Papers in Honour of Rastko Vasić 80th Birthday Зборник радова у част 80 г. живота Растка Васића

АРХЕОЛОШКИ ИНСТИТУТ

ЗБОРНИК РАДОВА У ЧАСТ 80 Г. ЖИВОТА РАСТКА ВАСИЋА

Уредници

Војислав Филиповић Александар Булатовић Александар Капуран

INSTITUTE OF ARCHAEOLOGY

PAPERS IN HONOUR OF RASTKO VASIĆ 80th BIRTHDAY

Editors

Vojislav Filipović Aleksandar Bulatović Aleksandar Kapuran

Belgrade 2019

Published by

Institute of Archaeology, Belgrade

For publisher

Miomir Korać

Editors

Vojislav Filipović Aleksandar Bulatović Aleksandar Kapuran

Editorial board

Arthur Bankoff, Brooklyn College, CUNY, New York (USA)

Anthony Harding, University of Exeter, Devon (UK)

Barbara Horejs, Institute for Oriental and European Archaeology, Austrian Academy of Sciences, Vienna (AUT)

Albrecht Jockenhövel, University of Münster, Münster (GER)

Maya Kashuba, Institute for the History of Material Culture, Russian Academy of Sciences, St. Petersburg (RUS)

Miomir Korać, Institute of Archaeology, Belgrade (SRB)

Carola Metzner-Nebelsick, Ludwig-Maximilians-Universität, München (GER)

Lolita Nikolova, International Institute of Anthropology, Utah (USA)

Christopher Pare, Johannes Gutenberg-Universität, Mainz (GER)

Hrvoje Potrebica, University of Zagreb, Zagreb (CRO)

Roberto Risch, Universitat Autònoma de Barcelona (ESP)

† Alexandru Szentmiklosi, Muzeul Banatului, Timisoara (ROM)

Marc Vander Linden, University of Cambridge, Cambridge (UK)

Ognjen Mladenović, secretary

Rewieved by

Editors and members of the editorial board

Translation

Authors

Proof-reading

Caitlyn Breen

Design

Institute of Archaeology

Printed by

Sajnos d.o.o., Novi Sad

Printed in

250

CONTENTS

Foreword / Увод	7
M. Svilar, Biography of Rastko Vasić / М. Свилар, Биографија Растка Васића	11
M. Svilar, Bibliography of Rastko Vasić / М. Свилар, Библиографија Растка Васића	17
A. Harding, RastkoVasić: some personal reflections	40
С. Мандић, Пут у Миделхарнис	41
Notes about life and archaeology / Цртице о животу и археологији	42
D. Antonović, S. Vitezović, J. Šarić, The Early Neolithic Settlement at Velesnica:	
Lithic and Osseous Industries	63
M. Stojić, Mislilac iz Medvednjaka	71
S. Alexandrov, Early Bronze Age Barrow Graves in North-West Bulgaria	75
⊕B. Hänsel, B. Teržan, K. Mihovilić, Konzeptioneller Wandel im früh- bis	
mittelbronzezeitlichen Befestigungsbau Istriens.	95
J. Станковски, Планинско светилиште Татићев Камен: три аспекта обредне праксе	111
M. Ljuština, Rame uz rame: zajednice vatinske kulture u Banatu	125
K. Dmitrović, Contribution to the Study of Spectacle-shaped Pendants	
in Western Serbia	137
B. Molloy, A warrior's journey? Some recent taxonomic, trace element and lead isotope	
analyses of Mediterranean Later Bronze Age metalwork in the Central and West Balkans	143
M. Blečić Kavur, B. Kavur, Privjesak kao tijelo – tijelo kao poruka	155
A. Kapuran, The Find from Medoševac 20 Yeas Later – an Addition	
to the Studies of the Tumulus Culture on the Territory of the Central Balkans	165
J. Koledin, "Novi" nalazi nanogvica tipa Regelsbrunn u Bačkoj	177
М. Лазић, Гробови инхумираних покојника у некрополама брњичке културе	187
P. Medović, Sečanj IV — ostava metalnih predmeta	201
L. Leshtakov, Bronze Spear and Javelin Heads with Polygonal Sockets -	
A Balkan Phenomenon	209
A. Bulatović, Particular Types of Bowls as Heralds of a New Age in the Balkans	215
А. Ђорђевић, Нова сазнања о остави бронзаних налаза из Рудника	233
J. Bouzek, Some Early Iron Age symbols and their possible interpretations	241
D. Ložnjak Dizdar, Notes on several finds from the beginning of the Early Iron Age	
in the Danube area	247

B. Govedarica, Tumul iz Brezja i neka pitanja socio-kulturnog razvoja na	
Glasincu u starijem željeznom dobu.	259
T. Bader, Bemerkungen über die chronologische Lage der	
Hortfundgruppe "Şomartin-Vetiş"	273
И. Бруяко, Костяной скипетр предскифского типа из городища	
Картал в низовьях Дуная	289
V. Filipović, Iron Spears of the <i>Balkan Syginnae</i> Type from the Central Balkans	297
Д. Топал, Акинак из Вршаца и проникновение клинкового вооружения скифов	
в Среднее Подунавье	307
M. Dizdar, New Late Hallstatt Finds from the Vinkovci Region (Eastern Croatia):	
A Contribution to the Study of Impacts from the Balkans to the southeastern	
Carpathian Basin	319
D. Mitrevski, The Ruler's Palace in Bylazora – Capital of "Independent Paeonians"	345
O. Mladenović, A New Find of Bronze Hinged Fibula from the Vicinity of Svrljig	355
M. Guštin, D. Božič, Eine kleine Sondergruppe der thrakischen Fibeln	367
List of authors / Списак аутора.	372

Foreword Увод

Since 1990, after practically 30 years and the publication of the volume of the Starinar journal dedicated to the academician and professor Milutin Garašanin, the Institute of Archaeology in Belgrade publishes a volume dedicated to a doyen of both Serbian and European archaeology, Rasko Vasić. In contrast to university centers, where this kind of publications are usual, due to the position of individuals as professors and teachers (Festschrift, Homage...), the scientific researchers are usually neglected in that respect, which can be seen in the fact that this volume represents the first of a kind published by the Institute of Archaeology. Bearing in mind the significance and the influence of Vasić's work on ex-Yugoslav and prehistoric archaeology of Europe, as well as the fact that he spent his entire career at the Institute of Archaeology, we consider this volume as a humble act of our gratitude for everything our dear colleague Vasić did for archaeology and the Institute, on occasion of his 80th birthday.

Indeed, Rastko Vasić stands as a great of both Serbian and Yugoslav archaeology, distinctly appreciated and esteemed, which stands in opposition to his humble and unobtrusive nature. Vasić's scientific and artistic educations often intertwined in his papers dealing both with the protohistoric art and the particular problems of the Bronze and Iron Age in southeastern Europe. Years of work and scientific questions led him to various phenomena of our prehistoric archaeology, many of which he had himself defined, but from time to time he used to go back and discover the until then unobserved Iron Age art of the Central Balkans. Only a glimpse of his bibliography at the beginning of this volume reveals the archaeological phenomena he had defined and interpreted, and through his serious and responsible scientific work and afterwards authority introduced to archaeology. His first monographs (Културне групе старијег гвозденог доба у Југославији and The Chronology of the Early Iron Age in Socialist Republic of Serbia) were created on basis of his doctoral dissertation and more than a couple of decades since the publication represent often cited literature.

Након безмало 30 лета и Старинара посвећеног академику и професору Милутину Гарашанину из 1990. године, Археолошки институт у Београду објављује једну засебну публикацију посвећену доајену српске, али и европске археологије Растку Васићу. За разлику од универзитетских центара, где је овај тип публикација (Festschrift, Hommage...) уобичајен због позиције појединца као професора и учитеља, научни су радници обично занемарени у томе погледу, што се види и по томе да је ово прва таква засебна публикација наше куће. Но, имајући у виду значај Васићевих дела за бившу југословенску и праисторијску археологију Европе и утицај на њу, као и то што је цео свој радни век провео у Археолошком институту, сматрали смо да је овај зборник поводом 80 година живота један скромни чин наше захвалности за све што је драги колега Васић учинио за археологију и Институт.

Растко Васић доиста представља великана српске и југословенске археологије, изразито уваженог и цењеног, што је у неку руку у супротности са његовом скромном и ненаметљивом природом. Васићево научно, али и уметничко образовање често се сустицало у његовим првим радовима, када се бавио како уметничким протоисторијским темама, тако и конкретним проблемима гвозденог и бронзаног доба југоисточне Европе. Године рада и стручна питања одвела су га ка многим феноменима наше праисторијске археологије, од којих је неке и сам дефинисао, али се с времена на време враћао, а уједно и откривао до тада незапажену уметност гвозденог доба централног Балкана. Само и летимичан поглед на његову библиографију на почетку овог зборника говори о археолошким појавама које је Васић одредио и интерпретирао, а својим озбиљним и одговорним научним радом и доцнијим ауторитетом увео у домаћу археологију. Његове прве монографије (Културне групе старијег гвозденог доба у Југославији и The Chronology of the Early Iron Age in Socialist Republic of Serbia), настале на основама док-

A complete affirmation in Yugoslav archaeology for colleague Vasić was the invitation to write no less than 13 chapters for the 5th volume of the distinguished publication Praistorija jugoslavenskih zemalja, as one of the youngest authors, dealing with less familiar subjects or subjects with scarce background data, undetermined origin or undefined to a great extent. It can be said that even nowadays, after more than 30 years, Vasić's certain syntheses from the aforementioned publication, remain the postulates for the Iron Age of the Central Balkans. Another significant work of Rastko Vasić, although often not emphasized enough, is the fact that under the invitation of the academician Dragoslav Srejović, he participated in writing of 150 separate units in the unique domestic archaeological encyclopedia - Arheološki leksikon – preistorija Evrope, Afrike i Bliskog Istoka, grčka, etrurska i rimska civilizacija, a paper that Yugoslav and Serbian archaeology lacked for a number of decades. His international reputation was confirmed by five monographs published within the prestigious Prähistorische Bronzefunde edition. In parallel with that, through his advice and influence, as well as through his scientific renown, he aided younger colleagues to prepare the volumes for the same edition.

In that context, it is important to mention that defending boards for magister or doctoral thesis on the subject on Bronze and Iron Age could not be imagined without the presence of the colleague Vasić. On such occasions, not a single critique or a bad word could be heard from Vasić, but positive opinion and useful suggestions above all, so that the candidate could properly prepare the thesis for future publication. Rastko Vasić has been a member of the editorial board for the Starinar journal for more than 40 years, as well as for many other corpora and journals in the territory of southeastern Europe. As a member of editorial staff or as a reviewer of papers and monographs, he would always point out the qualities of the submitted material, and if the other members of editorial staff or reviewers decided to reject the material, his benevolent suggestions would help in publishing each useful paper after all, even in some other journal. Also, as a longtime director of scientific projects at the Institute of Archaeology, he would always do his best to help торске дисертације, и даље су, неколико деценија након објављивања, цитирано штиво.

