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PRAPOVIJESNA NEKROPOLA POD
TUMULIMA PODSTENJE NA MALOJ
GORI KOD RADOBOJA

UDK: 903.5(497.5 Radoboj)''6383''

Izvorni znanstveni rad

U članku se donosi revizija dosadašnjih istraživanja prapovijesne nekropole pod tumulima, s lokaliteta Podstenje na Maloj gori kod Radoboja. Riječ je o prvoj otkrivenoj i istraživanoj nekropoli iz starijega željeznog doba, s područja kontinentalne Hrvatske, te prvom arheološkom nalazištu iz sjeverozapadne Hrvatske koje se spominje u znanstvenim publikacijama Austrijske akademije znanosti već od 1850. godine. Ujedno je riječ i o prvoj nekropoli pod tumulima s područja Zagorja, koja se može datirati u kasnohalštatski period, odnosno u razdoblje 6. i 5. st. pr. Kr. U članku se predstavlja problematika ovoga gotovo zaboravljenog, a iznimnoga, nalazišta počevši od otkrića lokaliteta i prvih iskopavanja tumula u proljeće 1850. godine. Na temelju podataka iz publikacija Austrijske akademije znanosti, objavljenih u razdoblju između 1850. i 1863., podataka iz hrvatskih publikaci-

PREHISTORIC BARROW NECROPOLIS
OF PODSTENJE AT MALA GORA NEAR
RADOBOJ

UDC: 903.5(497.5 Radoboj)''6383''

Original scientific paper

The paper provides a review of excavations carried out to date of the prehistoric barrow necropolis at the site of Podstenje at Mala Gora near Radoboj. This Early Iron Age necropolis was the first to be discovered and explored in continental Croatia, and it was the first archaeological site in north-west Croatia to have been cited in scientific publications of the Austrian Academy of Science, since as early as 1850. Additionally, this is the first barrow necropolis in the Zagorje region which can be dated to the Late Hallstatt period, to the 6th and 5th c. BC. The paper describes issues relating to this exceptional – though nearly forgotten – site, starting from the discovery of the site and the first excavations of the tumuli in the spring of 1850. Using the data contained in publications of the Austrian Academy of Science published between 1850 and 1863, in Croatian publications, in archival documentation of the Ministry of Culture of the

ja, podataka iz arhivske dokumentacije Ministarstva kulture Republike Hrvatske i Arheološkog muzeja u Zagrebu, malobrojnih preostalih arheoloških nalaza te arheoloških rekognosciranja, pokušalo se rekonstruirati kronološki slijed događanja te iskopavanja ovoga lokaliteta, kao i grobne cjeline iskopanih tumula. Članak na temelju analogija sa srodnim predmetima, pronađenim u susjednim područjima, predlaže kulturno određenje ove prapovijesne nekropole i određuje kronološki kontekst nalazišta unutar prapovijesnog Zagorja.¹

Ključne riječi: starije željezno doba, nekropola pod tumulima, Radoboj, Zagorje

Prirodne karakteristike

Nekropola pod tumulima nalazi se u šumi Podstenje, poznatoj još i pod nazivima Podostinje, Ostenje, Galovićevo ili Galovićevo husta u podnožju Strahinjščice, odnosno na sjevernim padinama humlja Plat, a sjeveroistočno od središta Radoboja u Zagorju, na nadmorskoj visini između 475 i 490 m (karta 1). Toponimi Podstenje, Ostenje i sl. potječu od obližnjih, gotovo vertikalnih stijena koje su dio grebena Plata. Lokalitet se nalazi na hrptu gorske zavale koja je na jugu omeđena strmim liticama Plata (542,6 m n. v.), na zapadu je od Strahinjščice dijeli greben Lipje (471,2 m n. v.), a sa sjeverne je strane omeđena Strahinjščicom (845,9 m n. v.), odnosno vrhovima Sušec (761,3 m n. v.) i Hajdine zerne (738,5 m n. v., karta 1). Na sjeveroistoku se zavalala između Pisanih pečina na Hajdinem zernu i Plata

¹ Članak ujedno predstavlja i prikaz dijela rezultata rada na doktorskoj disertaciji *Poselitev severozahodne Hrvaške v času bronaste in starejše železne dobe*, a koju izrađujem pod mentorstvom akad. prof. dr. sc. Bibe Teržan na Sveučilištu u Ljubljani, uz stipendiju Europske komisije iz programa Basileus.

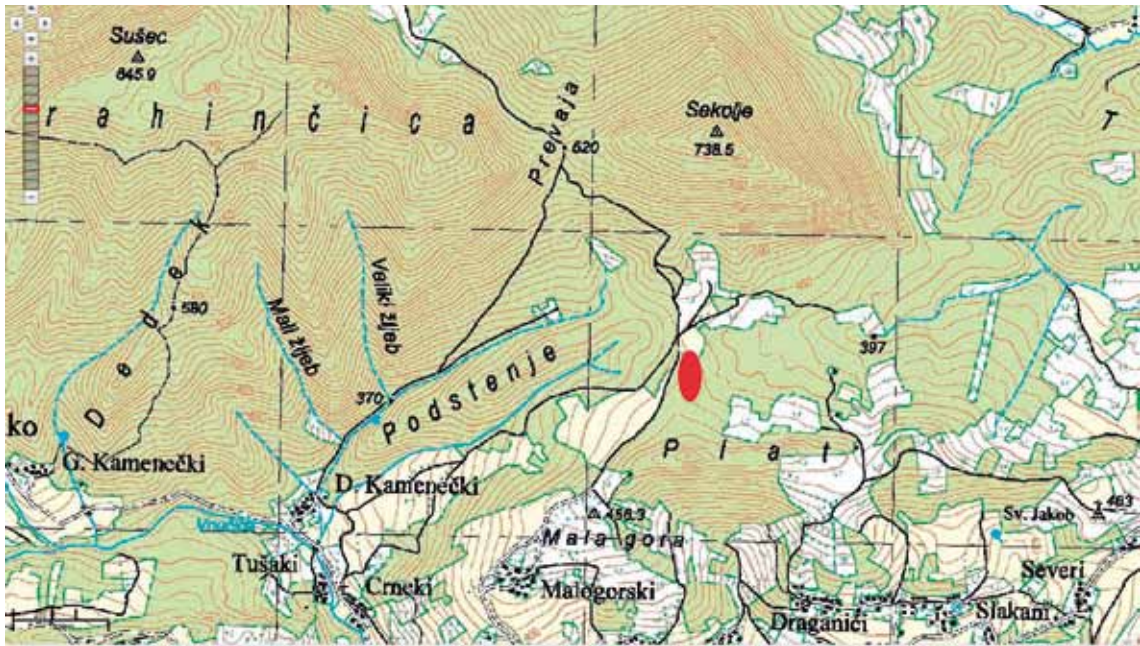
Republic of Croatia and the Archaeological Museum in Zagreb, and the few remaining archaeological finds and archaeological field surveys, an attempt has been made to reconstruct the chronological sequence of events and excavation of the site, and the graves under the tumuli. On the basis of analogies with related objects, discovered in neighbouring areas, the paper proposes the cultural attribution of this prehistoric necropolis and establishes the chronological context of this site within prehistoric Zagorje.¹

Key words: Early Iron Age, barrow necropolis, Radoboj, Zagorje

Natural features

The barrow necropolis is located in the Podstenje Forest, also known under the names of Podostinje, Ostenje, Galovićevo and Galovićevo Husta, at the foot of Strahinjščica, that is, on the northern slopes of the hilly area of Plat, to the north-east of the centre of Radoboj in Zagorje, at an altitude of between 475 and 490 m (map 1). The toponyms of Podstenje, Ostenje and similar are derived from the near-vertical cliffs nearby, which form part of the Plat crest. The archaeological site is located on the ridge within a mountain valley bounded on its southern side by the steep cliffs of Plat (542.6 mamsl), separated from Strahinjščica to the west by the Lipje ridge (471.2 mamsl), and bounded on its northern side by Strahinjščica (845.9 mamsl) – more precisely, by the Sušec (761.3 mamsl) and Hajdine Zerpe peaks (738.5 mamsl, map 1). To the north-east, the basin lying between

¹ The paper also presents some of the results of my work on the doctoral thesis *Poselitev severozahodne Hrvaške v času bronaste in starejše železne dobe*, prepared under the mentorship of Prof. Bibe Teržan, at the University of Ljubljana, with the support of a European Commission scholarship provided under the Basileus programme.



Karta / Map 1: Topografska karta istočnog dijela Strahinjščice i radobojskog humlja s ucrtanim položajem nekropole pod tumulima u Podstenju. M=1:25000 / Topographic map of the eastern part of Strahinjščica and hill region of Radoboj with the location of the barrow necropolis of Podstenje. Scale 1:25000 (<http://geoportal.dgu.hr/>)(17.9.2014.)

postupno spušta među brežuljke Očure, u doline potoka Smolinjak i Presečine.² Humlje između Radoboja i središnjeg bila Strahinjščice poznato je pod nazivima Mala gora, Plat i Nagora. Područje na kojem se nalaze prapovijesni tumuli danas prekriva bukova šuma, a ispresijecano je šumskim putevima koji vode od zaseoka Malogorski, na jugozapadu, prema središnjem masivu Strahinjščice te putevima koji vode prema Gorjanima Sutinskim na jugoistoku. Čitavo područje na kojem se nalaze tumuli danas je nenaseljeno, a šume se koriste za sječju drva za ogrjev, dok su brdske livade na sjevernim padinama Plata još do prije nekoliko desetljeća bile orane ili su korištene za ljetnu ispašu stoke lokalnih stanovnika iz obližnjih Gorjana Sutinskih. Danas su brdske livade na Platu najpoznatije zbog staništa različitih vrsta orhideja³ koje na njima rastu pa je čitavo područje od 1. 7. 2013. pod posebnom zaštitom Europske

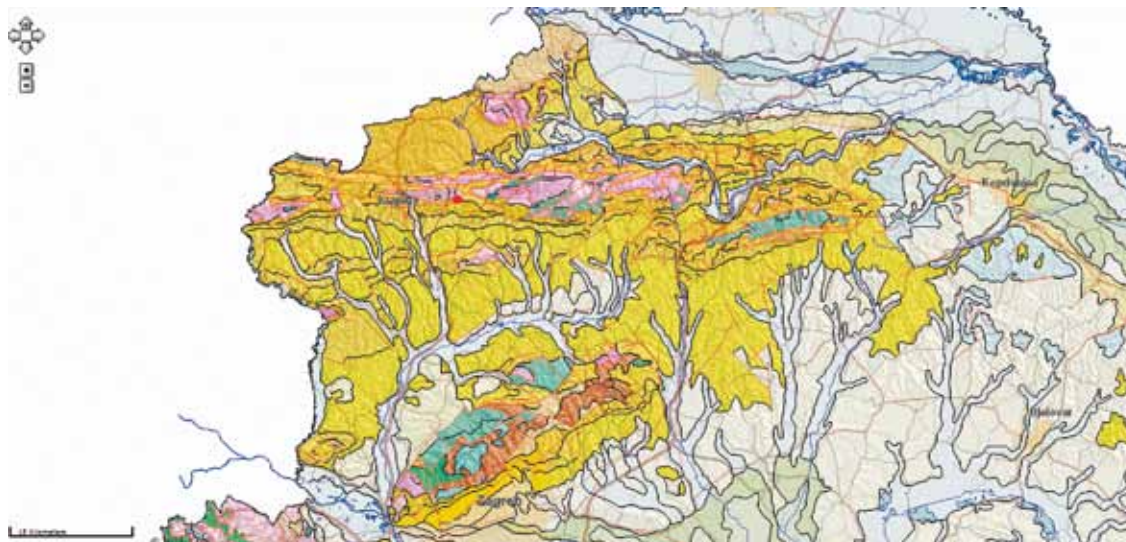
Pisane Pečine, on Hajdine Zerne, and Plat gradually descends to the hills of Očura, in the valleys of the Smolinjak and Presečina brooks.² The hilly area between Radoboj and the central ridge of Strahinjščica is known as Mala Gora, Plat and Nagora. Nowadays the zone in which the prehistoric tumuli are to be found is covered with beech forest, and forest roads cut through it leading from the hamlet of Malogorski in the south-west towards the central massif of Strahinjščica, and towards Gorjani Sutinski in the south-east. The zone in which the tumuli are located is uninhabited, and the forest is used for firewood. The mountain meadows on the northern slopes of Plat were ploughed or used for the summer pasture of cattle belonging to the population of nearby Gorjani Sutinski until several decades ago. Nowadays the mountain meadows on Plat are best known as habitats of diverse types of orchids³ that grow here, and as a result, on 1 July 2013, this entire area was placed under special protection of the Eu-

² Kozina 2007, 9-16.

³ Borovečki-Voska 2010, 18-19.

² Kozina 2007, 9-16.

³ Borovečki-Voska 2010, 18-19.



Karta / Map 2: Geološka karta sjeverozapadne Hrvatske s ucrtanim položajem nekropole pod tumulima u Podstenju. M=1:300000 / Geological map of north-west Croatia with the location of the barrow necropolis of Podstenje. Scale 1:300000 (<http://webgis.hgi-cgs.hr/>)(17.9.2014.)

komisije kao Natura 2000 tip staništa. Strahinjščica i radobojsko humlje također se od 2013. nalaze unutar granica planiranoga Regionalnog parka Hrvatsko zagorje.

Geološka i pedološka osnova

Greben, južne i istočne predjele Plata tvore gornjobadenski biogeni vapnenci, prekriveni vapnenančkim rendzinama, dok geološku osnovu livada na sjevernim padinama Plata čine oligocensko-miocenski pješčenjaci, odnosno lapori, prekriveni podzolima. Geološka i pedološka osnova područja prilično je raznolika, stoga se Plat razlikuje od središnjeg masiva Strahinjščice koji uglavnom tvore dolomiti iz vremena trijasa, a mjestimice i vapnenci, dok pedološku osnovu čine vapnenančke rendzine (karta 2). Na istočnom obronku glavnog masiva Strahinjščice nalaze se gotovo vertikalne stijene, poznate pod nazivom Pisane pećine, a riječ je o dolomitnim brečama srednjeg trijasa, prekrivenim dolomitnim rendzinama. U uskom pojasu između središnjeg masiva Strahinjščice i Plata, poznatom pod topomom Bučnjak, nalaze se eruptivne

ropean Commission as a Natura 2000 habitat. Since 2013, Strahinjščica and the hill region of Radoboj have also been encompassed by the planned Regional Park of Hrvatsko Zagorje.

Geological and pedological base

The ridge, southern and eastern parts of Plat consist of Upper Badenian biogenic limestones, covered with limestone rendzinas, while the geological base of the meadows on the northern slopes of Plat is composed of Oligocene-Miocene sandstones, i.e. marl, covered with podzols. The geological and pedological base of this region is rather diverse, and thus Plat differs from the central massif of Strahinjščica, mostly consisting of dolomitic rocks originating from the Triassic, and in some areas also of limestones, while its pedological base contains limestone rendzinas (map 2). On the eastern slope of the main massif of Strahinjščica there are some near-vertical cliffs called Pisane Pećine; these dolomitic breccia formations from the Middle Triassic are covered with dolomitic rendzinas. In a narrow belt stretching between the central massif of Strahinjščica and Plat, known as Bučnjak, there are some erup-

silikatne stijene, odnosno spilitizirani dijabaz iz razdoblja trijasa, a nad njima pedološku osnovu tvore kiselatna tla silikatnih pijesaka na kojima uspijeva acidofilna hrastova šuma.⁴

Povijest istraživanja

Arheološki nalazi i tumuli kod Radoboja prvi se put spominju u literaturi već 1850. godine,⁵ u godini njihova otkrića. Riječ je o prvoj otkrivenoj prapovijesnoj nekropoli pod tumulima u sjeverozapadnoj Hrvatskoj te o prvom arheološkom nalazištu s područja sjeverozapadne Hrvatske koje se spominje u izdanjima Austrijske akademije znanosti.⁶

Tumuli su otkriveni u proljeće 1850. godine, prilikom gradnje šumskog puta koji su lokalni stanovnici napravili na Maloj gori i koji je vodio od njezinih sjevernih padina prema vrhu Plata. Iako su gotovo svi istraživači koji su se bavili tumulima u 1850-ima, poput Mijata Sabljara⁷, A. von Morlota,⁸ Ljudevita Vukotinovića⁹ te Jakoba Franje Tkalca,¹⁰ u svojim objavama tvrdili da su zaslužni za otkrivanje tumula, ili su im ih drugi pripisivali, jedino je A. von Morlot napisao da su tumuli otkriveni prilikom gradnje šumskog puta¹¹ te su tako zasluge za otkriće nekropole pod tumulima naposljetku ipak pripale lokalnim stanovnicima.¹² U prvom radu o tumulima spominje se, prema J. F. Tkalcu, četiri koja je iskopao, dok druge tumu-

tive silicate rocks – spilitized diabase originating from the Triassic – covered by a pedological base consisting of acid soils formed by silicate sands, favourable for acidophile oak forest.⁴

History of exploration

Archaeological finds and tumuli in the vicinity of Radoboj were mentioned for the first time in literature as early as 1850,⁵ the same year in which they were discovered. This prehistoric barrow necropolis was the first to be discovered in north-west Croatia, and it was the first archaeological site in north-west Croatia cited in scientific publications of the Austrian Academy of Science.⁶

The tumuli were discovered in the spring of 1850, during the construction of a forest road built by the local population, leading from the northern slopes of Mala gora to the top of Plat. Although nearly all the researchers who dealt with tumuli in the 1850s – such as Mijat Sabljara,⁷ Adolf von Morlot,⁸ Ljudevit Vukotinović,⁹ and Jakob Franjo Tkalec¹⁰ – claimed the merit for the discovery of the tumuli in their publications, or were credited for it by others, only von Morlot wrote that the tumuli were discovered during the construction of a forest road,¹¹ and thus the credit for the discovery of the barrow necropolis eventually went to the local population.¹² In the first paper focusing on the tumuli, J. F. Tkalec cites four tumuli that were excavated by him, and there is no mention of any oth-

⁴ Cuković 1995; Borovečki-Voska 2010, 16-17.

⁵ Sitzungsberichte 1850, 451.

⁶ Morlot 1851, 293-294.

⁷ Archiv für KÖG-Q 1863, 307.

⁸ Morlot 1851, 294; Archiv für KÖG 1851, 236.

⁹ Vukotinović 1854, 8-10; Krklec-Švaljek 1998, 31.

¹⁰ Archiv für KÖG-Q 1855, 61, 82.

¹¹ Morlot 1851, 294.

¹² Ovom prilikom zahvaljujem Christophu Schodlu iz Knjižnice i Arhiva Austrijske akademije znanosti u Beču na pomoći pri traženju mogućih crteža nalaza i nalazišta na Maloj gori kod Radoboja.

⁴ Cuković 1995; Borovečki-Voska 2010, 16-17.

⁵ Sitzungsberichte 1850, 451.

⁶ Morlot 1851, 293-294.

⁷ Archiv für KÖG-Q 1863, 307.

⁸ Morlot 1851, 294; Archiv für KÖG 1851, 236.

⁹ Vukotinović 1854, 8-10; Krklec-Švaljek 1998, 31.

¹⁰ Archiv für KÖG-Q 1855, 61, 82.

¹¹ Morlot 1851, 294.

¹² I would like to take this opportunity to thank Christoph Schodl of the Library and Archive of the Austrian Academy of Science in Vienna for his assistance in my search of possible drawings of the finds and the site at Mala Gora near Radoboj.

le ne spominje,¹³ A. von Morlot piše o 11 tumula,¹⁴ a zatim se 1851. spominje 13,¹⁵ 1855. spominje se 12 prema Tkalcu, od čega četiri iskopavana te 8 neiskopavanih prema stanju iz 1850. godine¹⁶ i, konačno, 1863. ponovno 11 tumula.¹⁷ Kasniji autori preuzeli su podatke iz Von Morlotova članka iz 1851. te navodili postojanje 11 tumula, a od kasnijih istraživača jedino je Šime Ljubić osobno obišao tumule 1879.¹⁸ Rekognosciranjima i neformalnim obilascima u nekoliko je navrata od prosinca 2012. do svibnja 2013. pregledano šire područje nekropole pod tumulima u Podstenju, a ukupno je dokumentirano postojanje 11 danas vidljivih tumula, što odgovara i većini starih objava (sl. 1).

U izvještaju Mijata Sabljara iz 1863. saznajemo da se nekropola nalazi u šumi Podostinje, tada u vlasništvu Mihaela Galovića, te da lokalni stanovnici tumule nazivaju *mohyle*,¹⁹ što nije neuobičajeno budući da je kajkavski termin *mogila* prisutan na širem području sjeverozapadne Hrvatske pa ga tako nalazimo i na području Varaždinske Podravine kao lokalni naziv za tumule kod Martijanca, Jalžabeta, Zbelave itd.²⁰ Za razliku od tog termina, u Velikom Trgovišću lokalni stanovnici tumule nazivaju *gorica*. Von Morlot također navodi da su tumuli u prosjeku visoki 1 austrijski klafter, odnosno 1,89 metara te da im je promjer u prosjeku 42 - 70 koraka, odnosno 8,4 - 14 m, što odgovara i našim mjerenjima.²¹

¹³ Sitzungsberichte 1850, 451.

¹⁴ Morlot 1851, 294.

¹⁵ Archiv für KÖG-Q 1851, 237.

¹⁶ Notizenblatt 1855, 61.

¹⁷ Archiv für KÖG-Q 1863, 307.

¹⁸ Ljubić 1880, 118; Szabo 1914, 103; Klemenc 1936, 64; Šimek 1997, 79-80.

¹⁹ Archiv für KÖG-Q 1863, 307.

²⁰ Registar nalazišta. Arhiva Arh. odjela Gradskog muzeja Varaždin.

²¹ Archiv für KÖG-Q 1863, 307; 1 ugarski korak (*njem. der Schritt*) iznosio je 0,316 m, a 1 njemački korak 0,71 m prema Slukan Altić 2002, 62-63, no ovdje se radi o 0,2 m.

ers.¹³ Von Morlot wrote about 11 tumuli,¹⁴ while 13 were mentioned in 1851,¹⁵ and 12 in 1855, according to Tkalec, four of them excavated and 8 still unexplored, according to the situation in 1850.¹⁶ Finally, in 1863, mention is made of 11 tumuli.¹⁷ Subsequent authors took the data from von Morlot's 1851 paper, and wrote that 11 tumuli existed, and only Šime Ljubić saw the tumuli personally in 1879.¹⁸ Between December 2012 and May 2013 a wider area of the barrow necropolis of Podstenje was surveyed and visited informally several times, and a total of 11 tumuli, visible today, were documented – which corresponds to the majority of previous publications (fig. 1).

The 1863 report by Mijat Sabljara states that the necropolis is located in the Podostinje Forest, owned at the time by Mihael Galović. Furthermore, we can learn from the report that the local population referred to the tumuli as *mohyle*,¹⁹ which is not unusual, given that the Kajkavian term *mogila* is present in the wider region of north-west Croatia, for example in the area of Varaždinska Podravina (the Varaždin Drava region) as a local name for the tumuli at Martijanec, Jalžabet, Zbelava etc.²⁰ In contrast, the local population of Veliko Trgovišće refers to the tumuli as *gorica*. Von Morlot also wrote that the average height of the tumuli was 1 Austrian Klafter, which is 1.89 m, and that their diameter varied between 42 and 70 paces, that is, 8.4-14 m, which corresponds to our measurements.²¹

¹³ Sitzungsberichte 1850, 451.

¹⁴ Morlot 1851, 294.

¹⁵ Archiv für KÖG-Q 1851, 237.

¹⁶ Notizenblatt 1855, 61.

¹⁷ Archiv für KÖG-Q 1863, 307.

¹⁸ Ljubić 1880, 118; Szabo 1914, 103; Klemenc 1936, 64; Šimek 1997, 79-80.

¹⁹ Archiv für KÖG-Q 1863, 307.

²⁰ Register of Archaeological Sites. Archives of the Department of Archaeology of the Varaždin Town Museum.

²¹ Archiv für KÖG-Q 1863, 307; 1 Hungarian pace (*Ger. der Schritt*) corresponded to 0.316 m, and one German pace to 0.71 m, according to Slukan Altić 2002, 62-63, but here it corresponds to 0.2 m.



Sl. / Fig. 1: Satelitski snimak nekropole pod tumulima Podstenje na Maloj gori kod Radoboja, s označenim položajima tumula 1-11 / Satellite image of the barrow necropolis of Podstenje at Mala Gora near Radoboj, with locations of tumuli 1-11 (<http://geoportal.dgu.hr/>) (17.9.2014.)

Budući da smo iz radova objavljenih između 1850. i 1880. uspjeli rekonstruirati tijekom događanja i ustanoviti iskopavanje 11 tumula, ovdje se donosi kronološki slijed istraživanja nekropole na Maloj gori:

1. Lokalni stanovnici otkrivaju nekropolu pod tumulima u proljeće 1850.
2. Mijat Sabljar sondira prvi tumul u proljeće 1850.
3. Adolf von Morlot obilazi tumule u proljeće 1850. (ne iskopava).
4. Jakob Franjo Tkalec iskopava tri tumula tijekom 1850.
5. Ljudevit Vukotinović obilazi tumule 1854. (ne iskopava).
6. Emanuel von Graffenried iskopava sedam tumula u travnju 1860.
7. Šime Ljubić obilazi tumule 1879. (ne iskopava).

Since we have managed to reconstruct the course of events – using the papers published between 1850 and 1880 – and established that 11 tumuli have been excavated, here is the chronology of the exploration of the Mala Gora necropolis:

- 1 Local population discovers the barrow necropolis in the spring of 1850
- 2 Mijat Sabljar makes a test pit excavation of the first tumulus in the spring of 1850
- 3 Adolf von Morlot visits the tumuli in the spring of 1850 (no excavation)
- 4 Jakob Franjo Tkalec excavates three tumuli during 1850
- 5 Ljudevit Vukotinović visits the tumuli in 1854 (no excavation)
- 6 Emanuel von Graffenried excavates seven tumuli in April 1860
- 7 Šime Ljubić visits the tumuli in 1879 (no excavation)

Iskopavanje Mijata Sabljara (Dubica, 5. 5. 1790. – Zagreb, 21. 12. 1865.)

Iskopavanje prvog tumula iz nekropole Podstenje na Maloj gori kod Radoboja proveo je umirovljeni bojničnik Mijat Sabljar, koji se nakon vojne karijere posvetio brizi za kulturna dobra, prvo u Rijeci, Primorju i Splitu, a kasnije u Zagrebu.²² Sabljar je prvi tumul kod Radoboja istraživao ubrzo nakon njegova otkrića jer su tumuli otkriveni prilikom gradnje šumskog puta u proljeće 1850., a u proljeće 1850. Radoboj posjećuje i A. von Morlot koji već nailazi na ostatke iskopavanja prvog tumula koje je proveo Mijat Sabljar.²³ I Sabljar i Von Morlot pišu kako se radilo o jednom od najvećih tumula nekropole na Maloj gori, a Von Morlot još dodaje da se ovaj tumul nalazio nekako najistočnije u odnosu na ostale te da, za razliku od njih, jedini nije imao vidljivu depresiju, odnosno ulegnuće na vrhu,²⁴ a koje se često javlja kao posljedica devastiranja tumula u prošlosti. Razlozi koji su Sabljara potaknuli na iskopavanje ovog tumula, osim dimenzija i izdvojene lokacije, mogli su biti i nepostojanje vidljivih oštećenja. Sabljar je i kasnije bio upoznat s iskopavanjima na Maloj gori, a to se može zaključiti jer A. von Morlot navodi da je u Radoboju kod gorskog nadzornika Rösnera pronašao pismeni izvještaj koji je ovome poslao M. Sabljar, a u kojem, osim o vlastitu tumulu, obavještava Rösnera i o rezultatima iskopavanja Jakoba Franje Tkalca, što povezuje ovu dvojicu istraživača. Vjerojatno je M. Sabljar obavijestio Tkalca o postojanju nekropole odmah nakon svoga prvog sondiranja tumula jer je Von Morlot, prije objave svog članka o tumulima u Radoboju, od gorskog nadzornika Rösnera dobio Sabljarov izvještaj

²² Morlot 1851, 294; Lukežić 2007, 46; Linke 2011, 230.

²³ Morlot 1851, 294.

²⁴ Morlot 1851, 294-295; Archiv für KÖG-Q 1863, 307.

