## Papers in Honour of Rastko Vasić 80<sup>th</sup> 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)

# Iron Spears of the *Balkan Syginnae* Type from the Central Balkans (inspired by R. Vasić)

### Vojislav Filipović

Abstract: The paper addresses a particular type of iron spears which are found in the territory of Central Balkans in the period between the 6th and the 5th century BC, and which could broadly be classified as pike-like spears. As it follows in the paper, this particular type of iron spear is not uncommon in the wider area of European continent during the 1st millennium BC, and later it evolves into the Roman pilum, and specific Medieval pike-like spears. It seems as if both the appearance and evolution of such spears in a wider area is relatively concurrent, yet unrelated to each other, and it seems that the appearance of such spears represents a reaction to a more intensified use of defensive warfare equipment. In this paper, the aforementioned type of spear is distinguished from the Cyprian syginnae, which served as a standard for the first example published by R. Vasić back in 1996. Instead, a new and slightly revised term is proposed, containing the adjective Balkan. Such spears are frequently recorded in the Drim and Vardar river valleys and usually made of iron, while the largest examples measure more than 1,2 m in length.

Key Words: Syginnae iron spears, pike-like spears, Europe, Central Balkan, systematization, distribution

The contribution of Rastko Vasić both to Serbian and Yugoslav prehistoric archaeology is immense, and even nowadays his papers represent reliable sources of ideas and the basis for opuses focusing on the Bronze or Iron Age of practically all of southeastern Europe. Vasić's guidelines can be followed in his complex analysis of various bronze objects, considering that he published five volumes in the prestigious *Prähistorische Bronzefunde* edition, or in the detailed Iron Age chronology of the former Yugoslavia, which was also his dissertation thesis. Nevertheless, besides the broad and challenging topics, colleague Rastko Vasić also published short papers focused on small range phenomena, such as papers on double pins and sewing needles, Bronze Age razors in Serbia, solid-hilted swords, Iron Age boat-shaped earrings and rock drawings from Gusinje in Montenegro. A special inspiration for myself was always his short paper published in Journal of SAS from 1996, focusing on an unusual iron spear from Sanski Most, dated to the period between the 7th and the 6th century BC.<sup>2</sup>

At the time of publishing, the spear in question, typologically distinguished as a syginnae – which is, in fact, a bronze spear with more than 1 m in length originating from Cyprus, was once again addressed in a monograph on spears from the *Prähistorische Bronzefunde* edition. In that monograph, the examples from the Romaja necropolis that dated to the Hallstatt period were attributed to the same type.<sup>3</sup> In general, Vasić's definition of that spear is that it represents a long and pointed iron rod, often more than 1 m long. The lower part of the spear usually possesses a socket for the connection with the shaft, and without a doubt resembles both the Cyprian syginnae, even though those are often shorter and made of bronze, as well as the later Roman pilum. In the aforementioned paper, the syginnae from Sanski Most was based on other Greek weaponry such as makhairas, xiphos swords or greaves connected directly to Cyprian examples, which consequently led to the adoption of the term, regardless of whether it is the most appropriate one. Similarly,

<sup>&</sup>lt;sup>1</sup> Refer to Rastko Vasić's detailed bibliography in the beginning of this volume.

<sup>&</sup>lt;sup>2</sup> Васић 1996, 45-48.

<sup>&</sup>lt;sup>3</sup> Vasić 2015, 27-28.

S. Marinatos published the spears from the Vaphio tomb as syginnae, although those examples are common spears that possess a bronze plating of the wooden shaft.<sup>4</sup> Bearing in mind that R. Vasić initiated the discussion and proposed the term, it can be suggested that the term syginnae is supplemented with the geographical designation "Balkan", in order to distinctly separate those examples from the Cyprian syginnae and a particular issue connected with them, as well as from the other examples of Iron Age pike-like spears found throughout Europe. Namely, the professional literature still faces some polemics and uncertainties on Cyprian syginnae, especially on the issue of whether those represent obols or skewers or some type of javelins.<sup>5</sup> Nevertheless, such issue does not reflect on the syginnae in question in this paper, since those certainly represent a sort of heavy and piercing javelin similar to the examples that appeared in the Caucasus region during the 4th millennium BC<sup>6</sup> and, with various modifications, prevailed up to the Late Middle Ages. Nonetheless, R. Vasić's paper represents one of the few addressing the issue of pike-like types of spears, and to this day not a single extensive study encompassing a certain region, like the one on the *soliferreum* type of spears, <sup>7</sup> has been published.

