sex and age of horses in graves 12 and 13, see Teleaga 2017, 98, 101.

61 Párducz 1952, 144–146, Pls XLII: 1; XLIII: 12; XLIV: 1–4, 7–10; XLV: 1–3, 5–7; XLVI; Kemenczei 2009, 52, 135, Pls 65: 11; 66: 1–7, 10; Teleaga 2017, 98–101, Pls 13: 1; 14: 1–4; 15: 4–7.

62 I.e. phalerae with a single hoop: Szentes – Vekerzug grave 13 (Kemenczei 2009, 53, Pl. 68: 7; Teleaga 2017, 28); Nyíregyháza – Pazonyi utca (Kemenczei 2009, 53, Pl. 52: 3); cremation grave 59 at the cemetery of Algyő – Bartók Béla utca (Bende 2003, 66, Figs 4–6; Kozubová 2019a, 148, Fig. 39; 2019b, 52, Fig. 10: 1–21), etc.

Na grobljima Vekerzug kulture falere tipa Magdalenska gora još su pronađene (karta 2) – u grobu 24 na groblju Csanytelek – Újhalastó;⁷⁰ s groblja Gyöngyös, kao slučajan nalaz potječe falera promjera oko 6,0 cm⁷¹ i još se spominje jedna obložena zlatnim limom;⁷² u grobu s naoružanjem i ostacima dva konja, te još jednim jahaćim konjem s groblja Miskolc – Diósgyör iz 6. st. pr. Kr., bila je falera promjera 4,5 cm koja je danas izgubljena;⁷³ s groblja Nyékládháza – Mezőnyék kao slučajan nalaz potječe falera promjera 7,6 cm;⁷⁴ u paljevinskom grobu 52 na groblju Tiszavasvári – Dózsa-telep bila je falera promjera 3,5 cm;⁷⁵ vjerojatno iz groba na groblju Aszód potječu četiri falere promjera 8,8 – 9,0 cm koje pokazuju tragove spaljivanja.⁷⁶

Nalazi Vekerzug kulture na nalazištima Srijemske grupe

Zmijolika sljepoočničarka vekerzug tipa iz Novih Jankovaca

Na grobljima srijemske grupe nalazi, koji pripadaju prepoznatljivoj ostavštini Vekerzug kulture, do sada nisu bili posebno istaknuti. Izravne usporedbe na nalazišta Vekerzug kulture imaju nalaz brončane glatke sljepoočničarke s nalazišta Novi Jankovci – Velika Livada, gdje su pronađene i dvije falere tipa Magdalenska

2 had a single phalera measuring 5.6 cm in diameter.⁶³ In grave 16, with a horse burial,⁶⁴ there were four phalerae measuring 8.9 cm in diameter, coated in electrum, on one side of the horse's head.⁶⁵ Grave 18, with a horse burial, included four phalerae, 8 cm in diameter;⁶⁶ grave 19, with a horse burial, included four phalerae, 4 cm in diameter;⁶⁷ grave 139, with a horse burial, included three phalerae, 6 cm in diameter, and a buried dog.⁶⁸ There are also finds outside graves: a phalera 3.3 cm in diameter from trench CXXX and a phalera 2.8 cm in diameter from trench CXXXI.⁶⁹

In other cemeteries of the Vekerzug culture there have also been finds of phalerae of the Magdalenska Gora type (map 2), as in grave 24 in the cemetery of Csanytelek–Újhalastó.⁷⁰ In the Gyöngyös cemetery there was a chance find of a phalera around 6.0 cm in diameter⁷¹ and the mention of a phalera coated with gold sheet.⁷² A grave with weaponry and the remains of two horses and one riding horse in the cemetery of Miskolc–Diósgyör, of the 6th century BC, included a phalera measuring 4.5 cm in diameter, which has been lost.⁷³ The cemetery of Nyékládháza–Mezőnyék included, as a stray find, a phalera 7.6 cm in diameter;⁷⁴ cremation grave 52 in the cemetery of Tiszavasvári–Dózsa-telep included a phalera 3.5 cm in diameter,⁷⁵ and four phalerae probably originating from a grave in the Aszód cemetery have a diameter of 8.8–9.0 cm and show traces of burning.⁷⁶

Finds of the Vekerzug culture at the sites of the Syrmian group

Serpentine temple ring of the Vekerzug type from Novi Jankovci

In the Syrmian-group cemeteries, finds belonging to the recognizable heritage of the Vekerzug culture have not been singled out. The sites of the Vekerzug culture have direct parallels for the smooth bronze temple ring from the site of Novi Jankovci–Velika Livada, which included two phalerae of the Magdalenska Gora

70 Kemenczei 2009, 52.

71 Márton 1908, 45, T. 1: 7; Kemenczei 2009, 52, T. 147: 14; Teleaga 2010, 178; 2017, 89, T. 6: 5.

72 Kemenczei 2009, 52, T. 150: 6.

73 Gallus, Horváth, 1939, T. 47: 13–14; Kemenczei 2009, 52, T. 160: 3; Teleaga 2010, 177–178, T. 1: 4; 2017, 86, T. 4: 4.

74 Kemenczei 2009, 52, T. 46: 3.

75 Kemenczei 2009, 52, T. 111: 8.

76 Kemenczei 2009, 167, T. 144: 1, 4–6.

63 Párducz 1952, 145–146, 157–158, Fig. 5, Pls XLIII: 1; L; Kemenczei 2009, 52–53, 135, Pls 66: 2; 68: 1, 3, 5, 9; Vörös 2010, 54–61, Tables 1–4, Figs 1–6; Teleaga 2017, 101–107, Pls 16–17; 22: 2–5; 23: 2.

64 Stuck in the horse's cervical vertebra and right scapula (Párducz 1952, 147, Pl. 53; Kemenczei 2009, Pl. 65: 6–7), there were two triblade arrowheads of variant I1 according to A. Kozubová (2009, 70–71, Fig. 1).

65 Párducz 1952, 147, Pls LII–LIII; LIV: 1–3; LV: 1–3; LVI: 3; LVII: 3; Kemenczei 2009, 52, 135, Pl. 65: 1–5.

66 Párducz 1952, 147, Pls LXVIII: 2; LIX: 1–3; LX: 1–2; LXI: 1; LXII: 1–2; LXIII: 1–2.

67 Párducz 1954, 26–27, Fig. 2, Pls I: 1, 3–4; II: 10–12; Kemenczei 2009, 52, 135, Pl. 69: 1, 5–6.

68 Párducz 1955, 8–9, Fig. 2: 1, Pl. VI: 16–18; Kemenczei 2009, 52.

69 Párducz 1955, 10, Pl. XII: 15–16.

70 Kemenczei 2009, 52.

71 Márton 1908, 45, Pl. 1: 7; Kemenczei 2009, 52, Pl. 147: 14; Teleaga 2010, 178; 2017, 89, Pl. 6: 5.

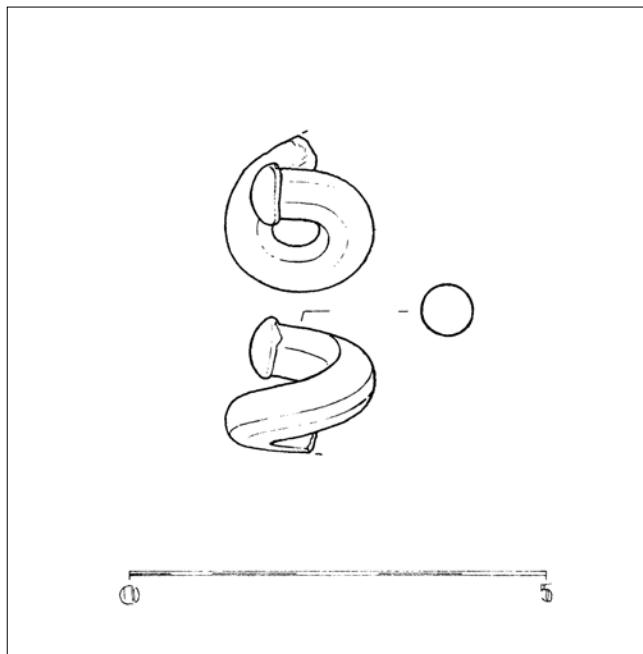
72 Kemenczei 2009, 52, Pl. 150: 6.

73 Gallus, Horváth, 1939, Pl. 47: 13–14; Kemenczei 2009, 52, Pl. 160: 3; Teleaga 2010, 177–178, Pl. 1: 4; 2017, 86, Pl. 4: 4.

74 Kemenczei 2009, 52, Pl. 46: 3.

75 Kemenczei 2009, 52, Pl. 111: 8.

76 Kemenczei 2009, 167, Pl. 144: 1, 4–6.



SLIKA 2. Zmijolika sljepoočničarka tipa I prema A. Kozubová s nalazišta Novi Jankovci – Velika Livada (nacrtala M. Rončević).

FIGURE 2. Serpentine temple ring of type I according to A. Kozubová from the Novi Jankovci – Velika Livada site (drawn by M. Rončević).

gora. Zmijolika sljepoočničarka lijevana je u jednome komadu i okruglog je presjeka. Jedan kraj završava niskim stožastim i neukrašenim zadebljanjem, dok je drugi oštećen (Sl. 2). Vanjski promjer iznosi 1,8 cm, a debljina 0,6 cm. Na osnovi ovih karakteristika, sljepoočničarka se može pripisati tipu I zmijolikih sljepoočničarki Vekerzug kulture prema detaljnoj podjeli A. Kozubová.⁷⁷

Zmijolike sljepoočničarke su prepoznatljiv te jedan od vodećih oblika Vekerzug kulture, o čemu svjedoče brojni nalazi na grobljima, gdje su datirane od prve polovice 6. do početka 4. st. pr. Kr. A. Kozubová ih dijeli u tri osnova tipa s obzirom na oblik tijela i njegov presjek, pri čemu je kod većine tijelo bilo presvučeno folijom od plemenitoga metala (zlato, elektrum ili srebro). Smanjene su nakitom za glavu te su oznaka društvenoga identiteta nositelja.⁷⁸ Još se s prostora istočne Hrvatske mogu spomenuti dvije slične masivne sljepoočničarke iz Batine koje na oba kraja imaju nisko stožasto zadebljanje, dok je tijelo presvučeno zlatnom folijom. Izdvojene su kao tip Batina i datirane su na početak starijeg željeznog doba, pri čemu nije posve isključeno da mogu pripadati i kasnemu halštatu.⁷⁹ Međutim, A. Kozubová ističe kako zmijolike sljepoočničarke Vekerzug kulture nisu povezane s ovim starijim nalazima te su lokalnoga porijekla, pri čemu se ne isključuje mogućnost kako mlađi oblici svoje uzore imaju u ovim sjeverno crnomorsko-kavkaskim nalazima.⁸⁰

type. The serpentine temple ring was cast in one piece and has a round cross-section. One terminal ends with an undecorated low conical expansion, while the other terminal is damaged (Fig. 2). It measures 1.8 cm in external diameter and 0.6 cm in thickness. On the basis of these characteristics, the temple ring can be associated with type I of the serpentine temple rings of the Vekerzug culture after the detailed classification of A. Kozubová.⁷⁷

Serpentine temple rings are a leading and recognizable form of the Vekerzug culture, as evidenced by numerous finds from cemeteries, dated from the first half of the 6th century BC to the beginning of the 4th. Kozubová divides them into three basic types according to the form of the body and cross-section; most of them were coated with a foil of precious metal (gold, electrum or silver). They were considered head jewellery and a mark of the wearer's social identity.⁷⁸ For eastern Croatia, we should also mention two similar massive temple rings from Batina, which have a low conical extension on both terminals; their body is coated with gold foil. They have been classified as the Batina type and dated to the beginning of the Early Iron Age, but it cannot be excluded that they belong to Late Hallstatt.⁷⁹ However, Kozubová points out that the serpentine temple rings of the Vekerzug culture are not connected with the older finds and that they have a local origin; there is still the possibility that the later forms have their models in these finds from the northern Black Sea and the Caucasus.⁸⁰

The temple ring from Novi Jankovci belongs to type I, which is considered the most numerous and found across the entire distribution area of the Vekerzug culture. Outside that area, single finds of temple rings of type I are known from sites in north-west Hungary and Moravia, with rare finds further north and north-west. Temple rings of type I are characterized by a smooth, cast, round-sectioned body which is not decorated. Their external diameter is between 1.5 cm and 2.4 cm. The conical extension at the end was cast together with the body, which is somewhat rare, or it could have been made of a thin metal sheet and then pulled over the unprofiled end. This extension is usually undeco-

⁷⁷ Kozubová 2013; 2018; 2019a; Kozubová, Fojtík 2021; Kozubová et al. 2022, itd.