Потпуну афирмацију у југословенској археологији колега Васић доживео је када је позван да, као један од тада најмлађих аутора, напише чак 13 поглавља за том V чувене Праисторије југославенских земаља, и то на неке теме о којима се мало знало или у вези с којима су подаци били штури, нејасног порекла и добрим делом недефинисани. Може се рећи да и данас, након 30 и више година, поједине Васићеве синтезе из ове серије и даље остају једини постулати гвозденог доба централног Балкана. Још један значајан допринос овога типа, чини се, није довољно помињан у досадашњем његовом раду, а то је чињеница да је на позив академика Драгослава Срејовића учествовао у изради преко 150 засебних јединица у јединственој домаћој археолошкој енциклопедији - Археолошки лексикон – преисторија Европе, Африке и Блиског истока, грчка, етрурска и римска цивилизација, делу које је дуги низ деценија недостајало југословенској и српској археологији. Међународни углед потврдио је са пет монографија у престижној едицији Prähistorische Bronzefunde, док је паралелно саветима и својим утицајем, као и научним реномеом, помагао млађим колегама да припреме своје свеске за исту едицију.

У томе контексту, важно је поменути да се без колеге Васића није могла замислити комисија за одбрану магистарских или докторских дисертација на тему бронзаног или старијег гвозденог доба. Том приликом од њега се није могла чути покуда или лоша реч, већ надасве позитивно мишљење и корисне сугестије како би кандитат своје дело адекватно припремио за будуће објављивање. Преко 40 година члан је редакције Старинара, као и многих зборника и часописа на простору југоисточне Европе. Као чест члан редакција или рецензент радова и монографија, увек је истицао квалитете прилога, а уколико би се остатак редакције или други рецензенти одлучили да одбију аутора, он би сесвојим благонаклоним сугестијама трудио да сваки користан рад ипак буде објављен, па макар у неком другом часопису. Такође, као дугогодишњи руководилац научних пројеката у Археолошком институту, young colleagues on each matter, never striking as a boss or a superior.

Plenty of details on the private and professional life of Rastko Vasić, both as an archaeologist and painter and literate, can be found in the continuation of this volume, which was one of the ideas of the editors. Therefore, about 60 pages are dedicated to his life and work, biography and a detailed bibliography, while the interview is illustrated with Vasić's numerous paintings, selected by the celebrant himself. Afterward, there is a collection of papers dedicated to the colleague Vasić, written in English, German, Russian and the ex-Yugoslav languages, assorted chronologically. Unfortunately, certain authors which were invited in agreement with the celebrant did not respond, primarily due to the poor health, so the editors once again point out that they regret the situation, although on the other hand, we are grateful and proud of the content of the volume, on 33 authors of the papers, and the editorial board comprised of prominent names of the word archaeology from nine different countries.

Through this volume, the editorial board and the Institute of Archaeology would like to heartily congratulate the jubilee to our colleague Vasić and to wish him many more years in archaeology.

Vojislav Filipović Aleksandar Bulatović Aleksandar Kapuran трудио се да помогне млађим колегама по свим питањима, не постављајући се притом као шеф.

Многи детаљи о приватном и професионалном животу Растка Васића и као археолога, и као сликара и књижевника, могу се наћи у наставку овог зборника, што је била и једна од идеја приређивача. Стога је првих шездесетак страна посвећено његовом животу и раду, биографији и детаљној библиографији, док је интервју илустрован бројним Васићевим сликама, по избору самог слављеника. Након тога уприличени сурадови посвећени колеги Васићу, на енглеском, немачком, руском и језицима бивше Југославије, поређани по хронолошком реду. Нажалост, поједини аутори позвани у консултацијама са слављеником нису се одазвали позиву, поглавито због нарушеног здравственог стања, па уредници и овом приликом напомињу да жале због оваквог развоја ситуације. С друге стране, поносни смо на садржај зборника – како на 33 аутора прилога, тако и на редакцију, у којој су врхунска имена светске археологије из девет земаља.

Колеги Васићу уредници и Археолошки институт овим зборником од срца честитају јубилеј и желе још много година рада у археологији.

Војислав Филиповић Александар Булатовић Александар Капуран



In the National Museum in Belgrade, 2018 (by Aca Đorđević) У Народном музеју, 2018. године (фото Аца Ђорђевић)

Particular Types of Bowls as Heralds of a New Age in the Balkans¹

- Contribution to the study of cultural and possible ethnic movements in southeast Europe at the end of Bronze and the beginning of Iron Age -

Aleksandar Bulatović

Abstract: Slightly biconical bowls, the rims or entire upper cone of which are decorated with facets or channels, as well as semi-globular bowls of inverted rim, of identical ornamentation, are characteristic of the Late Bronze and Early Iron Ages sites within the territory of the Balkan Peninsula. This very indicative bowl shape is the main topic of this paper, as it could be connected with possible ethnic and cultural movements in the Balkans at the transition from the second into the first millennium BC. The first part of this paper deals with bowl typology in order to survey the genesis, evolution and distribution thereof, followed by given indicative sites from Moravia in the north, down to Greece in the south. The closing part of this paper deals with an analysis of problems concerning origin, chronology and distribution of the mentioned bowls, as well as with possible chronological and regional differences between individual types or varieties.

Key words: Slightly biconical shaped bowls of channeled or faceted rims, Čaka Culture, Carpathian Basin, Balkan Peninsula, Aegean Migration (?).

Slightly biconical bowls, the upper cone (rim and shoulder) of which are decorated with horizontal and slanted facets or slanted channels, as well as semi-globular bowls with an inverted rim decorated with horizontal facets or slanted channels, are characteristic for the very end of Bronze Age and mark the beginning of Iron Age in many cultural groups within the Balkan Peninsula.

The problem of their origin, chronology, and distribution has been present in archaeological literature for a long time. Many authors perceived the significance of this ceramic shape as the chronological, ethnic and cultural interpretation of the Late Bronze, that is, Early Iron Ages within the territory of the Balkans. Pottery from the burned layers in the Vardina and Vardaroftsa sites in the north of Greece, among which there were bowls with inverted, slanted channeled rims, was previously designated by W. Heurtley as Danubian pottery or Lausitz ware, connecting its origin to the Danube Basin.²

The bowls could have originated from two regions – first, the region between the eastern branch of the Alps and Lower Carpathians, in which the Beierdorf-Velatice Culture was developing at the time, and second, the Upper Tisza Region in which the Gáva Culture³ at the end of the Late Bronze Age appeared. T. Kemenczei believes that bowls with slanted channeled (twisted) rims originate from the western part of the Carpathians and appear in the Br C-D periods.⁴ However, majority of authors dealing with this subject-matter think that the appearance of these bowls

¹ This article presents a shortened and renewed version of the article published earlier in Serbian (Булатовић 2010).

² Heurtley 1939, 217-218. Compare: Stefanovich 1973, 148-161 and quoted literature.

³ K. Vinski-Gasparini (Vinski-Gasparini 1973, 36) connects it to the Beierdorf-Velatice Culture, being the local variety of the Urnfield Culture, as well as B. Čović, who considers the bowls to be influenced by the Urnfield Culture – Urnfelder Kultur (Čović 1983, 404). On the other hand, Garašanin thinks this bowl type to have originated from the present Hungarian territory, but allows possibility for the variety with the faceted rim to stem from the central Balkan region (Гарашанин 1973, 309).

⁴ Kemenczei 1975, 45-70.

should be chronologically placed into the Br D-Ha A1 period, according to Reinecke's chronological system.⁵

M. Garašanin closely connects bowls with a horizontal faceted rim found in the central part of the Balkan Peninsula with the Mediana I horizon, dated to the Br C-D periods, according to Reinecke's chronological system. Such early dating of the bowls is very intriguing as it is simultaneous or even older than the period in which they appear in the northwest of Hungary or in Slovakia, being their home territory according to the majority of authors.⁶ Garašanin also allows for the possibility of the appearance of the bowl types with horizontally faceted rim within the Mediana cultural group territory, explaining his hypothesis by the evolution of the channeled ornament from the older, so called, Slatina group.⁷ Slightly biconical bowls with a horizontally faceted rim and shoulders were found at the Hisar site in the South Morava Basin, in a housing feature belonging allegedly to stratum I, dated into the period that also precedes the period in which they appear in the Middle Danube Basin.⁸

The more recent data from the central Balkan territory imposed revisions of this problem, with a broader approach and the aim to discover closer origins of these bowls, distribution directions thereof, much more precise chronology, and to recognize possible chronological, stylistic, distributional and other differences of diverse varieties of this bowl type in the Balkans.

For the analysis of bowls, particularly on sites where they appear very early, reliable finds from single stratified sites, or sites where they were found in graves, isolated cultural layers and other closed units were mainly used in order to achieve more competent and precise dates on the time of appearance and distribution of these bowls.

Types of slightly biconical bowls and bowls with an inverted rim

The analysis of stylistic and typological shapes of these bowls within the territory of the Balkan Peninsula, from their early appearance up to the Early Iron Age, shows two basic types with four diverse varieties each (Table 1):

Types:

I – Slightly biconical bowls and bowls with an inverted rim, the rim or entire upper cone of which (rim and shoulder) is horizontally or slantwise faceted and

II – Slightly biconical bowls and bowls with an inverted rim, the rim or entire upper cone of which (rim and shoulder) is channeled with slantwise channels.

III – Slightly biconical bowls with an inverted rims without ornaments, or with only one horizontal facet.

Varieties:

Ia – Slightly biconical bowl with horizontally faceted upper cone,

Ia1 – Slightly biconical bowl with slantwise faceted upper cone,

Ib – semi-globular bowl with an inverted rim with one horizontal facet

Ic – semi-globular bowl decorated with horizontal facets below the rim (this variety does not have a slightly biconical profile or inverted rim, but the established typological similarity to these bowls included them into the typology),

IIa – slightly biconical bowl, the upper cone of which is decorated with slanted rib-like channels (angle of modeled channels regularly is greater than 30°),

⁵ Ciugudean 1994, 25-40; Hellebrandt-Magdolna 1990, 93-111; Peschel 1987, 111-127 and etc.

⁶ Гарашанин 1973, 309.

⁷ Гарашанин 1973, 308-309. Compare with: Garašanin 1996, 212-213, Beil.1/B1. Consult terminology problem concerning terms Mediana group and Slatina group in: Булатовић 2000, 39-40; Stojić 2001a, 29; Булатовић 2006, 7-15.

⁸ Стојић 2001, 19-20.

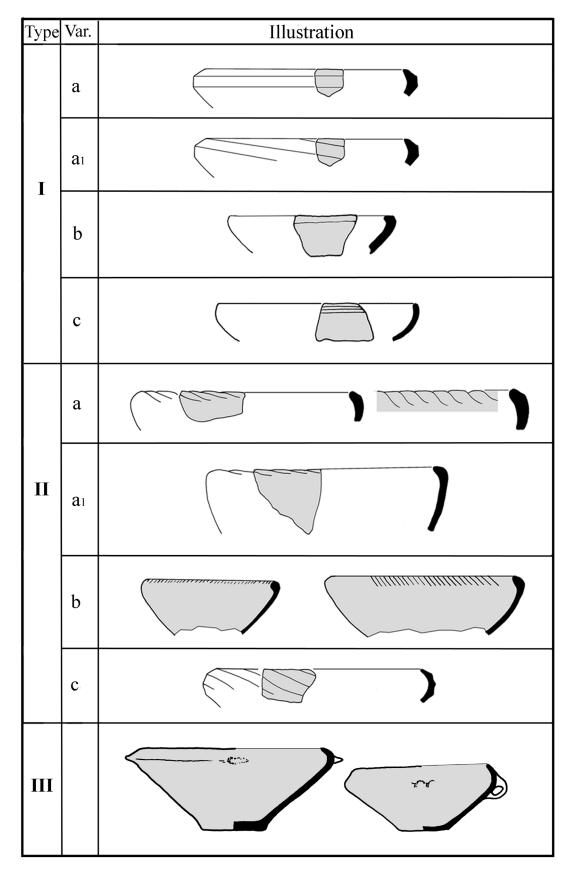


Table 1- Types and varieties of slightly biconical bowls.