The Balkan syginnae could be defined as a pole pike-like weapon possessing a tang or a simple hole for fixation with the shaft (similar to the Roman pilum), rarely with the socket, but with a square and occasionally round cross-section, made of full iron and slightly thickening from the top towards the body. Certain examples had no particular system of fixation and were probably simply implanted into the wide and hollowed wooden shaft. The examples of spears with any sort of blades or mid-rib should not be considered syginnae since a syginnae represents exclusively a throwing type of weapon, in contrast to the spears with blades that can have multiple functions (cutting, piercing, throwing, etc.). Also, syginnae should not be mixed with pilums, which possess either a small blade or a pyramidal head on the point and, having appeared later, are primarily connected to the final centuries BC.<sup>8</sup>

In the Central Balkans and surrounding territories, at least 24 spears are recorded that could be classified in a broader sense as the Balkan syginnae. We have to mention that the number is most likely even higher, yet, due to the uncertainties of the type of the object itself, those are either unpublished or inadequately published. In the Romaja monograph, for example, even though most of the syginnae are classified as pilums, the description of finds from grave 5 notes: *Five fragments of iron rods with a round cross-section. Unknown purpose.*<sup>9</sup>

### Catalogue of finds (Pl. I)

- 1. A fragment of a bent iron object with a square cross-section which could possibly be classified as a spear of syginnae type originates from grave 7 at the Karagač necropolis near Zvečan. Pointed top is probably missing, even though it is not noted in the original text. Discovered alongside a common spear. Preserved length: 17,9 cm; width: 0,7 cm (Pl. I/1).<sup>10</sup>
- 2. A "…large bronze pin with square cross-section...",<sup>11</sup> which R. Vasić did not include in his monograph on pins from the Central Balkans,<sup>12</sup> originates from Kočane near Štip. It is likely that it represents a bronze syginnae, but without the missing accompanying dimensions, the assumption remains less certain (Pl. I/2). 3. Quite poorly preserved iron spear without a blade, with a round cross-section of the top positioned on a small socket, probably originates from grave 7 at the Milici necropolis near Đevđelija. Discovered along-side a common spear. Dimensions unknown (Pl. I/3). <sup>13</sup>

<sup>&</sup>lt;sup>4</sup> Marinatos 1936/37, 187 and further.

<sup>&</sup>lt;sup>5</sup> Karageorghis 1970, 35 and further.

<sup>&</sup>lt;sup>6</sup> Мунчаев 1975, 306, 397; Courcier 2014, 611-614.

<sup>&</sup>lt;sup>7</sup> Quesada Sanz 1993.

<sup>&</sup>lt;sup>8</sup> Radman-Livaja 2004, 23 and further; Pernet 2010, 63 and further.

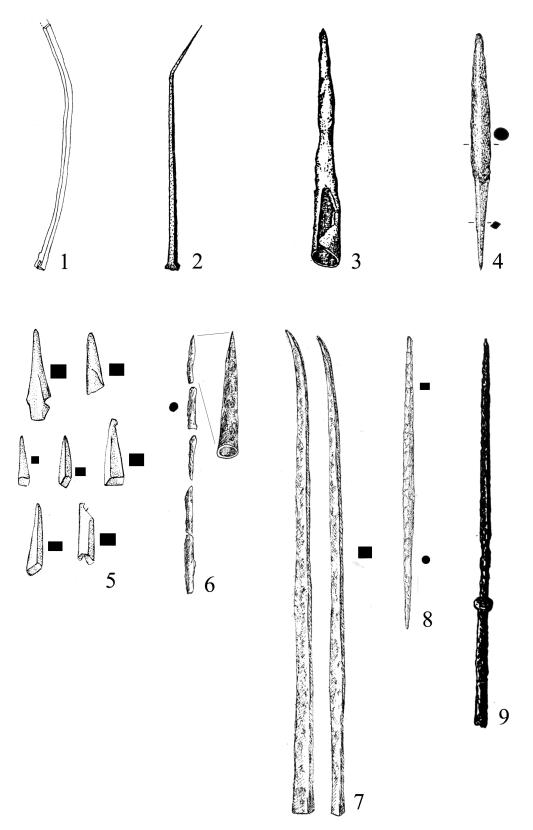
<sup>&</sup>lt;sup>9</sup> Đurić, Glišić i Todorović 1975, 44, cat. 14.

