

# O pogrebnim običajima u 11. st. pr. Kr. na jugu Karpatske kotline (primjer: groblje u Slatini)

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# O pogrebnim običajima u 11. st. pr. Kr. na jugu Karpatske kotline (primjer: groblje u Slatini)

## *On Burial Practices in the Southern Carpathian Basin in the 11<sup>th</sup> Century BC (Case Study: Cemetery in Slatina)*

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*Vrijeme 11. st. pr. Kr. na jugu Karpatske kotline obilježila je kultura polja sa žarama. Kasnobrončanodobno groblje u Slatini, istraženo 2009. godine, prema tipološko-kronološkoj analizi prikupljenih keramičkih i metalnih nalaza datira se u Ha A2 stupanj prema H. Müller-Karpeu. Apsolutni radiokarbonski datumi iz grobova u Slatini upućuju na vrijeme 11. st. pr. Kr. Istraženih 38 grobova nudi mogućnost rekonstrukcije pogrebnih običaja u središnjem dijelu Podravine, a geografski položaj Slatine omogućuje povezivanje dokumentiranih pogrebnih običaja sa širom komunikacijskom mrežom istovremenih istraženih groblja na širem prostoru južnog dijela Karpatske kotline.*

*Gljučne riječi: kasno brončano doba, kultura polja sa žarama, Slatina, srednja Podravina, groblje, pogrebni običaji*

*The 11<sup>th</sup> cent. BC in the southern Carpathian Basin was marked by the Urnfield culture. The typological and chronological analysis of the ceramic and metal finds collected in the Late Bronze Age cemetery in Slatina, excavated in 2009, date the cemetery to the Ha A2 phase according to the periodization of H. Müller-Karpe. Absolute radiocarbon dating from the Slatina graves suggests the period of the 11<sup>th</sup> cent. BC. The analyzed 38 graves give the opportunity to reconstruct the burial practices on the central Drava, while the geographic location of Slatina makes it possible to relate the observed burial practices with the wider communication network of the researched contemporary cemeteries in the wider area of the southern Carpathian Basin.*

*Keywords: Late Bronze Age, Urnfield culture, Slatina, central Drava, valley, cemetery, burial practices*

### UVOD

Vrijeme kasnoga brončanog doba u zapadnom dijelu Karpatske kotline obilježila je kultura polja sa žarama. Vrlo raširen običaj spaljivanja pokojnika prisutan je na ovom prostoru još od ranoga brončanog doba. Tijekom kasnoga brončanog doba spaljivanje pokojnika, ali i drugi dijelovi rituala poput odabira urne ili običaja prilaganja ili razbijanja keramičkih posuda tijekom polaganja ostataka pokojnika u grob, bili su rašireni na širem europskom prostoru s varijacijama u pojedinim zajednicama. U vrijeme 11. st. pr. Kr., prema sadašnjem stanju istraživanja, pokojnike se sahranjivalo na većim grobljima: Dobova (Starè 1975), Pobrežje (Pahič 1972), Ljubljana (Starè 1954; Puš 1971; 1982), Vál (Petres 1960), Neszmély (Patek 1961), Doroslovo (Trajković 2008).

### INTRODUCTION

The Late Bronze Age period in the western Carpathian Basin was marked by the Urnfield culture. The widespread custom of cremating the dead was present in the area ever since the Early Bronze Age. In the Late Bronze Age, the cremation of the dead and other parts of the ritual, such as the selection of the urn or the custom of adding or breaking ceramic vessels when placing the remains of the deceased in the grave, were spread over a wide European territory with variants in specific communities. In the 11<sup>th</sup> cent. BC, according to the current state of research, the deceased were buried in large cemeteries: Dobova (Starè 1975), Pobrežje (Pahič 1972), Ljubljana (Starè 1954; Puš 1971; 1982), Vál (Petres 1960), Neszmély (Patek 1961), Doroslovo (Trajković 2008).

Standardni odabir keramičke posude za urnu i posude koja je služila kao poklopac te prilaganje većeg broja metalnih predmeta u grobove (Teržan 1999) bila je karakteristika vremena Ha A2 i Ha B1 stupnja. Sličnosti i razlike u ritualu među pojedinim zajednicama mogu se objasniti materijalnim mogućnostima zajednice, njihovim položajem u komunikacijskim mrežama te potrebom da se ritual odvija na zadani način (Rebay-Salisbury 2013: 22).

Groblje u Slatini odabrano je kao analiza slučaja (*case study*) za pokušaj rekonstrukcije pogrebnog običaja u 11. st. pr. Kr. zbog nekoliko razloga: dosljedne primjene rituala u većini istraženih grobova, geografskog položaja Slatine u središtu južnog dijela Karpatske kotline, zatim rezultata modernih arheoloških istraživanja provedenih na većoj površini groblja i pripadajućeg naselja 2009. godine od strane Muzeja Slavonije u Osijeku te mogućnosti interdisciplinarnih analiza kojima su doprinijeli način iskopavanja, prikupljanje podataka te metodologija kasnijih neovisnih interdisciplinarnih istraživanja u okviru projekta Hrvatske zaklade za znanost UIP-11-2013-5327 BAMPICa (*Late Bronze Age mortuary practices and society in southern Carpathian Basin / Pogrebni običaji i društvo kasnog brončnog doba u južnom dijelu Karpatske kotline*).

Slatina je grad u srednjoj Podravini i nalazi se na posljednjim sjeveroistočnim obroncima Papuka koji se spuštaju prema dravskoj ravnici. Zaštitnim istraživanjima 2009. godine, sjeveroistočno od današnjeg grada Slatine, otkriveno je višeslojno nalazište s ostacima naselja iz kasnoga brončanog doba, starijega željeznog doba te kasnog latena, zatim rimskog razdoblja i srednjeg vijeka. Isto tako, otkriveno je i groblje iz kasnoga brončanog doba kao i nekoliko sačuvanih grobova iz starijega željeznog doba. Istraženi dijelovi kasnobrončanodobnog naselja i groblja te njihova datacija kao i mogućnosti koje su pružili prikupljeni podaci i otkrivene materijalni ostaci pridonijeli su pokušaju rekonstrukcije pogrebnih običaja zajednice koja je u 11. st. pr. Kr. živjela u srednjoj Podravini.

## POVIJEST ISTRAŽIVANJA

Pri rekonstrukciji pogrebnih običaja potrebno je pokušati iščitati što više podataka koje nam nude arheološki dokazi. Kako se s vremenom mijenja metodologija arheoloških iskopavanja kao i mogućnosti interdisciplinarnih analiza, dosezi u rekonstrukciji i interpretaciji sve su veći. Spoznaje koje se danas koriste i primjenjuju, svoje začetak imaju u prvim istraženim grobljima tijekom 19. stoljeća, jer su podaci prikupljeni na tim iskopavanjima i tada primjenjivane metodologije nudile mogućnosti interpretacije, ali su se otvarala i nova pitanja koja su poticala istraživačku dinamiku tijekom 20. stoljeća.

Iskopavanje groblja datiranih u kasno brončano doba na prostoru sjeverne Hrvatske seže u doba Š. Ljubića (1889) koji je krajem 19. stoljeća istraživao groblje u Treščerovcu. V. Hoffiller bio je sljedeći istraživač eponimnih kasnobrončanodobnih groblja Velika Gorica (1909) i Dalj (1938). Istraživači su dijelom objavili rezultate svojih istraživanja s podacima koje su sakupili prema tada suvremenoj metodologiji. Sukladno vremenu, pozornost se posvećivala

The standard choice of a ceramic vessel for the urn and a vessel for the lid, with the addition of numerous metal objects in the graves (Teržan 1999), was a characteristic of the Ha A2 and Ha B1 phases. The similarities and differences in ritual between specific communities can be explained by the material means of a community, its position in the communication networks, and the need to perform the ritual in the prescribed way (Rebay-Salisbury 2013: 22).

The cemetery in Slatina was chosen as the case study to try to reconstruct funeral rites from the 11<sup>th</sup> cent. BC for several reasons: the consistent application of ritual in the majority of the analyzed graves, the geographic location of Slatina in the center of the southern Carpathian Basin, the results of modern archaeological research made on most of the cemetery and the related settlement in 2009 by the Museum of Slavonia from Osijek, and the possibility of interdisciplinary analyses that were contributed by the excavation method, data collection and the methods of later independent interdisciplinary research within the project of the Croatian Science Foundation UIP-11-2013-5327 BAMPICa (*Late Bronze Age mortuary practices and society in southern Carpathian Basin / Pogrebni običaji i društvo kasnog brončnog doba u južnom dijelu Karpatske kotline*).

Slatina is a town in the central Drava valley, situated on the lowest northeast slopes of Papuk descending into the Drava valley. The rescue excavation in 2009, northeast of today's Slatina, yielded a stratified site with the remains of a settlement from the Late Bronze Age, the Early Iron Age and the Late La Tène, the Roman period and the Middle Ages. Moreover, they discovered a Late Bronze Age cemetery and a few preserved graves from the Early Iron Age. The researched parts of the Late Bronze Age settlement and cemetery and their dating, as well as the possibilities created by the collected data and uncovered material remains, contributed to the attempt to reconstruct the burial practice of the community that lived in the central Drava in the 11<sup>th</sup> cent. BC.

## RESEARCH HISTORY

When reconstructing burial practice, as much data as possible should be retrieved from archaeological evidence. As the methods of archaeological excavations and the range of interdisciplinary analysis developed, they brought about ever greater achievements in reconstruction and interpretation. The insights that are used and applied today had their origins in the first researched cemeteries in the 19<sup>th</sup> century, since the data collected from those excavations and the methods applied at the time opened the possibilities of interpretations, but also created new questions that motivated research development in the 20<sup>th</sup> century.

The excavation of cemeteries from the Late Bronze Age in the area of north Croatia started at the time of Š. Ljubić (1889), who researched the cemetery in Treščerovac in the late 19<sup>th</sup> century. V. Hoffiller was the next researcher of the eponymous Late Bronze Age cemeteries of Velika Gorica (1909) and Dalj (1938). The researchers published a part of the results of their excavations with the data they collected in accordance with the contemporary methods.



uglavnom arheološkim predmetima, a manje okolnostima nalaza i drugim vrstama materijalnih uzoraka (kosti pokojnika i drugi organski ostaci, npr. ugljen). Okolnosti i kontekst nalaza bili su tek usputno kratko opisani (npr. Hoffiller 1909: 121–122; 1938: 2). Otkriveni arheološki predmeti i zabilježeni način pokopavanja bili su poticaj i doprinos za definiranje identiteta istraživanih zajednica (Childe 1929; Vinski-Gasparini 1978; 1983).

Prva sustavna istraživanja s postavljenim istraživačkim pitanjima o pogrebnim ritualima proveli su K. Vinski-Gasparini i Z. Vinski sredinom 20. stoljeća na grobljima Zagreb–Vrapče, Virovitica i Sirova Katalena pokušavajući dopuniti spoznaje o dotad poznatoj materijalnoj i duhovnoj ostavštini kulture polja sa žarama (Vinski, Vinski-Gasparini 1956: 75–78; Vinski-Gasparini 1973: 16–18). Istraživali su s timom Arheološkog muzeja u Zagrebu groblje daljske grupe na nalazištu Vukovar–Lijeva bara koristeći tada suvremene metode, pri čemu su prikupljeni brojni podaci važni u rekonstrukciji pogrebnih običaja (Vinski 1955; 1959), koje su K. Vinski-Gasparini i Z. Vinski i interpretirali u svojim kasnijim studijama (Vinski-Gasparini 1962: 262–266; 1983: 609–610). Ovaj pokušaj rekonstrukcije bio je rezultat opažanja samih istraživača na lokalitetu prilikom iskopavanja kao i iskustvo istraživača koji su primjenom dosljedne metodologije tijekom iskopavanja prikupili podatke koji i nakon više od pola stoljeća omogućavaju daljnje analize te interpretacije groblja u Vukovaru na Lijevoj bari (Demo 2009). U drugoj polovini 20. stoljeća istraživano je groblje u Gređanima (Minichreiter 1983) te groblje u Drljanovcu (Majnarić-Pandžić 1988; 1994). Istraženo groblje u Gređanima rezultiralo je prvom kataloškom objavom svih dotad istraženih grobnih cjelina (Minichreiter 1983), a ne samo izborom što je bio slučaj s prije objavljenim grobljima (Vinski-Gasparini 1973), čime se dobio uvid u strukturu istraženog groblja, a što je potom omogućilo iščitavanje kompleksnog rituala u starijoj fazi kulture polja sa žarama. Prilikom istraživanja i obrade podataka s groblja u Drljanovcu primijenjene su i antropološke analize (Štefančić 1988) te se također pokušalo rekonstruirati, prvi put u literaturi na ovim prostorima, jedan dio pogrebnih običaja vezan uz prikupljanje kostiju s lomače te njihovo polaganje u grob (Majnarić-Pandžić 1988: 12, sl. 1). U najnovije doba istraživana su brojna groblja ili grobovi datirani u kasno brončano doba, najčešće tijekom zaštitnih istraživanja prilikom gradnje prometnica: Dubovo–Košno (Marijan 2010), ili plinovoda: Migalovci (Nodilo et al. 2013), no zabilježena su i ciljana istraživanja pojedinih groblja kao što su primjerice Mačkovac–Crišnjevi (Mihaljević, Kalafatić 2005) i Belišće (Ložnjak Dizdar 2014). Standardi zadani u prethodnim istraživanjima i analizama groblja pomogli su u oblikovanju metodologije arheoloških istraživanja i kasnijih multidisciplinarnih analiza primijenjenih u pokušaju rekonstrukcije pogrebnih običaja, pri čemu su brojni podaci prikupljeni tijekom arheoloških istraživanja bitno unaprijedili pojedine interpretacije načina pokopavanja kasnobrončanodobnih zajednica.

Objave groblja iz kasnoga brončanog doba na jugu Karpatske kotline tijekom druge polovine 20. stoljeća zadale su kriterije pri prezentiranju podataka (Dobova (Stare 1975),

As it was customary at the time, attention was given more to archaeological artifacts than to the circumstances of the site and other kinds of material finds (human remains and other organic remains, such as charcoal). The circumstances and context of the sites were shortly described (e.g. Hoffiller 1909: 121–122; 1938: 2). The discovered archaeological artifacts and the recorded burial method were a motivation for and contribution to defining the identity of the researched communities (Childe 1929; Vinski-Gasparini 1978; 1983).

The first systematic excavations where the researchers examined the burial practice was done by K. Vinski Gasparini and Z. Vinski in mid-20<sup>th</sup> century at the cemeteries of Zagreb–Vrapče, Virovitica and Sirova Katalena, where they tried to complement older insights about the material and spiritual heritage of the Urnfield culture (Vinski, Vinski Gasparini 1956: 75–78; Vinski Gasparini 1973: 16–18). Together with the team of the Archeological Museum in Zagreb, they excavated a cemetery of the Dalj group at the Vukovar–Lijeva Bara site using the methods of their time and collecting important data for the reconstruction of burial practices (Vinski 1955; 1959), which were later interpreted by K. Vinski-Gasparini and Z. Vinski in their works (Vinski-Gasparini 1962: 262–266; 1983: 609–610). That attempt at reconstruction was the result of observation of the archaeologists at the site during the excavations, but also the experience of the researchers, who used the excavation to consistently apply methods to collect the data which are now, more than half a century later, still helpful for the analysis and interpretation of the cemetery at Lijeva Bara in Vukovar (Demo 2009). The cemetery in Gređani (Minichreiter 1983) and the cemetery in Drljanovac (Majnarić-Pandžić 1988; 1994) were excavated in the second half of the 20<sup>th</sup> century. The analysis of the cemetery in Gređani resulted in the first catalog publication of all the cemetery units researched until then (Minichreiter 1983), since the previously published works on cemeteries were only selections (Vinski-Gasparini 1973). It provided insight into the structure of the explored cemetery, which in turn made it possible to interpret the complex ritual from the older phase of the Urnfield culture. The research and processing of the data from the Drljanovac cemetery included the application of anthropological analyses (Štefančić 1988). Also, it was the first time that in literature from this area tried to reconstruct a part of the burial practice related to the collection of bones from the pyre and their deposition into the grave (Majnarić-Pandžić 1988: 12, Fig. 1). In recent years, numerous Late Bronze Age cemeteries or graves were explored, usually within the rescue excavation done for the construction of roads: Dubovo–Košno (Marijan 2010) or gas pipeline: Migalovci (Nodilo et al. 2013), but there was also targeted excavation of specific cemeteries such as Mačkovac–Crišnjevi (Mihaljević, Kalafatić 2005) and Belišće (Ložnjak Dizdar 2014). The standards set in earlier research and analysis of cemeteries helped form the methodology of archaeological research and later multidisciplinary analyses applied to the attempt to reconstruct funerary practices, with the numerous data collected from the archaeological research significantly advancing particular interpretations of burial methods in the Late Bronze Age communities.