IIa1 – slightly biconical or semi-globular bowl with an inverted rim, the rim of which is decorated with slanted rib-like channels (angle of modeled channels is usually smaller than 30°). IIb – slightly biconical bowl, the rim of which is decorated with very short and, most frequently, shallow slantwise channels (angle of modeled channels regularly is greater than 70°), IIc – slightly biconical bowl, the upper cone of which (rim and shoulder) is decorated with slantwise shallow, more rarely, with rib-like channels (angle of modeled channels regularly is smaller than 30°).

These are the basic bowl varieties of types I and II, while the remaining similar sub-varieties are included into the variety, closest and most similar to it stylistically and typologically wise.

Site catalogue (Maps 1-3)

Slightly biconical bowls with faceted or channeled rim or upper cone have been recorded within the southern part of Central Europe, as well as within almost the entire Balkan peninsula. The vast territory within which these bowls were recorded, followed by differing chronology, point to several possibilities for their distribution. The following site catalogue shows exclusively chronologically sensitive sites within which the bowls were recorded, or chronologically non-sensitive sites, which, however, could point to possible movement directions, as well as the distribution territory of these bowls.

Southern part of Central Europe

Brandenburg; Jena-Amerbach¹⁰; Hradčany¹¹; Šumice¹²; Ipeľský Sokolec, Čaka, Báb, Ludanice, Dolný Peter, Šarovce, Machulince, Nesvady, Marcelova¹³; Velatice, king's tomb¹⁴; Pobedim¹⁵; Klentnice, grave 63¹⁶; Acsa, Békásmegyer,¹⁷ Szihalom, Szajla, Nagybátony and Šafarikovo;¹⁸ Hangony, necropolis in Gelej-Kanális and sites of Gáva cultural group in Tisza valley (Debrecen-Nyulas, Poroszló, Aponhát, Nagykallo)¹⁹; Tiszafüred;²⁰ Dunaújváros-Duna-dűlő;²¹ Nezsmely, Chotin, Mužla²²; Tapolca, Mende, Pécel and Kóspallag²³; Mahala²⁴; Moldova, channeled pottery horizon sites²⁵.

⁹ Rücker 2007.

¹⁰ Peschel 1987, Abb.6/4, Abb.7/3

¹¹ Stuchlîk, Trčala 1991, obr. 7/5.

¹² Balek 1991, obr. 3/10.

¹³ Paulik 1963, obr. 6/13, obr. 8/8, 9, obr. 10/1, obr. 22/73, obr.23/4, obr.29/2, obr.30/8, obr.24/3, obr.26/1, obr.25/7,12.

¹⁴ Gimbutas 1965, 247, T.3, Fig. 217/11.

¹⁵ Studeníková, Paulik 1983, 107-109, Tab.III/5, Tab.V/5, Tab.IX/5,11, Tab.X/3, Tab.XVIII/14.

¹⁶ Gimbutas 1965, Pl.72/1.

¹⁷ Vicze 2011.

¹⁸ Przybyła 2009, Fig. 11/22, 23.

¹⁹ Kemenczei 1984, Taf.LXIX/1,15, Taf.LXXIII/9, Taf.LXXV/21,26, Taf.LXXVI/2,8,15, Taf. LXXXIII/17,Taf.XCV/9 i dr; Kemenczei 1982, 86, Abb.6/1; Kemenczei 1982, 73-95; Kemenczei 1989, 73-96, Abb.8/9, Abb.10/1.

²⁰ Przybyła 2009, Fig. 10/4.

²¹ Kalicz-Schreiber 2010.

²² Nebelsick 1994, Abb.1,4,10/a,b.

²³ Paulik 1962, Abb. 35/5; Kemenczei 1975, Abb.1/5, Abb.2/2, Abb.3/4.

²⁴ Smirnova 1974, Fig.6/1,4.

²⁵ Hänsel 1976, Taf.41/1-3.

Northern part of Balkan Peninsula

Igritia²⁶; Uloara de Jos, Susani, Ciceu-Corabia, Mediaș²⁷; Bistret, Ticvaniul Mare, cultural group sites Gava-Mediaș and Gornea, Insula-Banului, Virtop, Cozia, Babadag, Tamaoani²⁸; cultural group sites Gornea-Kalakača²⁹; cultural group sites Sveta Lucija, Ljubljana and Notranje-Dolenje³⁰; Dobova, grave 289; Lenart V; Ptuj; Rogoza; Šmarna Gora.³¹

Western part of Balkan Peninsula

Martijanec³²; Gradina site near Karlovac³³; Novigrad na Savi, Kiringrad, necropolis at Lijeva bara site near Vukovar, Dalj³⁴; hillforts on periphery of Livno and Duvno plains³⁵; Gradina site near Hadžići³⁶; Debelo Brdo site near Sarajevo, Varvara (C2 and C3 levels)³⁷; Pod site near Bugojno. ³⁸

Central part of Balkan Peninsula

Opovo, grave 20a, Vojlovica, graves 88 and 133, Perlez, Jabuka, Aradac³⁹; Asfaltna baza in Zemun,⁴⁰ Karaburma, graves 108 and 115⁴¹; Kalakača, Bosut⁴²; Gradac in Banja Koviljača, Trojanov Grad on Cer mountain, Gradac in Cikote and Vito near Valjevo;⁴³ Panjevački Rit site in Jagodina⁴⁴; Sarina međa, pit houses 1 and 2, Vrbica site in Dragocvet⁴⁵; Konopljara site in Čitluk (features 3, 5, 6 i 7, and the oldest level of feature 12)⁴⁶; Medijana site in Niš⁴⁷; Ras and Velika gradina in Novi Pazar;⁴⁸ Hisar site in Leskovac (features 1/99, 3/06, 14/06)⁴⁹; Piljakovac in Kržince, level III and pits 1 and 2⁵⁰; Meanište in Ranutovac;⁵¹ Kovačke Njive and Čukar in Pavlovac;⁵²

²⁶ Hellebrandt Magdolna 1990, 93-111, Abb.3/2,5-6, Abb.5/1-4, Abb.3/4, Abb.9/8.

²⁷ Ciugudean 1994, 25-40, Fig.2/5; Stratan, Vulpe 1977, Taf.10/85-86, Taf.11/100, Taf.13/123,125; Vasilev 1980, Fig.10/3-5, Fig.15/4, Fig.16/1; Zaharia 1965, Fig.3/2,6-8, Fig.4/1-2; Gumă 1993, Pl.XVIII/1,3,6, Pl.XXI/6, Pl.XXIV/3b,6b, Pl.XXXV/9b, Pl.XXXI/3,6, Pl.XXXII/4,7, Pl.XXXVI/3-4,6-8.

²⁸ Chicideanu 1986, 7-47, Abb.35/3; Ciugudean 1994, 36; Gumă 1995, Pl.XV/3,8,13,15,19-20,25, Pl.XVI/1-3; Hänsel 1976, Taf. 39/1-2, Taf.45/10-11, Taf.46/10, Taf.47/2,4, Taf.52/4, Taf.55/6-7.

²⁹ Medović 1988; Gumă 1993, Pl.XL-LIV.

³⁰ Dular 1982, Sl.8/29,sl.13/18,sl.21/8, T.26/251.

³¹ Gabrovec 1983, 56, T.VII/20; Teržan, Črešnar 2014.

³² Vinski-Gasparini 1983, 570-572, T.LXXXVII/10.

³³ Majnarić-Pandžić 1986, Sl.3/1,3.

³⁴ Vinski-Gasparini 1973, 36, 66-67, 163-164, T.21/1, T.22/14-15, T.121/2,11, T.122/7; Vinski-Gasparini 1983, 600, Sl.5-6.

³⁵ Govedarica 1982, 111-188.

³⁶ Perić 1989, 60-62, sl.2.

³⁷ Čović 1983, T.LXI/11, 390-412.

³⁸ Čović 1983, 433-460, T.LXV/4,6, T.LXVI.

³⁹ Bukvić 2000, T.8/2, T.9/1, T.11/3, T.12/8, T.35/9, T.42/9, T.51/11 i T.63/4.

⁴⁰ Петровић 2010.

⁴¹ Todorović 1977, 22-23, 157.

⁴² Medović 1978; Medović 1988; Medović, Medović 2010.

⁴³ Арсић, Булић, Пецикоза 2013, 125-131; Булатовић, Филиповић, Глигорић 2017.

 $^{^{44}}$ Стојић 2004, T.LXXXVI/2-3 and finds from features: 23, 39, 65, 72, 108, 212, 217, 220, 234, 245, 101, 106/102, 121, 131, 133, 134, 149, 201, 202, 205, 210, 211, 221, 224, 228, 232 i 265.

⁴⁵ Stojić 1986, T.1/1, T.2/1, T.6/1-2,5-6.

⁴⁶ Стојић, Чађеновић 2001, 47-80, T.V/1-3,5-6, T.X/4,6,13, T.XII/111-12,16. Features 3, 5, 6, 7 and the earliest stratum in feature 12 are from Iron Age Ia and features 8, 9, 10, 11, 13 and layer above pit in feature 12 are from Iron Age Ib.

⁴⁷ Garašanin 1983, 761-772; Garašanin 1996, Beil.I/B1,B1a,B1a2,B1a3 i B1b.

⁴⁸ Babović 1980, 1980a, 41-43, T. XXIV-XXVIII.

⁴⁹ Стојић 2001, 34-35, Т.VIII/1-2; Bulatović 2009, Pl. I-II.

⁵⁰ Лазић 2005, T.V/3, T.VII/10-12, T.VIII/1-3, T.XII/1, 2, 4, T.XIII/1-6.

⁵¹ Bulatović, Filipović, Kapuran 2016, 91-113.

⁵² Bulatović, Kapuran, Milanović 2016, 205-219.

Crkvište and Gradište in Davidovac;⁵³ Turija;⁵⁴ Resulja in Lučane⁵⁵; Ljušta, Gladnice and Valač in Kosovo.⁵⁶

Southern part of Balkan Peninsula

Strnovac, inhumation grave under tumulus⁵⁷; Pelince, Rugince, Skoplje, Makreš⁵⁸; Madžari near Skopje⁵⁹; Stobi, Soutwestern necropolis⁶⁰; Vardarski rid, levels 13 and 14⁶¹; Maliq, horizon IIId2-3⁶²; Kastanas, above level 12⁶³; Vardina, burning level.⁶⁴

Eastern part of Balkan Peninsula

Horizon of stamped pottery in northern Bulgaria, cultural groups Pšeničevo and Tlačine, Gulubnik⁶⁵; sites of Babadag culture (Bucu, Enisala, Niculitel, Satu Nou);⁶⁶ Marica and Ravadinovo,⁶⁷ Baley.⁶⁸

Discussion

Typological analysis of slightly biconical bowls decorated with facets or channels, as well as of semi-globular bowls with an inverted rim, shows two types with eight basic varieties of these bowls. It has been stated that the mentioned ceramic shapes were distributed within the territory ranging between one thousand or more kilometers in length and around one thousand kilometers in width, from Moravia and northern Hungary to northern Greece, and from the Alps to the Black Sea. It has been noticed, however, that individual varieties of bowls were differently chronologically dated and that some of the varieties are characteristic for certain regions only.

