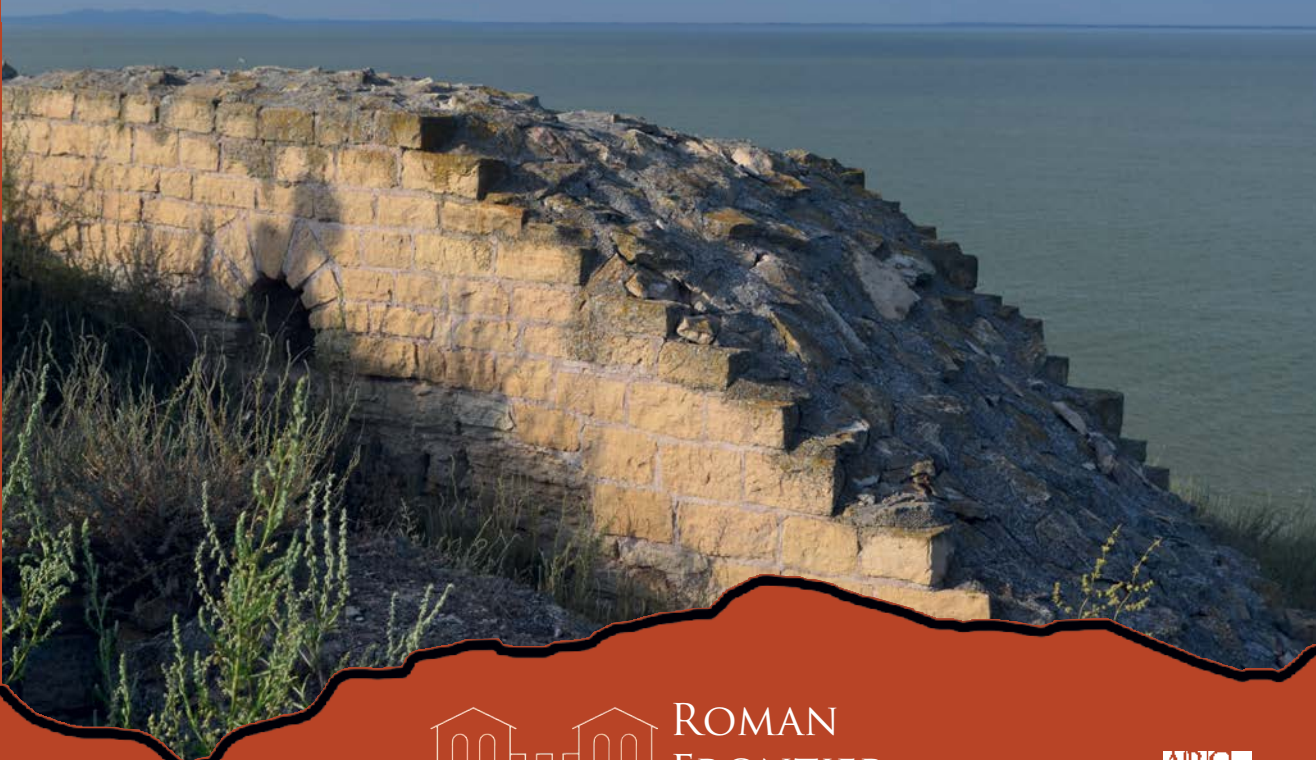


The Roman Lower Danube Frontier

Innovations in Theory and Practice

Edited by
Emily Hanscam and John Karavas



 ROMAN
FRONTIER
STUDIES

AIAA
OIPR
FISIS



The Roman Lower Danube Frontier

Innovations in Theory and Practice

Edited by
Emily Hanscam and John Karavas

ARCHAEOPRESS ARCHAEOLOGY



ARCHAEOPRESS PUBLISHING LTD
Summertown Pavilion
18-24 Middle Way
Summertown
Oxford OX2 7LG
www.archaeopress.com

ISBN 978-1-80327-662-5
ISBN 978-1-80327-663-2 (e-Pdf)

© the individual authors and Archaeopress 2023



This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

This book is available direct from Archaeopress or from our website www.archaeopress.com



Professor Mihail Zahariade at Halmyris, July 2014.

This volume is dedicated to the memory of
Prof. Mihail Zahariade (1950–2020).