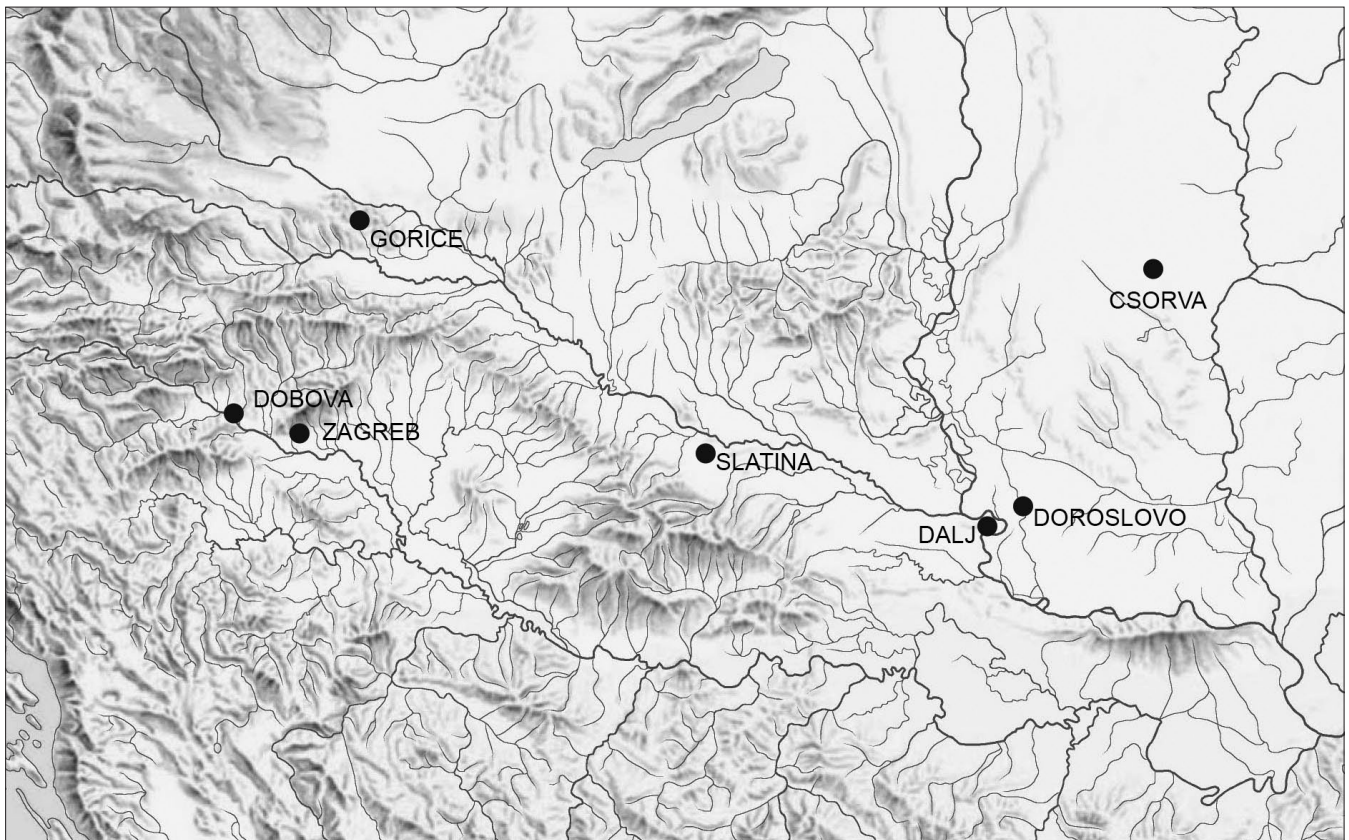


Pobrežje (Pahič 1972), Tolmin (Svojšak 2002), Doroslovo (Trajković 2008)) te su ponudile mogućnosti interpretacije. Zahtjevnosti i mogućnosti novih metodologija kao i brojnih interdisciplinarnih analiza promijenile su pristup načinu iskopavanja (Renfrew 1999: 278). Brojni podaci i opažanja o okolnostima nalaza, dokumentirani tragovi na predmetima u grobovima, zatim provedba antropoloških i arheozooloških analiza, ponudili su brojne mogućnosti u rekonstrukciji pogrebnih običaja, pri čemu se svaki zasebni grob može promatrati kao kompleksni događaj (*event*) koji se zbivao pred očima zajednice u nekoliko faza (Fülöp, Váczi 2016). Interpretacija pogrebnih običaja neizbježno je i odraz subjektivnosti istraživača pri čemu ne treba izbjegavati naglasiti prednosti izabranog pristupa i metodologije bez obzira na trenutačni trend. Treba pokušavati problematizirati aktivnosti prošlih zajednica koristeći i moderne perspektive doživljaja smrti i procese identifikacije s uvijek prisutnom spoznajom da ih vjerojatno ne možemo konceptualizirati na isti način kao ljudi koji su ih davno prakticirali (Taylor 2013: 183).

Na primjeru groblja u Slatini predstavljen je pokušaj rekonstrukcije pogrebnih običaja prema metodologiji primijenjenoj u provedbi uspostavnog istraživačkog projekta Hrvatske zaklade za znanost BAMPICa *Pogrebni običaji i društvo kasnog brončanog doba na jugu Karpatske kotline* (UIP-11-2013-5327). U okviru ovog projekta provode se neovisne arheološke, antropološke i arheozoološke analize s ciljem bioarheološke interpretacije pogrebnih običaja na jugu Karpatske kotline u kasnom brončanom dobu. Prednosti ujednačene metodologije koja se primjenjuje na projektu nalazi se u njezinoj primjeni od arheoloških iskopavanja do

The publications of cemeteries from the Late Bronze Age in the southern Carpathian Basin in the second half of the 20<sup>th</sup> century set the criteria for presenting data (Dobova (Stare 1975); Pobrežje (Pahič 1972); Tolmin (Svojšak 2002); Doroslovo (Trajković 2008)) and offered possibilities for interpretation. The demanding nature and the possibilities of the new methodologies and numerous interdisciplinary analyses changed the approach to excavation methods (Renfrew 1999: 278). Numerous data and observations about the circumstances of sites, documented traces on objects in the graves, and the application of anthropological and archaeozoological analyses, offered many possibilities for the reconstruction of burial practice, considering each grave as a complex event that took place before the eyes of the community in several phases (Fülöp, Váczi 2016). The interpretation of burial practice is necessarily a reflection of the researchers' subjectivity, where the explanation of the advantages of the chosen approach and methodology should not be neglected despite any contemporary trends. It should be attempted to question the activities of past communities using both the modern perspectives on the experience of death and the processes of identification while constantly keeping in mind that we are probably unable to conceptualize them in the same way as those who practiced them a long time ago (Taylor 2013: 183).

The Slatina cemetery case study presents an attempt to reconstruct the burial practice according to the methodology applied in the realization of the foundational research project of the Croatian Science Foundation BAMPICa *Late Bronze Age mortuary practices and society in southern Car-*



Karta 1 Položaj groblja u Slatini te istovremena groblja u južnom dijelu Karpatske kotline (D. Ložnjak Dizdar)

Map 1 Position of the cemetery in Slatina and other contemporaneous cemeteries in the southern Carpathian Basin (D. Ložnjak Dizdar)

interpretativne razine s međufazom neovisnih interdisciplinarnih analiza arheologa, antropologa i arheozoologa, pri čemu je zabilježen kontekst nalaza osnovno polazište u iščitavanju i tumačenju podataka. Uzimajući u obzir očuvanost nalazišta i arheoloških nalaza, ovakav pristup nudi mogućnost detaljnijeg uočavanja tragova na antropološkim, zoološkim i arheološkim ostacima različitih procesa koji su se odvijali tijekom ispraćaja pokojnika.

## GROBLJE U SLATINI

Groblje u Slatini jedno je od pet groblja uključenih u analizu pogrebnih običaja u kasnom brončanom dobu na jugu Karpatske kotline u sklopu projekta BAMPICa. U ovom se radu na primjeru jednog groblja nastoji predočiti kompleksnost pogreba kao rituala kao i njegove primjene unutar jedne zajednice, prije usporedbe s drugim grobljima u širem geografskom i vremenskom kontekstu kako bi se jasnije uočila egzaktnost podataka i mogućnosti koje takav pristup koji počinje od pojedinog lokaliteta prema širem kontekstu pruža u interpretaciji brončanodobnih zajednica. Ovaj pristup (*bottom-up*) ima prednost jer je povezan s dosadašnjim spoznajama i poznatim arheološkim artefaktima te provjeravan kroz nove nalaze i otkrića. U spomenutom pristupu važno je sagledavanje nalaza u njihovu kontekstu prije uklapanja u širi kontekst (Harding 2013: 394). Groblje u Slatini odabrano je kao *case study* zbog nekoliko razloga: očuvanosti groblja, geografskog položaja i jasne datacije groblja.

Zaštitnim istraživanjem Muzeja Slavonije iz Osijeka 2009. godine na trasi zaobilaznice oko grada Slatine otkriveno je višeslojno nalazište Slatina–Veliko polje. Istraženi su dijelovi kasnobrončanodobnog naselja i groblja, naselja i groblja iz starijega željeznog doba, naselje iz vremena kasne faze mlađega željeznog doba i prvih stoljeća antičkog razdoblja, te razdoblja srednjeg vijeka (Filipović 2010: 130–134). U istraženom dijelu kasnobrončanodobnog groblja u Slatini otkriveno je 38 grobova, pri čemu je kasnijim analizama utvrđeno kako su u dva groba otkriveni ostaci spaljenih životinjskih ostataka, nekoliko je grobova bilo vrlo oštećeno mlađim arheološkim cjelinama, a u jednom slučaju riječ je bila o kenotafu. Ukupno je 27 grobova dovoljno očuvano za daljnje analize. Na primjeru groblja iz Slatine primjenjuju se neovisne arheološke, antropološke i arheozoološke analize radi egzaktnosti dobivenih podataka i mogućnosti koje one pružaju u daljnjoj interpretaciji pogrebnih običaja.

Pri rekonstrukciji pogrebnih običaja na groblju u Slatini zabilježeno je nekoliko dijelova toga kompleksnog događaja: tko su bili pokojnici sahranjeni na groblju, na koji su način spaljivani pokojnici na lomačama, kako se odvijalo sakupljanje kostiju, odabir urne i poklopca, određivanje mjesta za groblje, žrtva na groblju (?), polaganje urne u grobnu raku.

### Zajednica sahranjena na groblju

Ispraćaj pokojnika bio je proces koji je omogućavao ožalošćenima žalovanje, a zajednici u kojoj je živio/živjela oproštaj od svoga pripadnika (Nebelsick 1997: 28). Pokojnik se nije sahranjivao sam (Parker Pearson 1999: 3), što upućuje kako razlike koje su uočljive u ritualu treba tumačiti kao

*pathian Basin* (UIP-11-2013-5327). The framework of the project includes independent archaeological, anthropological and archaeozoological analyses with the objective of a bioarchaeological interpretation of burial practice in the southern Carpathian Basin in the Late Bronze Age. The consistent methodology applied to the project has the advantage of being applied from the archaeological excavations to the level of interpretations, with the intermediary phase of independent interdisciplinary analyses of archaeologists, anthropologists and archaeozoologists, with the documented context of the site as the basic premise for data interpretation. Taking into account the state of preservation of the site and archaeological finds, this approach enables a more detailed examination of traces on anthropological, zoological and archaeological remains of various processes that took place during the funeral.

## SLATINA CEMETERY

The Slatina cemetery is one of the five cemeteries included in the analysis of burial practices in the Late Bronze Age in the southern Carpathian Basin within the BAMPICa project. This work focuses on a single cemetery to try to present the complexity of the funeral as a ritual and its application within a community and moves on to compare it with other cemeteries in a wider geographic and chronological context in order to gain a clearer understanding of the exactness of data and the possibilities that such an approach, starting from a single site and moving to a wider context, can offer for the interpretation of Bronze Age communities. This bottom-up approach has the advantage of being related to the past insights and known archaeological artifacts and being verified through new finds and discoveries. It is important for this approach to consider the finds in their own context before placing them in a wider context (Harding 2013: 394). The Slatina cemetery was chosen as a case study for several reasons: the preservation of the cemetery, its geographic position, and its clear dating.

The rescue excavation on the bypass road around the town of Slatina, done by the Museum of Slavonia in Osijek in 2009, discovered the stratified site Slatina–Veliko Polje. They researched parts of the Late Bronze Age settlement and cemetery, the Early Iron Age settlement and cemetery, and the settlement from late phase of the Late Iron Age, the first centuries of antiquity, and the period of the Middle Ages (Filipović 2010: 130–134). The researched part of the Late Bronze Age cemetery in Slatina includes 38 graves. Later analyses determined that cremated animal remains were found in two graves, while several graves were extensively damaged by later archaeological units, and that one case was a cenotaph. A total of 27 graves were sufficiently preserved for further analysis. The Slatina cemetery case study is used for independent archaeological, anthropological and archaeozoological analyses for the exactness of the obtained data and the possibilities they offer for further interpretation of funerary practices.

The reconstruction of the funerary practices at the Slatina cemetery recorded several parts of that complex event: the identity of the deceased at the cemetery, the method of

odraz slike koju je zajednica imala o preminuloj osobi.

Podaci o dijelu zajednice sahranjene na groblju u Slatini dobiveni su antropološkom analizom spaljenih ljudskih ostataka. Neovisna antropološka analiza pokušala je dati podatke o spolu, dobi, bolestima i načinu života kasno-brončanodobnih ljudi. Prikupljeni podaci olakšavaju daljnju analizu pogrebnih običaja i društva koje ih je primjenjivalo. Od istraženih 38 grobova, spaljeni ljudski ostaci dostatni za antropološku analizu pronađeni su u 27 grobova, pri čemu je analizirano 28 osoba, jer je izdvojen i jedan dvojni grob.

Analiza ljudskih kosturnih ostataka iz grobova napravljena je standardnim metodama kako bi se sakupili podaci o makroskopskim karakteristikama ostataka: prisutnosti, očuvanosti i težini kostiju, boji, minimalnom broju osoba, spolu i dobi te patološkim promjenama (Brickley, McKinley 2004; McKinley 2004).

Detaljna analiza pokazala je kako je među 28 osoba, 12 djece (42,8%) i 16 odraslih osoba (57,1%) (tab. 1). Među odraslim osobama je 6 žena (37,5%), 8 muškaraca (50%) i 2 osobe (12,5%) čiji se spol nije mogao sa sigurnošću odrediti. Djeca čine preko 40% uzorka, što je u skladu s očekivanim brojem djece u arheološkom uzorku, jer su ona najugroženiji dio društva. Većina prisutne djece, njih 66,6%, mlađa je od 5 godina. Troje djece je starosti od 10 do 15 godina, dok se jednom djetetu zbog vrlo male količine ostataka sa sigurnošću nije mogla odrediti dob. Djeca mlađa od 5 godina najčešće su zastupljena kategorija, jer je smrtnost djece iz arheoloških populacija u toj ranoj životnoj dobi vrlo velika. U uzorku nisu prisutna djeca u čak dvije dobne kategorije, od 5 do 10 godina i od 15 do 20 godina. Kako se kategorije međusobno preklapaju, moguće je da su oni prilikom analize stavljeni u mlađu/stariju kategoriju, jer na precizno određivanje dobi, osobito kod djece, uvelike utječe očuvanost kosturnih elemenata. Naime, kako kod spaljenog materijala nisu uvijek prisutni svi kosturni ostaci, određivanje dobi mora se temeljiti na prisutnim elementima.

Među odraslim osobama jest 5 žena (31,3%), 8 muškaraca (50%) i 3 osobe (18,7%) čiji se spol nije mogao sa sigurnošću odrediti. U uzorku je prisutan nešto veći broj muškaraca, što odudara od uobičajene podjele, gdje oba spola trebaju biti podjednako zastupljena. Ovo se vrlo lako može objasniti relativno malim cjelokupnim uzorkom, ali i činjenicom da

cremating the body on the pyres, the bone collection process, the selection of urns and lids, the choice of the cemetery location, the sacrifice at the cemetery (?), the placement of the urn in the open grave.