<sup>10</sup> Srejović 1973, 56, Pl. IX/4.

<sup>&</sup>lt;sup>11</sup> Георгиев 1981, 66, cat. 7, fig. 1/7.

<sup>12</sup> Vasić 2003.

<sup>&</sup>lt;sup>13</sup> Пашик, Винчик, Ивановски и Георгиев 1987, Т. V/7.



Pl. I – The examples of Balkan syginnae and similar finds from the Central Balkans (without scale) (1: after Srejović 1973: Pl. IX/4; 2: Георгиев 1981: сл. 1/7; 3: Пашик, Винчик, Ивановски и Георгиев 1987: Т. V/7; 4: Митревски 1991: Т. XVI/17; 5-8: Đurić, Glišić i Todorović 1975: Т. II/7, Т. III/11, Т. IV/11, Т. XIV/9 and Т. XXI/7; 9: Васић 1996: сл. 1/1.).

- 4. An iron spear with a tang for implantation on a wooden shaft. The tang is rhomboid in cross-section originates from grave 60 at the Dedeli necropolis near Valandovo. Discovered alongside a common spear. Length: 14,2 cm; diameter: 0,9 cm (Pl. I/4).<sup>14</sup>
- 5. At least 12 long iron spears of the syginne type with a square cross-section originate from grave 1 of mound 1 at the Romaja necropolis near Prizren. Previous researchers classified those as spears-pilums. Several pieces with the cross-shaped lower end and thorn-shaped upper end. Alongside the syginnae, the grave contained four common spears, iron labrys and a dagger. Length: 120 cm; width: 4,5 cm (Pl. I/5). 15
- 6. A fragment of an iron object with a round cross-section and pointed top originates from grave 5 of mound 1 at the Romaja necropolis near Prizren. The object probably represents the end of a spear of the syginnae type. It was found together with a common spear, a dagger, an iron sword and an axe of the so-called nadžak type. Length of the fragmented end: 4,5 cm (Pl. I/6). 16
- 7. At least 5 long iron spears of the syginnae type, square in cross-section, originate from grave 17 of mound 1 at the Romaja necropolis near Prizren. Previous researchers classified those as spears-pilums. The upper ends of the spears are slightly bent and twisted. Alongside the syginnae, the grave contained two iron axes, four common spears, and a dagger. Length: 56 cm; width: 1,5 cm (Pl. I/7).<sup>17</sup>
- 8. An iron syginnae probably originates from grave 32 of mound 1 at the Romaja necropolis near Prizren. Previous researchers treated the find as a possible pin. It has a round cross-section and slightly narrows towards both ends, of which one has round and the other square cross-section. The grave also contained three common spears, an iron sword, and a dagger. Length: 22,5 cm (Pl. I/8).<sup>18</sup>
- 9. An iron spear of the syginnae type with a socket and rod, and round bulge between. The grave also contained two common iron spears and an iron dagger. Length: 46 cm (Pl. I/9).<sup>19</sup>

### About the phenomenon of the pike-like spears

The spears are one of the earliest combat and hunting weapons, originating from the paleolithic. Originally spears were simple, made out of a wooden shaft sharpened at one end.<sup>20</sup> In time, flint points resembling the later iron spears were added to the shaft. Pointed and fire-hardened ends of shafts and spears made of bone and antler, like the ones from the Upper Paleolithic, appear as well.<sup>21</sup> The practice of bone reinforcements seems to prevail up to the Bronze and Iron Age since examples similar to the paleolithic ones are recorded in the territory of Poland up to the end of the Ha D period.<sup>22</sup> In terms of functionality, it seems that such shape of horn-made spears without a blade prevailed during the Metal Ages due to the simplicity of the construction and probably because of a deeper penetration into the body of, most likely, large animals. With that in mind, such examples could primarily be characterized as hunting spears, though their role in warfare should not be excluded. Similar reinforcements of the lower part of the spear, the so-called butt, appeared from the Iron Age. In cases of damage to the primary spear, butts could be used as an auxiliary weapon. Copper pikes with a round or square cross-section, measuring a length of 25 to 30 cm, and originating from the area of the northern and western Caucasus could be considered the first metal examples of the pike-like spears. Such examples are common for the Majkop culture during the second half of the 4th millennium BC (Map 1).<sup>23</sup> Almost identical ex-