Excavation by Mijat Sabljar (Dubica, 5 May 1790 - Zagreb, 21 December 1865)

The excavation of the first tumulus in the necropolis of Podstenje at Mala Gora, near Radoboj, was performed by the retired major Mijat Sabljar, who, after his military career, devoted himself to the care of cultural assets, at first in Rijeka, Primorje and Split, and then in Zagreb.²² Sabljar explored the first tumulus near Radoboj soon after its discovery, in the spring of 1850, as the tumuli were identified during the construction of a forest road in the spring of 1850. Radoboj also visited von Morlot, who had come across remains of the excavation of the first tumulus, carried out by Mijat Sabljar.²³ Both Sabljar and von Morlot wrote that this had been one of the largest tumuli of the Mala Gora necropolis, and von Morlot added that it was located most easterly, in comparison to others, and that it was the only one which had not displayed a visible depression at its top²⁴ (such as is often a consequence of prior pillaging of tumuli). The reasons that had prompted Sabljar to dig this tumulus, in addition to its size and isolated location, could include the lack of visible damage to it. Later, Sabljar continued to follow the excavations at Mala Gora; this can be deduced from von Morlot's words that in Radoboj, in the possession of the mountain warden Rösner, he found a written report sent by M. Sabljar, informing Rösner not only about the tumulus excavated by him, but also about the results of excavations by Jakob Franjo Tkalac, thus establishing a link between the two researchers. Sabljar probably informed Tkalac about the necropolis immediately after the first test pit excavation, because before von Morlot published his paper on the tumuli in Radoboj, he received Sabljar's report from the mountain warden Rösner, which had already included the results of Tkalac's excava-

²² Morlot 1851, 294; Lukežić 2007, 46; Linke 2011, 230.

²³ Morlot 1851, 294.

²⁴ Morlot 1851, 294-295; Archiv für KÖG-Q 1863, 307.

u kojem se već navode i rezultati Tkalčevih iskopavanja.²⁵ Osim kratkih osvrti na iskopavanja, koje su Von Morlot i Sabljari objavili u izdanjima Austrijske akademije znanosti, Mijat Sabljari nije ostavio nikakvih zabilježki o tijeku iskopavanja u dokumentaciji koja se čuva u Ministarstvu kulture Republike Hrvatske.²⁶

Arheološkim rekognosciranjem Općine Radoboj, provedenim između 1. travnja i 1. lipnja 2013. od strane autora i suradnika, lociran je tumul I koji je iskopavao Mijat Sabljari, a prema opisima iz njegovih i Von Morlotovih objavljenih izvještaja. Tumul se nalazi na sjeveroistočnom rubu nekropole gdje su i danas vidljivi tragovi Sabljareva iskopavanja. Ipak, cijeli tumul nije istražen te je zapadni i istočni dio humka još sačuvan. Ovaj se tumul nalazi na dijelu nekropole prepunom depresija nastalih urušavanjem nekadašnjih zračnika rudnika ugljena »Mirna«, a čiji se rovovi protežu direktno ispod nekropole, stoga je ponekad teško razlikovati ostatke iskopavanja Sabljarevih sondi od ostataka rudarske infrastrukture (sl. 2).

Adolf von Morlot (Napulj, 22. 3. 1820. – Bern 10. 2. 1867.) u Radoboju

Učeni matematičar i geolog između 1846. i 1851. radi kao inspektor za minerale u službi tadašnje Habsburške Monarhije,²⁷ odnosno kao visoki dužnosnik Geološkog zavoda iz Beča.²⁸ U to vrijeme nastaju njegova djela s područja mineralogije i geologije, a između ostalog obilazi Kranjsku, Štajersku i Zagorje. Von Morlot dolazi u Radoboj radi najbogatijeg svjetskoga nalazišta fosilne flore, fosilnih kukaca i riba te nalazišta samorodnog sumpora. U dva

tion.²⁵ Apart from short texts about the excavations published by von Morlot and Sabljari in publications of the Austrian Academy of Science, Mijat Sabljari did not leave any notes concerning the course of excavations in the documentation kept by the Ministry of Culture of the Republic of Croatia.²⁶

During the archaeological field survey of the municipality of Radoboj, carried out by the author and his associates between 1 April and 1 June 2013, tumulus I, excavated by Mijat Sabljari, was identified, on the basis of descriptions contained in reports published by Sabljari and von Morlot. The tumulus is located at the north-eastern edge of the necropolis, and traces of Sabljari's dig are still visible. However, the tumulus was not excavated in its entirety, and the western and eastern parts of the mound are still preserved. The tumulus is situated in a segment of the necropolis which is full of depressions caused by the collapse of former air shafts of the Mirna coal mine, whose tunnels stretch directly under the necropolis. For this reason, occasionally it is difficult to distinguish between the remains of Sabljari's test pits and remains of the coal mine's infrastructure (fig. 2).

Adolf von Morlot (Naples, 22 March 1820 - Bern, 10 February 1867) in Radoboj

From 1846 to 1851, the learned mathematician and geologist worked as a mineral inspector in the service of the then Habsburg Monarchy,²⁷ that is, as a high-ranking official of the Vienna Geological Institute.²⁸ During this period he authored papers in the fields of mineralogy and geology, and visited, among other regions, Carniola, Styria and Zagorje. Von Morlot came to Radoboj because of the world's most abundant find site of fossil flora, fossil insects and fish, and the deposits of native sulphur. During his

²⁵ Morlot 1851, 295-296.

²⁶ MK-UZKB-OMS - bilježnica 41.

²⁷ Historisches Lexikon der Schweiz 2009, 738.

²⁸ Krklec-Švaljek 1998, 10.

²⁵ Morlot 1851, 295-296.

²⁶ MK-UZKB-OMS - notebook 41.

²⁷ Historisches Lexikon der Schweiz 2009, 738.

²⁸ Krklec-Švaljek 1998, 10.

tjedna svog boravka u Radoboju, prikupio je 200 primjeraka fosilne flore, 231 primjerak fosilnih kukaca i 11 fosilnih riba.²⁹ Na kraju svoga posjeta Radoboju slučajno saznaje za prapovijesne tumule na Maloj gori te ih osobno i obilazi. Međutim, zbog nedostatka vremena, odlazi natrag u Švicarsku, a da ih nije iskopavao. Nakon povratka u Švicarsku, piše članak za Austrijsku akademiju znanosti o tumulima u Radoboju u kojem opisuje nalazište i prenosi rezultate iskopavanja M. Sabljara i J. F. Tkalca. Između 1851. i 1854. predaje geologiju te se bavi proučavanjem kvartara na Akademiji u Lausanni. Konačno, 1855. u potpunosti se posvećuje prapovijesti te putuje po sjevernoj Europi i objavljuje preglede arheoloških nalaza, među ostalima i dio zbirke vojvotkinje Von Mecklenburg, nama najpoznatije po iskopavanjima na području Dolenjske. Posljednje dvije godine svoga života provodi radeći kao konzervator arheoloških zbirki bernskog muzeja.³⁰ Osim prapovijesti, zanimao se i za eksperimentalnu psihologiju i etnomuzikologiju.

Tumul I prema Adolfu von Morlotu

Ovdje se donose opažanja koje je A. von Morlot objavio u svom članku o tumulima.³¹ Tumul I nalazio se na istočnome rubu nekropole, desno od šumskog puta. Bio je bez depresije na vrhu, a promjer mu je iznosio 12 m. Tumul su počela iskopavati četvorica radnika, rame uz rame, no budući da se po jedno drvo nalazilo na svakoj strani tumula, a koja nisu željeli srušiti, iskop se sužavao te su kasnije dvojica radnika nastavila kopati, a preostala dvojica su odnosila zemlju na šumski put. Tumul se počeo kopati od istočnog ruba, od puta prema središtu tumula. U vrijeme kad je Von Morlot posjetio lokalitet, svi

two-week stay in Radoboj, he collected 200 samples of fossil flora, 231 samples of fossil insects and 11 samples of fossil fish.²⁹ At the end of his visit, he learned by chance of the prehistoric burial mounds at Mala Gora, and he went to see them. However, due to a lack of time, he returned to Switzerland without engaging in any excavation. On his return to Switzerland, he wrote a paper on the Radoboj burial mounds for the Austrian Academy of Science, in which he described the site and communicated results of the excavations by M. Sabljara and J. F. Tkalec. Between 1851 and 1854 he taught geology and studied the Quaternary Period at the Academy of Lausanne. Finally, from 1855 he devoted all his energy to prehistory and travelled around northern Europe, publishing overviews of archaeological finds, including a part of the collection by the Duchess von Mecklenburg (better known in Croatia for the excavation in the Lower Carniola region). He spent the final two years of his life working as a conservator of archaeological collections at the Bern Museum.³⁰ In addition to prehistory, he was also interested in experimental psychology and ethno-musicology.

Tumul I according to Adolf von Morlot

What follows are the observations by von Morlot published in his paper about the tumuli.³¹ Tumulus I was situated on the eastern edge of the necropolis, to the right of the forest road. There was no depression at its top, and its diameter measured 12 m. At first, four workers were digging the tumulus, standing shoulder to shoulder, but there was a tree on each side of the tumulus which they did not want to fell. Thus the dig became narrower, and only two workers continued digging, while the other two took the excavated earth to the forest road. The excavation began at the eastern edge of the tumulus and proceeded towards its centre. At the time when

²⁹ Krklec-Švaljek 1998, 19.

³⁰ Bandi 1970, 170-171.

³¹ Morlot 1851, 295-296.

²⁹ Krklec-Švaljek 1998, 19.

³⁰ Bandi 1970, 170-171.

³¹ Morlot 1851, 295-296.

su tumuli imali ulegnuća na vrhu, a ovaj je imao vidljiv prolaz do središta s istočne strane, koji je preostao kao posljedica Sabljarova sondiranja.³²

Na 126 cm od ruba tumula te na 63 cm visine od razine okolnog tla, pronađena su dva izdužena kamena (47 cm duljine i 15 cm širine), horizontalno položena na nasuti sloj zemlje, koja nisu mogla samostalno stajati. Oko 32 cm dalje, prema središtu tumula te na visini od 63 cm iznad razine okolnog tla, zapažena je bjelkasta pojava u zemlji, a ispostavilo se da se radi o fragmentima spaljenih vrlo krhkih kostiju, manjih dimenzija. Oko kostiju nalazili su se fragmenti keramike za koje se nije mogao ustanoviti nekakav red ili pravilo u distribuciji, stoga Von Morlot zaključuje da su vjerojatno bili razbacani oko kostiju. Najveća je debljina stijenki pronađenih fragmenata keramike iznosila 6 mm, a najmanja 3 mm. Presjek je kod nekih fragmenata keramike bio crn, a kod nekih crven, a zapečena keramička smjesa bila je svjetlucava. Stijenke posuda bile su crne boje, neglazirane i krhke. Prema različitoj debljini fragmenata, moglo se zaključiti da se radi o barem 5 različitih keramičkih posuda. U zemlji se nailazilo i na komadiće ugljena veličine od zrna graška do lješnjaka. U zemlji je primijećen sivkasto-smeđi sloj, koji se pružao prema sredini tumula, debljine 1 cm, a za kojeg se naknadno ustanovilo da je riječ o vrlo nabijenom sloju pepela. U zemlji su se zatim pojavile perle od plave staklene paste sa žutim valovitim ukrasom te rupom u sredini, a koje su bile spljoštene na krajevima s obje strane. Perle su bile veličine lješnjaka. Kasnije je uslijedilo još fragmenata žutih, vrlo krhkih perli od staklene paste, dok su se ostaci kostiju i fragmenti keramike prorijedili. Pri gornjem rubu (vrhu) tumula pronađena je željezna sjekira s otvorom za nasad, duljine 13 cm. Prema sjever-

von Morlot visited the site, all the tumuli displayed depressions in their tops, and this one had a visible passage leading to its centre from the eastern side – the result of Sabljar's test pit excavation.³²

At a distance of 126 cm from the tumulus's edge, and at a height of 63 cm above the surrounding ground level, two elongated stones were found (47 cm long and 15 cm wide), placed horizontally over the earth fill: a position that would require human agency. Some 32 cm further towards the centre of the tumulus, at a height of 63 cm above the surrounding ground level, whitish colour was observed in the earth, and it was subsequently established that these were fragments of very brittle cremated bones of small dimensions. Pottery shards were discovered around the bones, but no order or pattern of their distribution could be established, leading von Morlot to the conclusion that the pottery was probably strewn around the bones. The thickest wall among the discovered pottery shards was 6 mm thick, and the least thick was 3 mm. The cross-section of some of the shards was black, and of some others red, while the burned pottery clay was glittering. The vessels' walls were black, unglazed and fragile. The different thicknesses of the shards led to the conclusion that they originated from at least five different ceramic vessels. Pieces of coal were also found in the earth, ranging in size from a pea to a hazelnut. A greyish-brown layer was noticed, too, 1 cm thick and stretching towards the centre of the tumulus; subsequently it was established that this was a heavily packed layer of ash. Thereafter, some beads appeared, made of blue glass paste with yellow wavy decoration and a hole in their centre, flattened at both ends. The beads were the size of a hazelnut. Furthermore, fragments of very fragile yellow beads made of glass paste were discovered, and bone remains and pottery fragments became fewer. An iron axe head, 13 cm long, with a hafting hole was found near the top of the tumulus. At the northern edge of the

³² Morlot 1851, 294-295.

³² Morlot 1851, 294-295.



Sl. / Fig. 2: Pogled na tumul I s vidljivim tragovima iskopavanja istražnih sondi iz 1850. godine / View of tumulus I with visible traces of test pits dug in 1850 (snimio / photo by D. Špoljar)

nom rubu tumula iskopavano je u dubinu do 47 cm, do prirodne i kompaktne, očito nikad dorađivane hodne površine tla, no drugi nalazi nisu pronađeni. S time su i završena iskopavanja ovog tumula, čija je površina u nižim dijelovima još neistražena.³³

Tumul I prema Mijatu Sabljaru

Mijat Sabljari je u proljeće 1850. godine sondirao jedan od većih tumula, čiji je promjer iznosio oko 12 m. Iskopavanja su vršena na način da se na istočnom i sjevernom rubu tumula postavila po jedna sonda, a koje su se spojile u središnjoj točki tumula tijekom iskopavanja. Na rubovima tumula Sabljari je u svakoj sondi pronašao po jedan kamen, zatim spaljene ljudske kosti, a u središtu tumula, osim ostataka ljudskih kostiju, i željeznu sjekiru/dlijeto te grumenje željezne rudače i dvije perle od plave staklene paste.³⁴

³³ Morlot 1851, 296.

³⁴ Archiv für KÖG-Q 1863, 307.

tumulus the dig reached a depth of 47 cm and the natural, compact and evidently never-worked walking surface, but no other finds were made. Thus the excavation of this tumulus was completed, but its surface under the lower sections of the barrow remains unexplored.³³

Tumulus I according to Mijat Sabljari

In the spring of 1850, Mijat Sabljari made a test pit excavation on one of the bigger tumuli, whose diameter measured about 12 m. A test pit was dug in both the eastern and northern edges of the tumulus, and the excavation proceeded until the test pits were connected in the tumulus's centre. At the edges of the tumulus, Sabljari found a stone in each of the test pits, along with cremated human bones, and in the centre of the tumulus, in addition to remains of human bones, there was an iron axe/chisel and iron-ore nuggets, as well as two beads made of blue glass paste.³⁴

³³ Morlot 1851, 296.

³⁴ Archiv für KÖG-Q 1863, 307.

Prijedlog rekonstrukcije tumula I

Promjer: 12 m

Visina: oko 2 m

Oštećenja: bez oštećenja tijekom iskopavanja/intaktno stanje

Opis pogrebnog postupka: Nakon izbora lokacije za pogrebni ritual nasut je sloj zemlje debljine oko 60 cm, na koji je zatim položen pokojnik ili možda čak dvije osobe. Položaj tijela unutar nasutoga zemljanog sloja označen je postavljanjem nekoliko većih kamena oko tijela, najvjerojatnije na uglovima lomače. Tijelo je potom spaljeno, a ostacima kostiju, pepela i ugljena pridodani su osobni predmeti pokojnika te grobni prilozi.³⁵ Podatak o nalazu željezne sjekire, koja se nalazila bliže vrhu tumula, mogao bi sugerirati naknadni pokop muške osobe, dok bi u tomu slučaju, sudeći prema nalazima perli od staklene paste, niže postavljena osoba bila ženskog spola. Nad svime je zatim podignut zemljani humak, odnosno tumul. Označavanje prostora, na kojem se nalazi grob pod tumulom, kamenjem većih dimenzija (cca 50x15 cm) zabilježeno je i na nekropoli pod tumulima u Budinjaku na Žumberku (*slo. Gorjanci*).³⁶

Grobni prilozi: minimalno 5 keramičkih posuda, grumenje željezne rudače.

Dijelovi nošnje: 2 perle od plave staklene paste sa žutim valovitim ukrasom, perle od žute staklene paste, željezno dlijeto/sjekira.

Broj pokopanih osoba: 1-2 (tab. 1)

Iskopavanja Jakoba Franje Tkalca

Jakob Franjo Tkalec po zanimanju je bio liječnik, a 1852. godine utemeljio je prirodoslovnu zbirku u zagrebačkoj Gornjogradskoj gimnaziji. Od njegovih radova najvažniji su oni o geološkoj građi i toplicama, uglavnom objavljivani na njemačkom jeziku. Pri prvom spominjanju

³⁵ Morlot 1851, 295.

³⁶ Škoberne 1999, 27, sl. 16.

Proposal for a reconstruction of tumulus I

Diameter: 12 m

Height: around 2 m

Damage: no damage inflicted by excavation / intact condition

Description of the burial ritual: After the location of the burial ritual was selected, a layer of earth some 60 cm thick was prepared, and one, or perhaps two, deceased were laid on it. The position of the body within the filled earth was marked by several larger stones placed around the body, probably on the corners of the pyre. The body was then cremated, and personal items of the deceased and grave goods were added to the bone remains, ash and charcoal.³⁵ The discovered iron axe, found closer to the top of the tumulus, could suggest a subsequent male burial, and in that case the glass-paste beads discovered in the lower layer would indicate that the deceased was a woman. All the remains were then covered by an earthen mound, that is, a tumulus. Using larger stones (approx. 50x15 cm) to mark the burial space under a mound has also been ascertained in the barrow necropolis at Budinjak on Žumberak (*Slovenian: Gorjanci*).³⁶

Grave goods: at least five ceramic vessels, iron-ore nuggets

Elements of attire: 2 beads made of blue glass paste with yellow wavy ornament, yellow glass-paste beads, iron chisel/axe

Number of persons buried: 1-2 (Pl. 1)

Excavation by Jakob Franjo Tkalec

Jakob Franjo Tkalec was a doctor, and in 1852 he founded a natural historical collection at the Zagreb Upper Town Grammar School. His most important works – mostly published in German – focused on geological material and spas. The first mention of the tumuli near Radoboj in the literature is

³⁵ Morlot 1851, 295.

³⁶ Škoberne 1999, 27, Fig. 16.

tumula kod Radoboja u literaturi saznajemo da je Filozofsko-kulturni odjel Krajevske akademije znanosti 16. 10. 1850., na svojoj sjednici u Beču, raspravljao o pismu pristiglom iz Hrvatske od Jakoba Franje Tkalca, u kojem ih on obavještava o svojim iskopavanjima četiri tumula kod Radoboja te im uz molbu za pomoć šalje i neke predmete koje je već iskopao iz spomenutih tumula. Tkalec još u svome obraćanju Akademiji 1850. navodi i da bi trebalo iskopati preostalih 8 tumula. Budući da ovo izdanje Akademije uključuje izvještaje sa sjednica između lipnja i prosinca 1850., može se zaključiti da je Tkalec svoja iskopavanja provodio između proljeća i jeseni 1850. Filozofsko-kulturni odjel na svojoj sjednici 11. 12. 1850. odlučuje izdvojiti tadašnjih 30 fl Carske Monarhije, kao prilog Tkalcu za nastavak započetih iskopavanja.³⁷

Adolf von Morlot u svome izvještaju o tumulima precizno navodi podatke o iskopavanju tumula I M. Sabljara, međutim, po završetku opisivanja navodi da se kasnijim iskopavanjima više kopalo nego sustavno istraživalo tumule u Podstenju. Budući da je Mijat Sabljar istraživao samo jedan tumul, u slučaju ovih Von Morlotovih navođenja mora se raditi o iskopavanjima Jakoba Franje Tkalca, a od kojih su iskopavanja tumula II-IV provedena najvjerojatnije između proljeća i jeseni 1850., odmah nakon Sabljareva sondiranja prvog tumula. Tkalčeva iskopavanja provodila su se nakon Von Morlotova posjeta Radoboju jer je osobnim obilaskom tumula Von Morlot ustanovio da je iskopavan samo jedan tumul, odnosno da ga je sondirao Mijat Sabljar. Iz Tkalčevih iskopavanja Von Morlot prenosi podatke koje je dobio od gorskog nadzornika gospodina Rösnera, a u kojima je stajalo da se tim iskopavanjima, osim nešto fragmenata keramike, pronašlo i perli od staklene paste različitih boja, a koje su bile ukrašene valo-

made in a report from a session of the Department of Philosophy and Culture of the Royal Academy of Science held in Vienna on 16 October 1850, where a letter was discussed which had arrived from Croatia, sent by Jakob Franjo Tkalec. In it, Tkalec informed them about his excavation of four tumuli near Radoboj, asked for their support and sent them some items dug from these tumuli. Furthermore, in his address to the Academy in 1850, Tkalec notes that the remaining eight tumuli should also be explored. Given that this publication of the Academy includes reports from sessions held between June and December 1850, the conclusion can be drawn that Tkalec carried out his excavations between the spring and autumn of 1850. At its session of 11 December 1850, the Department of Philosophy and Culture decided to set aside 30 imperial florins as its contribution to the continuation of Tkalec's excavation.³⁷

In his report, Adolf von Morlot precisely cites data concerning Sabljara's excavation of tumulus I, but at the end of his description he notes that subsequent excavations were more of a digging spree than a systematic exploration of the Podstenje tumuli. Given that Mijat Sabljara explored only one tumulus, those words of von Morlot must refer to the excavations by Jakob Franjo Tkalec, who most probably dug tumuli II-IV between the spring and autumn of 1850, immediately after Sabljara had opened test pits on the first tumulus. Tkalec launched his excavation after von Morlot had visited Radoboj, because after he personally visited the tumuli, von Morlot stated that only one had been excavated, i.e. that the test pit excavation had been carried out on it by Mijat Sabljara. As regards Tkalec's dig, von Morlot relates data received from the mountain warden, Rösner, stating that, in addition to some pottery shards, glass-paste beads of various colours were also found,

³⁷ Sitzungsberichte 1850, 451, 867-868.

³⁷ Sitzungsberichte 1850, 451, 867-868.

vitim ukrasom s još pridodanim točkicama. U jednome od tih tumula pronađene su i dvije male okrugle željezne karike.³⁸

U trima tumulima, koje je iskopavao J. F. Tkalec, pronađene su perle od staklene paste veličine od zrna graška do lješnjaka, s jednom rupom u sredini, za koje se čini da su bile pričvršćene na konopac. Osnovna je boja perli nebeskoplava sa žutim ukrasom, koji se u obliku valova pruža oko perle, a koji je, čini se, napravljen od različite mase (smjese staklene paste). Manje perle potpuno su prozirne, dok su veće perle prozirne u manjoj mjeri. Jedna veća, neprozirna perla od žute staklene paste na vanjskoj strani, na četiri mjesta, ima po dvije, usporedno postavljene, okrugle bijele mrlje (perle s duplim očima). U svakoj od bijelih mrlja nalazi se po jedna manja plava mrlja, od kojih su neke okružene kružnom, a neke polukružnom plavom crtom. Preostale su perle od žute staklene paste, a bilo je i jantarnih perli. Osim toga, pronađeni su fragmenti posuda iz vrlo nepročišćene, loše pečene zemlje, debljine 2 - 5 mm; zatim fragmenti jedne željezne, vrlo oksidirane karike te zajedno s pepelom jedna željezna sjekira.³⁹

Prijedlog rekonstrukcije tumula II

Promjer: 8 - 14 m

Visina: oko 2 m

Oštećenja: udubina na vrhu tumula, promjera oko 1,5 m, te dubine oko 30 cm

Opis pogrebnog postupka: Nakon izbora lokacije za pogrebni ritual, nasut je sloj zemlje na koji je potom položen pokojnik ili možda čak dvije osobe. Tijelo je potom spaljeno, a ostacima kostiju, pepela i ugljena pridodani su osobni predmeti pokojnika te grobni prilozci. Na temelju navođenja ostataka ugljena i pepela u izvještaju o iskopavanjima, pretpostavlja-

decorated with wavy lines and dots. In one of the tumuli, two small circular iron rings were also discovered.³⁸

In the three tumuli excavated by J. F. Tkalec, glass-paste beads ranging from pea-sized to hazelnut-sized were found, each with a hole in its centre, suggesting that they had been on a string. The basic colour of the beads is sky blue with yellow decoration consisting of a wavy line stretching around the bead, apparently made from a different mass (glass paste mixture). The smaller beads are completely transparent, while the bigger ones are transparent only to a small degree. A large opaque bead made of yellow glass paste displays pairs of white spots in four places (beads with double eyes). Within each of the white spots there is a smaller blue spot, and some such spots are encircled with a circular blue line, and some with a semi-circular blue line. Other beads are made of yellow glass paste, and some amber beads were also discovered. In addition, there were potsherds made of unrefined and poorly fired earth, 2-5 mm thick, fragments of a badly oxidized iron ring, and an iron axe found together with the ashes.³⁹

Proposal for a reconstruction of tumulus II

Diameter: 8-14 m

Height: around 2 m

Damage: a depression in the top of the tumulus, around 1.5 m in diameter and around 30 cm deep

Description of the burial ritual: After the location of the burial ritual was selected, a layer of earth was prepared, and one deceased, or perhaps even two, was laid on it. The body was then cremated, and personal items of the deceased and grave goods were added to the bone remains, ash and charcoal. On the basis of reported charcoal

³⁸ Morlot 1851, 296.

³⁹ Archiv für KÖG-Q 1851, 237.

³⁸ Morlot 1851, 296.

³⁹ Archiv für KÖG-Q 1851, 237.

mo da se spaljivanje pokojnika vršilo na mjestu kasnijeg podizanja tumula.⁴⁰ Budući da se, osim perli od staklene paste, spominju i dvije male okrugle željezne karike, nije sigurno o kojoj je vrsti predmeta riječ te radi li se o predmetu muške ili ženske nošnje, ako nisu možda čak u pitanju i dijelovi konjske opreme. Nad svime je zatim podignut zemljani humak, odnosno tumul.⁴¹

Grobni prilozi: keramičko posuđe

Dijelovi nošnje: perle od plave staklene paste s ukrasom u obliku žute valovnice, 2 manje željezne karike okruglog oblika

Broj pokopanih osoba: 1-2? (tab. 1)

Prijedlog rekonstrukcije tumula III

Promjer: 8 - 14 m

Visina: oko 2 m

Oštećenja: udubina na vrhu tumula, promjera oko 1,5 m, te dubine oko 30 cm

Opis pogrebnog postupka: Nakon izbora lokacije za pogrebni ritual nasut je sloj zemlje na koji je potom položen pokojnik ili možda čak dvije osobe. Tijelo je spaljeno, a ostacima kostiju, pepela i ugljena pridodani su osobni predmeti pokojnika te grobni prilozi. Na temelju navođenja ostataka ugljena i pepela u izvještaju o iskopavanjima,⁴² pretpostavljamo da je spaljivanje pokojnika vršeno na mjestu kasnijeg podizanja tumula. Osim perli od staklene paste i jantarnih perli, spominju se i jedna željezna sjekira te jedna željezna karika, ali nije sigurno o kojoj je vrsti predmeta riječ te radi li se o predmetu muške ili ženske nošnje, ako možda čak nije u pitanju dio konjske opreme. Nad

and ash remains, we can assume that the deceased was cremated in the same spot in which a barrow was later raised.⁴⁰ In addition to glass-paste beads, two small circular iron rings are also reported, but it is not clear what those items were, or whether they belonged to male or female attire, or even to horse gear. All the remains were covered by an earthen mound, that is, a tumulus.⁴¹

Grave goods: ceramic vessels

Elements of attire: beads made of blue glass paste with yellow wavy ornament, two small circular iron rings

Number of persons buried: 1-2? (Pl. 1)

Proposal for a reconstruction of tumulus III

Diameter: 8-14 m

Height: around 2 m

Damage: a depression in the top of the tumulus, around 1.5 m in diameter and around 30 cm deep

Description of the burial ritual: After the location of the burial ritual was selected, a layer of earth was prepared, and one deceased, or perhaps even two, was laid on it. The body was cremated, and personal items of the deceased and grave goods were added to the bone remains, ash and charcoal. On the basis of reported charcoal and ash remains,⁴² we can assume that the deceased was cremated in the same spot in which a barrow was later raised. In addition to glass-paste and amber beads, an iron axe and an iron ring are also reported, but it is not clear what those items were, or whether they belonged to male or female attire, or even to horse gear. All the remains

⁴⁰ Archiv für KÖG-Q 1851, 237.