### The community buried at the cemetery

The funeral was a process that helped the mourners express their loss and let the dead person's community bid a final farewell to its member (Nebelsick 1997: 28). The dead body was not buried alone (Parker Pearson 1999: 3), which suggests that the noticeable differences in the ritual should be interpreted as a reflection of the impression that the person had on the community.

The data about a part of the community buried at the Slatina cemetery were obtained by the anthropological analysis of cremated human remains. The independent anthropological analysis tried to provide data on sex, age, illnesses and way of life of Late Bronze Age population. The obtained data facilitate a further analysis of the funerary practices and the society. Out of the excavated 38 graves, cremated human remains sufficient for an anthropological analysis were found in 27 graves. The analysis included 28 individuals since one of the graves was double.

The analysis of the human skeletal remains from the graves was made using standard methods in order to collect data on the macroscopic characteristics of the remains: the presence, preservation and weight of the bones, their color, the minimum number of individuals, sex and age of the deceased their sex, age and pathological changes (Brickley, McKinley 2004; McKinley 2004).

The detailed analysis showed that, out of 28 persons, there were 12 children (42.8%) and 16 adults (57.1%). (Tab. 1) The adults included 6 females (37.5%), 8 males (50%) and 2 persons (12.5%) whose sex could not be estimated with certainty. Children make more than 40% of the sample, which is in accordance with the expected number of children in the archaeological sample, since they were the most vulnerable part of the society. Most of the children (66.6%) are younger than 5 years of age. Three children are between 10 and 15 years, while the age of one child could not be determined due to the scarcity of remains. Children younger than 5 years are the most frequent category since the mor-

DOB/AGE	DJECA/CHILDREN	MUŠKARCI/MALE	ŽENE/FEMALE	ODRASLI/ADULTS	UKUPNO/TOTAL
0-5	8				8
10-15	3				3
djeca/children	1				1
20-35		2	3		5
35+		4	3		7
odrasli/adults		2		2	4
UKUPNO/TOTAL	12	8	6	2	28

Tab. 1 Demografska struktura pokojnika s groblja u Slatini (P. Rajić Šikanjić)

Tab. 1 The demographic structure of deceased at the Slatina cemetery (P. Rajić Šikanjić)



su prisutne tri osobe čiji se spol nije mogao odrediti. U obje dobne skupine podjednak je broj osoba, dok se za 4 osobe točna dob nije mogla odrediti. Nešto je više muškaraca u starijoj dobnoj skupini.

Podaci dobiveni za Slatinu mogu se usporediti s dobivenim analizama uzoraka s groblja u Dobovi, Pobrežju i Doroslovu. U Dobovi su u 60 antropološki analiziranih grobova pronađeni ostaci 60 osoba, od toga je 55 odraslih (91%) i 5 (9%) djece (Stare 2000). Većina djece iz Dobove mlađa je od 5 godina, dok je samo jedno dijete dobi između 10 i 15 godina. Među odraslima su 4 muškarca (7,3%), 4 žene (7,3%) i 47 osoba (85,4%) kojima se spol nije mogao odrediti. Kod osoba kojima je bilo moguće preciznije odrediti dob, muškaraca ima podjednako u obje kategorije, dok žena ima samo u starijoj kategoriji. Kod osoba kojima se spol nije mogao sa sigurnošću odrediti, svega su 3 osobe u mlađoj kategoriji, dok ih je 15 u starijoj. Pri interpretaciji ovih podataka treba uzeti u obzir kako je najveći dio osoba u uzorku, njih čak 19, definiran kao odrasle osobe kojima nije bilo moguće odrediti spol ni precizniju dob. Antropološki materijal s lokaliteta Pobrežje potječe od 62 osobe od kojih je 58 (93,5%) odraslih osoba i četvero djece (6,5%) (Thomas 2011). Za samo četiri odrasle osobe mogao se odrediti spol, pa su tako prisutni tri muškarca i jedna žena. Zbog širih dobnih kategorija koje su se koristile pri analizi, za većinu osoba nije bilo moguće odrediti precizniju dob. Dob je bilo moguće odrediti za jednu ženu (20–35 godina), jednog muškarca (20–35 godina) i jednu stariju odraslu osobu (35+). Budući da su pri analizi materijala s lokaliteta Pobrežje korištene veoma široke dobne kategorije za koje je dana samo donja dobna granica, teško je dobivene podatke detaljnije usporediti s onima iz Slatine. Na groblju u Doroslovu 23 groba pripadaju kasnom brončanom dobu. Svi grobovi, osim jednoga, sadrže ostatke jedne osobe (Živanović 2008). Od 24 osobe, njih 5 (20,8%) je dječje dobi, dok je 19 odrasle dobi (79,2%). Troje djece je mlađe od 5 godina, dok je jedno dijete dobi od 5 do 10 i drugo od 15 do 20 godina. Među odraslima su 2 muškarca (10,5%), 6 žena (31,6%) i 11 osoba (57,9%) kojima se spol nije mogao odrediti. Sve odrasle osobe u starijoj su dobnoj skupini, odnosno iznad 35 godina.

Usporedbom raspodjele pokojnika prema dobi, vidljivo je da je jedino u Slatini prisutan velik broj djece, dok je on na ostala tri groblja relativno malen. Naime, velik broj djece je očekivan, jer da su djeca, pogotovo ona mlađa od 5 godina, najugroženiji dio društva.

Važno pitanje o proučavanoj populaciji odnosi se na zdravstveno stanje te uvjete i kvalitetu života zajednice, stoga je kosturni materijal pregledan kako bi se uočile patološke promjene na kostima. Većina uočenih promjena bila je prisutna kod djece, a riječ je o poroznosti i novom sloju kosti na dugim kostima i lezijama na lubanji, te dva slučaja *cribra orbitalije*. Kod čak osmero djece uočene su navedene promjene, a od toga ih je čak šestoro mlađe od 5 godina, dok je jedno dijete dobi od 10 do 15, a za jedno se nije mogla preciznije odrediti dob.

Poroznost i novi sloj kosti na dugim kostima naziva se periostitis, a u uzorku je uočen kod sedmero djece, od kojih

tality of children from archaeological populations at such an early age was very high. The sample does not include two age categories of children, from 5 to 10 years and from 15 to 20 years of age. Since age categories overlap, it is possible that the analysis included such children in younger or older categories, since the precision of age estimation on greatly depends on the preservation of skeletal elements, especially in children. As cremated material does not always include all the skeletal remains, age estimation has to be based on the present elements.

The adults include 5 females (31.3%), 8 males (50%) and 3 persons (18.7%) whose sex could not be determined with certainty. The prevalence of males in the sample is a departure from the usual distribution, where both sexes are represented equally. This can be easily explained by the relatively small size of the sample, but also by the fact that the sex of three persons could not be estimated. Both age groups have roughly the same number of people, but the age of 4 individuals could not be precisely estimated. There is slightly more males in the older age group.

The data obtained for Slatina can be compared with the analyses of the samples from the cemeteries in Dobova, Pobrežje and Doroslovo. The 60 anthropologically analyzed graves in Dobova contained the remains of 60 individuals: 55 adults (91%) and 5 (9%) children (Stare 2000). Most children from Dobova were younger than 5 years, with only one child of the age between 10 and 15 years. The adults include 4 males (7.3%), 4 females (7.3%) and 47 persons (85.4%) whose sex could not be estimated. Among those whose age could be estimated, males are equally present in both categories, while all the females are in the older category. Among the persons of indeterminate sex, there are only three individuals in the younger category and 15 in the older one. The interpretation of the data must take into account that most of the individuals in the sample, as many as 19, were defined as adults of indeterminate sex and age. The anthropological material from the site at Pobrežje includes 62 individuals: 58 (93.5%) adults and four children (6.5%) (Thomas 2011). Only four adults have a determinate sex: three males and one female. Since the analysis used wide age categories, the precise age could not be determined for most people. Age was estimated for one woman (20–35), one male (20–35), and one older female (35+). Since the analysis of the material from the Pobrežje site used very wide age categories, providing only the lower age limit, it is hard to compare the data with Slatina. 23 graves at the Doroslovo cemetery are from the Late Bronze Age. Each grave except one contains the remains of a single person (Živanović 2008). Out of 24 people, there are 5 children (20.8%) and 19 adults (79.2%). Three children are younger than 5 years, one child is between 5 and 10 years, and one is between 15 and 20 years. Among the adults, there are 2 males (10.5%), 6 females (31.6%), and 11 persons (57.9%) whose sex could not be estimated. All the adults are in the older age group (35+ years).

The comparison of the age distribution of the deceased shows that only Slatina has considerable number of children, while in the other three cemeteries it is relatively scarce. A large number of children would be expected taking

je petero mlađe od 5 godina, jedan je dobi od 10 do 15 godina, a jednom se dob nije mogla preciznije odrediti. Periostitis se javlja kao reakcija na upalni proces u organizmu, zbog zaraze ali i traume (Roberts, Manchester 2005).

Endokranijalne lezije uočene kod dvoje djece, povezuju se s meningitisom, tumorima, traumama ili dugotrajnim nedostatkom vitamina (Lewis 2007).

*Cribra orbitalia*, prisutna kod dvoje djece, povezuje se s anemijom te rahitisom i skorbutom, ali i zaraznim i parazitskim bolestima (Lewis 2007).

Sve tri vrste patoloških promjene uočenih kod djece dijele neke zajedničke uzroke, kao što su loša kvaliteta života, odnosno neadekvatna prehrana i prisutnost zaraznih bolesti (Roberts, Manchester 2005).

Kod odraslih osoba uočena su samo dva slučaja patoloških promjena – prijelom i degenerativne promjene na kralješcima. Prijelom kosti uzrokuje vanjska sila, koja svojim izravnim ili neizravnim djelovanjem dovodi do potpunog ili djelomičnog loma (Aufderheide, Rodríguez-Martín 2003). Slomljeno rebro uočeno je kod odraslog muškarca. Na rebro je vidljiv potpuno oblikovan koštani kalus koji svjedoči o oporavku osobe nakon loma. Degenerativne promjene na kralješku uočene su kod tri starija muškarca. Degenerativne promjene nastaju zbog niza čimbenika, a najznačajniji su mehanički stres, fizička aktivnost i starija životna dob (Larsen 1997). Kod jedne osobe uočen je gubitak zuba za života. Gubitak zuba može biti posljedica kariozne lezije, periodontalne bolesti ili apscesa (Roberts, Manchester 2005).

Podaci za patološke promjene na komparativnom materijalu dostupni su samo za uzorak s groblja Pobrežje (Thomas 2011). Uočeno je šest promjena na odraslim osobama, pet porotičnih hiperostoza na kostima glave i jedan slučaj degenerativnih promjena na kralješku.

Spaljeni ljudski ostaci pronađeni u Slatini deponirani u urne daju podatke o životu, uzrocima i vremenu smrti pokopanih pripadnika zajednice, ali i o načinu na koji je tekao proces spaljivanja na lomači i prema kojem su se kriteriju prikupljale kosti nakon gašenja lomače.

### Spaljivanje pokojnika na lomači

Prema nalazu spaljenih ljudskih ostataka svijetlosive ili bijele boje, jasno je kako je zajednica spaljivala svoje mrtve. Mjesta spaljivanja u Slatini nisu pronađena, niti na drugim istraživanim kasnobrončanodobnim grobljima na jugu Karpatske kotline radi uništenosti zbog korištenja tla. I inače su mjesta lomača rijetko očuvana, ponekad ispod mlađih struktura ili ispod tumula koji je pokrivaio grob i obližnje mjesto lomače (Parker Pearson 1999: 7). O veličini lomače i količini te vrstama drva koja su se koristila za spaljivanje pokojnika u Slatini možemo samo nagađati, jer su u grobovima pronađene uglavnom oprane kosti bez ostataka pepela i ugljena. Za mjesto lomača pretpostavlja se kako je bilo negdje u blizini groblja na kojem se sahranjivalo. Prema opisima iz Ilijade XXIV, 778, 784–787 (1987) i rezultatima eksperimentalne arheologije (Kowarik, Reschreiter 2009: 218) bile su potrebne veće količine drva da bi se moglo obaviti spaljivanje pokojnika. Prikupljanje drva zasigurno je obavljala zajednica koja je ispraćala pokojnika. Uloga zajednice

in the consideration the fact that children, especially those younger than 5 years of age, were the most vulnerable part of society.

An important issue for the analyzed population is their health and disease, as well as living conditions and quality of life of the community. For that reason, the skeletal material was examined to identify any pathological changes on the bones. Majority of the changes were identified in children: porosity and a new bone layer on the long bones, skull lesions, and two cases of *cribra orbitalia*. As many as eight children have such changes. Six of them are younger than 5 years, one is between 10 and 15 years, and one is of indeterminate age.

Porosity and a new bone layer on the long bones are called periostitis. It was identified in seven children. Five of them are younger than 5 years, one is between 10 and 15 years, and one is of indeterminate age. Periostitis is a reaction to an inflammation in the organism that can be caused by infection or trauma (Roberts, Manchester 2005).

Endocranial lesions were identified in two children. They are related to meningitis, tumors, traumas or prolonged lack of vitamins (Lewis 2007).

*Cribra orbitalia*, present in two children, is related to anemia, rickets and scurvy, but also infectious and parasitic diseases (Lewis 2007).

All three kinds of pathological changes identified in children have certain common causes, such as low quality of life, inadequate nourishment, and infectious diseases (Roberts, Manchester 2005).

Only two cases of pathological changes were identified in adults: fracture and degenerative changes on vertebrae. Bone fracture is caused by an outside force that acts directly or indirectly to inflict complete or partial fracture (Aufderheide, Rodríguez-Martín 2003). A broken rib was identified in an adult man. The rib has a visible, fully formed bone callus which indicates that the person recovered after the fracture. Degenerative changes on vertebrae were noticed in three older men. Degenerative changes can appear because of several factors, the most significant being mechanical stress, physical activity, and old age (Larsen 1997). It was established that one person lost their teeth in life. The loss of teeth can be a consequence of caries lesion, periodontal disease or an abscess (Roberts, Manchester 2005).

Data for pathological changes on comparative material are available only for the sample from the Pobrežje cemetery (Thomas 2011). Six changes have been noticed in adults: five porotic hyperostoses on the skull bones and one case of degenerative changes on vertebrae.

Cremated human remains from Slatina provide data on the life, causes and time of death of the buried community members, but also on the process of cremation on the pyre and the criterion for collecting bones after the pyre died out.

### Cremating the dead on the pyre

The presence of cremated human remains with grey or white hues clearly shows how the community cremated their deceased members. No cremation sites were found

važna je pri ispraćaju jer pojedine dijelove obreda (pribavljanje drva i izgradnja lomače, održavanje vatre) zasigurno nije moglo obavljati nekoliko osoba bliskih pokojniku.

Pokojnik je bio položen na sagrađenu lomaču, vjerojatno u nošnji koju je nosio za života, sudeći prema razlici u dijelovima nošnje položenima na lomaču s različitim pokojnicima, a koji se ne mogu povezati s mrtvačkim ruhom, ako je ono i postojalo jer nije ujednačeno za zajednicu ili pojedine dobne ili spolne skupine u zajednici. Nakon toga je bila upaljena lomača koja je, prema primjerima u Slatini, dosegla temperaturu višu od 600°C. Naime, promjene u boji kosturnih ostataka mogu se povezati s temperaturom vatre koja je djelovala na kost i dovela do njezina skupljanja. Na nižim temperaturama kosti postaju smeđe i crne boje, dok bijela boja označava potpuno oksidiranu kost (McKinley 2000; 2004). Boja ostataka kod većine analiziranih osoba iz Slatine jest bijela, odnosno bijela s primjesama sive. Samo kod dvije osobe boja ostatka je siva. Bijela boja povezuje se s visokim temperaturama vatre, višima od 600°C (Mays 1998; Wahl 2015). Kako je kod većina osoba boja bila ujednačena na prisutnim kosturnim elementima, možemo zaključiti kako su svi dijelovi tijela na lomači bili izloženi podjednako jačini vatre. Budući da nema razlika u boji među odraslim osobama i djecom te osobama različita spola, zajednica je za sve svoje članove koristila istu vrstu lomače i tehniku spaljivanja.