⁷⁸ Kozubová 2013; 2018; 2019a; Kozubová, Fojtík 2021; Kozubová et al. 2022. O ukrasima za kosu na grobljima Vekerzug kulture: Dušek 1966, 34–35; Chochorowski 1985, 61, 64; Kemenczei 2002, 29, 57–70; 2009, 71, 80–85; 2010, 118, sl. 10; Ilon 2017. Za najdetaljniju tipo-kronološku podjelu ukrasa za glavu/kosu, vidjeti: Kozubová 2013, 25–36, sl. 4–6; 2018, 13–55, sl. 10; 2019a, 106–109, sl. 28; 31; Kozubová, Fojtík 2021, 81–86, 91–92, sl. 17; 21; Kozubová et al. 2022, 285–289, sl. 7–8.

⁷⁹ Metzner-Nebelsick 2002, 433–439, 538–540, sl. 194, T. 8: 26–27.

⁸⁰ Kozubová 2013, 31, bilj. 39; 2018, 32; 2019a, 108–109.

⁷⁷ Kozubová 2013; 2018; 2019a; Kozubová, Fojtík 2021; Kozubová et al. 2022, etc.

⁷⁸ Kozubová 2013; 2018; 2019a; Kozubová, Fojtík 2021; Kozubová et al. 2022. On the hair ornaments at the Vekerzug-culture cemeteries: Dušek 1966, 34–35; Chochorowski 1985, 61, 64; Kemenczei 2002, 29, 57–70; 2009, 71, 80–85; 2010, 118, Fig. 10; Ilon 2017. For the most detailed typo-chronological classification of the head/hair ornaments, see: Kozubová 2013, 25–36, Figs 4–6; 2018, 13–55, Fig. 10; 2019a, 106–109, Figs 28, 31; Kozubová, Fojtík 2021, 81–86, 91–92, Figs 17, 21; Kozubová et al. 2022, 285–289, Figs 7–8.

⁷⁹ Metzner-Nebelsick 2002, 433–439, 538–540, Fig. 194, Pl. 8: 26–27.

⁸⁰ Kozubová 2013, 31, n. 39; 2018, 32; 2019a, 108–109.

Sljepoočničarka iz Novih Jankovaca pripada tipu I koji se smatra najbrojnijim i pronađen je na cijelome području rasprostiranja Vekerzug kulture. Izvan tog prostora, sljepoočničarke tipa I još su s pojedinačnim nalazima poznate s nalazišta u sjeverozapadnoj Mađarskoj i Moravskoj, uz rijetke nalaze dalje prema sjeveru i sjeverozapadu. Za sljepoočničarke tipa I karakteristično je lijevano glatko tijelo okrugloga presjeka, odnosno ono nije ukrašeno. Vanjski promjer iznosi 1,5 cm – 2,4 cm. Stožasto zadebljanje na kraju bilo je lijevano zajedno s tijelom, što je rijede, ili je moglo biti izrađeno od tankog lima i potom navučeno na neprofilirani kraj. Ovo je zadebljanje najčešće neukrašeno. Nošene su pojedinačno ili u paru, a vrlo rijetko se pronalazi više od dvije sljepoočničarke u grobu. Većina nalaza potječe iz paljevinskih grobova, no nalazi u kosturnim grobovima s obje strane glave pokazuju kako se radilo o ukrasima za glavu/kosu, najčešće nošenih od strane odraslih žena.⁸¹ Tako nalaz iz Novih Jankovaca zasad predstavlja najjužniji nalaz ovoga tipa i jedinstven je na nalazištima srijemske grupe.

Najbliži nalaz sljepoočničarki iz Novih Jankovaca predstavlja brončana sljepoočničarka sa srebrnom oplatom ukrašenom valovnicom s groblja Szentlőrinc. U grobu 29, u kojem je bila pokopana žena starija od 50 godina, s lijeve strane glave pronađena je sljepoočničarka, blago prebačenih krajeva i okruglog presjeka čiji promjer iznosi 1,2 cm. Srebrni lim ukrašen je žljebovima. U grobu su pronađeni četiri fibule, jantarne perle i nož. Gob je datiran u najmladu fazu groblja, odnosno do prve polovice 4. st. pr. Kr.⁸² Brončana sljepoočničarka tipa I, promjera 1,2 cm, pronađena je u grobu 1 na groblju Alsónyék – Hosszú dűlő koje pokazuje velike sličnosti s nalazištima srijemske grupe u istočnoj Slavoniji i Srijemu, pri čemu se grob 1 smatra najmlađim pokopom na groblju. U grobu je bila pokopana žena u dobi od 35 do 45 godina, koja je oko vrata imala staklene i jantarne perle, na prsima su bile četiri željezne fibule, a u grobu su još pronađeni pršlen i željezni nož. Sljepoočničarka, kao jedini element Vekerzug kulture na groblju, nalazila se pokraj glave pokojnice, ima prebačene krajeve, dok je presjek skoro rombičan. S druge strane glave pronađena je sljepoočničarka otvorenih krajeva i promjera 1,3 cm.⁸³ S druge strane, na nalazištima u sjeverozapadnoj Mađarskoj i Moravskoj u većem su broju zabilježene sljepoočničarke tipa III, koje se smatraju loklanim oblikom, dok se rijetko pojavljuju na nalazištima Vekerzug kulture. Za ove sljepoočničarke karakteristično je da uglavnom imaju neukrašeno tijelo četverokutnog ili osmerokutnog presjeka ili je ono plastično ukrašeno uzdužnim rebrima s motivima riblje kosti, valovnice, mreže i dr. te mogu imati i drugačiji oblik stožastoga zadebljanja.⁸⁴

81 Kozubová 2013, 27–28, sl. 4; 2018, 14–16, 32, 39–40, sl. 10, Tab. 1; 2019a, 106–109, 149, sl. 28; Kozubová, Fojtík 2021, 81, 83, sl. 17; Kozubová et al. 2022, 285, sl. 7.

82 Jerem 1968, 165, 186, sl. 23: 29/2; Kemenczei 2010, 111, sl. 7: 10; Kozubová 2018, 16, bilj. 5.

83 Sóos 2020, 51–52, 78–79, 97, sl. 3: 1–2; Kozubová et al. 2022, 287.

84 Kozubová 2013, 28–30, sl. 4; 2018, 14–16; 2019a, 106; Kozubová, Fojtík 2021, 91–92, bilj. 49, sl. 21; Kozubová et al. 2022, 285–289, sl. 8. Mogu se spomenuti nalazi sljepoočničarki tipa III u sjeverozapadnoj Mađarskoj kao npr. iz groba 29 na groblju Sopron – Krautacker dűlő (Jerem 1981, 114, sl. 7: 12–15), Velem-Szent Vídhégy, Sé – Doberdó (Gál, Molnár 2004, 174, T. 14: 1; 48; Kemenczei 2010, 114, sl. 8: 20–25; Ilon 2017, 99, T. I: 6; II: 5), itd.

rated. They were worn singly or in pairs; more than two temple rings in a single grave are found very rarely. Most finds come from cremation graves, but the finds on both sides of the head in inhumation graves show that they were head/hair decorations, most often worn by adult women.⁸¹ Currently, the find from Novi Jankovci is the southernmost find of this type, unique among the sites of the Syrmian group.

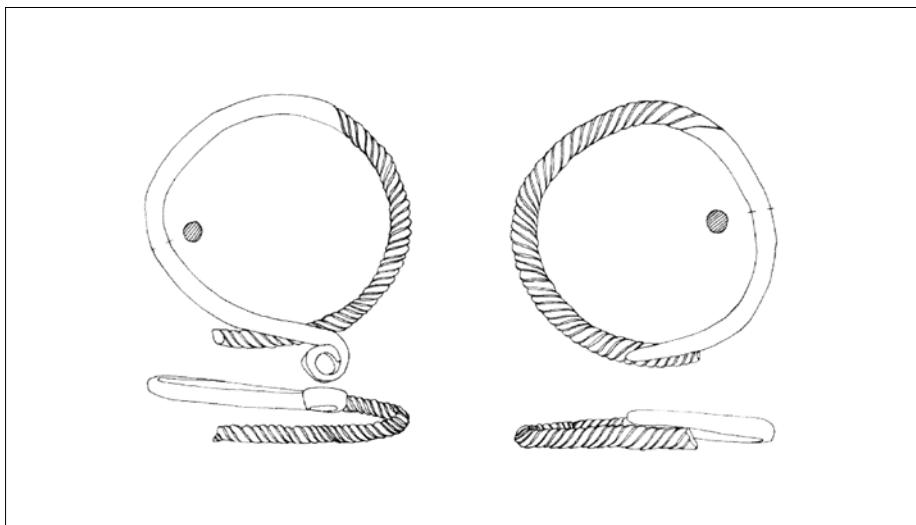
The closest find to the temple ring from Novi Jankovci is the bronze temple ring with silver coating decorated with a wave pattern from the Szentlőrinc cemetery. Grave 29 contained the burial of a woman older than 50 years of age; on the left side of the head there was a temple ring with slightly reverted terminals and a round cross-section, measuring 1.2 cm in diameter. The silver sheet is decorated with grooves. The grave included four fibulae, amber beads and a knife. The grave was dated to the latest phase of the cemetery, up to the first half of the 4th century BC.⁸² A bronze temple ring of type I, with a diameter of 1.2 cm, was found in grave 1 in the cemetery of Alsónyék–Hosszú dűlő, showing great similarities with the sites of the Syrmian group in eastern Slavonia and Syrmia; grave 1 is believed to be the latest burial in the cemetery. The woman buried in the grave was 35 to 45 years old, and she had glass and amber beads around her neck and four iron fibulae on her chest; the grave included a spindle whorl and an iron knife. The temple ring, as the only element of the Vekerzug culture in the cemetery, was found next to the woman's head; it has reverted terminals and an almost rhombic cross-section. On the other side of the head there was a temple ring with open terminals and a diameter of 1.3 cm.⁸³ In contrast, the sites in north-western Hungary and Moravia had a large number of temple rings of type III, which are believed to be a local form and rarely appear at the sites of the Vekerzug culture. These temple rings are characterized by usually having an undecorated body with a rectangular or octagonal cross-section, or a body decorated in relief with longitudinal ribs forming the patterns of fishbone, wave, netting etc., and can have a conical extension of a different shape.⁸⁴

81 Kozubová 2013, 27–28, Fig. 4; 2018, 14–16, 32, 39–40, Fig. 10, Tab. 1; 2019a, 106–109, 149, Fig. 28; Kozubová, Fojtík 2021, 81, 83, Fig. 17; Kozubová et al. 2022, 285, Fig. 7.

82 Jerem 1968, 165, 186, Fig. 23: 29/2; Kemenczei 2010, 111, Fig. 7: 10; Kozubová 2018, 16, n. 5.

83 Sóos 2020, 51–52, 78–79, 97, Fig. 3: 1–2; Kozubová et al. 2022, 287.

84 Kozubová 2013, 28–30, Fig. 4; 2018, 14–16; 2019a, 106; Kozubová, Fojtík 2021, 91–92, n. 49, Fig. 21; Kozubová et al. 2022, 285–289, Fig. 8. We could mention the finds of temple rings of type III in north-western Hungary, such as the one from grave 29 in the cemetery of Sopron–Krautacker dűlő (Jerem 1981, 114, Fig. 7: 12–15), Velem-Szent Vídhégy, Sé–Doberdó (Gál, Molnár 2004, 174, Pl. 14: 1; 48; Kemenczei 2010, 114, Fig. 8: 20–25; Ilon 2017, 99, Pl. I: 6; II: 5), etc.



SLIKA 3. Brončane tordirane narukvice iz dječjeg groba 54 s groblja Doroslovo (Trajković 2008).

FIGURE 3. Bronze twisted armrings from child grave 54 from the Doroslovo cemetery (Trajković 2008).