<sup>&</sup>lt;sup>14</sup> Митревски 1991, 32-33, Т. XVI/17.

<sup>15</sup> Đurić, Glišić i Todorović 1975, 38-39, cat. 7, T. II/7.

<sup>&</sup>lt;sup>16</sup> Đurić, Glišić i Todorović 1975, 44, cat. 11, Т. III/11 и Т. IV/11.

<sup>&</sup>lt;sup>17</sup> Đurić, Glišić i Todorović 1975, 66, cat. 9, T. XIV/9.

<sup>&</sup>lt;sup>18</sup> Đurić, Glišić i Todorović 1975, 85, cat. 7, T. XXI/7.

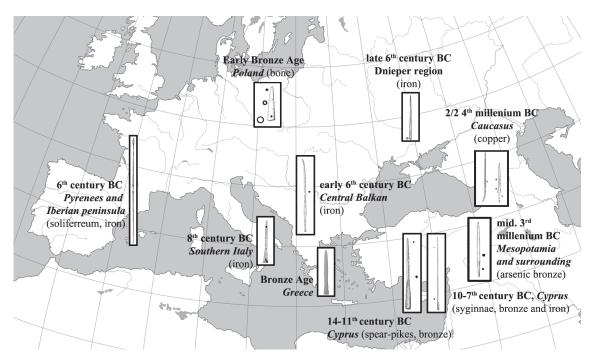
<sup>&</sup>lt;sup>19</sup> Васић 1996, 46, fig. 1/1.

<sup>&</sup>lt;sup>20</sup> Eight examples from Schöningena in Germany, dated around 300.000 BP, are considered one of the earliest pointed wooden spears. On the subject, refer to Baales und Jöris 2003, 281 and further.

<sup>&</sup>lt;sup>21</sup> A fine example are examples from the area of Pyrenees, which are dated around 20.000 ВР. Ж.М.Петильон и М. Лангле 2011, 78 and further.

<sup>&</sup>lt;sup>22</sup> Gedl 2009, 98 and further.

<sup>&</sup>lt;sup>23</sup> Courcier 2014, 611-614.



Map 1 – The appearance of the pike-like spears in Europe and Western Asia.

amples, made of arsenic bronze and similar in dimensions as well, appeared slightly later, during the middle of the 3rd millennium BC across a wide area of Mesopotamia and neighboring regions, where they represent a component of Sumero-Akkadian offensive weaponry.<sup>24</sup> It should be noted that there are examples decorated with incising in the aforementioned area.<sup>25</sup> During the Bronze Age in Europe, besides the aforementioned bone spearheads/reinforcements of wooden spears from Poland,<sup>26</sup> the pike-like spears occur in Cyprus as well, dated to a period between the 14th and the 11th century BC.<sup>27</sup> Save for those, there is a single example from Tanagra in Greece,<sup>28</sup> which cannot be taken as an argument for the idea of systematic use and production of this type of spear. Later, around the 10th century BC, the aforementioned Cyprian bronze syginnae mentioned by Herodotus appeared,<sup>29</sup> and slightly later (7th century BC) examples made of iron appeared as well. Such syginnae, despite the opinion of V. Karageorghis, could represent a further step in the evolution of the pike-like spears that preceded them on this island.