The oldest finds of the bowl types I and II come from the West Carpathian basin, and these bowls are frequently connected with the Čaka and Beierdorf-Velatice cultural groups. E. Studenikova and J. Paulik point out that these bowls appeared as a result of Velatice cultural group influence on the local Čaka cultural group.⁶⁹ It has been stated, however, that the bowls were not recorded in the early Lausitz Culture and appeared only sporadically in the Velatice Culture, in which they were dated relatively late as compared to their appearance in Čaka Culture (royal tomb in Velatice in which bowl of IIa type was found, dated into the period Ha A1).⁷⁰ In Čaka Culture, these bowls, however, together with bowls with a slightly S-shaped profile with widely everted rim, were the dominant bowl shape during the period Br D–Ha A1. Variety Ia bowls prevail, but bowls of the variety IIa are also present.

```
<sup>53</sup> Булатовић, Капуран 2014, 101-124.
```

 $^{^{54}}$ Булатовић 2007, Т. LVI.

⁵⁵ Булатовић 2007, 178-194, 202-208, T.LVIII/6-17.

⁵⁶ Гарашанин 1973, 312-313; Tasić 1959/60, 11 – 82, T.VII/1-2.

⁵⁷ Станковски 2008, 135-151, Т.І/2,6-8.

⁵⁸ Georgiev 1989, T.I/5,T.III/2,4,6.T.VII/2-3,T.X/1-3,T.XI/1,T.XIX/2-5 i dr.

⁵⁹ Mitrevski 1993, Fig.3/1-5,7.

⁶⁰ Митревски 1997, 313.

⁶¹ Папазовска 2005, 115-158, сл.3, Т.III/24, Т.IV/26-27.

⁶² Prendi 1982, Abb.8.

⁶³ Hochstetter 1984 Taf.102/1, Taf.156/3-4, Taf.196/3.

⁶⁴ Heurtley 1939, 98, 217/415-418.

⁶⁵ Hänsel 1976, Taf.60/14-15, Taf.66/2, Taf.66/2, Taf.72/1-4; Gotzev 1994, Fig.7/4; Георгиева 2003, Т.Ш/12,16; Ailincăi 2015, fig. 88-95.

⁶⁶ Ailineăi 2015, fig. 6, 13, 18-20, 23, 46, 65, 84.

⁶⁷ Czyborra 2005, Taf.4/10,Taf.8/10,13,Taf.14/9,Taf.22/5,Taf.25/1,Taf.26/11-12,Taf.28/1,5,7.

⁶⁸ Alexandrov, Ivanov, Hristova 2016, 439-456, Fig. 6/a-d, f-g, k, m, Fig. 7/f.

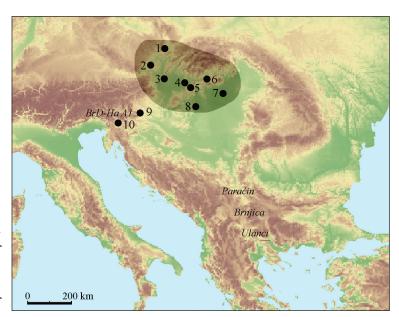
⁶⁹ Studeníková, Paulik 1983, 107-109.

⁷⁰ Pivovarova 1965, 107-162; Rihovsky 1961; Gimbutas 1965, 247, Fig.217b/11.

It is interesting to note that in the pre-Čaka horizon there are shapes such as slightly biconical bowls with a smaller tongue – or arch-shaped handles on its shoulder, sometimes with one horizontal facet on its shoulder (type III) typologically close to bowl types I and II.⁷¹ Identical bowls were identified but only sporadically within the southern part of Central Europe, even in the

Middle Bronze and the beginning of the Late Bronze Age (early Piliny culture, Tumulus culture, early Koszider horizon, Unetice culture, Veterov culture) (Map 1).72 In many cases, from the end of the Late Bronze Age these bowls in the south-western and southern part of Central Europe (Čaka culture, early Gava, Bistret-Isalnitza culture)⁷³ were identified together with bowl types I and II or, horizontal facets or channels appear on bowls of rounded shoulder with handles, only confirming the mutual evolving connections of these bowls with bowl types I and II 74

The most indicative ceramic shapes that explain the origin and evolution of the slightly biconical bowls with a faceted or channeled rim



Map 1 – Sites with bowls of type III (Br B-C/D): 1. Hradčany (Unetice culture); 2. Šumice (Veterov culture); 3. Šafarikovo (Piliny culture); 4. Čaka (Pre-Čaka horizon); 5. Ipeľský Sokolec (Pre-Čaka horizon); 6. Nagybátony (Piliny culture); 7. Tiszafüred (Tumulus culture); 8. Dunaújváros (Tumulus culture); 9. Lenart V; 10. Šmarna Gora.

(types I and II with varieties), however, are pear-shaped amphorae with arch-shaped handles on the neck with the belly and shoulder decorated with horizontal facets, as well as deep S profiled bowls with arch-shaped handles on the shoulder or neck, the belly and shoulder of which are decorated with slanted channels.⁷⁵ The lower part of these bowls is identical to bowl varieties Ia and IIa, consequently showing a close typological connection with the bowls that are the subject-matter of this paper. The mentioned pear-shaped amphorae and deep bowls are characteristic for Late Bronze Age cultures within the territory from the southwest of Slovakia to the north of Hungary.⁷⁶

Taking into consideration the fact that bowl types I and II were not identified in the early Lausitz and Velatice cultural groups, as well as in Late Bronze Age cultural groups in Banat and south part of the Transylvania, conclusion may be reached that they appeared within the territory of Čaka Culture in West Carpathian Basin (present day southwest Slovakia) and spread to the east,

⁷¹ Paulik 1963, 321.

⁷² It concerns cultures Halomsíros, Egyek, Berkesz-Demecser, as well as the necropolis in Alsóberecki and etc. (Kovács 1965, 65-86, abr.17/2,6-7; Kovács 1966/67, 27-58, Fig.11/17-18,Fig.12/3; Kemenczei 1981, 69-92, Abb.8/6. For Únetice and Věterovsky Cultures see: Stuchlik, Trčala 1991, 225-246, Obr.6/13,Obr.7/5; Bálek 1991, 247-252, Obr.3/10; Vicze 2011, pl. 175/3, 176/11, 179/4, 180/10, 185/1, 192/2; Przybyła 2009, 52, Fig. 11/22; Teržan, Črešnar 2014, sl. 8.4, 8.7, 20.6 and 20.12.

⁷³ Przybyła 2009, Fig. 7/18-19, 13/1, 17/10, 23/7.

⁷⁴ See: Kemenczei 1975, Abb.5/15; Kemenczei 1989, Abb.8/9, Abb.10/1; Hellebrandt Magdolna 1990, Abb.5/3-4; Chicideanu 1986, Abb.35/3.

⁷⁵ Paulik 1962, Abb.33/1,4,7,Abb.342,6-8.

⁷⁶ Kemenczei 1975, Abb.6/3-4; isti 1984, Taf.LXXXVIII/1,6,Taf.XCIII/24.

to Kyjatice Culture sites in the north part of Hungary and that the influence of the culture they belonged to spread to the north as well (Velatice, Jena-Amerbach and etc.) (Map 2). In the northeast part of Hungary, these bowls (type I and II) are connected to the Gava Culture sites, the beginning of which is chronologically placed into the Ha A period.⁷⁷ Interestingly, however, it seems that bowls of type III also appeared very early in the area of today's northern Hungary (Dunaujváros, Nagybátony), so this region together with both the west Carpathian Basin and SE Moravia could be the place of origin of the bowl types I and II.

All the mentioned data point to the fact that the slightly biconical bowls with a faceted or channeled upper cone (varieties Ia and IIa) appeared within the territory of the west Carpathian Basin in the Br D period, spreading already at the end of the same period along the Carpathian Range to the east, towards Ukraine and Moldova but also to the south along the edge of Bakonjska range towards Croatia and Slovenia, evading the marshy and boggy land of the vast Pannonian Plain. The cultural interaction that triggered the spreading of this bowl type, as well as of some other ceramic shapes identified together with these bowls, was probably caused by the movements of local communities from central Europe to the east and south under the pressure of Urnfield culture (*Urnenfelderkultur*) people. Bowls of this type were not identified at Gava Culture sites, in the north, in southeast Slovakia, but the mentioned bowls were found at sites from the Ha A-B periods in Ukraine and Moldova, and also in late Lausitz Culture in northern Europe. This shows clearly that population movement was primarily directed towards the south and east, but also towards the north.

These bowls were not identified in cultural groups characteristic for the Late Bronze Age in the central Balkans. In the housing feature from the earliest period at the Mediana site (Mediana I, Br C-D), no bowls of this type were found, nor any other pottery, stylistically and typologically close to these bowls, while in Kržince site by Vladičin Han they appear only in the III layer, dated into the Ha A periods. The mentioned bowls were also not found at the Gradište site in Končulj near Bujanovac, the latest layer of which, with the exception of the layer from the Hellenistic period, was dated into the Ha A1 period. In the Great Morava Basin, in closed finds on Vrbica site in Dragocvet and Sarina međa site in Jagodina as well as on features on Panjevački Rit site in Jagodina, the mentioned bowls seem to have appeared at the end of the Iron Age Ia (end of Ha A1), while they are very characteristic in form of the Iron Age Ib and Ic phases, according to the chronological system by M. Stojić (Ha A2-B1). In the necropolis from Karaburma, however, bowl varieties (Ia and Ib) were found only in two graves dated into the Karaburma III horizon, that is, into the Ha A/B periods. The same case is with the finds of these bowls in Banat. The same case is with the finds of these bowls in Banat.

⁷⁷ Kemenczei 1984, 96; Gumă 1997, 68.

⁷⁸ Smirnova 1974, 359-380; Hänsel 1976, Taf.41-42; Up to several hundred years back, the Pannonian Valley was marshy and unsuitable for settlement, consequently, this explains the lack of prehistorical sites within its territory. (Hänsel und Medović 1991, Taf.1). In Slovenia those bowls are dated in 13th-12th century calBC (Teržan, Črešnar 2014, sl. 9.7, sl. 9.8, sl. 14.1.9, and 14.1.14).

⁷⁹ Demetrova 1987, 305-315.

⁸⁰ Rücker 2007, Abb. 29 and 30.

⁸¹ The aforementioned bowls did not appear in the Lausitz Culture in the northern part of Central Europe before Ha A2/B1 period (Rücker 2007, Abb. 27-30).