Boja kosturnih ostataka iz Slatine usporedila se s podacima prikupljenima u istraživanjima groblja Pobrežje i Doroslovo. U Pobrežju 27 je osoba imalo smeđu boju kostiju, 21 osoba imala je tamnosmeđu i sivu boju, 26 osoba imalo je tamnosmeđu, tamnoplavu, bijelu i sivu boju, dok su dvije osobe imale ostatke tamnosive, plave i bijele boje (Thomas 2011). Samo je jedna osoba u uzorku imala bijelu, potpuno kalcificiranu kost. Ovakve razlike u boji sugeriraju da lomače nisu bile uniformirane te da je dolazilo do razlika u temperaturi vatre kod svakoga pojedinačnog slučaja. U Doroslovu većina je ostataka bila bijela s primjesama žute (Živanović 2008). Usporedba Slatine s ostalim grobljima pokazala je da su zajednice u Slatini i Doroslovu koristile istovjetnu vrstu lomače i tehniku spaljivanja za sve svoje članove te da je temperatura u oba slučaja bila viša od 600°C. U Pobrežju je temperatura lomače dosegla manje vrijednosti kod svih pokojnika, a samo je u jednom slučaju došlo do potpune kalcifikacije.

Podaci koji se o lomačama mogu iščitati iz spaljenih kostiju, oskudni su dokazi o važnoj fazi ispraćaja – spaljivanju gdje je vatra imala ulogu materijalne promjene tijela pokojnika. Vatra lomače imala je više značenja: kulturno, emotivno i estetsko kroz svoje elemente – vatra, gorivo, identitet pokojnika, proces i krajnji rezultat kremacije (Sørensen, Bille 2008: 256). Ritualni spaljivanja jesu izvedbe koje privlače čula onih koji provode ritual, zajednice koja u njemu sudjeluje i ostalih promatrača. Vatra transformira tijelo i dok tijelo gori, stvaraju se mirisi, toplina i vizualni i auditivni dojam je snažan (Cerezo-Román, Williams 2014: 250).

Čin spaljivanja pokojnika bio je vrlo važan dio pogrebnog rituala, pri čemu se događala ne samo transformacija tijela pokojnika nego je vjerojatno vatra i spaljivanje bio

either in Slatina or in other researched Late Bronze Age cemeteries in the southern Carpathian Basin because of the destruction caused by the use of soil. Generally speaking, pyre sites are rarely preserved, sometimes under later structures or under the tumulus covering the grave and the nearby pyre (Parker Pearson 1999: 7). We can only conjecture about the size of the pyre and the quantity and types of wood used to cremate the dead in Slatina, since the bones found in the graves are mostly washed, with no remains of ashes or charcoal. It is assumed that the site of the pyres was near the burial grounds. According to the descriptions from the Iliad XXIV, 778, 784–787 (1987) and the results of experimental archaeology (Kowarik, Reschreiter 2009: 218), the cremation required large quantities of wood. The wood was certainly gathered by the community that bade farewell to its member. The community had an important role in the funeral, since certain parts of the ritual (gathering wood, building the pyre, keeping the fire alive) could not be performed by a few people close to the deceased.

The corpse was placed on the built pyre, probably in the clothes worn in life, considering the difference in parts of the clothes laid on the pyre with the dead, which cannot be associated with the robes of the dead, if they existed at all, because there are no matching clothes for the community or for particular age or sex groups within the community. Then the pyre was set alight, reaching a temperature above 600°C according to the cases from Slatina. In fact, the changes in the color of skeletal remains can be associated with the temperature of the fire that affected the bone and made it shrink. On lower temperatures, bones become brown and black, while a white hue indicates a completely oxidized bone (McKinley 2000; 2004). The color of the remains of most analyzed persons from Slatina is white, or white with grey mixed in. Only two individuals have grey-hued remains. The white hue indicates high temperatures of fire, higher than 600°C (Mays 1998; Wahl 2015). Since the color for most persons was consistent on all the preserved skeletal elements, we can conclude that all the parts of the body on the pyre were exposed to a fire of similar intensity. Since there is no color difference between adults and children, or between opposite sexes, the community used the same kind of pyre and cremation technique for all of its members.

The color of skeletal remains from Slatina was compared with the data collected from the cemeteries of Pobrežje and Doroslovo. In Pobrežje, 27 persons had brown bones, 21 persons had dark brown and grey bones, 26 persons had dark brown, dark blue, white and grey bones, and two persons had dark grey, blue and white bones (Thomas 2011). Only one person in the sample had white, completely calcified bones. These hue differences suggest that the pyres were not uniform, with differences in fire temperature in each particular case. Most remains in Doroslovo were white with yellow mixed in (Živanović 2008). The comparison of Slatina with other cemeteries showed that the communities in Slatina and Doroslovo used the same kind of pyre and cremation technique for all their members and that the temperature in both cases was above 600°C. In Pobrežje, the temperature of the pyre was lower for all the dead, with



medij i proces uz koji i u kojem je zajednica tugovala. Fizički nestanak pokojnika bio je naglašen u procesu izgaranja lomače pri čemu su vjerojatno i emocije ožalošćenih usmjerene u vapaj i prihvaćanje gubitka (Sørensen, Bille 2008: 257). Vatra i lomača kao ritual bile su spona između ljudi i natprirodnih sfera. Proces spaljivanja bio je vidljiv dokaz zajednici koja je sahranjivala pokojnika o prijelazu iz svijeta živih u svijet mrtvih (Nebelsick 1997: 28, Tab. 1).

### Sakupljanje kostiju

Nakon gašenja i hlađenja lomače, koja je vjerojatno dogarala sama, sudeći prema boji i obliku kostiju, uz nadzor zajednice, pristupalo se prikupljanju kostiju pokojnika. U nekim kasnobrončanodobnim zajednicama primijećena je pravilnost koja je postojala pri odabiru kostiju s lomače kao i u redosljedu prikupljanja (Gramsch 2007; 2010: 114). Pri ekshumiranju urni groblja u Slatini koje se odvijalo prilikom konzervacije u razdoblju od 2010. do 2012. godine, nije bio prisutan antropolog i nije primijećena nikakva pravilnost pri depoziciji kostiju u urnu. Pregledom spaljenih ljudskih ostataka iz groblja u Slatini od strane antropologa uočeno je kako su kod većine osoba prisutne sve skupine kostiju, odnosno ulomci svih dijelova cijelog tijela. Kako su kod većine osoba iz Slatine prisutne sve skupine kostiju (kosti lubanje, zubi, kosti trupa te duge i sitne kosti), to se može objasniti pažljivim skupljanjem ostataka što je vjerojatno bio važan dio pogrebnih običaja u ovoj zajednici.

I nakon spaljivanja, ostaci tijela pokojnika imali su značnije o čemu svjedoči pažljivo prikupljanje i daljnje zbrinjavanje u pogrebnom ritualu (Stig Sørensen 2010: 59).

Prilikom vaganja ostataka pokojnika uočeno je kako se, sukladno spolu i dobi, razlikuju težine prikupljenih ostataka. Naime, analizom težina spaljenih ostataka može se odrediti koliko je kosturnog materijala sakupljeno s lomače i je li u grobu prisutno više osoba. Ukupna težina ostataka u grobovima iz Slatine u rasponu je od 3,3 g do 2142,5 g, čime prosjek iznosi 705,6 g. Većina grobova u rasponu je od 100,00 do 1500,00 g. Težine ostataka osoba dječje dobi su u rasponu od 3,3 g do 809,3 g, s prosjekom od 166,5 g. Vrijednosti težina kosturnih ostataka svih odraslih osoba su u rasponu od 411,20 g do 2142,50 g, s prosjekom od 1109,9 g. Kada se vrijednosti odraslih osoba podijele prema spolu, muškarci su u rasponu od 938,20 g do 1616,30 g, a prosjek je 1290,3 g, dok su vrijednosti za žene od 711,30 g do 2142,50 g s prosjekom od 993,40 g. Odrasle osobe kojima se spol nije mogao sa sigurnošću odrediti imaju težine od 411,20 g do 1064,00 g s prosjekom od 737,60 g. Usporedbom prosječnih težina za djecu i odrasle vidljivo je kako djeca imaju najniže vrijednosti u uzorku, što je očekivano jer težina kostura ovisi o dobi osobe, njezinoj građi i visini (Mays 1998). Težine muškaraca nešto su veće od onih za žene, što je i očekivana raspodjela.

Usporedba težine uzoraka iz Slatine s ostalim grobljima pokazala je neke sličnosti, ali i razlike. Na groblju u Dobovi težine se kreću od 4 do 363 g, s prosjekom od 61,8 g, što je znatno manje nego u Slatini (Stare 1975). Sukladno tomu, manje su i prosječne vrijednosti za djecu (46,5 g) te odrasle (64 g). Kod odraslih osoba zanimljivo je kako je prosječna

only one case of complete calcification.

The data on the pyres that can be gleaned from cremated bones are scarce evidence on an important phase of the funeral – the cremation – where fire played the role of the material transformation of the dead body. The fire of the pyre had cultural, emotional and aesthetic meanings through its elements: fire, fuel, the identity of the deceased, the process and the final result of cremation (Sørensen, Bille 2008: 256). Cremation rituals are performances that attract the senses of those who perform the ritual, the community that participates in it, and other viewers. The fire transforms the body, and while it burns, it creates smell, heat, a strong visual and auditory impression (Cerezo-Román, Williams 2014: 250).

The act of cremation of the corpse was a very important part of the funerary rite. It was not only about a transformation of the body, but also about the fire and cremation being a medium and process along which and within which the community mourned. The physical disappearance of the dead person was accentuated in the process of burning of the pyre, where the emotions of the mourners were probably directed towards a dirge and the acceptance of loss (Sørensen, Bille 2008: 257). As a ritual, the fire and the pyre connected people with supernatural spheres. To the community that performed the burial, the cremation process was visible evidence of the transition from the world of living to the world of the dead (Nebelsick 1997: 28, Tab. 1).

### Bone gathering

After the burning out and cooling down of the pyre, which probably burned out by itself under the supervision of the community, considering the color and shape of the bones, it was time to gather the dead person's bones. Some Late Bronze Age communities show regularity in the choice of bones from the pyre and the order of gathering (Gramsch 2007; 2010: 114). When the urns of the Slatina cemetery were exhumed during the conservation works from 2010 to 2012, no anthropologist was present and no regularities were noticed in the depositing of bones into the urn. When an anthropologist examined the cremated human remains from the Slatina cemetery, it was noticed that most dead persons had all the bone groups, that is, fragments of all the parts of the entire body. Since most persons from Slatina have all the bone groups (skull bones, teeth, axial bones and long and small bones), it can be explained with the careful gathering of remains, which was probably an important part of funerary rites in this community.

Even after the cremation, body remains had significance, as demonstrated by their careful gathering and further safekeeping in the funerary ritual (Stig Sørensen 2010: 59).

The weighing of the remains of the deceased established that the weight of the gathered remains differ depending on sex and age. In fact, the weighing of the cremated remains can determine the amount of the skeletal material gathered from the pyre and whether there is more than one person in the grave. The total weight of the remains in the Slatina graves varies from 3.3 g to 2142.5 g with an average weight of 705.6 g. Most graves have between 100 and 1500



težina ostataka kod žena (195,8 g) znatno veća od onih za muškarce (104,5 g), no ovaj podatak treba uzimati s oprezom jer se za velik dio odraslih osoba u uzroku, čak 47 čija je prosječna težina 49,3 g, nije mogao odrediti spol. Težina uzorka iz Pobrežja kreće se od 2,4 g do 573,7 g, prosječno 122,04 g (Thomas 2011). Usporedba vrijednosti unutar groblja pokazuje kako ne postoji korelacija između težine ostataka i spola ili dobi osobe. Iako je pretpostavka bila da će veće vrijednosti ostatka pripadati odraslim osobama, dobivene razlike toliko su male da analiza nije potvrdila navedenu pretpostavku. Vrijednosti težina ostataka za groblje u Doroslovu kreću se od 5 g do 640 g, s prosjekom od 178,5 g, što je također znatno manje nego u Slatini (Živanović 2008). Sukladno tomu su manje i prosječne vrijednosti djece i odraslih te osoba obaju spolova. Prosječna vrijednost težine ostataka djece jest 58,75 g, dok je ona za odrasle 178,5 g. Vrijednosti prema spolu osobe jesu 535,5 g za muškarce i 316 g za žene. Sva tri lokaliteta imaju znatno manje prosječne vrijednosti od uzorka iz Slatina, pa su sukladno tomu i vrijednosti za djecu te odrasle, znatno manje. Za sada nije moguće objasniti zbog čega su vrijednosti na ova tri lokaliteta manje i zbog čega je u tim zajednicama sakupljeno manje kosturnog materijala s lomače.

Jedno od istraživačkih pitanja u pokušaju razumijevanja pravilnosti u težini ostataka bilo je i propitivanje povezanosti količine prikupljenih kostiju i kriterija za odabir urne. U slučaju grobova 7, 13, 15 i 38 uočeno je kako je veličina posude mogla pohraniti manju količinu kostiju (raspon vrijednosti težina od 65 do 244 g), a antropološkom analizom otkriveno je kako je riječ o grobovima djece u dobi od 0 do 5 godina.

### Odabir urne i poklopca

Među urnama otkrivenim u grobovima u Slatini razlikuju se tri osnovna oblika: lonci, amfore, i vrčevi. Među loncima razlikuju se tri oblika različita po tipu: lonci zaobljenog tijela, lonci bikoničnog tijela i lonci zaobljenog tijela i cilindričnog vrata. Usporedbom podataka dobivenih arheološkom analizom urni i poklopaca te antropološkom analizom ljudskih ostataka pokušala se otkriti pravilnost u odabiru urni. Osim kriterija količine kostiju koja je preostala nakon spaljivanja pokojnika, postavlja se pitanje što je još moglo utjecati na izbor urne. Provedena usporedba podataka pokazuje kako su u loncima uglavnom pokopavane žene (6 osoba), pri čemu je uočeno kako su u loncu pokopane i jedna odrasla osoba kojoj se spol nije mogla sa sigurnošću odrediti te troje djece (dvoje dobi 10–15 godina). Iako se spol djece ne može odrediti antropološkom analizom, može se pretpostaviti kako je u nekim slučajevima mogla biti riječ o djeci ženskog spola kao npr. u grobu 8 u kojem je pronađen i ulomak torkvesa. Upotreba lonca kao recipijenta za spaljene kosti pokojnika na području Karpatske kotline može se pratiti od ranoga brončanog doba. Veličina i tip lonca koji se koristio kao urna razlikuju se prema vremenskim fazama i regijama. Na početku kasnoga brončanog doba na jugu Karpatske kotline upotrebljavao se lonac kao urna na području gornje Posavine i prostoru Podravine (grupa Virovitica), dok se na prostoru srednje i donje Posavine (grupa Barice-Gređani)

g. The weight of the remains of children varies between 3.3 g and 809.3 g, with an average of 166.5 g. The weights of skeletal remains of all adults are between 411.20 g and 2142.50 g, with an average of 1109.9 g. When the weights of adults are divided by sex, men have between 938.20 g and 1616.30 g with an average of 1290.3 g, while women have between 711.30 g and 2142.50 g with an average of 993.40 g. Adults whose sex could not be determined have between 411.20 g and 1064.00 g with an average of 737.60 g. The comparison between the average weight for children and adults shows that children have the lowest values in the sample, which could be expected since the weight of the skeleton depends on a person's age, build and height (Mays 1998). Men are somewhat heavier than women, which is the expected distribution.

The comparison of the weight of samples from Slatina with other cemeteries showed similarities, but also differences. The Dobova cemetery has weights between 4 and 363 g, with an average of 61.8 g, which is much lower than Slatina (Stare 1975). Accordingly, there are lower average values for children (46.5 g) and adults (64 g). Among the adults, interestingly, the average weight of the remains for women (195.8 g) is much higher than the one for men (104.5 g), but this piece of data should be taken with caution, since their sex could not be determined for many adults in the sample, as many as 47, with an average weight of 49.3 g. The weight of the sample from Pobrežje is between 2.4 g and 573.7 g, with an average of 122.04 g (Thomas 2011). The comparison of values within the cemetery shows no correlation between the weight of the remains and the sex or age of a person. Even though it was assumed that adults would have heavier remains, the obtained differences are so small that the analysis has not confirmed the assumption. The weight of the remains at the Doroslovo cemetery is between 5 g and 640 g, with an average of 178.5 g, which is also much less than Slatina (Živanović 2008). Accordingly, there are lower average values for children and adults of both sexes. The average weight of the remains is 58.75 g for children and 178.5 g for adults. The weight for different sexes is 535.5 g for men and 316 g for women. All three sites have much lower average weight than the Slatina sample. Accordingly, their weight for children and adults is much lower. For now it is impossible to explain why these three sites have lower weight and why their communities gathered less skeletal material from the pyres.