The first examples made of iron in the area of southern Apennines appeared, as it seems, during the end of the 8th century BC, although it is an isolated example from tomb J21 at the site of Sala Consilina.<sup>30</sup> It is an example with a massive socket and a spike with a square cross-section, measuring a length of around 20 cm. From the beginning of the 6th century BC, the number of this type of spear in the aforementioned area increased, now measuring more than 60 cm in length. Almost all of the south-Apennine examples possess a socket and most often a square cross-section.<sup>31</sup> In the steppe areas of eastern Europe, examples made of iron appeared during the end of the 6th century and the beginning of the 5th century BC, as shown in the central region of the Dnieper

<sup>&</sup>lt;sup>24</sup> Gernez et Souleiman 2013, 43-44.

<sup>&</sup>lt;sup>25</sup> Gernez et Souleiman 2013, 58, fig. 12.

<sup>&</sup>lt;sup>26</sup> Gedl 2009, 98 and furhter.

<sup>&</sup>lt;sup>27</sup> Karageorghis 1970, 44, fig. 7.

<sup>&</sup>lt;sup>28</sup> Avila 1983, 79, Taf. 22/162H.

<sup>&</sup>lt;sup>29</sup> Karageorghis 1970, 38, fig. 4.

<sup>&</sup>lt;sup>30</sup> Inall 2009, 55, fig. 11/9.5.

<sup>31</sup> Inall 2009, 64 and further.

River.<sup>32</sup> Those examples are usually more than 30 cm long.<sup>33</sup> Thus, the only example resembling the one from Sanski Most, published by R. Vasić in the aforementioned paper, originated from mound 2 of the Nartan necropolis in North Caucasus.<sup>34</sup> The example in question is made of iron, has a square cross-section, and was chronologically positioned into the 5th and the beginning of the 4th century BC. On the other hand, it is interesting to mention that pilum-like examples of iron spears, but with a round socket and a small massive blade on the iron rod with a square cross-section and length of about 50 cm, appeared in the area of the northern Black Sea region at the end of the 6th century BC as well.<sup>35</sup>

The Balkan syginnae, pike-like spears, can be dated to a period from the beginning of the 6th century BC based on the accompanying archaeological material from the graves. Such examples measure around 1 m in length. Those will be further discussed in the concluding remarks. A specific class of heavy javelin measuring up to 2 m in length and completely made of iron (both the blade and the shaft), known as *soliferreum*, should be mentioned as well. Those appeared in the area north of the Pyrenees and in the Iberian Peninsula during the 6th century BC.<sup>36</sup> The spearheads of certain examples are made like pike-like spears, although most of the examples possess a sort of small blade or even a small pyramidal blade, similar to the pilum.<sup>37</sup> During the 4th century BC, a spear resembling the Roman pilum appeared with the Celts, but it usually possesses a socket for implantation on the shaft.<sup>38</sup> Later, in the 3rd and the 2nd century BC, a short pike with square cross-sections and wide socket appears occasionally, as is the case with Romania.<sup>39</sup>

In the later period, pike-like spears made of iron were relatively frequent, yet became shorter compared to the earlier examples, gained in mass and, without exception, possessed a wide socket, such as is the case with Roman examples. Even later examples, Late Antique and Byzantine ones, continued the evolution of earlier examples, so we can observe examples with rounded and square cross-sections, but also with a triangular cross-section on the socket. Even in the Middle Ages the pike-like spears remained in use, even though it can be noticed that the spearheads are identical in length as the corresponding massive socket, probably due to the necessity for penetration of improved defensive equipment of the soldiers.

### The Balkan syginnae

As mentioned above, at least 24 spears that could be in a broader sense classified as the Balkan syginnae were recorded in the Central Balkans and surrounding territories (Map 2). Two examples that are round and hollow (Cat. No. 3, 6) and an example that possesses an oval spearhead and a short tang (Cat. No. 8) should be singled out. The other examples are long pointed rods. The example made of bronze from the vicinity of Štip (Cat. No. 2) should be put aside for the moment considering that there is currently no possibility of checking this example, and the determination of the example was based solely on one drawing and description. In general, 23 examples are made of iron and those are distributed across the valleys of Vardar and Drim rivers: the areas connected with numerous finds of defensive equipment – shields, helmets, greaves, as

<sup>&</sup>lt;sup>32</sup> Ильинская 1968, 29, Т. VII/20.

<sup>&</sup>lt;sup>33</sup> Прокопенко 2014, 500, рис. 95/5, 9.

<sup>&</sup>lt;sup>34</sup> Прокопенко 2014, 183, рис. 95/5.