⁸² These bowls are not found in the Belegiš cultural group (except very sporadically type III), Žuto Brdo-Girla Mare group, in Paraćin (sporadically type III) and Brnjica cultural groups (Вранић 2002; Петровић 2006; Крстић 2003; Гарашанин 1973, 298-307; Булатовић 2007, 37-45; Šimić 1994, 197-215 etc.). In the previous article about these bowls it was mentioned that two Ia bowl fragments from Hisar site in Leskovac in south-eastern Serbia were dated into the Br C-D period (Стојић 2001, 34-35). Later analyses of vertical stratigraphy showed that these fragments belong to the Ha B period.

⁸³ Лазић 2005, 131-174.

⁸⁴ Булатовић 2000, 31.

⁸⁵ Stojić 1986; Стојић 2004.

⁸⁶ Todorović 1977, 22-23, 132, 157.

⁸⁷ Bukvić 2000, 108-115.

during the Ha A2-B periods the mentioned bowls became inevitable pottery inventory at numerous sites in the Great Morava Valley and South Morava Valley and, at the beginning of the Ha B period, also in Western Serbia, 88 the Vardar Basin and possibly Eastern Serbia. 89

We have to mention that already from the period Br C/D-Ha1, before the advent of these bowls in local central Balkans cultures (especially in west Serbia), one sees a considerable cultural influence from the north in the form of the appearance of unusual pottery shapes (amphorae with an ovoid belly on high foot, S shaped bowls and beakers on foot, both with an obliquely channeled belly, etc.). This indicates some sort of contact between population of the central Balkans and Carpathian Basin since the end of the Middle Bronze Age, to what was pointed out earlier. 191

According to the mentioned data, especially the distribution and chronology of those bowls during this period, it appears that certain population movements towards the south happened along the valleys of the Great Morava, South Morava and Vardar rivers. These particular types of bowls were spread through the population contact, which is confirmed by numerous finds of these vessels in this region. Those movements towards the south encountered settlements of autochthonous populations, such as the Paracin and Brnjica cultural groups, as well as cultural groups of the Late Bronze Age in Povardarje, and kept destroying their habitations (Priboj, Končulj, Vardina, Kastanas). With it came bowls of types I and II, the so called channeled pottery, which will mark the forthcoming centuries where the cultural circumstances in the Great Morava basin, South Morava basin and Pčinja valley found itself. Representatives of this culture, characterized by channeled pottery, succeeded to disintegrate the obviously already weakened Paraćin and Brnjica cultural groups so that the channeled pottery prevailed during the Ha A2-B1 periods, while bowl types I and II appear only sporadically in Vardar basin, within the territory of the LBA Ulanci cultural group (Map 3). Plenty of channeled pottery along with sporadic finds of the previous Brnjica culture are registered at the sites from the Ha A-B periods in the South Morava basin (Hisar, Meanište, Piljakovac), but also in the Vardar basin (Klučka, Stobi, Kastanas etc.). A certain number of metal objects, particularly tongue-swords produced in Central European workshops, but stated within the central Balkans, point to the very live contacts among cultural groups from the north and the south of the Balkan Peninsula. 92 These contacts were probably caused by migrations and often they were of violent nature, very noticeably illustrated by destroyed habitations of autochthonous cultural groups.93

On the basis of analysis of individual bowl types, that is, of bowl varieties and of their disposition differences within the Balkan Peninsula and the south part of the Central Europe as well as of the dating of these bowls, certain conclusions have been reached. It has been stated that the oldest finds of these bowls (type III) appeared at Middle Bronze Age sites in the territory of present day SE Moravia, SW Slovakia and N-NW Hungary and spread to the south in the Late Bronze Age according to absolute dates from Slovenia (Map 1).

In the Čaka Culture in West Carpathian basin basin, bowl varieties Ia and IIa, and in one case variety IIc (or Ia1), were found exclusively, which in any case are very similar (in one case slanted facets, in the other slanted channels). These sites are dated to the same period (Br D-Br D/Ha A1) and consequently it is not possible to state whether any of these varieties is older than

⁸⁸ Hillfort settlement Gradac in Cikote near Loznica with timber rampart and bowls of Ia1 variety is dated (AMS) in Ha B1/B2 periods (Булатовић, Филиповић, Глигорић 2017).

⁸⁹ Булатовић, Капуран, Јањић 2013; Капуран, Булатовић, Јовановић 2014.

⁹⁰ At sites of Late Bronze age in Great Morava basin and west Serbia sporadically appeared bowls very similar to bowls of type III (Garašanin 1983a, 727-735, T. 101/4; Dmitrović 2014).

⁹¹ Булатовић 2011, 134. There are no such a bowls at AMS dated sites of local Brnjica culture in Br C-D periods (Medijana, Svinjište – unpublished).

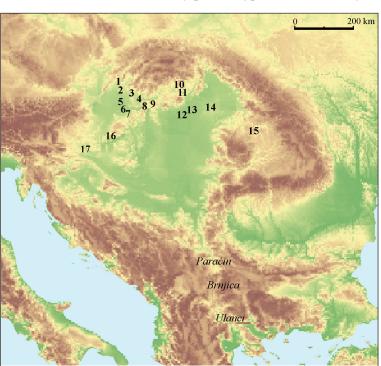
⁹² For more information regarding this issue see in: Bulatović, Filipović 2017.

⁹³ Tongue swords originate from the Middle Europe, where they are dated into Br D-Ha A1 period, but the finds of these swords during the Ha A period are stated from *Vnanje Gorice in the north up to Kosovo and Macedonia in the south* (Vinski-Gasparini 1983, 655, T.XCII/1-2, T.XCIII/1; Gabrovec 1983, T.II/10-12; Гарашанин et al. 1971, cat. No. 207, 216; Srejović 1959/60, sl.8.).

the other, but on the basis of the aforesaid it could be concluded that the bowl varieties Ia and IIa are the basic varieties from which all the others stem (Map 2). During the Br D/Ha A1 period, in north Hungary and northwest Romania, appear also the aforementioned bowl varieties, together with the variety Ib, while in the Ha A1-A2 periods, variety IIa1 has been identified within this territory. It seems that in this period, within the territories of southwest Slovakia, north Hungary, and at sites in Slovenia and Croatia where these bowls only start to appear in the Ha A1-A2 periods in a large numbers (Zagreb group), ⁹⁴ prevail bowl varieties IIa, while all the other bowl varieties are represented in a much lesser number. In the same period, in the central Balkans and southwest Romania, circumstances are quite different. Within this territory prevail type I bowls (variety Ia

is far the most numerous one); although, found sporadically, are varieties IIc and IIa1 or the type II bowls. 95 Only at the end of this period (Ha A2 period) appear variety IIa bowls at sites in the south and west of Romania and central Balkans. 96

In the Pčinja Valley and Vardar Basin appear type I bowls only in the tumulus in Strnovac (varieties Ia1 and Ib) dated into the Ha A periods, while type II bowls were exclusively found at other sites. It is also stated that the variety IIb, represented by its stylistic and typological features imitating variety IIa and IIa1 bowls (false turban dish), appears only in the Ha B period, predominantly in Macedonia and north Greece, though it was sporadically found in the middle of Bosnia, southwest Bulgaria and south Albania.



Map 2 – Sites with bowls of types I and II (Br D-Ha A1): 1. Pobedim;
2. Ludanice; 3. Machulince; 4. Šarovce; 5. Nesvady: 6. Dolny Peter;
7. Marcelova; 8. Kospallag; 9. Acsa; 10. Aggtelek; 11. Sajoszentpeter;
12. Szihalom; 13. Gelej; 14. Nagykallo; 15. Igrici; 16. Tapolca; 17.
Ptuj. / Sites with both types of bowls (I and II): 1, 7, 10, 11, 15; sites with only type I: 2, 4, 6, 13; sites with only type II: 3, 5, 9, 12, 16.

The disposition of bowl types I and II could be explained by successive interactions between populations in the territory north of the Balkans and along the Balkan Peninsula. In such a case, variety Ia bowls would be somewhat older than the variety IIa ones and could be connected to the first contacts, spreading them to the territories of west Transylvania, Tisza region and Serbian Middle Danube basin, as well as to the Great Morava basin and South Morava basin, during the Br D – Ha A2 periods. At the time, within the territory of north Hungary, appear variety IIa bowls influenced by Čaka culture and its related Urnfield cultures from the northwest. They are, however, distributed only during the later contacts, spreading to the south in the Ha A2-B1 periods, reaching the confluence

⁹⁴ Vinski-Gasparini 1983.

⁹⁵ Bowls of type Ia1 were registered in grave 21 at Baley necropolis in NW Bulgaria which was dated in 1306-1124 BC, respectively Br D-Ha A period (Alexandrov, Ivanov, Hristova 2016, Fig. 6, Fig. 9/c). It could be significant chronological reper for appearance of these types of bowls on the north of Central Balkans.

⁹⁶ One bowl from Baley necropolis dated to period 1211-1014 BC belongs to type IIa (Alexandrov, Ivanov, Hristova 2016, Fig. 7/f, Fig. 9/d).

of the Vardar. Variety IIa bowls can be observed in Macedonia in the periods Ha A2-B, usually as isolated finds, and not as a standard part of the pottery inventory.

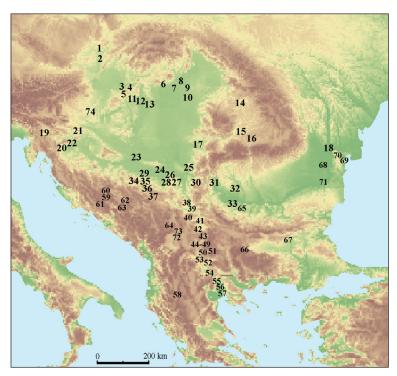
The theory of a possible migration from the north is supported by the changes in the settlement topography pattern at the end of Bronze and the beginning of Iron Ages in the south part of the South Morava basin. Namely, it is stated that during the periods Ha A in Vranje-Bujanovac valley hillfort settlements suddenly appear (Priboj, Dubnica, Končulj, Krševica). The same situation is found on the outskirts of the Niš and Leskovac plains.⁹⁷

The change of topography, that is of settlement disposition, could be connected to the first social contacts bringing variety Ia bowls to these regions, while later contact is connected to the destruction of these settlements and relocation of the Brnjica cultural group settlements

from deep into the interior, to the southeast, into the Donja Pčinja region. The later movements, according to the variety IIa bowl finds, could be dated into the Ha A2 period, but judging by the disposition and number of the variety IIa bowl finds, these contacts were more intense than earlier ones and they caused significant changes within local Balkan cultures.

The finds of swords and other metal objects stemming from Central European workshops point to the direction of their movement from central Europe, along the Carpathian Range and Transylvanian Alps towards the central Balkans. The metal objects from the Central Balkans are identical to objects listed in the depositories of Transylvania and Banat.

It is of important to mention that in Moldova during the Ha A1-B1 periods, bowl varieties Ia and Ic were found exclusively, which could be explained by breakthrough of the first interaction through the Carpathian Gorges into Moldova, while the influence of this ornamental style later spreads North into Ukraine (Mahala – Ha B period).



