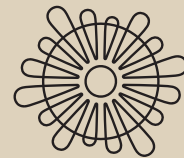


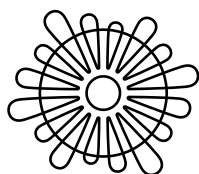
ARCHAEOLOGIA adriatica

Sveučilište u Zadru / Universitas studiorum Jadertina / University of Zadar
Odjel za arheologiju / Department of Archaeology / UDK 902/904
ISSN 1846-4807 / Archaeol. Adriat. / Vol. 18 / Zadar, 2024.



ARCHAEOLOGIA

adriatica



Sveučilište u Zadru
Universitas Studiorum
Jadertina | 1396 | 2002 |

SVEUČILIŠTE U ZADRU / UNIVERSITAS STUDIORUM JADERTINA / UNIVERSITY OF ZADAR
ODJEL ZA ARHEOLOGIJU / DEPARTMENT OF ARCHAEOLOGY

UDK 902/904

ARCHAEOL. ADRIAT.

ISSN 1846-4807

ARCHAEOLOGIA adriatica

IZDAVAČ / *Publisher*
Sveučilište u Zadru / *University of Zadar*
Mihovila Pavlinovića 1, 23000 Zadar, Hrvatska

POVJERENSTVO ZA IZDAVAČKU DJELATNOST / *Publishing Committee*
Lena Mirošević (predsjednica / *Chair*)

GLAVNI I ODGOVORNI UREDNIK / *Editor in Chief*
Ante Uglešić

TAJNICA / *Secretary*
Josipa Baraka Perica

UREDNIŠTVO / *Editorial Board*
Igor Borzić (Sveučilište u Zadru), Martina Čelhar (Sveučilište u Zadru),
Tomislav Fabijanić (Sveučilište u Zadru), Josipa Baraka Perica (Sveučilište u Zadru),
Mirja Jarak (Sveučilište u Zagrebu), Marko Dizdar (Institut za arheologiju, Zagreb),
Biba Teržan (Univerza v Ljubljani), Gian Pietro Brogiolo (Università degli Studi di Padova)

ADRESA UREDNIŠTVA / *Address of the Editorial Board*
Archaeologia Adriatica
Sveučilište u Zadru, Odjel za arheologiju
Obala kralja Petra Krešimira IV., 2
23000 Zadar, Hrvatska / Croatia
Tel. +385(0)23 200 522
E-mail: archaeologia.adriatica@unizd.hr

ARCHAEOLOGICA ADRIATICA REFERIRA SE U / *Archaeologia Adriatica is abstracted and indexed in*
DOAJ: Directory of Open Access Journals
- Ulrich's international periodicals directory
- DYABOLA. Sachkatalog der Bibliothek – Römisch-
Germanische Kommission des Deutschen Archäologischen Instituts
ERIHPLUS: European Reference Index for the Humanities and Social Science
SCOPUS

DOSTUPNO NA / *Available at*
Morepress (morepress.unizd.hr)
Hrčak. Portal znanstvenih časopisa Republike Hrvatske (hrcak.srce.hr)

ČASOPIS IZLAZI JEDNOM GODIŠNJE / *Published annually*
ISSN 1846-4807 (Tisak)
ISSN 1848-9281 (Online)
DOI 10.15291/archeo
UDK Gorica Lovrić, Sveučilišna knjižnica u Zadru

NASLOVNICA / *Cover Page*
Foto / *Photo*: L. Bogdanić

Članci u časopisu su licencirani pod Creative Commons Attribution By 4.0 International Licence
The articles in the journal are licenced under a Creative Commons Attribution By 4.0 International Licence



SADRŽAJ / CONTENTS

JOSIPA BARAKA PERICA

O životu i djelu profesora emeritusa Brunislava Marijanovića
On the Life and Work of Professor Emeritus Brunislav Marijanović

11

ANA MARINović

Bibliografija profesora emeritusa Brunislava Marijanovića
Bibliography of Professor Emeritus Brunislav Marijanović

25

LEO ARBUTINA, MARIO BODRUŽIĆ, DARIO VUJEVIĆ

Vela Pećina kod Kali na Ugljanu - novo nalazište kasnoga gornjeg paleolitika
na sjevernodalmatinskim otocima (Izvorni znanstveni članak)
*Vela Pećina Cave near Kali on Ugljan – a New Late Upper Palaeolithic
Site in the Northern Dalmatian Islands (Original scientific paper)*

35

KRISTINA HORVAT OŠTRIĆ, NICHOLAS TRIOZZI,

SARAH B. MCCLURE, KELLY REED, DORIS VIDAS

Rezultati probnoga arheološkog istraživanja neolitičkog
nalazišta Pod Jarugom (Prethodno priopćenje)
*Results of Archaeological Trial Excavations of the
Neolithic Site Pod jarugom (Preliminary report)*

77

TIHOMILA TEŽAK-GREGL

Kakve veze imaju Brezovljani s Butmirom? (Prethodno priopćenje)
What does Brezovljani have to do with Butmir? (Preliminary report)

123

MAJA KRZNARIĆ ŠKRIVANKO

Prostorna distribucija i unutarnja organizacija naselja sopotske
kulture na vinkovačkom području (Prethodno priopćenje)
*The Spatial Distribution and Internal Organisation of Sopot-Culture
Settlements in the Vinkovci Area (Preliminary report)*

141

DRAGANA RAJKOVIĆ, SELENA VITEZOVIĆ

Ukrasni predmeti od školjki s lokaliteta Osijek –
Hermanov vinograd (Izvorni znanstveni članak)
*Mollusc-Shell Decorative items from the Osijek –
Hermanov vinograd Site (Original scientific paper)*

229

JACQUELINE BALEN Lasinjska kultura u Bosni i Hercegovini - u svjetlu nalaza bočice iz Visokog Brda u Lupljanici kod Dervente (Stručni rad) <i>Lasinja Culture in Bosnia and Herzegovina – In the Light of a Miniature Bottle find from Visoko Brdo in Lupljanica near Derventa (Professional paper)</i>	255
MITJA GUŠTIN „Zajednica sa Skadarskog jezera” na prijelazu iz bakrenog u brončano doba (Izvorni znanstveni članak) <i>‘Lake Skadar Community’ at the Turn from the Copper to the Bronze Age (Original scientific paper)</i>	267
BIBA TERŽAN, ANA KRUH Srednjoeuropski elementi na srednjem Jadranu i njegovu zaleđu u rano brončano doba – rekapitulacija (Pregledni članak) <i>Central European Elements in the Central Adriatic and its Hinterland in the Early Bronze Age – A Recapitulation (Review paper)</i>	297
DOMAGOJ PERKIĆ, MARKO DIZDAR, HRVOJE POTREBICA, IVAN PAMIĆ Grob iz starijeg željeznog doba s groblja Nakovana – Zmijna (poluotok Pelješac) (Izvorni znanstveni članak) <i>An Early Iron grave at the Nakovana – Zmijna cemetery (Pelješac Peninsula) (Original scientific paper)</i>	329
MARTINA ČELHAR Fibule tipa Certosa Ic, Id i Ie u kontekstu novih nalaza iz Nadina (Izvorni znanstveni članak) <i>Ic-, Id- and Ie- type Certosa Fibulae in the Context of New Finds from Nadin (Original scientific paper)</i>	371
MATE PARICA Tragovi maslinarstva u prapovijesti istočnog Jadrana (Prethodno priopćenje) <i>Traces of Olive Cultivation in the Prehistoric Eastern Adriatic (Preliminary report)</i>	413

ANA MARINOVIĆ

Novac gradova Arpija i Dirahija s istraživanja
na solinskoj Zaobilaznici (Stručni rad)
*Coins of the Cities of Arpi and Dyrrachion from Research
on the Solin-Zaobilaznica Site (Professional paper)*

431

DRAŽEN MARŠIĆ

Stubci s protomama Jupitra-Amona i Gorgone iz Zadra i problem
njihova arhitektonskog konteksta (Izvorni znanstveni članak)
*The Pillars with Protomes of Jupiter Ammon and Gorgon from Zadar
and their Architectural Context (Original scientific paper)*

445

FILOMENA SIROVICA, TATJANA TKALČEC, EVA BUĆA
Izvan izvornog konteksta: keramički nalazi iz groblja
oko crkve Uznesenja Blažene Djevice Marije u Gori
(Izvorni znanstveni članak)

*Outside of the Original Context: Ceramic Finds from
the Graveyard next to the Church of the Assumption of
the Blessed Virgin Mary in Gora (Original scientific paper)*

477

KARLA GUSAR, ANA KARADOLE

Prilog poznavanju kasnosrednjovjekovne i novovjekovne keramike
u Dalmaciji – nalazi sa zadarskog Muraja (Izvorni znanstveni članak)
*A Contribution to the Study of Late Medieval and Early Modern Pottery
in Dalmatia – Finds from Zadar's Muraj (Original scientific paper)*

529

Upute autorima / Instructions for Authors

581



B. Marijanović

Osamnaesti svezak časopisa *Archaeologia Adriatica* posvećen je profesoru emeritusu Brunislavu Marijanoviću u znak zahvalnosti za sve što je učinio za Odjel za arheologiju, Sveučilište u Zadru i arheologiju općenito.

The eighteenth volume of the journal *Archaeologia Adriatica* is dedicated to professor emeritus Brunislav Marijanović, as an expression of gratitude for everything he has done for the Department of Archaeology, University of Zadar and archaeology in general.

SREDNJOEUROPSKI ELEMENTI NA SREDNJEM JADRANU I NJEGOVU ZALEĐU U RANO BRONČANO DOBA – REKAPITULACIJA

CENTRAL EUROPEAN ELEMENTS IN THE CENTRAL ADRIATIC AND ITS HINTERLAND IN THE EARLY BRONZE AGE – A RECAPITULATION

BIBA TERŽAN

Univerza v Ljubljani, Filozofska fakulteta
University of Ljubljana, Faculty of Arts
Zavetiška 5
SL-1000 Ljubljana
ljubinka.terzan@ff.uni-lj.si

ANA KRUH

Goriški muzej
Regional Museum Goriški muzej
Grajska cesta 1
SL-5000 Nova Gorica
ana.kruh@goriskimuzej.si

UDK: 903(497.583)“637.3“

DOI: 10.15291/archeo.4689

PREGLEDNI ČLANAK / REVIEW PAPER

Primljeno / Received: 2024-3-27

Prihvaćeno / Accepted: 2024-11-29

KLJUČNE RIJEČI:

licenska keramika,
bodež s punim metalnim
drškom, igle s ušicom,
cetinska kultura, posuška
kultura, rano brončano
doba, migracija

KEY WORDS:

Litzen pottery, solid-hilt-
ed dagger, eyelet-headed
pin, Cetina Culture,
Posuška/Posušje/Dinaric
Group, Early Bronze
Age, migration

Istraživanje je uputilo na komplementarnu sliku triju glavnih elemenata, kao indikacije kontakata između prostora srednjeg Jadrana i njegova zaleđa s kulturama ranoga brončanog doba u srednjoj Europi. Istraživanjima je obuhvaćena materijalna kultura iz naselja (licenska lončarija), vojna oprema, odnosno oružje (bodeži s punim drškom) te nošnja (igla s ušicom). Na temelju njihove tipološke analize i njihove rasprostranjenosti, koje pokazuju da se u određenim segmentima međusobno prostorno i vremenski prekrivaju, zaključujemo da su to, u okviru posuške skupine, pokazatelji jednog te istoga kulturnog, a moguće i migracijskog događanja tijekom ranoga brončanog doba.

Research has shown a complementary image of three main elements as indications of contacts between the region of the central Adriatic and its hinterland with the cultures of the Early Bronze Age in Central Europe. They encompass the settlement material culture (Litzen pottery), military equipment or weapons (solid-hilted daggers), and attire (pins with an eyelet). On the basis of their typological analysis and distribution, which showed that they overlap each other spatially and temporally in certain segments, it can be concluded that within the framework of the Posuška/Posušje or Dinaric group, they are indicators of one and the same cultural and possibly migratory event occurring during the Early Bronze Age.

GEOGRAFSKI OKVIR

Zapadni dio Balkanskog poluotoka pretežno je brdovito područje, koje na sjeveru prema Savi prelazi u nizinske predjele južne Panonije, tj. Karpatske kotline, dok je na zapadu i jugozapadu ograničeno istočnom obalom Jadranskog mora, brojnim otocima, poluotocima i zaljevima, iako je obalno zaleđe poprilično brdovito. Pečat mu daju Dinaridi, raščlanjeni brojnim visoravnima i krškim poljima, koja se nalaze sve od Notranjske na sjeveru, preko Like, Dalmacije i Hercegovine te Crne Gore, dalje prema jugu. Samo malobrojne rijeke poput Zrmanje, Krke, Cetine i Neretve povezuju ovaj relativno teško dostupan kraj s obalom i morem.

KRONOLOŠKI OKVIR

Sintetički pregled o brončanom dobu na zapadnom Balkanskom poluotoku dan je u četvrtoj knjizi veleopusa *Praistorija jugoslavenskih zemalja* (= PJZ).¹ U njoj je, s jedne strane, predstavljena opća kronološka podjela na rano, srednje i kasno brončano doba, što bi ugrubo odgovaralo srednjoeuropskoj kronološkoj shemi prema Reineckeu i njegovim nasljednicima, koji su je dopunjavali i detaljnije razdijelili (rano – Bd A1-2 (-3), srednje – Bd B1-2 do Bd C1-2, kasno – Bd D do Ha A1-2 i Ha B1-3), a s druge strane, dane su lokalne kronološke karakteristike i vremenske faze u okviru pojedinačnih regija odnosno kulturnih skupina. Temeljne studije, za područje koje nas ovdje zanima, nastale su ispod pera Borivoja Čovića i Ivana Marovića² te također predstavljaju ishodište za naše istraživanje. Uzimajući to u obzir, potrebno je upozoriti da je u razdoblju od izdavanja četvrte knjige PJZ (1983.) došlo

¹ BENAC, ČOVIĆ 1983.

² ČOVIĆ 1983a; MAROVIĆ, ČOVIĆ 1983.

GEOGRAPHIC FRAMEWORK

The western part of the Balkan Peninsula is mainly mountainous, in the north, towards the Sava River, it merges into the lowlands of southern Pannonia or the Carpathian basin, and in the west and southwest, it is bordered by the eastern coast of the Adriatic Sea with numerous islands, peninsulas, and bays, while its hinterland is quite hilly. Its dominant feature is the Dinaric Alps or Dinarides, broken up by numerous high plateaus – plain that stretch all the way from Notranjska in the north, through Lika, Dalmatia, and Herzegovina, and Montenegro further south. These relatively inaccessible areas in the hinterland of the central Adriatic are connected to the coast and the sea only by a small number of rivers, such as the Zrmanja, Krka, Cetina, and Neretva.

CHRONOLOGICAL FRAMEWORK

A synthetic overview of the Bronze Age in the Western Balkan Peninsula was given in the fourth book of the magnum opus “Prehistory of the Yugoslav Lands” / “Praistorija jugoslavenskih zemalja” (further PJZ).¹ It presents, on the one hand, a general chronological division into the early, middle and late Bronze Age, which roughly corresponds to the Central European chronological scheme according to Reinecke and his successors, who supplemented and subdivided it in more detail (early – Bd A1-2 (-3), middle – Bd B1-2 to Bd C 1-2, late – Bd D to Ha A 1-2 and Ha B1-3), while, on the other hand, local chronological characteristics and time stages were added in the framework of individual regions or cultural groups. For the area we are interested in here, the fundamental studies were made by Borivoj Čović and Ivan Marović, which also represent the starting point for our research.² At the same time, it seems necessary to note that there have been certain changes and supplements

¹ BENAC, ČOVIĆ 1983.

² ČOVIĆ 1983a; MAROVIĆ, ČOVIĆ 1983.

do određenih promjena i dopuna, pogotovo u apsolutnom datiranju pojedinih kronoloških stupnjeva, što je rezultat popunjenih datacijskih metoda, prije svega radiokarbonske i dendrokronološke analize.

KULTURNI OPIS

Među karakterističnim fenomenima rano-
ga brončanog doba na području srednjeg Jadrana i njegova zaleđa ističe se tzv. cetinska kultura, čija je jezgra bila baš u srednjoj Dalmaciji.³ Njezini su utjecaji sezali duž Jadrana prema sjeveru sve do Istre⁴ i Tršćanskog krasi te prema jugu do Peleponeza⁵ i južnoga Apeninskog poluotoka⁶, a također u kontinentalno zaleđe, sve do kulturnih skupina, kao što su Glasinac u Bosni i Belotić-Bela Crkva u zapadnoj Srbiji. Okvirno,⁷ cetinska je kultura datirana paralelno s ranom heladskom fazom III (EH/FH III), dakle u drugu polovinu 3. i rana stoljeća 2. tisućljeća pr. n. e.⁸ Njezin se kulturni identitet prije svega raspoznaje kroz način pokopavanja njihovih preminulih,⁹ odnosno: 1) po obliku grobova, u pravilu pravokutne grobne škrinje sastavljene od kamenih ploča, 2) po obliku nadgrobničkih spomenika – gomila, koje su pretežno kamene, ali također mogu biti zemljane, 3) po specifičnoj lončariji – i glede vrsta posuda i glede tipične ornamentike¹⁰ te 4) po drugim grobnim priložima, pogotovo

since the publication of the fourth volume of the PJZ (1983), especially in the absolute dating of individual chronological stages, which is the result of improved dating methods, especially in radiocarbon and dendrochronological analyses.

CULTURAL OUTLINE

Among the characteristic phenomena of the Early Bronze Age in the area of the central Adriatic and its hinterland, the so-called Cetina Culture stands out, the core of which was exactly in central Dalmatia.³ Its influence extended along the Adriatic Sea to the north as far as Istria and the Trieste Karst⁴, and to the south to the Peloponnese⁵ and the southern Apennine peninsula,⁶ as well as in the continental hinterland as far as cultural groups such as Glasinac in Bosnia and Belotić-Bela Cerkev in western Serbia.⁷ In general terms, the Cetina Culture is dated parallel to the early Helladic phase III (EH/FH III), i.e. to the second half of the 3rd millennium and early centuries of the 2nd millennium BC.⁸ Its cultural identity is recognizable mainly in terms of the burial of the deceased,⁹ i.e. 1) according to the shape of the graves, the most recognizable, they were rectangular stone cists made from stone slabs, 2) according to the shape of the grave monuments – tumuli or mounds that were mainly composed of stone, but also earthen, 3) according to specific forms of pottery – both in terms of the form

³ MAROVIĆ 1976; MAROVIĆ, ČOVIĆ 1983; MAROVIĆ 1984; 1994; GOVEDARICA 1989: 109–144; DELLA CASA 1995: 568–571; FORENBAHER 2018.

⁴ MIHOVILIĆ 2007–2008; 2022: 215–217, T. 1–2; MIHOVILIĆ, TERŽAN 2022: 359; RECCHIA 2020: 9–11.

⁵ RAMBACH 2007.

⁶ CAZELLA et al. 2020; RECCHIA 2020: 12–23.