Brončane tordirane narukvice s groblja Doroslovo

Na grobljima srijemske grupe, koja se nalaze u južnoj Bačkoj, zabilježeni su još neki nalazi koji se mogu smatrati rezultatom kulturnih kontakata sa zajednicama Vekerzug kulture. Tako su na groblju Doroslovo, u slabo sačuvanom dječjem kosturnom grobu 54, pronađene dvije brončane narukvice promjera 5,1 i 5,2 cm. Na jednoj podlaktici nalazila se narukvica okruglog presjeka s prebačenim krajevima te polovicom tijela koja je tordirana, dok je druga glatka. Tordirni kraj je oštećen, dok je onaj glatki raskucan i spiralno uvijen. Druga narukvica također ima oštećeni tordirani kraj, dok glatki završava u šiljak (Sl. 3).⁸⁵ Za ove se narukvice navodi kako su popularan oblik na sjevernome Balkanu i datirane su u 3. st. pr. Kr., iako se u nešto izmijenjenom obliku pojavljuju i ranije.⁸⁶ Isto tako, istaknuto je kako su oblikovane na isti način kao i srebrne sljepoočničarke varijante A, kakve se pojavljuju u ranolatenskim grobovima (LT B2) u jugoistočnom dijelu Karpat-ske kotline.⁸⁷ U analizi narukvica iz Doroslova kao usporedbe su navedene tordirane sljepoočničarke iz kasnohalštatskih grobova iz Donje Doline koje svakako nisu odgovarajuće, kao i za one iz ranolatenskih grobova.

Zapravo, narukvice iz groba 54 izravne analogije postoje na grobljima Vekerzug kulture, gdje različiti oblici narukvica predstavljaju jedan od najčešćih oblika nakita u grobovima žena. Narukvice Vekerzug kulture, koje su bile brončane ili željezne, ukratko opisuje T. Kemenczei bez njihova preciznijega kronološkog određenja, pri čemu navodi i one brončane koje su tordirane.⁸⁸ Narukvice s groblja Chotín detaljno je analizirala A. Kozubová, koja izdvaja dva osnovna tipa brončanih narukvica – okruglog i trakastog presjeka s varijantama. Narukvice okruglog presjeka, s obzirom na završetak krajeva, dijele se na dva tipa, dok se pod-

Bronze twisted bracelets from the Doroslovo cemetery

The cemeteries of the Syrmian group in southern Bačka contained some other finds that can be considered a result of cultural contacts with the communities of the Vekerzug culture. In the Doroslovo cemetery, poorly preserved child's inhumation grave 54 included two bronze armrings measuring 5.1 and 5.2 cm in diameter. On one forearm there was a round-sectioned armring with reverted terminals; half of its body was twisted, and half was smooth. The twisted terminal was damaged, while the smooth one was hammered and spirally curved. The other armring also has a damaged twisted terminal, while the smooth one tapers to a point (Fig. 3).⁸⁵ These armrings are described as a popular form in the northern Balkans and dated to the 3rd century BC, although they do appear earlier in a slightly different form.⁸⁶ Also, it is pointed out that they were shaped in the same way as the silver temple rings of variant A that appear in Early La Tène graves (LT B2) in the south-eastern Carpathian Basin.⁸⁷ Analysis of the Doroslovo armrings indicates that their parallels are the twisted temple rings from Late Hallstatt graves in Donja Dolina, which are certainly not adequate, either for these or for those from the Early La Tène graves.

In fact, the armrings from grave 54 have direct analogies in the cemeteries of the Vekerzug culture, where various forms of armrings are among the most frequent forms of jewellery in women's graves. The Vekerzug-culture armrings, which were made of bronze or iron, are briefly described by T. Kemenczei, who does not provide precise dating and includes the twisted bronze ones.⁸⁸ The armrings from the Chotín cemetery were analysed in detail by A. Kozubová, who distinguishes two basic types of bronze armring: round-sectioned and strap-sectioned with vari-

85 Trajković 2008, 78, sl. na str. 230: 1–2.

86 Vasić 2008: 350; Ljuština 2010: 61–62, sl. 5: 1–2; 2020, 342–344.

87 Jovanović 1994, 114; Ljuština, Spasić 2012, 370.

88 Kemenczei 2009, 83–84, 183, Popis 8.

85 Trajković 2008, 78, Fig. on p. 230: 1–2.

86 Vasić 2008: 350; Ljuština 2010: 61–62, Fig. 5: 1–2; 2020, 342–344.

87 Jovanović 1994, 114; Ljuština, Spasić 2012, 370.

88 Kemenczei 2009, 83–84, 183, List 8.

varijante prepoznaju prema načinu ukrašavanja. Tordirane narukvice datirane su u najmlađu fazu Vekerzug kulture i smatraju se prepoznatljivim oblikom nakita za ruke.⁸⁹

Dosad poznati nalazi brončanih tordiranih narukvica Vekerzug kulture ukazuju na područje vjerojatnog porijekla narukvica iz groba 54 s groblja Doroslovo. Tijelo takvih narukvica je okruglog presjeka i može biti u cijelosti tordirano ili je, kao kod narukvica iz groba 54, polovica ili dvije trećine tordirana, a druga polovica je glatka. No niti jedna tordirana narukvica s groblja Vekerzug kulture nema završetak koji je raskovan i uvijen u ušicu. Izravna usporedba, posebno za narukvicu iz groba 54, čiji se glatki dio stanjuje prema kraju, poznata je iz groba 1 s groblja Szentes – Vekerzug. Nalazila se na lijevoj podlaktici žene, pri čemu je tordirani završetak odlomljen.⁹⁰ Narukvica istog oblika pronađena je i u grobu 76, u kojem je bila pokopana odrasla žena. Narukvica se nalazila na desnoj podlaktici te ima blago prebačene krajeve. Završetak tordiranog dijela nije sačuvan i pokazuje tragove istrošnosti. U grobu su bile i srebrne tordirane sljepoočničarke s koničnim krajevima.⁹¹ Još jedna napola tordirana narukvica poznata je s groblja Piliny i ima blago prebačene krajeve.⁹² Par narukvica, s cijelim tordiranim tijelom, pronađen je u paljevinskom grobu 48 na groblju Tiszavasvári – Csárdapart. Radi se o bogato opremljenome grobu žene u kojem su bile i dvije zmijolike sljepoočničarke tipa II.⁹³ Dvije tordirane narukvice pronađene su i u grobu grob 27 na groblju Vámosmikola – Istvánmajor, a nalazile su se na podlakticama pokojnice,⁹⁴ dok je u blizini groba 56, na groblju Tápiószele – Sumrák također pronađena narukvica ovog oblika.⁹⁵

Kauri pužići s groblja Stubarlija

Još jedna vrsta nalaza ukazuje na kulturne kontakte srijemske grupe sa zajednicama Vekerzug kulture, a radi se o nalazima kauri pužića na groblju Stubarlija kod Mošorina u južnoj Bačkoj. U grobu 1, u kojem je pokopana bogato opremljena žena u dobi od 35 do 50 godina, pronađeno je 14 kauri pužića – trinaest desno od zdjelice i jedan kod lijeve nadlaktice. Pužići imaju imaju velike rupe na dorzalnoj strani. Smatra se kako su do Bačke došli sa sjevernoga Jadrana posredstvom jugoistočnoalpskog prostora⁹⁶ iako na ovim područjima oni za sada nisu poznati u većem broju. Ovaj je jedinstven nalaz na grobljima srijemske grupe nedavno detaljno obrađen te se promatra kao import prestižnog predmeta, vjerojatno s prostora Vekerzug kulture uz komunikaciju koja je vodila uz rijeku Tisu.⁹⁷ Kauri pužići iz groba 1 s groblja Stubarlija nisu dobro sačuvani. S obzirom na tafonomске promjene

ants. Round-sectioned armrings are divided, according to the ends of the terminals, into two types, while sub-variants are recognized by the method of their decoration. Twisted armrings are dated to the latest phase of the Vekerzug culture and considered to be a recognizable form of arm jewellery.⁸⁹

The known finds of twisted bronze armrings of the Vekerzug culture indicate the probable area of origin of the armrings from grave 54 in the Doroslovo cemetery. The body of such armrings has a round cross-section and can be wholly twisted or, as shown by the armrings from grave 54, one half or two thirds can be twisted and the other half smooth. But Vekerzug-culture cemeteries have no twisted armrings with a hammered terminal curled into a loop. A direct parallel, especially for the armring from grave 54 with the tapering smooth part, is known from grave 1 in the cemetery of Szentes–Vekerzug. It was found on the woman's left forearm; the twisted terminal was broken off.⁹⁰ Another armring of the same shape was found in grave 76, where an adult woman was buried. The armring was found on the right forearm and has slightly reverted terminals. The twisted part is worn and has lost its terminal. The grave included silver twisted temple rings with conical terminals.⁹¹ Another half-twisted armring, with slightly reverted terminals, is known from the Piliny cemetery.⁹² A pair of armrings with a wholly twisted body was found in cremation grave 48 in the cemetery of Tiszavasvári–Csárdapart. It is a richly furnished woman's grave that included two serpentine temple rings of type II.⁹³ Two twisted armrings were found on the woman's forearms in grave 27 in the cemetery of Vámosmikola–Istvánmajor,⁹⁴ while another armring of this shape was found close to grave 56 in the Tápiószele–Sumrák cemetery.⁹⁵

Cowrie shells from the Stubarlija cemetery

There is another type of finds that points to cultural contacts between the Syrmian group and the communities of the Vekerzug culture: the cowrie shells found in the Stubarlija cemetery near Mošorin, in southern Bačka. Grave 1, with the burial of a richly-equipped woman between 35 and 50 years of age, included 14 cowrie shells: thirteen to the right of the pelvis and one next to the left upper arm. The shells have large holes on the dorsal side. It is believed they arrived in Bačka from the northern Adriatic through the south-eastern Alpine region,⁹⁶ although in these areas they are, as yet, not known in large numbers. This find, unique among Syrmian-group cemeteries, was recently analysed in detail and is considered to be a prestigious import, probably from the region of the Vekerzug culture by the route along the River Tisza.⁹⁷ The cowrie shells from grave 1 in the Stubarlija cemetery

89 Kozubová 2013, 55–64; 2016, 76–83, sl. 1; 2019a, 120–121.

90 Csallány, Párducz 1945, 106, T. XLIII: 6.

91 Párducz 1954, 39, Fig. 12, T. XXIV: 7; Kemenczei 2009, 136, 183, T. 75: 21.

92 Kemenczei 2009, 173, T. 174: 17.

93 Kemenczei 2009, 157, T. 125: 1–2.

94 Laczus, Párducz 1969, 221, T. LV: 10–11; Kemenczei 2009, 175, T. 181: 11.

95 Párducz 1966, 41, T. XIV: 1.

96 Medović 2007, 10, 71, sl. 6: 5, T. III: 2.

97 Ljuština, Radišić, Ninčić 2019.

89 Kozubová 2013, 55–64; 2016, 76–83, Fig. 1; 2019a, 120–121.

90 Csallány, Párducz 1945, 106, Pl. XLIII: 6.

91 Párducz 1954, 39, Fig. 12, Pl. XXIV: 7; Kemenczei 2009, 136, 183, Pl. 75: 21.

92 Kemenczei 2009, 173, Pl. 174: 17.

93 Kemenczei 2009, 157, Pl. 125: 1–2.

94 Laczus, Párducz 1969, 221, Pl. LV: 10–11; Kemenczei 2009, 175, Pl. 181: 11.

95 Párducz 1966, 41, Pl. XIV: 1.

96 Medović 2007, 10, 71, Fig. 6: 5, Pl. III: 2.

97 Ljuština, Radišić, Ninčić 2019.

i modifikacije, zaključuje se kako pripadaju rodu *Cypraea*, dok je vrstu teško odrediti, pri čemu su morfološki najsljčniji vrsti *Cypraea annulus*. Rupe na dorzalnoj strani nastale su namjerno iako ostaje mogućnost kako su mogle nastati i u nekim prirodnim procesima. Usporedbe su zabilježene na grobljima Vekerzug i Ciumbrud kulture, gdje ovi pužići uglavnom pripadaju vrsti *Cypraea annulus* te također imaju velike rupe s dorzalne strane. Razlika se prepoznaje u položaju nalaza u grobovima. Pužići u grobu 1 pronađeni su kod zdjelice i možda su bili spremljeni u neku vrstu vrećice, dok se na drugim grobljima nalaze oko vrata pokojnica, odnosno nosili su se na ogrlici oko vrata.⁹⁸