Map 3 – Sites with bowls of types I and II (Ha A-B): 1. Velatice; 2. Klentnice; 3. Chotin; 4. Mužla; 5. Naszmely; 6. Szajla; 7. Korom; 8. Taktabaj; 9. Nyiregyhaza; 10. Debrecen; 11. Bekasmegyer; 12. Pecel; 13. Mende; 14. Ciceu-Corabia; 15. Uloara de Jos; 16. Medias; 17. Susani; 18. Tamaoani; 19. Notranje; 20. Podzemelj; 21. Martijanec; 22. Dobova; 23. Vukovar; 24. Kalakača; 25. Ticvaniul Mare; 26. Opovo; 27. Karaburma; 28. Asfaltna baza, Zemun; 29. Bosut; 30. Gornea; 31. Insula Banului; 32. Virtop; 33. Bistret; 34. Banja Koviljača; 35. Trojanov grad; 36. Cikote; 37. Vito; 38. Panjevački rit; 39. Sarina međa; 40. Čitluk; 41. Medijana; 42. Hisar; 43. Kržince; 44. Meanište; 45. Pavlovac; 46. Davidovac; 47. Turija; 48. Lučane; 49. Žujince; 50. Strnovac; 51. Rugince; 52. Skopje; 53. Madžari; 54. Stobi; 55. Vardarski rid; 56. Vardina; 57. Kastanas; 58. Malig; 59. Varvara; 60. Pod; 61. Duvno; 62. Debelo brdo; 63. Hadžići; 64. Novi Pazar; 65. Tlačine; 66. Cepina; 67. Pšeničevo; 68. Bucu; 69. Enisala; 70. Niculitel; 71. Satu Nou; 72. Ljušta; 73. Valač; 74. Rogoza. Sites with both types of bowls (I and II): 3, 5, 6, 8, 11, 23, 24, 28, 29, 30, 31, 34, 35, 36, 38, 40, 42, 46, 47, 63, 64; sites with only type I: 4, 15, 17, 19, 20, 26, 27, 39, 48; the remaining sites have only type II.

⁹⁷ Bulatović, Filipović 2017.

In the Ha B period, in Bosnia, Slovenia and Croatia, besides type II bowls, type I bowls are found, probably as a result of cultural influences from the northwest of the Balkan Peninsula or the influence from the Middle Danube Basin, along the Sava and the Bosna Valleys.

In the Ha B-C periods, type II bowls (particularly variety IIa) are the prevailing bowl types within the entire territory of the Balkan Peninsula (Map 3). They cover the regions from Ukraine, the Black Sea (Cozia, Tlačine and other cultures from these regions) and east Bulgaria (Babadag, Pšeničevo) up to the Adriatic sea and from the central Europe to the Aegean sea (Kastanas). In Troy, no bowls of types I-III were found, but a lot of so called channeled pottery was registered, so it is assumed that the carriers of this pottery could not be connected to the destruction of settlement Troy VII, despite having been involved in movements in the central Balkans, but their indirect involvement was possible in pushing on the autochthonous population of Trace and south Balkans towards the south and the east. 99

Conclusion

A number of conclusions have been reached upon the study of finds of slightly biconical bowls and bowls with an inverted rim, decorated with channels or facets, from several indicative sites from Late Bronze and Early Iron Ages within the Balkan Peninsula and south part of the Central Europe.

It has been stated that bowls of type III existed as an archetype of type I and II bowls in the Middle and Late Bronze Age cultures in Moravia, the west Carpathian Basin, and in the northern part of the Pannonian plain and a bit later in the present-day Slovenia.

Already from the period Br D-Ha1, before the advent of these bowls in Central Balkans, unusual pottery shapes appeared in local Late Bronze Age cultures for which analogies can be seen in the Carpathian Basin. This stresses certain contacts between the populations of the central Balkans and Carpathian Basin at the end of the Middle and Late Bronze Ages.

The bowls of types I and II appear first within the southwest of Slovakia and northwest Hungary in the Br D period, and spread very fast, already in the Br D/Ha A1 period, from its home territory across the rim of Carpathian Basin to the east, to the northeast Hungary and west Romania. Namely, this first wave of migration into these territories brought along only variety Ia bowls, which were further distributed to the south during the Ha A1 period, to the central parts of the Balkan Peninsula, and consequently it can be concluded that these bowls are somewhat older than other varieties. In the period Br D-Ha A1 in north Hungary, variety IIa bowls (turban dish) appear as well, distributed to the east with a new wave of contacts in the same manner as the previous wave, but also to the south along the Bakonjska Range, to the present day Croatia and Slovenia, where in the Ha A1/A2 periods, exclusively variety IIa bowls were found. The variety Ia bowls remained only in the basins of Great Morava and South Morava, as confirmed by a large number of these bowls and also by other ceramic shapes of that stylistic and typological pattern, prevailing within this region in the Ha A periods. The first variety of IIa bowls (Mediana, Kržince) appear only during the later contacts between populations of the Carpathian basin and the central part of the Balkan Peninsula (Ha A2-B period). These bowls, however, are particularly characteristic for Macedonia and the lower Vardar Basin, where variety Ia bowls were not found at all. The later wave of migration, with turban dish bowls (variety IIa), was much more aggressive, as witnessed by many burned settlements from that period in the Vranje-Bujanovac valley and Vardar valley, as well as by changes in settlement topography patterns and material culture.

⁹⁸ Bowls of types I and II occur for the first time in Kastanas in layer 12 (Ha A2-B1) which is parallel with Troy VIIb settlements.

⁹⁹ In the VIIb2 layer, beside the detailed pottery inventory, no bowls of type I and II were found. (Blegen et al. 1958). See also: Hnila 2012. There are also chronological differences between possible movements in the Balkans and the fall of the settlements of Troy VII, so the most intense movements in the Balkans (second wave?) could connect only with the period of hiatus after VII b3 settlement (Wardle et al. 2007, fig. 7).

During Ha B-C periods, bowls of both types (particularly variety IIa) became an inevitable part of the ceramic inventory of nearly all the cultural groups in the Balkan Peninsula, which could be explained by the spread of cultural influence of the new stylistic trend, though, it could be possible that social interactions, which at the time were of greater or lesser intensity, were one of the reasons this ceramic shape had spread into the eastern, southern, and western parts of the Balkan Peninsula in the Ha B period.

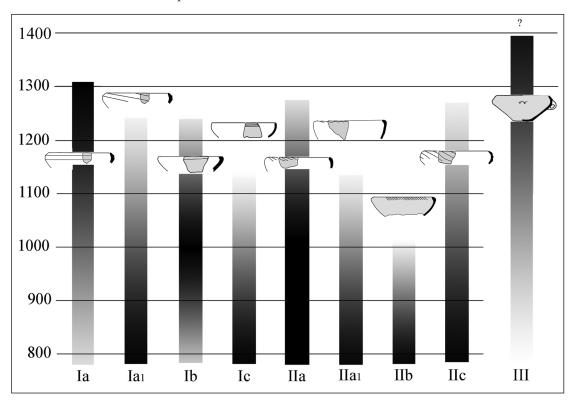


Table 2 – Chronological determination of slightly biconical bowls.

Whether representatives of the mentioned population contacts who brought along bowls to the Balkan Peninsula were actually protagonists of historically known migrations from that period, known under names of Doric and Aegean migrations, the assumed direction of these migrations coincides mainly with the distribution direction of bowl types I and II. Migrations that spread bowl types I and II started in the southern part of Central Europe, but were probably initiated by the representatives of the *Urnenfelder* cultural complex from Central Europe, as observed in certain ceramic shapes found together with type I bowls and originating from cultures of the *Urnenfelder* complex, and in numerous metal finds produced in Central European workshops. It is of interest to point out that bowl distribution across the sites could be followed up to the northwest shores of the Aegean Sea, but they do not appear in southern Trace, south Greece or in Troy, thus imposing the conclusion that their representatives did not reach Troy. Consequently, their possible participation in destruction of VIIb settlements is utterly uncertain, especially because settlements of Troy VIIb existed before the most intense movements in the Balkans.

These population contacts, however, probably started a chain reaction of ethnic movements in the Balkans, causing many ethnic and cultural changes within this territory which led to the creation of new cultural groups to mark the advanced Iron Age. To what extent bowls of this type, particularly variety IIa, left a deep trace in the Iron Age Cultures in the Balkans, is shown in the fact that reproduction of this variety survived within these regions even several centuries later, in late phases of the early Iron Age (6th/5th century BC).

Bibliography

Alexandrov, Ivanov, Hristova 2016 – S. Alexandrov, G. Ivanov, T. Hristova, The Necropolis of Baley in NW Bulgaria and its significance for the end of the Bronze age and beginning of the Iron age in the lower Danube region, in: *Southeast Europe and Anatolia in Prehistory*, eds. K. Bačvarov, R. Gleser, Bonn, 2016: 439-456.

Ailincăi 2015 - S. Ailincăi, Trăind cu morții, Cluj-Napoca, 2015.

Арсић, Булић, Пецикоза 2013 – Р. Арсић, Д. Булић, В. Пецикоза, Градина старијег гвозденог доба Вито из села Брезовице код Ваљева, у: *Резултати нових археолошких истраживања у северозападној Србији и суседним територијама*, ур. В. Филиповић, Р. Арсић, Д. Антоновић, Београд — Ваљево, 2013: 125-131.

Babović 1980 - Lj. Babović, Gradina, Ras, Pazarište, Novi Pazar, Arheološki pregled 21: 41-42.

Babović 1980a – Lj. Babović, Velika gradina, Pazarište, Novi Pazar, Arheološki pregled 21: 42-43.

Bálek 1991 – M. Bálek, Dvojitý kruhový přikop věteřovské skupiny u Šumic, okr. Znojmo. *Archaeologické rozhledy* 43 (2): 247-252.

Blegen *et al.* **1958** – C. W. Blegen, C. G. Boutler, J. L. Caskey, M. Rawson, *Troy settlements VIIa, VIIb and VIII*, vol. 4, part 2, Princeton University.

Bukvić 2000 - Lj. Bukvić, Kanelovana keramika Gava kompleksa u Banatu. Novi Sad, 2000.

Булатовић 2000 – А. Булатовић, Налазишта брњичке културне групе у Врањско – бујановачкој и Прешевској котлини, *Гласник Српског археолошког друштва* 15-16: 23-42.

Булатовић 2006 – А. Булатовић, Неколико забелешки о Медијана културној групи, *Лесковачки зборник* 46: 7-15.

Булатовић 2007 – А. Булатовић, *Врање-културна стратиграфија праисторијских локалитета у Врањској регији*. Београд-Врање, 2007.

Булатовић 2008 – А. Булатовић, Стамбени објекат из позног бронзаног доба са локалитета Медијанасектор југ–прилог проучавању односа параћинске културне групе и брњичке културне групе, *Гласник Српског археолошког друштва* 24: 223-244.

Bulatović 2009 – A. Bulatović, South Morava basin in the Transitional period from The Bronze to the Iron Age, *Старинар н.с.* 57: 57-82.

Булатовић 2010 — А. Булатовић, Порекло и дистрибуција благобиконичних здела увученог фасетираног или канелованог обода са краја бронзаног и почетка гвозденог доба на Балканском полуострву, *Старинар н.с. LIX*: 89-108.

Булатовић 2011 – А. Булатовић, Карактеристичне керамичке форме на централном Балкану и у северној Егеји у позно бронзано доба, *Старинар* LXI: 121-140.

Булатовић, Капуран, Јањић 2013 – А. Булатовић, А. Капуран, Г. Јањић, *Неготин, културна стратиграфија праисторијских локалитета у Неготинској Крајини*. Београд-Неготин, 2013.