⁴¹ Nesigurna grobna cjelina. Raspored predmeta unutar tumula II-IV mogao je biti i drugačiji, a rekonstrukcija grobnih cjelina samo je prijedlog autora izrađen na temelju redoslijeda navođenja predmeta u izvještajima Austrijske akademije znanosti.

⁴² Archiv für KÖG-Q 1851, 237.

⁴⁰ Archiv für KÖG-Q 1851, 237.

⁴¹ Uncertain grave unit. The distribution of objects within tumuli II-IV could be different; this reconstruction of grave units is just a proposal by the author, based on the order in which objects are listed in the reports of the Austrian Academy of Science.

⁴² Archiv für KÖG-Q 1851, 237.

svime je potom podignut zemljani humak, odnosno tumul.⁴³

Grobni prilozi: keramičko posuđe

Dijelovi nošnje: jantarne perle, perle od žute staklene paste s četiri para plavo-bijelih očiju, okruženih plavom, polukružnom ili kružnom linijom, 1 okrugla željezna karika, 1 željezna sjekira

Broj pokopanih osoba: 1-2? (tab. 1)

Prijedlog rekonstrukcije tumula IV

Promjer: 8 - 14 m

Visina: oko 2 m

Oštećenja: udubina na vrhu tumula, promjera oko 1,5 m te dubine oko 30 cm

Opis pogrebnog postupka: Nakon izbora lokacije za pogrebni ritual, nasut je sloj zemlje na koji je potom položen pokojnik. Tijelo je spaljeno, a ostacima kostiju, pepela i ugljena pridodane su perle od staklene paste te keramičko posuđe. Na temelju navođenja ostataka ugljena i pepela u izvještaju o iskopavanjima,⁴⁴ pretpostavljamo da je spaljivanje pokojnika vršeno na mjestu kasnijeg podizanja tumula. Budući da se od dijelova nošnje spominju samo perle od staklene paste, može se pretpostaviti da se radilo o pojedinačnom grobu ženske osobe. Nad svime je zatim podignut zemljani humak, odnosno tumul.⁴⁵

Grobni prilozi: keramičko posuđe

Dijelovi nošnje: perle od žute staklene paste

Broj pokopanih osoba: 1 (tab. 1)

Iskopavanja Alberta Emanuela (Edmunda) von Graffenrieda (1829.- 1881.)

Emanuel von Graffenried, pripadnik bogate bernske obitelji, dolazi u Radoboj 1860. te u travnju iste godine provodi iskopavanja preostalih sedam tumula od

were covered by an earthen mound, that is, a tumulus.⁴³

Grave goods: ceramic vessels

Elements of attire: amber beads, beads made of yellow glass paste with four pairs of blue and white eyes encircled with blue circular or semi-circular lines, one circular iron ring, one iron axe

Number of persons buried: 1-2? (Pl. 1)

Proposal for a reconstruction of tumulus IV

Diameter: 8-14 m

Height: around 2 m

Damage: a depression in the top of the tumulus, around 1.5 m in diameter and around 30 cm deep

Description of the burial ritual: After the location of the burial ritual was selected, a layer of earth was prepared, and the deceased was laid on it. The body was then cremated, and glass-paste beads and ceramic vessels were added to the bone remains, ash and charcoal. On the basis of reported charcoal and ash remains,⁴⁴ we can assume that the deceased was cremated in the same spot in which a barrow was later raised. Given that glass-paste beads are the only elements of attire mentioned, we can assume that this was an individual female grave. All the remains were covered by an earthen mound, that is, a tumulus.⁴⁵

Grave goods: ceramic vessels

Elements of attire: beads made of yellow glass paste

Number of persons buried: 1 (Pl. 1)

Excavation by Albert Emanuel (Edmund) von Graffenried (1829-1881)

Emanuel von Graffenried, member of a wealthy family from Bern, came to Radoboj in 1860, and in April of the same year he led the excavation of the remaining seven tumuli

⁴³ Nesigurna grobna cjelina, kao i u prethodnom slučaju.

⁴⁴ Archiv für KÖG-Q 1851, 237.

⁴⁵ Nesigurna grobna cjelina, kao i u slučaju tumula II i III.

⁴³ Uncertain grave unit, as in the previous case.

⁴⁴ Archiv für KÖG-Q 1851, 237.

⁴⁵ Uncertain grave unit, as in the cases of tumuli II and III.

ukupno 11.⁴⁶ Graffenried je, za razliku od Tkalca i Sabljara, planski provodio iskopavanja te je svih sedam tumula iskopao prema istome obrascu. Svoje je iskopne sonde uglavnom orijentirao u smjeru sjever-jug ili sjeveroistok-jugozapad, a tumule je počeo kopati od ruba plašta tumula, kanalom širine oko 1,5 m, prema središtu tumula, da bi samo središte istražio pravokutnom sondom, dimenzija 3x3 m ili 3x4 m. Upravo zahvaljujući ponavljanju spomenutog obrasca iskopavanja, danas sa sigurnošću možemo izdvojiti svih sedam tumula koje je iskopavao E. von Graffenried. Zbog specifičnog načina iskopavanja, nijedan od tumula nije u potpunosti istražen te je veći dio plašta tumula i danas sačuvan. O vremenu završetka njegovih iskopavanja postoje neke nedoumice jer se u pismu radobojskog župnika Muzeju u Zagrebu spominje kako je E. von Graffenried 1866./1867. u župnom dvoru u Radoboju ostavio neke nalaze iz tumula u Podstenju, na koje je, međutim, očito zaboravio te ih iz tog razloga radobojski župnik daruje i šalje u zagrebački muzej.⁴⁷ Vjerojatnije je ipak da se radobojski župnik zabunio u brojanju godina te da je prošlo više od 3 - 4 godine od Von Graffenriedovih iskopavanja u Radoboju, kako on to navodi u svome pismu, a kao argument za tu tvrdnju može poslužiti objava izvještaja o rezultatima Von Graffenriedovih iskopavanja 1863. godine. Rezultate svojih iskopavanja Von Graffenried je podijelio s Mijatom Sabljarem, koji ih je i objavio u izdanjima Austrijske akademije znanosti.⁴⁸ Spomenuta objava, iako skromnog sadržaja, predstavlja ujedno i jedini izvor podataka za rekonstrukciju grobnih cjelina.

⁴⁶ Archiv für KÖG-Q 1863, 307.

⁴⁷ Arhivska dokumentacija Arheološkog muzeja u Zagrebu.

⁴⁸ Archiv für KÖG-Q 1863, 307.

(out of the total of 11).⁴⁶ In contrast to Tkalec and Sabljara, Graffenried carried out planned excavation and explored all seven tumuli following the same excavation pattern. His test trenches were dug mostly with a north-south or northeast-southwest orientation, and digging started at the edge of the tumulus mantle, wherefrom a trench approximately 1.5 m wide was opened towards the centre of the tumulus. The central section was explored through a rectangular test pit 3x3 m or 3x4 m in size. Thanks to his iterated use of this excavation pattern, nowadays we can identify with certainty all seven tumuli dug by von Graffenried. Because of this specific digging method, none of the tumuli has been explored fully, and large parts of their mantles have been preserved to date. There are some doubts concerning the time of the completion of Graffenried's excavation because, in a letter sent to the Zagreb Museum, the parish priest of Radoboj wrote that, in 1866/1867, von Graffenried left some finds from the Podstenje tumuli in the parish house in Radoboj, and that he must have forgotten about them, because of which the parish priest of Radoboj was now donating them to the Zagreb Museum.⁴⁷ However, it would appear more likely that the Radoboj parish priest was confused in his calculation of the year and that more than 3-4 years had elapsed since von Graffenried's dig in Radoboj, which he stipulated in his letter. An argument in favour of this claim is the publication of the report on the results of von Graffenried's excavation in 1863. Von Graffenried shared his results with Mijat Sabljara, who published them in publications of the Austrian Academy of Science.⁴⁸ Though modest in terms of its content, this publication is the only source of data for the reconstruction of grave units.

⁴⁶ Archiv für KÖG-Q 1863, 307.

⁴⁷ Archival documentation of the Archaeological Museum in Zagreb.

⁴⁸ Archiv für KÖG-Q 1863, 307.

Prijedlog rekonstrukcije tumula V

Promjer: 72 koraka (*njem. der Schritt*)/14,4 m

Visina: oko 2 m

Oštećenja: udubina na vrhu tumula, promjera oko 1,5 m te dubine oko 30 cm

Opis pogrebnog postupka: Nakon izbora lokacije za pogrebni ritual nasut je sloj zemlje na koji je potom položen pokojnik ili nekoliko njih. Tijelo je zatim spaljeno, a ostacima kostiju, pepela i ugljena pridodane su glačane kamene ruktovrine i keramičko posuđe. Na temelju navođenja ostataka ugljena i pepela u izvještaju o iskopavanjima, pretpostavljamo da je spaljivanje pokojnika vršeno na mjestu kasnijeg podizanja tumula. U izvještaju se spominje da su pronađeni tragovi više spaljenih tijela,⁴⁹ a veći broj kamenih bruseva mogao bi također sugerirati veći broj pokopanih osoba. Nad svime je zatim podignut zemljani humak, odnosno tumul.

Grobni prilozi: mnogo keramičkog posuđa

Dijelovi nošnje: nekoliko glačanih kamenih ruktovrina

Broj pokopanih osoba: više osoba? (tab. 1)

Prijedlog rekonstrukcije tumula VI

Promjer: 58 koraka (*njem. der Schritt*)/11,6 m

Visina: oko 2 m

Oštećenja: udubina na vrhu tumula, promjera oko 1,5 m te dubine oko 30 cm

Opis pogrebnog postupka: Tijelo pokojnika je prvo spaljeno, a zatim su ostaci kostiju i pepeo položeni u urnu, odnosno žaru, te je ostacima potom pridodana jedna jantarna perla,⁵⁰ što bi moglo upućivati na to da se radilo o ženskoj osobi. Žara je postavljena u središte izabrane lokacije te je bez grobnih priloga nad žarom podignut zemljani grobni humak, odnosno tumul. O

⁴⁹ Archiv für KÖG-Q 1863, 307.

⁵⁰ Archiv für KÖG-Q 1863, 307.

Proposal for a reconstruction of tumulus V

Diameter: 72 steps (*Ger. der Schritt*)/14.4 m

Height: around 2 m

Damage: a depression in the top of the tumulus, around 1.5 m in diameter and around 30 cm deep

Description of the burial ritual: After the location of the burial ritual was selected, a layer of earth was prepared, and one or several deceased were laid on it. The bodies were then cremated, and polished stone artefacts and ceramic vessels were added to the bone remains, ash and charcoal. On the basis of reported charcoal and ash remains, we can assume that the deceased were cremated in the same spot in which a barrow was later raised. The report mentions that traces of several cremated bodies were identified,⁴⁹ and a number of whetstones could suggest multiple burials. All the remains were covered by an earthen mound, that is, a tumulus.

Grave goods: many ceramic vessels

Elements of attire: several polished stone artefacts

Number of persons buried: several? (Pl. 1)

Proposal for a reconstruction of tumulus VI

Diameter: 58 steps (*Ger. der Schritt*)/11.6 m

Height: around 2 m

Damage: a depression in the top of the tumulus, around 1.5 m in diameter and around 30 cm deep

Description of the burial ritual: The body of the deceased was firstly cremated, then the bone remains and ashes were placed in an urn, and an amber bead was added to the urn,⁵⁰ perhaps indicating that the deceased was a woman. The urn was laid in the centre of the selected location, and an earthen mound (tumulus) was erected over it, without any grave goods. The excavation report con-

⁴⁹ Archiv für KÖG-Q 1863, 307.

⁵⁰ Archiv für KÖG-Q 1863, 307.

lokaciji spaljivanja tijela pokojnika ne postoje podaci u izvještaju o iskopavanju.

Grobni prilozi: -

Dijelovi nošnje: jantarna perla

Broj pokopanih osoba: 1 (tab. 1)

Prijedlog rekonstrukcije tumula VII

Promjer: 70 koraka (*njem. der Schritt*)/14 m

Visina: oko 2 m

Oštećenja: udubina na vrhu tumula, promjera oko 1,5 m te dubine oko 30 cm

Opis pogrebnog postupka: Nakon izbora lokacije za pogrebni ritual, nasut je sloj zemlje na koji je zatim položen pokojnik. Tijelo je potom spaljeno, a ostacima kostiju, pepela i ugljena pridodana je jedna glačana kamena rukotvorina te keramičko posuđe crvene boje.⁵¹ Nad svime je zatim podignut zemljani humak, odnosno tumul. Budući da u izvještajima nedostaju podaci o eventualnim ostacima ugljena i pepela na mjestu kasnijeg podizanja tumula, postojanje spališta na mjestu podizanja tumula nije potvrđeno.

Grobni prilozi: fragmenti keramičkog posuđa crvene boje

Dijelovi nošnje: 1 glačana kamena rukotvorina

Broj pokopanih osoba: 1 (tab. 1)

Prijedlog rekonstrukcije tumula VIII

Promjer: 42 koraka (*njem. der Schritt*)/8,4 m

Visina: oko 2 m

Oštećenja: udubina na vrhu tumula, promjera oko 1,5 m te dubine oko 30 cm

Opis pogrebnog postupka: Nakon izbora lokacije za pogrebni ritual, nasut je sloj zemlje na koji je zatim položen pokojnik. Tijelo je potom spaljeno, a ostacima kostiju, pepela i ugljena pridodana je perla od staklene paste te keramičko posuđe.

⁵¹ Archiv für KÖG-Q 1863, 307.

tains no data concerning the location of the cremation.

Grave goods: -

Elements of attire: an amber bead

Number of persons buried: 1 (Pl. 1)

Proposal for a reconstruction of tumulus VII

Diameter: 70 steps (*Ger. der Schritt*)/14 m

Height: around 2 m

Damage: a depression in the top of the tumulus, around 1.5 m in diameter and around 30 cm deep

Description of the burial ritual: After the location of the burial ritual was selected, a layer of earth was prepared, and the deceased was laid on it. The body was then cremated, and a polished stone artefact and red ceramic vessels were added to the bone remains, ash and charcoal.⁵¹ All the remains were covered by an earthen mound, that is, a tumulus. Given that the report contains no data on possible remains of charcoal and ashes at the location in which the mound was subsequently erected, it cannot be ascertained that the cremation site was in the same location as the tumulus.

Grave goods: potsherds of red ceramic vessels

Elements of attire: one polished stone artefact

Number of persons buried: 1 (Pl. 1)

Proposal for a reconstruction of tumulus VIII

Diameter: 42 steps (*Ger. der Schritt*)/8.4 m

Height: around 2 m

Damage: a depression in the top of the tumulus, around 1.5 m in diameter and around 30 cm deep

Description of the burial ritual: After the location of the burial ritual was selected, a layer of earth was prepared, and the deceased was laid on it. The body was then cremated, and a glass-paste bead and ceramic vessels were

⁵¹ Archiv für KÖG-Q 1863, 307.

Budući da se od dijelova nošnje spominje samo jedna perla od plave staklene paste, može se pretpostaviti da se radilo o pojedinačnom grobu ženske osobe. Nad svime je zatim podignut zemljani humak, odnosno tumul. Budući da u izvještajima nedostaju podaci o eventualnim ostacima ugljena i pepela na mjestu kasnijeg podizanja tumula, postojanje spališta na mjestu podizanja tumula nije potvrđeno.⁵²

Grobni prilozi: fragmenti keramičkog posuđa (T. 1: 1-4; T. 2: 1-3)

Dijelovi nošnje: perla od plave staklene paste (T. 3: 6)

Broj pokopanih osoba: 1 (tab. 1)

Prijedlog rekonstrukcije tumula IX

Promjer: 48 koraka (*njem. der Schritt*)/9,6 m

Visina: oko 2 m

Oštećenja: udubina na vrhu tumula, promjera oko 1,5 m te dubine oko 30 cm

Opis pogrebnog postupka: Nakon izbora lokacije za pogrebni ritual, nasut je sloj zemlje na koji je zatim položen pokojnik. Tijelo je potom spaljeno, a ostacima kostiju, pepela i ugljena pridodano je keramičko posuđe. Budući da se drugi predmeti ne spominju, nemoguće je odrediti spol ili broj pokojnika. Nad svime je zatim podignut zemljani humak, odnosno tumul. Budući da u izvještajima nedostaju podaci o eventualnim ostacima ugljena i pepela na mjestu kasnijeg podizanja tumula, postojanje spališta na mjestu podizanja tumula nije potvrđeno.⁵³

Grobni prilozi: fragmenti keramičkog posuđa

Dijelovi nošnje: -

Broj pokopanih osoba: neodrediv (tab. 1)

⁵² Archiv für KÖG-Q 1863, 307.

⁵³ Archiv für KÖG-Q 1863, 307.

added to the bone remains, ash and charcoal. Given that the only element of attire mentioned in the report is a blue glass-paste bead, we can assume that this was an individual female burial. All the remains were covered by an earthen mound, that is, a tumulus. Given that the report contains no data on possible remains of charcoal and ashes at the location in which the mound was subsequently erected, it cannot be ascertained that the cremation site was in the same location as the tumulus.⁵²

Grave goods: potsherds (Pl. 1: 1-4; Pl. 2: 1-3)

Elements of attire: blue glass-paste bead (Pl. 3: 6)

Number of persons buried: 1 (Pl. 1)

Proposal for a reconstruction of tumulus IX

Diameter: 48 steps (*Ger. der Schritt*)/9.6 m

Height: around 2 m

Damage: a depression in the top of the tumulus, around 1.5 m in diameter and around 30 cm deep

Description of the burial ritual: After the location of the burial ritual was selected, a layer of earth was prepared, and the deceased was laid on it. The body was then cremated, and ceramic vessels were added to the bone remains, ash and charcoal. Given that no other finds are mentioned in the report, it is impossible to establish the gender and number of the deceased. All the remains were covered by an earthen mound, that is, a tumulus. Given that the report contains no data on possible remains of charcoal and ashes at the location in which the mound was subsequently erected, it cannot be ascertained that the cremation site was in the same location as the tumulus.⁵³

Grave goods: potsherds

Elements of attire: -

Number of persons buried: impossible to establish (Pl. 1)

⁵² Archiv für KÖG-Q 1863, 307.

⁵³ Archiv für KÖG-Q 1863, 307.

Prijedlog rekonstrukcije tumula X

Promjer: 60 koraka (*njem. der Schritt*)/12 m
 Visina: oko 2 m

Oštećenja: udubina na vrhu tumula promjera oko 1,5 m te dubine oko 30 cm

Opis pogrebnog postupka: Nakon izbora lokacije za pogrebni ritual, nasut je sloj zemlje na koji je zatim položen pokojnik, čije je tijelo potom spaljeno. Budući da se arheološki nalazi ne spominju, nemoguće je odrediti spol ili broj pokojnika. Nad svime je zatim podignut zemljani humak, odnosno tumul. S obzirom na to da u izvještajima nedostaju podaci o eventualnim ostacima ugljena i pepela na mjestu kasnijeg podizanja tumula, postojanje spališta na mjestu podizanja tumula nije potvrđeno.⁵⁴

*Grobni priloz*i: -

Dijelovi nošnje: -

Broj pokopanih osoba: neodrediv (tab. 1)

Prijedlog rekonstrukcije tumula XI

Promjer: 58 koraka (*njem. der Schritt*)/11,6 m

Visina: oko 2 m

Oštećenja: udubina na vrhu tumula, promjera oko 1,5 m te dubine oko 30 cm

Opis pogrebnog postupka: Nakon izbora lokacije za pogrebni ritual, nasut je sloj zemlje na koji je zatim položen pokojnik, čije je tijelo potom spaljeno. Budući da se arheološki nalazi ne spominju, nemoguće je odrediti spol ili broj pokojnika. Nad svime je zatim podignut zemljani humak, odnosno tumul. S obzirom na to da u izvještajima nedostaju podaci o eventualnim ostacima ugljena i pepela na mjestu kasnijeg podizanja

⁵⁴ Archiv für KÖG-Q 1863, 307.

Proposal for a reconstruction of tumulus X

Diameter: 60 steps (*Ger. der Schritt*)/12 m

Height: around 2 m

Damage: a depression in the top of the tumulus, around 1.5 m in diameter and around 30 cm deep

Description of the burial ritual: After the location of the burial ritual was selected, a layer of earth was prepared, the deceased was laid on it and the body was then cremated. Given that no archaeological find is mentioned in the report, it is impossible to establish the gender and number of the deceased. All the remains were covered by an earthen mound, that is, a tumulus. Given that the report contains no data on possible remains of charcoal and ashes at the location in which the mound was subsequently erected, it cannot be ascertained that the cremation site was in the same location as the tumulus.⁵⁴

Grave goods: -

Elements of attire: -

Number of persons buried: impossible to establish (Pl. 1)

Proposal for a reconstruction of tumulus XI

Diameter: 58 steps (*Ger. der Schritt*)/11.6 m

Height: around 2 m

Damage: a depression in the top of the tumulus, around 1.5 m in diameter and around 30 cm deep

Description of the burial ritual: After the location of the burial ritual was selected, a layer of earth was prepared, the deceased was laid on it and the body was then cremated. Given that no archaeological find is mentioned in the report, it is impossible to establish the gender and number of the deceased. All the remains were covered by an earthen mound, that is, a tumulus. Given that the report contains no data on possible remains of charcoal and ashes at the location in which the mound was subsequently erected, it cannot be ascer-

⁵⁴ Archiv für KÖG-Q 1863, 307.

tumula, postojanje spališta na mjestu podizanja tumula nije potvrđeno.⁵⁵

Grobni prilozi: -

Dijelovi nošnje: -

Broj pokopanih osoba: neodrediv (tab. 1)

Problematika nalazišta kroz kasnije radove (1879. - 2011.)

Kronološko određenje tumula mijenjalo se tijekom godina, jednako kao i točna lokacija nekropole. Svi istraživači iz 19. stoljeća koji su, bilo iskopavali ili posjetili nekropolu, bili su jedinstveni pri njezinoj dataciji u prapovijest: Mijat Sabljar, Jakob Franjo Tkalec, Adolf von Morlot, Emanuel von Graffenried te Šime Ljubić.⁵⁶

Šime Ljubić 1879. obilazi tumule u Radoboju te zaključuje da je prekopano svih 11 tumula. Pišući o svom putovanju Zagorjem, navodi kako je tumule otkrio A. von Morlot 1850. te da je lokalnim stanovnicima platio iskopavanje, što je pogrešno. Ljubić također navodi i iskopavanja E. von Graffenrieda te piše kako je po završetku iskopavanja nekamo odnio nalaze. Pri obilasku tumula, Ljubić je prikupio nešto fragmenata keramike te nešto kostiju,⁵⁷ međutim, tih nalaza u Arheološkom muzeju u Zagrebu više nema, a nije poznato gdje su završili. Gjuro Szabo 1914. godine u svome članku piše kako nekropola pripada halštatskom, odnosno latenskom razdoblju.⁵⁸

Hrvatsko-slovenski arheolog Josip Klemenc, pionir arheološke topografije u sjeverozapadnoj Hrvatskoj, odvojio je prapovijesne fragmente keramičkog posuđa i perlu od staklene paste iz Male gore, koji su se tada već desetljećima na-

tained that the cremation site was in the same location as the tumulus.⁵⁵

Grave goods: -

Elements of attire: -

Number of persons buried: impossible to establish (Pl. 1)

The site as discussed in later works (1879-2011)

The chronological attribution of the tumuli has changed over the years, as has the precise location of the necropolis. All the explorers who either excavated or visited the necropolis in the 19th century shared the view that it should be dated to prehistory: Mijat Sabljar, Jakob Franjo Tkalec, Adolf von Morlot, Emanuel von Graffenried and Šime Ljubić.⁵⁶

In 1879, Šime Ljubić visited the Radoboj tumuli and concluded that all 11 of them had been excavated. When he wrote about his journey through Zagorje, he noted that the tumuli were discovered in 1850 by von Morlot, and that he paid the locals for the excavation, but this information is incorrect. Ljubić also mentioned the excavation by von Graffenried and stated that he took away the finds after the completion of the excavation. When he visited the site, Ljubić collected several pottery shards and some bones,⁵⁷ but those finds can no longer be found in the Archaeological Museum in Zagreb, and their whereabouts are unknown. In his 1914 paper, Gjuro Szabo wrote that the necropolis belonged to the Hallstatt, that is, La Tène period.⁵⁸

Croatian-Slovenian archaeologist Josip Klemenc, pioneer of archaeological topography in northwest Croatia, separated the prehistoric pottery shards and a glass-paste bead from Mala Gora – which had been kept for decades by the Archaeological Museum in Zagreb – and noted that Mala Gora was a site whose

⁵⁵ Archiv für KÖG-Q 1863, 307.

⁵⁶ Ljubić 1880, 118-119.

⁵⁷ Ljubić 1880, 119.

⁵⁸ Szabo 1914, 104.

⁵⁵ Archiv für KÖG-Q 1863, 307.

⁵⁶ Ljubić 1880, 118-119.

⁵⁷ Ljubić 1880, 119.

⁵⁸ Szabo 1914, 104.

lazili u Arheološkom muzeju u Zagrebu, i Malu goru označio kao nalazište bez poznate točne lokacije. Fragmentima halštatske keramike (T. 1: 1-4; T. 2: 1-3) iz Male gore Klemenc je pridodao i nalaz keltskog zlatnika s kopijom poznatog prikaza Aleksandra Velikog i Nike,⁵⁹ a koji potječe s njiva u okolici Radoboja, međutim, taj nalaz novca nema izravne veze s keramikom iz Male gore ni prema dataciji, ni prema mjestu nalaza.

Halštatske tumule u Podstenju Klemenc je na svojoj karti ucrtao na Cerovečkom brijegu, odnosno Vrbančaku, brijegu nasuprot Male gore i Podstenju u smjeru zapada, a uz to je i čitavu nekropolu pod tumulima datirao u rimsko razdoblje. Od nalaza, osim keramike, navodi i staklene urne, što je vjerojatno posljedica zamjene njemačkog termina za staklene perle. Staklene perle ne spominje, iako se već tada jedna nalazila u Arheološkom muzeju u Zagrebu. Nadalje, Klemenc navodi da je 1885. A. von Morlot otvorio 11 tumula, što je također pogrešno, a najviše iznenađuje što u svome radu citira M. Sabljara u pismu u kojem uopće ne spominje A. von Morlota jer ga vjerojatno nikad nije niti upoznao.⁶⁰

Budući da Klemenčevo djelo predstavlja svojevrsnu prvu arheološku topografiju sjeverozapadne Hrvatske, mnogi arheolozi, koji se bave sjeverozapadnom Hrvatskom, često posežu upravo za njegovim radovima iz 1930-ih, a tako su i mnogi od njih preuzeli dataciju pogrešno ucrtanih tumula u Podstenju u rimsko razdoblje, kao i pogrešnu lokaciju nalazišta.⁶¹

Od 1936. nadalje, u Hrvatskoj se ne provjerava Klemenčeva datacija pa tako, npr. Ž. Tomičić pogrešno navodi da je iskopavanja 1850. vršio A. von Morlot, a iz citirane literature vidljivo je da mu mjerilo nisu bile prve objave iz Austrije, već da se konzultirao

precise location was unknown. To the Hallstatt pottery shards (Pl. 1: 1-4; Pl. 2: 1-3) from Mala Gora, Klemenc added a Celtic golden coin bearing the famous image of Alexander the Great and Nike,⁵⁹ discovered in a tilled field in the vicinity of Radoboj; however, this find has no direct connection with the Mala Gora pottery, either in terms of its dating or in terms of its find site.

On his map, Klemenc marked the Hallstatt tumuli of Podstenje on Cerovečki Brijeg (Cerovec Hill) or Vrbančak, a hill located opposite Mala Gora and Podstenje to the west; furthermore, he dated the entire barrow necropolis to the Roman period. In addition to pottery finds, he also wrote about glass urns, which is probably the result of a misunderstood German term for glass beads. He made no mention of glass beads, although at that time one of them was already being kept by the Archaeological Museum in Zagreb. Moreover, Klemenc stated that, in 1885, A. von Morlot opened 11 tumuli, which is also incorrect. The most surprising fact is that he quoted Sabljara's letter in which von Morlot had not been mentioned at all, because Sabljara had probably never met him.⁶⁰

Klemenc's work is, in a way, the first archaeological topography of northwest Croatia, and thus many archaeologists who deal with northwest Croatia often refer to his works from the 1930s. As a result, many have taken the Roman-period dating of the erroneously marked tumuli of Podstenje and the erroneous location of the site.⁶¹

Since 1936, Klemenc's dating has not been verified in Croatia, and thus Ž. Tomičić, for example, wrote invalidly that the 1850 excavation was carried out by von Morlot, and the cited literature reveals that he did not consult the first publications made in Austria, but rather Klemenc and Ljubić. In his

⁵⁹ Klemenc 1936, 64.

⁶⁰ Archiv für KÖG-Q 1863, 307.