⁷ MARAN 1998: 323–330, T. 30–36, 39–40, 71; FORENBAHER 2023.

⁸ MAROVIĆ, ČOVIĆ 1983; ČOVIĆ 1983b: 807–811; DELLA CASA 1995: 572–573; MARAN 1998: 327–330, Pl. 82; CAZELLA et al. 2020; RECCHIA 2020: 21–23; ARENA 2020: 32–33, Fig. 2; FORENBAHER 2023: 143–152, Fig. 14–17.

⁹ FORENBAHER 2023: 59–137, 165–172, Sl. 1; 52.

¹⁰ FORENBAHER 2018: 124–132, Sl. 5–6, 8.

³ MAROVIĆ 1976; MAROVIĆ 1984; MAROVIĆ, ČOVIĆ 1983; MAROVIĆ 1994; GOVEDARICA 1989: 109–144; DELLA CASA 1995: 568–571; FORENBAHER 2018.

⁴ MIHOVILIĆ 2007–2008; MIHOVILIĆ 2022: 215–217, Pl. 1–2; MIHOVILIĆ, TERŽAN 2022: 359; RECCHIA 2020, 9–11.

⁵ RAMBACH 2007.

⁶ CAZELLA et al. 2020; RECCHIA 2020, 12–23.

⁷ MARAN 1998: 323–330, Pl. 30–36, 39–40, 71; FORENBAHER 2023.

⁸ MAROVIĆ, ČOVIĆ 1983; ČOVIĆ 1983b: 807–811; DELLA CASA 1995: 572–573; MARAN 1998: 327–330, Pl. 82; CAZELLA et al. 2020; RECCHIA 2020: 21–23; ARENA 2020: 32–33, Fig. 2; FORENBAHER 2023: 143–152, Fig. 14–17.

⁹ FORENBAHER 2023: 59–137, 165–172, Fig. 1; 52.

oružju. U gomilama s promjerom između okvirno 4 m i 26 m, očuvanim i do 3 m visine, u pravilu se nalazio samo po jedan grob, a samo u rijetkim primjerima više grobova. U grobnoj je škrinji uobičajeno pokopana po jedna osoba, ponegdje i više njih, a u pravilu su zgrčenci. Kod primjera kremacije, ostatci su pokojnika položeni u žare, također smještene u središnji dio gomile. Razmjerno brojne su i gomile, u kojima nisu otkriveni grobovi odnosno ostatci pokopanih osoba te za njih I. Marović misli da predstavljaju kenotafe. Često su u gomilama otkrivene veće količine razbijenog posuđa, što upućuje na posebne pogrebne rituale. Budući da su inhumacije i kremacije pokojnika relativno podjednako zastupljene te istovremene, to dovodi do zaključka o biritualnom načinu pokopavanja, koji se ipak pokazuje specifičnim, i to samo za pojedine lokalne društvene skupine ove kulture.¹¹

Drugi karakteristični fenomen na području srednjodalmatinskog zaleđa, uključujući i područje Hercegovine između rijeke Zrmanje i rijeke Neretve te dalje prema Crnoj Gori, tijekom ranoga brončanog doba jest takozvana posuška kultura odnosno dinarska kultura.¹² Kao novu odnosno posebnu kulturnu pojavu definirao ju je B. Čović, tek nakon što je izdana četvrta knjiga *Praistorija jugoslavenskih zemalja*. Njezine je početke datirao u fazu Bd A1 te je naslućivao da je egzistirala još dalje, u vrijeme srednjega brončanog doba, slično kao naselje Velika Gradina u Varvarima.¹³ Za razliku od cetinske kulture, njezina se kulturna identifikacija prije svega oslanja na naseobinske nalaze. Za

of the vessels and the typical decoration,¹⁰ and 4) by other grave goods, particularly weapons. In mounds with a diameter between around 4 and 26 m and preserved up to a height of 3 m, only one grave was located as a rule, only in rare cases were there more. Only one person was usually buried in the grave, sometimes more, as a rule in a contracted position. In those cases where the dead were cremated, their remains were placed in urns, also located in the central part of the tumulus. There are relatively numerous mounds in which no graves or remains of buried persons were uncovered, and I. Marović considered them to represent cenotaphs. Large quantities of broken vessels were also often discovered in the tumuli, which would suggest special burial rituals. Considering the relatively equal representation and simultaneity of inhumation and cremation burials, a bi-ritual manner of burial can be considered to have existed, which, nonetheless, appears to be specific and only for individual local social communities of this culture.¹¹

Another characteristic phenomenon in the area of the central Dalmatian hinterland, including the areas of Herzegovina between the Zrmanja and Neretva Rivers and further towards Montenegro, is the so-called Posuška/Posušje culture, also called the Dinaric culture of the early Bronze Age.¹² It was defined by B. Čović as a new or special cultural phenomenon only after the publication of the fourth volume of the "Prehistory of the Yugoslav Lands". Its beginnings were dated to the Bd A1 phase and it was presumed that it had already existed in the period of the middle Bronze Age, similar to the settlement of Velika Gradina at Varvara.¹³ Unlike the Cetina Culture,

¹¹ MAROVIĆ, ČOVIĆ 1983: 205; FORENBAHER 2023: 165–172, Fig. 52.

¹² ČOVIĆ 1989: 69–70, Prilog 1, Popis nalazišta (Posuška kultura/grupa); GOVEDARICA 1989: 145–172 (Dinarska kultura); DELLA CASA 1995: 568–574 (*Dinaric group*); TERŽAN, KARAVANIĆ 2013: 845.

¹³ ČOVIĆ 1989; DELLA CASA 1995: 574. Spomenimo da Marijanović zagovara mišljenje da se posuška kultura nije širila preko Neretve: pogledaj MARIJANOVIĆ 2003: 323–325.

¹⁰ FORENBAHER 2018: 124–132, Fig. 5–6, 8.

¹¹ MAROVIĆ, ČOVIĆ 1983: 205; FORENBAHER 2023: 165–172, Fig. 52.

¹² ČOVIĆ 1989: 69–70, Add. 1, List of sites (Posušje-Culture); GOVEDARICA 1989: 145–172 (Dinaric Culture); DELLA CASA 1995: 568–574 (Dinaric group); TERŽAN, KARAVANIĆ 2013: 845.

¹³ ČOVIĆ 1989; DELLA CASA 1995: 574. It should be mentioned that Marijanović defended the idea that the Posuška Culture did not extend across the Neretva: see MARIJANOVIĆ 2003: 323–325.

tu su kulturu važna visinska naselja – gradi-
ne, u pravilu utvrđene moćnim bedemima,
a ponegdje i kulama, izgrađenim suhozid-
nom tehnikom. Pretežito je riječ o manjim
naseljima promjera 50-100 m, a samo neka
dosežu promjer od oko 150 m. Ova su po-
tonja u unutrašnjosti raščlanjena dodatnim
zidovima, što upućuje na kompleksne utvr-
de s akropolom.¹⁴ Posebna studija Alojza
Benca¹⁵ o topografiji prapovijesnih naselja
te o prostornoj dimenziji naseljenosti na po-
dručju Duvanjskog, Livanjskog i Glamoč-
kog polja upućuje na pažljivo planiranje pri
naseljavanju visinskih utvrda te na to kakva
je bila konceptualizacija i upravljanje pro-
storom, pomoću sistema vizualnih komuni-
kacija, koji je povezivao cijelo proučavano
područje.¹⁶ Budući da se cetinska i posuška
odnosno dinarska kulturna skupina i pro-
storno i kronološki djelomično preklapaju,
lucidna je teza B. Čovića¹⁷ da su koegzisti-
rale na istome geografskom prostoru. Dok
su nositelji cetinske kulture bili nomadski
pastiri, a njihova naselja gotovo nepoznata,
osim špiljskih boravišta, poput špilja Škarin
samograd i Ravlića pećina,¹⁸ nositelji posuš-
ke kulture su, međutim, bili sedentarni po-
ljoprivrednici. Dakle, riječ je o komplemen-
tarnim gospodarskim granama i smislenoj
strategiji za preživljavanje u tome krševitom
kraju.¹⁹ Moglo bi se ići korak dalje i postavi-
ti tezu da dok je cetinska kultura, kao arhe-
ološki fenomen, ponajprije odraz načina po-
kopavanja i pogrebnih rituala, što se osobito
izražava baš u specifičnoj lončariji i njezinoj
ornamentici, koja je u naseljima samo izni-

its cultural definition is based primarily on set-
tlement finds. It is characterized by high-altitude
settlements, hillforts, generally fortified with
strong walls and, in some places, towers built of
stone using the dry-wall technique. These are
mostly small settlements with a diameter of 50-
100 m, only a few reach a diameter of around
150 m. The latter, on the other hand, can be
divided inside with additional walls, which in-
dicates complex fortifications with an acropolis.¹⁴
Alojz Benac's special study¹⁵ on the topography
of prehistoric hillforts and the spatial dimensions
of settlement in the area of the Duvno, Livno,
and Glamoč plains shows how carefully the set-
tlement of high-altitude outposts was planned,
the conceptualization of the space, and its con-
trol with a system of visual communications that
connected the entire considered area of settle-
ment.¹⁶ Since the Cetina and Posuška/ Dinaric
cultural groups most probably overlapped both
spatially and chronologically for a part of their
existence, B. Čović's lucid thesis is that they co-
existed in the same geographical area,¹⁷ but while
the bearers of the Cetina Culture were nomadic
shepherds, as their settlements except for cave
shelters, such as Škarin samograd and Ravlića
Cave, are almost unknown,¹⁸ the bearers of the
Posuška Culture were most probably sedentary
peasants, mainly arable farmers. These would
thus be complementary economic branches, as a
sensible strategy for survival in this karst region.¹⁹

We could go one step further and put forward
the thesis that the Cetina Culture as an archaeo-
logical phenomenon is primarily a reflection of
the method of burial and funerary rituals, which

¹⁴ ČOVIĆ 1989: 62–70, 79–83, sl. 11; GOVEDARICA 1989: 149–153, Sl. 20–21.

¹⁵ BENAC 1985.

¹⁶ BENAC 1985: 190–191, Karta 5. Premda nisu sva kartira-
na naselja iz razdoblja ranoga brončanog doba i/ili posuške
kulture, ipak nude frapantan uvid u strukture naseljenosti
tijekom brončanog i željeznog doba na obuhvaćenom po-
dručju.

¹⁷ ČOVIĆ 1989: 93–95; DELLA CASA 1995: 568–569.

¹⁸ MAROVIĆ, ČOVIĆ 1983: 201–203; MARIJANOVIĆ
1981: 36–41, 52–54; MARIJANOVIĆ 2012.

¹⁹ ČOVIĆ 1989: 93–95; MARIJANOVIĆ 2003: 324–325.

¹⁴ ČOVIĆ 1989: 62–70, 79–83, fig. 11; GOVEDARICA 1989: 149–153, Fig. 20–21.

¹⁵ BENAC 1985.

¹⁶ BENAC 1985: 190–191, Map 5. Although not all mapped
settlements are from the Early Bronze Age and/ or the Po-
suška Culture, they nevertheless provide a striking insi-
ght into settlement structures during the Bronze and Iron
Ages in the area under consideration.

¹⁷ ČOVIĆ 1989: 93–95; see also DELLA CASA 1995: 568–569
(»Dinaric and Cetina groups being thus to a certain extent
coeval.«).

¹⁸ MAROVIĆ, ČOVIĆ 1983: 201–203; MARIJANOVIĆ
1981: 36–41, 52–54; MARIJANOVIĆ 2012.

¹⁹ ČOVIĆ 1989: 93–95; MARIJANOVIĆ 2003: 324–325.

mno prisutna, posuška/dinarska kultura pak predstavlja materijalnu kulturu pretežito na-seobinskog značenja, vjerojatno djelomično istovremene jedne te iste populacije.

INDIKATORI KONTAKATA SA SREDNJOEUROPSKIM KULTURAMA

Keramika

Kako je već B. Čović eksplicitno pokazao, tzv. licenska lončarija (Litzen keramika) predstavlja novu pojavu u okviru posuške kulturne skupine. Karakteristična je za drugu fazu te kulture – koja je nazvana kao faza Sovići, odnosno 3. faza cetinske kulture, što odgovara u srednjoeuropskom smislu fazi Bd A2/B1.²⁰ Čović je licensku keramiku posve jasno izdvojio od starije vrpčaste (Schnur keramike) i keramike ukrašene na način „namotane niti“, koje su karakteristične za eneolitik. To što se na taj način ukrašena lončarija pojavljuje u kontekstu ranoga brončanog doba, shvaća se kao plod lokalne eneolitske tradicije.²¹ Drukčija je situacija s licenskom keramikom. Čović je pokazao da je njezino primarno podrijetlo na području zapadne Panonije, od zapadnog dijela srednjeg Podunavlja – sjeverozapadne Hrvatske i susjednih dijelova Slovenije, zapadne Mađarske i Austrije.²² Lončarija ukrašena pojasevima (pramenima) s utisnutom izvijenom niti, zastupljena je na veoma širokom prostoru, i to od Malih Karpata na sjeveru do ruba istočnih Alpa na zapadu te do srednjeg toka Dunava na istoku pa sve do Save na jugu, a izdvojena je od panonskog prostora u zaleđu srednjeg Jarana, i to baš na području posuške kulturne skupine. Istraživanje suautorice ovog rada, Ane Kruh,

is particularly expressed in the specific pottery and its ornamentation, which is only rarely represented in the settlements, while the Posuška/Dinaric culture in fact represents the material culture of the mostly settlement character of this probably partly contemporary population of the area.

INDICATORS OF CONTACTS WITH CENTRAL EUROPEAN CULTURES

Pottery

As has already been explicitly shown by B. Čović, the so-called Litzen pottery represents a new phenomenon within the Posuška cultural group. It is typical of the second phase of this culture – called the Sovići phase or the 3rd phase of the Cetina Culture, which corresponds in Central European terms to the Bd A2/B1 phase.²⁰ Čović quite clearly separated Litzen pottery from earlier corded ware (= corded or Schnur-pottery) and pottery decorated in the manner of “wound string”; which are typical in the Eneolithic. However, if pottery decorated in this way were to appear in the context of the early Bronze Age, it would be understood to be a remnant of the local Eneolithic tradition.²¹ It is different, however, for Litzen pottery. Čović clearly pointed to a primary provenance for it in the area of western Pannonia – in northwestern Croatia and neighboring parts of Slovenia, western Hungary, and Austria.²² This type of pottery, decorated with the impression of twisted cord in bands (strands) was spread over a very wide area in the developed Early Bronze Age, namely from the Little Carpathians in the north to the edge of the Eastern Alps in the west, to the middle course of the Danube in the east, and all the way to the Sava River in the south –

²⁰ ČOVIĆ 1989: 75–78, 94, sl. 16, T. 10–11; FORENBAHER 2018: 136–137, Fig. 13.

²¹ ČOVIĆ 1977; 1983a: 158; 1989: 94, T. 10–11; 1989/1990.

²² ČOVIĆ 1983a: 158; 1989: 78, 95–96.

²⁰ ČOVIĆ 1989: 75–78, 94, Fig. 16, Pl. 10–11; see also FORENBAHER 2018: 136–137, Fig. 13.

²¹ ČOVIĆ 1977; ČOVIĆ 1983a: 158; ČOVIĆ 1989: 94, Pl. 10–11; ČOVIĆ 1989/1990.

²² ČOVIĆ 1983a: 158; ČOVIĆ 1989: 78, 95–96; see also FORENBAHER 2018.

pokazalo je da možemo razlikovati šest skupina liscenske keramike, koje su povezane s različitim kulturnim regijama te su znakovite za raspon od faza Bd A2 do Bd B1 (sl. 1).²³ U prvu su skupinu uvršteni nalazi liscenske lončarije s područja sjeverne Hrvatske (Hrvatsko Zagorje, Podravina), zapadne Mađarske (okolica jezera Balaton uz rijeke Kapos, Rabu i Zalu), istočne Slovenije (Prekmurje,²⁴ Podravje,²⁵ Dolenjska i Ljubljansko barje)²⁶ te austrijske Štajerske/Steiermark (uz rijeke Muru i Rabu); u drugu skupinu spadaju nalazi s područja istočnog dijela Donje Austrije (Niederösterreich) južno od Dunava, Gradišćanske (Burgenland) i sjeverozapadne Transdanubije²⁷; treća je skupina na području Slavonije i južne Transdanubije; četvrta je skupina na području jugozapadne Slovačke i podunavskog dijela Mađarske (Mala mađarska nizina i okolica Budimpešte); u petu su skupinu uvršteni nalazi, koji se u stručnoj literaturi svrstavaju u stariju fazu kulture Belegiš, povezani s prostorom istočne Slavonije, Srijema, Bačke i Banata; te šesta skupina na području Hercegovine i srednje Dalmacije (sl. 1).²⁸

Nalazi s nalazišta srednje Dalmacije, Hercegovine, uključujući i one iz Poda kod Bugojna, tako predstavljaju posebnu skupinu liscenske keramike, koja je svojstvena posuškoj kulturnoj skupini (sl. 2). Pri tome je karakteristično da su ti nalazi liscenske lonča-

and separated from the Pannonian area in the hinterland of the middle Adriatic, namely in the area of the Posuška cultural group. Research in the framework of the doctoral dissertation of the co-author of this paper, Ana Kruh, showed that we can distinguish six groups of Litzen pottery, which are linked to different cultural regions and are attested in the range from Bd A2 to Bd B (Fig. 1).²³ The first group encompassed the finds of Litzen pottery in the areas of northern Croatia (Hrvatsko Zagorje, Podravina), western Hungary (around Lake Balaton and along the Kapos, Raba, and Zala Rivers), eastern and central Slovenia (Prekmurje,²⁴ Podravje,²⁵ Dolenjska, and Ljubljansko barje),²⁶ and Austrian Styria/Steiermark (along the Mura River), the second group was related to the area of the eastern part of Lower Austria/Niederösterreich south of the Danube, Gradišćansko/Burgenland, and northwestern Transdanubia,²⁷ the third group the area of Slavonia and southern Transdanubia, the fourth group the area of southwestern Slovakia and the Danubian part of Hungary (the Little Hungarian plain and the surroundings of Budapest). The fifth group contained finds assigned to the earlier phase of the Belegiš Culture, tied to the area of Eastern Slavonia, Srem/Syrmia, Bačka, and the Banat, while the sixth group encompassed the area of Herzegovina and Central Dalmatia (Fig. 1).²⁸ Thus, finds from sites in Central Dalmatia and Herzegovina, including those from Pod near Bugojno, represent a special group of Litzen pottery belonging to the Posuška/Dinaric cultural group (Fig. 2). It is significant that these finds of Litzen pottery are known mainly from settle-

²³ KRUH 2019.

²⁴ Pogledaj također KERMÁN 2024: 472–480, sl. 1; 8–12.

²⁵ Pogledaj također TERŽAN 1984: 58–60, Abb. 4–5; KRAMBERGER 2024: 567–569, 571–576, Fig. 2; 16–18, Pl. 4–5, 7.

²⁶ Za radiokarbonske datacije liscenske keramike u Sloveniji pogledaj također ČREŠNAR, TERŽAN 2014: 674–679, Sl. 14–18.