Булатовић и Капуран 2014 — А. Булатовић, А. Капуран, Насеље из раног гвозденог доба на локалитету Црквиште у Давидовцу код Врања, *Гласник Српског археолошког друштва* 29: 101-124.

Bulatović, Filipović, Kapuran 2016 – A. Bulatović, D. Filipović, A. Kapuran, The Iron Age Settlement at the Site of Meanište in Ranutovac Near Vranje, in: *Archaeological investigations along the route of the E 75 Highway, 2011-2014*, eds. S. Perić, A. Bulatović, Belgrade, 2016: 91-113.

Bulatović, Kapuran, Milanović 2016 – A. Bulatović, A. Kapuran, D. Milanović, Layers from Metal Ages at the Site of Kovačke Njive in Pavlovac near Vranje, in: *Archaeological investigations along the route of the E 75 Highway, 2011-2014*, eds. S. Perić, A. Bulatović, Belgrade, 2016: 205-219.

Булатовић, Филиповић, Глигорић 2017 — А. Булатовић, В. Филиповић, Р. Глигорић, *Лозница, културна стратиграфија праисторијских локалитета у Јадру, Рађевини и Азбуковици.* Београд-Лозница, 2017.

Bulatović and Filipović 2017 – A. Bulatović, V. Filipović, Morava Valley in the Late Bronze Age and the Transitional period – changes in topography and material culture, *Fortifications: the Rise and Fall of Defended Sites in the Late Bronze and Early Iron Age of South-East Europe*, International Conference, Temisoara, Romania, November 11-13th, Johann Wolfgang Goethe Universität, Franfurt am Main; Museum für Vor-und Frühgeschichte, Staatliche Museen zu Berlin; Exellence Cluster Topoi, University of Exeter; Muzeul Banatului, Timişoara, 2017: 149-159.

Chicideanu 1986 – J. Chicideanu, Die Frühthrakische Kultur, Zur Bronzezeit in Südwest Rumänien, *Dacia* 30, 1-2: 7-47.

Ciugudean 1994 – H. Ciugudean, The Hallstatt A period in central Transylvania. in: *The early Hallstatt period in South-eastern Europe*, eds. H. Ciugudean, N. Boroffka, Alba Iulia, 1994: 25-40.

Czyborra 2005 – I. Czyborra, *Die ältere Eisenzeit türkisch Thrakiens und ihr Verhältnis zur südosteuropäischen Urnenfelder-und Hallstattzeit*, Doctoral Dissertation, Freie Universität, Berlin.

Čović 1983 – B. Čović, Prelazna zona i Srednjobosanska kulturna grupa, in: *Praistorija jugoslavenskih zemalja* IV, ur. A. Benac, Sarajevo, 1983: 390-460.

Demetrova 1987 – S. Demetrova, Gegenseitige kontakte der Urnenfelderkulturen in der Ostslowakei, in: *Die Urnenfelderkulturen Mitteleuropas*, Symposium Liblice, 21-25.10.1985. Praha, 1987: 305-315.

Dmitrović 2014 – K. Dmitrović, Notes on Urnfield Period in the Čačak Region, Serbia. in: *The beginning of the Late Bronze age between the Eastern Alps and the Danube*, eds. D. Ložnjak-Dizdar, M. Dizdar, Zagreb, 2014: 262-271.

Dular 1982 – J. Dular, *Halštatska keramika v Sloveniji*. Ljubljana, 1982.

Gabrovec 1983 – S. Gabrovec, Dobovsko-Ruška grupa and Ljubljanska grupa, in: *Praistorija jugoslavenskih zemalja* IV, ur. A. Benac, Sarajevo, 1983: 54-96.

Гарашанин 1973 – М. Гарашанин, Праисторија на тлу Србије. Београд, 1973.

Garašanin 1983 – M. Garašanin, Centralnobalkanska regija. Kasno bronzano doba. Medijana – grupa, in: *Praistorija jugoslavenskih zemalja* IV, ur. A. Benac, Sarajevo, 1983: 761-772.

Garašanin 1983a – M. Garašanin, Centralnobalkanska regija. Srednje bronzano doba. Paraćinska grupa, in: *Praistorija jugoslavenskih zemalja* IV, ur. A. Benac, Sarajevo, 1983: 727-735.

Garašanin 1996 – M, Garašanin, Die kulturelle und chronologische Stellung der Mediana-Gruppe, in: *The Yugoslav Danube basin and the Neighbouring Regions in the 2 nd millennium b.c.*, ed. N. Tasič, Simposium in Vršac, Belgrade-Vršac, 1996: 201-218.

Гарашанин *et al.* **1971** – М. Гарашанин, В. Санев, Д. Симоска, Б. Китаноски, Предисториски култури во Македонија, in: *Catalogue of exhibition*, ed. В. Санев, Штип, 1971.

Georgiev 1989 – Z. Georgiev, *Keramika gvozdenog doba u skopsko-kumanovskom i ovčepoljsko – bregalničkom regionu*, MA thesis, University of Belgrade.

Георгиева 2003 – Р. Георгиева, Керамиката от ранната желязна епоха в Югозападна Бъгария и феноменът "Цепина", in: *Пирајхме* 2, ed. Б. Таневски, Куманово, 2003: 159-195.

Gimbutas 1965 – M. Gimbutas, *Bronze Age Cultures in Central and Eastern Europe*. Paris-Haque-London, 1965.

Gotzev 1994 – A. M. Gotzev, Decoration of the Early Iron Age pottery from south-east Bulgaria, in: *The early Hallstatt period in South-eastern Europe*, eds. H. Ciugudean, N. Boroffka, Alba Iulia, 1994: 97-128.

Govedarica 1982 – B. Govedarica, Prilozi kulturnoj stratigrafiji praistorijskih gradinskih naselja u jugozapadnoj Bosni, *Godišnjak Centra za balkanološka istraživanja* 18: 111-188.

Gumă 1993 - M. Gumă, Civilizația primei epoci a fierului în sud-vestul României. Bucuresti, 1993.

Gumă 1995 – M. Gumă, The end of the Bronze Age and the beginning of the Early Iron Age in SW Romania, N Serbia and NW Bulgaria. A short review. *Thraco-Dacica*, 16, 1-2: 99-137.

Gumă 1997 - M. Gumă, Epoca bronzului în Banat. Timișoara, 1997.

Hänsel 1976 – B. Hänsel, *Beiträge zur Regionalen und Chronologischen Gliederung der Älteren Hallstattzeit an der Unteren Donau.* Bonn, 1976.

Hänsel und Medović 1991 – B. Hänsel, P. Medović, *Vorbericht über die jugoslawisch-deutschen Ausgrabungen in der Siedlung von Feudvar bei Mošorin (Gem. Titel, Vojvodina) von 1986-1990*, Mainz am Rhein: Bericht der Römisch-Germanischen Kommission 72.

Hellebrandt Magdolna 1990 – B. Hellebrandt Magdolna, Az Igrici kerámiadepot, *Communicationes Archaeologicae Hungariae*: 93-111.

Heurtley 1939 – W. A. Heurtley, *Prehistoric Macedonia*. Cambridge, 1939.

Hochstetter 1984 – A. Hochstetter, *Kastanas, Die handgemachte Keramik*, Prähistorische Archäologie in Südosteuropa 2/3. Berlin, 1984.

Hnila 2012 – P. Hnila, *Pottery of Troy VIIb*, Vol.1, Dissertation, Eberhard Karls Universität Tübingen.

Kalicz-Schreiber 2010 – R. Kalicz-Schreiber, Ein Graberfeld der Spatbronzezeit von Budapest-Békásmegyer, Budapest, 2010.

Капуран, Булатовић, Јовановић 2014 – А. Капуран, А. Булатовић, И. Јовановић, *Бор и Мајданпек, културна стратиграфија праисторијских локалитета између Ђердапа и Црног Тимока*. Београд-Бор, 2014.

Kemenczei 1975 – T. Kemenczei,. Zur Verbreitung der Spätbronzezeitlichen Urnenfelderjultur östlich der Donau, *Folia Archaeologica* 26: 45-70.

Kemenczei 1981 – T. Kemenczei, Das Spätbronzezeitliche Urnengräberfeld von Alsóberecki, *Folia Archaeologica* 32: 69-91.

Kemenczei 1982 - T. Kemenczei, Die Gáva-Kultur aus Nagykálló, Folia Archaeologica 33: 73-95.

Kemenczei 1984 - T. Kemenczei, Die Spatbronzezeit Nordostungarns. Budapest, 1984.

Kemenczei 1989 – T. Kemenczei, Bemerkungen zur Chronologie der Spätbronzezeitlichen Grabfunde im Donau-Theiß zwischenstromgebiet, *Communicationes Archaeologicae Hungariae*: 73-96.

Kovács 1965 - T. Kovács, A halomsíros kultúra leletei bagon, Folia Archaeologica 17: 65-86.

Kovács 1966/1967 – T. Kovács, Eastern connections of North-Eastern Hungary in the Late Bronze Age, *Folia Archaeologica* 18: 27-58.

Крстић 2003 – Д. Крстић, Гламија, некропола бронзаног доба у Корбову. Београд, 2003.

Лазић 2005 – М. Лазић, Праисторијско насеље у Пиљаковцу код Владичиног Хана, in: *Е 75- Археолошка истраживања*, св. 1/2004, ed M. Brmbolić, Београд, 2005: 131-174.

Majnarić-Pandžić 1986 – N. Majnarić-Pandžić, Prilog poznavanju kasnog brončanog i starijeg željeznog doba na Kordunu i Baniji, in: *Zbornik radova sa znanstvenog skupa održanog u Karlovcu*, 12-14.X. 1983. Zagreb, 1983: 29-43.

Medović 1978 – P. Medović, Naselja starijeg gvozdenog doba u jugoslovenskom Podunavlju. Beograd, 1978

Medović 1988 - P. Medović, Kalakača, naselje ranog gvozdenog doba. Novi Sad, 1988.

Medović i Medović 2010 – P. Medović, I. Medović, *Gradina na Bosutu, naselje starijeg gvozdenog doba*, Novi Sad, 2010.

Mitrevski 1993 – D. Mitrevski, A Brnjica Type Necropolis near Skopje, *Старинар н.с.* LXIII-LXIV: 115-124.

Митревски 1997 – Д. Митревски, Протоисториските заедници во Македонија. Скопје, 1997.

Nebelsick 1994 – L. D. Nebelsick, Der Übergang von der Urnenfelder-zur Hallstattzeit am nordlichen Ostalpenrand und am nördlichen Transdanubien, in: *Archäologische untersuchungen zum Übergang von der Bronze-Zur Eisenzeit Zwischen Nordsee und Kaukaus*, Kolloquiums in Regensburg, 28-30.October, Bonn, 1992: 307-363.

Paulik 1962 – J. Paulik, Das Velatice-Baiedorfer Hügelgrab in Očkov, *Slovenská Archeológia* 10-1: 5-96. **Paulik 1963** – J. Paulik, K problematike Čakanskèj kultüry v karpatskej kotline, *Slovenská Archeológia*, 11-2: 269-332.

Папазовска 2005 – А. Папазовска, Слоеви од железното време на Вардарски рид, in: *Вардарски рид* том 1, Скопје, 2005: 115-158.