⁶¹ Šimek 1997, 80; Tomičić 1999, 91.

⁵⁹ Klemenc 1936, 64.

⁶⁰ Archiv für KÖG-Q 1863, 307.

⁶¹ Šimek 1997, 80; Tomičić 1999, 91.

s Klemencom i Ljubićem. Tomičić u svojoj interpretaciji navodi i da se radi o potpuno devastiranoj skupini antičkih tumula te još nadodaje da je riječ o tumulima noričko-panonskog tipa, koji odražavaju duhovnu kulturu autohtonog pučanstva tijekom prvih stoljeća rimske dominacije u zapadnom dijelu provincije Panonije.⁶² Tomičić je na svome Arheološkom zemljovidu Općine Bedekovčina nekropolu Podstenje ucrtao na mjestu na kojem ju je pogrešno ucrtao i Klemenc (Cerovečkov brijeg/Vrbančak), a lokalitet Mala gora pogrešno je ucrtan kod župne crkve u Radoboj, što se čak razlikuje i od Klemenčeve pogrešne lokacije, koji je Malu goru postavio istočnije od Radoboja.⁶³ Ostali istraživači prapovijesti sjeverozapadne Hrvatske, iako malobrojni, ne obaziru se na ovo nalazište, najvjerojatnije zbog uvjerenja da se radi o antičkom lokalitetu.

Današnje stanje nekropole pod tumulima Podstenje

Općina Radoboj je 2011. godine podnijela zahtjev Ministarstvu kulture Republike Hrvatske za financiranjem arheološkog iskopavanja tumula u Podstenju, a s obzirom na to da arheološko nalazište nije bilo ni evidentirano ni zaštićeno pri Ministarstvu kulture, G. Divac iz Konzervatorskog odjela u Krapini počela je proučavati literaturu o ovome nalazištu. Zahvaljujući njezinu radu, arheološko nalazište Podstenje od 13. 10. 2011. vodi se kao preventivno zaštićeno nepokretno kulturno dobro pod oznakom P-4126 te pod nazivom »Prapovijesna nekropola pod tumulima Podstenje«, čime je nakon gotovo cijelog stoljeća ova nekropola ponovno dobila svoju ispravnu dataciju te je pravilno locirana.⁶⁴ Tumuli se nalaze u katastarskoj općini Radoboj, na k.č. 2377/16, k.č. 2334/18, te na k.č. 2377/15.

⁶² Tomičić 1999, 91.

⁶³ Tomičić 1999, 90, sl. 1.

⁶⁴ Narodne novine br. 54, 163.

interpretation Tomičić stated that this was a group of completely destroyed tumuli from the period of Classical Antiquity, and added that they were of the Noric-Pannonian type, reflecting the spiritual culture of the indigenous population during the first centuries of Roman rule in the western part of the province of Pannonia.⁶² In his Archaeological Map of the Bedekovčina Municipality, Tomičić marked the Podstenje necropolis in the same spot in which it was erroneously marked by Klemenc (Cerovečki Brijeg/Vrbančak), while he falsely marked the site of Mala Gora by the Radoboj parish church, which is different from Klemenc's false position, because he had marked Mala Gora to the east of Radoboj.⁶³ The few other researchers of the prehistory of northwest Croatia have ignored this site, most probably being convinced that it was a Classical Antiquity site.

Present-day condition of the barrow necropolis of Podstenje

In 2011, the municipality of Radoboj submitted an application to the Ministry of Culture of the Republic of Croatia for the financing of archaeological excavation of the Podstenje tumuli. In view of the fact that this archaeological site had been neither recorded nor protected by the Ministry of Culture, G. Divac of the Krapina Conservation Department started studying literature which discussed this site. Thanks to her work, on 13 October 2011, the Podstenje archaeological site was registered as an immobile cultural asset under preventive protection, marked with the sign P-4126 and entitled "Prehistoric barrow necropolis of Podstenje". Thus, after nearly a century, the necropolis regained its correct dating and location.⁶⁴ The tumuli are situated in the cadastral district of Radoboj, on cadastral units 2377/16, 2334/18 and 2377/15.

⁶² Tomičić 1999, 91.

⁶³ Tomičić 1999, 90, Fig. 1.

⁶⁴ Official Gazette (Narodne novine), No. 54, 163.

Do spoznaje kako se radi o halštatskoj nekropoli pod tumulima došli smo proučavajući literaturu u sklopu rada na doktorskoj disertaciji, odnosno čitajući prvi hrvatski članak o tome nalazištu.⁶⁵ Potom nam se ta pretpostavka dodatno potvrdila uvidom u dokumentaciju i građu Pretpovijesne zbirke Arheološkog muzeja u Zagrebu, gdje su pohranjeni malobrojni nalazi iz Von Graffenriedovih iskopavanja koji se sastoje od jedne perle od staklene paste s narebnjenjima (P-21317) (T. 3: 6), od 7 fragmenata keramike (P-1688/1-7) (T. 1: 1-4; T. 2: 1-3) i kamene figurine (P-21318) (T. 2: 4) čiji je kontekst upitan jer se ne spominje ni u jednom izvještaju o iskopavanjima.⁶⁶

Danas je u Podstenju vidljivo 11 prapovijesnih tumula. Najmanji je promjera 8,28 m te ga ubrajamo među tumule II-IV iz iskopavanja J. F. Tkalca. Najveći tumul u Podstenju promjera je 14,07 m, a riječ je o jednom od tumula V-XI iz iskopavanja E. von Graffenrieda. Preostali tumuli promjera su u prosjeku između 12 i 14 m. Visine tumula su između 1,5 do 2 m te svi imaju vidljive tragove iskopavanja iz 19. stoljeća. Sedam tumula ima vidljivi pristupni kanal od ruba plašta tumula do središta te pravokutnu sondu u sredini, stoga se može zaključiti da je riječ o tumulima V-XI koje je iskopavao E. von Graffenried (sl. 3). Ori-jentacije iskopnih sondi sedam spomenutih tumula su: 3 sonde orijentacije sjever-jug, 3 sonde orijentacije sjeveroistok-jugozapad te jedna sonda orijentacije jugoistok-sjeverozapad. Ostatke iskopa u tumulima V-XI iz Von Graffenriedovih iskopavanja lokalni su stanovnici koristili za odlaganje i zaka-panje strvina životinja.

⁶⁵ Ljubić 1880, 118-119.

⁶⁶ Ovom prilikom zahvaljujem dr. sc. Jacqueline Balen, ravnateljici Arheološkog muzeja u Zagrebu, na uvidu u dokumentaciju i građu s prapovijesnih nalazišta u sjeverozapadnoj Hrvatskoj, a koji se čuvaju u sklopu Pretpovijesne zbirke Arheološkog muzeja u Zagrebu. Zahvaljujem također Miljenki Galić na crtanju nalaza.

Our understanding that this was a Hallstatt barrow necropolis is a result of our research of the literature, carried out within the scope of preparation of a doctoral thesis. Specifically, it was a result of our reading of the first Croatian paper about this site.⁶⁵ The assumption was additionally confirmed by the inspection of documentation and artefacts in the Prehistoric collection of the Archaeological Museum in Zagreb, which keeps the few finds unearthed during von Graffenried's excavations, consisting of a ribbed glass-paste bead (P-21317) (Pl. 3: 6), seven potsherds (P-1688/1-7) (Pl. 1: 1-4; Pl. 2: 1-3) and a stone figurine (P-21318) (Pl. 2: 4) whose provenance is dubious, since it is not mentioned in any of the excavation reports.⁶⁶

Nowadays 11 prehistoric tumuli can be discerned in Podstenje. The diameter of the smallest is 8.28 m, and it is one of tumuli II-IV, which were excavated by J. F. Tkalca. The largest Podstenje tumulus has a diameter of 14.07 m, and it is one of tumuli V-XI, excavated by von Graffenried. The average diameters of the other tumuli range between 12 and 14 m. Their height is between 1.5 and 2 m, and all bear visible traces of the 19th-century excavation. On seven tumuli, there is a visible trench leading from the edge of the mantle to a rectangular test pit in the tumulus centre, leading to the conclusion that these are tumuli V-XI, excavated by von Graffenried (fig. 3). The orientation of the test trenches is as follows: three are oriented north-south, three northeast-southwest, and one is oriented southeast-northwest. The dug trenches in tumuli V-XI left after von Graffenried's excavations were used by the local population for disposal and burial of animal corpses.

⁶⁵ Ljubić 1880, 118-119.

⁶⁶ I would like to take this opportunity to thank Dr. Jacqueline Balen, director of the Archaeological Museum in Zagreb, for granting me access to the documentation and material from the prehistoric sites in north-west Croatia kept in the Prehistoric Collection of the Archaeological Museum in Zagreb. My gratitude also goes to Miljenka Galić for drawings of the finds.



Sl. / Fig. 3: Pogled na jedan od tumula V-XI iz iskopavanja E. von Graffenrieda 1860. s vidljivim tragovima iskopa istražne sonde / View of one of tumuli V-XI excavated by E. von Graffenried in 1860, with visible traces of dug test pit (snimio / photo by D. Špoljar)

M. Sabljar iskopavao je tumul I, smješten na sjeveroistočnom rubu nekropole, a na lokaciji tumula i danas su vidljivi tragovi dviju sondi, jedne na istočnoj, a druge na sjevernoj strani tumula. Preostala 3 tumula imaju vidljive tragove iskopavanja bez primijenjenog posebnog obrasca, a riječ je o tumulima II-IV koje je iskopavao J. F. Tkalec. Dva tumula imaju depresije kružnog oblika na vrhu, promjera oko 2 m, kojima se došlo do groba u središtu, dok je posljednji tumul kopan od juga prema sjeveru te mu danas nedostaju gotovo $\frac{3}{4}$. Zanimljiv je najmanji tumul (jedan od tumula II-IV) koji se nalazi odmah do jednog od najvećih tumula u nekropoli (tumul I), na njezinu sjeveroistočnom rubu. Promjeri svih tumula izmjereni su laserskim metrom, uz mogućnost pogreške od 1% na 18 m.

M. Sabljar excavated tumulus I, situated on the north-eastern edge of the necropolis. The traces of two test pits are still visible: one in the eastern section of the tumulus, and the other in the northern. The remaining three tumuli bear visible traces of excavation in which no particular pattern was used; these are tumuli II-IV, excavated by J. F. Tkalec. Two of them have circular depressions in their tops, around 2 m in diameter – they were used to access the graves in the centres of the tumuli. The last tumulus was dug from the southern side in a northern direction, and nearly $\frac{3}{4}$ of it is missing. The smallest tumulus (one of tumuli II-IV) is interesting: it is located immediately by one of the largest tumuli of the necropolis (tumulus I), at its north-east edge. The diameters of all the tumuli have been measured with a laser distance meter, with a possible error of 1% at a distance of 18 m.

Od ukupno 11 tumula, 10 ih je pozicionirano jedni pokraj drugih, po jedan ili po dva u nizu u smjeru jugozapad-sjeveroistok, a međusobno su udaljeni 10-ak m. Od ovog pravila odstupa jedino najsjeverniji tumul udaljen oko 50 m zračne linije od njemu najbližeg tumula na sjeveroistočnom rubu nekropole. U smjeru jugozapad-sjeveroistok, zračna udaljenost između najjužnijeg i najsjevernijeg tumula iznosi oko 160 m, dok udaljenost između najzapadnijeg i najistočnijeg tumula iznosi oko 120 m. Ukupna površina područja na kojem se nalaze tumuli iznosi otprilike 1 ha. Može se zaključiti da su tumuli grupirani, odnosno da je riječ o skupini tumula. Iako se uz tumule nalaze šumski putevi, ne može se reći da su podizani uz neki od puteva jer bi tada njihova distribucija bila vezana uz orijentaciju puta, što u Podstenju nije slučaj. Promatramo li šire područje tumula, položaj na kojem se nalaze zapravo je zabačen te su tumuli vidljivi tek kad se stigne neposredno do nekropole.

Područje nekropole danas je isprijecano kolotečinama šumskih puteva, koji su vjerojatno zbog glipkog tla često mijenjali trase, pa tako i samu mikromorfologiju reljefa i nekropole. Na sjevernom dijelu nekropole nalaze se veće depresije širine oko 4 m te duljine i više desetaka metara, orijentacije istok-zapad, a koje su nastale kao posljedica urušavanja zračnika rudnika ugljena »Mirna«, što se nalazi ispod nekropole. Rudnici ugljena pružaju se od zaseoka Donji Kamenečki na zapadu u smjeru sutjeske Očura na istoku. U blizini nekropole nalazi se više tzv. jalovišta, nasutih hrpa zemlje i ugljena, nastalih iskopom zračnika za rudnik ugljena.⁶⁷

Nedavno provedenim arheološkim rekognosciranjem Općine Radoboj, kojim su snimljeni i izmjereni svi tumuli te kojim su dokumentirana sva oštećenja,

Of the 11 tumuli, 10 are situated next to one another, and one or two positioned in a southwest-northeast direction, with a distance of approximately 10 m between them. Only the northernmost tumulus deviates from this pattern, being some 50 m away as the crow flies from the closest tumulus, on the north-eastern edge of the necropolis. The distance between the southernmost and northernmost tumuli is around 160 m as the crow flies, while the distance between the westernmost and easternmost tumuli is around 120 m. The total surface area of the necropolis is about 1 ha. We can conclude that the tumuli are grouped, i.e. that this is a group of tumuli. Although there are some forest roads in their vicinity, we cannot say that they were erected by a road, because if they were, their distribution would be linked to the road's orientation, but at Podstenje this is not the case. If we observe the wider zone in which they are located, their position is actually isolated, and the tumuli are visible only when one is in the immediate vicinity of the necropolis.

Nowadays, the area in which the necropolis is situated is criss-crossed with the tracks of forest roads, which have probably frequently changed their routes due to the muddy terrain, and the micro-morphology of the relief and the necropolis changed with them. In the northern section of the necropolis there are some bigger depressions, around 4 m wide and several dozen meters long, oriented east-west, which are results of the collapse of the airshafts of the Mirna coal mine, located under the necropolis. The coal mines stretch from the hamlet of Donji Kamenečki, in the west, towards the Očura canyon, in the east. In the vicinity of the necropolis, there are several spoil heaps, that is, piles of earth and coal, left by the excavation of air shafts for the coal mine.⁶⁷

The recent archaeological field survey of the municipality of Radoboj, during which all the tumuli were photographed and measured and

⁶⁷ Krklec-Švaljek 1998, 35-38.

⁶⁷ Krklec-Švaljek 1998, 35-38.

pregledano je i šire područje nekropole. Međutim, rekognosciranje nije rezultiralo otkrićima drugih pojedinačnih tumula ili skupine tumula.⁶⁸

Na gorskim livadama, koje se nalaze oko 150 metara zračne linije od nekropole u smjeru istoka, dokumentirano je nekoliko vidljivih uzvišenja, koja djeluju umjetno. Uzvišenja se otprilike u istoj liniji pružaju od sjevernog ruba livade prema njezinu južnom rubu, a razvučena su u smjeru istok-zapad, što je i smjer oranja na ovoj parceli. Iako je prva pretpostavka bila da se možda radi o još jednoj skupini tumula, razvučenoj oranjem, vlasnik obližnjih njiva objasnio nam je kako se radi o hrpama kamenja nastalim čišćenjem parcela, a koje su danas prekrivene travom.

Pripadnost i prostorni kontekst nekropole pod tumulima Podstenje

Budući da se ni u jednom od dosadašnjih objavljenih radova ne spominje naselje kojem bi pripadala nekropola pod tumulima u Podstenju, jedan od ciljeva projekta arheološkog rekognosciranja Općine Radoboj bio je lociranje pripadajućega prapovijesnog naselja.

Naselje na Hajdinem zernu

Prvo u nizu otkrivenih naselja bilo je prapovijesno naselje na Hajdinem zernu. Nalazište je slučajno otkriveno tijekom autorova planinarenja 26. 12. 2012. Tom

⁶⁸ Projekt »Arheološko rekognosciranje Općine Radoboj«, koji su proveli autor i suradnici između travnja i lipnja 2013., a koji je u cijelosti je financirala Općina Radoboj. Intenzivnim terenskim pregledom obuhvaćen je teritorij čitave Općine, površine 32 km², a otkrivena arheološka nalazišta mogu se preliminarno kronološki datirati u razdoblja paleolitika/mezolitika, bakrenog doba te kasnog brončanog/starijega željeznog doba. Obrada arheoloških nalaza je u tijeku.

all the damage on them documented, encompassed a wider area of the necropolis. However, no new individual tumuli or groups of tumuli have been identified.⁶⁸

On mountain meadows located some 150 m as the crow flies to the east of the necropolis, several seemingly man-made elevations have been observed and registered. These elevations are distributed more or less in a line stretching from the northern edge of a meadow to its southern edge, and they are stretched in an east-west orientation, which corresponds to the direction of ploughing on this land plot. Although our first assumption was that this could be another group of tumuli, drawn out by ploughing, the owner of nearby land plots explained that those were heaps of stones, resulting from the clearing of plots, today overgrown by grass.

Affiliation and spatial context of the barrow necropolis of Podstenje

Given that there is no mention of a settlement that the barrow necropolis of Podstenje would belong to in any of the papers published to date, one of the goals of the archaeological field survey of the municipality of Radoboj was to locate the associated prehistoric settlement.

Settlement at Hajdine Zerne

The first of the identified settlements was the prehistoric settlement at Hajdine Zerne. The author discovered this site by chance, during his mountain hike on 26 December

⁶⁸ The project "Archaeological Field Survey of the Municipality of Radoboj" was implemented by the author and his associates from April to June 2013, and financed entirely by the municipality of Radoboj. The intensive field survey encompassed the whole territory of the municipality, covering 32 km². The discovered archaeological sites can be provisionally dated to the Palaeolithic/Mesolithic, Copper Age and Late Bronze/Early Iron Age. The processing of archaeological finds is under way.



Sl. / Fig. 4: Pogled na terase usječene u stijenu na južnim vršnim padinama naselja na Hajdinem zernu / View of the terraces cut into rock on the southern upper slopes of the settlement at Hajdine Zerne (snimio / photo by D. Špoljar)

je prilikom ustanovljeno postojanje više umjetno napravljenih terasa, usječenih u stijenu na južnim, vršnim padinama najistočnijeg obronka Strahinjščice – Hajdinog zerna (738,5 m n. v.) (sl. 4). Osim spomenutih struktura, na terasama je pronađeno više desetaka fragmenata keramičkog posuđa te komadi kućnog lijepa koji svjedoče o postojanju nadzemnih objekata na terasama.

Nadzemni su objekti najvjerojatnije bili građeni od šiblja i drvenih trupaca te premazani kućnim lijepom, odnosno mazom. Fragmenti keramičkog posuđa su nasebinskog karaktera, grube fakture, redukcijskog i oksidacijskog načina pečenja s dosta primjesa sitnog šljunka. Prema karakteristikama nalaza, fragmenti keramike mogu se preliminarno datirati u halštatsko razdoblje, a manji broj keramičkih nalaza pripisuje se mlađem željeznom dobu. Projektom rekognosciranja naselje

2012. On that occasion several man-made terraces were observed, cut into rock on the southern high slopes of the easternmost side of Strahinjščica – Hajdine Zerne (738.5 m amsl) (fig. 4). In addition to these structures, dozens of pottery shards and pieces of daub were found, testifying to the existence of above-ground structures on the terraces.

The above-ground structures were probably built with wicker and logs, and covered with daub. The discovered pottery shards belong to a settlement: they are roughly shaped, fired by reduction and oxidation, with a fair amount of added gravel. Based on their features, pottery shards can be provisionally dated to the Hallstatt period, and some of them have been attributed to the Late Iron Age. During the field survey, the settlement was recorded by a GPS device, the boundaries of its distribution zone were established, and the visible man-made ter-

je snimljeno GPS uređajem, određene su mu granice rasprostiranja te su dokumentirane sve vidljive, umjetno izrađene terase. Riječ je o terasama širine između 5 i 10 m te duljine između 15 i nekoliko desetaka metara (sl. 4). Ukupno je riječ o desetak nizova terasa koje se spuštaju od vrha Hajdinog zerna uz vršni greben po južnim padinama ovog obronka Strahinjšćice (sl. 4). Rekognosciranjem su na samom vrhu, kao i na svim terasama, otkriveni arheološki nalazi – fragmenti keramike te komadi kućnog lijepa, stoga se može zaključiti da je bio naseljavan čitav vršni dio Hajdinog zerna.

U zapadnom je dijelu naselja na najnižoj terasi, 50-ak m od vršnog grebena u smjeru istoka, rekognosciranjem otkriveno rudarsko okno limonitne žile, u kojem se, sudeći prema keramičkim nalazima pronađenim u samom oknu, već u prapovijesti vadila rudača za dobivanje željeza i izradu željeznih predmeta (sl. 5). Izravni dokaz rudarenja u kontekstu prapovijesnog naselja važan nam je i zbog grumenja željezne rudače te željeznih predmeta koji potječu iz nekropole u Podstenju, a mogli su biti izrađeni od rudače koja se vadila u oknu na obližnjem Hajdinem zernu. Okno je dimenzija 5x6 m, a neposredno ispred, odnosno ispod okna zabilježene su sa zapadne i s istočne strane dvije veće hrpe zemlje, prepune fragmenta prapovijesnoga keramičkog posuđa i većih komada kućnog lijepa (sl. 5). Osim fragmenta keramike iz halštatskog razdoblja, ukrašene kosim urezivanjem ili plastičnom trakom s otiscima, na terasi na kojoj se nalazi rudarsko okno pronađena je i ručka kantharosa, izrađenog na lončarskom kolu, te fragment posude ukrašen žljebljenjem okomitih linija, a koji se mogu datirati u mlađe željezno doba. Nalaz rudarskog okna, eksploatiranog u prapovijesti u kontekstu naselja, zasad je jedinstven slučaj u sjeverozapadnoj Hrvatskoj, a i na širem području.

racess were documented. The terraces are between 5 and 10 m wide, and between 15 and several dozen metres long (fig. 4). There is a total of about a dozen terrace rows, descending from the top of Hajdine Zerne, along the ridge, down the southern slopes at this side of Strahinjšćica (fig. 4). The field survey at the very top, and on all the terraces, resulted in the discovery of archaeological finds (potsherds and pieces of daub), prompting the conclusion that the entire top part of Hajdine Zerne was inhabited.

In the western section of the settlement, on a lower terrace, some 50 m from the top ridge in an easterly direction, the field survey resulted in the discovery of a mine pit on a limonite basset. The pottery finds discovered in the pit suggest that it was used as early as prehistory for quarrying ore used for the production of iron objects (fig. 5). This direct evidence of quarrying in the context of a prehistoric settlement is important in view of the iron-ore nuggets and iron objects originating from the necropolis of Podstenje, which could be made from the ore extracted from the pit at nearby Hajdine Zerne. The size of the pit is 5x6 m, and immediately in front of it, that is, below the pit, on its western and eastern side, there are two large heaps of earth, full of prehistoric pottery shards and large pieces of daub (fig. 5). In addition to Hallstatt pottery shards, decorated with slanted incisions or a plastic band with imprints, a handle from a kantharos, made on a pottery wheel, was also found on the terrace, as well as a fragment of a vessel decorated with vertical fluting; all can be dated to the Late Iron Age. The identified mine pit, exploited in prehistory within the context of a settlement, is the only such case discovered in north-west Croatia and the wider region to date.

Hajdine Zerne is one of the highest inhabited places in the region of Zagorje, and

Hajdine zerne jedna je od najviših naseljenih točaka u Zagorju te općenito u sjevernoj Hrvatskoj, a naselje je ukupne površine nešto veće od 2 ha. Naselje na Hajdinem zernu od nekropole pod tumulima Podstenje udaljeno je oko 30 minuta pješaćenja šumskim putem i planinarskom stazom po relativno strmom terenu, odnosno oko 800 m zračne linije te manje od 300 m visinske razlike. Budući da su rekognosciranja nedavno završila te je obrada arheoloških nalaza u tijeku, možda će se nakon analize moći preciznije kronološki datirati prikupljeni materijal.

Naselje na Platu/Nagori

Drugo u nizu prapovijesnih naselja, nalazi se na Platu/Nagori, oko 10 minuta hoda po putu od tumula, odnosno oko 400 m zračne linije od tumula u smjeru jugoistoka, uz stjenovit greben Plata. Naselje je otkriveno tijekom autorova planinarenja 6. 3. 2013. Prostire se na oko 8,5 ha površine na južnim, vršnim padinama Plata/Nagore. U središnjem dijelu naselja na Platu nalazi se prijevoj kojim je najlakše prići gorskim livadama Male gore na sjevernim padinama Plata te dalje na Hajdine zerne (1,1 km zračne linije, odnosno 45 minuta pješaćenja). Valja istaknuti kako se i naselje na Hajdinem zernu nalazi neposredno iznad gorskog prijevoja, poznatog pod toponimom Prevoja/Prijevoji, a kojim se najbrže i najlakše stiže iz južne, radobojske strane, na sjevernu, jesenjansku stranu Strahinjščice. Naselje je bilo okruženo fortifikacijskim sustavom kameno-zemljanih bedema i kamenih suhozida. Na livadama, pod kojima se nalazi naselje, i orhidejski je vrt.⁶⁹

Između nekadašnjega prapovijesnog naselja na Platu/Nagori i lovačkog doma na zapadnom dijelu humlja danas stjenovitim grebenom Plata i njegovim vršnim

in northern Croatia in general. The total surface area of the settlement is just over 2 ha. The distance from the settlement at Hajdine Zerne to the barrow necropolis of Podstenje is about 30 minutes on foot along a forest road and mountain path leading over relatively steep terrain, or approximately 800 m as the crow flies, with less than 300 m of difference in altitude. In view of the fact that the field survey has been completed recently, and that the processing of archaeological finds is under way, a possibly more precise chronological dating of the collected material is pending the completion of the analysis.

Settlement at Plat/Nagora

The second prehistoric settlement is located at Plat/Nagora, some 10 minutes on foot, or 400 m as the crow flies, from the tumuli in a south-easterly direction, by the rocky ridge of Plat. The author discovered the settlement during his hiking trip on 6 March 2013. It covers an area of around 8.5 ha over the southern upper slopes of Plat/Nagora. In the central section of the settlement at Plat, there is a mountain pass which provides the easiest access to the mountain meadows of Mala Gora on the northern slopes of Plat and further to Hajdine Zerne (1.1 km as the crow flies, or 45 minutes on foot). It should be noted that the settlement at Hajdine Zerne is also situated immediately above a mountain pass, known under the name Prevoja/Prijevoji, which provides the quickest and easiest access from the southern, Radoboj, side to the northern, Jesenje, side of Strahinjščica. The settlement was encircled with a fortification system consisting of stone and earthen ramparts and stone drywalls. On the meadows above the settlement, there is an orchid garden.⁶⁹

Between the prehistoric settlement at Plat/Nagora and the hunting hut in the western part of the hill region, there is a well-kept walking path leading along the rocky ridge of Plat and

⁶⁹ Borovečki-Voska 2010, 18-19.

⁶⁹ Borovečki-Voska 2010, 18-19.



Sl. / Fig. 5: Pogled na površinsko eksploatacijsko okno limonitne žile u sklopu naselja na Hajdinem zernu / View of the surface exploitation pit of the limonite basset within the settlement at Hajdine Zerne (snimio / photo by D. Špoljar)

južnim padinama vodi uređena pješačka staza, a koja je dio i planinarsko-poučne staze »Putevima orhideja«. Iznad staze je, na samom grebenu Plata, zabilježeno nekoliko umjetnih terasa dimenzija 4x5 m, usječenih u stijenu, te je u zemlji iz korijena prevrnutih stabala pronađeno mnoštvo fragmenata keramike, a koja se okvirno kronološki može datirati u razdoblje kasnoga brončanog i starijega željeznog doba. Fragmenti keramike pronađeni su oko 200 m zapadnije od prapovijesnog naselja, a sugeriraju da je staza vjerojatno bila korištena već u prapovijesti. Na terasama su pronađeni i komadi kućnog lijepa, stoga su se vjerojatno na njima nalazili nadzemni objekti, možda u funkciji nadziranja zapadnog pristupa naselju na Platu/Nagori.

Na najvišem položaju naselja na Platu/Nagori, na 514 m n. v., nalaze se prapovijesni suhozidi širine 70 cm, visine do 1 m te duljine od nekoliko desetaka metara (sl. 6). Suhozidi se pružaju u smjeru sje-

its southern slopes; nowadays it forms part of the hiking-educational trail "Along the orchid paths". Beyond the trail, on the very ridge of Plat, there are several man-made terraces of 4x5 m, cut into the rock; on them, in the earth surrounding the roots of toppled trees, a lot of potsherds were found, datable chronologically to the Late Bronze and Early Iron ages. The potsherds were discovered some 200 m to the west of the prehistoric settlement, which suggests that the trail was probably used as early as prehistory. Pieces of house daub were also found on the terraces, indicating that above-ground structures were present on them, perhaps controlling the western access to the settlement at Plat/Nagora.

