

**ROMAN MILITARY
EQUIPMENT
FROM THE RIVER
LJUBLJANICA**

Typology, Chronology
and Technology

**RIMSKA VOJAŠKA
OPREMA IZ REKE
LJUBLJANICE**

Arheološke in
naravoslovne raziskave

Janka Istenič

**NARODNI
MUZEJ
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Preface

The River Ljubljanica in its stretch across the Ljubljansko barje was declared a cultural monument of national importance in 2003. It is the origin of numerous archaeological artefacts, including pieces of Roman military equipment in excellent condition that offer an important insight into that part of the Roman legacy.

The book is the result of research that began in 1999, lasting nearly two decades with several interruptions. During this time, several military finds have already been published in different scientific journals, but are brought together here and accompanied by a detailed and comprehensive analysis they certainly merit.

The book is based on the collection of artefacts kept in the Archaeological Department at the National Museum of Slovenia. The collection has been built up during the last two hundred years and has been cared for by a succession of curators. These include my colleagues Timotej Knific and Polona Bitenc, who greatly expanded the collection, gathered and organised the data on archaeological contexts and other relevant information and arranged for the conservation of a great many of the artefacts. They also studied and presented their findings to the public, both professional and general.

It would not be possible to study the Roman militaria in detail without conserving the items first. This was performed at the Department of Conservation and Restoration, in the National Museum of Slovenia. Sonja Perovšek conserved the great majority of the artefacts discussed in the book, Anita Virag, Irma Langus Hribar and Zoran Milić were charged with the rest. They invested a great amount of expertise, effort and knowledge into cleaning, conserving and restoring the artefacts, all accompanied by investigative considerations. These four colleagues, as well as Igor Ravbar, member of the same Department, were also my partners in discussions concerning the artefacts' construction and production techniques.

Sonja Perovšek (on rare occasions replaced by Anita Virag) carefully prepared the spots for the PIXE analyses and photographed them as part of process documentation. Zoran Milić conducted the XRF analyses at the National Museum of Slovenia, but also collaborated with the Jožef Stefan Institute to examine the B1 sheath and dagger using neutron radiography. He provided the X-rays until 2016, after this year his task was undertaken by Sonja Perovšek.

Ida Murgelj (National Museum of Slovenia) and Dragica Knific Lunder drew the artefacts. Ida Murgelj also made illustrations of the artefacts showing the spots measured with the PIXE method. Photographs are an important part of the publication and are the result of the dedicated work by Tomaž Lauko (National Museum of Slovenia). Vida Bitenc and Edisa Lozić prepared the maps.

Some of the Roman militaria discussed in the book are kept in the City Museum of Ljubljana. I was able to briefly get them on loan, for which I would like to thank Irena Šinkovec, curator of the Potočnik family collection, and Bernarda Županek, curator of the museum's Roman collection. From the same museum, I also collaborated with restorers Alenka Drol and Matjaž Bizjak.

The advice of Jana Horvat (Institute of Archaeology, ZRC SAZU) was a great help and support, as were her critical comments and suggestions in relation to earlier versions of Chapters 1 to 19. These were also read by Boštjan Laharnar (National Museum of Slovenia) who provided relevant information and comments.

To Marjeta Šašel Kos (Institute of Archaeology, ZRC SAZU) I would like to extend my gratitude for her valuable comments on the early version of Chapter 19. Peter Kos (National Museum of Slovenia) helped me in noting the overly ambitious interpretation of the coin finds proposed in the early version of Chapter 18.

Ljubljana na Barju je bila leta 2003 razglašena za kulturni spomenik državnega pomena. Med najdbami iz reke so odlično ohranjeni predmeti, pomembni za razumevanje razvoja rimskega orožja.

Izhodišče za knjigo so bile raziskave, ki sem jih začela leta 1999, torej je z monografijo povezano delo, s krajšimi in daljšimi prekinitvami, trajalo dvajset let. Posamezni izsledki proučevanja rimske vojaške opreme iz Ljubljane so bili že objavljeni v znanstvenih člankih, vendar ta izjemna zbirka rimskih vojaških predmetov zasluži poglobljeno celostno obravnavo.

Monografija temelji na zbirki predmetov iz reke Ljubljane, ki jo hrani Arheološki oddelek Narodnega muzeja Slovenije. Med številnimi, ki so bili v njenem skoraj dvestoletnem nastajanju zaslužni za njen obstoj, želim izpostaviti kustosa zbirke v zadnjih dobrih dvajsetih letih, Timoteja Knifca in Polono Bitenc. Poskrbela sta za veliko povečanje zbirke, pridobitev in ureditev najdiščnih in drugih pomembnih podatkov, njeno urejenost in konserviranje velikega števila predmetov ter preučevanje in predstavitev rezultatov znanstveni in laični javnosti.

Poglobljeno preučevanje predmetov ne bi bilo mogoče brez konserviranja predmetov, ki so ga izvedli na Oddelku za konserviranje in restavriranje Narodnega muzeja Slovenije. Veliko večino predmetov, ki jih obravnavam v knjigi, je konservirala Sonja Perovšek, ostale pa Anita Virag, Irma Langus Hribar in Zoran Milić. V raziskovalno čiščenje, konserviranje in redko tudi v restavriranje predmetov so vložili svoje bogate izkušnje, znanje in veliko truda. Našteti in Igor Ravbar, prav tako član Oddelka za konserviranje in restavriranje, so bili tudi moji sogovorniki pri vprašanjih o zgradbi in načinu izdelave predmetov.

Sonja Perovšek (izjemoma jo je nadomestila Anita Virag) je skrbno pripravila mesta za analize PIXE in jih fotografsko dokumentirala. Zoran Milić je opravil analize XRF z aparatom v Narodnem muzeju Slovenije ter v sodelovanju z Inštitutom "Jožef Stefan" nožnico

bodala B1 pregledal z nevtronsko radiografijo. Skrbel je tudi za izdelavo rentgenskih posnetkov; to delo je leta 2016 prevzela Sonja Perovšek.

Predmete sta narisali Ida Murgelj (Narodni muzej Slovenije) in Dragica Knific Lunder. Ida Murgelj je naredila tudi risbe, ki kažejo, kje smo izvedli analize PIXE. Pomemben del knjige so fotografije predmetov, ki jih je naredil Tomaž Lauko (Narodni muzej Slovenije). Zemljevidi so delo Vide Bitenc in Edise Lozić.

Predmete rimske vojaške opreme, ki jih hranijo v Mestnem muzeju v Ljubljani, sem si lahko začasno izposodila, za kar sem hvaležna Ireni Šinkovec, ki skrbi za zbirko družine Potočnik, in Bernardi Županek, kustosinji rimske zbirke; prijazno sta sodelovala tudi restavratorja Alenka Drol in Matjaž Bizjak iz istega muzeja.

Jana Horvat (Inštitut za arheologijo ZRC SAZU) mi je bila s pogovori in nasveti v oporo med pisanjem knjige, poleg tega je prečitala poglavja 1 do 19 in dala dragocene predloge za izboljšave. Za koristne podatke in pripombe k besedilom poglavij 1 do 19 sem hvaležna tudi Boštjanu Laharnarju (Narodni muzej Slovenije).

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