Inače, kauri pužiće, koji su većinom iz roda *Cypraea annulus*, s groblja Vekerzug kulture, detaljno je analizirala A. Kozubová.⁹⁹ Radi se o nakitu za vrat, pri čemu su pužići imali funkciju privjesaka, o čemu svjedoči rupica na dorzalnoj strani. Pronađeni su u grobovima odraslih žena, djece ili maloljetnih pokojnika, imali su funkciju amuleta, a nalaze se pojedinačni pužići ili po više njih u grobu. U najvećem se broju pojavljuju na groblju Szentes – Vekerzug, dok su na ostalima grobljima manje zastupljeni. Pretpostavlja se kako su pristigli s Kavkaza preko područja uz sjeverne obale Crnog mora.¹⁰⁰ U većem se broju počinju pojavljivati u grobovima Ciumbrud grupe od druge polovice 7. st. pr. Kr., dok se u Vekerzug kulturi pojavljuju u grobovima iz 6. st. pr. Kr. te ostaju česti i tijekom 5. st. pr. Kr.¹⁰¹

Zaključak

Rezultati istraživanja provedenih posljednjih dvadesetak godina na vinkovačkom području potvrđuju kako su područja istočne Slavonije i zapadnog Srijema tijekom kasnoga halštata bili prostori rasprostiranja srijemske grupe. To je vrijeme intenzivnih kontakata sa svim susjednim kulturnim grupama, posebno onima na srednjem Balkanu i na jugoistočnoalpskom području, koji su omogućili da srijemska grupa razvije karakterističnu materijalnu ostavštinu koja je za sada najprepoznatljivija u predmetima ženske nošnje i nakita.¹⁰² Jedna od prepoznatljivosti srijemske grupe je i pojava zasebnih ukopa konja, sa ili bez konjske opreme, koji su datirani u 5. i 4. st. pr. Kr. Nalazi s groblja Vinkovci – Nama ukazuju na porijeklo jednog seta konjske opreme u srednjoj Europi, dok druga svoje porijeklo ima na prostoru Donjega Podunavlja. Na kontaktu s Donjim Podunavljem ukazuje i nedavni nalaz ukopa konja sa žvalama tipa VA1 na groblju Lo-

are poorly preserved. The taphonomic changes and modifications indicate that they belong to the *Cypraea* genus; it is hard to determine the species, but their morphological characteristics are closest to *Cypraea annulus*. The dorsal holes were made on purpose, but there is still a possibility that they could have appeared in a natural way. There are parallels in the cemeteries of the Vekerzug and Ciumbrud groups, where these shells usually belong to the *Cypraea annulus* species and also have large dorsal holes. There is a difference in the positions of the finds inside the graves. The shells from grave 1 were found next to the pelvis and could have been stored in a bag, while those in other cemeteries were found around the women's necks, which means they were worn on necklaces.⁹⁸

Cowrie shells from the Vekerzug-culture cemeteries, mostly of the *Cypraea annulus* species, have been analysed in detail by Kozubová.⁹⁹ This was neck jewellery, and the shells served as pendants, as evidenced by the dorsal hole. They were found in graves of adult women, children or underage youths, and served as amulets; a single grave could have just one shell or several. Their greatest numbers were found in the cemetery of Szentes-Vekerzug, while they are less numerous in other cemeteries. It is assumed they arrived from the Caucasus, across the regions along the northern shore of the Black Sea.¹⁰⁰ They start to appear in greater numbers in the graves of the Ciumbrud group of the second half of the 7th century BC, while they appear in the graves of the Vekerzug culture from the 6th century BC and remain frequent in the 5th century BC.¹⁰¹

Conclusion

The results of the excavations undertaken around Vinkovci in the last twenty years reconfirm that the territories of eastern Slavonia and western Syrmia during the Late Hallstatt period belong to the area of distribution of the Syrmian group. This was a period of intensive contact with all the neighbouring cultural groups, especially the central Balkans and the south-eastern Alpine region, so that the Syrmian group developed a characteristic material legacy that is currently most recognizable in women's costume and jewellery items.¹⁰² A characteristic feature of the Syrmian group is the separate burial of horses with or without their gear, dated to the 5th and 4th centuries BC. The finds from the cemetery of Vinkovci-Nama indicate that one set of horse gear originated from central Europe, while another originated from the lower Danube. Contacts with the lower Danube are also indicated by the recent find of a horse burial with bits of type

⁹⁸ Ljuština, Radišić, Ninčić 2019, 139–140, 144–145, sl. 2; Ljuština 2020, 344, sl. 11.

⁹⁹ Also: Chochorowski 1985, 56; Kemenczei 2009, 91–92, 186, Popis 9; Teleaga, Zirra 2003, 84–85; Grahek 2004, 153–154, sl. 42 itd.

¹⁰⁰ Kozubová 2013, 49, bilj. 74. U Vekerzug kulturi puževi iz roda *Cypraea* rijetko se nalaze u grobovima gdje su bili ukrasi na odjeći; isto tako, nalaze se u dva groba s ukopom konja na groblju Szentes – Vekerzug (grobovi 139 i 146), gdje su vjerojatno bili ukrasi na konjskoj opremi.

¹⁰¹ Kozubová 2013, 48–51, sl. 17; 2019a, 100–101, sl. 20; Kozubová, Fojtík 2021, 86, sl. 18; Kozubová et al. 2022, 289–293, sl. 9; Ljuština, Radišić, Ninčić 2019, 142–145.

¹⁰² Dizdar 2019, 337–338.

⁹⁸ Ljuština, Radišić, Ninčić 2019, 139–140, 144–145, Fig. 2; Ljuština 2020, 344, Fig. 11.

⁹⁹ Also: Chochorowski 1985, 56; Kemenczei 2009, 91–92, 186, List 9; Teleaga, Zirra 2003, 84–85; Grahek 2004, 153–154, Fig. 42 etc.

¹⁰⁰ Kozubová 2013, 49, n. 74. Shells of genus *Cypraea* have rarely been found in the graves of the Vekerzug culture, where they were clothing decorations; they have also been found in two horse-burial graves in the cemetery of Szentes-Vekerzug (graves 139 and 146), where they were probably horse harness decorations.

¹⁰¹ Kozubová 2013, 48–51, Fig. 17; 2019a, 100–101, Fig. 20; Kozubová, Fojtík 2021, 86, Fig. 18; Kozubová et al. 2022, 289–293, Fig. 9; Ljuština, Radišić, Ninčić 2019, 142–145.

¹⁰² Dizdar 2019, 337–338.

vas u zapadnom Srijemu.¹⁰³ Da je ovakvih ukopa bilo i na drugim grobljima, ukazuju nalazi falera tipa Magdalenska gora koje su pronađene na tri nalazišta u zapadnom Srijemu (Sl. 1). Radi se o prvim nalazima ovoga oblika konjske opreme na nalazištima sriješke grupe, a falere vjerojatno potječu iz uništenih grobova – ukopa konja te se, na osnovi usporedbi, mogu datirati u 5. i prvu polovicu 4. st. pr. Kr.

Ove su falere do sada bile poznate s nalazišta na jugoistočnoalpskom prostoru, prije svega na grobljima doljenjske skupine, kao i na području rasprostiranja Vekerzug kulture (karta 2).¹⁰⁴ Da se falere tipa Magdalenska gora s nalazišta u okolini Vinkovaca mogu smatrati utjecajem sa zapada, ukazivala bi njihova boja, odnosno sastav, budući da arheometalurška analiza još nije provedena. Većinom su tamno sivo-zelene boje, što bi ukazivalo kako su izrađene od slitine olova i kositra. Ovom su slitinom bile izrađene falere s doljenjskih nalazišta,¹⁰⁵ uostalom kao i neki drugi predmeti nošnje i nakita¹⁰⁶ tijekom horizonta certoške fibule i rane faze negovske kacige.¹⁰⁷ U navedene horizonte datiraju se i falere tipa Magdalenska gora, pri čemu novi nalazi iz Kobarida pokazuju kako se mogu pojavljivati sve do početka mlađega željeznog doba. Drugo područje rasprostiranja ovih falera obuhvaća groblja Vekerzug kulture u sjeveroistočnom dijelu Karpatske kotline, na kojima je zabilježeno kako je gornja površina falera ponekad mogla biti presvučena zlatnom folijom ili elektrumom, što se smatra lokalnom tehnikom.¹⁰⁸ Zbog toga se vjerojatno utjecajem Vekerzug kulture može promatrati i presvlačenje falera iz Ljuljaka, Atenice i Pećke banje srebrnim limom, što je opet lokalna karakteristika budući da su srebrni predmeti na srednjem Balkanu česti od 6. st. pr. Kr.¹⁰⁹

Zajedničko svim trima grupama – srijemskoj, doljenjskoj i Vekerzug – predstavlja i pojava fenomena ukopa konja, o čemu postoje brojne recentne studije.¹¹⁰ Na grobljima srijemske i Vekerzug kulture konji su, sa ili bez konjske opreme, ukopani zasebno bez vidljive povezanosti s nekim od pokojnika. Također, predmeti konjske opreme ne pojavljuju se u grobovima pokojnika osim iznimnih slučajeva na grobljima Vekerzug kulture.¹¹¹ B. Teržan u

VA1 in the Lovas cemetery in western Syrmia.¹⁰³ The presence of such burials in other cemeteries is indicated by the phalerae of the Magdalenska Gora type that have been found at three sites in western Syrmia (Fig. 1). These are the first finds of this form of horse gear at the sites of the Syrmian group. The phalerae probably come from destroyed graves with horse burials; based on parallels, they can be dated to the 5th century BC and the first half of the 4th.

The earlier known phalerae of this kind came from sites in the south-eastern Alpine region, primarily the cemeteries of the Lower Carniola group, and in the distribution area of the Vekerzug culture (map 2).¹⁰⁴ One indicator that the phalerae of the Magdalenska Gora type from sites around Vinkovci can be considered an influence from the west is their colour or composition, since there has been no archaeometallurgical analysis yet. They are mostly dark grey and green in colour, which seems to indicate that they were made of an alloy of lead and tin. This alloy was employed to make the phalerae from the Lower Carniola sites,¹⁰⁵ as well as some other items of costume and jewellery¹⁰⁶ during the horizons of the Certosa fibula and the early phase of the Negau helmet.¹⁰⁷ The phalerae of the Magdalenska Gora type are dated to the same horizons, but the new finds from Kobarid show that they can appear up to the beginning of the Late Iron Age. The other distribution area of these phalerae encompasses the Vekerzug-culture cemeteries in the north-eastern Carpathian Basin, where it was established that the top of the phalerae could sometimes be coated with gold foil or electrum, which is considered to be a local technique.¹⁰⁸ For this reason, a probable influence of the Vekerzug culture can also be seen in the silver-sheet coating of the phalerae from Ljuljaci, Atenica and Pećka Banja, again a local feature, since silver objects in the central Balkans are frequent from the 6th century BC.¹⁰⁹

All three groups – Syrmian, Lower Carniola and Vekerzug – share the phenomenon of horse burials, which has been the subject of many recent papers.¹¹⁰ In the cemeteries of the Syrmian group and Vekerzug culture, horses are buried separately, with

¹⁰³ Majnarić-Pandžić 2000; 2003; Dizdar 2020b. Ukopi konja – njih šest – sa ili bez konjske opreme, do sada su u najvećem broju pronađeni na groblju Szentlőrcinc: Jerem 1968, 169–171.

¹⁰⁴ Parzinger 1995, 71, 73, sl. 25; Kmet'ová 2017, 103, sl. 7: 4.

¹⁰⁵ Gabrovec 1987, 63; Egg 2003, 335; Preložnik 2007, 159.

¹⁰⁶ Kromer 1960, 111–116; Hencken 1974, 126; Frey 1980, 227.

¹⁰⁷ Gabrovec, Teržan 2010, 291.

¹⁰⁸ Kemenczei 2009, 52–53.

¹⁰⁹ Vasić 1995; 2001; 2005.