At the highest position in the settlement at Plat/Nagora, at 514 mamsl, there are prehistoric drywalls 70 cm wide and up to 1 m high, several dozen metres long (fig. 6). The drywalls stretch in a north-south direction down the slopes of Nagora, and their position indicates that their function was to protect the highest settlement plateau (fig. 6).



Sl. / Fig. 6: Pogled na dio prapovijesnih suhozida pri vrhu naselja Plat/Nagora / View of some of the prehistoric drywalls near the top of the settlement at Plat/Nagora (snimio / photo by D. Špoljar)

ver-jug niz južne padine Nagore, a svojim položajem ukazuju na funkciju zaštite najvišeg platoa naselja (sl. 6).

Na istočnom prilazu prapovijesnom naselju na Platu/Nagori, rekognosciranjima su otkrivena tri međusobno usporedna bedema kameno-zemljane strukture (sl. 7). Riječ je zapravo o fortifikacijskom sustavu koji se pruža u smjeru jugozapad-sjeveroistok te priječi pristup naselju iz smjera sutjeske Očura, odnosno iz Podravine. Strukture su većih dimenzija, a najveća od njih je širine gotovo 20 m te nekoliko desetaka metara duljine. Visine su oko 3 - 4 m (sl. 7). Najistočniji od spomenuta tri bedema ima vidljiva oštećenja u svojoj strukturi, nastala kao posljedica sekundarnog iskorištavanja kamenja u srednjem vijeku, pri gradnji crkve Sv. Jakoba/Majke Božje Očurske koja se nalazi u neposrednoj blizini. Osim toga, nedaleko od spomenu-

During the field survey, on the eastern approach to the prehistoric settlement at Plat/Nagora, three parallel ramparts made of stone and earth were discovered (fig. 7). This is a fortification system of a southwest-northeast orientation, which prevents access to the settlement from the direction of the Očura canyon, that is, from Podravina (the Drava region). The ramparts are large – the biggest is nearly 20 m wide and several dozen meters long. They are some 3-4 m high (fig. 7). The easternmost of the three ramparts displays some visible damage to its structure, which is a result of the secondary exploitation of stone in the Middle Ages – the stone was used for the construction of the church of St. Jacob / Blessed Virgin of Očura, located in the immediate vicinity. Not far from this rampart a circular depression was observed, some 3 m in diameter,



Sl. / Fig. 7: Pogled na trostruke kameno-zemljane bedeme na istočnom prilazu naselju Plat/Nagora / View of the triple stone and earthen ramparts on the eastern approach to the settlement at Plat/Nagora (snimio / photo by D. Špoljar)

tog bedema, otkrivena je i kružna depresija promjera oko 3 m, a moglo bi se raditi o jami za dobivanje vapna u koju su kotljali kamenje s prapovijesnog bedema. Za razliku od halštatskog naselja u Sv. Križu Brdovečkom, koje je površine oko 40.000 m², odnosno oko 4 ha, ovo je naselje duplo veće, a ova su dva naselja slična i zbog višestrukih linija utvrđenja. Dok u slučaju Plata/Nagore imamo trostruka utvrđenja na istočnom prilazu naselju, u Sv. Križu Brdovečkom nalazimo dvostruku liniju utvrđenja na sjevernom prilazu naselju.⁷⁰

Naselje na Crkvišu

Treće u nizu prapovijesnih naselja, koja se mogu datirati u razdoblje kasnoga brončanog, odnosno starijega željeznog doba, otkriveno je rekognosciranjem na položaju Crkviše iznad Strahinja Rado-

which could be a lime pit which stones from the prehistoric rampart were rolled into. Unlike the Hallstatt settlement at Sv. Križ Brdovečki, which covers a surface of around 40,000 m², that is, around 4 ha, this settlement is twice that size; otherwise, the settlements have similar multiple fortifications. In the case of Plat/Nagora, there are triple fortifications on the eastern approach to the settlement, while in Sv. Križ Brdovečki there is a double fortification line on the northern approach to the settlement.⁷⁰

Settlement at Crkviše

The third prehistoric settlement in the group that can be dated to the Late Bronze or Early Iron Age was discovered during the field survey at the site of Crkviše above Strahinja Radobojsko. The distance between this set-

⁷⁰ Cvitković, Škoberne 2003, 221.

⁷⁰ Cvitković, Škoberne 2003, 221.



Karta / Map 3: Topografska karta Strahinjščice i radobojskog humlja s ucrtanim položajima naselja na Hajdinemu zernu (1), Platu/Nagori (2) i Crkvišu (3) te nekropolom pod tumulima Podstenje (4). M=1:25000 / Topographic map of Strahinjščica and the hill region of Radoboj with locations of the settlements at Hajdine Zerne (1), Plat/Nagora (2) and Crkviše (3) and the barrow necropolis of Podstenje (4). Scale 1:25000 (<http://geoportal.dgu.hr/>) (17.9.2014.)

bojskoga. Ovo je naselje od nekropole pod tumulima Podstenje udaljeno 2,5 km zračne linije u smjeru zapada, odnosno oko 1 sat pješaćenja. Vrh naselja nalazi se na 515 m n. v., a osim na vrhu, gdje se nalazi umjetno napravljen plato površine oko pola hektara, naselje se proteže i sjevernim te južnim vršnim padinama južnog obronka Strahinjščice, a granice rasprostriranja naselja utvrđene su prema konfiguraciji terena i distribuciji arheoloških nalaza na površini. Ukupna površina naselja iznosi oko 2,5 ha, što ga po veličini čini sličnim naselju na Hajdinemu zernu. Osim fragmenata keramičkog posuđa te komada kućnog lijepa, na naselju je pronađena i željezna troska.

Ovim je otkrićima ujedno upotpunjena slika naseljenosti šireg područja nekropole pod tumulima Podstenje (karta 3), a sudeći prema udaljenosti i povezanosti putevima, može se pretpostaviti da su sta-

tlement and the necropolis of Podstenje is 2.5 km as the crow flies, or about 1 hour on foot. The top of the settlement is at 515 m a.s.l., and in addition to a man-made plateau of about half a hectare at the top, the settlement also spreads over the northern and southern upper slopes of the southern side of Strahinjščica; the boundaries of the surface covered by the settlement were established on the basis of land configuration and distribution of archaeological surface finds. The total area covered by the settlement is around 2.5 ha, similar to the size of the settlement at Hajdine Zerne. In addition to potsherds and pieces of daub, some iron slag was also found.

These discoveries have completed the picture of population distribution in the wider area surrounding the barrow necropolis of Podstenje (map 3), and on the basis of distances and connecting roads and paths, we can assume that the population of the set-

novnici naselja na Platu/Nagori pokapali dio svojih preminulih na ovoj nekropoli, a moguće je da su to činili i stanovnici naselja na obližnjem Hajdinem zernu. S obzirom na to da rekognosciranjem nisu evidentirane nekropole na drugim lokacijama u okolici naselja, u budućnosti će biti potrebno utvrditi jesu li i gdje pokapani ostali pripadnici otkrivenih prapovijesnih naselja. Naselje na Crkvišu zasad se zbog svoje udaljenosti ne dovodi u vezu s nekropolom u Podstenju, iako nalazi željezne troske sa spomenutog naselja te grumenje željezne rudače iz tumula sugeriraju moguću povezanost ovih prapovijesnih zajednica.

Sudbina arheoloških nalaza iz Male gore

Nije poznato gdje su završili nalazi iz tumula I, koji je iskopavao Mijat Sabljar. Iako je tada već radio u Muzeju u Zagrebu, tih nalaza danas u Arheološkom muzeju u Zagrebu nema. Iz članaka se razabire da je i Sabljar bio povezan s Austrijskom akademijom znanosti te im je čak poslao i izvještaj o svome iskopavanju tumula I, doduše 13 godina kasnije, kao i kratki opis tumula i nalaza koje je iskopao Emanuel von Graffenried u travnju 1860.⁷¹

Prvi arheološki nalazi iz nekropole Podstenje poslani su u Austrijsku akademiju znanosti u Beč 1850., odmah nakon prvih iskopavanja Jakoba Franje Tkalca, a on je istovremeno od Akademije zatražio i financijsku potporu pri daljnjim iskopavanjima.⁷²

Adolf von Morlot nije stigao iskopavati tumule 1850.⁷³ te se ubrzo nakon putovanja po Hrvatskoj i Sloveniji vratio u Bern, gdje već 1867. umire, a svoju ostavštinu oporučno ostavlja Arhivu grada Berna u

tlement at Plat/Nagora – and possibly also of the settlement at Hajdine Zerne – buried some of their dead in this necropolis. In view of the fact that field surveys have not identified any other graveyards in the settlements' surroundings, in the future it will be necessary to establish whether other inhabitants of the discovered prehistoric settlements were buried and, if they were, where. Due to its distance, for the time being the settlement at Crkviše is not associated with the Podstenje necropolis, although the iron slag found in the settlement and iron-ore nuggets discovered in the tumuli suggest a possible link between these prehistoric communities.

Destiny of archaeological finds from Mala Gora

The whereabouts of the finds from tumulus I, excavated by Mijat Sabljar, are not known. Although he was already working at the Zagreb Museum at the time, today those finds cannot be found in the Archaeological Museum in Zagreb. The published papers reveal that Sabljar was in contact with the Austrian Academy of Science, and he even sent them his report on the excavation of tumulus I – albeit 13 years later – and a brief description of the tumuli and finds discovered by Emanuel von Graffenried in April 1860.⁷¹

The first archaeological finds from the Podstenje necropolis were sent to the Austrian Academy of Science in 1850, immediately after the excavation by Jakob Franjo Tkalec, who at the same time asked the Academy for its financial support for further excavations.⁷²

Adolf von Morlot did not have enough time for excavation of the tumuli in 1850.⁷³ Soon after his journey through Croatia and Slovenia he returned to Bern, where he died in 1867, specifying in his will that his property would go to the Bern City Archive, where it is held

⁷¹ Archiv für KÖG-Q 1863, 307.

⁷² Sitzungsberichte 1850, 451.

⁷³ Morlot 1851, 294.

⁷¹ Archiv für KÖG-Q 1863, 307.

⁷² Sitzungsberichte 1850, 451.

⁷³ Morlot 1851, 294.

kojem je pohranjena i danas.⁷⁴ Pismenim upitom Arheološkom odjelu Povijesnog muzeja u Bernu (*njem. Bernisches Historisches Museum, Abteilung Archäologie*), saznali smo da se u Muzeju ne nalaze arheološki nalazi iz Radoboja koje bi eventualno A. von Morlot ili E. von Graffenried darovali Muzeju.⁷⁵ Takav se rasplet situacije donekle i mogao očekivati budući da A. von Morlot uopće nije iskopavao tumule na Maloj gori, jer ih je otkrio netom prije odlaska iz Radoboja te budući da u to doba nije radio za švicarske, već za austrijske institucije. Drugi Švicarac, Emanuel von Graffenried, koji je 1860. iskopavao sedam tumula, tada je bio u službi Austrijske akademije znanosti te postoji mogućnost kako je većinu svojih nalaza odnio u Beč.

Manji dio nalaza iz iskopavanja E. von Graffenrieda ostao je kod župnika Eduarda Finka u Radoboju, koji ih je nekoliko godina kasnije poslao u Arheološki muzej u Zagrebu, gdje se i danas čuvaju. Riječ je o sedam fragmenata keramike (T. 1: 1-4; T. 2: 1-3), jednoj perli od plave staklene paste s narebranjima (T. 3: 6) te jednoj kamenoj figurini upitnog konteksta (T. 2: 4) (sl. 8).⁷⁶ Iz svega navedenog proizlazi da je najizglednija institucija za pohranu radobojskih nalaza bila Austrijska akademija znanosti, odnosno današnji Prirodoslovni muzej u Beču (*njem. Naturhistorisches museum Wien*), međutim, ni u tome muzeju danas nema traga Tkalčevim ili Von Graffenriedovim nalazima iz Radoboja.⁷⁷

⁷⁴ Pismeno priopćenje prof. dr. F. Müllera.

⁷⁵ Ovom prilikom zahvaljujem prof. dr. Felixu Mülleru, voditelju Arheološkog odjela Bernisches Historisches Museum (BHM), na pruženim informacijama o ostavštini Adolfa Morlota te na pomoći u potrazi za nalazima iz Podstenja u BHM.

⁷⁶ Arhivska dokumentacija Arheološkog muzeja u Zagrebu.

⁷⁷ Pismeno priopćenje dr. A. Kerna. Ovom prilikom zahvaljujem dr. Antonu Kernu iz Naturhistorisches Museum (NHM) u Beču, na pruženim informacijama o inventaru NHM-a.

to this day.⁷⁴ Following our written enquiry to the Department of Archaeology of the Bern Historical Museum (*Ger. Bernisches Historisches Museum, Abteilung Archäologie*), we have learned that the Museum does not keep any archaeological finds from Radoboj, which could have been donated to it by von Morlot or von Graffenried.⁷⁵ This outcome could have been expected, given that von Morlot did not excavate the tumuli at Mala Gora at all, since he had discovered them only a short time before leaving Radoboj, and, moreover, at the time he did not work for Swiss institutions, but rather for Austrian. The second Swiss, Emanuel von Graffenried, who dug seven tumuli in 1860, was at that time employed by the Austrian Academy of Science, which makes it possible that he took most of his finds to Vienna.

A small number of finds excavated by von Graffenried were left with the parish priest Eduard Fink in Radoboj; several years later, he sent them to the Archaeological Museum in Zagreb, where they are still kept. Those are seven pottery shards (Pl. 1: 1-4; Pl. 2: 1-3), a ribbed blue glass-paste bead (Pl. 3: 6) and a stone figurine of questionable provenance (Pl. 2: 4) (fig. 8).⁷⁶ All of the above leads to the conclusion that the most probable institution to store the finds from Radoboj was the Austrian Academy of Science, that is, today's Natural History Museum in Vienna (*Ger. Naturhistorisches Museum Wien*). However, in the museum there is no trace of either Tkalčec's or von Graffenried's finds from Radoboj.⁷⁷

⁷⁴ Written communication by Prof. F. Müller.

⁷⁵ I would like to take this opportunity to thank Prof. Felix Müller, head of the Department of Archaeology of the Bernisches Historisches Museum (BHM), for information supplied on the legacy of Adolf Morlot and his assistance in my search for the finds from Podstenje in the BHM.

⁷⁶ Archival documentation of the Archaeological Museum in Zagreb.

⁷⁷ Written communication by Dr. Anton Kern. I would like to take this opportunity to thank Dr. Kern of the Naturhistorisches Museum (NHM) in Vienna for information supplied on the NHM's inventory.



Sl. / Fig. 8: Preostali nalazi iskopavanja E. von Graffenrieda (najvjerojatnije iz tumula VIII) u Arheološkom muzeju u Zagrebu (P-1688/1-7, P-21317, P-21318) / Remaining finds from the excavation by E. von Graffenried (most probably from tumulus VIII) kept in the Archaeological Museum in Zagreb (P-1688/1-7, P-21317, P-21318) (snimio / photo by D. Špoljar)

Budući da se sjeverozapadna Hrvatska tijekom iskopavanja E. von Graffenrieda nalazila u sklopu Austro-Ugarske Monarhije, moguće je da su nalazi iz Podstenja završili i u Magyar Nemzeti Múzeumu u Budimpešti. No iz pisma ravnatelja Muzeja švicarskom veleposlaniku u Budimpešti, na popisu nalaza iz Von Graffenriedove zbirke, koji se čuvaju u spomenutom Muzeju, nema navedenih nalaza iz tumula u Podstenju. To bi se moglo objasniti činjenicom da tadašnji ravnatelj Magyar Nemzeti Múzeuma u Budimpešti, dr. Istvan Gedái, veleposlaniku Švicarske u Budimpešti, Claudiju Caratschu, u pismu navodi samo brončane nalaze iz zbirke E. von Graffenrieda. S obzirom na to da se u izvještajima o iskopavanjima

In view of the fact that, at the time of von Graffenried's excavations, north-west Croatia was part of the Austro-Hungarian Monarchy, it is possible that the finds from Podstenje ended up in the Hungarian National Museum (HNM) (*Hun. Magyar Nemzeti Múzeum*) in Budapest. But a letter sent by the Museum's director to the Swiss ambassador in Budapest listed the finds in von Graffenried's collection kept in this Museum, and it did not include the finds from the Podstenje tumuli. This could be explained by the fact that the then director of the Budapest Magyar Nemzeti Múzeum, Dr. Istvan Gedái, listed only bronze finds from von Graffenried's collection in his letter to the Swiss ambassador, Claudio Caratsch. Given that the reports on the ex-

u Podstenju brončani nalazi ne spominju, pojavljivanje Podstenja u spomenutom pismu nije se moglo očekivati. Ostavštini E. von Graffenrieda je nakon njegove smrti 1881. kupio antikvarijat u vlasništvu braće Egger, a 1883. zbirku je konačno otkupio Magyar Nemzeti Múzeum u Budimpešti.⁷⁸

Kronološki položaj i kulturni kontekst nalaza i nalazišta

Uvid u arheološke nalaze, pronađene u prapovijesnim tumulima u Podstenju na Maloj gori kod Radoboja, omogućuju nam skromni izvještaji o rezultatima iskopavanja, koje je objavila Austrijska akademija znanosti tijekom druge polovice 19. stoljeća. Budući da je samo manji broj nalaza iz Podstenja do danas sačuvan te se nalazi u Arheološkom muzeju u Zagrebu, analiza nalaza u najvećoj se mjeri temelji na opisima iz starih objava, a tek manjim dijelom na sačuvanim nalazima. Iako skromnog sadržaja, opisi nalaza su u slučaju nekih predmeta, poput perli od staklene paste, vrlo detaljni te je bilo moguće čak i samo na temelju opisa odrediti o kojem je tipu perli riječ, a zatim im i potražiti analogije u susjednim područjima. Određivanje tipova perli od staklene paste, sastavnih dijelova narukvica ili ogrlica, budući da se radi o kronološki osjetljivim tipovima arheoloških nalaza, omogućilo nam je također preciznije kronološke zaključke o vremenu korištenja nekropole. Ostali pronađeni predmeti, poput željeznih karika, željeznih sjekira, grumenja željezne rudače, jantarnih perli, glačanih kamenih rukotvorina-kamenih bruseva te keramičkog posuđa nisu nam detaljnije opisani te nam zasad ne mogu poslužiti za precizniju kronološku atribuciju nalazišta. Vrijednost je tih nalaza u

⁷⁸ Pismeno priopćenje prof. dr. F. Müllera uvidom u ostavštinu A. von Morlota u Arhivu grada Berna (njem. *Stadtarchiv Bern*).

cavations at Podstenje make no mention of any bronze finds, mention of Podstenje in the said letter cannot be expected. After von Graffenried's death in 1881, his legacy was bought by the antique shop owned by the Egger brothers, and the collection was finally purchased by the Budapest Magyar Nemzeti Múzeum in 1883.⁷⁸

Chronological and cultural context of the archaeological site and finds

An insight into archaeological finds discovered in the prehistoric tumuli of Podstenje at Mala Gora, near Radoboj, is made possible by the modest reports of excavation results published by the Austrian Academy of Science in the second half of the 19th century. In view of the fact that only a small number of finds from Podstenje have been preserved to date and kept in the Archaeological Museum in Zagreb, the analysis is based mostly on the descriptions contained in old publications, and only partially on the preserved finds. Although the content of the reports is modest, the descriptions of some of the finds, for example, glass-paste beads, are very detailed, so much so that they even allowed us to determine the bead type, and look for analogies in neighbouring regions. Given that glass-paste beads – elements of bracelets or necklaces – are a chronologically sensitive type of archaeological find, determination of their type allowed us to draw more precise conclusions regarding the chronology and the period in which the necropolis was used. Other finds, such as iron rings, iron axes, iron-ore nuggets, amber beads, polished stone artefacts / stone whetstones and ceramic vessels, were not described in detail, and for the time being they cannot be used to establish a more precise chronological attribution of the site. The value of such finds is that they provide

⁷⁸ Written communication by Prof. F. Müller following his inspection of the legacy of A. von Morlot in the Bern City Archive (*Ger. Stadtarchiv Bern*).

dobivanju potpunije slike konteksta pogrebnog postupka, uvida u repertoar nalaza muške i ženske nošnje itd.

Perle od staklene paste

U Hrvatskoj se prapovijesne perle od staklene paste u najvećem broju pojavljuju unutar granica rasprostiranja japodske grupe, međutim, japodske se perle prema tipovima razlikuju od primjeraka iz Radoboja. Nalazi staklenih perli najrodniji primjercima iz Radoboja potječu s područja Dolenjske, u susjednoj Sloveniji, te općenito s područja srednje Europe, a posebno Češke. Pregled prapovijesnog stakla Češke napravljen je za razdoblja od ranoga brončanog doba do kraja latenskog razdoblja, a obuhvatio je korpus od 2000 nalaza od stakla i fajanse.⁷⁹ Prema tipologiji perli od staklene paste za područje Češke, staklene se perle iz nekropole pod tumulima Podstenje mogu podijeliti na nekoliko tipova: perle složenog oblika, perle s očima te na perle s valovnicom.

Perle složenog oblika

Riječ je o prozirnog tipu narebrenih perli, tamnoplave boje. Obično su bačvastog i nepravilnog oblika te blago spljoštene, a broj rebara predstavlja jednu od najvažnijih karakteristika za razlikovanje. Halštatske perle obično imaju između 5 i 9 rebara, najčešće sedam, te se po tome razlikuju od narebrenih perli iz rimskog razdoblja koje imaju veći broj rebara. U literaturi su narebrene perle poznate još pod terminima: tikvaste, lotusoidne, zvjezdolike itd. Ovaj tip perli od staklene paste (tip 308 prema N. Venclovoj) karakterističan je za jugoistočnoalpski prostor, iako se primjerci pojavljuju na širem području od Mediterana na jugu, do južne Poljske na sjeveru.⁸⁰

⁷⁹ Venclová 1990, 7.

⁸⁰ Venclová 1990, 60.

a more complete picture of a burial ritual, an insight into the repertoire of male and female attire, etc.

Beads made of glass paste

In Croatia, the largest number of prehistoric glass-paste beads can be found within the distribution zone of the Japodes group; however, the Japodic beads are of different types from those found in Radoboj. Glass beads that are most closely related to those discovered in Radoboj originate from the region of Lower Carniola in neighbouring Slovenia, and from central Europe generally, especially Bohemia. A systematization of prehistoric glass from Bohemia, which includes 2000 finds made of glass and faience, has been made for the periods between the Early Bronze Age and the end of the La Tène period.⁷⁹ According to the typology of glass-paste beads in the territory of Bohemia, the glass beads from the barrow necropolis of Podstenje can be classified into several types: beads of complex form, eye beads, and beads with a wavy line.

Beads of complex form

These are transparent ribbed beads of a dark blue colour. Usually they are barrel-shaped, or of an irregular and slightly flattened shape, and their main distinguishing trait is the number of their ribs. Hallstatt beads usually have between 5 and 9 ribs, most frequently 7, which distinguishes them from Roman beads, which have more ribs. The literature contains various terms used in reference to ribbed beads: turnip-shaped, lotus-shaped, star-shaped etc. This type of glass-paste bead (type 308 according to N. Venclová) is characteristic of the south-eastern Alpine region, although some samples have been discovered in a wider region, stretching from the Mediterranean in the south to southern Poland in the north.⁸⁰

⁷⁹ Venclová 1990, 7.

⁸⁰ Venclová 1990, 60.

Najveći broj perli ovog tipa može se prema srednjoeuropskoj relativnoj kronologiji datirati u Ha D2, Ha D3-Lt A stupnjeve, a u Češkoj su ovakve perle pronađene na lokalitetima Lípa, Nynice te Plzeň-Doubravka. U horizontu paljevinskih grobova starijega željeznog doba iz zapadne Češke, ovaj se tip perli pojavljuje zajedno sa žutim perlama s plavo-bijelim očima (Nynice/Plzeň – sjever – grob 47).⁸¹ Ovaj je tip perli važan za kronološko određnje tumula u Podstenju jer je ustanovljeno da se ne pojavljuju prije Ha D stupnja, a najvjerojatnije čak ni prije Ha D2 stupnja.

Narebrene perle od staklene paste rijetko se pojavljuju u halštatskim grobovima dolenjske skupine u Novom Mestu, a poznate su iz Kapiteljske njive/grob 20/XXXVI, te iz Mestnih njiva/grob 209. Ovi se grobovi mogu sigurno datirati u mlađe halštatsko razdoblje, odnosno u horizont negovske kacige koji odgovara 5. i 4. st. pr. Kr. S podnice SJ 061 u kasnohalštatskom naselju Zbelava-Pod lipom, kod Varaždina u Podravini, potječe primjerak narebrene perle od staklene paste, a važno je naglasiti da se naselje datira u stupanj Ha D3-Lt A prema srednjoeuropskoj relativnoj kronologiji, tj. u horizont negovske kacige prema periodizaciji dolenjske skupine, odnosno stupanj Štajerska V prema B. Teržan, što odgovara 5. st. pr. Kr.⁸²

Ovom tipu perli od staklene paste možemo pripisati primjerak iz tumula VIII u nekropoli Podstenje, koji je iskopao E. von Graffenried, a koji se čuva u Arheološkom muzeju u Zagrebu (P-21317), iako se u slučaju Radoboja radi o neprozirnoj varijanti ovog tipa. Perla ima 12 narebrenja, vanjski promjer iznosi 16 mm, a unutarnji promjer, odnosno promjer perforacije 6 mm (T. 3: 6). Primjerak

Using the Central European relative chronology, most beads of this type can be dated to phases Ha D2 and Ha D3-Lt A. In Bohemia, such beads have been found at the sites of Lípa, Nynice and Plzeň-Doubravka. In the horizon of cremation graves from the Early Iron Age in western Bohemia, this type of bead appears together with yellow beads with blue-and-white eyes (Nynice/Plzeň – north – grave 47).⁸¹ This type of bead is important for chronological determination of the Podstenje tumuli, since it has been established that they did not appear before phase Ha D, and probably not even before Ha D2.

Ribbed glass-paste beads have rarely been found in the Hallstatt graves of the Lower Carniola group at Novo Mesto, but they have been discovered at Kapiteljska Njiva/grave 20/XXXVI, and at Mestne Njive/grave 209. These graves can be dated with certainty to the Late Hallstatt period, that is, to the Ne-gau-helmet horizon, which corresponds to the 5th and 4th c. BC. A ribbed glass-paste bead was also discovered in flooring SJ 061 in the Late Hallstatt settlement of Zbelava-Pod Lipom, near Varaždin Podravina (the Drava region). It is important to mention that this settlement has been dated to Ha D3-Lt A phase according to the Central European relative chronology, that is, to the Ne-gau-helmet horizon according to the Lower Carniola group periodization, or to the Styria V phase according to B. Teržan, which correspond to the 5th c. BC.⁸²

The bead from tumulus VIII of the Podstenje necropolis – excavated by von Graffenried and kept in the Archaeological Museum in Zagreb (P-21317) – can be ascribed to this type of glass-paste bead, although the Radoboj bead is non-transparent. The bead displays 12 ribs, its external diameter is 16 mm, and its internal (i.e. the diameter of the perforation) is 6 mm (Pl. 3: 6). Based on analogies,

⁸¹ Venclová 1990, 61, sl. 5.

⁸² Kovačević 2012, 75, 96, T. 5:4.

⁸¹ Venclová 1990, 61, Fig. 5.

⁸² Kovačević 2012, 75, 96, Pl. 5:4.

iz Radoboja može se na temelju analogija datirati u Ha D2-Ha D3 stupanj, odnosno u kraj 6. i početak 5. st. pr. Kr.

Na području glasinacke skupine u Bosni i Hercegovini, narebrene perle pojavljuju se u grobu 1 tumula XXII u Ilijaku⁸³ te u grobu 1 tumula IV iz Potpećina, a koji datira iz stupnja Glasinac V, odnosno iz 5. st. pr. Kr.⁸⁴

Narebrene su perle pronađene u grobovima za koje se pretpostavlja da su se nalazili pod tumulom u Pečkoj Banji na sjeverozapadu Kosova, odnosno na sjeveru Metohije. Riječ je o dvije perle od jantara, no ovdje ih spominjemo zbog sličnosti s narebrenom perlom od staklene paste iz Podstenja. Naime, jantarne perle iz Pečke Banje su promjera 19,5 i 17,5 mm, a sastoje se od 12 i 13 rebara. Iz grobova u Pečkoj Banji potječu i dvije narebrene perle od staklene paste, jedna zelene boje sa 5 rebara, promjera 24 mm te jedna plave boje sa 7 rebara, promjera 17 mm. Grobovi iz Pečke Banje datiraju s kraja 6. i početka 5. st. pr. Kr. Jedna narebrana perla od staklene paste potječe iz tumula X u nekropoli Boka kod Prčeva na granici Kosova i Metohije, a sastoji se od 9 rebara. Zbog velike koncentracije narebrenih perli na nekropolama 6. i 5. st. pr. Kr. na prostoru Balkana te južne Italije, primjerak iz Radoboja zasad pridružujemo geografski najbližim nalazištima u Dolenjskoj i Podravini. U budućnosti bi jedino kemijske analize sastava staklene paste mogle dati precizniji odgovor o porijeklu narebrenih perli na jugoistočnoalpskom prostoru.⁸⁵

⁸³ Benac, Čović 1957, T. XXXIV, 33-46.