²⁷ Lončarija ove vrste većinom je pojedinim primjercima zastupljena na nalazištima još mnogo šireg prostora: kod Salzburga, pri donjem toku rijeke Morave/March (u Donjoj Austriji/Niederösterreich), na predjelima današnje jugozapadne Slovačke, u južnoj Transdanubiji te također na nalazištima istočne i središnje Slovenije.

²⁸ KRUH 2019: 162–179, sl. 38, Prilog 1, 156–166 (s popisom nalazišta i citiranom literaturom).

²³ KRUH 2019.

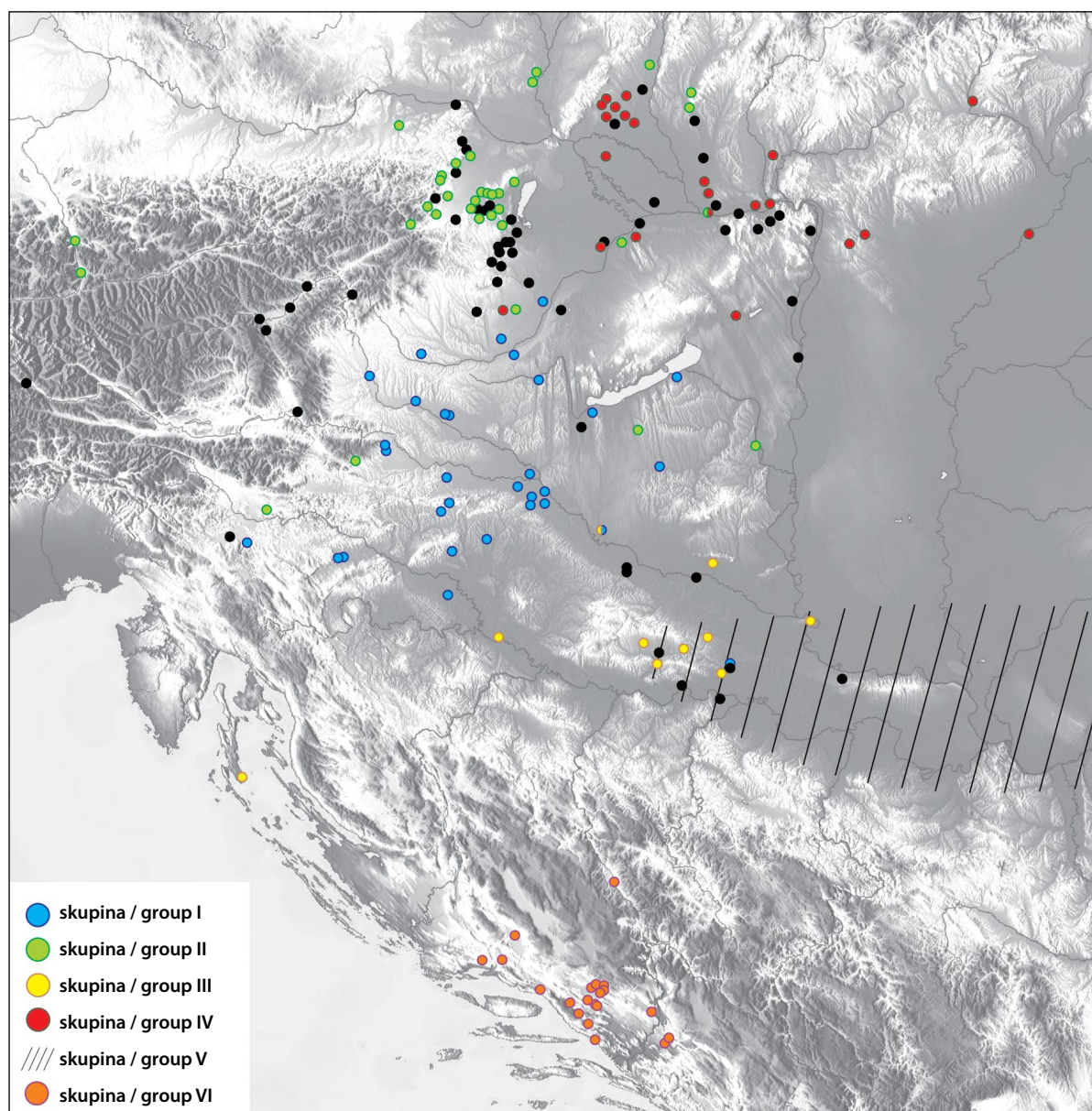
²⁴ See also KERMÁN 2024: 472–480, Fig. 1; 8–12.

²⁵ See also TERŽAN 1984: 58–60, Fig. 4–5; KRAMBERGER 2024: 567–569, 571–576, Fig. 2; 16–18, Pl. 4–5, 7.

²⁶ See also ČREŠNAR, TERŽAN 2014: 674–679, Fig. 14–18.

²⁷ This type of pottery is mostly known from individual specimens at sites in a much larger area: in Solnogaško/Salzburg, along the lower reaches of the Morava/March River (in Lower Austria/Niederösterreich), in parts of present-day southwestern Slovakia, in southern Transdanubia, and also at sites in eastern and central Slovenia.

²⁸ KRUH 2019: 162–179, Fig. 38, Add. 1, 156–166 (with a list of sites and cited literature).



SLIKA 1. Licenska keramika, cjelokupna rasprostranjenost s označenim regionalnim skupinama I–VI i crne točke neopredjeljenje s obzirom na skupine (prema Kruh 2019: 162–179, Priloga 1; izradila A. Kruh)

FIGURE 1 Litzén pottery, total distribution with regional groups I–VI, black dots are unclassified finds (according to Kruh 2019: 162–179, Add. 1; made by A. Kruh)

rije poznati prije svega iz naselja – gradina,²⁹ pojedini primjerci također iz špiljskih nalazišta,³⁰ a samo rijetko iz grobnih gomila (sl. 6: 4–6).³¹ S obzirom na način izrade i tipološke karakteristike posuda, pretpostavlja

ments - hillforts,²⁹ with individual specimens also from cave sites,³⁰ and only very rarely from burial mounds (Fig. 6/4-6).³¹ Based on the method of production and the typological characteristics of the vessels, it can be assumed that they are mainly

²⁹ ČOVIĆ 1989: 62–68, 75, 79–84.

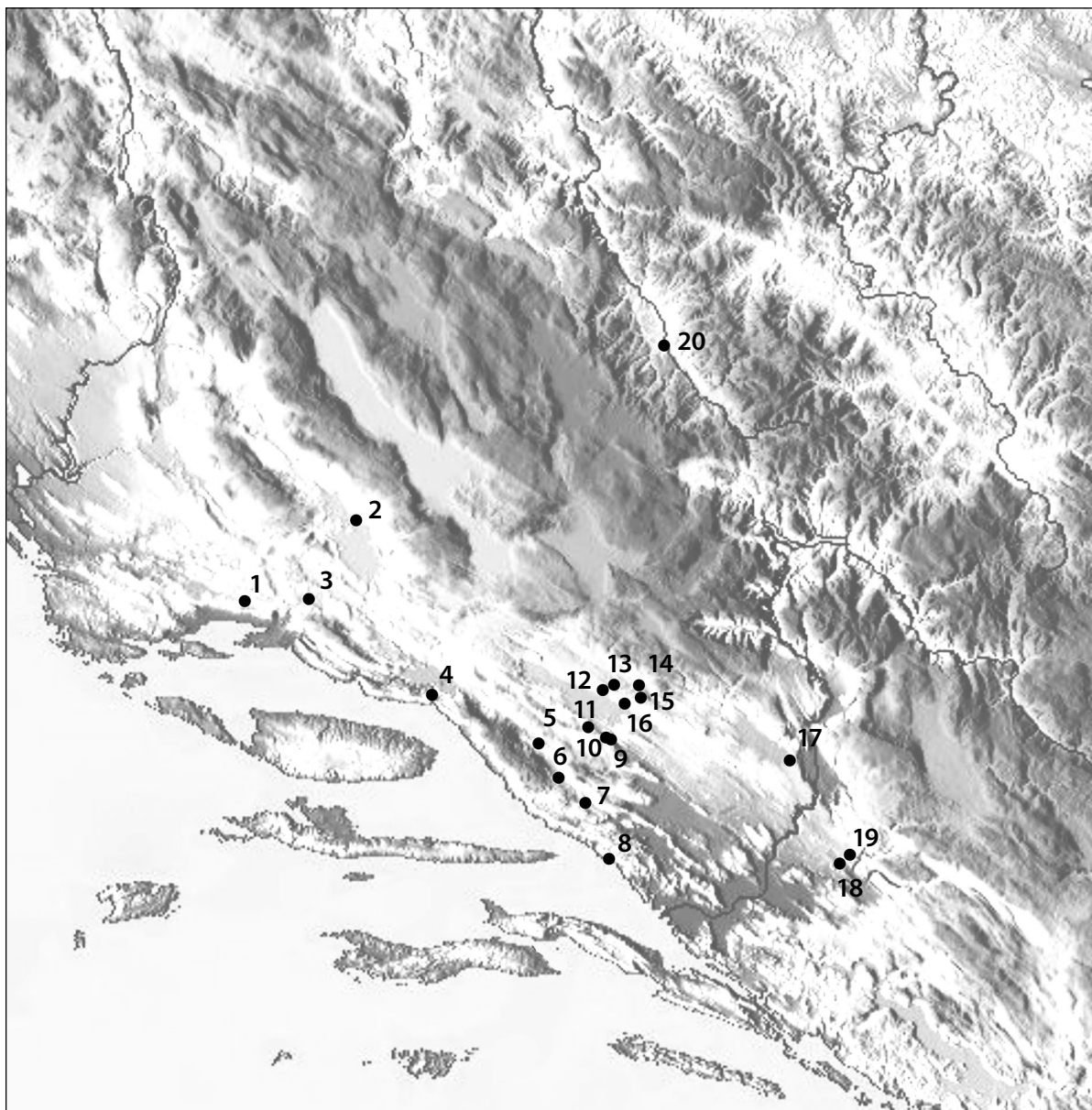
³⁰ ČOVIĆ 1989: 84–85; MARIJANOVIĆ 1981: 42, sl. 3; 2012: 105, sl. 59, T. 85: 1-5; 86: 1-2; TOMASOVIĆ 2011: 15–16, sl. 7, T. 4/3.

³¹ MAROVIĆ, ČOVIĆ 1983: 214; MAROVIĆ 1984: sl. 14, 2–3, 5; 1994: 66–68, sl. 4/4; TOMAS, VUJEVIĆ 2023.

²⁹ ČOVIĆ 1989: 62–68, 75, 79–84.

³⁰ ČOVIĆ 1989: 84–85; MARIJANOVIĆ 1981: 42, Fig. 3; 2012: 105, Fig. 59, T. 85/1-5; 86/1-2; TOMASOVIĆ 2011: 15–16, Fig. 7, T. 4/3.

³¹ MAROVIĆ, ČOVIĆ 1983: 214; MAROVIĆ 1984: Fig. 14, 2-3, 5; 1994: 66–68, Fig. 4/4; TOMAS, VUJEVIĆ 2023.



SLIKA 2. Nalazišta licenske keramike na srednjem Jadranu i njegovom zaleđu (za pojedina nalazišta pogledaj listu, brojevi na listi odgovaraju brojevima na karti; izradila A. Kruh)

FIGURE 2 Sites of Litzén pottery discoveries along the central Adriatic and its hinterland (for individual sites see the list, as the numbers in the list correspond to the numbers on the map; made by A. Kruh 2019)

se da je pretežito riječ o lokalnim proizvodima, koji su vjerojatno nastali po uzorima iz istočnoalpskog odnosno južnapanonskog prostora, u periodu faze Bd A2 te nije riječ o importima.³² Prijelaznu i povezujuću kariku

local products, which were probably created according to models from the Eastern Alps or of the Pannonian area during the Bd A2 phase, and not imports.³² An intermediate and connecting link between the groups in the Pannonian Plain and

³² Na temelju vrste uzoraka ukrasa, prije svega uporabe motiva valovnice, pokazuje se veza s licenskom keramikom, opredijeljenom u prvu skupinu, koja je zastupljena u fazi Bd A2. Pretpostavku o lokalnoj proizvodnji bilo bi potrebno još provjeriti tehnološko-kemijskim analizama keramičkih nalaza.

³² Based on the typical ornamentation of the vessels, especially wavy bands, it can be assumed that this pottery was made according to models of our first group of Litzén-pottery. However, this hypothesis about local production would still need to be verified with technological-chemical analyzes of these pottery finds.

između skupina u Panonskoj nizini i posuške kulture, predstavljala je gradina Pod kod Bugojna³³, u dolini rijeke Vrbasa, kao komunikacijskoj žili između sjevera i juga. Naime, upravo kod Poda se put, koji je vodio sa sjevera duž Vrbasa, rascijepio, i to na jednu stranu prema Neretvi, a na drugu preko Kupreških vrata do Kupreškog, Livanjskog i Sinjskog polja, sve do Jadrana. Ovaj put također dobro karakteriziraju nalazi liscenske keramike (sl. 2).

Oružje

Između grobnih priloga cetinske kulture, pored već opisane bogato ukrašene keramike, kao što su kultne posude na nozi, terine sa širokim, ukrašenim rubovima ušća te vrčevi tipa „Kozarac“³⁴, u prvom se redu ističu bodeži s punim metalnim drškom i sjekire s cjevastim otvorom za nasađivanje ručice³⁵ te takozvani „pseudobrassardi“ (brusni kamen ili zaštitna pločica za zapešće pri napinjanju luka ili ...???; sl. 6/3).³⁶ Za našu su obuhvaćenu temu prije svega važni brončani bodeži s punim metalnim drškom. Za njih su već Z. Vinski, I. Marović te B. Čović pokazali da ih možemo povezati, s jedne strane, s bodežima italiskog tipa na Apeninskom poluotoku te s druge strane, s metalurškim krugom unjetičke kulture.³⁷ Ako se oslonimo na neka novija istraživanja, njihovo tipološko i kronološko mjesto možemo još nadopuniti i precizirati.

Zanimljivu sliku daje cjelokupna raspro-

the Posuška/Dinaric group was represented by the settlement at Pod near Bugojno³³ in the valley of the Vrbas River as a communication channel between the north and the south. It was in fact at Pod that the route that led from the north along the Vrbas branched, on one side towards the Neretva River and on the other through the Kupreška Vrata pass to the Kupres, Livno, and Sinj plains all the way to the Adriatic. This route is also well marked by finds of Litzen pottery (Fig. 2).

Weapons

Among the grave goods of the Cetina Culture, in addition to the already mentioned richly decorated pottery, such as footed cult vessels, terrines with wide, decorated mouth edges, and jugs of the „Kozarac“ type,³⁴ weapons especially stand out, such as triangular and solid-hilted daggers, and shaft-hole axes with a tubular socket,³⁵ and the so-called „pseudobrassards“ (a whet-stone, or protective plate for the wrist when drawing a bow, Fig. 6/3).³⁶ For the topic discussed here, solid-hilted bronze daggers are particularly important. Z. Vinski and I. Marović and B. Čović had already shown that they may be connected on the one hand with daggers of the Italic type on the Apennine peninsula, and on the other hand with the metallurgical circle of the Unetice culture.³⁷ However, if we rely on some recent research, we can supplement and specify their typological and chronological position.

An interesting image is given by the full distri-

³³ ČOVIĆ 1965: 48–49, 71–77, T. 6/17–18; 8/1–2; 1983a: 172–173, 177–181, T. 24/12; 1991: 20, T. 14/3, 8; 20/6; 25/1–4. O povezanosti Poda s Panonskim prostorom glede metalurške djelatnosti pogledaj također TERŽAN 2019.

³⁴ MAROVIĆ, ČOVIĆ 1983: 194–200, 209–214, sl. 14–15, T. 31–32; MAROVIĆ 1984: 34–46, sl. 7–13, 16–17; MARAN 1998: T. 33–36 (kod keramike se ističe ukras izveden dubokim urezima, pečati, često bijelo inkrustirani, organizirani u različite geometrijske motive).

³⁵ Za sjekire pogledaj ŽERAVICA 1993: 26–27, T. 8/82–83.

³⁶ MAROVIĆ, ČOVIĆ 1983: 205–209, T. 31/4.7; 33–34, 1/7–9; MAROVIĆ 1984: 37–38, sl. 14–15. Funkcija tih predmeta još nije posve razjašnjena, ali je dosta diskutirana.

³⁷ VINSKI 1961: 13–18; MAROVIĆ, ČOVIĆ 1983: 206–209; MAROVIĆ 1984: 38; 1994: 70.

³³ ČOVIĆ 1965: 48–49, 71–77, Pl. 6/17–18; 8/1–2; 1983a: 172–173, 177–181, Pl. 24/12; 1991: 20, Pl. 14/3, 8; 20/6; 25/1–4. For the connections of Pod with the Pannonian area in terms of metallurgical activity also see TERŽAN 2019.

³⁴ MAROVIĆ, ČOVIĆ 1983: 194–200, 209–214, Fig. 14–15, Pl. 31–32; MAROVIĆ 1984: 34–46, Fig. 7–13, 16–17; MARAN 1998: Pl. 33–36 (in the pottery, the decoration stands out made with deep incisions, stamps, often encrusted in white, and organized into various geometric motifs).

³⁵ For axes, see ŽERAVICA 1993: 26–27, Pl. 8/82–83.

³⁶ MAROVIĆ, ČOVIĆ 1983: 205–209, Pl. 31/4.7; 33–34, 1/7–9; MAROVIĆ 1984: 37–38, Fig. 14–15. The function of these objects is still not entirely clear, but has been discussed at length.