<sup>&</sup>lt;sup>35</sup> Мелюкова 1964, 44 and further, Т. 14/12-16; Агульников, Попович, Церна и Топал 2013, 266-268, Рис. 6/6.

<sup>&</sup>lt;sup>36</sup> Quesada Sanz 1993.

<sup>&</sup>lt;sup>37</sup> On numerous types of this particular weapon refer to Quesada Sanz 1993, 164 and further.

<sup>38</sup> Repka 2016, 227;

<sup>&</sup>lt;sup>39</sup> Bazarcius 1983, 255, fig. 4/1-3.

<sup>&</sup>lt;sup>40</sup> Radman-Livaja 2004, T. 4/15, T. 5/16-17; Pernet 2010, 68, fig. 31/2-3.

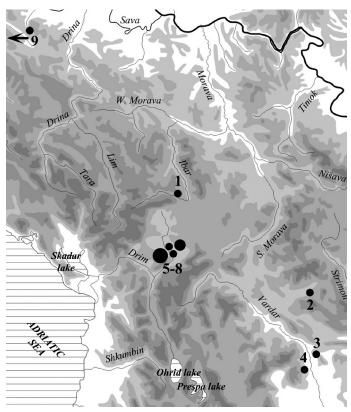
<sup>&</sup>lt;sup>41</sup> On the topic refer to Bugarski 2009, 423 and further with earlier literature.

<sup>42</sup> Bugarski 2009, 437-438.

compared to the other parts of the Central Balkans.<sup>43</sup> Regardless of the mentioned variants, all of the examples had a function of penetrating the defensive equipment and belong to javelins. These syginnae were most likely created out of military necessity for an additional response to the more intensive use of defensive equipment, considering that before these examples no similar ones were recorded in the area. It seems as if most of these types of weapons evolved independently throughout Europe and Asia, in the particular moment of need, and therefore no direct correlation between them existed.

In terms of dating, and based on enclosed grave contexts from Romaja, where our examples occur together with chronologically relevant archaeological material – ribbed iron shield boss with a polygonal top, the xiphoi type of sword<sup>44</sup> and the axe of the so-called nadžak type, it can be noted that their appearance in the Central Balkans should be correlated to a period from the beginning of the 6th century BC and that their duration can be limited to the middle of the 5th century BC.

The fact that the graves from Karagač (Cat. No. 1), Milci (Cat. No. 3) and Đevđelija (Cat. No. 4) contain a common iron spear besides the syginnae is quite important and fits a usual pattern – that one spear serves as a javelin and the other as a fighting spear, since it is impossible for a warrior to use two spears simultaneously. A particular problem for this concept are graves with syginnae from Romaja (Cat. No. 5-8), since those incorporate an abnormal number of weapons, so realistically the warriors could not carry all of it, let alone fight. A total of 12 syginnae measuring more than 1 m in length originate from grave 1 of mound 12, together with 12 common spears, an iron labrys, and a dagger. For the time being, this problem, as well as the appearance of the "Romaja warriors", remains without a meaningful explanation till another future find. The fact is that the syginnae type of spear was used intensively in this area and was most likely locally



Map 2 – Distribution of the Balkan syginnae (the nubers correspond to catalogue numbers)

forged. The tempting and logical explanation that it represents a kind of obol, a Greek monetary and metric form consisting of bronze and iron rods that was also found in graves in Greece starting from the 7th century BC,<sup>45</sup> does not strike real for numerous reasons. First of all, obols are usually found in combination with fire-dogs, as well as iron loops used for carrying. The syginnae from Romaja were found in a position that indicates a warrior form, which can be particularly well observed in grave 1 of mound 1. In this grave, a large spear with a blade and socket was placed next to the syginnae, and the syginnae themselves were found below the iron labrys

<sup>&</sup>lt;sup>43</sup> Filipović 2018.

<sup>44</sup> Despiné 2016.

<sup>&</sup>lt;sup>45</sup> E.g. grave 79 from Salamina, refer to Karageorghis 1970, 38, or tomb 25 at Sindos, refer to. Luce 2011, 58, fig. 12.