⁸⁴ Benac, Čović 1957, T. XXXVI, 9-9a.

⁸⁵ Palavestra 1997, 18-22, T. II, 10, T. III, 11; 33, T. VIIIb, 9.

the Radoboj bead can be dated to phase Ha D2-Ha D3, that is, to the end of the 6th and beginning of the 5th c. BC.

In the distribution zone of the Glasinac group in Bosnia and Herzegovina, ribbed beads have been found in grave 1 of tumulus XXII at Ilijak⁸³ and in grave 1 of tumulus IV at Potpećine, dating from phase Glasinac V, that is, from the 5th c. BC.⁸⁴

Ribbed beads have also been found in graves assumed to have been under a tumulus at Pečka Banja in north-western Kosovo, which is the northern part of the Metohija region. Those are two amber beads, but they are mentioned here because of their similarity to the ribbed bead from Podstenje. The amber beads from Pečka Banja have diameters of 19.5 and 17.5 mm, and they have 12 and 13 ribs respectively. Two ribbed glass-paste beads have also been found in the graves at Pečka Banja; one of them is green with five ribs and a diameter of 24 mm, while the other is blue with seven ribs and a diameter of 17 mm. The graves at Pečka Banja have been dated to the end of the 6th and the beginning of the 5th c. BC. One ribbed glass-paste bead has been discovered in tumulus X in the necropolis of Boka near Prčevo at the border between Kosovo and Metohija; it contains of 9 ribs. Due to the high concentration of ribbed beads in necropolises from the 6th and 5th c. BC in the territory of the Balkans and southern Italy, for the time being the Radoboj bead has been attributed to the geographically closest sites in Lower Carniola and Podravina. In the future, chemical analysis of the glass-paste composition might provide a more precise answer to the question of origin of ribbed beads in the south-eastern Alpine region.⁸⁵

⁸³ Benac, Čović 1957, Pl. XXXIV, 33-46.

⁸⁴ Benac, Čović 1957, Pl. XXXVI, 9-9a.

⁸⁵ Palavestra 1997, 18-22, T. II, 10, T. III, 11; 33, T. VIIIb, 9.

Perle s očima

Riječ je o neprozirnom tipu perli od žute staklene paste, ukrašenih s po 4 vertikalno postavljena para plavo-bijelih očiju u 4 sloja. Najniži sloj ukrasa je bijele boje, a najviši plave. Ovaj tip perli (tip 519 prema N. Venclovoj) predstavlja jednu od najbrojnijih kategorija perli s očima na području Češke.⁸⁶ Na području Češke perle s očima ovog tipa mogu se datirati u Ha D-Lt A stupnjeve, odnosno od kraja Ha D1 stupnja u grobljima korištenim u kontinuitetu od Ha C do Lt A perioda, poput Hrádeka te Nynica ili najkasnije od kraja Ha D2 stupnja poput Nynica.⁸⁷

S područja Moravske zasad ne postoje nalazi žutih perli s plavo-bijelim slojevitim očima, a iz Slovačke se na groblju u Chotínu IA perle s očima pojavljuju u samo 5 grobova.⁸⁸

S područja Slovenije su perle s očima poznate iz halštatskih nekropola dolenjske skupine: Novo mesto,⁸⁹ Stična/IV, Vinkov vrh,⁹⁰ Brezje,⁹¹ Vače⁹² itd. Iz halštatskih grobova u Novom Mestu poznato nam je nekoliko nalaza perli s 4 para očiju koji su vertikalno postavljeni: u zelenoj varijanti s Kapiteljske njive/grob V/46, datira iz 6. - 5. st. pr. Kr., u žutoj varijanti s Kapiteljske njive/grob 337, datira iz 3. - 2. st. pr. Kr.⁹³

Više primjeraka perli s parovima plavo-bijelih očiju pronađeno je tijekom iskopavanja naselja kod Zbelave u Varaždinskoj Podravini, a koje se prema srednjoeuropskoj relativnoj kronologiji datira u stupanj Ha D3-Lt A, tj. u horizont negovske

⁸⁶ Venclová 1990, 70-71.

⁸⁷ Venclová 1990, 77.

⁸⁸ Venclová 1990, 77.

⁸⁹ Križ, Turk 2003.

⁹⁰ Staré 1964/1965, 224-226.

⁹¹ Kromer 1959.

⁹² Staré 1955, 104.

⁹³ Križ, Turk 2003, 98, 103; Bakarić, Križ, Šoufek 2006, 191.

Eye beads

These are opaque beads made of yellow glass paste, decorated with four vertically set pairs of blue-and-white eyes painted in four layers. The lowest level of the ornament is white, and the top layer is blue. This type of bead (type 519 according to N. Venclová) belongs to the most numerous categories of eye beads in Bohemia.⁸⁶ In the territory of Bohemia, this type of eye bead can be dated to phases Ha D-Lt A, and to the end of phase Ha D1 in graveyards which were continuously in use from Ha C to Lt A, such as Hrádek and Nynice, and no later than the end of phase Ha D2 in graveyards such as Nynice.⁸⁷

In the territory of Moravia, yellow beads with blue-and-white eyes have not been discovered to date, and in Slovakia they were present only in five graves in the graveyard of Chotín IA.⁸⁸

In Slovenia, eye beads have been recorded in Hallstatt necropolises of the Lower Carniola group: at Novo Mesto,⁸⁹ Stična/IV, VinkovVrh,⁹⁰ Brezje,⁹¹ Vače⁹² etc. Several beads with four vertically set pairs of eyes have been found in Hallstatt graves at Novo Mesto: green beads at Kapiteljska Njiva/grave V/46, dating from the 6th-5th c. BC, and yellow beads at Kapiteljska Njiva/grave 337, dating from the 3rd-2nd c. BC.⁹³

Several beads decorated with pairs of blue-and-white eyes were discovered during the excavation of a settlement near Zbelava in Varaždinska Podravina (the Varaždin Drava region), dating to phases Ha D3-Lt A according to the Central European relative chronology, that is, to the Negau-helmet horizon

⁸⁶ Venclová 1990, 70-71.

⁸⁷ Venclová 1990, 77.

⁸⁸ Venclová 1990, 77.

⁸⁹ Križ, Turk 2003.

⁹⁰ Staré 1964/1965, 224-226.

⁹¹ Kromer 1959.

⁹² Staré 1955, 104.

⁹³ Križ, Turk 2003, 98, 103; Bakarić, Križ, Šoufek 2006, 191.

kacige prema periodizaciji dolenske skupine, odnosno stupanj Štajerska V prema B. Teržan, što odgovara 5. st. pr. Kr.⁹⁴

Nakit od jantarnih perli te perli od staklene paste, koje mogu doći u varijacijama od jednoboynih, preko onih s očima do onih s valovitom linijom na području glasinacke kulture, prema Čoviću, javljaju se u fazi Glasinac IVc2,⁹⁵ a koja se može datirati u razdoblje između oko 550. do prvih desetljeća 5. stoljeća pr. Kr.⁹⁶ Staklene perle s očima pojavljuju se na području glasinacke kulture u grobu 5 tumula I u Čitlucima.⁹⁷ Staklene perle s ukrasnom valovnicom, zatim perle s očima te narebrenne perle pojavljuju se u grobu 1 tumula XXII u Ilijaku,⁹⁸ te u grobu 1 tumula IV iz Potpećina, a koji datira iz stupnja Glasinac V.⁹⁹

Na nekropoli Stubarlija kod Mošorina u južnoj Bačkoj, odnosno u Vojvodini, pronađene su perle s parovima očiju. Riječ je o iskopavanjima Predraga Medovića između 1992. i 1994., tijekom kojih su otkrivena 42 groba, od čega je 5 skeletnih grobova pripisano kasnoj fazi starijega željeznog doba (grobovi 1, 3, 4, 5 i 6). Posebno se ističe grob 6 u kojem su se, osim ogrlice od perli od staklene paste, još nalazili i kantharos, zdjela s uvučenim rubom i brončana certoška fibula. Grobovi se pripisuju mlađoj fazi srijemske grupe te datiraju iz kasnohalštatskog razdoblja.¹⁰⁰

Na području sjeveroistočne Srbije, na nalazištu Mihajlov ponor na Miroču, 2005. godine u središnjem dijelu kamene konstrukcije br. 7 otkrivene su tri perle s očima

according to the periodization of the Lower Carniola group, or phase Styria V according to B. Teržan, which correspond to the 5th c. BC.⁹⁴

According to Čović, in the distribution zone of the Glasinac Culture, jewellery consisting of amber beads and glass-paste beads in different variants, ranging from monocoloured to those decorated with eyes and wavy lines, appear in phase Glasinac IVc2,⁹⁵ which can be dated to the period between around 550 and the first decades of the 5th century BC.⁹⁶ In the territory of the Glasinac Culture, glass beads with eyes have been recorded in grave 5 of tumulus I at Čitluci.⁹⁷ Glass beads with a decorative wavy line, eye beads and ribbed beads have been discovered in grave 1 of tumulus XXII at Ilijak,⁹⁸ and in grave 1 of tumulus IV at Potpećine, dating from phase Glasinac V.⁹⁹

Beads with pairs of eyes have been found in the necropolis of Stubarlija, near Mošorin in southern Bačka, in Vojvodina. They were found during the excavation led by Predrag Medović from 1992 to 1994, which resulted in the discovery of 42 graves. Five of them (graves 1, 3, 4, 5 and 6) were skeletal graves attributed to the late phase of the Early Iron Age. Grave 6 is particularly interesting since, in addition to a necklace consisting of glass-paste beads, there was also a kantharos, a bowl with an inward rim and a bronze Certosa-type fibula. The graves have been attributed to the late phase of the Sarmia group and dated to the Late Hallstatt period.¹⁰⁰

In 2005, in the territory of north-eastern Serbia, at the site of Mihajlov Ponor on Miroč, three eye beads were discovered in the cen-

⁹⁴ Kovačević 2007, 99, 105-106, T. 4:4; Kovačević 2012, 75, T. 12:1.

⁹⁵ Čović 1987, 620.

⁹⁶ Čović 1987, 582.

⁹⁷ Benac, Čović 1957, T. XXXI, 10.

⁹⁸ Benac, Čović 1957, T. XXXIV, 33-46.

⁹⁹ Benac, Čović 1957, T. XXXXVI, 9-9a.

¹⁰⁰ Medović 2003, 104-106, sl. 4.

⁹⁴ Kovačević 2007, 99, 105-106, Pl. 4:4; Kovačević 2012, 75, Pl. 12:1.

⁹⁵ Čović 1987, 620.

⁹⁶ Čović 1987, 582.

⁹⁷ Benac, Čović 1957, Pl. XXXI, 10.

⁹⁸ Benac, Čović 1957, Pl. XXXIV, 33-46.

⁹⁹ Benac, Čović 1957, Pl. XXXXVI, 9-9a.

¹⁰⁰ Medović 2003, 104-106, Fig. 4.

ma. Dvije su bile svijetloplave boje s po četiri para očiju tamnoplave i bijele boje, a jedna je perla bila žute boje s po četiri para očiju svijetloplave i bijele boje. Jedna perla plave boje s očima otkrivena je i u konstrukciji br. 12. Autori nalaze datiraju u kraj 6. st. pr. Kr.¹⁰¹

Perle s očima na području srednje i jugoistočne Europe mogu se uglavnom datirati u Ha D2 ili u Ha D2-Ha D3 stupnjeve prema srednjoeuropskoj relativnoj kronologiji, odnosno u kraj 6. i početak 5. st. pr. Kr.¹⁰² U nekropoli Podstenje ovaj se tip perli pojavljuje u tumulu III, odnosno u jednom od tumula II-V, koje je iskopavao Jakob Franjo Tkalec 1850. godine.

Perle s valovnicom

Riječ je o neprozirnom tipu perli od plave staklene paste, ukrašenih horizontalno postavljenom valovnicom žute boje (tip 710 prema N. Venclovoj). S područja Češke poznati su primjerci s lokaliteta: Dolánky/23, 25, Jaroměř, Láz/2, Lhota-Závist/14, Lovosice/24, Řepeč.¹⁰³

Njihova je učestalost na području Moravske i Slovačke nešto manja u usporedbi s Češkom, međutim, najzastupljenije su na području dolenske skupine u Sloveniji. Broj nalazišta u Sloveniji, kao i broj nalaza iz pojedinačnih grobova, premašuje sve ostale europske regije prema zastupljenosti ovog tipa perli. Na području Novog Mesta pronađene su perle s valovnicom u više halštatskih grobova: Kapiteljska njiva/grob I/5, Kapiteljska njiva/grob III/49, Kapiteljska njiva/tumul III/sporadično, Kapiteljska njiva/grob V/72, Kapiteljska njiva/grob VI/14, Kapiteljska njiva/grob VI/32, Kapiteljska njiva/grob VII/27, Kapiteljska njiva/grob VII/28, Kapiteljska njiva/grob X/31, Kapiteljska

tral part of stone structure no 7. Two of them were of a light blue colour with four pairs of dark-blue-and-white eyes each, and one was yellow with four pairs of light-blue-and-white eyes. A blue bead with eyes has been discovered in structure no. 12, too. The authors have dated these finds to the late 6th c. BC.¹⁰¹

The majority of eye beads discovered in the territory of central and south-eastern Europe can be dated to phases Ha D2 or Ha D2-Ha D3 according to the Central European relative chronology, i.e. to the end of the 6th and the beginning of the 5th c. BC.¹⁰² In the Podstenje necropolis, this type of bead has been recorded in tumulus III, i.e. in one of tumuli II-V, excavated by Jakob Franjo Tkalec in 1850.

Beads with a wavy line

These are opaque beads made of blue glass paste, decorated with a horizontally set yellow wavy line (type 710 according to N. Venclová). In Bohemia, such beads have been found at the sites of Dolánky/23, 25, Jaroměř, Láz/2, Lhota-Závist/14, Lovosice/24, Řepeč.¹⁰³

Such finds have been somewhat rarer in the territory of Moravia and Slovakia than in Bohemia, and they have been most frequent in the distribution zone of the Lower Carniola group in Slovenia. The number of their find sites in Slovenia, and the number of beads discovered in individual graves, surpasses all other European regions in terms of the frequency of this type of bead. In the Novo Mesto area, beads with a wavy line have been found in several Hallstatt graves: Kapiteljska njiva/grave I/5, Kapiteljska njiva/grave III/49, Kapiteljska njiva/tumulus III/sporadically, Kapiteljska njiva/grave V/72, Kapiteljska njiva/grave VI/14, Kapiteljska njiva/grave VI/32, Kapiteljska njiva/grave

¹⁰¹ Peković, Jevtić 2007, 129-130, sl. 3, 8-10; Jevtić, Peković 2007, 192, 201, T. I, 1-3, T. V, 16.

¹⁰² Venclová 1990, 83.

¹⁰³ Venclová 1990, 89.

¹⁰¹ Peković, Jevtić 2007, 129-130, Fig. 3, 8-10; Jevtić, Peković 2007, 192, 201, Pl. I, 1-3, Pl. V, 16.

¹⁰² Venclová 1990, 83.

¹⁰³ Venclová 1990, 89.

njiva tumul XII/nalaz 4 itd. te datiraju iz 5. - 4. st. pr. Kr.¹⁰⁴

Perle od staklene paste te jantarne perle potječu iz nekropole na Budinjaku. Tipovi pronađenih perli od staklene paste na budinjačkoj nekropoli su: perle od neprozirne plave paste s bijelom valovnicom, perle od neprozirne plave paste sa žutom valovnicom, perle od prozirne plave paste s bijelom valovnicom, perle od zelene staklene paste sa žutom valovnicom, perle od neprozirne plave paste sa žutim spiralama i žutim valovitim ukrasom oko rupa, perle od plave staklene paste i perle od zelene staklene paste.¹⁰⁵

S područja rasprostiranja japodske skupine također potječu različiti tipovi perli od staklene paste, ali tip s valovnicom rijetko se publicirao pa nam je tako poznata perla s valovnicom iz Ljubićeva crteža japodskog nakita.¹⁰⁶ Iako postoje nalazišta na kojima se ovaj tip perli pojavljuje već u Ha C stupnju, poput Řepeč u južnoj Češkoj, zatim Hallstatt, Sopron, Beilngries itd., ipak se ove perle mogu kronološki datirati uglavnom u Ha D1 te Ha D2, a posebice u Ha D3-Lt A stupanj.¹⁰⁷ Staklene perle s valovnicom pojavljuju se u grobu 1 tumula XXII u Ilijaku¹⁰⁸ te u grobu 1 tumula IV iz Potpećina, a koji datira iz stupnja Glasinac V, odnosno iz 5. st. pr. Kr.¹⁰⁹

Iz nekropole pod tumulima Sakra kod Romaje u Metohiji, na jugozapadnom dijelu Kosova, poznata nam je jedna perla od zelene staklene paste s bijelom valovnicom. Većina grobova iz Romaje datira iz 6. i 5. st. pr. Kr.¹¹⁰

VII/27, Kapiteljska njiva/grave VII/28, Kapiteljska njiva/grave X/31, Kapiteljska njiva, tumulus XII/find 4, etc. They have been dated to the 5th-4th c. BC.¹⁰⁴

Glass-paste beads and amber beads have also been found in the necropolis at Budinjak. Among the glass-paste beads discovered there, several types can be discerned: beads of opaque blue paste with a white wavy line, beads of opaque blue paste with a yellow wavy line, beads of transparent blue paste with a white wavy line, beads of green glass paste with a yellow wavy line, beads of opaque blue paste with yellow spirals and yellow wavy decoration surrounding the holes, beads of blue glass paste, and beads of green glass paste.¹⁰⁵

Various types of glass-paste beads have also been discovered in the distribution zone of the Japodic group, but the type of bead with wavy line has rarely been published. Thus, we are familiar with the bead with wavy line only from Ljubić's drawing of the Japodic jewellery.¹⁰⁶ Although in some sites this type of bead appears as early as phase Ha C (for example, at Řepečin southern Bohemia, at Hallstatt, Sopron, Beilngries etc.), the majority of such beads can be dated to phases Ha D1 and Ha D2, and especially to Ha D3-Lt A.¹⁰⁷ Glass beads with wavy line have been recorded in grave 1 of tumulus XXII at Ilijak,¹⁰⁸ and in grave 1 of tumulus IV at Potpećine, dating from phase Glasinac V, that is, from the 5th c. BC.¹⁰⁹

A green glass-paste bead with a white wavy line has been recorded in the barrow necropolis of Sakra, near Romaja, in Metohija, in south-western Kosovo. Most of the graves at Romaja have been dated to the 6th and 5th c. BC.¹¹⁰

¹⁰⁴ Križ, Turk 2003, 95, 97, 99-102.

¹⁰⁵ Škoberne 1999, 31, sl. 23.

¹⁰⁶ Bakarić, Križ, Šoufek 2006, 64.

¹⁰⁷ Venclová 1990, 90.

¹⁰⁸ Benac, Čović 1957, T. XXXIV, 33-46.

¹⁰⁹ Benac, Čović 1957, T. XXXXVI, 9-9a.

¹¹⁰ Palavestra 1997, 28-32, T. VIIIa, 25.

¹⁰⁴ Križ, Turk 2003, 95, 97, 99-102.

¹⁰⁵ Škoberne 1999, 31, Fig. 23.

¹⁰⁶ Bakarić, Križ, Šoufek 2006, 64.

¹⁰⁷ Venclová 1990, 90.

¹⁰⁸ Benac, Čović 1957, Pl. XXXIV, 33-46.

¹⁰⁹ Benac, Čović 1957, Pl. XXXXVI, 9-9a.

¹¹⁰ Palavestra 1997, 28-32, Pl. VIIIa, 25.

Iz nekropole Podstenje poznati su nam nalazi perli od plave staklene paste sa žutom valovnicom iz tumula I, koje je 1850. iskopavao Mijat Sabljar te iz tumula II, odnosno iz tumula II-IV, koje je iskopavao Jakob Franjo Tkalec. Budući da se perle s valovnicom pojavljuju kroz dulje vremensko razdoblje, radobojske primjerke datiramo okvirno u 6. i 5. st. pr. Kr.

Ostali nalazi

Geografski najbliža analogija za glačane kamene rukotvorine, odnosno moguće kamene bruseve iz tumula u Podstenju, nalaz je kamenog brusa pravokutnog presjeka s rupom za nasad s Budinjaka, a koji potječe iz groba 4 u kneževskom tumulu 139. Uz spomenuti kameni brus u grobu sa skeletnim ostacima pronađeni su još i keramički ciborij, željezno listoliko koplje, željezni nož s trnastim nastavkom za dršku te željezni okrugli obruč.¹¹¹ Iz kneževskog skeletnoga groba 6, unutar drvene komore pod tumulom 139 na Budinjaku, potječe i dio pojasne garniture, sastavljene od jednostavnoga željeznog koluta okruglog presjeka te još 2 željezna koluta.¹¹² Dvije željezne narukvice rombičnog presjeka potječu iz groba 7 u tumulu 139 na Budinjaku.¹¹³ U Budinjaku su, kao i u grobu 18/1891 iz Hallstatta u Austriji, željezne narukvice pripadale ženskim osobama, a u Novom Mestu čini se da je željezni obruč iz tumula I, groba 16 na Kapiteljskoj njivi, prema položaju u grobu, pripadao muškarcu, odnosno ratniku.¹¹⁴ Parovi narukvica iz groba 18/1891 u Hallstattu¹¹⁵ tipični su dijelovi ženske nošnje.¹¹⁶ Željezni okovi pojasa javljaju se sporadično, a primjer iz Budinjaka može se pridružiti nalazima iz

As regards the Podstenje necropolis, blue glass-paste beads with yellow wavy line were found in tumulus I, excavated in 1850 by Mijat Sabljar, and in tumulus II, i.e. tumuli II-IV, excavated by Jakob Franjo Tkalec. Given that beads with wavy lines appear over a longer period of time, those from Radoboj have been dated roughly to the 6th and 5th c. BC.

Other finds

In terms of geography, the closest analogy for polished stone artefacts, i.e. possible stone whetstones found in the Podstenje tumuli, is a stone whetstone of a rectangular cross-section with a hafting hole discovered at Budinjak, in grave 4 of the princely tumulus 139. The stone whetstone found in this skeletal grave was accompanied by a ceramic ciborium, an iron flat-bladed spear, an iron knife with a hafting tongue and a circular iron hoop.¹¹¹ Princely skeletal grave 6, found within a wooden chamber under tumulus 139 at Budinjak, was also the find site of a belt-set segment, consisting of a simple iron ring of circular cross-section, and an additional two iron rings.¹¹² Two iron bracelets of rhombic cross-section have been found in grave 7 under tumulus 139 at Budinjak.¹¹³ Just as in grave 18/1891 at Hallstatt in Austria, at Budinjak iron bracelets also belonged to women, whereas at Novo Mesto, judging from its position within the grave, it would appear that the iron ring discovered in tumulus I, grave 16 of Kapiteljska Njiva belonged to a man – that is, to a warrior.¹¹⁴ The pairs of bracelets from grave 18/1891 at Hallstatt¹¹⁵ are typical elements of female attire.¹¹⁶ Iron belt mounts have been recorded only sporadically, and the sample from Budinjak can be added to the finds from tumulus 6, grave 1

¹¹¹ Škoberne 1999, 126, T. 5-2.

¹¹² Škoberne 1999, 129, T. 16, 1, 4-5.

¹¹³ Škoberne 1999, 134, T. 20, 2-3.

¹¹⁴ Knez 1993, T. 16, 17, 7.

¹¹⁵ Mahr 1914, 32.

¹¹⁶ Hodson 1990, sl. 12.

¹¹¹ Škoberne 1999, 126, Pl. 5-2.

¹¹² Škoberne 1999, 129, Pl. 16, 1, 4-5.

¹¹³ Škoberne 1999, 134, Pl. 20, 2-3.

¹¹⁴ Knez 1993, Pl. 16, 17, 7.

¹¹⁵ Mahr 1914, 32.

¹¹⁶ Hodson 1990, Fig. 12.

tumula 6, groba 1 u Malencima¹¹⁷ te nedovoljno dokumentiranom grobu iz Vača.¹¹⁸ Budući da nije poznato radi li se u slučaju željeznih karika iz tumula II-IV u Podstenju o dijelovima muške ili ženske nošnje, ili možda čak o dijelovima željezne konjske opreme, interpretacija ovih nalaza nije moguća. Ostali nalazi, poput željeznih sjekira, jantarnih perli i željezne rudače, u starim se objavama o tumulima u Podstenju navode bez dodatnih opisa, stoga im nije moguće nalaziti analogije.

Malobrojne fragmente keramičkog posuđa iz Von Graffenriedovih iskopavanja, koji se čuvaju u Arheološkom muzeju u Zagrebu (P-1688/1-7), čini ukupno 7 nalaza.

U slučaju prvog fragmenta radi se o neukrašenom središnjem dijelu trbuha posude, pečene u redukcijskoj atmosferi tijekom čitavog procesa pečenja. Posuda je bila izrađena od dobro pročišćene gline te joj je površina ispolirana. Sudeći prema obliku, moglo bi se raditi o zdjeli s uvučenim rubom (P-1688/1) (T. 1: 4).

Drugi je fragment također središnji dio trbuha posude, pečen u peći s redukcijskom atmosferom. Riječ je o loše pročišćenoj glini s makroskopski vidljivim primjesama sitnog šljunka, a površina je keramike zaglađivana prije pečenja. Na vanjskoj površini nalazi se plastična aplikacija u obliku bradavice s udubljenjem. Sudeći prema obliku, moglo bi se raditi o loncu većih dimenzija (P-1688/2) (T. 2: 2). Lonci s udubljenim bradavicama pojavljuju se na nalazištima Oloris i Rabeljčja vas te na Šmatevžu kod Gomilskog na prijelazu sa srednjeg u kasno brončano doba, odnosno na početku kasnoga brončanog doba.¹¹⁹ Krajem starijega željeznog doba takve se aplikacije pojavljuju na područ-

at Malenci¹¹⁷ and to the insufficiently documented grave at Vače.¹¹⁸ Given that it is not known whether the iron rings from tumuli II-IV at Podstenje belonged to male or female attire, or possibly to horse gear, the interpretation of those finds remains impossible. Other finds, such as iron axes, amber beads and iron ore, were listed in the old publications of the Podstenje tumuli without any description, and thus they elude any analogies.

There is a total of seven pottery shards resulting from von Graffenried's excavations, which are kept in the Archaeological Museum in Zagreb (P-1688/1-7).

The first of them is an unadorned central part of a vessel's belly, fired in reduction atmosphere during the entire firing process. The vessel was made of well-purified clay, and its surface was polished. Judging by its shape, it could have been a bowl with an inward rim (P-1688/1) (Pl. 1: 4).

The second shard is also a central part of a vessel's belly, fired in a kiln under reduction atmosphere. The clay was not purified well and contained an admixture of macroscopically visible fine gravel. The ceramic's surface was smoothed before firing. The external surface contains a plastic applique – a countersunk extrusion. Judging by its shape, it could have been a large pot (P-1688/2) (Pl. 2: 2). Pots with countersunk extrusions have been recorded at the sites of Oloris and Rabeljčja Vas, and at Šmatevž, near Gomilsko, at the turn of the Middle into the Late Bronze Age, i.e. at the beginning of the Late Bronze Age.¹¹⁹ At the end of the Early Iron Age, such appliques could be found in Lower Carniola.¹²⁰ A vessel with a cork-shaped applique has also been found at the Late Hallstatt site of Zbelava in Varaždinska Podravina

¹¹⁷ Staré 1960/1961, 50, Pl. 3,1.

¹¹⁸ Gabrovec 1962/1963, 317, Pl. 5, 13.

¹¹⁹ Dular, Šavel, Tecco Hvala 2002, Pl. 61:10; Strmčnik Gulič 1988/1989, Pl. 5:5.; Tica, Djurić 2007, 13, 52-53:185.

¹²⁰ Knez 1986, Pl. 45:5; Teržan 1977, Pl. 19:3, 34:8, 42:2.

¹¹⁷ Staré 1960/1961, 50, T. 3, 1.

¹¹⁸ Gabrovec 1962/1963, 317, T. 5, 13.