³⁷ VINSKI 1961: 13–18; MAROVIĆ, ČOVIĆ 1983: 206–209; MAROVIĆ 1984: 38; 1994: 70.

stranjenost bodeža s punim metalnim drškom u Europi, koja s jedne strane obuhvaća dijelove od južnih obala Baltičkog mora, između Labe i Visle, preko pokrajina srednje Europe, poput pokrajina srednje Njemačke s Bavarskom te preko zapadnih Alpa do sliva rijeke Rone, sve do njezina ušća u Sredozemno more te s druge strane do Padske nizine i Apeninskog poluotoka. Bodeži iz srednje Dalmacije označuju, takoreći, jugoistočni rub raširenosti ove vrste oružja tijekom ranoga brončanog doba. Naravno, mogu se razlikovati brojni različiti i regionalni tipovi, tj. varijante bodeža s punim metalnim drškom, koji upućuju na postojanje pojedinih metalurških radionica lokalnog značenja ili pak možda na putujuće majstore lijevanja (sl. 3).³⁸

Glede tipa bodeža s kratkom trokutastom oštricom i relativno dugim metalnim drškom, najstariji primjerci takvih bodeža u srednjoj Dalmaciji su iz Prapatnice kod Splita i Živalja kod Obrovca. Premda prvi potječe iz uništenog groba, a drugi iz tumula 2, njihova datacija u fazu Bd A1-2 ne čini se spornom. Bodeži se među sobom ponešto razlikuju, jer bodež iz Živalja ima držak sastavljen od dvaju dijelova (sl. 4). Kako je već spomenuto, bodeže su već prije odgovarajuće datirali Vinski, Marović i Čović te su definirani kao italjski tip bodeža.³⁹ U pogledu nešto detaljnije tipološke analize bodeža, koju je izveo Stephan Schwenzer, bodež iz Prapatnice je tako pripisan njegovu tipu 3 italjskih bodeža, koji su najzastupljeniji upravo u srednjoj Italiji te samo u pojedinim primjercima na području sliva Rone (sl. 5).⁴⁰ Zbog dvodijelnosti drška, bodež iz Živalja je napravljen posebnim ljevačko-tehnološkim postupkom te ga zato Schwenzer pripisuje posebnoj skupini bodeža s tuljastim drš-

bution of solid-hilted daggers in Europe, which encompasses the areas from the southern shores of the Baltic Sea between the Elbe and the Vistula Rivers through the lands of Central Europe, such as central Germany with Bavaria, and through the Western Alps to the Rhone River basin all the way to its outlet into the Mediterranean Sea on one side, and on the other side to the Po River plain and the Apennine peninsula. The daggers from central Dalmatia mark, so to speak, the southeastern edge of the distribution of this type of weapon in the Early Bronze Age. Of course, it is possible to distinguish between numerous different local and regional types or variants of solid-hilted daggers, which indicate that individual metallurgical workshops of a local character existed with perhaps also traveling foundry masters (Fig. 3).³⁸

In central Dalmatia, in terms of the type of dagger with a short triangular blade and a relatively long hilt, the oldest examples of such daggers are from Prapatnica near Split and Živalji near Obrovac (Sinj). Although the former originates from a destroyed grave and the latter from tumulus 2, their dating to the Bd A1-2 phase does not seem controversial. However, the two daggers are slightly different, because the dagger from Živalji has a hilt composed of two parts (Fig. 4). As was already mentioned, the daggers had already been properly identified and dated as Italic type daggers by Vinski, Marović, and Čović.³⁹ According to a somewhat more detailed typological analysis of daggers by Stephan Schwenzer, the dagger from Prapatnica was attributed to his type 3 of Italic daggers, which are most abundantly represented in central Italy, with only individual examples also in the Rhone basin (Fig. 5).⁴⁰ Due to the two-part handle, the dagger from Živalji was made using a special casting-technological process, hence Schwenzer attributed it to a special group of daggers with socketed handles,

³⁸ SCHWENZER 2004: 13–19, Abb. 4–6.

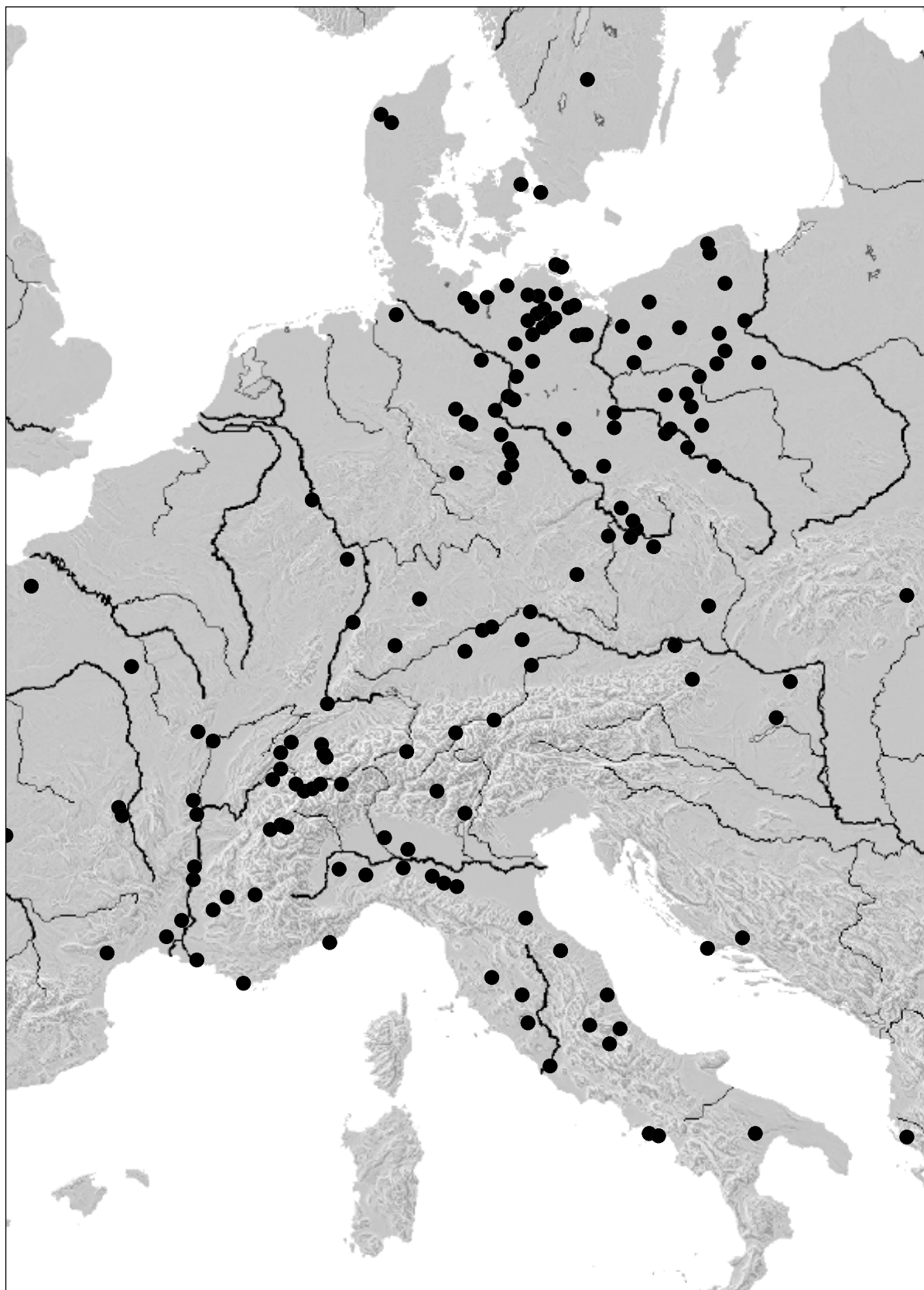
³⁹ VINSKI 1961: 14, T. 3/1; MAROVIĆ, ČOVIĆ 1983: 206, sl. 15/12, T. 33/5,5a; MILOŠEVIĆ 1998: 174–175, sl. 289.

⁴⁰ SCHWENZER 2004: 82–85, 301 (Nr. 232), Abb. 56/230; 57; T. 68/230; 69/232.

³⁸ SCHWENZER 2004: 13–19, Fig. 4–6.

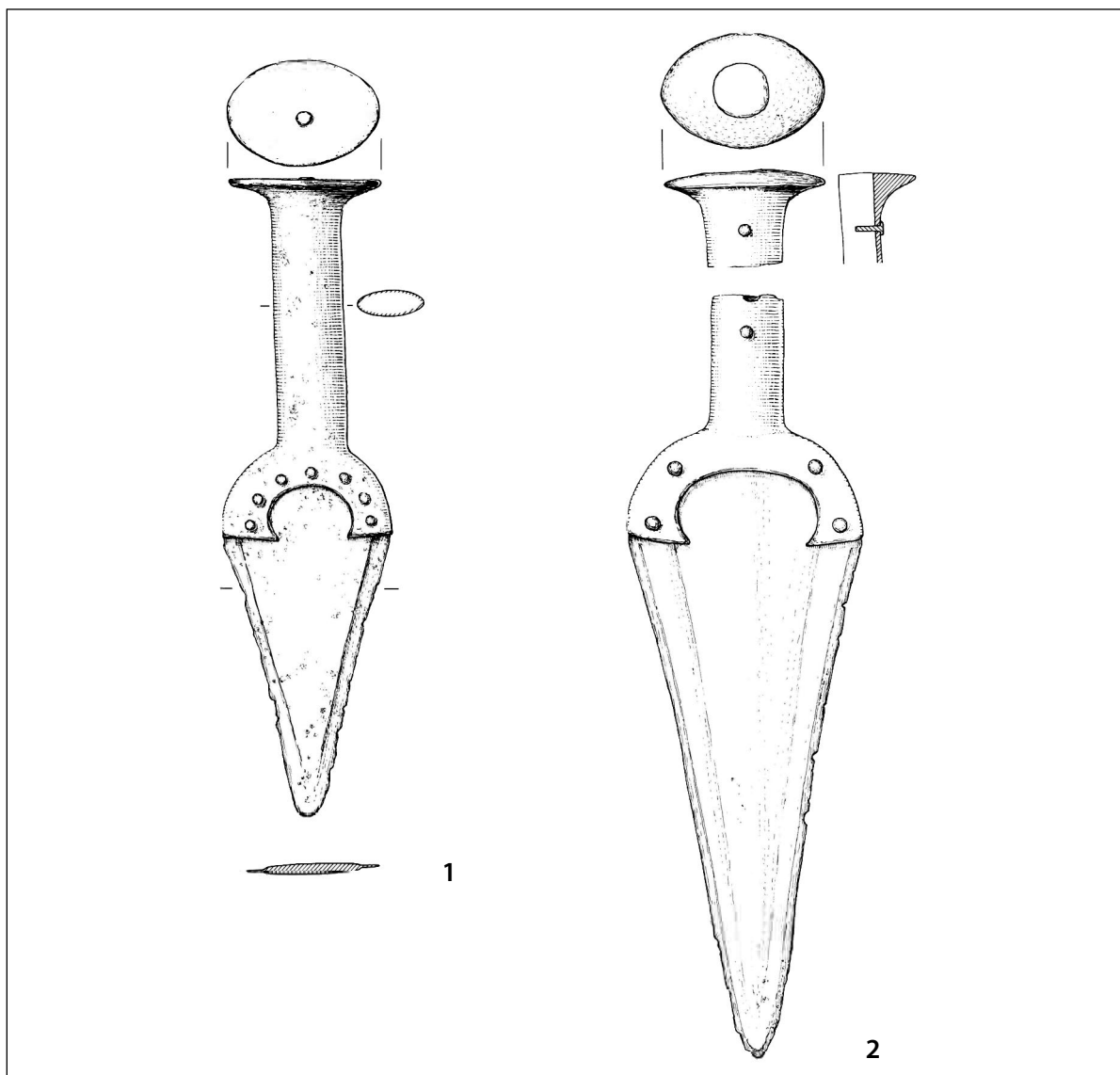
³⁹ VINSKI 1961: 14, Pl. 3/1; MAROVIĆ, ČOVIĆ 1983: 206, Fig. 15/12, Pl. 33/5,5a; DELLA CASA 1995: 574; MILOŠEVIĆ 1998: 174–175, Fig. 289.

⁴⁰ SCHWENZER 2004: 82–85, 301 (No. 232), Fig. 56/230; 57; Pl. 68/230; 69/232.



SLIKA 3. Bodeži s punom drškom iz ranog brončanog doba, cjelokupna rasprostranjenost bez obzira na tip i okolnosti nalazišta (prema Schwenzer 2004: Abb. 4-6)

FIGURE 3 Solid-hilted daggers from the early Bronze Age, total distribution without reference to type and circumstances of discovery (according to Schwenzer 2004: Fig. 4-6)



SLIKA 4. Bodeži s punom drškom: 1) Prapatnica kod Splita, 2) Živalji u Obrovcu kod Sinja (prema Vinski 1961: T. 3/1; Marović, Čović 1983: sl. 15/12, T. 33/5-6; Schwenzer 2004: T. 68/230; 69/232)

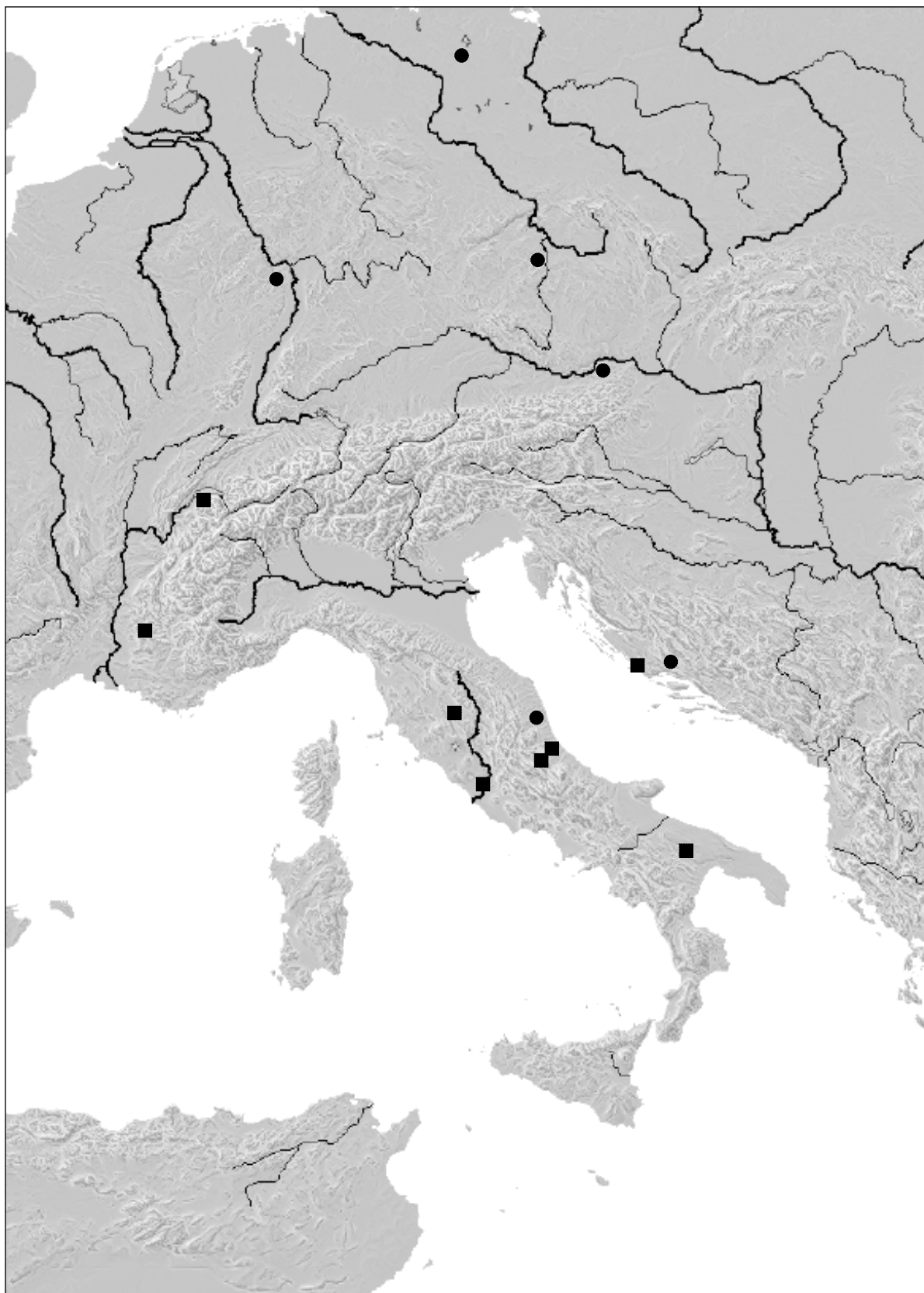
FIGURE 4 Solid-hilted daggers: 1) Prapatnica near Split, 2) Živalji in Obrovac near Sinj (according to Vinski 1961: Pl. 3/1; Marović, Čović 1983: fig. 15/12, Pl. 33/5-6; Schwenzer 2004: Pl. 68, 230; 69/232)

kom, opredijeljeni kao skupina VI (*Tüllengriffdolch*). Bodeži ove skupine ne pojavljuju se samo u Italiji, već se također pojavljuju i u srednjem Podunavlju i uz Rajnu, sve do Mecklenburga, što upućuje na veze između metalurških majstora odnosno između krugova radionica iz vrlo udaljenih krajeva i kulturnih skupina (sl. 5).⁴¹ Na pitanje je li bodež iz Živalja podrijetlom s italiskog ili srednjoeuropskog prostora ili je možda ipak lokalne izrade, kemijske bi analize njegove

defined as Group VI (*Tüllengriffdolch*). Daggers of this group appear not only in Italy, but also in the central Danube basin and the Rhineland as far as Mecklenburg, hence indicating connections between metallurgical craftsmen or workshop circles from very distant places and cultural groups (Fig. 5).⁴¹ The question of whether the dagger from Živalji would have originated from the Italic or Central European region, or perhaps was even of local manufacture, could probably be answered by metallurgical analyzes of its alloy

⁴¹ SCHWENZER 2004: 166, Abb. 113.

⁴¹ SCHWENZER 2004: 166, Abb. 113.



SLIKA 5. *Rasprostranjenost bodeža s punom drškom italskoga tipa 3 (kvadrat) i bodeža livarsko-tehnološke skupine VI (krug) (prema Schwenzer 2004: Abb. 57, 113; doradila M. Vinazza)*

FIGURE 5 *The distribution of solid-hilted daggers of Italic type 3 (rectangle) and daggers of the cast-technological group VI (circle) (according to Schwenzer 2004: Fig. 57, 113; made by M. Vinazza)*

slitine vjerojatno mogle pružiti odgovor.

Iz Živalja kod Obrovca potječe još jedan bodež s punim metalnim drškom, i to iz groba 2 u tumulu 1, koji datira u vrijeme Bd A2.⁴² Bodež ima dulju, trokutastu i lijepo ukrašenu oštricu, a i elegantno konkavno zakrivljeni držak ukrašen je trima pojasevima horizontalnih ureza,⁴³ gornja okrugla ploha drška s tutulom u sredini je ukrašena dvama graviranim koncentričnim krugovima u motivu jeline grane (*Tannenzweigmotiv*)⁴⁴ ili riblje kosti (*Fischgrätband*) (sl. 6/1).⁴⁵ Baš zbog relativno dugog sječiva, s duljinom od 32,5 cm, neki ga istraživači ubrajaju čak i među kratke mačeve.⁴⁶ To znači da bi se taj primjerak mogao uvrstiti među oružje, koje već upućuje na novi način borbe – mačevanje, odnosno u prijelazni oblik između bodeža i mača. Već su Marović i Čović naveli primjerak iz Perjana u Tirolu⁴⁷ kao najbolju analogiju za bodež iz Živalja, što je Peter Turk potvrdio u svojoj studiji o novom nalazu kratkog mača s područja Jablje kod Mengeša, iz šire okolice Ljubljane (sl. 7),⁴⁸ koji predstavlja najbližu i adekvatnu usporedbu s primjerkom iz Živalja te je bitno nadopunio raspravu o mačevima ovog tipa. Naime, Turk je pokazao da je u razvijenoj fazi ranoga brončanog doba na istočno-alp-

composition.