One of the research tasks in an attempt to understand any regularity in the weight of the remains was the examination of the relation between the quantity of the collected bones and the criteria for the selection of urns. In the case of the graves 7, 13, 15 and 38, it was noticed that the size of the vessel could contain a smaller quantity of bones (with the weight range from 65 to 244 g), and the anthropological analysis discovered that those were graves of children of 5 years of age or less.

### Choice of urn and lid

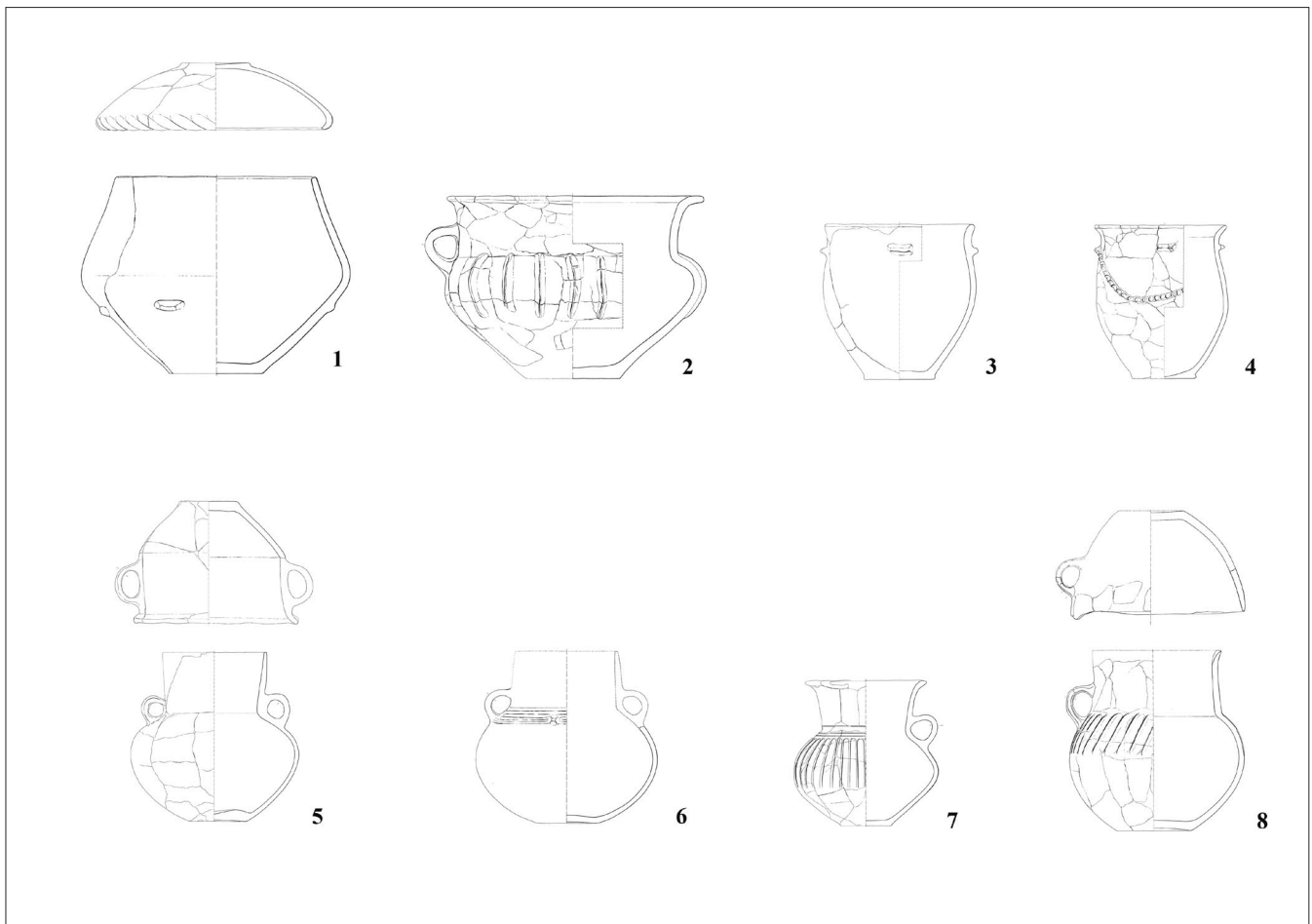
The urns discovered in the Slatina graves have three basic shapes: pots, amphorae, and jugs. The pots have three forms of different types: bulging pots, biconical pots, and

koristila zdjela kao poklopac nad spaljenim kostima koje su prvotno bile umotane u neki organski recipijent (Ložnjak Dizdar 2011a). Tijekom 12. st. pr. Kr., s jačanjem utjecaja baierdorfsko-velatičkog stila, u grobovima se počinju upotrebljavati i drugi tipovi posuda kao urne – vrčevi i amfore (Patek 1968; Vinski-Gasparini 1973: 69, 72, T. 23: 1, 5; T. 25: 5; Ložnjak Dizdar 2011b: 252, Pl. 3: 1–12).

Na groblju u Slatini u amforama, odnosno posudama zaobljenog tijela i cilindričnog vrata s dvije trakaste nasuprotno postavljene ručke koje spajaju vrat i rame posude, pokopana su uglavnom djeca (5), ali i muške odrasle osobe (4). Amfore su kao oblik urne široko rasprostranjene na jugu Karpatske kotline u razdoblju 11. i 10. st. pr. Kr. te se pojavljuju kao različito ukrašeni ili neukrašeni tipovi na grobljima srednjeg Podunavlja i jugoistočnoalpskog prostora (Ložnjak Dizdar 2011b: karta 2; Patek 1958; 1961: T. XIV: 5–6; 1968).

U vrčeve, odnosno posude zaobljenog tijela i cilindričnog ili ljevkastog vrata s jednom ručkom te manjih zapremina, položeni su spaljeni ostaci djece (2) u dobi od 0 do 5 godina (težine ostataka 108,4 i 244,2 g) te jedne starije muške osobe (težina ostataka 1507,20 g), čiji su se ostaci, ipak, nalazili u mnogo većoj posudi koja bi mogla biti i veći lonac koji ima jednu ručku, sudeći prema odnosu visine i širine otvora posude. Vrčevi se kao urne koriste u razdoblju 11. i 10. st. pr. Kr., odnosno do Ha B2 na grobljima srednjeg Podunavlja (Patek 1968; Kalics Schreiber 2010) te jugoistočnoalpskog

bulging pots with cylindrical necks. By comparing the data obtained from the archaeological analysis of urns and lids, and the anthropological analysis of human remains, it was attempted to discover regularity in the choice of urns. Aside from the criterion of the quantity of bones remaining after the cremation of the corpse, there is the question of what else could have influenced the choice of the urn. The comparison of data shows that the pots were mostly used to bury females (6 persons), as well as 1 adult whose sex could not be determined, and 3 children (two were 10–15 years old). Even though the anthropological analysis cannot determine the children's sex, it can be assumed that some cases were female children, such as e.g. the grave 8, which included a fragment of a torc. The use of a pot as a recipient for the cremated bones of the dead in the region of the Carpathian Basin can be seen from the Early Bronze Age. The pots used as urns have different sizes and types depending on time phases and regions. At the beginning of the Late Bronze Age in the southern Carpathian Basin, pots were used as urns in the areas of the upper Sava and Drava (the Virovitica group), while the areas of the central and lower Sava (the Barice-Gredani group) used bowls as lids over the cremated bones, which were originally packed in an organic recipient (Ložnjak Dizdar 2011a). During the 12<sup>th</sup> cent. BC, as the influence of Baierdorf-Velatices style grew, other types of vessels started being used in the graves as urns: jugs and



Sl. 1 Osnovni oblici urni i poklopaca na groblju u Slatini (crtež: M. Rončević)

Fig. 1 The basic shapes of urns and lids at the Slatina cemetery (drawing: M. Rončević)

područja (Müller-Karpe 1959), od kada se sve više kao urne počinju koristiti lonci velikih recipijenata (Teržan 1990: 93).

Ako se uspoređi vrijeme od sredine Ha A1 do Ha B2 u relativnokronološkoj shemi, vidljivo je kako se na jugu Karpatske kotline spaljene kosti pokojnika pohranjuju u urne manjih zapremina, pri čemu je uzimana u obzir količina kostiju koja se namjeravala prikupiti nakon spaljivanja tijela pokojnika. Ranije, na početku kulture polja sa žarama, kao i kasnije na kraju, taj dio pogrebnog običaja nije se odvijao prema istim kriterijima, sudeći prema sadašnjem stanju istraživanja.

Usporedba odnosa između izbora tipa urne te spola i dobi pokojnika na groblju u Slatini komparirana je s podacima iz drugih istovremenih groblja na kojima su objavljene antropološke analize te se pokazalo kako je sličan princip u odabiru urni primjenjivan za lonce i amfore na groblju u Dobovi (Starè 1975: grobovi 209, 219 i 305), zatim Gorice pri Turnišću u sjeveroistočnoj Sloveniji u izboru lonaca i amfora (Plestenjak 2010: grobovi 1 i 4) te na groblju u Doroslovu (Trajković 2010: grobovi 36 i 71).

O rasprostranjenosti ideje o upotrebi amfore kao urne te povezanosti s ritualom svjedoče podaci s područja Karpatske kotline te činjenica kako se na grobljima za koja su provedene antropološke analize mogu uočiti neke pravilnosti. Očito je kako su, uz rašireni ritual spaljivanja kao načina tretiranja tijela preminule osobe, prenošene i rasprostranjene druge faze rituala u komunikacijskoj mreži zajednica kulture polja sa žarama. Osim tipoloških karakteristika materijalne kulture koje su bile putokaz u definiranju kulturnih grupa i lokalnih identiteta, neki dijelovi pogrebnog rituala koji se primjenjuju pokazuju kako su komunikacijske mreže bile mnogo intenzivnije s globalnijim posljedicama nego što se čini na prvi pogled.

Pri odabiru poklopca na groblju u Slatini uočena su dva osnovna tipa: zdjele i šalice, pri čemu nije uočena pravilnost u izboru koja bi ovisila o spolu ili dobi pokojnika.

Ovakav izbor poklopca uobičajen je u Ha A2 fazi kulture polja sa žarama. Zdjele, uglavnom uvučenog ruba, uobičajen su izbor za poklopce tijekom čitave kulture polja sa žarama, a karakterističan tip šalice s dva jezičasta izdanka iznad ruba te s trakastom ručkom, koji se može usko datirati u Ha A2 vrijeme, uočen je u funkciji poklopca na groblju Tököl (Patek 1958) i Vál (Petres 1960), dok kao poklopac ovaj tip nije zabilježen na grobljima u Doroslovu (Trajković 2008) i Csorvi (Trogmayer 1963). Zbog toga ovaj izbor poklopca treba povezati s područjem zapadne Mađarske, odnosno s područjem sjeverno od rijeke Drave.

I u povezivanju pojedinih istovremenih zajednica kao u primjeru Slatine s dijelom istovremenim grobljima u Doroslovu, Dobovi te istraženim grobovima iz Gorice, treba imati na umu razlike u metodologiji istraživanja i analizi. Pri tome egzaktne činjenice vidljive u materijalnoj kulturi i zabilježenim kontekstima kao i provjerljive analize spaljenih ljudskih i životinjskih ostataka, mogu ukazivati na varijacije, no materijalni dokazi upućuju na zaključak o sličnosti materijalne kulture i rituala koji se provodio tijekom pokopa u nekoliko faza. U pogrebnom ritualu također su uočljiva neka lokalna obilježja, pri čemu je vidljivo kako je zajednica primjenjivala ritual prema svojim mogućnostima u odabiru urne, pogrebnoj gozbi koja se odvijala tijekom pogreba te prilikom polaganja urne u grob.

amphorae (Patek 1968; Vinski-Gasparini 1973: 69, 72, Pl. 23: 1, 5; Pl. 25: 5; Ložnjak Dizdar 2011b: 252, Pl. 3: 1–12).

The Slatina cemetery amphorae, which are bulging vessels with cylindrical necks and two cord-decorated opposite handles on either side joining the neck and shoulders of the vessel, contained mostly children (5), but also adult male (4). As a type of urns, amphorae were widespread in the southern Carpathian Basin in the period between the 11<sup>th</sup> and the 10<sup>th</sup> cent. BC, appearing as variously decorated or undecorated types at the cemeteries of the central Danube and the southeast Alpine region (Ložnjak Dizdar 2011b: Map 2; Patek 1958; 1961: Pl. XIV: 5–6; 1968).

The jugs, which are lower-volume bulging vessels with cylindrical or conical necks and a single handle, contained the cremated remains of children (2) under 5 years of age (the weight of the remains was 108.4 g and 244.2 g), and an old man (the weight of the remains was 1507.20 g), whose remains were placed in a much larger vessel, which could have been a larger pot with a single handle, considering the ratio of width and height of the vessel mouth. Jugs were used as urns in the period from the 11<sup>th</sup> to the 10<sup>th</sup> cent. BC, or until the Ha B2 phase at the cemeteries on the middle Danube (Patek 1968; Kalics Schreiber 2010) and the southeast Alpine region (Müller-Karpe 1959), when large recipient pots were being increasingly used as urns (Teržan 1990: 93).

When the period from the middle of Ha A1 to Ha B2 is considered in a relative chronological scheme, it can be seen that the cremated bones of the dead in the southern Carpathian Basin were stored in lower-volume urns, taking into account the amount of bones that was intended to be collected after the cremation of the body. Earlier, at the beginning of the Urnfield culture, but also at its end, this part of the funerary rite was not performed according to the same criteria, considering the current state of research.

The relationships between the chosen type of urn and the sex and age of the dead at the Slatina cemetery were compared with the data from other contemporary cemeteries where anthropological analyses were done. It turned out that a similar principle for choosing urns was applied to pots and amphorae at the Dobova cemetery (Starè 1975: graves 209, 219 and 305), to pots and amphorae at Gorica near Turnišće in northeast Slovenia (Plestenjak 2010: graves 1 and 4), and at the Doroslovo cemetery (Trajković 2010: graves 36 and 71).

The popularity of the idea to use amphorae as urns and their relation to the ritual are confirmed by the data from the region of Carpathian Basin and by the fact that the cemeteries subject to anthropological analyses show certain regularities. It is obvious that, along with the widespread ritual of cremation as the method of treating the dead body, there were other phases of the ritual that were transmitted and spread in the communication networks of the communities of the Urnfield culture. Aside from the typological characteristics of material culture, which were signposts defining cultural groups and local identities, some applied elements of the funerary rite suggest that the communication networks were much more intense, with global consequences, than it would seem at first sight.



### Odabir mjesta za groblje i princip pokopa

Groblje kasnoga brončanog doba u Slatini nalazilo se na oko 120 m južno od istovremenog naselja otvorenog tipa koje se nalazilo na povišenoj gredi istočno od potoka Potočani. Groblje se pružalo, sudeći prema istraženom segmentu, u smjeru sjeveroistok – jugozapad. Blizina groblja istovremenom naselju uobičajena je u kasnom brončanom dobu. Takvi primjeri nalaze se uz starije groblje datirano u Br D stupanj u Poljani Križevačkoj 2 (Ložnjak Dizdar 2012: 65) u sjevernoj Hrvatskoj, u Ptuju u sjeveroistočnoj Sloveniji (Strmčnik-Gulič 1989: 147, Prilog 1), dijelom istovremenom naselju i groblju na položaju Ménfőcsanak u zapadnoj Mađarskoj koje se tumači kao povremeno sezonsko boravište za razliku od Slatine (Ilon 2014: 39, sl. 2), dugotrajnom groblju Békásmegyer u Budimpešti (Kalicz-Schreiber 2010: 14, sl. 2). Ponekad su grobovi otkriveni i unutar naselja kao u primjeru Podsmreke (Murgelj 2013; 2014: 18, sl. 2).