¹¹⁰ Kmet'ová 2014, 125, 190–202; Kmet'ová 2017, 92, 94, 99–111, sl. 1; 2018, 267–282, Fig. 4; Kmet'ová, Barta 2018, 215.

¹¹¹ Prema ranijim mišljenjima, ukopi konja Vekerzug kulture bili su povezani s utjecajima sa sjevernokrnomorskog i kavkaskog područja. Međutim, novija istraživanja to opovrgavaju, vidjeti: Kmet'ová 2017, 94, 99, 108–111; 2018, 277–282 s ranjom literaturom. Istočje se kako je ukope konja teško preciznije datirati, pri čemu su oni s kronološki osjetljivim nalazima datirani od kraja 6. do početka 4. st. pr. Kr. Radiokarbonska datacija poznata je za dva ukopa konja s groblja Chotín IA koja pokazuje vrijeme od sredine 4. do početka 3. st. pr. Kr.: Kmet'ová 2014, 179–183, 186–190, 252–253; 2017, 99, 108–111; 2018, 277–278; Kmet'ová, Barta 2018, 214.

¹⁰³ Majnarić-Pandžić 2000; 2003; Dizdar 2020b. Horse burials – six of them – with or without horse gear were found in greatest number in the Szentlőrcinc cemetery: Jerem 1968, 169–171.

¹⁰⁴ Parzinger 1995, 71, 73, Fig. 25; Kmet'ová 2017, 103, Fig. 7: 4.

¹⁰⁵ Gabrovec 1987, 63; Egg 2003, 335; Preložnik 2007, 159.

¹⁰⁶ Kromer 1960, 111–116; Hencken 1974, 126; Frey 1980, 227.

¹⁰⁷ Gabrovec, Teržan 2010, 291.

¹⁰⁸ Kemenczei 2009, 52–53.

¹⁰⁹ Vasić 1995; 2001; 2005.

¹¹⁰ Kmet'ová 2014, 125, 190–202; Kmet'ová 2017, 92, 94, 99–111, Fig. 1; 2018, 267–282, Fig. 4; Kmet'ová, Barta 2018, 215.

analizi eponimnoga groblja ističe kako su konji i uzgoj konja imali posebno značenje za zajednicu te su vjerojatnije bili vlasništvo cijele zajednice nego pojedinca.¹¹² I na grobljima u Dolenjskoj konji ili njihovi dijelovi također su najčešće ukopani zasebno, najčešće u blizini pokojnika s naoružanjem, što se možda može objasniti pokopavanjem pod tumulima koje je karakteristično za ovu skupinu. Međutim, razlika se uočava u prisutnosti konjske opreme u grobovima bogato opremljenih pokojnika, dok se samo rijetko nalazi u ukopima konja. Ukopi konja poznati su u dolenjskoj skupini od početka starijega željeznog doba, ali postaju češći od horizonta certoske fibule kada su i ukopani zasebno. Istovremeno, počinje se pojavljivati i konjska oprema Vekerzug tipa,¹¹³ koja postaje sve brojnija, sve do njezina nestanka u grobovima krajem horizonta negovske kacige.¹¹⁴ Zapravo, jugoistočnoalpski prostor područje dolenjske skupine posebno povezuje s dvama udaljenim područjima na kojima je zabilježen fenomen ukopa konja – sjeveroistočnu Italiju, gdje se ukopi konja pojavljuju od 6. st. pr. Kr., i Karpatsku kotlinu, pri čemu je teško odrediti područje podrijetla ovoga fenomena. Povezanost ovih područja dokumentiraju i pojedini predmeti konjske opreme, što bi ukaživalo na razmjenu upregnutih konja tzv. istočnoga tipa. Ovi su konji mogli predstavljati prestižne darove između društvenih elita, odnosno pojedinih obitelji, a konj i oprema bili su statusni simboli.¹¹⁵

Nalazi falera tipa Magdalenska gora na nalazištima u okolini Vinkovaca predstavljaju za sada jedinstvene nalaze ovoga oblika konjske opreme na nalazištima srijemske grupe, s usporedbama na grobljima dolenjske i Vekerzug kulture. S obzirom na vjerojatnu izradu od slitine olova i kositra, vjerojatnije je kako su kulturni transfer sa zapada, odnosno da su nastale u lokalnim srijemskim radionicama pod tim utjecajem. Međutim, niti idejno izvorište ovih falera u Vekerzug kulturi ne treba posve isključiti. Falere vjerojatno potječu iz uništenih grobova, odnosno ukopa konja kakvi su već poznati na grobljima srijemske grupe, a svjedoče o važnosti konja za zajednice. Razlika je što se konjska oprema, pa tako i falere, u srijemskoj grupi i Vekerzug kulturi nalaze s konjima, dok u dolenjskoj skupini češće dolaze u ratničkim grobovima.

¹¹² Teržan, Hellmuth, Heimann 2011, 265.

¹¹³ Pojava konjske opreme Vekerzug tipa na nalazištima dolenjske skupine promatra se kao selektivno uključivanje novih oblika kroz različite vrste transfera: Teržan 1998, 524, 526–530; Dular 2003, 131; 2007, 744–746; Preložnik 2007, 163. Zanimljiva je nová interpretacija kako se možda radi o njezinom korištenju u prikazivanju društvenih identiteta u lokalnim zajednicama: Kozubová, Golec 2020, 357.

¹¹⁴ Dular 2007; Tecco-Hvala 2012, 157–158; Kmet'ová 2014, 107–111, 249–250, sl. 25; 2017, 101–103; 2018, 274–276.

¹¹⁵ Jerem 1968, 192–193; Bökonyi 1983, 335–336; Jerem 1998, 330–332; Dular 2007, 746–747; Teržan, Hellmuth, Heimann 2011, 265; Kmet'ová 2014, 254–257; 2017, 108–111, Fig. 1; 2018, 278–282, Fig. 4; Kmet'ová, Barta 2018, 215. Prepostavku o dolenjskoj skupini, kao posredniku, potvrđivali bi rezultati zooarheoloških analiza ostataka konja iz halštatskih grobova u Dolenjskoj koje pokazuju kako se radi o konjima tzv. istočnoga tipa, pri čemu su neki korišteni kao jahači konji (Bökonyi 1964; 1968; 1993; Dular 2007, 742–744; Kmet'ová 2018, 279–280, sl. 5). S druge strane, ostaci konja s naselja Cvinger iznad Vira pri Stični pripisuju se drugome tipu – zapadnom ili su bili lokalnog podrijetla, a vjerojatno su korišteni za svakodnevne poslove, pa čak i hranu (Bökonyi 1994, 199). Konji s nalazišta Bizjakova hiša u Kobaridu bliže su zapadnome, keltskomu tipu konja te su pojedini konji također bili korišteni za jahanje (Toškan 2011, 44–49, Fig. 23).

or without horse gear, and have no visible connection with the buried humans. Also, horse-gear items do not appear in human graves, barring exceptional cases in the cemeteries of the Vekerzug culture.¹¹¹ In her analysis of the eponymous cemetery, B. Teržan points out that horses and horse breeding had a special significance for the community, and that it is more probable they were owned by the whole community instead of individuals.¹¹² Horses or their parts in the Lower Carniola cemeteries are also usually buried separately, most often near humans buried with weaponry, which can perhaps be explained by the burials under tumuli that are characteristic of this group. However, there is a difference: there is horse gear in the graves of richly-equipped people, but it is only rarely found in horse burials. Horse burials are known in the Lower Carniola group from the beginning of the Early Iron Age, but they become more frequent from the horizon of the Certosa fibula, when they are buried separately. At the same time, horse gear of the Vekerzug type starts to appear¹¹³ and becomes more plentiful, until its disappearance from the graves at the end of the Negau-helmet horizon.¹¹⁴ In fact, the south-eastern Alpine region, especially the area of the Lower Carniola group, connects the two distant areas where the phenomenon of horse burials has been identified – north-eastern Italy, where horse burials appear from the 6th century BC, and the Carpathian Basin – and it is hard to determine the geographic origin of this phenomenon. The connection between these regions is evidenced by particular items of horse gear, which seems to point to the exchange of harnessed horses of the ‘eastern’ type. These horses could have served as prestigious gifts between social elites or particular families, horses and horse gear being status symbols.¹¹⁵

¹¹¹ According to earlier opinions, horse burials in the Vekerzug culture were associated with influences from the northern Black Sea and the Caucasus. However, this is refuted by more recent research; see Kmet'ová 2017, 94, 99, 108–111; 2018, 277–282 with earlier literature. It is pointed out that horse burials are hard to date precisely; those with chronologically sensitive finds are dated from the end of the 6th century BC to the beginning of the 4th. Radiocarbon dating is known for the two horse burials at the Chotín IA cemetery, indicating a period from the middle of the 4th century BC to the beginning of the 3rd: Kmet'ová 2014, 179–183, 186–190, 252–253; 2017, 99, 108–111; 2018, 277–278; Kmet'ová, Barta 2018, 214.

¹¹² Teržan, Hellmuth, Heimann 2011, 265.

¹¹³ The appearance of horse gear of the Vekerzug type at the sites of the Lower Carniola group is seen as selective inclusion of new forms through various kinds of transfers: Teržan 1998, 514, 526–530; Dular 2003, 131; 2007, 744–746; Preložnik 2007, 163. An interesting new interpretation is that it may be about its use in the presentation of social identities in local communities: Kozubová, Golec 2020, 357.

¹¹⁴ Dular 2007; Tecco-Hvala 2012, 157–158; Kmet'ová 2014, 107–111, 249–250, Fig. 25; 2017, 101–103; 2018, 274–276.

¹¹⁵ Jerem 1968, 192–193; Bökonyi 1983, 335–336; Jerem 1998, 330–332; Dular 2007, 746–747; Teržan, Hellmuth, Heimann 2011, 265; Kmet'ová 2014, 254–257; 2017, 108–111, Fig. 1; 2018, 278–282, Fig. 4; Kmet'ová, Barta 2018, 215. The assumption about the Lower Carniola group as a mediator seems to be confirmed by the results of the zooarchaeological analyses of horse remains from Hallstatt graves in Lower Carniola, which show that these are horses of the ‘eastern’ type and that some were used as riding horses (Bökonyi 1964; 1968; 1993; Dular 2007, 742–744; Kmet'ová 2018, 279–280, Fig. 5). On the other hand, horse remains from the Cvinger settlement above Vir pri Stični are associated with another type – the western type – or had a local origin, and were probably used for daily chores, and even as food (Bökonyi 1994, 199). The horses from the site of Bizjakova Hiša in Kobarid are closer to the western, Celtic type of horses; some of them were also used for riding (Toškan 2011, 44–49, Fig. 23).

Inače, u srijemskoj grupi, osim utjecaja sa srednjeg Balkana, za sada su najprepoznatljiviji utjecaji doljenjske skupine vidljivi u različitim oblicima certosa i drugih tipova fibula, kao i u ženskom nakitu. Utjecaji Vekerzug kulture do sada su u jugoistočnom dijelu Karpske kotline bili slabije primjetni,¹¹⁶ ali nalaz brončane zmijolike sljepoočničarke tipa I u Novim Jankovcima nedvojbeno se može smatrati dokazom kulturnih kontakata i poveznicom s prostorom Vekerzug kulture. Još su neki predmeti s nalazišta srijemske grupe vjerojatno pristigli sa sjevera, kao brončane tordirane narukvice iz dječjega groba 54 s groblja Doroslovo, te kauri pužići iz groba 1 na groblju Stubarlija. Isto tako, vjerojatno su posredstvom srijemske grupe do srednjega Balkana pristigli nalazi karakteristični za Vekerzug kulturu, posebno naoružanje i konjska oprema,¹¹⁷ dok su u suprotnom smjeru završili pojedini oblici fibula, kao i neki predmeti nošnje i nakita pronađeni na grobljima Vekerzug kulture.¹¹⁸

Vjerojatno će buduća sustavnija istraživanja nalazišta srijemske grupe omogućiti bolje razumijevanje složenoga kulturnog krajolika jugoistočnoga dijela Karpske kotline tijekom kasnoga halštata, prostora na kojem se od početka 6. do kraja 4. st. pr. Kr. susreću svi kulturni fenomeni toga vremena, svaki obilježen svojom prepoznatljivom materijalnom ostavštinom.