Another solid-hilted dagger originates from Živalji near Obrovac (Sinj), from grave 2 in tumulus 1, which belongs to the period of Bd A2.⁴² The dagger has a long narrow triangular and nicely decorated blade, as well as an elegant impressed concave hilt decorated with three bands of horizontal incisions,⁴³ while the top of the circular plate of the hilt was decorated with a rounded cone (tutulus) in the center and two engraved concentric circles with a motif of pine branches (*Tannenzweigmotiv*)⁴⁴ or herringbone (*Fischgrätband*) (Fig. 6/1).⁴⁵ It is precisely because of the relatively long blade, about 32.5 cm, that some researchers have assigned it among short swords.⁴⁶ This would mean that this example could already be classified as a type of weapon that indicates a new way of fighting - swordsmanship, i.e. as a transitional form between a dagger and a sword. Already Marović and Čović had cited the example from Perjen in the Tyrol as the best analogy for the dagger from Živalji,⁴⁷ while Peter Turk in his study on the new find of a short sword from the area of the Jablje Castle near Mengeš, in the broader area of Ljubljana (Fig. 7),⁴⁸ which represents the closest and at the same time a good comparison to the example from Živalji, both confirmed and significantly supplemented the discussion on this type of sword. He in fact showed that in the devel-

⁴² VINSKI 1961: 15; MAROVIĆ, ČOVIĆ 1983: 207, T. 34/1-7; MAROVIĆ 1994: 65-68, sl. 2-3; GOVEDARICA 1989, T. 34/1, 5-8; MILOŠEVIĆ 1998: 207-208, sl. 343.

⁴³ Jednako je ukrašen držak kratkog mača iz Donje doline, koji pak u pogledu oblikovanosti oštrice spada u metalurški krug mačeva tipa Hajdu Samson-Apa. Usporedi: VINSKI 1961: 17-19, T. 8/1; MAROVIĆ, ČOVIĆ 1983: 208; HARDING 1995: 69-70, T. 28/228.

⁴⁴ Za ovaj ukras pogledaj HARDING 1995: 70.

⁴⁵ MAROVIĆ, ČOVIĆ 1983: 207-209, T. 34/1, 1a; MAROVIĆ 1994: 63-68, sl. 3/1; HARDING 1995: 69-70, T. 28/229; SCHWENZER 2004: 92-93, 301 (Nr. 231), Abb. 62: 231, T. 69: 231. Za ukras riblje kosti na bodežima još posebno pogledaj SCHWENZER 2004: 95-98, 339 (Liste 18), Abb. 63; 65, 67; za ukras gornje okrugle plohe drška s koncentričnim krugovima pogledaj SCHWENZER 2004: 107-108, Abb. 72 e, 75.

⁴⁶ HARDING 1995: 69-70; SCHWENZER 2004: 92-93, Abb. 62: 231; TURK 2007: 211-212, sl. 11/1.

⁴⁷ MAROVIĆ, ČOVIĆ 1983: 208.

⁴⁸ TURK 2007; 2012; TURK, TURK 2019: 177-178, sl. 221-223.

⁴² VINSKI 1961: 15; MAROVIĆ, ČOVIĆ 1983: 207, Pl. 34/1-7; MAROVIĆ 1994: 65-68, Fig. 2-3; GOVEDARICA 1989: Pl. 34/1, 5-8; MILOŠEVIĆ 1998: 207-208, Fig. 343.

⁴³ The hilt of a short sword from Donja Dolina is decorated in the same way, but due to the shape of the blade, it belongs to the metallurgical circle of swords of the Hajdu Samson-Apa type. Cf.: VINSKI 1961: 17-19, Pl. 8/1; MAROVIĆ, ČOVIĆ 1983, 208; HARDING 1995: 69-70, Pl. 28/228.

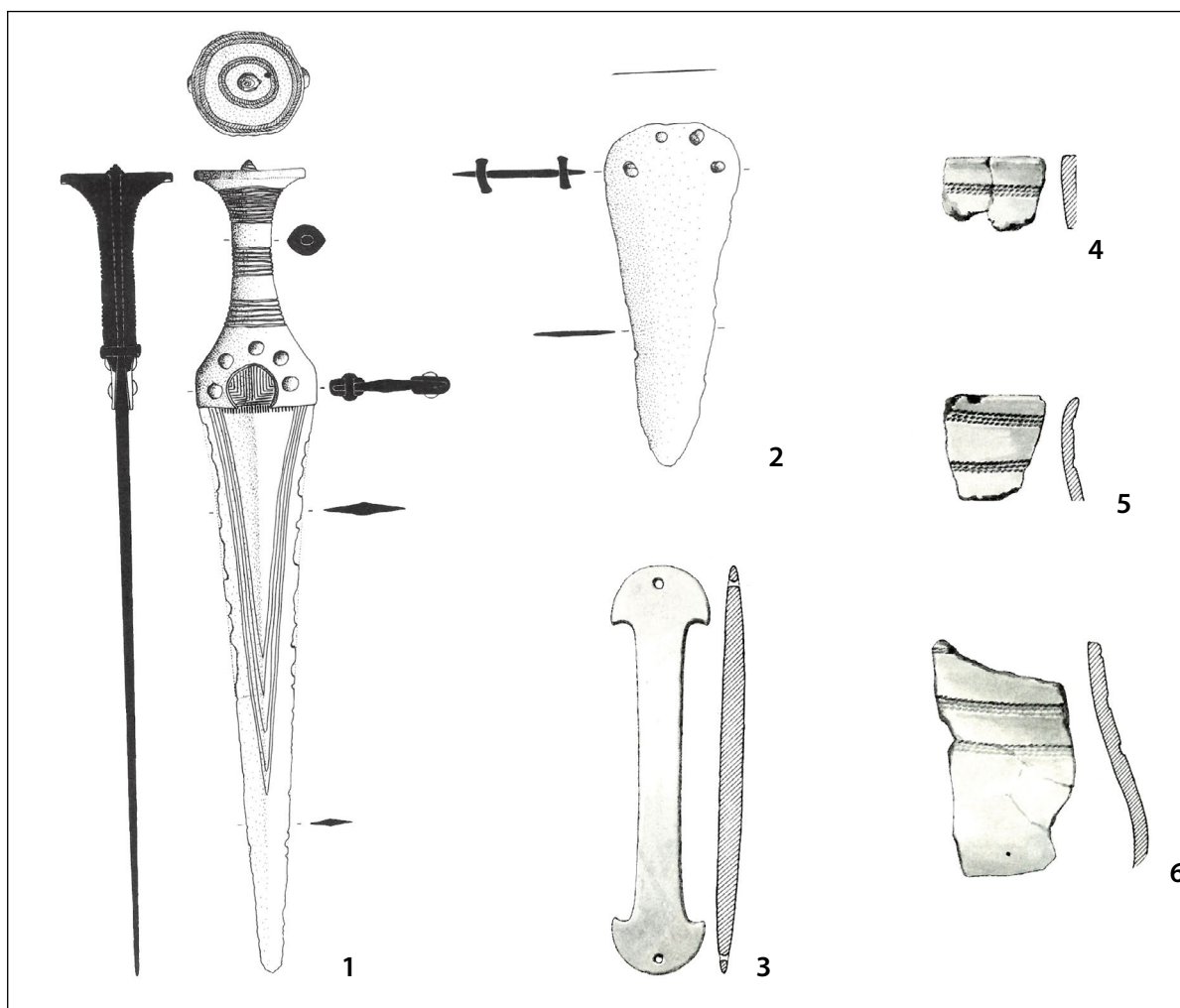
⁴⁴ For this decoration, see HARDING 1995: 70.

⁴⁵ MAROVIĆ, ČOVIĆ 1983: 207-209, Pl. 34/1, 1a; MAROVIĆ 1994: 63-68, Fig. 3/1; HARDING 1995: 69-70, Pl. 28/229; SCHWENZER 2004: 92-93, 301 (No. 231), Fig. 62/231, Pl. 69/231. For the herringbone decoration on the daggers, see especially SCHWENZER 2004: 95-98, 339 (List 18), Fig. 63; 65, 67; for the decoration of the upper hilt plate with concentric circles, see SCHWENZER 2004: 107-108, Fig. 72e, 75.

⁴⁶ HARDING 1995: 69-70; SCHWENZER 2004: 92-93, Fig. 62/231; TURK 2007: 211-212, Fig. 11/1.

⁴⁷ MAROVIĆ, ČOVIĆ 1983: 208.

⁴⁸ TURK 2007; 2012; TURK, TURK 2019: 177-178, Fig. 221-223.



SLIKA 6. Živalji u Obrovcu kod Sinja, tumul, grob 2, grobni nalazi: 6 (1-2 bronza, 3 kamen, 4 keramika) (prema Marović 1994: sl. 3)

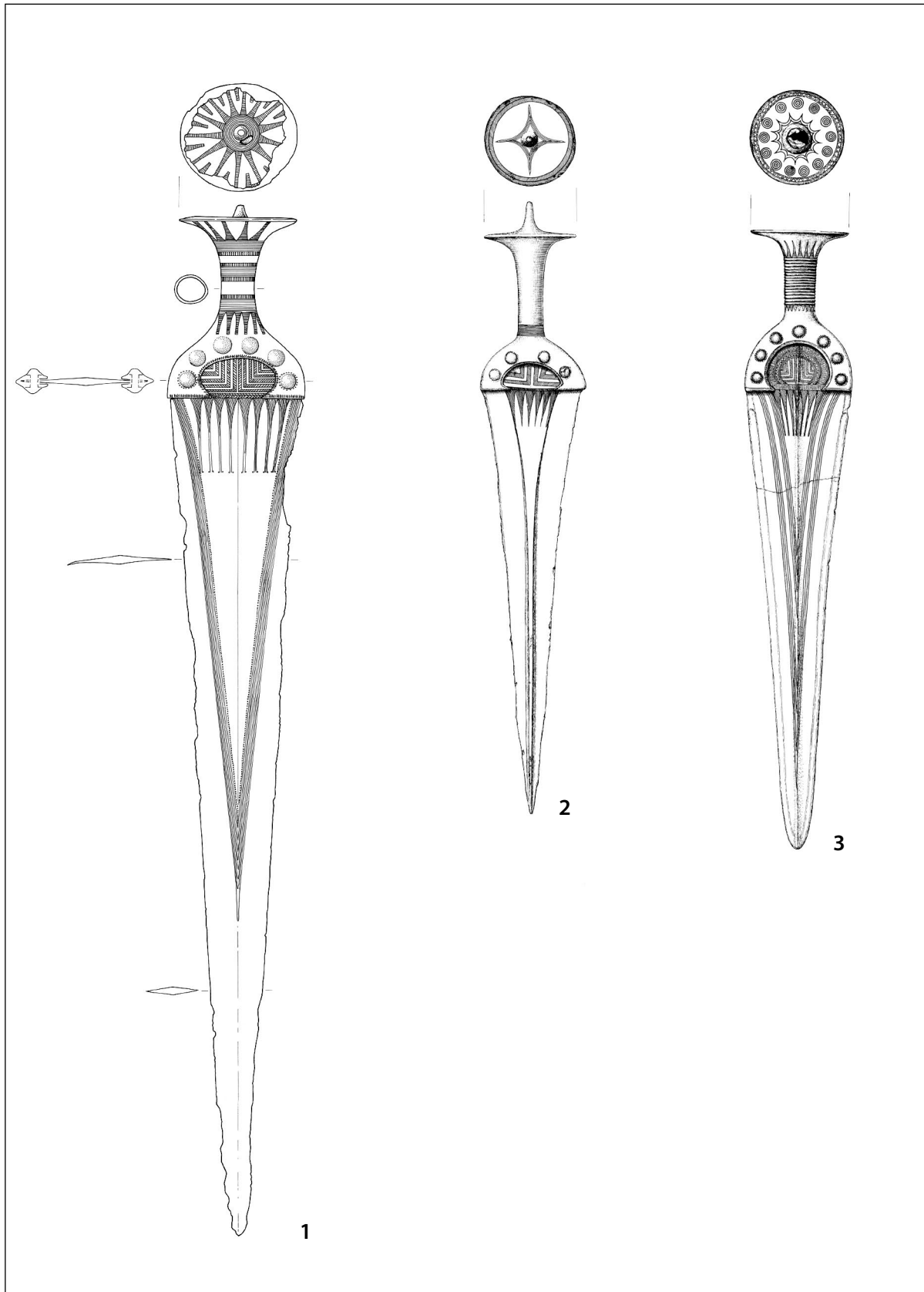
FIGURE 6 Živalji in Obrovac near Sinj, tumulus, grave 2, grave finds: 6 (1-2 bronze, 3 stone, 4-6 pottery) (according to Marović, Čović 1983: Pl. 34: 1-7; Marović 1994: Fig. 3)

skom prostoru postojala posebna skupina kratkih mačeva, za koje je karakterističan specifičan kombinirani ukras šrafiranih kutnih polukriževa i visećih trokuta. S takvim se ukrasom ovi mačevi nadovezuju na stariju ornamentalnu tradiciju, svojstvenu upravo alpskom svijetu. Ta činjenica omogućava tezu da je u rano brončano doba postojala posebna istočno-alpska metalurška provincija s lokalnim ljevačkim radionicama.⁴⁹ Sudеći prema obliku sječiva i ukrasa, možemo pretpostaviti da bodež/kratki mač iz groba

oped stage of the Early Bronze Age in the Eastern Alpine region there was a special group of short swords, which were characterized by a specific combined decoration of hatched angular crosses and hanging triangles. With this kind of decoration, these swords are linked to an older ornamental tradition, specific to the Alpine world. This fact enables the theory to be expressed that in the Early Bronze Age there had been a special Eastern Alpine metallurgical province with local casting and metal working activities.⁴⁹ Judging by the shape of the blade and the decoration, it can therefore

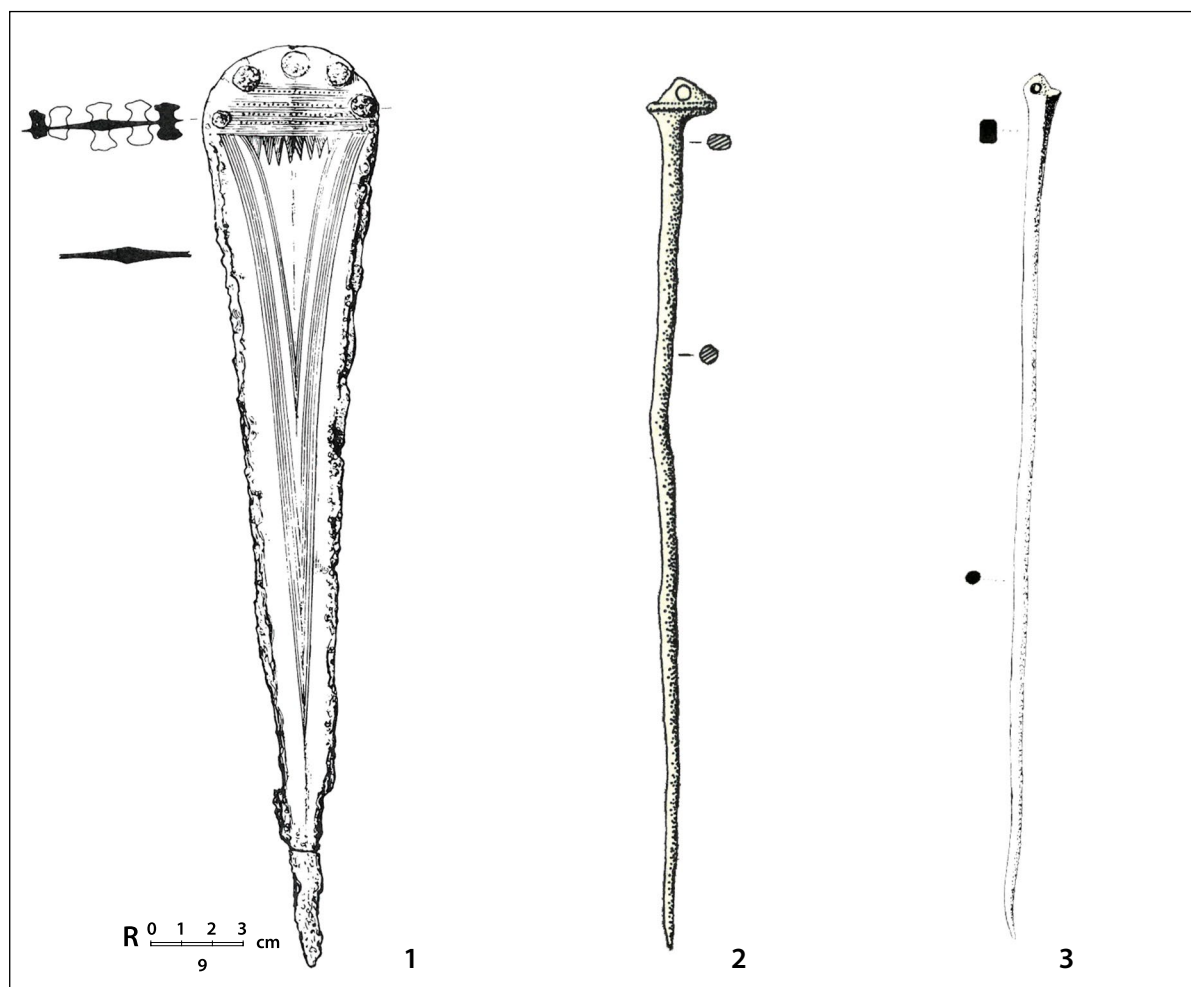
⁴⁹ TURK 2007: 211-213, 218 (Lista 1), sl. 9-13; 2012: 316-318, sl. 2-5. Za ukras kutnih polukriževa (= *halbes Winkelkreuz*/ HA 4) pogledaj također SCHWENZER 2004: 118-119, 349-350 (Liste 43-44), Abb. 85.

⁴⁹ TURK 2007: 211-213, 218 (List 1), Fig. 9-13; 2012: 316-318, Fig. 2-5. For the decoration of angular crosses (= *halbes Winkelkreuz*/ HA 4), also see SCHWENZER 2004: 118-119, 349-350 (Liste 43-44), Fig. 85.



SLIKA 7. *Kratki mačevi s punom drškom: 1) Jablje kod Mengeša, 2) Perjen u Tirolu, 3) Maiersdorf u Donjoj Austriji (prema Turk 2012: sl. 3-4)*

FIGURE 7 *Short solid-hilted swords: 1) Jablje near Mengeš, 2) Perjen in the Tyrol, 3) Maiersdorf in Lower Austria (according to Turk 2012: Fig. 3-4)*



SLIKA 8. 1) Bodež, Sopa u Vinjanima, tumul, grob, grobni nalaz (prema Čović 1989: T. 14/9); igle s ušicom na glavi (Ösenkopfnadel); 2) Postranje kod Imotskog, 3) Surčin u Srijemu (prema Marović 1981: sl. 16/6; Vinski 1961: T. 6/3)

FIGURE 8 1) Bronze dagger: Sopa in Vinjani, tumulus, grave find (according to Čović 1989: Pl. 14/9); Pins with a loop ("Ösenkopfnadel"); 2) Postranje near Imotski, 3) Surčin in Srem/Syrmia (according to Marović 1981: Fig. 16/6; Vinski 1961: Pl. 6/3)

2 u tumulu iz Živalja, potječe iz istočnoalp-skoga obrtničkog kruga, što, među ostalim, dodatno podupiru i fragmenti liceske keramike, pronađeni u grobu (sl. 6/4–6).