¹¹⁹ Dular, Šavel, Tecco Hvala 2002, T. 61:10; Strmčnik Gulič 1988/1989, T. 5:5.; Tica, Djurić 2007, 13, 52-53:185.

ju Dolenjske.¹²⁰ Posuda s čepastom aplikacijom poznata je i iz kasnohalštatskog naselja u Zbelavi u Varaždinskoj Podravini.¹²¹ Slične aplikacije kasnije se još pojavljuju u nekropoli na Kapiteljskoj njivi u Novom Mestu, zatim na naselju Kučar kod Podzemelja te na Trnavi, a možemo ih datirati u razdoblje mlađega željeznog doba.¹²²

Treći je fragment keramike središnji dio posude s horizontalno položenom ručkom spljoštenog oblika koja je orijentirana prema vrhu posude u obliku trokutaste aplikacije s okruglastom udubinom u donjem dijelu. Riječ je o redukcijski pečenoj posudi, napravljenoj od slabo pročišćene gline s makroskopski vidljivim primjesama sitnog šljunka. Površina je posude zaglađivana prije pečenja (P-1688/3) (T. 2: 3).

Četvrti fragment keramike predstavlja dio zdjele s uvučenim rubom. Unatoč prilično gruboj fakturi keramike, površina posude dobro je zaglađena prije samog procesa pečenja koji se odvijao u redukcijskoj atmosferi (P-1688/4) (T.1: 1).

Peti fragment keramike čini okrugla ručka manjih dimenzija, smještena na najširem dijelu posude. Keramika je grube fature s makroskopski vidljivim primjesama sitnog šljunka. Posuda je pečena u redukcijskoj atmosferi. Moglo bi se raditi o loncu manjih dimenzija (P-1688/5) (T. 2: 1).

Šesti fragment čini dio posude s ravnim rubom. Na prijelazu između gornjeg i donjeg dijela posude smještena je i stožasta plastična aplikacija, a prema rekonstrukciji, posuda je imala četiri takve aplikacije (T. 1: 3). Riječ je o posudi relativno tankih stijenki, izrađenoj od dobro pročišćene gline te pečenoj u redukcijskoj atmosferi (P-1688/6). Radi se o zdjeli (T. 1: 3).

¹²⁰ Knez 1986, T. 45:5; Teržan 1977, T. 19:3, 34:8, 42:2.

¹²¹ Kovačević 2007, T. 1:8; Kovačević 2012, T. 8:8.

¹²² Križ 2005, T. 12: grob 121-1, T. 18: grob 131-2, T. 30: grob 151:2, T. 36: grob 15-2; Dular, Ciglenečki, Dular 1995, T. 53:10-12; Novšak 2006, T. 59:18.

(the Varaždin Drava region).¹²¹ Similar appliques were later present in the necropolis at Kapiteljska Njiva in Novo Mesto, in the settlement of Kučar, near Podzemelj, and at Trnava; they can be dated to the Late Iron Age.¹²²

The third pottery shard is a central portion of a vessel, with a horizontally set handle of a flattened shape, turned towards the top of the vessel and shaped like a triangular applique with a rounded indentation in its lower part. The vessel was fired under reduction atmosphere, and made of poorly purified clay with an admixture of macroscopically visible fine gravel. The surface was smoothed before firing (P-1688/3) (Pl. 2: 3).

The fourth pottery shard is part of a bowl with an inward rim. Despite the relatively rough ceramic composition, the vessel's surface was well smoothed before the firing process, which took place under reduction atmosphere (P-1688/4) (Pl.1: 1).

The fifth pottery shard is a small round handle, applied to the widest section of a vessel. The ceramic composition is rough, with a macroscopically visible admixture of fine gravel. The vessel was fired under reduction atmosphere. It could have been a small pot (P-1688/5) (Pl. 2: 1).

The sixth shard is part of a vessel with a flat rim. The fragment includes a conic plastic applique at the place where the upper and lower portions of the vessel meet. The reconstruction suggests that the vessel displayed four such appliques (Pl. 1: 3). The vessel's wall was relatively thin, and it was made of well purified clay, and fired under reduction atmosphere (P-1688/6). It was a bowl (Pl. 1: 3).

The last shard is an undecorated part of the conic neck and inward rim of a pot, made of well purified clay, with polished surface, fired

¹²¹ Kovačević 2007, Pl. 1:8; Kovačević 2012, Pl.8:8.

¹²² Križ 2005, Pl. 12: grave 121-1, Pl. 18: grave 131-2, Pl. 30: grave 151:2, Pl. 36: grave 15-2; Dular, Ciglenečki, Dular 1995, Pl. 53:10-12; Novšak 2006, Pl. 59:18.

Posljednji fragment predstavlja neukrašeni dio stožastog vrata i izvučenog ruba lonca, izrađenog od dobro pročišćene gline, ispolirane površine te pečenog u redukcijskoj atmosferi (P-1688/7) (T. 1: 2). Lonci sa stožastim vratom potječu iz kasnohalštatskog naselja kod Zbelave u Varaždinskoj Podravini (tip A6), a smatraju se pokazateljem sačuvane ranije halštatske tradicije.¹²³

Posljednji nalaz iz Podstenja, koji se čuva u Arheološkom muzeju u Zagrebu, predstavlja komad kamena s ugraviranim crtama što prikazuju ljudski lik (P-21318) (T. 2: 4). Kamen je prirodnog oblika, ali gravurama nalikuje na čovjeka, odnosno na torzo, glavu i kosu ili šešir. Riječ je o stijeni masivne strukture lokalnog podrijetla, kakve se nalaze po Strahinjščici. Na donjem dijelu kamena, koji bi predstavljao torzo osobe, nalaze se četiri vertikalno ugravirane rupice što najvjerojatnije predstavljaju gumbe na odjeći, a uz rupice je ugravirano i nekoliko paralelnih linija vertikalne orijentacije, kao i nekoliko kraćih paralelnih linija horizontalne orijentacije, koje bi mogle predstavljati slojeve odjeće ili nabore. Na središnjem dijelu kamena, koji bi predstavljao lice, ugravirane su oči, nos, usta, a čini se i brkovi. Ispod samog lica na stražnjoj strani figurine nalazi se nekoliko paralelno postavljenih linija, vertikalne orijentacije, koje bi prema položaju na figurini trebale predstavljati vrat osobe. Na gornjem dijelu kamena nalazi se nekoliko paralelnih linija vertikalne orijentacije koje bi trebale predstavljati kosu ili možda pokrivalo za glavu. Figurina je samostojeća, visine je 85 mm, širine 36,5 mm, debljine 44 mm te težine 200 g. Budući da se kamena figurina ne spominje ni u jednom od starih izvještaja s iskopavanja, kao ni u jednom dosad objavljenom članku o nekropoli u Podstenju, nije jasno je li uopće

under reduction atmosphere (P-1688/7) (Pl. 1: 2). Pots with conic neck have been found in the Late Hallstatt settlement near Zbelava in Varaždinska Podravina (type A6); they are considered to be evidence of a preserved earlier Hallstatt tradition.¹²³

The final artefact found at Podstenje and kept in the Archaeological Museum in Zagreb is a piece of stone with engraved lines depicting a human silhouette (P-21318) (Pl. 2: 4). The shape of the stone is natural, but the engraving makes it resemble a man, or rather a torso, head and hair (or a hat). The stone comes from a rock of massive structure and local origin, which can be found at Strahinjščica. In the lower part of the stone (supposedly the man's torso), there are four vertically engraved holes, most likely depicting buttons on clothes, and next to these holes there are several vertical parallel lines and several shorter horizontal parallel lines, which could suggest layers of clothes or folds. In the central part of the stone – supposedly the face – the eyes, nose and mouth are engraved, and possibly also a moustache. Below the face, on the back of the figurine, there are several parallel lines, vertically set, which, judging by their position, should depict the neck. On the upper part of the stone there are several vertical parallel lines, supposedly suggesting the hair or even a head covering. The height of this free-standing figurine is 85 mm, it is 36.5 mm wide and 44 mm thick. It weighs 200 g. In view of the fact that the stone figurine is not mentioned in any of the old excavation reports, or in any of the papers concerning the Podstenje necropolis published to date, it is not clear whether it was discovered in Radoboj at all. If indeed it originates from Radoboj, it might be the result of some workers' joke, i.e. a planted find, but it is also possible that it is truly a find made in one of the tumuli. Since the context of this find remains unknown and there are no analogies in the wider region, we will refrain from any further interpretation.

¹²³ Kovačević 2007, 102, 105, sl. 4: A6.

¹²³ Kovačević 2007, 102, 105, Fig. 4: A6.

riječ o nalazu iz Radoboja. Ako se zaista radi o nalazu iz Radoboja, moguće je da je riječ o šali radnika, odnosno o podmetnutom nalazu, a moguće je, naravno, da je zaista riječ o nalazu iz jednog od tumula. Budući da nam je kontekst ovog nalaza nepoznat te da mu na širem području ne nalazimo analogija, ne bismo se upuštali u njegovu daljnju interpretaciju.

Podstenje u kontekstu starijega željeznog doba Zagorja i susjednih područja

Osim nekropole u Podstenju, na području Zagorja dosad su otkrivene još dvije nekropole pod tumulima: nekropola u Ravnom Brezju kod Kumrovca te nekropola pod tumulima u Velikom Trgovišću.¹²⁴ Iz nekropole u Velikom Trgovišću još nemamo poznatih nalaza pa o prapovijesnoj dataciji zaključujemo, uz oprez, na temelju dimenzija promjera tumula koje iznose u prosjeku između 40 i 60 m te visine između 6 i 12 m. U Ravnom Brezju, na području nekropole, u blizini jednog od dvaju potvrđenih zemljanih tumula, pronađeni su arheološki nalazi koji se mogu datirati u starije željezno doba, a riječ je o 11 brončanih narukvica, fragmentu brončane višeglave igle, fragmentima keramičke posude te o kućnom lijepu. Kumrovečki nalazi preliminarno datiraju iz 7. - 6. st. pr. Kr. Na jugozapadnom rubu Zagorja nalazi se utvrđeno visinsko naselje te nekropola u Sv. Križu Brdovečkom. Temelji starije crkve s tlocrtom u obliku križa, kasnosrednjovjekovni grobovi te fragmenti halštatskih posuda pronađeni su probnim sondiranjem, koje je provedeno 1980-ih. Naknadnim iskopavanjima istražena je ukupna površina 270 m², a otkrivene su podnice kuća od zapečene zemlje, fragmenti naseobinske keramike te brončani i željezni nalazi. Naselje je na blagim padinama sa sjeverne strane

¹²⁴ Vinski, Vinski-Gasparini 1962; Škoberne 1999.

Podstenje in the context of the Early Iron Age of Zagorje and the surrounding regions

In addition to Podstenje, two more barrow necropolises have been discovered to date in the region of Zagorje: one at Ravno Brezje, near Kumrovec, and another one at Veliko Trgovišće.¹²⁴ There are still no known finds from the Veliko Trgovišće necropolis, and thus its prehistoric dating is based, with caution, on the tumuli's diameters, ranging on average between 40 and 60 m, and on their heights of between 6 and 12 m. At Ravno Brezje, in the vicinity of one of the two confirmed tumuli, archaeological finds have been recorded, datable to the Early Iron Age. They include 11 bronze bracelets, a fragment of a bronze multiheaded pin, fragments of a ceramic vessel, and house daub. The finds from Kumrovec have been provisionally dated to the 7th and 6th c. BC. At the south-western edge of Zagorje, there is a fortified highland settlement and a necropolis at Sv. Križ Brdovečki. The test pit excavations in the 1980s resulted in the discovery of the foundations of an old church of a cross-shaped ground plan, late-mediaeval graves and fragments of Hallstatt vessels. Subsequent excavation has covered a surface area of 270 m², in which house floors made of fired earth have been found, as well as fragments of settlement pottery, and some bronze and iron finds. On gentle slopes to the north, the settlement was protected by two rows of earthen fortifications, and its prominent position at the site of today's church and graveyard (311 m amsl) granted it a view over the River Sava valley, from Brežice (Brežice Pass) to Podsused, and over the River Sutla valley, from the Sutla's mouth on the Sava to Bizeljsko. The necropolis is situated to the east of the settlement, at a position called Tursko groblje, next to an access road leading to the settlement. It consists of seven skeletal graves, believed by the researchers to have been under earthen tumuli of a diameter of more than 20 m. Through centuries of inten-

¹²⁴ Vinski, Vinski-Gasparini 1962; Škoberne 1999.

bilo zaštićeno dvama redovima zemljanih utvrđenja, a svojim je istaknutim položajem na mjestu današnje crkve i groblja (311 m n. v.) imalo pregled nad dolinom rijeke Save od Brežica (Brežička vrata) do Podsuseda, kao i nad dolinom rijeke Sutle od ušća u Savu do Bizeljskog. Nekropola se nalazi istočnije od naselja, na položaju Tursko groblje, uz pristupni put koji vodi prema naselju, a sastoji se od skeletnih grobova za koje istraživači smatraju da su se nekad možda nalazili pod zemljanim tumulima promjera većeg od 20 metara. Intenzivnom obradom zemlje kroz stoljeća, odnosno rigolanjem za potrebe vinograda te klizanjem zemlje, tumuli su mogli biti u potpunosti izniveilirani. Slučajnim otkrićem te zaštitnim iskopavanjima, koja su uslijedila, 2001. je pronađen skeletni grob muškarca, koji je uz brojne druge nalaze sadržavao i brončanu kacigu tipa Sv. Križ, pravokutnu pojasnu kopču, žvale te ukop konja, a datira iz Ha D stupnja prema srednjoeuropskoj relativnoj kronologiji, odnosno iz 6. st. pr. Kr.¹²⁵ Tijekom iskopavanja 2005. unutar dviju sondi (A i B) na površini od 46 m² otkrivena su četiri groba, od kojih su za usporedbu s nekropolom Podstenje najvažniji grob 3 i grob 4. U grobu 3 pronađeni su, među ostalim, fragmenti keramičke posude, keramički pršljen te staklene perle bijele, plave i žute boje s plastičnim aplikacijama. U grobu 4 pronađene su željezne pločice, koje najvjerojatnije predstavljaju dijelove oklopa, te željezna igla, željezno koplje, vjerojatno i željezni nož, kameni brus i keramika.¹²⁶ Grobovi, prema karakteristikama nalaza, datiraju iz kasnohalštatskog perioda, odnosno iz 6. i 5. st. pr. Kr. Od istraživanih halštatskih nekropola pod tumulima u Međimurju i Podravini, zasad se jedino nalazi iz tumula II u Jalžabetu mogu

sive land cultivation, specifically double-digging for vineyards, and of land erosion, the tumuli could have been completely levelled. Their chance discovery and subsequent excavation in 2001 have resulted in the finding of a male skeletal grave, which contained, among a number of finds, a bronze helmet of the Sv. Križ type, a rectangular belt buckle, horse bits and a horse burial, dating from phase Ha D according to the Central European relative chronology, or the 6th c. BC.¹²⁵ During the 2005 excavation of two test pits (A and B), carried out over a surface of 46 m², four graves were identified; graves 3 and 4 are most important for the comparison with the Podstenje necropolis. In grave 3 there were, among other finds, pottery shards, a ceramic spindle whorl, and white, blue and yellow glass beads with plastic appliques. Iron plates were found in grave 4 – probably elements of armour – as well as an iron pin, iron spear, and possibly also an iron knife, stone whetstone and pottery.¹²⁶ Based on the features of the finds, these graves date from the Late Hallstatt period, that is from the 6th and 5th c. BC. Of all the Hallstatt barrow necropolises in Međimurje and Podravina explored to date, only in tumulus II at Jalžabet were finds discovered that can be dated to the middle of the 6th c. BC, that is, to phase Ha D1 according to the Central European relative chronology. A tumulus excavated at Bistričak, near Jalžabet, contained the burial of a cremated horse (tumulus II). In the tumulus, there was a large number of ceramic, bronze and iron objects; among them, a special group of finds are those characteristic of the eastern, that is Scythian, cultural circle, such as plates of scale body armour, pendants, three-edged arrows etc.¹²⁷ Besides barrow necropolises, individual finds originating from destroyed graves have also been made: for example, a bronze anklet from destroyed skeletal graves

¹²⁵ Cvitković, Škoberne 2003, 221-226.

¹²⁶ Škoberne 2004, 168; Škoberne 2006, 158-160; Cvitković 2008, 196-198.

¹²⁵ Cvitković, Škoberne 2003, 221-226.

¹²⁶ Škoberne 2004, 168; Škoberne 2006, 158-160; Cvitković 2008, 196-198.

¹²⁷ Šimek 1998, 509; Šimek 2004, 114-116.

datirati u sredinu 6. st. pr. Kr., odnosno u Ha D1 stupanj prema srednjoeuropskoj relativnoj kronologiji. Na Bistričaku kod Jalžabeta istražen je tumul (tumul II) s ukopom kremiranog konja. U tumulu je pronađena velika količina keramičkih, brončanih i željeznih predmeta, a posebnu grupu predmeta čine nalazi karakteristični za istočni, odnosno skitski kulturni krug, poput pločica ljuskastog oklopa, privjesaka, trobridnih strelica itd.¹²⁷ Osim nekropola pod tumulima, poznati su pojedinačni nalazi iz uništenih grobova, poput brončane nanogvice iz uništenih skeletnih grobova u Kostelu kod Pregrade¹²⁸ (T. 3: 1) te sličnog primjerka nanogvice s Kamenjaka kod Donje Stubice¹²⁹ (T. 3: 2), a koji također datiraju iz starijega željeznog doba, najvjerojatnije iz 6. st. pr. Kr. Slična nanogvica nedavno je pronađena i na Velikom Taboru.¹³⁰ Nekoliko sličnih, iako masivnijih nanogvica s narebnjenjima, potječe i iz groba u Sv. Petru Ludbreškom, pronađenom 1897. godine. U grobu su se, osim para brončanih nanogvica, nalazili još i dijelovi brončanog kotlića s križnim atašama grupe C prema G. von Merhartu te ogrlica koja nije sačuvana. Iako o načinu pokopa i strukturi groba nema sačuvanih podataka, pronađeni arheološki nalazi datiraju, prema analogijama sa sličnim predmetima pronađenima na susjednim područjima, iz druge polovice 6. st. pr. Kr., odnosno iz Ha D stupnja.¹³¹ Kod Lepoglave, na trasi željezničke pruge 1890. godine, otkriven je skeletni grob s jednom zlatnom narukvicom te dvije bron-

at Kostel, near Pregrada¹²⁸ (Pl. 3: 1), and a similar anklet from Kamenjak, near Donja Stubica¹²⁹ (Pl. 3: 2). Both date from the Early Iron Age, probably from the 6th c. BC. Recently, a similar anklet has been found at Veliki Tabor.¹³⁰ Several similar, though more massive, anklets with ribs were also found in a grave at Sv. Petar Ludbreški, discovered in 1897. In addition to a pair of bronze anklets, the grave also contained fragments of a small bronze cauldron with cross-shaped attachments for a handle of group C according to G. von Merhart, and a necklace which has not been preserved. Although there are no data concerning the burial method and grave structure, the discovered archaeological material originates from the second half of the 6th century BC, that is, from phase Ha D (based on analogies with similar objects found in the neighbouring region).¹³¹ In 1890, a skeletal grave was discovered near Lepoglava, on the route of the railway line. It contained a gold bracelet and two bronze pins.¹³² Although the grave's dating is uncertain, it is mentioned here because of the chance find of a gold conic fibula from Čakovec, currently kept in the Hungarian National Museum (Hun. Magyar Nemzeti Múzeum) in Budapest, originating from the 6th c. BC.¹³³ Finally, we should also mention destroyed cremation graves at Dolje near Podsused, in which many potsherds and ceramic weights have been found (Pl. 3: 4-5); a blue glass-paste bead has also been mentioned in this context (Pl. 3: 3), but it is more

¹²⁷ Šimek 1998, 509; Šimek 2004, 114-116.

¹²⁸ Ljubić 1889, 59; Klemenc, Saria 1939, 34; Šimek 1990, 62, br. 190; Šimek 1997, 72, br. 141.

¹²⁹ Klemenc 1938, 63-64; Lipovac, Ivančan 1993, 38; Pavišić 2007, 14-17.

¹³⁰ Prema Inventarnoj knjizi Dvora Veliki Tabor. Ovom prigodom zahvaljujem Nadici Jagarčec i Siniši Žnidarcu na uvidu u muzejsku građu i dokumentaciju Dvora Veliki Tabor.

¹³¹ Balen-Letunić 1984, 69-72, T. I.

¹²⁸ Ljubić 1889, 59; Klemenc, Saria 1939, 34; Šimek 1990, 62, No. 190; Šimek 1997, 72, No. 141.

¹²⁹ Klemenc 1938, 63-64; Lipovac, Ivančan 1993, 38; Pavišić 2007, 14-17.

¹³⁰ According to the Inventory Ledger of Veliki Tabor Castle. I would like to take this opportunity to thank Nadica Jagarčec and Siniša Žnidarec for the opportunity to inspect the museum artefacts and documentation of Veliki Tabor Castle.

¹³¹ Balen-Letunić 1984, 69-72, Pl. I.

¹³² Ljubić 1890, 108; Klemenc, Saria 1936, 17; Šimek 1990, No. 164; Šimek 1997, 117, No. 346; Šimek 2003, 152.

¹³³ Vinski 1959, 226, Pl. 9/82; Glogović 2003, 99.

čane igle.¹³² Iako nije sigurno iz kojeg je razdoblja bio taj grob, ovdje ga navodimo zbog slučajnog nalaza zlatne čunjaste fibule iz Čakovca, koja se trenutačno nalazi u Magyar Nemzeti Múzeumu u Budimpešti, a datira iz 6. st. pr. Kr.¹³³ Na kraju, treba spomenuti i uništene paljevinske grobove iz Dolja kod Podsuseda, u kojima je pronađeno mnoštvo fragmentiranoga keramičkog posuđa i keramičkih utega (T. 3: 4-5), a u tom kontekstu spominje se i perla od plave staklene paste (T. 3: 3), koja je ipak vjerojatnije porijeklom iz obližnjega uništenog naselja na položaju nekadašnje ciglane »Croatia« u Podsusedu.¹³⁴ U odnosu na malobrojne nekropole i pojedinačne uništene grobove, ili ravna groblja, halštatska naselja Zagorja poznata su nam u puno većem broju, ali ta tema prelazi opseg ovoga rada.¹³⁵

Iako nemamo dovoljno podataka kojima bismo znanstveno argumentirali početak i završetak pokopavanja na nekropoli pod tumulima u Podstenju na temelju detaljnih opisa tipova perli od staklene paste, smatramo da je nekropola u upotrebi tijekom stupnjeva Ha D2 i Ha D3-Lt A prema srednjoeuropskoj relativnoj kronologiji starijega željeznog doba, odnosno krajem 6. te tijekom 5. st. pr. Kr. Na temelju pogrebnog postupka, odnosno spaljivanja pokojnika, nekropolu možemo pripisati grupi Martijanec-Kaptol, međutim, na temelju repertoara nalaza iz tumula, a posebice nakita od staklene paste i jantara,

¹³² Ljubić 1890, 108; Klemenc, Saria 1936, 17; Šimek 1990, br. 164; Šimek 1997, 117, br. 346; Šimek 2003, 152.

¹³³ Vinski 1959, 226, T. 9/82; Glogović 2003, 99.

¹³⁴ Klemenc 1938, 15; Radovčić, Škoberne 1989, 122, 125, 139.

¹³⁵ U pripremi je znanstveni članak o halštatskim nekropolama i pojedinačnim nalazima iz grobova s područja Zagorja te se njegova objava planira u sljedećem broju VAMZ-a, a dio rezultata vezan uz nekropolu u Kumrovcu predstavljen je i na godišnjoj konferenciji EAA u Plzenu u Češkoj 7. 9. 2013.

likely that it originates from the nearby destroyed settlement, at the site of the former "Croatia" brick factory in Podsused.¹³⁴ In comparison to the small number of necropolises, destroyed individual graves and flat graveyards in Zagorje, many more Hallstatt settlements are known in this region, but this topic goes beyond the scope of this paper.¹³⁵

Although we lack sufficient data on which to base a scientific argument concerning the beginning and the end of burials at the barrow necropolis of Podstenje, on the basis of the detailed descriptions of types of glass-paste beads, we believe that the necropolis was used during phases Ha D2 and Ha D3-Lt A according to the Central European Early Iron Age relative chronology, i.e. in the late 6th and during the 5th c. BC. The burial ritual (cremation) leads to the conclusion that the necropolis can be attributed to the Martijanec-Kaptol group, but the repertoire of finds discovered in the tumuli, and especially jewellery made of glass paste and amber, make this necropolis more similar to the Lower Carniola group. It is worth reiterating that, in the reports on excavations at the Podstenje tumuli, traces of cremation of the deceased at the site at which a tumulus was subsequently erected are mentioned in the cases of tumulus I and tumulus V, while in the case of tumulus VI, remains of cremated bones in a ceramic urn are recorded.¹³⁶ Traces of coal and ashes are brought up in the descriptions of finds from tumuli II, III and IV.¹³⁷ The reports on excavation of tumuli VII-XI make no direct mention of remains

¹³⁴ Klemenc 1938, 15; Radovčić, Škoberne 1989, 122, 125, 139.

¹³⁵ A scientific paper on Hallstatt necropolises and individual finds from graves in the region of Zagorje is being prepared, with a view to publishing it in the next edition of the VAMZ. Some of the results relating to the Kumrovec necropolis were presented at the EAA Annual Conference held in Plzen, Czech Republic, on 7 September 2013.

¹³⁶ Morlot 1851, 295-296; Archiv für KÖG-Q 1863, 307.

¹³⁷ Archiv für KÖG-Q 1851, 237.

nekropola je sličnija dolenskoj grupi. Još jednom valja napomenuti da se u izvještajima o iskopavanjima tumula u Podstenju tragovi spaljivanja pokojnika na položaju kasnijeg podizanja tumula spominju kod tumula I te kod tumula V, dok se u slučaju tumula VI spominju ostaci spaljenih kostiju u keramičkoj žari.¹³⁶ Tragovi ugljena i pepela spominju se u opisima nalaza iz tumula II, III i IV.¹³⁷ U izvještajima o iskopavanjima tumula VII-XI izrijekom se ne spominju ostaci spaljenih osoba, no pretpostavljamo da je pogrebni postupak bio sličan, ili identičan, onome u tumulima I, II, III i IV, odnosno da bi istraživači izvijestili o postojanju eventualnih razlika u pogrebnom postupku, kao što je to učinjeno u slučaju tumula VI. Snažan utjecaj dolenske grupe tijekom kasnohalštatskog razdoblja, na prostoru sjeverozapadne Hrvatske, vidljiv je i na drugim nekropolama, npr. u Sv. Križu Brdovečkom i Ravnom Brezju kod Kumrovca, kao i u nalazima iz uništenih grobova, poput Donje Stubice i Kostela te Sv. Petra Ludbreškog. Na nekropoli u Sv. Križu Brdovečkom, na položaju Tursko groblje, pogrebni je ritual inhumacijski, što se može objasniti neposrednom blizinom područja rasprostiranja dolenske skupine. Tijekom 6. st. pr. Kr. imamo zabilježene snažne skitske utjecaje u Varaždinskoj Podravini, poput nalaza iz tumula II u Jalžabetu, a koje neki istraživači starijega željeznog doba ovih prostora, zajedno s mogućom kugom u Noriku koju spominje Vergilije, dovode u vezu s prestankom postojanja većine naselja i nekropola grupe Martijanec-Kaptol.¹³⁸ Osim u nalazima iz nekropola i uništenih grobova, jak utjecaj dolenske skupine primjećuje se i na, doduše zasad malobrojnim, istraživanim naseljima na prostoru sjeverozapadne Hrvatske, a koja egzistiraju tijekom kasnohalštatskog razdoblja.¹³⁹

¹³⁶ Morlot 1851, 295-296; Archiv für KÖG-Q 1863, 307.

¹³⁷ Archiv für KÖG-Q 1851, 237.

¹³⁸ Teržan 1998, 526.