The finds of phalerae of the Magdalenska Gora type at the sites around Vinkovci are currently unique finds of this form of horse gear at the sites of the Syrmian group, with parallels in the cemeteries of the Lower Carniola group and Vekerzug culture. Since they probably consist of an alloy of lead and tin, it is more probable that they were a cultural transfer from the west or that they were produced in local Syrmian workshops under that influence. However, we should not rule out that the Vekerzug culture was the conceptual source of these phalerae. The phalerae probably come from destroyed graves, i.e. horse burials that are known from the cemeteries of the Syrmian group, and they testify to the importance of horses for the communities. The difference is that horse gear, including phalerae, is found together with horses in the Syrmian group and Vekerzug culture, while it is more frequently found in warrior graves in the Lower Carniola group.

For now, the most recognizable influences on the Syrmian group, aside from those coming from the central Balkans, are the influences of the Lower Carniola group, visible in different forms of Certosa and other types of fibulae, and in women's jewellery. The influences of the Vekerzug culture used to be less noticeable in the south-eastern Carpathian Basin,¹¹⁶ but the find of a bronze serpentine temple ring of type I in Novi Jankovci can undoubtedly be considered proof of cultural contact and connectivity with the territory of the Vekerzug culture. Some other objects from Syrmian-group sites probably also came from the north, such as the bronze twisted armrings from child grave 54 in the Doroslovo cemetery and the cowrie shells from grave 1 in the Stubarlija cemetery. Also, it is probable that the central Balkans received the characteristic Vekerzug-culture finds by way of the Syrmian group, especially weaponry and horse gear,¹¹⁷ while the transfers in the opposite direction include certain forms of fibulae and some costume and jewellery items in the cemeteries of the Vekerzug culture.¹¹⁸

More systematic future research of the Syrmian-group sites will probably provide a better understanding of the complex cultural landscape of the south-eastern Carpathian Basin in the Late Hallstatt, a territory where the period from the beginning of the 6th century BC to the end of the 4th was marked by a convergence of all the cultural phenomena of the time, each exhibiting a recognizable material heritage.

¹¹⁶ Jovanović 1977; Ljuština, Ninčić 2017, 245–250, sl. 1. Npr. u grobu Vršac – At u južnome Banatu kopljé i dvije trobridne strelice s tuljcem (Ljuština, Ninčić 2017, 245, sl. 5; 6: 1); akinake sa segmentiranim drškom s nalazišta Vršac – Magarčovo brdo iz prve polovice 5. st. pr. Kr. (Vasić 1987, 564; Ljuština, Ninčić 2017, 246, sl. 2; Topal 2019).

¹¹⁷ Guštin 1984, 112–114; Vasić 1987; Teržan 1998; Ljuština, Ninčić 2017, itd.

¹¹⁸ Kemenczei 2004; 2009. Npr. kopča s izboženjima s nalazišta Muhi – Kocsmadomb (Kemenczei 2009, T. 42: 4), ulomak ažuriranoga pojasa s nalazišta Nyíregyháza – Közvágóhíd (Kemenczei 2009, T. 49: 4), brončana narukvica u paljevinskom grobu 28 na groblju Eger – Nagy Eged (Kozubová, Horváth 2019, 140, 145, sl. 1: 1) itd. Za detaljniju analizu južnih utjecaja na Vekerzug kulturu: Kozubová 2019a.

¹¹⁶ Jovanović 1977; Ljuština, Ninčić 2017, 245–250, Fig. 1. E.g. a spear and two triblade arrowheads with an inner socket in the grave of Vršac–At in southern Banat (Ljuština, Ninčić 2017, 245, Figs 5; 6: 1); the akinakes with a segmented hilt from the site of Vršac–Magarčovo Brdo of the first half of the 5th century BC. (Vasić 1987, 564; Ljuština, Ninčić 2017, 246, Fig. 2; Topal 2019).

¹¹⁷ Guštin 1984, 112–114; Vasić 1987; Teržan 1998; Ljuština, Ninčić 2017, etc.

¹¹⁸ Kemenczei 2004; 2009. E.g. the buckle with protrusions from the site of Muhi–Kocsmadomb (Kemenczei 2009, Pl. 42: 4), a fragment of an openwork belt from the site of Nyíregyháza–Közvágóhíd (Kemenczei 2009, Pl. 49: 4), a bronze armring from cremation grave 28 in the cemetery of Eger–Nagy Eged (Kozubová, Horváth 2019, 140, 145, Fig. 1: 1) etc. For a more detailed analysis of the southern influences in the Vekerzug culture: Kozubová 2019a.

BIBLIOGRAFIJA

BIBLIOGRAPHY

- Bende 2003 – L. Bende, Szkíta kori temető Algyőn / Cemetery from the Scythian Period at Algyő, *Régészeti kutatások Magyarországon* 2001, 2003, 63–78.
- Božič 2014 – D. Božič, Das Doppelkammhelm- und Pferdgrab, Ausgegraben bei Vače im Jahre 1887, in Tecco Hvala, S. (ed.), *Studia Praehistorica in Honorem Janez Dular*, Opera Instituti Archaeologici Sloveniae 30, 2014, 271–286.
- Božič 2016 – D. Božič, Graves from the Certosa Phase in Early Iron Age Barrow 48 at Stična / Grobovi certoškoga stupnja u stariježeljeznodobnom tumulu 48 u Stični, *Prilozi Instituta za arheologiju u Zagrebu* 33, 2016, 155–170.
- Bökönyi 1964 – S. Bökönyi, Angaben zur Kenntnis der eisenzeitlichen Pferde in Mittel- und Osteuropa, *Acta Archaeologica Academiae Scientiarum Hungaricae* XVI/3–4, 1964, 227–239.
- Bökönyi 1968 – S. Bökönyi, Data on Iron Age Horses of Central and Eastern Europe, in Bökönyi, S., Angel, J. L. (eds.), *Mecklenburg Collection, Part I*, Bulletin 25, American School of Prehistoric Research, Cambridge, 1968, 1–71.
- Bökönyi 1983 – S. Bökönyi, Trade of domestic animals between Pannonia and Italy, *Savaria. A Vas Megyei Múzeumok Értesítője* 16, 1983, 335–339.
- Bökönyi 1993 – S. Bökönyi, *Pferdedomestikation, Haustierhaltung und Ernährung*, Archäozoologische Beiträge zu historisch-ethnologischen Problemen, Archeolingua, 1993.
- Bökönyi 1994 – S. Bökönyi, Analiza živalskih kosti / Die Tierknochenfunde der Siedlung, in Gabrovec, S. (ed.), *Stična I. Naselbinska izkopavanja / Siedlungsausgrabungen*, Katalogi in monografije 28, Narodni muzej Slovenije, 1994, 190–213.
- Brunšmid 1902 – J. Brunšmid, Prethistorijski predmeti iz Srijemske županije, *Vjesnik Hrvatskoga arheološkoga društva n.s.* VI, 1902, 68–86.
- Chochorowski 1985 – J. Chochorowski, *Die Vekerzug-Kultur, Charakteristik der Funde*, Prace archeologiczne 36, 1985.
- Csallány, Párducz 1945 – G. Csallány, M. Párducz, Szkítakori leletek a szentesi Múzeumban / Funde aus der Skythenzeit im Museum zu Szentes, *Archaeologiai Értesítő* 3–6. III Folyam (1944–1945), 1945, 81–117.
- Cvitković, Škoberne 2003 – I. Cvitković, Ž. Škoberne, The Find of an Equestrian Grave of Iron Age at Sv. Križ Brdovečki (Croatia), *Archäologisches Korrespondenzblatt* 33/3, 2003, 221–228.
- Dizdar 2019 – M. Dizdar, New Late Hallstatt Finds from the Vinkovci Region (Eastern Croatia): A Contribution to the Study of Impacts from the Balkans to the southeastern Carpathian Basin, in Filipović, V., Bulatović, A., Kapuran, A. (eds.), *Zbornik radova u čast 80. g. života Rastka Vasića*, Arheološki institut, 2019, 319–343.
- Dizdar 2020a – M. Dizdar, The Late Hallstatt Connections between the South-eastern Carpathian Basin and the Western and Central Balkans: The Beautiful Ladies from the South, in Gavranović, M., Heilmann, D., Kapuran, A., Verčík, M. (eds.), *Spheres of Interaction. Contacts and Relationships between the Balkans and Adjacent Regions in the Late Bronze / Iron Age (13th–5th Centuries BCE)*, Proceedings of the Conference held at the Institute of Archaeology, Belgrade, 15–17 September, 2017, Perspectives on Balkan Archaeology 1, Verlag Marie Leidorf GmbH, 2020a, 189–215.
- Dizdar 2020b – M. Dizdar, Rezultati istraživanja u Lovasu (zapadni Srijem) 2019. godine – Kasnohalštatsko i ranolatensko groblje / Research results in Lovas (Western Syrmia) in 2019 – The Late Hallstatt and the Early La Tène cemetery, *Annales Instituti Archaeologici* XVI, 2020b, 18–30.
- Djuknić, Jovanović 1965 – M. Djuknić, B. Jovanović, Illyrian Princely Necropolis at Atenica, *Archaeologica Iugoslavica* VI, 1965, 1–35.
- Dular 1978 – J. Dular, *Podzemelj*, Katalogi in monografije 16, Narodni muzej, 1978.
- Dular 2003 – J. Dular, *Halštatske nekropole Dolenjske* / Die hallstattzeitlichen Nekropolen von Dolenjsko, Opera Instituti Archaeologici Sloveniae 6, 2003.
- Dular 2007 – J. Dular, Pferdegräber und Pferdebestattungen in der hallstattzeitlichen Dolenjsko-Gruppe, in Blečić, M., Črešnar, M., Hänsel, B., Hellmuth, A., Kaiser, E., Metzner-Nebelsick, C. (eds.), *Scripta Praehistorica in honorem Biba Teržan*, Situla 44, Narodni muzej Slovenije, 2007, 737–752.
- Dušek 1966 – M. Dušek, *Thrakisches Gräberfeld der Hallstattzeit in Chotín*, Archaeologica Slovaca Fontes 6, 1966.
- Egg 2003 – M. Egg, Waffenbrüder? Eine ungewöhnliche Bestattung der Frühlatènezeit in Novo mesto in Slowenien, *Jahrbuch des Römisch-Germanischen Zentralmuseums* 46/2 (1999), 2003, 317–356.
- Frey 1980 – O. H. Frey, Ein Zierstück der späten Hallstattzeit von der Magdalenska gora bei Šmarje, in *Die Hallstattkultur, Symposium Steyr* 1980, 1980, 227–240.
- Gabrovec 1987 – S. Gabrovec, Dolenska grupa, in Benac, A. (ed.), *Praistorija jugoslavenskih zemalja V – Željezno doba*, Akademija nauka i umjetnosti Bosne i Hercegovine, Centar za balkanološka ispitivanja, 1987, 29–119.
- Gabrovec et al. 2006 – S. Gabrovec, A. Kruh, I. Murgelj, B. Teržan, *Stična II/1. Gomile starejše železne dobe / Grabhügel aus der älteren Eisenzeit. Katalog*, Katalogi in monografije 37, Narodni muzej Slovenije, 2006.
- Gabrovec, Teržan 2010 – S. Gabrovec, B. Teržan, *Stična II/2. Gomile starejše železne dobe. Razprave / Grabhügel aus der älteren Eisenzeit. Studien, Katalogi in monografije* 38 (2008), Narodni muzej Slovenije, 2010.
- Gál, Molnár 2004 – K. Gál, A. Molnár, *«Sé-Doberdó. Az 1998-as és 2001-es ásatások vaskori leletanyaga, Savaria. A Vas Megyei Múzeumok értesítője* 28, 2004, 159–230.
- Gallus, Horváth 1939 – S. Gallus, T. Horváth, *Un peuple cavalier préscythe en Hongrie, Trouvailles archéologiques du premier âge du fer et leurs relations avec l'eurasie*, Dissertationes Panonicae ser. II. fasc. 9, 1939.
- Gerbec, Mlinar 2022 – T. Gerbec, M. Mlinar, Il sito di culto di Bizjakova hiša a Kobarid (Slovenia occidentale), in Gambacurta, G., Mascardi, M., Vallicelli, C. M. (eds.), *Figlio del lampo, degno di un re. Un cavallo veneto e la sua bardatura*, Atti della giornata di studi, Oderzo, 23 novembre 2018, Antichistica 34 – Archeologia 7, Edizioni Ca’Foscari, 2022, 85–96.
- Gospodari srebra 1990 – Gospodari srebra / Masters of Silver, 1990, *Gospodari srebra, Gvozdeno doba na tlu Srbije / Masters of Silver. The Iron Age in Serbia*, Jevtić, J. (ed.), Narodni muzej Beograd-Muzej Vojvodine Novi Sad-Muzej Kosova Priština, 1990.
- Grahek 2004 – L. Grahek, Halštatska gomila na Hribu v Metliki, *Arheološki vestnik* 55, 2004, 111–206.
- Guštin 1979 – M. Guštin, *Notranjska: k začetkom železne dobe na severnem Jadranu / Zu den Anfängen der Eisenzeit an der nördlichen Adria*, Katalogi in monografije 17, Narodni muzej, 1979.
- Guštin 1984 – M. Guštin, Prazgodovinski grobovi z vozovi na ozemlju Jugoslavije, in Guštin, M. (ed.), *Keltski voz*, Posavski muzej Brežice knj. 6, 1984, 111–132.
- Hencken 1974 – H. Hencken, Bracelets of Lead-Tin Alloy from Magdalenska Gora, *Situla* 14/15, 1974, 119–127.
- Hencken 1978 – H. Hencken, *The Iron Age Cemetery of Magdalenska Gora in Slovenia*, Mecklenburg Collection, Part II, Bulletin 32, American School of Prehistoric Research, Harvard University, 1978.
- Ilon 2017 – G. Ilon, Skythische Spiralringe oder Piercings aus West-Transdanubien und ihre Symbolik, in Beljak Pažinová, N., Borzová, Z. (eds.), *Sedem decénii Petra Ramsauera*, Studia Historica Nitriensis Supplementum 21, 2017, 97–116.
- Jerem 1968 – E. Jerem, The Late Iron Age Cemetery of Szentlörinc, *Acta Archaeologica Academiae Scientiarum Hungaricae* XX, 1968, 159–208.
- Jerem 1981 – E. Jerem, Zur Späthallstatt und Frühlatènezeit in Transdanubia, in Eibner, C., Eibner, A. (eds.), *Die Hallstattkultur*, Bericht über das Symposium in Steyr 1980 aus Anlaß der Internationalen Ausstellung des Landes Oberösterreich, 1981, 105–136.
- Jerem 1998 – E. Jerem, Iron Age horse burial at Sopron-Krautacker (NW Hungary). Aspects of trade and religion, in Anreiter, P., Bartosiewicz, L., Jerem, E., Meid, W. (eds.), *Man and the Animal World. Studies in Archaeozoology, Archaeology, Anthropology and Palaeolinguistics in memoriam Sándor Bökönyi*, Archaeolina, Main Series 8, 1998, 319–334.
- Jovanović 1977 – B. Jovanović, Primerici životinjskog stila skitskog i tračkog gvozdenog doba u Jugoslaviji, *Starinar* XXVII (1976), 1977, 19–33.