Zbog toga je pozornosti vrijedan i bodež iz tumula u Sopi u Vinjanima kod Posušja (sl. 8/1). Njegova je oštrica po dužini, koja iznosi oko 29 cm, te po obliku gotovo jednaka kao kod bodeža iz Živalja, samo mu se gravirani ukras, na predjelu pločice drška, ponešto razlikuje. U ovom slučaju nije riječ o kombiniranom ukrasu šrafiranih kutnih polukriževa i visećih trokuta, kao u slučaju onog iz Živalja, nego je riječ o paralelno urezanim pojasima, ispunjenim sitnim punciranim točkama pod

be suggested that the dagger/short sword from grave 2 in the tumulus at Živalji originated from the Eastern Alpine craft circle, which is supported – not least of all – by the shards of Litzen pottery found in the grave (Fig. 6/4-6).

In this connection, the dagger from the tumulus at Sopa in Vinjani near Posušje is also worthy of attention (Fig. 8/1). Its blade is approx. 29 cm long, and the shape is almost the same as the dagger from Živalji, only the engraved decoration in the area of the hilt plate is slightly different. It is not a combined decoration of cross-hatched angular half-crosses and hanging triangles as in the example from Živalji, but of parallel incised bands filled with finely punctuated dots and

kojima je ukras s većim trokutima.⁵⁰ Premda ovaj bodež nema očuvani držak, koji je vjerojatno bio drven, ima pet zakovica za nasađivanje,⁵¹ jednako kao kod bodeža iz Živalja (sl. 6/1 i 8/1). S obzirom na to da su na takav način ukrašeni bodeži poznati prije svega na prostoru sjeverno od Alpa i srednjeg Podunavlja sve do Danske, čini se vjerojatno da je bodež iz Sope također proizvod obrtničke radionice koju moramo tražiti na području srednje ili čak sjeverne Europe.

Grob 2 iz tumula 1 iz Živalja čini se zanimljivim i zbog svojeg položaja unutar gomile te ostalih grobnih priloga. U kamenom su tumulu bile dvije grobne škrinje, jedna pored druge, pokrivene kamenom pločom. U slučaju prvog groba riječ je o pokopu djeteta, uz vanjski rub drugog groba ležali su ostatci kostiju jedne osobe, a u grobnoj škri-nji druge osobe, i to ostatci kostura (lubanje i udova) odrasle osobe, u zgrčenom položaju. Dugi je bodež bio položen u sredinu groba i daje utisak da ga je pokojnik držao u ruci, na sredini prsnoga koša (sl. 6/1). U njegovoj blizini, isto tako na sredini prsa, otkriven je kameni predmet u obliku „izdužene kretske sekire“, vjerojatno tzv. „pseudobrassard“ i zlatna žica (sl. 6/3). U grobu je bilo i nekoliko fragmenata lencske lončarije (sl. 6/4–6). U sjeverozapadnom uglu grobne škrinje nalazio se kratki trokutasti bodež (sl. 6/2). Marović je za njega mislio da ne pripada zgrčencu u grobu 2, već dislociranom pokopu izvan kamene škrinje.⁵² Ta je teza vjerojatna, ali ne i jedina moguća. Naime, među grobnim prilozima istaknutih ratničkih grobova

below them a decoration of larger hanging triangles.⁵⁰ However, this dagger does not have a preserved hilt, which was probably wooden, but it does have five rivets for fastening the hilt,⁵¹ the same as the dagger from Živalji (Fig. 6/1 and 8/1). Considering that daggers decorated in this way are known mainly from the area north of the Alps and the middle Danube all the way to Denmark, it seems likely that the dagger from Sopa would also be the product of a craft workshop, which we have to seek in the central or even northern regions of Europe.

Grave 2 from tumulus 1 at Živalji also seems interesting from the point of view of its location in the mound and the other grave goods. In the stone tumulus, there were two stone cist burials, one next to the other, covered with a stone slab. The first grave contained a child's burial, along the outer edge of the second grave lay the remains of the bones of one individual, with another in the stone cist, the remains of a skeleton (skull and limbs) of an adult in a contracted position. The long dagger was placed in the middle of the grave, giving the impression that the deceased was holding it in his hand in the middle of his chest. Nearby, also in the middle of his chest, a stone object in the shape of an “elongated Cretan axe”, probably the so-called “pseudobrassard”, and a gold wire were found (Fig. 6/1, 3). In the grave there were also some shards of Litzen pottery vessels. A short triangular dagger was also found in the northwestern corner of the burial cist (Fig. 6/2). Marović concluded that this did not belong to the contracted burial in grave 2, but to a dislocated burial outside the stone cist.⁵² This thesis is plausible, but not the only possible one. Among

⁵⁰ SCHWENZER 2004: 116–117, 352, Abb. 82 a; 83 (Liste 50). Schwenzer je ugotovio da taj ukras nije specifičan za određeni tip bodeža, već da je raširen – kako pokazuje karta Abb. 83 – na različitim tipovima bodeža s punim metalnim drškom i oštricama bodeža, sve od obala Baltičkog mora do Padske nizine odnosno srednje Italije. Pokazuje da je bodež iz Sope s tim ukrasom do sada jedini tako ukrašeni primjerak južno od Dunava odnosno na zapadnom Balkanu.

⁵¹ ČOVIĆ 1983: 146, sl. 11/9; ČOVIĆ 1989: 86, T. 14/9, Karta: 11; HARDING 1995: 11–12, T. 1/1.

⁵² MAROVIĆ 1994: 66–68, sl. 3.

⁵⁰ SCHWENZER 2004: 116–117, 352, Fig. 82a, 83 (List 50). Schwenzer noted that this decoration is not specific to a particular type of dagger, but rather widespread – as shown by the map on Fig. 83 – on various types of solid-hilted daggers and dagger blades all the way from the shores of the Baltic Sea to the Po River Plain or central Italy. It appears that the dagger from Sopa with this decoration is so far the only example south of the Danube or in the Western Balkans.

⁵¹ ČOVIĆ 1983: 146, Fig. 11/9; 1989: 86, Pl. 14/9; Map: 11; HARDING 1995: 11–12, Pl. 1/1.

⁵² MAROVIĆ 1994: 66–68, Fig. 3.

ranoga brončanog doba, a još češće tijekom srednjega brončanog doba, ova kombinacija oružja – dva bodeža ili bodež i mač, pojavljuje se više puta. Kao primjer može se navesti grob iz Siona-Petit Chasseur⁵³ u švicarskim Alpama te kao „krunski“ dokaz iz kronološke faze Bd A2, slavni i izrazito bogati grob iz Leubingena u Saskoj, kod kojeg su bila čak dva para bodeža.⁵⁴ Pri tome je vrijedno spomenuti da je riječ o dvostrukom grobu starije muške osobe i mlađe ženske osobe, odnosno djeteta.⁵⁵ Veoma se često u regijama srednje Europe pojavljuje kombinacija bodeža i mača u grobovima srednjega brončanog doba.⁵⁶ Kad bismo grob 2 iz Živalja sagledali iz toga zornog kuta, mogli bismo pretpostaviti da je mali trokutasti bodež također pripadao ratniku u grobnoj škrinji 2. To bi značilo da bi eventualna kombinacija dugog bodeža/kratkog mača i maloga trokutastog bodeža (sl. 6/1-2), mogla upravo upućivati na novi način naoružanja, odnosno ratovanja. Ujedno, takva kombinacija odražava visoki društveni status ratnika u grobu 2 tumula iz Živalja, slično kao što ga iskazuju iznadprosječno opremljeni ratnički grobovi na srednjoeuropskom prostoru.⁵⁷

Takva dragocjena vojna oprema, kao što su bodeži iz Živalja, Sope i Prapatnice te zlatni nakit, premda u malobrojnim grobovima, ipak dopuštaju pretpostavku da je u okviru cetinske kulture odnosno posuške kulture došlo do zamjetljivih društvenih diferencijalnosti s ratničkom elitom na čelu. Možda nije riječ samo o odrazu društvenih okolnosti, kakve su zavladaile širom Europe tijekom ranoga brončanog doba, već je moguće da je riječ o ogledalu lokalnih tradicija iz kasnoga bakrenog doba, kakve predstavljaju istaknute gomile tipa „Velika i Mala Gruda“ kod Tivta

the grave goods of prominent warrior graves in the Early Bronze Age and even more often in the Middle Bronze Age, a combination of weapons consisting of two daggers or a dagger and a sword often appears. As an example, let us cite the grave from Sion-Petit Chasseur in the Swiss Alps,⁵³ and as the crowning evidence from the Bd A2 chronological phase, the famous, extremely rich grave from Leubingen in Saxony, in which there were even two pairs of daggers.⁵⁴ It is worth noting here that this is a double grave of an older male person and a younger female person, or child.⁵⁵ Especially often in the countries of Central Europe, a combination of a dagger and a sword appears in graves of the Middle Bronze Age.⁵⁶ If grave 2 at Živalji is viewed from this angle, it might be assumed that the small triangular dagger had also belonged to the warrior in the stone cist burial 2. This would mean that the eventual combination of a long dagger/short sword and a small triangular dagger (Fig. 6/1-2) might also indicate a new way of arming or fighting. At the same time, such a combination of weapons would reflect the high social status of the warrior in grave 2 of the tumulus at Živalji, similar to that exhibited by some warriors equipped with above-average weapons in the Central European area.⁵⁷

Such valuable military equipment as the daggers from Živalji, Sopa, and Prapatnica and the gold jewelry, although found in a relatively small number of graves, nevertheless allows the hypothesis that within the framework of the Cetina and Posuška cultures there existed a noticeable social differentiation with a warrior elite in charge. Perhaps it is not merely a reflection of similar social conditions that prevailed throughout Europe in the Early Bronze Age, but rather also a reflection of local traditions from the Late Copper Age, as represented by the outstanding mounds of the “Velika and Mala Gruda” type near Tivat on the

⁵³ SCHWENZER 2004: 223–224, Abb. 136/8–9.

⁵⁴ HÖFER 1906: 18–21, sl. 14–17, T. 1, 2/1, 5–7; STRAHM 2010: 167–171, Abb. 4.

⁵⁵ HÖFER 1906: 16; ZICH 2004.

⁵⁶ Pogledaj npr. HACHMANN 1957, T. 50; SCHAUER 1971, T. 129/B, C; 130/D.

⁵⁷ Pogledaj npr. STRAHM 2010; HANSEN 2016.

⁵³ SCHWENZER 2004: 223–224, Fig. 136/8–9.

⁵⁴ HÖFER 1906: 18–21, Fig. 14–17, Pl. 1, 2/1, 5–7; STRAHM 2010, 167–171, Fig. 4.

⁵⁵ HÖFER 1906: 16; ZICH 2004.

⁵⁶ See, cf. HACHMANN 1957: Pl. 50; SCHAUER 1971: Pl. 129/B, C; 130/D.

⁵⁷ See, cf. STRAHM 2010; HANSEN 2016.

u Boki kotorskoj na južnom Jadranu.⁵⁸

Nošnja

Između grobnih priloga cetinske i posuške kulture, tek rijetki predmeti predstavljaju metalne dijelove nošnje, poput igle za zakopčavanje odjeće te komadi nakita. Kako je već spomenuto, ističu se predmeti, kao što su zlatne žice u grobu 2 iz Živalja, spiralni obruči za kosu (Noppenring)⁵⁹ iz Čitluka, Velike gomile te ogrlica od jantarnih jagoda iz Nadograde.⁶⁰ Našu posebnu pozornost izazvala je brončana igla s ušicom, odnosno rupicom na vrhu glavice iz Postranja kod Imotskog (sl. 8/2). Za nju je već Marović pokazao da spada među igle karakteristične za srednjoeuropsku unjetničku kulturu, tzv. *Ösenkopfnadel*, a najbližu joj paralelu predstavlja igla iz nekropole u Surčinu (sl. 8/3).⁶¹ Koliko nam je poznato, do danas na Balkanu nisu otkrili nove nalaze ovih igala, ali je njihova rasprostranjenost indikativna, jer se djelomično prostorno prekriva s distribucijom određenih tipova bodeža s punim metalnim drškom te ujedno i sa sjevernim rubom rasprostranjenosti lencske keramike. Dapače, igle tog tipa najzastupljenije su u središnjem dijelu unjetičke kulture, od gornjeg toka Odre, preko srednjonjemačkih pokrajina i gornjeg Podunavlja, odnosno Bavorske, do zapadno-alpskog svijeta, a samo su pojedini primjerci do sada poznati iz srednjeg Podunavlja, odnosno Karpatskog bazena. S

Boka Kotorska Bay in the southern Adriatic.⁵⁸

Attire

Among the grave goods of the Cetina and Posuška cultures, there are only rare objects that represent metal parts of the attire, such as pins for fastening clothes and pieces of jewelry. As was already mentioned, objects such as the gold wires in grave 2 from Živalji, and spiral hair rings (*Noppenring*)⁵⁹ from Čitluk, Velike gomile, and a necklace of amber beads from Nadograde stand out.⁶⁰ Attention was particularly drawn to a bronze attire pin with a loop at the top of the head (an eyelet-headed pin) from Postranje near Imotski. Marović has already shown that it belongs to the pins typical of the Central European Unjetice/Unetice culture, the so-called *Ösenkopfnadel*, and that the closest parallel is the pin from the necropolis in Surčin (Fig. 8/2-3).⁶¹ As far as we know, so far no new finds of these pins have come to light in the Western Balkans, but their distribution is indicative because it partially overlaps spatially with that of certain types of solid-hilted daggers, and at the same time with the northern periphery of the distribution of Litzen pottery. Of course, pins of this type are most common in the central areas of the Unetice culture, from the upper course of the Oder River through the central German lands and the upper Danube or from Bavaria to the western Alpine world, and only individual specimens are so far known from the central Danube basin or the Carpathian basin.

According to the investigations of Franziska

⁵⁸ PAROVIĆ-PEŠIKAN 1977-1978; PRIMAS 1996; MARAN 1998: 320-322, T. 20/1-8, 15-17; 21; DURMAN 2006; SAVELJIĆ-BULATOVIĆ, GUŠTIN, HINCAK 2015: 9-48.

⁵⁹ Za rasprostranjenost tipa Noppenring pogledaj BARTELHEIM 1998: 61-62, Karte 142.

⁶⁰ MAROVIĆ, ČOVIĆ 1983: 214-215, T. 34/8; MAROVIĆ 1984: 48-50, T. 19/8; 1994: 68; MILOŠEVIĆ 1998: 85-86, sl. 139 (Čitluk, Velike gomile), 267, sl. 435 (Nadograde). Za ogrlicu sastavljenu od jantarnih jagoda i brončanih spirala - salteleonov, pokazali smo da je riječ o nakitu koji je karakterističan prije svega u Istri tijekom ranoga i srednjega brončanog doba, te zato pretpostavka da ovaj nakit iz Nadograde upućuje na povezanost s Istrom - pogledaj MIHOVILIĆ, TERŽAN 2022: 359-360.

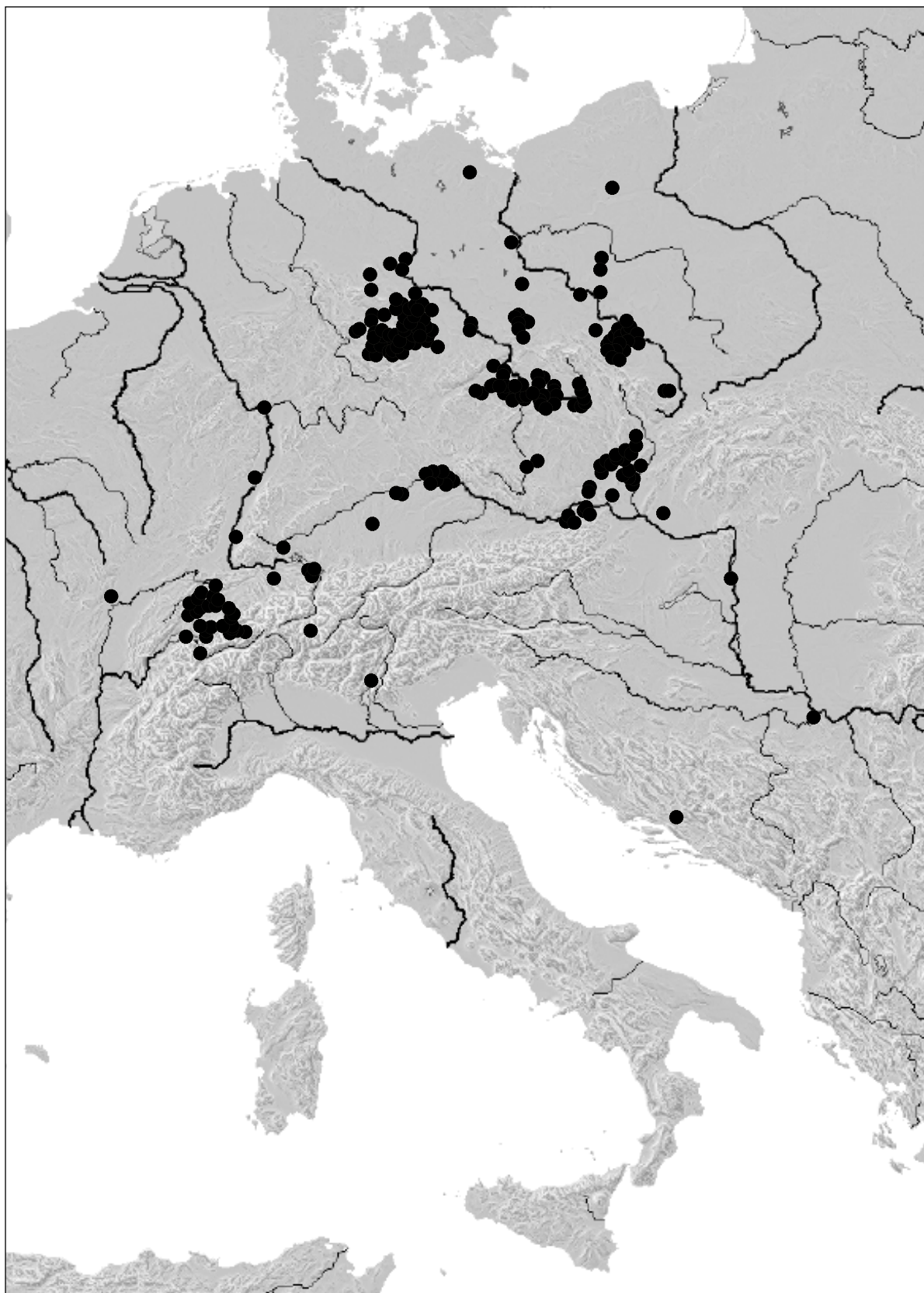
⁶¹ VINSKI 1961: 10, T. 6/3; MAROVIĆ 1981: 56, sl. 16/6.

⁵⁸ PAROVIĆ-PEŠIKAN 1977-78; PRIMAS 1996; MARAN 1998: 320-322, Pl. 20/1-8, 15-17; 21; DURMAN 2006; SAVELJIĆ-BULATOVIĆ, GUŠTIN, HINCAK 2015: 9-48.