Unutar samog groblja u Slatini uočen je princip horizontalnog pokopavanja. Pretpostavlja se kako se pokopavalo u skupinama prema obiteljskom principu, sudeći prema rasporedu grobova. To je vidljivo u grupi od 4 groba (9, 11, 12, 13 – muška, ženska osoba te dvoje djece). Takve kombinacije moguće su i u još nekim dijelovima groblja s obzirom na neodređivanje spola u biološkoj kategoriji djece do 20 godina. Tu je potrebno uzeti u obzir i socijalnu dob koja je u kasnobrončanodobnom društvu bila zasigurno drugačija od biološke dobi.

Slično pokopavanje u skupinama zabilježeno je na starijim grobljima Popernjak (Marijan 2010) ili Migalovci (Nodilo et al. 2013: 91, sl. 4), te dijelom istovremenom Pobrežju, gdje se i prema dijelovima nošnje položene u grobove mogu izdvojiti društvene skupine unutar ženskih grobova (Teržan 1999: 115, sl. 12; Črešnar, Thomas 2013: 87, sl. 9).

Osim grobova sa spaljenim ljudskim ostacima i keramičkim priložima, na sjevernom rubu groblja otkrivena su dva groba koja su već u depoziciji pokazivala drugačiji način od onoga primijećenog u ostalim istraženim grobovima.

### Žrtva na groblju (?)

Sjeverno od grobova sa spaljenim ljudskim ostacima i keramičkim priložima, pronađena su međusobno vrlo blizu tri ukopa sa spaljenim kostima koja su prilikom arheoloških istraživanja označeni kao grobovi 1–3, a zbog naknadnog polaganja spaljenih kostiju u nekom organskom materijalu, sudeći prema obliku zabilježenom *in situ*. Antropološkom analizom utvrđeno je kako nije riječ o ljudskim ostacima. Arheozoološka analiza ponudila je intrigantne odgovore na pitanja o ovom otkriću.

U grobu 1 pronađeni su ostaci svinje (*Sus sp.*) i goveda (*Bos taurus*), a u grobu 2 ostaci goveda (*Bos taurus*) i ovce ili koze (*Ovis/Capra*) prema arheozoološkoj analizi (Radović, neobjavljeno). Na dijelu jednog rebra otkriveni su tragovi transversalnih ureza kao posljedica ljudskih aktivnosti u komadanju mesa prije gorenja. Životinjske kosti iz groba 1 djelomično su kalcificirane, svijetlosive do bijele su boje, što svjedoči kako su dijelovi životinja bili izloženi jakoj vatri, nakon čijeg su gašenja kosti vjerojatno bile oprane i depozirane u jamu (Radović, neobjavljeno). U grobu 2 uglavnom

The choice of lids at the Slatina cemetery shows two basic types: bowls and cups, with no regularity in choice that would depend on the sex or age of the dead.

Such choice of lids is typical in the Ha A2 phase of the Urnfield culture. Bowls, usually with an inward rim, were the usual choice for lids during the entire Urnfield culture. The characteristic type of cup with two conical bosses above the rim and a cord-decorated handle, which can be narrowly dated to the Ha A2 phase, was identified as a lid at the cemeteries of Tököl (Patek 1958) and Vâl (Petres 1960), while this type was not found as a lid at the cemeteries of Doroslovo (Trajković 2008) and Csorva (Trogmayer 1963). Therefore, this choice of lid should be associated with the region of western Hungary and the area north of the river Drava.

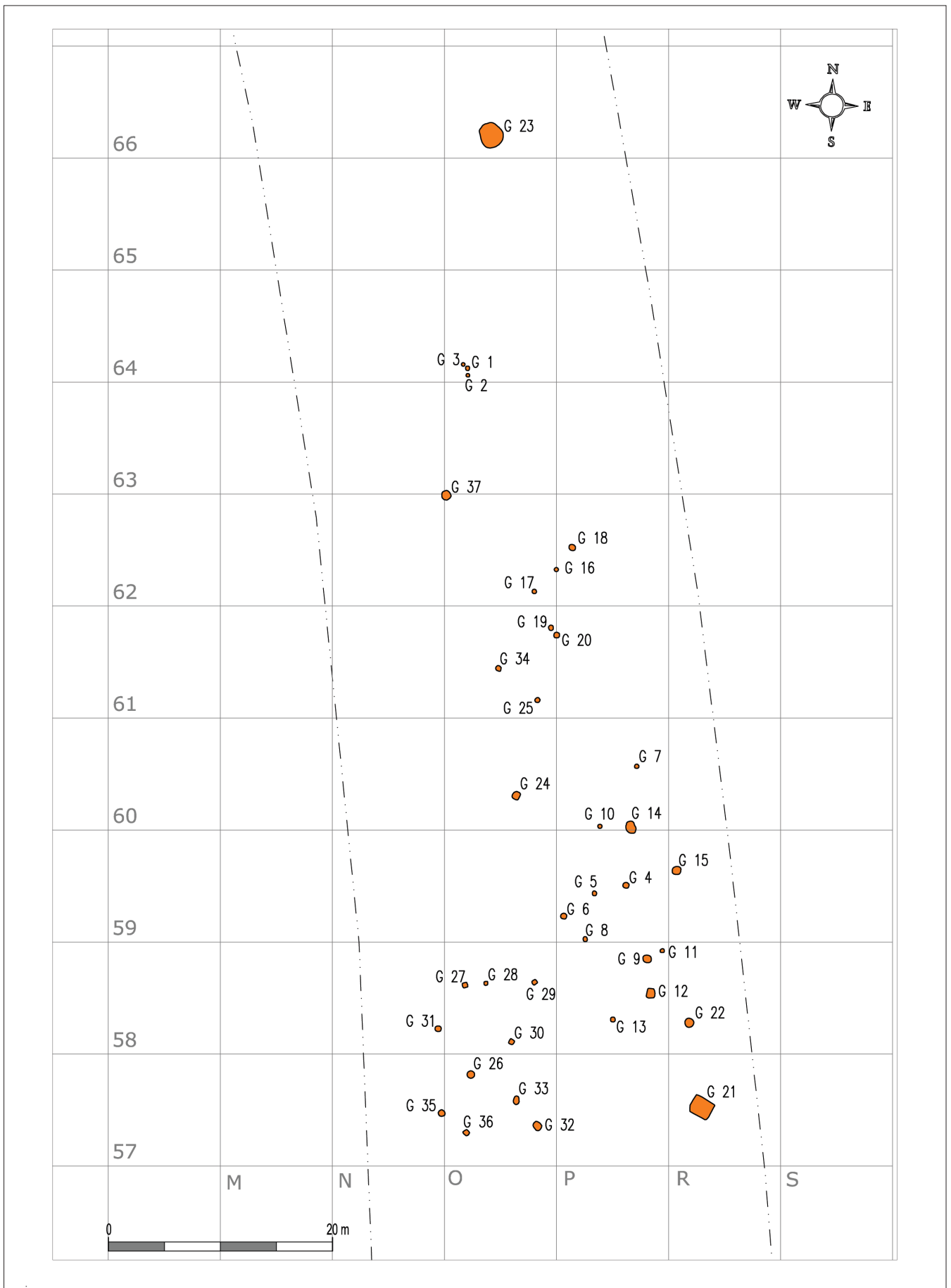
Also, when making connections between particular contemporary communities, as in the case of relating Slatina to the roughly contemporary cemeteries in Doroslovo, Dobova and the researched graves from Gorice, attention should be paid to the differences in the methods of research and analysis. The exact facts visible in the material culture and recorded contexts, as well as the verifiable analyses of cremated human and animal remains, can indicate variations, but material evidence points to the conclusion about the similarity of material culture and ritual that was performed in several phases during the burial. The funerary rite also shows certain local features, where it can be seen how the community applied the ritual according to its means when choosing the urn, having the funerary feast during the funeral, and laying the urn into the grave.

### The choice of cemetery and the burial principles

The Late Bronze Age cemetery in Slatina was around 120 m south of the contemporary unenclosed settlement on raised ground east of the creek Potočani. Judging by the researched segment, the cemetery lies on a northeast – southwest axis. The closeness of the cemetery to the contemporary settlement was normal in the Late Bronze Age. Such cases can be seen near the older cemetery from the Br D phase in Poljana Križevačka 2 (Ložnjak Dizdar 2012: 65) in northern Croatia, in Ptuj in northeastern Slovenia (Strmčnik-Gulič 1989: 147, Annex 1), partly contemporary settlement and cemetery at the site of Ménfőcsanak in western Hungary, which is interpreted as an occasional seasonal abode unlike Slatina (Ilon 2014: 39, Fig. 2), the long-used cemetery Békásmegyer in Budapest (Kalicz-Schreiber 2010: 14, Fig. 2). Graves were sometimes discovered within settlements, as in Podsmreka (Murgelj 2013; 2014: 18, Fig. 2).

A principle of horizontal burial was identified within the Slatina cemetery. It is assumed that those buried were gathered according to a family principle, judging by the distribution of graves. It can be seen in a group of 4 graves (9, 11, 12, 13 – a man, a woman, and two children). Such combinations are possible in other parts of the cemetery, considering the indeterminate sex in the biological category of children under 20. Another thing to be considered is the social age, which was certainly different from biological age in the Late Bronze Age society.

A similar burial in groups was identified at the older



Sl. 2 Plan groblja u Slatini (M. Kristović, Arheoplan d. o. o.)  
 Fig. 2 The Slatina cemetery plan (M. Kristović, Arheoplan d.o.o.)



Sl. 3 Grob 1 *in situ* (foto: T. Filipović, dokumentacija Muzeja Slavonije Osijek)

Fig. 3 Grave 1 *in situ* (photo: T. Filipović, documentation from the Museum of Slavonia in Osijek).

su bili zastupljeni mali neodredivi fragmenti kostiju, bez dugih kostiju i rebara. Životinjske kosti iz groba 2 djelomično su karbonizirane, sivosmeđe do tamnosive boje što svjedoči kako su dijelovi životinja bili izloženi nestabilnoj vatri ili su bili pri rubu lomače, te je možda riječ i o jami u kojoj su pohranjeni otpaci, ali isto organizirani u nekoliko hrpica (Radović, neobjavljeno). U grobu 3 pronađeno je vrlo malo osteološkog materijala i teško je sa sigurnošću odrediti o čemu je riječ. Ostaci spaljenih kostiju svinje (*Sus sp.*) otkriveni su i u grobu 36 zajedno sa spaljenim kostima pokojnika (Radović, neobjavljeno).

Nalazi životinjskih kostiju nisu rijetkost u grobovima kulture polja sa žarama. Spaljeni životinjski ostaci pronađeni su na groblju Békásmegyer u Budimpešti (Heußner 2010: 302–307), na grobljima u sjeveroistočnoj Sloveniji (Črešnar, Thomas 2013: 95), te na dijelom istovremenom groblju Oblekovce (Říhový 1968: 44) i mlađem groblju Podoli u Moravskoj (Říhový 1982: 64), gdje su spaljene životinjske kosti pronađene zajedno s ljudskima u urnama. Na nekim grobljima pronađene su nespaljene životinjske kosti kao prilozi npr. u Slatini istovremenim kasnobrončanodobnim grobovima 36, 83, 118 u Doroslovu u Bačkoj (Blažić 2008: Tab. 1). Najsličnija usporedba za grobove 1–2 jesu nalazi spaljenih životinjskih kostiju iz jama 354, 358 i 408 u Kainachu pokraj Wildona u Štajerskoj gdje su spaljene životinjske kosti isto u jamama unutar istraženog groblja kulture polja sa žarama (Gutjahr 2011: 181, sl. 2, sl. 19). Prema nalazima keramike, te su jame datirane u ranu fazu kulture polja sa žarama (od prijelaza Br C/D do u Ha A1 stupanj). Slično kao u grobu 1 u Slatini, prema boji spaljenih kostiju i kalcificiranosti, pretpostavlja se kako su ovi ostaci bili u središnjem dijelu lomače ili vatre (Gutjahr 2011: 181). Tragovi ritualnih aktivnosti prije, tijekom i nakon sprovoda zamijećeni su i na drugim kasnobrončanodobnim nalazištima, npr. na groblju rane kulture polja sa žarama Janíky u jugozapadnoj Slovačkoj (Studeníková 2015) te kasnobrončanodobnom nalazištu

cemeteries in Popernjak (Marijan 2010) or Migalovci (Nodilo et al. 2013: 91, Fig. 4), and partially contemporary Pobrežje, where parts of clothes laid in graves can also differentiate social groups within female graves (Teržan 1999: 115, Fig. 12; Črešnar, Thomas 2013: 87, Fig. 9).

Aside from the graves with cremated human remains and ceramic objects, two graves discovered at the northern edge of the cemetery showed a method of disposal that differed from the one identified in other researched graves.

### Cemetery sacrifice (?)

North of the graves with cremated human remains and ceramic objects, three graves with cremated bones were found very close to one another. During the archaeological research, they were labeled as graves 1–3, because of the subsequent deposition of cremated bones in some organic material, judging by the form recorded *in situ*. The anthropological analysis determined that the remains were not human. The archaeozoological analysis offered intriguing answers to the questions about this find.

Grave 1 contained the remains of a pig (*Sus sp.*) and a bovine (*Bos taurus*), while grave 2 contained the remains of a bovine (*Bos taurus*) and a sheep or goat (*Ovis/Capra*) according to the archaeozoological analysis (Radović, unpublished). A part of a rib had traces of transversal cuts as a consequence of the human activity of hacking flesh before cremation. The animal bones from grave 1 were partly calcified, with a light grey or white hue, indicating that parts of animals were exposed to strong fire, and probably washed and deposited in an open grave after the fire burned out (Radović, unpublished). Grave 2 mostly contained small unidentifiable bone fragments, without long bones or ribs. The animal bones from grave 2 are partly carbonized, ranging in hue from grey-brown to dark grey, which means that parts of animals were exposed to an unstable fire or were close to the pyre, so maybe it is a hole for depositing waste, but it was also organized in several piles (Radović, unpublished). Grave 3 contained very little osteological material, so it is hard to determine with certainty what it is. The remains of cremated bones of a pig (*Sus sp.*) were also found in the grave 36 together with the cremated bones of the dead person (Radović, unpublished).

The finds of animal bones are not rare in graves of the Urnfield culture. Cremated animal remains were found at the Békásmegyer cemetery in Budapest (Heußner 2010: 302–307), at graveyards in northeastern Slovenia (Črešnar, Thomas 2013: 95), and in the partly contemporary cemetery Oblekovce (Říhový 1968: 44) and the more recent cemetery Podoli in Moravia (Říhový 1982: 64), where cremated animal bones were found together with human bones in urns. Some cemeteries contained uncremated animal bones as grave accessories, e.g. in the Late Bronze Age graves 36, 83, 118 in Doroslovo in Bačka, contemporaries of Slatina (Blažić 2008: Tab. 1). The most similar comparison for the graves 1–2 are the finds of cremated animal bones from the pits 354, 358 and 408 in Kainach near Wildon in Styria, where cremated animal bones were also in pits within the researched cemetery of the Urnfield culture. (Gutjahr 2011:

Lapus u Rumunjskoj (Metzner-Nebelsick et al. 2010).

Tragovi dijelova pogrebnih običaja poput ritualnih jama i sl. upućuju na aktivnosti koje su se odvijale prije, tijekom i nakon sprovoda i mogu se usporediti s tragovima sličnih radnji na prostoru Karpatske kotline. Tragovi nespaljenih i spaljenih životinjskih kostiju svjedoče kako se tijekom rituala ispraćaja pokojnika žrtvovalo i konzumiralo (?) meso životinja. Dokazi o tom dijelu ispraćaja pokojnika nalaze se na brojnim grobljima kulture polja sa žarama. Razlike u vrsti mesa životinja mogu se objasniti mogućnostima, privredom i okolišem u kojem je zajednica živjela, a odabir dijelova životinjskog mesa koji je žrtvovan te način (prilaganje ili spaljivanje) vjerovanjima te iste zajednice.