- Jovanović 1994 – B. Jovanović, Horizont najstarijih keltskoh grobova na severnom Balkanu, in Tasić N. (ed.), *Kulture gvozdenog doba jugoslovenskog Podunavlja*, Balkanološki institut SANU, Posebna izdanja 55, 1994, 111–117.
- Kemenczei 2002 – T. Kemenczei, Beiträge zur Schmuckmode der Alföld-Gruppe skythischer Prägung, *Folia Archaeologica XLIX-L* (2001–2002), 2002, 29–77.
- Kemenczei 2004 – T. Kemenczei, Bemerkungen zu den Fibeln des Skythenzeit, *Communicationes Archaeologicae Hungariae*, 2004, 79–103.
- Kemenczei 2009 – T. Kemenczei, *Studien zu den Denkmälern skythisch geprägter Alföld Gruppe*, Inventaria Praehistorica Hungariae XII, Magyar Nemzeti Múzeum, 2009.
- Kemenczei 2010 – T. Kemenczei, Funde der skytischen geprägten Alföld-Gruppe in Transdanubiens, *Folia Archaeologica LIV* (2008–2010), 2010, 101–125.
- Kmet'ová 2013 – P. Kmet'ová, „Masters of Horses“ in the West, „Horses Breeders“ in the East? On the Significance and Position of the Horse in the Early Iron Age Communities of the Pannonian Basin, in Karl, R., Leskovar, J. (eds.), *Interpretierte Eisenzeit*, Fallstudien, Methoden, Theorie. Tagungsbeiträge der 5. Linzer Geschpräche zur interpretativen Eisenzeitarchäologie, Studien zur Kulturgegeschichte von Oberösterreich Folge 37, 2013, 247–258.
- Kmet'ová 2014 – P. Kmet'ová, *Deponovanie koní na pohrebiskách z doby halštatskej v priestore panónskej panvy*, Dissertationes archaeologicae Bratislavenses 2, Univerzita Komenského v Bratislave, Filozofická Fakulta, 2014.
- Kmet'ová 2017 – P. Kmet'ová, Contacts between the Late Hallstatt groups of the Pannonian Basin, the south-east Alpine Hallstatt region and ancient Veneti from the perspective of horse burials, in Trefný, M., Jennings, B. (eds.), *Inter-regional contacts during the first millennium B.C. in Europe*, Proceedings from the session organized during the 19th meeting of European Association of Archaeologist, held in Pilsen, 5th – 9th September 2013, 2017, 92–117.
- Kmet'ová 2018 – P. Kmet'ová, 'And Four Strong-Necked Horses He Threw Swiftly on the Pyre...' On Human-Horse Relationship in the Early Iron Age Central Europe from the Perspective of Interregional Contacts, in Pavuk, P., Klontza-Jaklová, V., Harding, A. (eds.), *ΕΥΔΑΙΜΩΝ. Studies in Honour of Jan Bouzek*, Opera Facultatis philosophiae Universitatis Carolinae Pragensis vol. XVIII, 2018, 267–289.
- Kmet'ová, Barta 2018 – P. Kmetová, P. Barta, Absolute dating of horse graves at cemeteries of Vekerzug culture: new evidence from Chotin, in Trefný, M. (ed.), *The early Iron Age in Centra Europe*, Proceedings of the conference held on 2nd–4th of July 2015 in Hradec Králové, 2018, 202–221.
- Knez 1986 – T. Knez, *Novo mesto I, Halštatski grobovi*, Carniola Archaeologica 1, Dolenjski muzej, 1986.
- Kozubová 2009 – A. Kozubová, Dial'kové zbrane z pohrebísk vekerzugskej kultúry na juhozápadnom Slovensku, *Zborník Slovenského národného múzea CIII – Archeológia* 19, 2009, 65–130.
- Kozubová 2011 – A. Kozubová, Súčasti konských postrojov z lokalít vekerzugskej kultúry na juhozápadnom Slovensku (časť I), *Musaica* 27 – *Zborník Filozofickej fakulty Univerzity Komenského*, 2011, 69–100.
- Kozubová 2013 – A. Kozubová, *Pohrebiská vekerzugskej kultúry v Chotíne na juhozápadnom Slovensku. Vyhodnotenie*. Katalóg (S dodatkom: *Pohrebisko vekerzugskej kultúry v Senici-Štrkovej kolónií*), Dissertationes archaeologicae Bratislavenses 1, 2013.
- Kozubová 2016 – A. Kozubová, Arminge aus Gräberfeldern der Vekerzug-Kultur in Chotín, in Bazovský, I. (ed.), *Zborník pamiatku Magdy Pichlerovej Štúdie*, *Zborník Slovenského národného múzea*, Supplementum 11, 2016, 75–101.
- Kozubová 2018 – A. Kozubová, Kopfschmuck der Vekerzug-Kultur am Beispiel der Gräberfelder in Chotín, *Musaica archaeologica* 3/1, 2018, 13–63.
- Kozubová 2019a – A. Kozubová, „Something happened in the East but more in the West and South.“ Einige kritische Bemerkungen zu östlichen Einflüssen in der Vekerzug-Kultur, *Musaica archaeologica* 4/1, 2019a, 55–185.
- Kozubová 2019b – A. Kozubová, „Mutig wie ein Adler, schnell wie ein Pferd.“ Untersuchungen zu den Gräbern der Vekerzug-Kultur mit Waffen und Pferdegeschirr: Fallstudie, *Musaica archaeologica* 4/2, 2019b, 27–109.
- Kozubová 2021 – A. Kozubová, 'With a Weapon in Hand and a Horse by Side.' Weapons and Horse Harness in Graves of Vekerzug Culture from an Interregional Perspective, *Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego* Tom 42, 2021, 81–112.
- Kozubová, Horváth 2019 – A. Kozubová, V. Horváth, Nur eine Faszination vom Westen oder etwas anderes? Zu hallstättischen Einflüssen in der Vekerzug-
- Kultur am Beispiel des Gräberfeldes von Eger-Nagy Eged (Ostungarn), *Zborník Slovenského národného múzea* CXIII–Archeológia 29, 2019, 139–157.
- Kozubová, Golec 2020 – A. Kozubová, M. Golec, Aus der Nähe oder aus der Ferne? Zu den hallstattzeitlichen Funden vom östlichen Typ aus Mähren, in Kozubová, A., Makarová, E., Neumann, M. (eds.): *Ultra velum temporis. Venované Jozefovi Bátorovi k 70. narodeninám*, Slovenská archeológia – Supplementum 1, 2020, 349–360.
- Kozubová, Fojtík 2021 – A. Kozubová, P. Fojtík, Nicht nur als Kopschmuck getragen: ein au ergewöhnlichen hallstattzeitlicher Fund aus Smržice-Trávníky u Ostrova (Mittelmähren), *Musaica archaeologica* 6/1-2, 2021, 51–123.
- Kozubová et al. 2022 – A. Kozubová, T. Mangel, T. Jošková, M. Beková, D. Vích, „Von der Haltestelle Ost zur Haltestelle West“. Ein Beitrag zu neuen hallstatt- und frühlatènezeitlichen Funden vom östlichen Typ aus Ostböhmien, *Slovenská archeológia* LXX/2, 2022, 275–326.
- Križ 2022 – B. Križ, Novo Mesto IX – Kapiteljska njiva. Gomile VI, VII in VIII / Barrows VI, VII and VIII, *Carniola Archaeologica* 9, Dolenjski muzej, 2022.
- Križ, Jereb, Teržan 2014 – B. Križ, M. Jereb, B. Teržan, 27.3. Kandija, in Teržan B., Črešnar, M. (eds.) *Absolutno datiranje bronaste in željezne dobe na Slovenskem / Absolute dating of the Bronze and Iron Ages of Slovenia*, Katalogi in monografije 40, Narodni muzej Slovenije, 2014, 485–490.
- Kromer 1960 – K. Kromer, Zierstücke östlicher Herkunft aus drei Gräbern in Slowenien, *Situla* 1, 1960, 111–116.
- Laczus, Párducz 1969 – G. Laczus, M. Párducz, The Scythian Age Cemetery at Vámosmikola, *Acta Archaeologica Academiae Scientiarum Hungaricae XXI/3/4*, 1969, 217–226.
- Laharnar 2018 – B. Laharnar, V zaledju Svete Lucije. Prispevek k arheološki topografiji Šentviške planote, in Črešnar, M., Vinazza, M. (eds.), *Srečanja in vpliv v raziskovanju bronaste in železne dobe na Slovenskem*, Znanstvena založba Filozofske fakultete Univerze v Ljubljani, 2018, 367–380.
- Ljuština 2010 – M. Ljuština, The Late Hallstatt Communities in the Serbian part of the Danube Basin, in Berecki, S. (ed.), *Iron Age Communities in the Carpathian Basin*, Proceedings of the International Colloquiums from Târgu Mureş 9–11 October 2009, Bibliotheca Mvsei Marisiensis, Seria Archaeologica II, Editura Mega, 2010, 59–78.
- Ljuština 2020 – M. Ljuština, Remarks on Funerary Practices of Late Hallstatt Srem/Syrmia Group, Northern Serbia, in Teleaga, E. (ed.), *Funeralkultur der Thraker und Skythen des 7. bis 5. Jahrhunderts v. Chr. an der unteren Donau*, Studien zur Eisenzeitlichen Archäologie Thrakiens Band 5, Verlag Marie Leidorf GmbH, 2020, 337–348.
- Ljuština, Ninčić 2017 – M. Ljuština, I. Ninčić, Scythian Weapons and horse harness in the Territory of Serbia, Starožitnosti rannogo zaliznogo viku, *Archeologija i davnja istorija Ukrajiny* 2/23, 2017, 245–254.
- Ljuština, Radišić, Ninčić 2019 – M. Ljuština, T. Radišić, I. Ninčić, Exotic Goods from the Early Iron Age Necropolis Stubarlija, Serbia. As Indicators of Cultural Contacts, in Sîrbu, V., Schuster, C., Hortopan, D. (eds.), *Border Guards of the Passes, from the Fortresses and the Graves. The Bronze and Iron Ages*, Proceedings of the 17th International Colloquium of Funerary Archaeology, Târgu Jiu, Gorj County (Romania), 4th–7th October 2018, Editura Istros a Muzeului Brăilei „Carol I“, 2019, 139–148.
- Ljuština, Spasić 2012 – M. Ljuština, M. Spasić, Celtic Newcomers between Traditional and Fashionable Graves 63 and 67 from Karaburma, in Berecki, S. (ed.), *Iron Age Rites and Rituals in the Carpathian Basin*, Proceedings of the International Colloquium from Târgu Mureş 7–9 October 2011, Bibliotheca Mvsei Marisiensis, Seria Archaeologica V, Editura Mega, 2012, 391–399.
- Majnarić-Pandžić 2000 – N. Majnarić-Pandžić, O pojavi novih tipova konjske opreme iz završnog starijeg željezneg doba u istočnoj Hrvatskoj, *Opuscula Archaeologica* 23–24 (1999–2000), 2000, 27–38.
- Majnarić-Pandžić 2003 – N. Majnarić-Pandžić, Ein späthallstattzeitliches Gräberfeld in Vinkovci (Nordkroatien) und das Problem eines neuen Phänomens der Pferdeausstattung in diesem Gebiet, *Germania* 81/2, 2003, 481–511.
- Márton 1980 – L. Márton, Skytha sírleletek Gyöngyösön, *Archaeologai Értesítő* 28, 1908, 37–54.
- Medović 2007 – P. Medović, *Stubarlija, Nekropolja naselja Feudvar kod Mošorina (Bačka)*, Muzej Vojvodine, Posebna izdanja, Knjiga XX, 2007.
- Metzner-Nebelsick 2002 – C. Metzner-Nebelsick, Der «Thrako-Kimmerische» Formenkreis aus der Sicht der Urnenfelder- und Hallstattzeit im südöstlichen Pannionen, *Vorgeschichtliche Forschungen* Band 23, Verlag Marie Leidorf GmbH, 2002.