⁵⁹ For the distribution of the Noppenring type, see BARTELHEIM 1998: 61-62, Map 142.

⁶⁰ MAROVIĆ, ČOVIĆ 1983: 214-215, Pl. 34/8; MAROVIĆ 1984: 48-50, Pl. 19/8; 1994: 68; MILOŠEVIĆ 1998: 85-86, Fig. 139 (Čitluk, Velike Gomile), 267, Fig. 435 (Nadograde). For the necklace composed of amber beads and bronze spirals-salteleons, we have shown that this is jewelry that is typical especially in Istria in the Early and Middle Bronze Ages, hence it is thought that only this jewelry from Nadograde indicates connections with Istria, see MIHOVILIĆ, TERŽAN 2022: 359-360.

⁶¹ VINSKI 1961: 10, Pl. 6/3; MAROVIĆ 1981: 56, Fig. 16/6.



SLIKA 9. Igle s ušicom na glavi (Ösenköpfnadeln), cjelokupna rasprostranjenost bez obzira na tipove i okolnosti nalazišta (prema Bartelheim 1998: Karte 148–149; Knoll, Meller 2016: Abb. 1, 8a; dopunjeno; doradila M. Vinazza)
FIGURE 9 Pins with a loop (“Ösenköpfnadeln”), total distribution without reference to type and circumstances of discovery, with additions (according to Bartelheim 1998: Maps 148-149; Knoll, Meller 2016: Fig. 1, 8a; made by M. Vinazza)

obzirom na istraživanja Franziske Knoll i Harald Meller, moguće je razlikovati sedam odnosno osam tipova tih igala, koje se međusobno razlikuju u pogledu ukrašenosti igle i oblikovanosti glavice i ušice. Zanimljivo je da se pojedini tipovi igala pokazuju kao lokalno specifični te na taj način ocrtavaju pojedine lokalne skupine nošnji u okviru unjatičkoga kulturnog kruga (sl. 9).⁶² Iгла iz Postranje je neornamentirana, njezina je ušica trokutastog oblika te bismo je zato eventualno mogli uvrstili u tip 5 ili 3, koji su pak zastupljeni u razmjerno malom broju primjeraka, prije svega na području zapadnih Alpa,⁶³ međutim neukrašene igle, prema Bartelheimu, imaju mnogo veću raširenost. Budući da je igla iz Surčina ostala po strani kod obaju spomenutih autora, glede tipa neopredijeljenosti, i igla iz Postranje ostaje među neopredijeljenim, neukrašenim iglama (sl. 8/2-3). Unatoč tomu, igla iz Postranje predstavlja dodatni indikator povezanosti srednjeg Jadrana, odnosno njegova zaleđa sa srednjoeuropskim kulturnim prostorom u vrijeme ranoga brončanog doba, faze Bd A2.

SAŽETAK⁶⁴

Naše je istraživanje pokazalo komplementarnu sliku, sastavljenu od triju glavnih elemenata, koji obuhvaćaju naseobinsku materijalnu kulturu (licenska keramika), vojnu opremu, tj. oružje (bodeži s punim metalnim drškom) te nošnju (igle s ušicom). Na osnovi rasprostranjenosti spomenutih predmeta – licenske

Knoll and Harald Meller, it is possible to distinguish between seven or eight types of these pins, which differ from each other according to the decoration of the pin and the design of the head and loop. It is interesting that individual types of pins appear to be locally specific and in this way outline individual local attire groups within the Unetice cultural circle (Fig. 9).⁶² The pin from Postranje is unornamented, and its loop is triangular in shape, so it could possibly be classified as type 5 or 3, which are represented by relatively few examples, especially in the area of the Western Alps,⁶³ while the distribution of undecorated pins according to Bartelheim is much wider. Since the pin from Surčin was also unclassified by the two mentioned authors in terms of type, the pin from Postranje also remains among the undefined undecorated pins (Fig. 8/2-3). Nevertheless, the pin from Postranje represents an additional indicator for connections between the central Adriatic and its hinterland with the Central European cultural area during the Early Bronze Age of phase Bd A2.

SUMMARY⁶⁴

Our research has shown a complementary picture consisting of three main elements, which refer to the settlement's material culture (Litzen pottery), military equipment or weapons (solid-hilted daggers), and attire (pins with a loop). Based on the prevalence of the mentioned types—Litzen pottery (Figs 1-2), certain types of daggers/short swords (Fig. 5), and personal attire, namely pins with a loop (*Ösenkopfnadel*) (Fig. 9), which in certain segments mutually

⁶² Za rasprostranjenost igala tipa „*Ösenkopfnadel*“ cfr. BARTELHEIM 1998: 64–66, t. 46, Karte 148–149; KNOLL, MELLER 2016: 284–291, Abb. 1–2, 7–8a.

⁶³ KNOLL, MELLER 2016: 289–294, Abb. 2; 7 n.o.p; 8a.

⁶⁴ Za pomoć pri pripremi našeg članka za tisak naša zahvala ide kolegama i kolegicama, Dariju Maršaniću (Rijeka) za prijevod na hrvatski jezik, Barbari Smith-Demo (Zagreb) za prijevod na engleski jezik, Manca Vinazza (Ljubljana) za pripremu karata rasprostranjenosti i za pripremu slika 3-9 te Petru Turku (Ljubljana) za crteže sa slike 7.

⁶² For the distribution of the *Ösenkopfnadel* type pin, cf. BARTELHEIM 1998: 64–66, Pl. 46, Map 148–149; KNOLL, MELLER 2016: 284–291, Fig. 1–2, 7–8a.

⁶³ KNOLL, MELLER 2016: 289–294, Fig. 2; 7 n.o.p; 8a.

⁶⁴ For help in preparing our article for print, we would like to thank our colleagues Barbara Smith-Demo (Zagreb) for the English translation, Dario Maršanić (Rijeka) for the Croatian translation, Manca Vinazza (Ljubljana) for the preparation of the distribution maps and figures (Fig. 3–9) and Peter Turk (Ljubljana) for the illustrations Fig. 7.

keramike (sl. 1–2), određenih tipova bodeža/kratkih mačeva (sl. 5) te osobne nošnje, tj. igala s ušicom (*Ösenkopfnadel*, sl. 9), koje se u određenim segmentima međusobno prostorno i vremenski preklapaju, zaključujemo da su to pokazatelji istoga kulturnog događanja. Karakterističnim se čini relativno raspršeno, ali unatoč tomu neuobičajeno gusto pojavljivanje licenske keramike u cijelom zaleđu srednjeg Jadrana, dakle u posuškoj skupini, uključujući i Pod kod Bugojna (sl. 2), za koju se smatra da je lokalne izrade. Njezina zastupljenost, kao i domaća proizvodnja pokazuju da licenska keramika u posuškoj kulturi nije predstavljala samo „modni trend“ u oponašanju i prihvatanju određene vrste „pribora za jelo i/ili servisa za piće“ te pivskih običaja po uzoru na panonski kulturni krug s licenskom keramikom (sl. 1). Tim više dopušta pretpostavku da je u posuškoj kulturnoj skupini licenska keramika bila popularan i sastavni element njezine lončarske materijalne kulture. Zbog toga je možda možemo razumjeti kao odraz migracije manje ili veće skupine osoba iz zapadno-panonskog svijeta, koja se posve asimilirala te se, takoreći, stopila s cetinsko-posuškom kulturom.⁶⁵ Drugo moguće objašnjenje jest to da je licenska keramika rezultat intenzivnih kontakata između jadranskog zaleđa i panonskog prostora, čiji bi glavni medijator bilo transhumantno stočarstvo, koje je možda i pokrenulo migracije.⁶⁶

Tezu o kontaktima i možda ipak migraciji u vrijeme Bd A2 iz panonskog prostora prema srednjem Jadranu podupiru i bodeži iz tumula iz Živalja kod Obrovca te Sope u Vinjanima (sl. 4; 5; 6/1; 8/1), jer smo pokazali da je njihov izvor potrebno tražiti ili na području jugoistočnog alpskog svijeta ili među srednjim Podunavljem i sjevernom Europom. Nešto se

overlap each other spatially and chronologically, we can conclude that they are indicators of the same cultural events. The relatively scattered, but nevertheless unusually dense occurrence of Litzen pottery in the entire hinterland of the middle Adriatic seems significant, such as in the Posuška/Dinaric group, including Pod near Bugojno (Fig. 2), as it is considered to be of local manufacture. Hence its distribution as a local product indicates that the Litzen pottery in the Posuška group did not represent merely a “fashion trend” in imitating and adopting a certain type of “food and/or beverage service”, and drinking habits following the model of the Pannonian cultural circle with Litzen pottery (Fig. 1), but allows the hypothesis that it was a popular and integral element of the pottery material culture in the Posuška/Dinaric group. Therefore, it can be understood as a reflection of the migration of smaller or larger groups of people from the western Pannonian world, who completely assimilated and, so to speak, merged with the Posuška/Dinaric cultural group.⁶⁵ Another possible explanation is that the presence of Litzen pottery is the result of intense contacts between the Adriatic hinterland and the Pannonian area, the main mediator of which could be transhumant grazing, which may also have triggered migrations.⁶⁶

The thesis about migrations during Bd A2 from the Pannonian area towards the central Adriatic is also supported by the daggers from the tumuli in Živalji near Obrovac and Sopa in Vinjani (Figs 4/2; 5; 6/1; 8/1), as we have shown that their origin is to be sought either in the regions of the southeastern Alpine world or between the Middle Danube and Northern Europe. The origin of the pin with a loop (*Ösenkopfnadel*) can be defined somewhat more precisely. The distribution of such pins (regardless

⁶⁵ Sigurno je trenutačno riječ samo o hipotezi koja se mora u budućnosti provjeriti novim multidisciplinarnim metodama istraživanja. A bez hipoteze nema ni uzroka za buduća istraživanja.

⁶⁶ O problematici transhumantnosti te također migracija postoji opsežna stručna literatura, premda na tome mjestu želimo upozoriti samo na dobro argumentiranu i ključnu studiju: pogledaj HÄNSEL 2002; HÄNSEL 2016.

⁶⁵ Of course our hypothesis have to be proved by new multidisciplinary analyses and research. But without hypothesis there are no need for further investigations.

⁶⁶ Extensive professional literature exists on the topic of transhumance and also migration, but we would like to point out here only one well-argued and key study: see HÄNSEL 2002; HÄNSEL 2016.

točnije da odrediti izvor igle s ušicom (*Ösenkopfnadel*). Rasprostranjenost takvih igala (ne glede tipa) ne seže u panonski prostor južno od Dunava, jer su iznimke izrazito rijetke, međutim, slaže se s najsjevernijom, četvrtom skupinom lencenske keramike, koja obuhvaća prostor današnje jugozapadne Slovačke i sjeverne Mađarske (usporedi sl. 1 i 9). Pritom treba spomenuti da se utjecaji kasne unjetičke kulture zamjećuju također na nalazištima zapadne Transdanubije, na kojima je zastupljena također lencenska keramika prve skupine.⁶⁷ Ta je činjenica važna jer pokazuje da i iglu iz Postranja (sl. 8/2) možemo razumijeti u neposrednom kontekstu s proširenjem lencenske keramike u zaleđe srednjeg Jadrana, i to ili u okviru migracije ili samo na individualnoj razini. Isto je tako indikativno da lencenska keramika, kao i bodeži iz Živalja i Sope te igla iz Postranja govore o tome da se priljev srednjoeuropskih elemenata na srednjem Jadranu i u njegovu zaleđu odvijao prilično istovremeno, tj. u rano brončano doba, tijekom faze Bd A2.

of type) does not extend to the Pannonian area south of the Danube, as exceptions are extremely rare, but contact does exist with the northernmost, fourth group of Litzen pottery, which includes the area of today's southwestern Slovakia and northern Hungary (cf. Figs 1 and 9). It should also be mentioned that the influences of the late Unjetice Culture can also be traced at sites in Western Transdanubia, where Litzen pottery of the first group is also represented.⁶⁷ This fact seems significant, because it shows that the pin from Postranje (fig. 8/1) can also be understood in a direct context with Litzen pottery in the hinterland of the middle Adriatic, either in the context of a potential migration or only on an individual level. It is also indicative that both Litzen pottery and solid-hilted daggers from Živalji and Sopa, along with the pin from Postranje speak for the fact that the influx of Central European elements in the middle Adriatic and its hinterland took place fairly simultaneously, i.e. in the early Bronze Age, during phase Bd A2.

⁶⁷ Pogledaj npr. BÉKEI 2007: 102–103, 105, T. 34/5–7; 36: 63–67; KVASSAY, KISS, BONDAR 2004: 153, T. 18/8–12. (Autorice kod nekih posuda također vide vezu s lončarijom cetinske kulture).

⁶⁷ See e.g. BÉKEI 2007, 102–103, 105, Pl. 34/5–7; 36: 63–67; KVASSAY, KISS, BONDAR 2004, 153, Pl. 18/8–12 (The authors noted several connections with the pottery of the Cetina Culture in several vessels).

**LISTA ARHEOLOŠKIH NALAZIŠTA LICENSKE KERAMIKE NA SREDNJEM JADRANU I U NJEGOVU ZALEĐU /
A LIST OF ARCHAEOLOGICAL FIND SPOTS OF LITZEN POTTERY IN THE CENTRAL ADRIATIC AND ITS
HINTERLAND**

1. Vučevica – Kovačina, HR (ŠUTA 2013: 11–12, sl. 6)
2. Obrovac Sinjski – Živalji, HR (MAROVIĆ, ČOVIĆ 1983: 207–208, 214, T. 34/4–6)
3. Dugopolje, HR (KLIŠKIĆ 2001: 64, T. 3/6–8)
4. Slime – Plana/Pod, HR (TOMASOVIĆ 2011b: 242, sl. 26, T. 1/4)
5. Rašćane Gornje, HR (KATAVIĆ, SUNKO KATAVIĆ, DEVLAKHOVIĆ 2011: 46, kat. jed. 7)
6. Kozica – Jujnovića špilja, HR (TOMASOVIĆ 2008: 142, T. 2/2; 2011a: sl. 7, T. 4/3)
7. Majići – Gradina, HR (MUCIĆ, KOVAČEVIĆ BOKARICA 2011: 130, kat. jed. 2; T. 1/2)
8. Brist, HR (TOMASOVIĆ 1999: 2, sl. 1a; 2014: 108)
9. Peć Mlini – Ravlića pećina, BiH (MARIJANOVIĆ 1981: 42, sl. 3; 2012: 105, sl. 59, T. 85/1–5, T. 86/1–2; ČOVIĆ 1989: 75)
10. Drinovci – Petnjik, BiH (TOMAS, VUJEVIĆ 2023: 32, 35, T. 3/1)
11. Drinovci – Majića gradina, BiH (TOMAS 2016: 13, sl. 5–7)
12. Osoje – Nečajno, BiH (ČOVIĆ 1980: 38; 1983: 139, 151–152; 1989: 70, T. 8/5)
13. Osoje – Slime, BiH (ČOVIĆ 1983: 152; 1989: 75)
14. Batin – Golovrana, BiH (ČOVIĆ 1989: 75)
15. Gradac – Bristovica, jug, BiH (ČOVIĆ 1989: 75)
16. Sovići – Trostruka gradina, BiH (ČOVIĆ 1980: 38–41, sl. 2/4–7, 3/3; 1983: 139–140, 151–152, T. 18/9, 10, 12; 1989: 75, T. 10/1–7, T. 11/1–6)
17. Čule – Kamenak, BiH (ČOVIĆ 1983: 152; 1989: 75)
18. Crnići – Aladinsko brdo, BiH (ČOVIĆ 1989: 75, T. 11/7)
19. Crnići – Jasočka gradina, BiH (ČOVIĆ 1989: 75, T. 11/8)
20. Bugojno – Pod, BiH (ČOVIĆ 1965: 49, T. 6/17, 18, T. 8/1–2; 1983: 177, T. 24/12; 1991: 20, T. 14/3, 8, T. 20/6, T. 25/1–4)

LITERATURA / REFERENCES

- ARENA, A. 2020, From one side to another. An overview on trans-Adriatic connectivity during the Middle Bronze Age, *Godišnjak Centra za balkanološka ispitivanja*, 49, 49–135.
- BARTELHEIM, M. 1998, *Studien zur böhmischen Aunjetitzer Kultur: Chronologische und chorologische Untersuchungen 1-2*, Universitätsforschungen zur prähistorischen Archäologie 46/I -II, 1998, Bonn: Verlag Dr. Rudolf Habelt GmbH.
- BÉKEI, L. 2007, Adatok a Nyugat-Dunántul középső bronzkori történetéhez / Angaben zur mittelbronzezeitlichen Geschichte Westtransdanubiens. Siedlung mit Aunjetitz-, Gäta- und ostalpinen Elementen und Litzenkeramik auf den Fundorten 4 und 6/a am Umleitungsweg 84 bei Sárvár, *Savaria*, 31, 7–140.
- BENAC, A. 1985, *Utvrdena ilirska naselja (I). Delmatske gradine na Duvanjskom polju, Buškom Blatu, Livanjskom i Glamočkom polju*, Djela 60, Centar za balkanološka ispitivanja 4, Sarajevo: Akademija nauka i umjetnosti Bosne i Hercegovine.
- BENAC, A., ČOVIĆ, B. (ur./ eds.) 1983, *Praistorija jugoslavenskih zemalja IV. Bronzano doba*, Sarajevo: Akademija nauka i umjetnosti Bosne i Hercegovine, Centar za balkanološka ispitivanja.
- BULATOVIĆ, A., GORI, M., VANDER LINDEN, M. 2020, Radiocarbon dating the 3rd millennium BC in the Central Balkans: a re-examination of the Early Bronze Age sequence, *Radiocarbon* 62(5), 1163–1191.
- CAZELLA, A., GORI, M., PACCIARELLI, M., RECCHIA, A. 2020, 2500-2000 BC: connectivity phenomena between the Balkans, Greece, Southern Italy, Eastern Sicily, the Aeolian Islands and Malta, u/in: *Italia tra Mediterraneo ed Europa: mobilità, interazioni e scambi*, Rivista di Scienze Preistoriche, 70, 181–197.
- ČOVIĆ, B. 1965, Uvod u stratigrafiju i hronologiju praistorijskih gradina u Bosni, *Glasnik Zemaljskog muzeja Bosne i Hercegovine*, n. s., 20, 27–100.
- ČOVIĆ, B. 1976, *Od Butmira do Ilira*, Sarajevo: Veselin Masleša.
- ČOVIĆ, B. 1980, »Schnur« i »Litzen« keramika na području Neretve, u/in: *Dolina rijeke Neretve od prethistorije do ranog srednjeg vijeka. Znanstveni skup Metković, 4.-7. listopada 1977*, = Izdanja Hrvatskog arheološkog društva, 5, 35–43.
- ČOVIĆ, B. 1983a, Jadransko-zapadnobalkanska regija, u/in: Benac, A., Čović, B. (ur./eds.) 1983, 99–190.
- ČOVIĆ, B. 1983b, Zaključna razmatranja, u/in: Benac, A., Čović, B. (ur./eds.) 1983, 807–829.
- ČOVIĆ, B. 1989, Posuška kultura, *Glasnik Zemaljskog muzeja Bosne i Hercegovine*, n. s., 44, 61–127.
- ČOVIĆ, B. 1989/1990, Vrpčasto ukrašena keramika na istočnoj jadranskoj obali i u njenom zaleđu, *Starinar*, 40/41, 51–59.
- ČOVIĆ, B. 1991, *Pod kod Bugojna. Naselje bronzanog i željeznog doba u centralnoj Bosni. Sveska 1: Rano bronzano doba / Pod bei Bugojno. Eine Siedlung der Bronze- und Eisenzeit in Zentralbosnien. Heft 1: Die Frühbronzezeit*, Sarajevo: Zemaljski muzej Bosne i Hercegovine.
- ČREŠNAR, M., TERŽAN, B. 2014, Absolutno datiranje bronzaste dobe na Slovenskem / Absolute Dating of the Bronze Age in Slovenia, u/in: Teržan, B., Črešnar, M. (eds.), *Absolutno datiranje bronzaste in železne dobe na Slovenskem / Absolute Dating of the Bronze and Iron Ages in Slovenia*, Katalogi in monografije 40, Ljubljana: Narodni muzej Slovenije, 661–702.
- DELLA CASA, Ph. 1995, The Cetina-group and the transition from Copper to Bronze Age in Dalmatia, *Antiquity* 69(204), 565–576.
- DURMAN, A. (ur./ed.) 2006, *Simbol boga i kralja. Prvi europski vladari / Symbol of God and King*.