(Fig. 1/a). Similar can be noted for grave 17, where four iron spears with a blade and socket were placed next to the syginnae (Fig. 1/b). Secondly, although it is clear that contact and exchange with the Greek world existed during the period, it seems hard to believe that the non-Greek tribal communities in the far hinterland of the mountain would adopt the metric systems and values of the ancient Greeks. At last, we have noted that this type of weapon appeared during the second half of the 4th millennium BC, and that this type of spear occurred across a wide area and does not represent a rare and specific phenomenon, at least not enough to be automatically defined as obol.

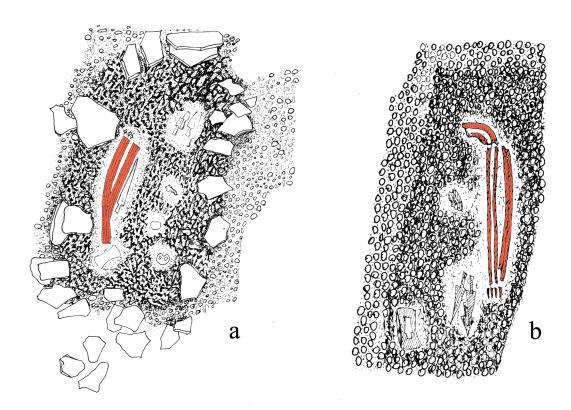


Fig. 1a-b – Position of the syginnae in graves 1 and 17 from the Romaja necropolis (after: Đurić, Glišić i Todorović 1975: 37 and 65)

Finally, we should add that the Herodotus's Cyprian syginnae made of bronze, without exception, possess a socket and a long and elongated body, therefore differing significantly from our examples, both in terms of metal and manner of fixation to the wooden shaft. But, bearing in mind that colleague Vasić noted this particular form of the spear and guided the author to follow that path and to a certain extent complement the story, there is no doubt that the name for this specific, but also common spear, should keep the term *Balkan syginnae*.

Na mnogaja ljeta!

<sup>\*</sup> This paper is the result of work on the project *Archaeology of Serbia: cultural identity, integrational factors, technological processes and the role of the central Balkans in the development of the European prehistory* (no. 177020), funded by the Ministry for education, science and technological development of the Republic of Serbia.

### **Bibliography**

**Агульников, Попович, Церна и Топал 2013** – С. М. Агульников, С. С. Попович, С. В. Церна, Д. А. Топал. Скифский курган №7 у с. Пуркарь на Нижнем Днестре. *Stratum plus* 3 (2013): 257-284.

**Baales und Jöris 2003** – M. Baales, O. Jöris. Zur Altersstellung der Schöninger Speere. pp. 281-288. in: *Erkenntnisjäger. Kultur und Umwelt des frühen Menschen* (eds. H. Meller, J.M. Burdukiewicz, L. Fiedler, W.D. Heinrich, A. Justus und E. Brühl). Veröffentlichungen des Landesamtes für Archäologie Sachsen-Anhalt 57. Halle 2003.

Bazarcius 1983 - V. Bazarcius. Cetatea geto - dacica de la Bunesti, jud. Vaslui. SCIVA 34: 249-273.

**Бугарски 2009** – И Бугарски. Ромејске сулице VI века и налази са Градине у Врсеницама и Лишке Таве. *Зборник радова Народног музеја* XIX: 423-454.

**Courcier 2014** – A. Courcier. Ancient Metallurgy in the Caucasus From the Sixth to the Third Millennium BCE. pp. 579-664. in: *Archaeometallurgy in Global Perspective* (eds. B. Roberts, C. Thornton). New York 2014.

**Despiné 2016** – A. Despiné. Σίνδος : το νεκροταφείο, ανασκαφικές έρευνες 1980 - 1982. Ι – ΙΙΙ. Athens 2016.

**Đurić, Glišić i Todorović 1975** – N. Đurić, J. Glišić i J. Todorović. *Praistorijska Romaja*. Prizren-Beograd 1975.

**Filipović 2018** – V. Filipović. Some observations on communications and contacts in the Central Balkan and neighbouring regions during the 7th to 5th century BC based on the distribution of weapons. *Godisnjak CBI ANUBiH* 47, 105-115.