Contents

List of Contributors	iv
Preface	
Researching the Romans on the Roman Lower Danube: Challenges and Opportunities	vii
Ioana A. Oltean	
Introduction	
The Lower Danube <i>Limes</i>: Recentring a Roman Frontier Province	1
John Karavas and Emily Hanscam	
Modelling Forts and Landscapes in Scythia Minor	13
Nathaniel Durant	
Roman Camps in the Lower Danube: From Remote Sensing to Provincial Contexts	36
Ovidiu Țentea and Florian Matei-Popescu	
Roads and the Roman Landscape in Moesia Inferior	63
Adriana Panaite	
Sanctified by the Blood of Martyrs: The Creation of New Sacred <i>Loci</i> in Scythia Minor During the Early Christian Period (4th Century AD)	89
Patrick Lowinger	
Ratiaria: The Focal Point in the Western Part of Lower Danube Frontier	110
Zdravko Dimitrov	
Reflections on the Importance of Studies on the Lower Danubian <i>Limes</i>	136
Piotr Dyczek	

List of Contributors

Zdravko Dimitrov has a MA in Classical Archaeology (2000) and a PhD (2004) from Sofia University and was made Associate Professor in 2014. Since 2001, he has worked at the National Archaeological Institute of the Bulgarian Academy of Sciences. He is the author of over 150 articles and four books, and the head of more than ten rescue excavations in Bulgaria and regular excavations at Ratiaria, Bononia and sanctuaries in the Rhodopes. He was a Mellon Fellow in Jordan (ACOR 2009) and Greece (ASCSA 2011) and received the Paul Getty Foundation Stipend (Algeria 2012). He speaks German, English, Russian and Serbian.

Nathaniel Durant is an Adjunct Faculty at both Husson University and Maine Maritime Academy who specializes in the Late Antique Lower Danube, especially in the province of Scythia Minor. He earned a PhD in Classics from the University at Buffalo in 2020; his contribution to this volume draws heavily on his PhD research. He served on the field staff as the GIS and Survey Specialist at the archaeological excavations of the site of Halmyris in south-east Romania. His research currently revolves around Late Roman forts, Roman frontiers and the integration of statistical models into archaeology.

Piotr Dyczek (prof. dr hab.) is Professor of Archaeology, Head of the Department of Classical Archaeology of the Faculty of Archaeology and Director of the Center for Research on the Antiquity of Southeastern Europe at the University of Warsaw. He is a member of DAI and the Bulgarian Academy of Sciences, a member of the scientific committee of LRCW and CRPA Implementer of European Union programs, Culture 2000, Tempus IV, Erasmus and Picasp. He has implemented over 30 research grants. He teaches classical archaeology and has supervised numerous bachelor's, master's and doctoral theses. He conducts excavations in Novae (Bulgaria), Rhizon (Montenegro) and Shkodra and Bushati in Albania. He has also excavated in Tanais (Russia) and in Serax in Turkmenistan. He specializes in Greek Bronze Age archaeology (MA, PhD), Illyrian archaeology, *Limes* archaeology (habilitation) and the history of ancient material culture and Roman provincial art. He is the editor of the journal *Novensia*.

Emily Hanscam is a Researcher in Archaeology at Linnaeus University, Sweden, associated with the UNESCO Chair for Heritage Futures, the LNU Centre for Concurrences and LNU Digital Transformations. She earned a PhD in Archaeology from Durham University (2019), researching Roman frontiers, archaeology and nationalism in East-Central Europe. She was previously a Lecturer in Archaeology for the University of Amsterdam and Project Manager for Archaeology at Halmyris, an international volunteer excavation project in Romania. Her research focuses on the politics of the past, critical heritage studies, and the reception of the Roman past with a focus on border landscapes. She is co-editor of *Digging Politics: The ancient past and contested present in East-Central Europe* (De Gruyter, 2023).

John Karavas is a graduate of the Universities of Oxford and Durham (PhD in Ancient History, 2001). His main areas of interest lie in the fields of Hellenistic and Roman History, Greek and Roman provincial archaeology (with a special interest in Roman frontiers) as well as ancient warfare. He has been associated with various research groups and institutes both in the UK and in East-Central Europe. Over the years he has participated in many excavations in Serbia,

Romania and Greece; between 2008–2020 he was the Director of Excavations at Halmyris, a Greek/Roman/Byzantine military and urban site on the Danube Delta in Romania. Since 2003, he has been a faculty member at the College Year in Athens Study Abroad Program (DIKEMES).

Patrick Lowinger possesses a MA in ancient history from American Military University and a MA in archaeology from the University of Leicester. Pat is currently a graduate student at Leicester where he hopes to one day complete his doctoral degree. His research interests include the establishment, abandonment and reuse of sacred loci across temporal periods and by culturally dissimilar groups. Currently his research is focused upon western Cornwall spanning from the Late Neolithic through to the Early Medieval period. He lives in Washington State with his wife and two adult children where he enjoys a variety of outdoor activities when he is not teaching.