- The first european Rulers*, Zagreb: Galerija Klovićevi dvori.
- FORENBAHER, S. 2018, Ljubljana i Cetina: lončarski stilovi 3. tisućljeća prije Krista na prostoru istočnog Jadrana / Ljubljana and Cetina: Pottery Styles of the third Millenium BC in the Eastern Adriatic, *Prilozi Instituta za arheologiju u Zagrebu*, 35, 113–157.
- FORENBAHER, S. 2023, *Rane grobne gomile na Jadranu i raznolikost pogrebnih običaja u 3. tisućljeću pr. Kr.* / *Early Burial Mounds in the Adriatic and the Diversity of Mortuary Practice in the 3rd Millenium B.C.*, Monografije Instituta za arheologiju 15, Zagreb: Institut za arheologiju.
- GOVEDARICA, B. 1989, *Rano bronzano doba na području istočnog Jadrana*, Djela 67, Centar za balkanološka ispitivanja, 7, Sarajevo.
- HACHMANN, R. 1957, *Die frühe Bronzezeit im westlichen Ostseegebiet und ihre mittel- und südosteuropäischen Beziehungen. Chronologische Untersuchungen*, 6. Beiheft zum Atlas der Urgeschichte, Hamburg: Flemmings Verlag, Kartographisches Institut Hamburg.
- HÄNSEL, B. 2002, Zusammenfassende Bemerkungen zum Siedlungsverlauf in Kastanas – Kontinuität und Bevölkerungswandel, u/in: R. Jung, *Kastanas. Ausgrabungen in einem Siedlungshügel der Bronze- und Eisenzeit Makedonies 1975-1979. Die Drehscheibenkeramik der Schichten 19–11*, *Prähistorische Archäologie in Südosteuropa* 18/1, Kiel: Verlag Oetker/Voges, 11–27.
- HÄNSEL, B. 2016, Invasion, Immigration, Infiltration im bronzezeitlichen Makedonien, u/in: *Mensch, Kultur und Gesellschaft von der Kupferzeit bis zur frühen Eisenzeit im nördlichen Eurasien. Beiträge zu Ehren zum 60. Geburtstag von Eugen Sava* / *Man, Culture, and Society from the Copper Age until the Early Iron Age in Northern Euroasia. Contributions in honour of the 60th anniversary of Eugen Sava*, Zanoci, A., Kaiser, E., Kashuba, M., Izbitser, E., Bät M. (ur./eds.), Tyragetia International 1, Chişinău: National museum of history of Moldova, Freie Universität Berlin, 127–143.
- HANSEN, S. 2016, »Arm und Reich« in der Bronzezeit Europas, u/in: *Arm und Reich – Zur Ressourcenverteilung in prähistorischen Gesellschaften* / *Rich and Poor – Competing for resources in prehistoric societies*, 8. *Mitteldeutscher Archäologentag von 22. bis 24. Oktober 2015 in Halle (Saale)* / *8th Archaeological Conference of Central Germany, October 22-24, 2015 in Halle (Saale)*, Meller, H., Hahn, H. P., Jung, R., Risch, R. (ur./eds.), Tagungen des Landesmuseums für Vorgeschichte Halle 14/I, Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt, 197–217.
- HARDING, A. 1995, *Die Schwerter in ehemaligen Jugoslawien*, *Prähistorische Bronzefunde* IV/14, Stuttgart: Franz Steiner Verlag.
- HÖFER, P. 1906, Der Leubinger Grabhügel, *Jahresschrift für die Vorgeschichte der sächsisch-thüringischen Länder*, 5, 1–59.
- KATAVIĆ, V., SUNKO KATAVIĆ, A., DEVLAKHOVIĆ, A. 2011, Istraživanje grobnog tumula, dviju vrtača, gradine i gradinice u Gornjim Raščanima kod Vrgorca, u/in: *Arheološka istraživanja na trasi autoceste u Zabiokovlju i Plini*, Tomasović M. (ur./ed.), Makarska: Gradski muzej, 41–70.
- KERMAN, B. 2024, Naselbine iz bronzaste dobe v Prekmurju. Pregled stanja raziskav/ Bronze Age settlements in Prekmurje. Overview of the state of research, *Arheološki vestnik*, 75, 463–499.
- KLIŠKIĆ, D. 2001, Prapovijest na području Dugopolja, u/in: *Dugopolje: zbornik radova općine Dugopolje*, 1, Gulin A. (ur./ed.), Dugopolje, Zagreb: Općina Dugopolje, 55–78.
- KRAMBERGER, B. 2024, Novosti o poselitvi Pohorskega Podravja v zgodnji in srednji bronzasti dobi ter kronologija poselitve na najdišču Slivnica IB pri Mariboru / New insight into the settlement of Pohorsko Podravje region in the Early and Middle Bronze Age and the chronology of Slivnica IB near Maribor, *Arheološki vestnik*, 75, 551–618.
- KNOLL, F., MELLER, H. 2016, Die Ösenkopfnadel – Ein »Klassen« verbindendes Trachtele-

- ment der Aunjetitzer Kultur. Ein Beitrag zu Kontext, Interpretation und Typochronologie der mitteldeutschen Exemplare, u/in: *Arm und Reich – Zur Ressourcenverteilung in prähistorischen Gesellschaften/ Rich and Poor – Competing for resources in prehistoric societies*. 8. Mitteldeutscher Archäologentag von 22. bis 24. Oktober 2015 in Halle (Saale) / 8th Archaeological Conference of Central Germany, October 22-24, 2015 in Halle (Saale), Meller, H., Hahn, H. P., Jung, R., Risch, R. (ur./eds.), Tagungen des Landesmuseums für Vorgeschichte Halle 14/ II, Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt, 283–370.
- KRUH, A. 2019, *Pramenasta keramika*, neobjavljena disertacija / unpublished PhD thesis, Univerza v Ljubljani, Ljubljana: Filozofska fakulteta.
- KVASSAY, J., KISS, V., BONDÁR, M. 2004, Öskori és középkori település emlékei Zalaegerszeg-Ságod–Bekehäta lelőhelyen, *Zalai Múzeum*, 13, 119–175.
- MARAN, J. 1998, *Kulturwandel auf dem griechischen Festland und den Kykladen im späten 3. Jahrtausend v. Chr. Studien zu den kulturellen Verhältnissen in Südosteuropa und dem zentralen sowie östlichen Mittelmeerraum in der späten Kupfer- und frühen Bronzezeit*, Universitätsforschungen zur prähistorischen Archäologie 53/I-II, Bonn: Verlag Dr. Rudolf Habelt GmbH.
- MARIJANOVIĆ, B. 1981, Ravlića pećina (Peć Mlini), *Glasnik Zemaljskog muzeja Bosne i Hercegovine*, n. s., 35/36 (1980–1981), 1–97.
- MARIJANOVIĆ, B. 2003, Značenje Neretve u prostornom rasporedu prapovijesnih kultura, u/in: *Arheološka istraživanja u Naroni i dolini Neretve. Znanstveni skup Metković, 6.-9. listopada 2001.*, = *Izdanja Hrvatskog arheološkog društva*, 22, 321–328.
- MARIJANOVIĆ, B. 2012, *Ravlića pećina: prapovijesno naselje / Ravlića cave: prehistoric settlement*, Mostar: Hrvatska franjevačka arheološka zbirka sv. Stjepana, Ogranak Matice hrvatske u Grudama.
- MAROVIĆ, I. 1976, Rezultati dosadašnjih istraživanja kamenih gomila oko vrela rijeke Cetine u god. 1953, 1954, 1958, 1966. i 1968, *Materijali 12. IX kongres arheologa Jugoslavije Zadar 1972*, 55–75.
- MAROVIĆ, I. 1981, Prilozi poznavanju brončanog doba u Dalmaciji, *Vjesnik za arheologiju i historiju dalmatinsku* 75, 7–61.
- MAROVIĆ, I. 1984, Sinjska regija u prahistoriji, u/in: *Cetinska krajina od prethistorije do dolaska Turaka. Znanstveni skup Sinj, 3.-6. VI 1980.*, = *Izdanja Hrvatskog arheološkog društva*, 8, 27–63.
- MAROVIĆ, I. 1994, Dva predmeta neuobičajena oblika iz Obrovca i Ravče, *Vjesnik za arheologiju i historiju dalmatinsku*, 86, 63–80.
- MAROVIĆ, I., ČOVIĆ, B. 1983, Cetinska kultura, u/in: A. Benac, B. Čović (ur./eds.) 1983, 191–231.
- MIHOVILIĆ, K. 2009–2008, Gropi – Stari Guran. Analiza prapovijesne keramike, *Histria archaeologica*, 38/39 (2007–2008), 37–79.
- MIHOVILIĆ, K. 2022, Katalog tumula, grobova u kamenoj škrinji i drugih oblika pokopa na području brončanodobne Istre / Katalog der Grabhügel, Gräber in einer Steinkiste und anderer Bestattungsformen im Gebiet des bronzezeitlichen Istriens, u/in: K. Mihovilić, B. Teržan, *Monkodonja. Istraživanje protourbanog naselja brončanog doba Istre. Knjiga 4. Mušego / Mon Sego, grobni tumuli – nekropola gradine Monkodonja i brončanodobni tumuli Istre / Monkodonja. Forschungen zu einer protourbanen Siedlung der Bronzezeit Istriens. Teil 4. Mušego / Mon Sego, Grabhügel – eine Nekropole von der Gradina Monkodonja und die bronzezeitlichen Grabhügel Istriens*, Monografije i katalozi 37, Pula: Arheološki muzej Istre, 181–282.
- MIHOVILIĆ, K., TERŽAN, B. 2022, Usporedba s tumulima u susjednim regijama / Tumuli in den Nachbarregionen, u/in: K. Mihovilić, B. Teržan, *Monkodonja. Istraživanje protourbanog*

- naselja brončanog doba Istre. Knjiga 4. Mušego / Mon Sego, grobni tumuli – nekropola gradine Monkodonja i brončanodobni tumuli Istre / Monkodonja. Forschungen zu einer protourbanen Siedlung der Bronzezeit Istriens. Teil 4. Mušego / Mon Sego, Grabhügel – eine Nekropole von der Gradina Monkodonja und die bronzezeitlichen Grabhügel Istriens*, Monografije i katalogi 37, Pula: Arheološki muzej Istre, 347–375.
- MILOŠEVIĆ, A. 1998, *Arheološka topografija Cetine*, Katalogi i monografije 3, Split: Muzej hrvatskih arheoloških spomenika.
- MUCIĆ, K., KOVAČEVIĆ BOKARICA, N. 2011, Doprinosi poznavanju povijesti Vrgoračke krajine na osnovi rezultata novijih arheoloških istraživanja, u/in: *Arheološka istraživanja na trasi autoceste u Zabiokovlju i Plini*, M. Tomasović (ur./ed.), Makarska: Gradski muzej, 125–212.
- PAROVIĆ-PEŠIKAN, M. 1977-78, Les recherches `a Boka Kotorska, *Starinar*, n. s., 28/29, 16–67.
- PRIMAS, M. 1996, *Velika Gruda I. Hügelgräber des frühen 3. Jahrtausends v. Chr. im Adriagebiet – Velika Gruda, Mala Gruda und ihr Kontext*, Universitätsforschungen zur prähistorischen Archäologie 32, Bonn: Verlag Dr. Rudolf Habelt GmbH.
- RAMBACH, J. 2007, Olympia and Andravida-Lechania: two bronze age sites in the northwest Peloponnese with far-reaching overseas cultural connections, u/in: *Between the Aegean and Baltic seas. Prehistory across borders*, Aegaeum 27, Liege: Universite de Liege, University of Texas at Austin, 81–89.
- RECCHIA, G. 2020, Reaching across the Adriatic: northern and western interactions of the Cetina phenomenon (25th – 20th centuries BC), *Godišnjak 49, Centar za balkanološka ispitivanja Sarajevo*, 5–28.
- SAVELJIĆ-BULATOVIĆ, L., GUŠTIN, M., HINCAK, Z. 2015, *Podgorica. Praistorijske humke i srednjovjekovne nekropole Gruda Boljevića*, Podgorica: JU Muzeji i galerije Podgorica.
- SCHAUER, P. 1971, *Die Schwerter in Süddeutschland, Österreich und der Schweiz I. Prähistorische Bronzefunde IV/2*, München: C.H. Beck'sche Verlagsbuchhandlung.
- SCHWENZER, S. 2004, *Frühbronzezeitliche Vollgriffdolche. Typologische, chronologische und technische Studien auf der Grundlage einer Materialaufnahme von Hans-Jürgen Hundt*, Kataloge vor- und frühgeschichtlicher Altertümer 36, Mainz: Verlag des Römisch-Germanischen Zentralmuseums in Kommission bei Dr. Rudolf Habelt GmbH, Bonn.
- STRAHM, CH. 2010, Die ökonomischen und ideellen Bedingungen der Formation frühbronzezeitlicher Eliten, u/in: *Der Griff nach den Sternen. Wie Europas Eliten zu Macht und Reichtum kamen. Internationales Symposium in Halle (Salle) 16.-21. Februar 2005*, Meller, H., Bertemes F. (ur./ eds.), Tagungen des Landesmuseums für Vorgeschichte Halle (Saale) 5/1, Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt, 165–175.
- ŠUTA, I. 2013, Korištenje vrtača u prapovijesti Dalmacije, *Tusculum*, 6, 7–24.
- TERŽAN, B. 1983, Das Pohorje – ein vorgeschichtliches Erzrevier?, *Arheološki vestnik*, 34, 51–84.
- TERŽAN, B. 2019, Metallurgical activity in the Early Bronze Age period on the hilltop settlement of Pod near Bugojno, *Godišnjak 48, Centar za balkanološka ispitivanja ANU BiH*, 59–71.
- TERŽAN, B., KARAVANIĆ, S. 2013, The Western Balkans in the Bronze Age, Settlements and their social implications, u/in: *The Oxford Handbook of the European Bronze Age*, Fokkens, H., Harding A. (ur./eds.), Oxford: Oxford University Press, 839–849.
- TOMAS, T. 2016, Majića gradina (Drinovci) – novo nalazište licenske keramike u Hercegovini, *Hercegovina*, 2, 7–23.
- TOMAS, T., VUJEVIĆ, D. 2023, Nove arheološke spoznaje s prostor Drinovaca, *Hercegovina*, 9, 7–42.

- TOMASOVIĆ, M. 1999, Prostor Gornjega makarskog primorja od prapovijesti do srednjega vijeka prema arheološkim pokazateljima, u/in: *Hrvatski rasadnik. Zbornik članaka znanstvenoga skupa Gornje makarsko primorje (Gradac – Zaoštrog, 26.-27. 9. 1996)*, Radelić, Z. (ur./ed.), Zagreb: Gornjoprimska općina Gradac i prijatelji, 1-15.
- TOMASOVIĆ, M. 2008, Arheološki dokazi života na prostoru Biokova od razdoblja prapovijesti do srednjeg vijeka, u/in: *Biokovo*, R. Ozimec (ur./ed.), Zagreb: Graphis, 138-152.
- TOMASOVIĆ, M. 2011a, Prapovijesni nalazi iz Župe, Rašćana i Kozice – kulturna slika nakon započetih rekognosciranja, u/in: *Arheološka istraživanja na trasi autoceste u Zabiokovlju i Plini*, Tomasović M. (ur./ed.), Makarska: Gradski muzej, 9-29.
- TOMASOVIĆ, M. 2011b, Arheološka topografija lijeve strane donjeg toka Cetine, u/in: *Arheološka istraživanja u Cetinskoj krajini*, = *Izdanja Hrvatskog arheološkog društva*, 27, 229-265.
- TOMASOVIĆ, M. 2014, *Culture heritage guide: Makarska and the Makarska Littoral, Biokovo and the Biokovo hinterland, the Omiš-Rogoznica and the Neretva river-Ston areas*, Makarska: Gradski muzej.
- TURK, P. 2007, Bronasti polnoročajni meč iz Jabelj v osrednji Sloveniji / A Bronze Solid-Hilted Sword from Jablje in Central Slovenia, u/in: *Scripta praehistorica in honorem Biba Teržan. Situla 44*, Ljubljana: Narodni muzej Slovenije, 209-229.
- TURK, P. 2012, Bronasti meč iz izvira pri Jabljah / Bronze sword from a water spring near Jablje, u/in: *Potopljena preteklost. Arheologija vodnih okolij in raziskovanje podvodne kulturne dediščine v Sloveniji. Zbornik ob 128-letnici Dežmanovih raziskav Ljubljanice na Vrhniki (1884-2012)*, Gaspari, A., Erič M. (ur./eds.), Ljubljana: Didacta.
- TURK, P., TURK, M. 2019, *Najstarejše zgodbe s stičišča svetov*, Ljubljana: Narodni muzej Slovenije.
- VINSKI, Z. 1961, O oružju ranoga brončanog doba u Jugoslaviji, *Vjesnik Arheološkog muzeja u Zagrebu*, 3. ser., 2, 1-38.
- ZICH, B. 2004, Die Fürstengräber von Leubingen und Helmsdorf, u/in: *Der geschmiedete Himmel. Die weite Welt im Herzen Europas vor 3600 Jahren*, Meller H. (ur./ed.), Stuttgart: Theiss Verlag GmbH: 156-159.
- ŽERAVICA, Z. 1993, *Äxte und Beile aus Dalmatien und anderen Teilen Kroatiens, Montenegro, Bosnien und Herzegowina*, Prähistorische Bronzefunde IX/8, Stuttgart: Franz Steiner Verlag.