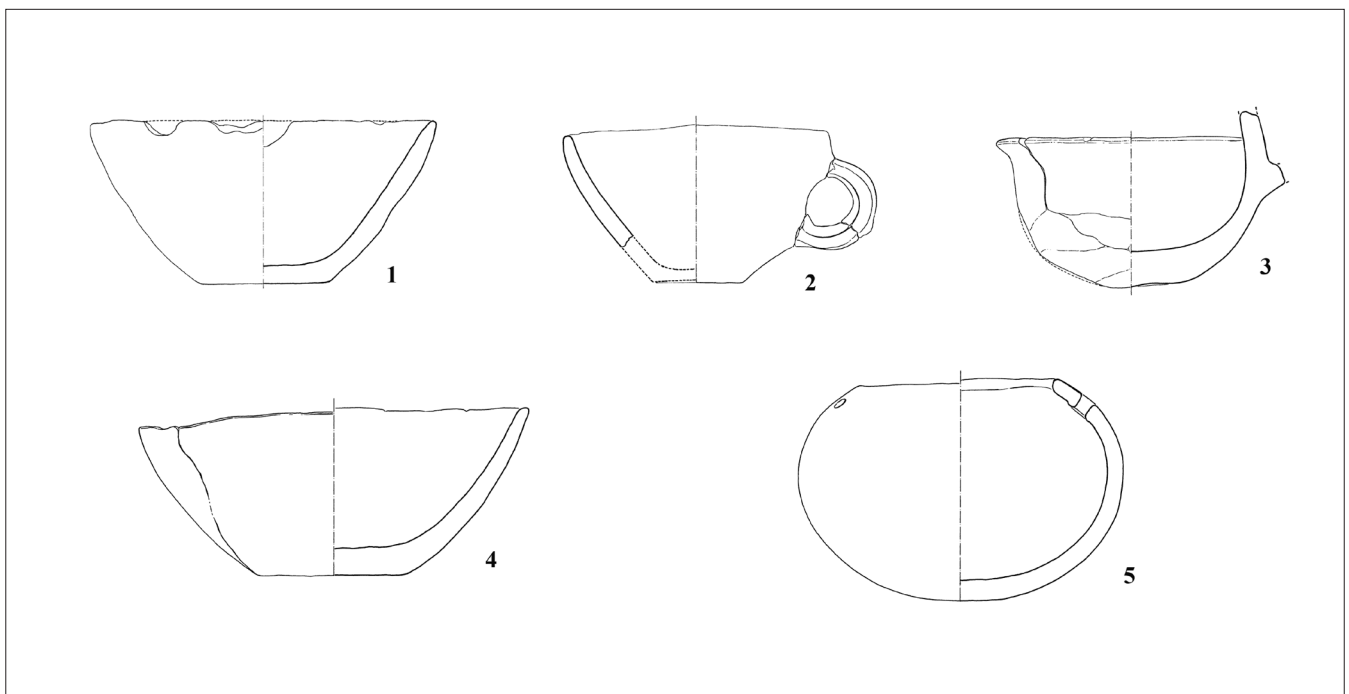
Osim otkrića spaljenih životinjskih kostiju, zanimljivi su i nalazi manjih zdjelica u urnama među spaljenim kostima kao i ulomci lonca pronađeni među spaljenim kostima koji svjedoče o gozabama koje su se odvijale tijekom pogreba. Ulomci lonca pronađeni među spaljenim kostima u grobu 22 svjedoče o gozbenim aktivnostima uz lomaču kao i ostaci spaljenih životinjskih kostiju među kojima su također pronađeni ulomci kasnobrončanodobne keramike. Male zdjelice pronađene u grobovima 6 i 35 mogu svjedočiti o libacijskim aktivnostima tijekom prikupljanja kostiju i polaganja u urnu. Sličnu ulogu u ritualu imala je i šalica pronađena u grobu 15, ali izvan urne.

Ovi skromni tragovi spaljenih životinjskih kostiju, cjelovitih manjih zdjelica i razbijenih ulomaka keramičkih posuda pronađeni među spaljenim kostima pokojnika svjedoče o dijelovima rituala od kojih je ostalo malo materijalnih dokaza, ali su se nepobitno odvijali tijekom pogreba članova zajednice. Potom su grobovi bili zatrpani uglavnom zemljom koja je bila iskopana tijekom pripreme grobne rake koja nije bila mnogo veća od urne u kojoj su bile sakupljene kosti pokojnika. Iznimka od pravila jest grobna raka pripremljena za

181, Fig. 2, Fig. 19). According to ceramic finds, the pits were dated to the early phase of the Urnfield culture (from the Br C/D transition to the Ha A1 phase). Similarly to the grave 1 at Slatina, the hue and calcification of cremated bones gave rise to the hypothesis that those remains were in the central part of a pyre or fire (Gutjahr 2011: 181). Traces of ritual activities before, during and after the funeral were noticed at other Late Bronze Age sites too, e.g. at the cemetery of the early Urnfield culture with Janíky urns in southwestern Slovakia (Studeníková 2015) and the Late Bronze Age site of Lapus in Romania (Metzner-Nebelsick et al. 2010).

Traces of parts of burial customs, such as ritual pits etc., indicate what activities took place before, during and after the funeral, and can be compared with the traces of similar activities in the area of the Carpathian Basin. Traces of uncremated and cremated animal bones indicate that animal meat was sacrificed and eaten (?) during the ritual of parting from the dead man. Evidence of that part of the last rites for the dead can be seen at numerous cemeteries of the Urnfield culture. The differences in the types of animal meat can be explained by the resources, economy and environment in which the community lived, while the choice of parts of animal meat that were sacrificed and the method (deposition or cremation) can be explained by the beliefs of that community.

Aside from the discovery of cremated animal remains, there are interesting finds of smaller bowls among the cremated bones in the urns and the fragments of a pot found among the cremated bones, indicating the feasts that took place during funerals. The fragments of a pot found among the cremated bones in grave 22 testify about feast activities by the pyre, just like the remains of cremated animal bones that were also accompanied by fragments of the Late Bronze Age ceramics. Small bowls found in graves 6 and 35



Sl. 4 Zdjelice i šalice pronađene u urnama u Slatini (foto: D. Ložnjak Dizdar)

Fig. 4 Bowls and cups found in Slatina urns (photo: D. Ložnjak Dizdar)





Sl. 5 Grob 15 in situ (foto: T. Filipović, dokumentacija Muzeja Slavonije Osijek)

Fig. 5 Grave 15 in situ (photo: T. Filipović, documentation from the Museum of Slavonia in Osijek)

dvojni ukop u dvije odvojene urne u grobu 15 koja je bila zatrpana ostacima gara i pepela s lomače.

S obzirom na to da nije otkriven niti jedan grob poremećen ukopom mlađeg groba, pretpostavlja se kako su grobovi imali vanjske oznake kojima tragovi nisu uočeni tijekom istraživanja, vjerojatno zbog uništenosti hodne površine iz kasnoga brončanog doba nastale tijekom kasnijih ljudskih aktivnosti na ovom položaju.

## ZAKLJUČAK

Smrt pojedinca u zajednici nekad je, kao i danas, bilo iskustvo završetka ovozemaljskog života te se kroz različite rituale pokušalo oprostiti od pokojnika, ali i prirediti prijelaz prema vječnosti, ovisno o vjerovanjima (Gramsch 1995). Vjerojatno je kako su faze u pogrebnom ritualu, zamijećene prema tragovima u kasnobrončanodobnim grobljima, dio vjerovanja kasnobrončanodobnih ljudi: smrt – priprema tijela za pokop – uobičajena nošnja – lomača – prikupljanje drva – polaganje tijela – gozba uz lomaču – vatra – zrak – gašenje lomače – prikupljanje i pranje kostiju – voda – odabir urne – poklapanje urne – polaganje urne u grob – zatrpanje i označavanje groba – zemlja.

Njihova vjerovanja vezana uz zagrobni život bila su vrlo raširena na širem europskom prostoru, sudeći ne samo prema načinu tretiranja tijela pokojnika nego i o sličnosti kod aktivnosti u ispraćaju pokojnika nakon spaljivanja do polaganja u grobnu raku. Sličnosti su vjerojatno odraz svakodnevnog života i društva čija se ideologija onda preslikala i na pogrebne običaje i doživljaj smrti (Fokkens 1997: 370).

Pokušavajući rekonstruirati pogrebne običaje primjenjivane pri ispraćaju pokojnika u Slatini, uočeno je kako se u većini grobova može razaznati većina faza ispraćaja. Za svaku pojedinu fazu teško je sa sigurnošću rekonstruirati čitav proces koji se odvijao prilikom svakog ispraćaja, ali promatrajući grobove unutar istraženog dijela groblja zajednice, primijećene su pravilnosti koje svjedoče o poznavanju rituala i važnosti njegove primjene u ispraćaju svakoga premulog člana zajednice.

might indicate libation activities during the collection of bones and their deposition in the urn. A similar role in the ritual was played by the cup found in grave 15, but outside the urn.

These modest remains of cremated animal bones, whole small bowls and broken fragments of ceramic vessels found among the cremated bones of the dead testify about parts of rituals that have left little material evidence, but undoubtedly took place during the funeral of a community member. Then the graves were covered, mostly with earth that had been excavated during the preparation of the grave, which was not much larger than the urn containing the dead person's bones. An exception to this rule is the grave prepared for a double burial in two separate urns in grave 15, which was covered with the remains of embers and ashes from the pyre.

Since no graves were disturbed by burials in any later graves, it is assumed that the graves were marked above ground, but no trace of such marks was found by the researchers, probably because of the destruction of the walking surface from the Late Bronze Age because of later human activities at the site.

## CONCLUSION

Death of a community member was, and still is, an experience of the end of the earthly life, so various rituals were practiced to give a final farewell to the dead, but also to prepare them for the crossing to eternity, depending on beliefs (Gramsch 1995). It is probable that the phases in the funerary rite, which were identified on the basis of traces in the Late Bronze Age cemeteries, are a part of the beliefs of the Late Bronze Age people: death – preparation of the body for burial – the usual clothes – a pyre – collecting wood – laying the body – a feast next to the pyre – fire – air – the pyre burns out – collecting and washing the bones – water – selection of the urn – closing the urn with a lid – laying the urn into the grave – covering the grave with soil and marking the grave – earth.

Their beliefs related to the afterlife were widespread on a large European territory, judging not only by the method of treating the dead body, but also by the similar activities during the funeral – from burning to laying into the grave. These similarities are probably a reflection of everyday life and society whose ideology was also applied to funerary practices and the experience of death (Fokkens 1997: 370).

During the attempt to reconstruct the funerary practices applied to the funerals in Slatina, it was noticed that most graves reveal most of the funerary phases. For each phase, it is hard to reconstruct the entire process that took place during each funeral, but it was noticed that the graves within the researched part of the community cemetery have regularities that indicate knowledge of the ritual and the importance given to its application for the funeral of each community member.

The comparison of these phases with the wider region of the southern Carpathian Basin tried to find similarities and differences in order to define the communication network that existed in the 11<sup>th</sup> cent. BC according to the data

Usporedbom ovih faza sa širim prostorom juga Karpat-ske kotline pokušale su se uočiti sličnosti i razlike u cilju definiranja komunikacijske mreže prisutne u 11. st. pr. Kr. prema podacima o pogrebnom ritualu. Različito od spoznaja koje su uočene na nalazima iz ostava i metalnim predmetima kada se vrijeme Ha A2 definira kao vrijeme kolapsa komunikacijske mreže u južnoj Transdanubiji (Váczi 2013: 219), prema sličnostima u pogrebnim običajima može se uočiti kako mreža komunikacija još uvijek funkcionira, odnosno kako ekonomske promjene nisu utjecale na komunikacijsku mrežu vezanu uz vjerovanja i ispraćaj pokojnika koja je uspostavljena tijekom Ha A1 stupnja kada su se ideje npr. o upotrebi amfore ili šira rasprostranjenost kaneliranog ukrasa raširile iz prostora srednjeg Podunavlja na širi prostor Karpat-ske kotline.

Razlike koje su vidljive u materijalnoj kulturi ili pojedinoj fazi rituala mogu se tumačiti mogućnostima koje su pojedine zajednice, ovisno o privredi, posjedovale te su prema njima nastojale primjenjivati ritual kojim je smrt trebalo pretvoriti u trajanje. Mogućnosti male zajednice iz Slatine upućuju na poljoprivrednike i stočare koji su imali manje zemaljskih dobara za razliku od dijelom istovremenih zajednica u Pobrežju, Dobovi i Velikoj Gorici, a sudeći prema metalnim predmetima pronađenim u grobovima, ili u Tökölu i Válu sudeći prema broju keramičkih priloga u grobovima. Prema strukturi grobnih priloga, groblje u Slatini najbližije je starijim grobovima na groblju u Doroslovu (Trajković 2008). Tipovi urni i poklopaca odabrani od zajednice u Slatini upućuju na komunikacijske veze s Dobovom, Csorvom, ali i s grobljima u sjevernom dijelu Transdanubije. Primjena žrtve životinja prilikom pogreba također je arheološki zabilježena na prostoru istočnog kruga kulture polje sa žarama (Črešnar, Thomas 2013). Primjer predstavljenog groblja u Slatini pokazuje važnost *bottom-up* pristupa u proučavanju pogrebnih običaja gdje se mogu iščitati dijelovi kompleksnih događaja povezanih uz ispraćaj pokojnika koji su mogli potrajati nekoliko dana i u kojima je vjerojatno sudjelovao veći dio zajednice.

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on the burial ritual. Differently from the insights based on the finds from storerooms and metal objects when the Ha A2 phase is defined as the time of the collapse of the communication network in southern Transdanubia (Váczi 2013: 219), the similarities in funerary rites indicate that the communication network still functioned and that the economic changes did not affect the communication network related to the beliefs and the funeral, which was set up during the Ha A1 phase, when the ideas on e.g. the use of amphorae or a wider reach of fluted ornaments were spreading from the region of central Danube to a wider area of the Carpathian Basin.

The differences that were identified in the material culture or a phase of a ritual can be interpreted through the opportunities of specific communities depending on their economy, through which they tried to apply a ritual that was supposed to turn death into a continuation. The means of the small community from Slatina indicate they were farmers and cattle owners, with less earthly possessions than the partly contemporary communities in Pobrežje, Dobova and Velika Gorica, judging by the metal objects found in graves, or in Tököl and Vál judging by the number of ceramic objects in the graves. By its structure of grave objects, the Slatina cemetery is most similar to older graves at the Doroslovo cemetery (Trajković 2008). The types of urns and lids chosen by the Slatina community indicate communication links with Dobova, Csorv, but also with cemeteries in north Transdanubia. Animal sacrifice during a funeral was first recorded in the area of the eastern circle of the Urnfield culture (Črešnar, Thomas 2013). The case study of the Slatina cemetery shows the importance of the bottom-up approach in the research of funerary practices, where it is possible to interpret parts of complex events related to the funeral, which could last several days, and where probably most of the community participated.