Perić 1989 - S. Perić, Gradina, Hadžići, Arheološki pregled 1987: 60-62.

Peschel 1987 – K. Peschel, Zu Den Grundlagen der Jüngeren Bronzezeit in Thüringen, in: *Die Urnenfelderkulturen Mitteleuropas*, Symposium Liblice, 21-25.10.1985. Praha, 1987: 111-127.

Петровић 2006 – Б. Петровић, Калуђерске ливаде, некропола бронзаног доба. Београд, 2006.

Петровић 2010 – Б. Петровић, *Асфалтна база у Земуну, насеље раног гвозденог доба*. Београд, 2010. **Pivovarova 1965** – M. Pivovarova, K problematika mohyl v Lužickej kulture, *Slovenská Archeológia* 12-1: 107-162.

Prendi 1982 – F. Prendi, Die bronzezeit und der beginn der eisenzeit in Albanien, in: *Sudosteuropa zwischen 1600 und 1000 V. Chr.*, Berlin, 1982: 203-233.

Przybyła 2009 – M. Przybyła, *Inter contacts in the Western Carpathian area at the turn of the 2nd and 1st millennia BC*. Warsaw, 2009.

Rihovsky 1961 – J. Rihovsky, Počatky velaticke kultury na Morave, Slovenská Archeológia 9: 112-134.

Rücker 2007 – J. Rücker, *Das spätbronze- und früheisenzeitliche Gräberfeld von Eisenhüttenstadt, Studien zur Lausitzer Kultur in Ostbrandenburg*, Dissertation, Rheinischen Friedrich-Wilhelms-Universität zu Bonn.

Smirnova 1974 – G. J. Smirnova, Complexele de tip Gáva-Holihrady- o comunitate cultural- istorică, *Istorie veche și arheologie* 3-25: 359-380.

Srejović 1959/1960 – D. Srejović, Praistorijska nekropola u Donjoj Brnjici, *Glasnik Muzeja Kosova i Metohije* 4-5: 83-135.

Станковски 2008 – J. Станковски, Тумулот I од тумуларната некропола кај селото Стрновац, Општина Нагоричане, *Macedoniae Actae Archaeologica* 18: 135-151.

Stefanovich 1973 – R. Stefanovich, Some Balkan Elements in the Aegean Migrations, in: *Actes du VIIIe congres international des sciences prehistoriques et protohistoriques*, ed G. Novak, Beograd, 1973: 148-161.

Stojić 1986 - M. Stojić, Gvozdeno doba u basenu Velike Morave. Beograd-Svetozarevo, 1986.

Стојић 2001 – М. Стојић, Брњичка културна група у басену Јужне Мораве: генеза, развој и хронологија, *Лесковачки зборник* 41: 15-94.

Stojić 2001a – M. Stojić, The Brnjica cultural group in the South Morava basin, *Старинар н.с.* 50: 9-60. Стојић 2004 – М. Стојић, *Пањевачки рит.* Београд, 2004.

Стојић и Чађеновић 2001 – М. Стојић, Г. Чађеновић, Керамика из периода прелаза бронзаног у гвоздено доба на локалитету Конопљара у Читлуку, in: *Археолошка налазишта Крушевца и околине*, ed. H. Тасић, Крушевац—Београд, 2001: 47-80.

Stratan und Vulpe 1977 – I. Stratan, A. Vulpe, Der Hügel von Susani, *Praehistorische Zeitschrift* 52, Band 1977, heft 1: 28-60.

Stuchlĭk and Trčala 1991 – S. Stuchlĭk, F. Trčala, Únetická pohřebiště b Hradča nech, *Archaeologické rozhledy* 43 (2): 225-246.

Studeníková and Paulík 1983 – E. Studeníková, J. Paulík, *Osada z dobu bronzovej v Pobedime*. Bratislava, 1983.

Šimić 1994 – J. Šimić, Early Hallstatt horizon in north-eatern Slavonia, in: *The early Hallstatt period in South-eastern Europe*, eds. H. Ciugudean, N. Boroffka, Alba Iulia, 1994: 197-215.

Tasić 1959/1960 – N. Tasić, Završna istraživanja na praistorijskom naselju kod Valača, *Glasnik Muzeja Kosova i Metohije* 4-5: 11-82.

Teržan i Črešnar 2014 – B. Teržan, M. Črešnar, *Absolutno datiranje bronaste i železne dobe na Slovenskem*. Ljubljana, 2014.

Todorović 1977 – J. Todorović, Karaburma II. Beograd, 1977.

Vasilev 1980 – V. Vasilev, Așezarea fortificată din prima vĭrstă a fierului de la Ciceu-Corabia, jud. Bistrita-Násáud, *Acta Mysei Napocensis* 42: 31-63.

Vicze 2011 – M. Vicze, Bronze Age Cemetery at Dunaújváros-Duna-dűlő. Budapest, 2011.

Vinski-Gasparini 1973 – K. Vinski-Gasparini, *Kultura polja sa žarama u sjevernoj Hrvatskoj*. Zadar, 1973.

Vinski-Gasparini 1983 – K. Vinski-Gasparini, Grupa Zagreb, in: *Praistorija jugoslavenskih zemalja* IV, ur. A. Benac, Sarajevo, 1983: 63-96.

Вранић 2002 - С. Вранић, Белегиш, Стојића гумно-некропола спаљених покојника. Београд, 2002.

Wardle, Newton, Kuniholm 2007 – K. A. Wardle, M. Newton, P. I. Kuniholm, Troy VIIb2 Revisited, The date of the transition from Bronze to Iron Age in the Northern Aegean, in: *The Struma/Strymon River Valley in Prehistory*, eds H. Todorova, M. Stefanovich, G. Ivanov, Sofia, 2007: 481-498.

Zaharia 1965 – E. Zaharia, Sur Le Hallstatt ancien de Transylvanie, Dacia 9: 83-104.

List of authors / Списак аутора

Stefan Alexandrov

National Institute of Archaeology and Museum Bulgarian Academy of Sciences 2 Saborna Str. 1000 Sofia, Bulgaria stefanalexandrov@abv.bg

Dragana Antonović

Institute of Archaeology, Belgrade Knez Mihailova 35/IV 11000 Belgrade, Serbia d.antonovic.960@gmail.com

Tiberius Bader

Max Eyth Str. 12 71282 Hemmingen, Deutschland tib.bader@web.de

Martina Blečić Kavur

Univerza na Primorskem, Fakulteta za humanistične študije, Titov trg 5 6000 Koper, Slovenia martina.blecic.kavur@upr.si

Jan Bouzek

Charles University Smetanovo nábřeží 6 11001 Prague, Czech Republic Jan.Bouzek@ff.cuni.cz

Dragan Božič

Znanstvenoraziskovalni center SAZU Inštitut za arheologijo Novi trg 2 SI–1000 Ljubljana, Slovenija dragan.bozic@zrc-sazu.si

Игорь Викторович Бруяко

Одесский археологический музей Национальной академии наук Украины Ланжероновская ул.4 65026 Одесса, Украина ibruyako@yandex.ru

Aleksandar Bulatović

Institute of Archaeology, Belgrade Knez Mihailova 35/IV 11000 Belgrade, Serbia abulatovic3@gmail.com

Marko Dizdar

Institute of Archaeology Ljudevita Gaja 32 10000 Zagreb, Croatia marko.dizdar@iarh.hr

Katarina Dmitrović

Narodni muzej Čačak Cara Dušana 1 32000 Čačak, Serbia katarina.dmitrovic@gmail.com

Aca Đorđević

National Museum in Belgrade Trg Republike 1a 11000 Belgrade, Serbia a.djordjevic@narodnimuzej.rs

Vojislav Filipović

Institute of Archaeology, Belgrade Knez Mihailova 35/IV 11000 Belgrade, Serbia vfilipov1@gmail.com

Blagoje Govedarica

Institut für Prähistorische Archaologie der FU Berlin, c/o Eurasien Abteilung des DAI Im Dol 2-6, Haus II 14195 Berlin, Germany blagoje.govedarica@dainst.de

Mitja Guštin

profemeritus Pusterla 7 6330 Piran, Slovenia mitja.gustin@upr.si

† Bernhard Hänsel

Institut für Prähistorische Archäologie, Freie Universität Fabeckstraße 23-25 14195 Berlin, Deutschland

Aleksandar Kapuran

Institute of Archaeology, Belgrade Knez Mihailova 35/IV 11000 Belgrade, Serbia a.kapuran@gmail.com

Boris Kavur

Univerza na Primorskem, Fakulteta za humanistične študije, Titov trg 5 6000 Koper, Slovenia boris.kavur@upr.si

Jovan Koledin

Muzej Vojvodine Dunavska 35 21000 Novi Sad, Srbija jovan.koledin@muzejvojvodine.org.rs

List of authors / Списак аутора

Мирослав Д. Лазић

Универзитет у Београду, Филозофски факултет, Одељење за археологију, Археолошка збирка Чика Љубина 18-20 11000 Београд, Србија mdlazic@gmail.com

Ljuben Leshtakov

National Institute of Archaeology with Museum,
Bulgarian Academy of Sciences
Sofia, 2 Saborna str.
1000 Sofia, Bulgaria
1 leschtakow@abv.bg

Marija Ljuština

Univerzitet u Beogradu, Filozofski fakultet Odeljenje za arheologiju Čika-Ljubina 18-20 11000 Beograd mljustin@f.bg.ac.rs

Daria Ložnjak Dizdar

Institut za arheologiju Ljudevita Gaja 32 10000 Zagreb, Hrvatska dldizdar@iarh.hr

Predrag Medović

Narodnog fronta 71 21000 Novi Sad, Serbia

Dragi Mitrevski

Ss. Cyril and Methodius University blvd. Goce Delcev 9 1000 Skopje, Macedonia dragimit@yahoo.com

Ognjen D. Mladenović

Institute of Archaeology, Belgrade Knez Mihailova 35/IV 11000 Belgrade, Serbia mladenovic40@gmail.com

Kristina Mihovilić

Arheološki muzej Istre Carrarina ulica 3 52100 Pula, Hrvatska kristina.mihovilic@ami-pula.hr

Barry Molloy

School of Archaeology University College Dublin Newman Building Dublin 4, Ireland barrymolloy@gmail.com

Јовица Станковски

T. Думба 88/4-21 1100 Куманово, Македонија stankovskijovica@yahoo.com

Milorad Stojić

Milutina Milankovića 28 11000 Beograd, Srbija milestojic@gmail.com

Marija Svilar

Institute of Archaeology, Belgrade Knez Mihailova 35/IV 11000 Belgrade, Serbia marijasvilar@yahoo.com

Josip Šarić

Institute of Archaeology, Belgrade Knez Mihailova 35/IV 11000 Belgrade, Serbia josips@eunet.rs

Biba Teržan

Filozofska fakulteta, Univerza v Ljubljani Aškerčeva cesta 2 1000 Ljubljana, Slovenia biba.terzan@ff.uni-lj.si

Денис Топал

Университет «Высшая антропологическая школа» Зимбрулуй 10а 2024 Кишинев, Молдова denis.topal@gmail.com

Selena Vitezović

Institute of Archaeology, Belgrade Knez Mihailova 35/IV 11000 Belgrade, Serbia selenavitezovic@gmail.com