¹³⁹ Kovačević 2012, 65-68.

of cremated bodies, but we can assume that the burial ritual was similar, or identical, to that employed in tumuli I, II, III and IV –that is, that the researchers would have reported had there been any differences in the burial ritual, as they did in the case of tumulus VI. Strong influence from the Lower Carniola group in the territory of north-west Croatia during the Hallstatt period is also visible in other necropolises, for example, at Sv. Križ Brdovečki and at Ravno Brezje, near Kumrovce, and on finds from destroyed graves, such as those in Donja Stubica and Kostel, and Sv. Petar Ludbreški. In the necropolis at Sv. Križ Brdovečki, at a position called Tursko groblje, the burial ritual consisted of inhumation, which can be explained by the closeness of the distribution zone of the Lower Carniola group. During the 6th c. BC, strong influence from the Scythians was felt in Varaždinska Podravina (the Varaždin Drava region), reflected, for example, in the finds from tumulus II at Jalžabet. Some researchers of the Early Iron Age of this region link this to a possible plaque in Noricum cited by Vergil, and also to the disappearance of the majority of settlements and necropolises of the Martijanec-Kaptol group.¹³⁸ Besides the finds from necropolises and destroyed graves, the strong influence of the Lower Carniola group can also be observed in (for the time being, the small number of) settlements of the Late Hallstatt period excavated in north-west Croatia.¹³⁹

If we accept the reports on the excavations at Podstenje, which only mention cremation burials, we could conclude that the Podstenje necropolis was used by a Late Hallstatt community of the Martijanec-Kaptol group, which had ties with the Lower Carniola group (probably through a complex system of trade and barter). Although it is not clear when burials at this necropolis were discontinued, and when the nearby settlements at Plat/Nagora and Hajdine Zerne disappeared, the complex system of fortification at the eastern access

¹³⁸ Teržan 1998, 526.

¹³⁹ Kovačević 2012, 65-68.

Ako prihvatimo izvještaje o iskopavanjima Podstenja, a koji spominju isključivo pogrebni postupak spaljivanja, mogli bismo ustanoviti da se u slučaju Podstenja radi o kasnohalštatskoj zajednici skupine Martijanec-Kaptol, koja je povezana s dolenskom skupinom, najvjerojatnije putem složenog sustava trgovine i razmjene. Iako nije sigurno kad prestaje pokopavanje na ovoj nekropoli te kada prestaju egzistirati obližnja naselja na Platu/Nagori i Hajdinem zernu, postojanje složenog sustava fortifikacija na istočnom prilazu naselju Plat/Nagora ukazuje na postojanje opasnosti s istoka, odnosno iz smjera Podravine. Nekoliko fragmenata keramike, koji se mogu pripisati latenskoj kulturi, potječe iz naselja na Hajdinem zernu. Spomenuti fragmenti, iako malobrojni, sugeriraju naseljavanje toga područja i u mlađem željeznom dobu, a na pitanje je li riječ o kontinuitetu ili diskontinuitetu naseljavanja, odgovor bi trebala dati buduća arheološka istraživanja.

Zaključak

Prapovijesna nekropola pod tumulima u Podstenju na Maloj gori kod Radoboja iz više je razloga jedinstveno arheološko nalazište. Složena povijest nestručnih iskopavanja, provedenih između 1850. i 1860. godine, nastavila se rijetkim i sažetim izvještajima istraživača o pronađenim nalazima i zatečenim pojavama, a zatim i pogreškama kasnijih autora u dataciji i lociranju nalazišta tijekom čitavog 20. stoljeća. U uvjerenju da je riječ o antičkom lokalitetu, kasniji istraživači prapovijesti nisu se obazirali na ovo nalazište čija je uloga u rasvjetljavanju događanja i rekonstrukciji života u starijem željeznom dobu Zagorja i sjeverozapadne Hrvatske u najmanju ruku iznimna.

Na temelju svih dostupnih podataka iz različitih institucija, malobrojnih preostalih

to the settlement at Plat/Nagora indicates that danger came from the east, from the direction of Podravina. Several potsherds attributable to the La Tène culture have been recorded in the settlement at Hajdine Zerne. These fragments, although scarce, suggest that the area was also inhabited in the Late Iron Age. However, future archaeological research should provide an answer to the question whether the inhabitation was continuous or not.

Conclusion

Several considerations make the prehistoric barrow necropolis of Podstenje at Mala Gora, near Radoboj, a unique archaeological site. The complex history of unprofessional excavations, carried out between 1850 and 1860, was followed throughout the 20th c. by rare and concise reports on discovered material and observed phenomena, and also by mistakes of subsequent researchers as regards the dating and location of the site. Convinced that this site dated from Classical Antiquity, later scholars ignored it, although its role in clarifying the events and reconstructing the life of the Early Iron Age in Zagorje and north-west Croatia is exceptional, to say the least.

Using all available data sourced from various institutions, the small number of remaining preserved archaeological finds and the current condition of the necropolis, this paper is an effort to restore this site to its rightful place among the prehistoric archaeological sites of Zagorje.

In the majority of cases, it has been possible to propose reconstructions of graves under the tumuli, while in some cases the distribution of discovered objects in the tumulus is unclear, and it remains uncertain whether the tumulus encompassed one or two graves. The majority of the total number of 11 earthen tumuli contained individual graves, and in the remaining cases it is not clear whether one or possibly two deceased were buried therein. In the latter case, the two deceased were

sačuvanih arheoloških nalaza te današnjeg stanja nekropole, u ovom se članku nekropoli u Podstenju pokušalo vratiti zasluženo mjesto među prapovijesnim nalazištima Zagorja.

Prijedlozi rekonstrukcija grobnih cjelina u tumulima u većini su slučajeva ipak bili mogući, dok u slučaju nekoliko tumula ostaje nejasan raspored predmeta te postojanje jednog ili dva groba u pojedinim tumulima. U većini od ukupno 11 zemljanih tumula pokopani su pojedinci, dok za preostale nije sigurno radi li se o pojedinačnim ili možda dvojnim grobovima, u potonjem slučaju, najvjerojatnije žene i muškarca. Tijelo pokojnika je spaljeno na mjestu podizanja tumula, a zatim su na ostatke kostiju i pepeo pridodani dijelovi nošnje te grobni priloz i u obliku keramičkog posuđa ili, u jednom slučaju, željezne rudače. Takav pogrebni postupak razlikuje se samo u slučaju jednog tumula, u kojem su ostaci, najvjerojatnije ženske osobe, spaljeni te zatim položeni u urnu, u koju je potom dodana jantarna perla te je nasut zemljani humak. Budući da je pokopavanje u urnama karakteristično za kasno brončano doba te za ranija razdoblja starijega željeznog doba u sjeverozapadnoj Hrvatskoj, moguće je da se radi o najstarijem grobu ove nekropole. No to je, zbog nedostatka pouzdanih podataka, zasad samo pretpostavka.

Na temelju repertoara nalaza moglo bi se zaključiti da se ne radi o raskošnim grobovima, poput onih na susjednim područjima. Međutim, čak i malobrojni nalazi u tumulima u Podstenju ukazuju na međusobne razlike pokopanih osoba. U dva je tumula pronađeno isključivo keramičko posuđe, a dva tumula nisu sadržavala nikakve arheološke nalaze. Prema dimenzijama, tumuli se previše međusobno ne razlikuju, a nije ustanovljen ni smisao u međusobnom rasporedu tumula, osim da je riječ o skupini tumula. U slučaju dva

probably a woman and a man. The deceased's body was buried at the spot at which the tumulus was subsequently erected. Parts of the deceased's attire and grave goods consisting of ceramic vessels and, in one case, iron ore, were then added to the bone remains and ashes. The burial ritual was different in only one case, in which the remains, probably of a woman, were cremated and then placed in an urn, with the addition of an amber bead, and the urn was then covered with an earthen mound. In view of the fact that burials in urns are characteristic of the Late Bronze Age and early phases of the Early Iron Age in north-west Croatia, this could be the earliest grave in the necropolis. However, in view of the insufficiency of reliable data, for the time being this remain an assumption.

The repertoire of finds leads to the conclusion that the graves were not lavish, as were those in the surrounding areas. However, even the small number of finds from the Podstenje tumuli point to differences between the individuals buried. Two tumuli contained only pottery, and in a further two no archaeological finds have been discovered. As regards their dimensions, there are no major differences among the tumuli, and no explanation for their distribution has been established either, other than that this is a group of tumuli. It is assumed that a man is buried under each of two tumuli, while in a further three the finds suggest burials of women. The reliable data are too scarce to allow determination of gender of the deceased under other tumuli. As regards their attire, women are identified by jewellery consisting of glass and amber beads, while men's attributes are iron axes. At this site, the discovered iron rings, iron ore and polished stone artefacts cannot be attributed with certainty to either gender. In view of the repertoire of finds, the Podstenje necropolis displays many similarities with communities which lived in the Lower Carniola region of neighbouring Slovenia in the Early Iron Age, although they had a different burial rit-

tumula pretpostavlja se da je u njima pokopan muškarac, dok se pokopavanje ženske osobe pretpostavlja na temelju nalaza u trima tumulima. O ostalim tumulima nemamo dovoljno pouzdanih podataka za određivanje spola pokojnika. Od dijelova nošnje, ženske osobe karakterizira nakit od staklenih i jantarnih perli, a kao obilježje muškaraca mogu se izdvojiti željezne sjekire. Kad je riječ o ovome nalazištu, željezne karike, željeznu rudaču te glačane kamene rukotvorine zasad nije moguće sa sigurnošću pripisati nijednom spolu. Prema repertoaru nalaza, nekropola u Podstenju pokazuje velike sličnosti sa zajednicama koje su u starijem željeznom dobu naseljavale područje Dolenjske u susjednoj Sloveniji, iako se od njih razlikuju pogrebnim postupkom. O povezanosti Zagorja i Dolenjske u starijem željeznom dobu svjedoče i drugi nalazi dolenjskog porijekla s područja Zagorja, a riječ je prije svega o primjercima brončanog nakita iz Kumrovca, Kostela, Donje Stubice i Velikog Tabora koji se obrađuju u kontekstu halštatskih nekropola Zagorja u zasebnom članku. Spaljivanjem pokojnika, ova je zajednica najbližnja zajednicama grupe Martijanec-Kaptol.

Iz podataka o nekropoli u Podstenju, objavljenih u izdanjima Austrijske akademije znanosti tijekom 50-ih i 60-ih godina 19. stoljeća, definirani su pojedini kronološki osjetljivi tipovi perli. Na temelju ustanovljenih analogija sa srodnim predmetima iz susjednih područja, nekropolu pod tumulima Podstenje preliminarno datiramo u 6. i 5. st. pr. Kr., odnosno u Ha D2 i Ha D3-Lt A stupnjeve prema srednjoeuropskoj relativnoj kronologiji.

Položaj nekropole pod tumulima, zaštićen Platom s juga te masivom Strahinjščice sa sjevera, ujedno se nalazi između dvaju otkrivenih prapovijesnih naselja. Broj pokopanih osoba, koji bi mogao varirati između 11 i 20 ljudi, svakako ne odgo-

ual. Some other finds originating from Lower Carniola and discovered in Zagorje also testify to links between Zagorje and Lower Carniola in the Early Iron Age: primarily bronze jewellery, found at Kumrovec, Kostel, Donja Stubica and Veliki Tabor, which will be discussed in a separate paper focusing on the Hallstatt necropolises in Zagorje. Cremation of the deceased, employed by this community, makes it most similar to the communities of the Martijanec-Kaptol group.

The data on the Podstenje necropolis, published in the 1850s and 1860s in publications of the Austrian Academy of Science, have been used to define certain chronologically-sensitive types of beads. On the basis of established analogies with similar objects from the neighbouring regions, the barrow necropolis of Podstenje has been provisionally dated to the 6th and 5th c. BC, i.e. to phases Ha D2 and Ha D3-Lt A according to the Central European relative chronology.

The barrow necropolis, protected by Plat on its southern side and the Strahinjščica massif to the north, is situated between two identified prehistoric settlements. The number of people buried in the necropolis lies somewhere between 11 and 20, and as such does not correspond to the size of those prehistoric settlements discovered at Plat/Nagora and at Hajdine Zerne, or to the settlement at Crkviše, located somewhat farther off. The conclusion can be drawn that only a small number of the members of the community were buried in this necropolis, while the burial ritual employed for other inhabitants of those settlements, and the locations of their graves, remain unknown.

Bearing in mind the condition of the necropolis, future exploration will be non-destructive, similar to the recent archaeological field survey, with a view to preserving the badly damaged archaeological site. Geophysical survey of the tumuli and the narrow zone of the necropolis is planned for 2014, and the entire site should also be scanned by LiDAR.

vara dimenzijama prapovijesnih naselja, otkrivenih u neposrednoj blizini nekropole, na Platu/Nagori te na Hajdinem zernu, ili na malo udaljenijem Crkvišu. Može se zaključiti da je samo manji broj pripadnika zajednice pokopan na ovoj nekropoli, dok nam pogrebni postupak ostalih članova zajednice, kao i lokacija njihova groba, ostaju nepoznati.

Zbog stanja nekropole, buduća će istraživanja biti nedestruktivnog karaktera, poput nedavno provedenoga arheološkog rekognosciranja, a u cilju očuvanja ovog teško oštećenoga arheološkog nalazišta. Tijekom 2014. planiraju se geofizikalna snimanja tumula i užeg područja nekropole, a čitavo nalazište planira se snimiti i lidarski. Buduća sondiranja, što se planiraju provesti na obližnjim prapovijesnim naseljima, trebala bi pružiti više podataka o prapovijesnim zajednicama koje su naseljavale radobojsko humlje u starijem željeznom dobu, a otkriće površinskoga eksploatacijskog okna limonitne žile u kontekstu naselja na Hajdinem zernu, zbog svoje jedinstvenosti, otvara mnoga pitanja o lokalnom eksploatiranju željezne rudače i izradi željeznih predmeta na području Zagorja te o vezama radobojskih prapovijesnih zajednica s drugim, njima istovremenim zajednicama na području Zagorja i susjednih regija. Kompleksan sustav fortifikacija, otkriven na naselju Plat/Nagora, svjedoči o nemirnim vremenima i opasnostima od kojih se ta zajednica pokušala obraniti, a daljnjim istraživanjima pokušat će se otkriti i razlog prestanka naseljavanja na radobojskom humlju.

Future text-pit excavations, planned on the nearby prehistoric settlements, should provide more data on the prehistoric communities that lived in the hill region of Radoboj in the Early Iron Age, and the unique discovery of the surface exploitation pit of the limonite basset within the context of the settlement at Hajdine Zerne raises a number of questions concerning the local exploitation of iron ore and production of iron objects in Zagorje, and on links between the prehistoric communities of Radoboj and other contemporary communities in Zagorje and the neighbouring regions. The complex system of fortifications discovered by the settlement at Plat/Nagora testifies to the turbulent times and the community's efforts to defend itself from dangers. Further research will try to establish the reason for discontinued settlement of the hill region of Radoboj.

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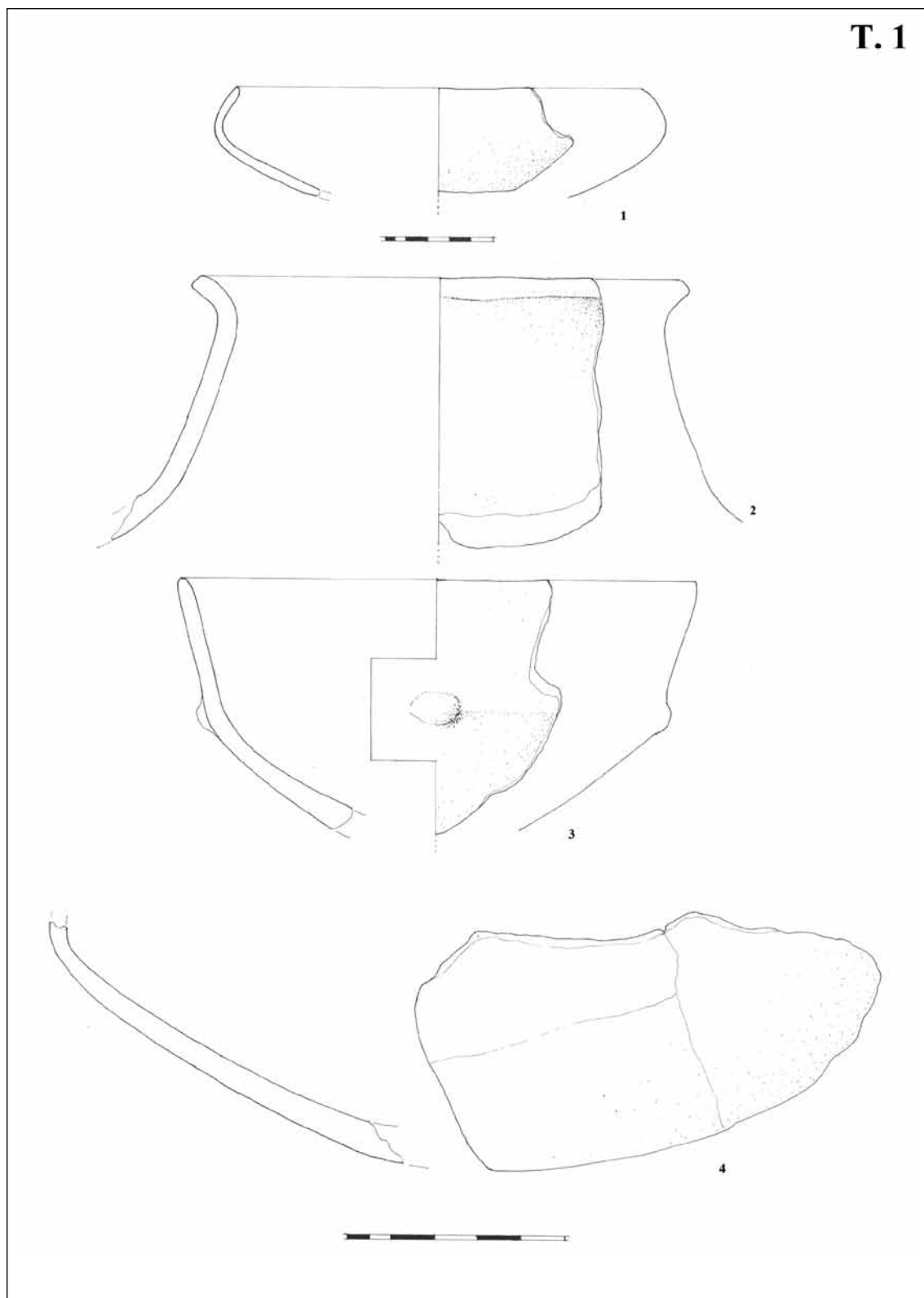


Tabla / Plate 1: Dio nalaza iz iskopavanja E. von Graffenrieda (najvjerojatnije iz tumula VIII) u Arheološkom muzeju u Zagrebu. 1-4 keramika / Some of the finds excavated by E. von Graffenried (probably from tumulus VIII) in the Archaeological Museum in Zagreb. 1-4 – pottery (crtež / drawing by M. Galić)

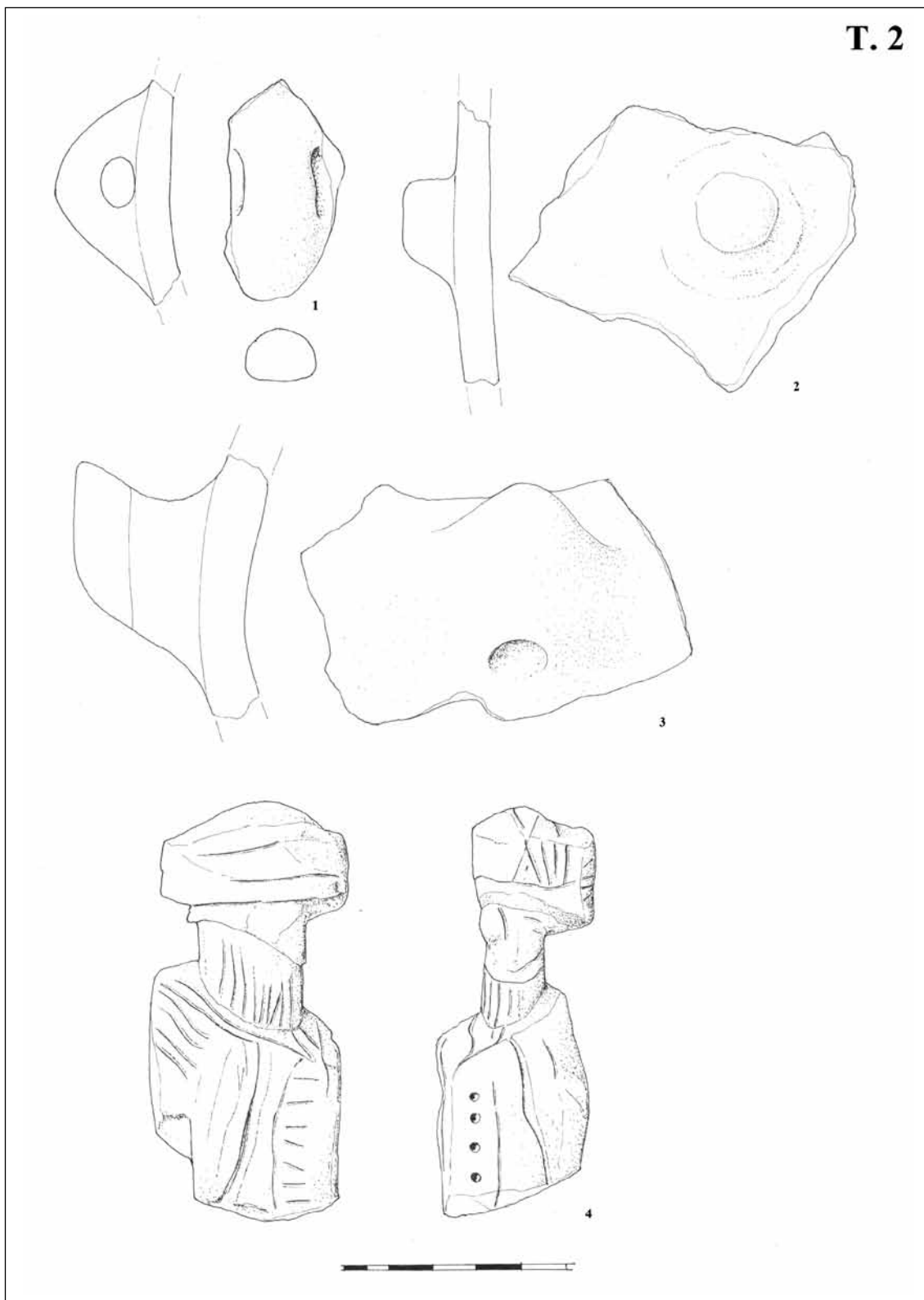


Tabla / Plate 2: Dio nalaza iz iskopavanja E. von Graffenrieda (najvjerojatnije iz tumula VIII) u Arheološkom muzeju u Zagrebu. 1-3 keramika, 4 kamena figurina / Some of the finds excavated by E. von Graffenried (probably from tumulus VIII) in the Archaeological Museum in Zagreb. 1-3 – pottery, 4 – stone figurine (crtež / drawing by M. Galić)

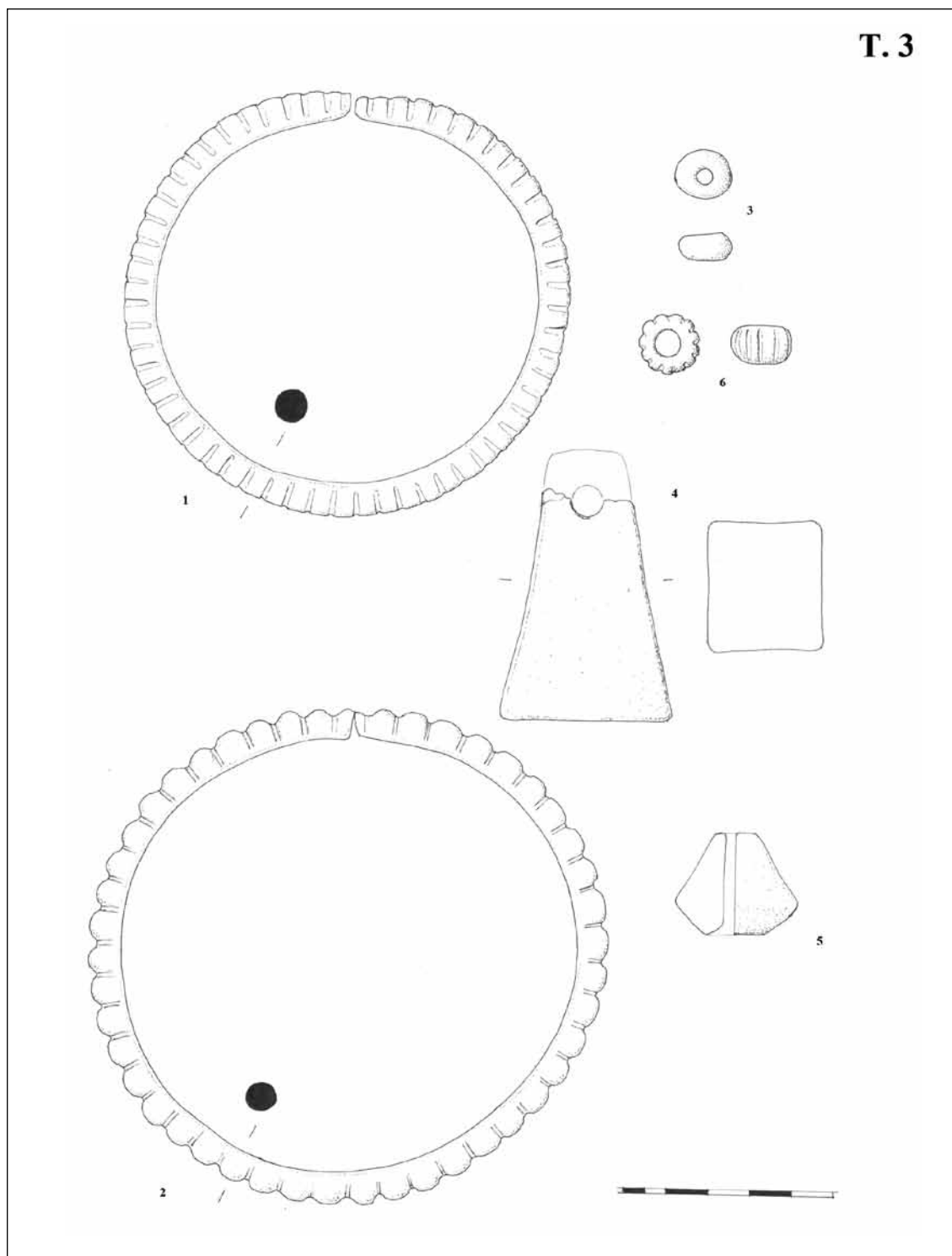


Tabla / Plate 3: Slučajni nalazi s područja Zagorja, uglavnom iz uništenih grobova. 1 – brončana nanogvica (Kostel), 2 – brončana nanogvica (Donja Stubica-Kamenjak), 3 – perla od staklene paste (Podsused-Dolje/Goljak), 4 – piramidalni keramički uteg (Podsused-Dolje), 5 – bikonični keramički uteg (Podsused-Dolje), 6 – perla od staklene paste s narebnjima (Radoboj-Podstenje) / Chance finds from the Zagorje region, mostly from destroyed graves. 1 – bronze anklet (Kostel), 2 – bronze anklet (Donja Stubica-Kamenjak), 3 – glass-paste bead (Podsused-Dolje/Goljak), 4 – pyramidal ceramic weight (Podsused-Dolje), 5 – biconic ceramic weight (Podsused-Dolje), 6 – ribbed glass-paste bead (Radoboj-Podstenje) (crtež / drawing by M. Galić)

Tumul	Promjer (m)	Staklene perle	Jantar. perle	Kameni brus	Željezna sjekira	Željezna karika	Željezna rudača	Keramičko posude	Spol	Broj osoba	Opaska
I	12	2 pl. sa žut. val.; žute	0	0	1	0	Da	5	Ž/M	1 ili 2	4 kamena
II	između 8 i 14	pl. sa žut. valov.	0	0	0	2	0	Da	Ž/M	1 ili 2	Nesiguran kontekst
III	između 8 i 14	žut. s.4 para pl.-bij. očiju	više kom.	0	1	1	0	Da	Ž/M	1 ili 2	Nesiguran kontekst
IV	između 8 i 14	žute	0	0	0	0	0	Da	Ž	1	Nesig. kontekst
V	14,4	0	0	više kom.	0	0	0	Da	M	1 ili više	
VI	11,6	0	1	0	0	0	0	0	Ž	1	Ostaci u urni
VII	14	0	0	1	0	0	0	Da	M	1	
VIII	8,4	1 plava narebrena perla	0	0	0	0	0	Da	Ž	1	
IX	9,6	0	0	0	0	0	0	Da	?	?	
X	12	0	0	0	0	0	0	0	?	?	
XI	11,6	0	0	0	0	0	0	0	?	?	

Tablica / Table 1: Nekropola pod tumulima u Podstenju kod Radoboju – prijedlog rekonstrukcije grobnih cjelina tumula I-XI / Barrow necropolis of Podstenje near Radoboj – proposal for a reconstruction of grave units of tumuli I-XI (autor / author D. Špoljar, 2013.)



Sl. / Fig. 9: Panoramski pogled na dio tumula (tumuli V-XI) nekropole Podstenje na Maloj gori kod Radoboja / Panoramic view of some of the tumuli (tumuli V-XI) in the necropolis of Podstenje at Mala Gora near Radoboj (snimio / photo by D. Špoljar)