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## LITERATURA / BIBLIOGRAPHY

- Aufderheide, A. C., Rodríguez-Martín, C. 2003, *Cambridge Encyclopedia of Human Paleopathology*, Cambridge.
- Blažić, S. 2008, Ostaci životinjski kostiju u grobovima halštatske nekropole Đepfeld, in: Trajković, D. *Đepfeld – nekropola starijeg gvozdenog doba kod Doroslova*, Sombor, 357–376.
- Brickley, M., Mckinley, J. I. 2004, *Guidelines to the Standards for Recording Human Remains. IFA Paper No. 7*, British Association for Biological Anthropology and Osteoarchaeology, Southampton – Institute of Field Archaeologists, Reading.
- Cerezo-Román, J. I., Williams, H. 2014, Future Directions for the Archaeology of Cremation, in: *Transformation by Fire. The Archaeology of Cremation in Cultural Context*, Kuijt I., Quinn C. P., Cooney G. (eds.), Amerind Studies in Anthropology, The University of Arizona Press, Tucson, Arizona, 240–255.
- Childe, V. G. 1929, *The Danube in prehistory*, Oxford.
- Črešnar, M., Thomas, J. L. 2013, New data on cremation burials from North-Eastern Slovenia, in: *Brandbestattungen von der Mittleren Donau bis zur Ägäis zwischen 1300 und 750 v. Chr. Akten des internationalen Symposiums an der Österreichischen Akademie der Wissenschaften in Wien, 11.-12. Februar 2010.*, Lochner M., Ruppenstein F. (eds.), Mitteilungen der Prähistorischen Kommission Tagungsband Band 77 – Veröffentlichungen der Mykenischen Kommission Band 32, Verlag der ÖAW, Wien, 79–97.
- Demo, Ž. 2009, *Ranosrednjovjekovno groblje bjelobrdske kulture: Vukovar-Lijeve Bara (X-XI stoljeće)*, Katalozi i monografije 6, Arheološki muzej Zagreb, Zagreb.
- Filipović, S. 2010, Slatina Veliko polje Berezine, Trnovača (r. br. 78-79), *Hrvatski arheološki godišnjak*, Vol. 6 (2009), 130–135.
- Fokkens, H. 1997, The genesis of urnfields: economic crisis or ideological change?, *Antiquity*, Vol. 71, 360–373.
- Fülöp, K., Váci, G. 2016, Late Bronze Age Cremation Burials: A complex event with few remains, *Hungarian Archaeology*, 2016 spring (e-journal), 1–7.
- Gramsch, A. 1995, Death and Continuity, *Journal of European Archaeology*, Vol. 3 (1), 71–90.
- Gramsch, A. 2007, A microarchaeological approach to the social significance of Late Bronze Age burial practices, in: *Encounters – Materialities – Confrontations: Archaeologies of Social Space and Interaction*, Cornell P., Fahlander F. (eds.), Cambridge Scholars Press, Cambridge, 1–16.
- Gramsch, A. 2010, *Ritual und Kommunikation, Altersklassen und Geschlechterdifferenz im spätbronze- und früheisenzeitlichen Gräberfeld Cottbus Alvensleben-Kaserne (Branderburg)*, Universitätsforschungen zur prähistorischen Archäologie 181, Verlag Dr. Rudolf Habelt GmbH, Bonn.
- Gutjahr, Ch., 2011, Mittel- und frühspätbronzezeitliche Gruben aus dem Bereich des Gräberfeldes Kainach bei Wildon, Gem. Weitendorf, Stmk., in: *Beiträge zur Mittel- und Spätbronzezeit sowie zur Urnenfelderzeit am Rande der Südostalpen, Akten des 1. Wildoner Fachespraches vom 25. bis 26. Jun 2009 in Wildon / Steiermark (Österreich)*, Gutjahr Ch., Tiefengraber G. (eds.), Hengist-Studien Band 2, Internationale Archäologie Arbeitsgemeinschaft-Symposium-Tagung-Kongress Band 15, Verlag Marie Leidorf GmbH, Rahden/Westf., 141–206.
- Harding, A., 2013, World Systems, Cores, and Peripheries in Prehistoric Europe, *European Journal of Archaeology*, Vol. 16/3, 378–400.
- Heußner, B. 2010, Anthropologischen Untersuchung des Gräberfelds von Békásmegyér, in: Kalicz-Schreiber, R. *Ein Gräberfeld der Spätbronzezeit von Budapest-Békásmegyér*, Institut für Archäologische Wissenschaften der Eötvös Loránd Universität, Budapest, 299–313.
- Hoffiller, V. 1909, Staro groblje u Velikoj Gorici, *Vjesnik Hrvatskoga arheološkoga društva*, N. s. X (1908/09), 120–134.
- Hoffiller, V. 1938, *Dalj*, Corpus Vasorum Antiquorum 2, Beograd.
- Homer, 1987, *Ilijada*, Matica hrvatska, Zagreb.
- Ilon, G. 2014, Urnfield Cemetery at the Boundary of Győr-Ménfőcsanak, Hungary, *Folia Archaeologica*, Vol. LVI, Budapest, 9–72.
- Kalicz-Schreiber, R. 2010, *Ein Gräberfeld der Spätbronzezeit von Budapest-Békásmegyér*, Institut für Archäologische Wissenschaften der Eötvös Loránd Universität, Budapest.
- Kovarik, K., Reschreiter, H. 2009, Ethno- and experimental archaeology, in: *Kingdom of Salt. 7000 years of Hallstatt*, Kern A., Kowarik K., Rausch A. W., Reschreiter H. (eds.), Natural History Museum, Wien, 218–219.
- Larsen, C. S. 1997, *Bioarchaeology*, Cambridge University Press, Cambridge.
- Lewis, M. E. 2007, *The bioarchaeology of children: Perspectives from biological and forensic anthropology*, Cambridge University Press, Cambridge.
- Ložnjak Dizdar, D. 2011a, Starija faza kulture polja sa žarama u sjevernoj Hrvatskoj – novi izazovi / Early Urnfield Culture in Northern Croatia – New Challenges, in: *Starija faza kulture polja sa žarama u sjevernoj Hrvatskoj – novi izazovi*, Dizdar M., Ložnjak Dizdar D., Mihelić S. (eds.), Osijek, 12–35.
- Ložnjak Dizdar, D. 2011b, Funerary Practices of Late Bronze Age Communities in Continental Croatia, in: *Bronze Age Rites and Rituals in the Carpathian Basin*, Berecki S., Nemeth R., Rezi B. (eds.), Bibliotheca Musei Marisiensis. Seria Archaeologica IV, Targu Mures, 245–259.
- Ložnjak Dizdar, D. 2012, Zaštitna istraživanja nalazišta AN 5 Poljana Križevačka 2 na trasi autoceste A 12 Sv. Helena – GP Gola, *Annales Instituti archaeologici*, Vol. VIII, 63–68.
- Ložnjak Dizdar, D. 2014, Two graves of the Late Urnfield Period from Belišće (Podravina Region, Croatia), in: *Praehistorica in Honorem Janez Dular*, Opera Instituti Archaeologici Sloveniae 30, Tecco Hvala S. (ed.), Ljubljana, 81–90.
- Ljubić, Š. 1889, *Popis Arheološkičkoga odjela Nar. Zem. Muzeja u Zagrebu*, Odsjek I, Svezak I, Zagreb.
- Majnarić-Pandžić, N. 1988, Prilog poznavanju kasnoga brončanog doba u sjeverozapadnoj Hrvatskoj, *Arheološki radovi i rasprave*, Vol. 11, 9–32.
- Majnarić-Pandžić, N. 1994, Novi kasnobrončodobni grobovi iz Drljanovca kod Nove Rače, *Bjelovarski zbornik*, Vol. 4–5, 43–56.
- Marijan, B. 2010, *Crtice iz prapovijesti Slavonije (Brončano doba)*, Sveučilište J. J. Strossmayera, Filozofski fakultet, Osijek.
- Mays, S. 1998, *Archaeology of human bones*, Routledge, London.
- McKinley, J. I. 1994, Bone fragment size in British cremation burials and its implications for pyre technology and ritual, *Journal of Archaeological Science*, Vol. 21, 339–342.
- McKinley, J. 2000, The analysis of cremated bone, in: *Human osteology: In archaeology and forensic science*, Cox M., Mays S. (eds.), Cambridge University Press, Cambridge, 403–421.
- McKinley, J. 2004, Compiling a skeletal inventory: cremated human bone, in: *Guidelines to the standards for recording human remains. IFA paper No. 7*, Brickley M., McKinley J. I. (ed.), British Association for Biological Anthropology and Osteoarchaeology, Southampton – Institute of Field Archaeologists, Reading, 9–13.
- Metzner-Nebelsick, C., Kacsó, C., Nebelsick, L. D. 2010, A Bronze Age ritual structure on the edge of the Carpathian Basin, in: *Das Ende des 2. Jahrtausendes v. Chr. auf der Theiß-Ebene und Siebenbürgen, Satu Mare 18-19 iulie 2008*, Marta L. (ed.), Satu Mare XXVI/I, Satu Mare, 219–234.
- Mihaljević, M., Kalafatić, H., 2006, Mačkovac Crišnjevi (naselje i nekropola), *Hrvatski arheološki godišnjak*, Vol. 2 (2005), 48–49.
- Minichreiter, K. 1983, Pregled istraživanja nekropola grupe "Gređani" u Slavoniji, *Anali Osijek*, Vol. 2 (1982/83), 7–122.
- Müller-Karpe, H. 1959, *Beiträge zur Chronologie der Urnenfelderzeit nördlich und südlich der Alpen*, Römisch-Germanische Forschungen 22, Berlin.
- Murgelj, I. 2013, *Podsmreka pri Višnji Gori*, KO 13 Višnja Gora – Bič, Zbirka Arheologija na avtocestah Slovenije 42, Ljubljana.
- Murgelj, I. 2014, The Beginning of the Virovitica cultural group in Dolenjska – the example of Podsmreka 2, in: *The Beginning of the Late Bronze Age between the Eastern Alps and the Danube, Proceedings of the International conference in Osijek, October 20-22, 2011*, Ložnjak Dizdar D., Dizdar M. (eds.), Zbornik Instituta za arheologiju / Selta Instituti archaeologici 1, Zagreb, 17–28.
- Nebelsick, L. D. 1997, Die Kalenderberggruppe der Hallstattzeit am Nordostalpenrand, in: *Hallstattkultur im Osten Österreichs*, Neugebauer J.-W. (ed.), St. Pölten–Wien, 9–128.
- Nodilo, H., Vrkić, Š., Skelac, G., Kulenović, I. 2013, Vojvodine–Migalovci: nekropola s početka kulture polja sa žarama / Vojvodine–Migalovci: a nekropolis dating to the beginning of the Urnfield culture, *Prilozi Instituta za arheologiju u Zagrebu*, Vol. 29 (2012), 89–124.
- Pahić, S. 1972, *Pobrežje*, Katalogi in monografije 6, Narodni muzej Slovenije



- nije, Ljubljana.
- Parker Pearson, M. 1999, *The Archaeology of Death and Burial*, Sutton Publishing, Gloucestershire.
- Patek, E. 1958, A Tököli koravaskori urnatemető, *Budapest Régiségei*, Vol. XVIII, 385–424.
- Patek, E. 1961, Die Siedlung und das Gräberfeld von Neszmély, *Acta Archaeologica Academiae Scientiarum Hungaricae*, Vol. XIII/1–4, 33–82.
- Patek, E. 1968, *Die Urnenfelderkultur in Transdanubien*, Akadémiai Kiadó, Budapest.
- Petres, É. F. 1960, Früheisenzeitliche Gräberfeld in Vál, *Alba Regia*, Vol. I, 17–42.
- Plestenjak, A. 2010, *Gorice pri Turnišču*, Arheologija na avtocestah Slovenije 12, Ljubljana.
- Puš, I. 1971, *Žarnogrobiščna nekropola na dvorišču SAZU v Ljubljani, izkopavanja v letih 1964–1965*, Razprave VIII/1, Ljubljana.
- Puš, I. 1982, *Prazgodovinsko žarno grobišče v Ljubljani*, Razprave XIII/2, Ljubljana.
- Radović, S. *Slatina, popis analiziranih uzoraka i evidentiranih taksonoma životinja*, (neobjavljeno / unpublished).
- Rebay-Salisbury, K. 2010, Cremations: Fragmented bodies in the Bronze and Iron Ages, in: *Body Parts and Bodies Whole. Changing Relations and Meanings*, Rebay-Salisbury, K., Stig Sørensen, M. L., Hughes, J. (eds.), Oxbow Books, Oxford, 64–71.
- Rebay-Salisbury, K. 2013, Inhumation and cremation: how burial practices are linked to beliefs, in: *Embodied Knowledge. Perspectives on Belief and Technology*, Stig Sørensen M. L., Rebay-Salisbury K. (eds.), Oxbow Books, Oxford, 15–26.
- Renfrew, C. 1999, *Before Civilization. The Radiocarbon Revolution and Prehistoric Europe*, Pimlico edition, London.
- Říhový, J. 1968, *Das Urnengräberfeld in Oblekovice*, Fontes Archaeologici Pragenses vol. 12, Praha.
- Říhový, J. 1982, *Das Urnengräberfeld von Podolí*, Fontes Archaeologiae Moraviae Tomus XV, Brno.
- Roberts, C., Manchester, K. 2005, *The archaeology of disease*, Cornell University Press, Ithaca.
- Sørensen, T. F., Bille, M. 2008, Flames of transformation: the role of fire in cremation practices, *World Archaeology*, Vol. 40 (2), 253–267.
- Starč, F. 1954, *Ilirske najdbe železne dobe v Ljubljani*, Dela SAZU 9, Sekcija za arheologijo 7, Ljubljana.
- Starč, F. 1975, *Dobova*, Posavski muzej Brežice, Knjiga 2, Brežice.
- Stig Sørensen, M. L. 2010, Bronze Age bodiness – maps and coordinates, in: *Body Parts and Bodies Whole. Changing Relations and Meanings*, Rebay-Salisbury K., Stig Sørensen M. L., Hughes J. (eds.), Oxbow Books, Oxford 2010, 54–63.
- Stig Sørensen, M. L., Rebay, K. 2008, From substantial bodies to the substance of bodies: analysis of the transition from inhumation to cremation during the Middle Bronze Age in central Europe, in: *Past Bodies. Body-Centred Research in Archaeology*, Borić D., Robb J. (eds.), Oxbow Books, Oxford, 59–68.
- Strmčnik-Guljič, M. 1989, Bronastodobni naselitveni kompleks v Rabelčji vasi na Ptujju, *Arheološki vestnik*, Vol. 39–40 (1988/89), 147–170.
- Studeníková, E. 2015, Urnenfelderzeitliches Totenhaus in Janíky – Dolné Janíky, in: *Zborník na pamiatku Jozefa Paulíka Štúdie*, Bartík J. (ed.), Zborník Slovenského Národného Múzea, Archeológia Supplementum 9, Bratislava, 107–122.
- Svoljšak, D., Pogačnik, A. 2002, *Tolmin, Prazgodovinsko grobišče I–II*, Katalogi in monografije 35, Ljubljana.
- Štefančič, M. 1988, Antropološka analiza skeltnih ostankov iz urne najdene v grobu 7 u nekropoli Drljanovac pri Bjelovaru, *Arheološki radovi i rasprave*, Vol. 11, 29–34.
- Taylor, N. 2013, Broken Mirrors? Archaeological Reflections on Identity, in: *Exploring Prehistoric Identity in Europe. Our Construct or Theirs?*, Ginn V., Enlander R., Crozier R. (eds.), Oxbow Books, Oxford, 175–185.
- Teržan, B. 1990, *Starejša železna doba na Slovenskem Štajerskem*, Katalogi in monografije 25, Ljubljana.
- Teržan, B. 1999, An Outline of the Urnfield Culture Period in Slovenia, *Arheološki vestnik*, Vol. 50, 97–143.
- Thomas, J. L. 2011, *Late Bronze Age Skeletal Populations of Slovenia*, PhD thesis, The University of Edinburgh, Edinburgh.
- Trajković, D. 2008, *Đepfeld – Nekropola starijeg gvozdenog doba kod Doroslava*, Gradski muzej Sombor, Sombor.
- Trogmayer, O. 1963, Beiträge zur Spätbronzezeit des südlichen Teils der ungarischen Tiefebene, *Acta Archaeologica Academiae Scientiarum Hungaricae*, Vol. XV, 85–122.
- Váczi, G. 2013, Cultural connections and interactions of Eastern Transdanubia during the Urnfield period, *Dissertationes Archaeologicae ex Instituto Archaeologico Universitatis de Rolando Eötvös nominatae*, Ser. 3. No. 1, Budapest, 205–230.
- Vinski, Z. 1955, Prethodni izvještaj o iskopavanju na "Lijevoj bari" u Vukovaru 1951., 1952. i 1953. godine, *Ljetopis Jugoslavenske akademije znanosti i umjetnosti*, Vol. 60, 231–255.
- Vinski, Z. 1959, Ausgrabungen in Vukovar, *Archaeologia Iugoslavica*, Vol. III, 99–109.
- Vinski, Z., Vinski-Gasparini, K. 1956, Prolegomena ka statistici i kronologiji prehistorijskih ostava u Hrvatskoj i vojvodanskom području Srijema, *Opuscula archaeologica*, Vol. I, 57–99.
- Vinski, Z., Vinski-Gasparini, K. 1962, O utjecajima istočno-alpske halštatske kulture i balkanske ilirske kulture na slavonsko-sremsko Podunavlje, *Arheološki radovi i rasprave*, Vol. II, 263–293.
- Vinski-Gasparini, K. 1973, *Kultura polja sa žarama u sjevernoj Hrvatskoj*, Monografije sv. 1, Zadar.
- Vinski-Gasparini, K. 1978, Osvrt na istraživanja kasnog brončanog i starijeg željeznog doba u sjevernoj Hrvatskoj, *Izdanja Hrvatskog arheološkog društva*, Vol. 2, 129–148.
- Vinski-Gasparini, K. 1983, Kultura polja sa žarama sa svojim grupama, in: *Praistorija jugoslavenskih zemalja IV. Bronzano doba*, Benac A. (ed.), Sarajevo, 547–646.
- Wahl, J. 2015, Investigations on pre-Roman and Roman cremation remains. in: *The analysis of burned human remains. Second edition*, Schmidt C. W., Symes S. A. (eds.), Academic Press, Amsterdam, 163–179.
- Živanović, S. 2008, Antropološka analiza, in: Trajković, D. *Đepfeld – Nekropola starijeg gvozdenog doba kod Doroslava*, Gradski muzej Sombor, Sombor, 379–392.