- Mlinar, Gerbec 2011 – M. Mlinar, T. Gerbec, *Keltskij Konj Topot. Najdišče Bizjakova Hiša v Kobaridu / Hear the Horses of Celts. The Bizjakova Hiša Site in Kobarid*, Tolminski muzej, 2011.
- Párducz 1952 – M. Párducz, Le cimetière Hallstattien de Szentes-Vekerzug I, *Acta Archaeologica Academiae Scientiarum Hungaricae* II, 1952, 143–183.
- Párducz 1954 – M. Párducz, Le cimetière Hallstattien de Szentes-Vekerzug II (Les fouilles de 1952 et 1953), *Acta Archaeologica Academiae Scientiarum Hungaricae* IV, 1954, 25–91.
- Párducz 1955 – M. Párducz, Le cimetière Hallstattien de Szentes-Vekerzug III, *Acta Archaeologica Academiae Scientiarum Hungaricae* VI, 1955, 1–22.
- Párducz 1966 – M. Párducz, The Scythian Age Cemetery at Tápiószele, *Acta Archaeologica Academiae Scientiarum Hungaricae* XVIII, 1966, 35–91.
- Parzinger 1995 – H. Parzinger, Die Funde, in Parzinger, H., Nekvasil, J., Barth, F. E. (eds.), *Die Býčí skála-Höhle. Ein hallstattzeitlicher Höhlenopferplatz in Mähren*, Römisch-Germanische Forschungen Band 54, Verlag Philipp von Zabern, 1995, 16–92.
- Potrebica, Dizdar 2002 – H. Potrebica, M. Dizdar, Prilog poznavanju naseljenosti Vinkovaca i okolice u starijem željeznom dobu, *Prilozi Instituta za arheologiju u Zagrebu* 19, 2002, 79–100.
- Preložnik 2007 – A. Preložnik, Steppenreiterspuren im eisenzeitlichen Dolenjsko (Slowenien), in Andraschko, F. M., Kraus, B., Meller, B. (eds.), *Archäologie zwischen Befund und Rekonstruktion, Ansprache und Anschaulichkeit, Festschrift für Prof. Dr. Renate Rolle zum 65. Geburstag*, Antiquitates, Archäologische Forschungsergebnisse Band 39, Verlag Dr. Kováč, 2007, 155–167.
- Soós 2002 – B. Soós, Middle Iron Age Cemetery from Alsónyék, Hungary, *Dissertationes Archaeologicae Ser. 3. No. 8*, 2020, 49–105.
- Srejović 1991 – D. Srejović, Tribalski grobovi u Ljuljcima, *Starinar* XL-XLI (1989–1990), 1991, 141–153.
- Stare 1973 – V. Stare, *Prazgodovina Šmarjete*, Katalogi in monografije 10, Narodni muzej, 1973.
- Škoberne 2004 – Ž. Škoberne, Grupa Budinjak, in Balen-Letunić, D. (ed.), *Ratnici razmedu istoka i zapada – Starje željezno doba u kontinentalnoj Hrvatskoj*, Arheološki muzej u Zagrebu, 2004, 131–159.
- Tasić 1998 – N. Tasić, Gvozdeno doba, in Tasić, N. (ed.), *Arheološko blago Kosova i Metohije od neolita do ranog srednjeg veka*, Srpska akademija nauka i umetnosti-Muzej u Prištini, 1998, 148–224.
- Tecco Hvala 2012 – S. Tecco Hvala, *Magdalenska gora. Družbena struktura in grobni rituali železnodobne skupnosti / Magdalenska gora. Social structure and burial rite of the Iron Age community*, Opera Instituti Archaeologici Sloveniae 26, 2012.
- Tecco Hvala, Dular, Kocuvan 2004 – S. Tecco Hvala, J. Dular, E. Kocuvan, *Železnodobne gomile na Magdalenski gori*, Katalogi in monografije 36, Narodni muzej Slovenije, 2004.
- Teleaga 2010 – E. Teleaga, Wiederentdeckte späthallstattzeitliche Grabfunde aus Mickolc-Diósgyőr (Ungarn), *Dacia* LIV, 2010, 177–200.
- Teleaga 2017 – E. Teleaga, *Studien zu den späthallstattzeitlichen Wagengräbern des Karpatenbeckens*, Studien zur Eisenzeitlichen Archäologie Thrakiens Band 2 Supplement I, Verlag Marie Leidorf GmbH, 2017.
- Teleaga, Zirra 2003 – E. Teleaga, V. Zirra, *Die Nekropole des 6.-1. Jhs. v. Chr. von Istrija Bent bei Histria*, Internationale Archäologie Band 83, Verlag Marie Leidorf GmbH, 2003.
- Teržan 1976 – B. Teržan, Certoška fibula, *Arheološki vestnik* XXVII, 1976, 317–443.
- Teržan 1998 – B. Teržan, Auswirkungen des skytisch geprägten Kulturkreis auf die hallstattzeitlichen Kulturgruppen Pannoniens und des Ostalpenraumes, in Hänsel, B., Machnik, J. (eds.), *Das Karpatenbecken und die osteuropäische Steppe*, Prähistorische Archäologie in Südosteuropa Band 12, Verlag Marie Leidorf GmbH, 1998, 511–560.
- Teržan, Črešnar 2014 – B. Teržan, M. Črešnar, Pokus absolutnega datiranja starejše železne dobe na Slovenskem, in Teržan, B., Črešnar, M. (eds.), *Absolutno datiranje bronaste in željezne dobe na Slovenskem*, Katalogi in monografije 40, Narodni muzej Slovenije, 2014, 703–724.
- Teržan, Hellmuth, Heimann 2011 – B. Teržan, A. Hellmuth, F. Heimann, Amanzenmythos im Spiegel der eisenzeitlichen Grabfunde zwischen Pontus und Karpatenbecken, in Sava, E., Govendarica, B., Hänsel, B. (eds.), *Der Schwarzmeeerraum vom Āneolithikum bis in die Früheisenzeit (5000–500 v. Chr.)* Band 2, Globale Entwicklung Versus Lokalgeschehen, Internationale Fachtagung von Humboldtianern für Humboldtianer im Humboldt-Kolleg in Chișinău, Moldavien (4.–8. Oktober 2010), Prähistorische Archäologie in Südosteuropa Band 27, Verlag Marie Leidorf GmbH, 2011, 253–272.
- Teržan, Lo Schiavo, Trampuž-Orel 1985 – B. Teržan, F. Lo Schiavo, N. Trampuž-Orel, *Most na Soči (S. Lucia) II*, Katalogi in monografije 23, Narodni muzej, 1985.
- Todorović 1967 – J. Todorović, Praistorijske nekropole u Ritopeku, *Starinar* XVII, 1967, 153–166.
- Todorović 1971 – J. Todorović, *Katalog praistorijskih metalnih predmeta*, Katalog III, Muzej grada Beograda, 1971.
- Topal 2019 – A. Topal, Akinakes from Vršac and the Penetration of Scythian Blade Weaponry into the Middle Danube Region, in Filipović, V., Bulatović, A., Kapuran, A. (eds.), *Zbornik radova u čast 80. g. života Rastka Vasića*, Arheološki institut, 2019, 307–318.
- Toškan 2011 – B. Toškan, Analiza živalskih kostnih ostankov, in Mlinar, M., Gerbec, T. (eds.), *Keltskij Konj Topot. Najdišče Bizjakova Hiša v Kobaridu*, Tolminski muzej, 2011, 43–50.
- Trajković 2008 – D. Trajković, *Đepfeld – Nekropolu starijeg gvozdenog doba kod Doroslova*, Gradske muzeje Sombor, 2008.
- Vasić 1987 – R. Vasić, Trakokimerijski, skitski i trako-getske uticaji u jugoslovenskom Podunavlju, in Benac, A. (ed.), *Praistorija jugoslavenskih zemalja V – Željezno doba*, Akademija nauka i umjetnosti Bosne i Hercegovine, Centar za balkanološka ispitivanja, 1987, 559–567.
- Vasić 1995 – R. Vasić, Srebrni nakit IV veka pre n. e. na teritoriji srednjeg Podunavlja, in Popović, I., Cvjetićanin, T., Borić-Brešković, B. (eds.), *Radionice i kovnice srebra*, Narodni muzej u Beogradu, 1995, 83–91.
- Vasić 2001 – R. Vasić, Gold and Silver in Iron Age Serbia, *Archaeologia Bulgarica* V/3, 2001, 23–28.
- Vasić 2005 – R. Vasić, Srebrni nalaz iz Nikinaca, *Starinar* LV, 2005, 67–73.
- Vasić 2008 – R. Vasić, Doroslovo, in Trajković D. (ed.), *Đepfeld – Nekropolu starijeg gvozdenog doba kod Doroslova*, Gradske muzeje Sombor, 2008, 337–354.
- Vörös 2010 – I. Vörös, Die Pferde im skythischen Gräberfeld Szentes-Vekerzug, *Archaeologiai Értesítő* 135, 2010, 53–68.
- Wells 1981 – P. S. Wells, *The Emergence of an Iron Age Economy, The Mecklenburg Grave Groups from Hallstatt and Stična*, Mecklenburg Collection, Part III, Peabody Museum of Archaeology and Ethnology, Harvard University, 1981.
- Werner 1988 – W. M. Werner, *Eisenzeitliche Trensen an der unteren und mittleren Donau*, Prähistorische Bronzefunde Abteilung XVI/4, Beck's, 1988.
- Žeravica 1976 – Z. Žeravica, Timenačka greda, Donja Dolina – nekropolu mladeg željeznog doba, *Arheološki pregled* 18, 1976, 50–51.