Gedl 2009 - M. Gedl. Die Lanzenspitzen in Polen. Prähistorische Bronzefunde V/3, Mainz 2009

**Георгиев 1981** – 3. Георгиев. Праисториски наоди од Кочани и прашање на рамните некрополи по Брегалница. *Годишен зборник на Филозофскиот факултет на Универзитетот во Скопје* 7 (33): 65-78

**Gernez et Souleiman 2013** – G. Gernez, A. Souleiman. Une exceptionnelle découverte à Tell Mabtouh Sharqi: les dépôts d'armes et objets en métal du Temple N. Etude préliminaire. *Studia Orontica* XI: 41-57.

**Ильинская 1968** – В. А. Ильинская. Скифы днепровского лесостепного левоъережья. Киев 1968.

**Inall 2009** – Y. Inall. *A Typological Assessment of Iron Age Weapons in South Italy*. Master thesis. School of Philosophical and Historical Inquiry University of Sydney. Sydney 2009.

**Karageorghis 1970** – V. Karageorghis, Note on Sigynnae and Obeloi. *Bulletin de correspondance hellénique* 94/1: 35–44.

**Luce 2011** – J-M. Luce. From miniature objects to giant ones: The process of defunctionalisation in sanctuaries and graves in Iron Age Greece. *Pallas* 86: 53-73.

**Marinatos 1936/37** – S. Marinatos. Σιγύνη *The Annual of the British School at Athens* 37: 187-191.

Мелюкова 1964 - А.И. Мелюкова. Вооружение скифов. Москва 1964.

Митревски 1991 – Д. Митревски. Дедели. Скопје 1991.

Мунчаев 1975 – Р.М. Мунчаев. Кавказ на заре бронзового века. Москва 1975.

**Пашик, Винчик, Ивановски, и Георгиев 1987** – Р. Пашик, Ж. Винчик, М. Ивановски и З. Георгиев. Некрополата "Милци" кај Гевгелија. *Културно наследство* X-XI: 75-102.

Pernet 2010 – Lionel Pernet. Armement et auxiliaires gaulois. Montagnac 2010.

**Петильон и Лангле 2011** — Ж.М.Петильон и М. Лангле. Эволюция костяного и каменного оружия эпохи финального палеолита: мадленские сообщества (20 000–14 000 cal. ВР) в Юго-Западной Европе. стр. 69-96. у: *Предметы вооружения и искусства из кости в древних культурах Северной Евразии (технологический и функциональный аспекты)* (ур. Г. А. Хлопачев). Замятнинский сборник. Вып. 2. Санкт-Петербург 2011.

**Прокопенко 2014** — Ю.А. Прокопенко. *Скифы, сарматы и племена кобанской культуры Центрального Предкавказья во второй половине I тыс. до н.э.* Ставрополь 2014.

**Quesada Sanz 1993** – F. Quesada Sanz. Soliferrea de la Edad del Hierro en la Península Ibérica. *Trabajos de Prehistoria* 50: 159-183.

**Radman-Livaja 2004** – I. Radman-Livaja. *Militaria Sisciensia, Nalazi rimske vojne opreme iz Siska u fundusu Arheološkog muzeja u Zagrebu*, Katalozi i Monografije AMZ-a, sv. 1. Zagreb 2004.

**Repka 2016** – D. Repka. Archaeological and written evidence of Western Celtic groups presence in the Carpathian Basin territory at the end of Early and the beginning of Middle La Tène period. *Anodos. Studies of the Ancient World* 12/2012: 219-231.

**Srejović 1973** – D. Srejović. Karagač and the Problem of the Ethnogenesis of the Dardanians. *Balcanica* IV: 39-82.

**Васић 1996** – Р. Васић, Једно копље из Санског Моста: пилум или сигина. *Гласник САД* 12: 45-48. **Vasić 2003** – R. Vasić. *Die Nadeln im Zentralbalkan*. Prähistorische Bronzefunde XIII/11. Stuttgart 2003. **Vasić 2015** – R. Vasić. *Die Lanzen– und Pfeilspitzen im Zentralbalkan: Vojvodina, Serbien, Kosovo, Mazedonien*. Prähistorische Bronzefunde V/ 8. Stuttgart 2015.

### 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 Đ. 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