Florian Matei-Popescu is a senior post-doc researcher at the Greco-Roman Archaeology and Epigraphy Department of the Vasile Pârvan Institute of Archaeology in Bucharest. His area of research focuses on all aspects of the history and archaeology of the Roman provinces in the Lower Danube area and beyond, with a particular interest on the Roman military presence, Roman frontiers studies and Latin and Greek inscriptions from the Imperial period. He published an important book on the Roman military presence in the province of Moesia inferior (*The Roman Army in Moesia Inferior*, Bucharest, 2010) and another one, in collaboration, on the Roman auxiliary units in Moesia superior (*Auxilia Moesiae Superioris*, Cluj-Napoca, 2018). He is a member of the Romanian *Limes* Commission, focusing on the frontiers of the province of Dacia Inferior and excavating the Jidova Roman fort from Câmpulung-Muscel (3rd century AD) and at the nearby Roman military bathhouses at Voinești (Trajanic period). He also excavates at the Roman military amphitheatre from Drobeta and at Ulpia Traiana Sarmizegetusa. He is currently working on a supplement of the series *Inscriptiones Scythiae Minoris*, focusing on the Roman frontier from Scythia Minor.

Ioana Oltean, FSA is Associate Professor in Roman and Remote Sensing Archaeology at the University of Exeter, specializing in the archaeology of the Roman Lower Danube *limes* provinces and in aerial archaeology. She investigates the impact of Roman conquest on local landscapes, settlement pattern evolution and society from the Late Iron Age to the Roman period in the Lower Danube area and beyond, to quantify the nature and extent of their change through Roman imperialist expansion. Since 1998 she has combined aerial reconnaissance, satellite imagery and LiDAR research with ground investigations in various parts of Romania, the Roman Empire and Latin America. She is a member of the Aerial Archaeology Research Group and of the Society for the Promotion of Roman Studies, and a regular contributor to the International Congresses of Roman Frontier Studies, Roman Archaeology Conferences and the Theoretical Roman Archaeology Conference.

Adriana Panaite is a researcher in the Department of Greek and Roman Archaeology and Epigraphy at the Vasile Pârvan Institute of Archaeology of the Romanian Academy in Bucharest. She earned a PhD in History from Bucharest University (2011), researching Roman roads in Moesia Inferior under the supervision of Professor Alexandru Barnea. Her research interests focus on Roman provincial archaeology, Roman roads, urbanism, landscape archaeology and ancient geographies. She has excavated at numerous sites along the Lower Danube since 1993, first as a student participant and later as an academic researcher; these include the ongoing

excavations at the Roman settlement at Tropaeum Traiani (Adamclisi, Romania), the Roman fortification at Dinogetia, Histria (Istria, Romania), Roşia Montană (Alburnus Maior, Romania), Novae (Svishtov, Bulgaria) as well as within the city of Bucharest.

Ovidiu Ţentea is Senior Researcher at the National Museum of Romanian History, Bucharest, and an associate at Babeş-Bolyai University, Cluj-Napoca. He is interested in Roman urbanism, acculturation of the Danube provinces, archaeology of the Roman fortifications and their military settlements, Roman temples, Roman baths and landscape archaeology. He has worked on Roman sites in Colonia Dacica Sarmizegetusa and excavated Roman forts at Căşeiu, Gilău, Mălăieşti and the settlements Sarmizegetusa Regia and Buridava (Stolniceni). He is the author of *Ex Oriente ad Danubium. The Syrian auxiliary units on the Danubian frontier of the Roman Empire* (Cluj-Napoca, 2012), *Bath and bathing at Alburnus Maior – Băile de la Alburnus Maior* (Cluj-Napoca, 2015), co-author of *Auxilia Moesiae Superioris* (Cluj-Napoca, 2018) and co-editor of *Dacia Augusti Provincia: crearea provinciei* (Bucharest, 2006) and of *Near and Beyond the Roman Frontier. Proceedings of the Colloquium held in Târgovişte, 16–17 October 2008* (Bucharest, 2009).

Researching the Romans on the Roman Lower Danube: Challenges and Opportunities

Ioana A. Oltean

The Lower Danube Roman *limes* represents a complex archaeological landscape, with numerous military sites constructed along the border of the Empire within a distinct ecological and cultural setting. Currently, the Tentative UNESCO World Heritage Lists put forward by Romania and Bulgaria includes 49 and 32 sites respectively, with a further 10 from the Serbian section. They have been nominated as part of a wider effort to expand UNESCO's recognition to the entire Roman frontier, as 'a remarkable example of the Roman military architecture, construction techniques and their evolution' which serves to demonstrate the complexity and diversity of Roman strategic solutions to specific climates and topographies, or to political, military and social circumstances on the one hand, and 'the ambition of the Roman Empire to dominate the whole world by imposing its laws and lifestyle in a long-term perspective' as 'an important exchange of human and cultural values at the peak of the Roman civilization', on the other.¹

The landscape the Roman army tried to control in the Lower Danube sector of the *limes* presented considerable challenges. While rivers are generally thought to provide clear distinctions between the territories under the Roman Imperial rule and those outside it, while at the same time reducing possibilities in cross-river movement thus making them more easily controlled (e.g. Breeze 2011: 92; Lemke 2015: 847), the precise line of the river is more difficult to establish east of the Danube's cataracts, with the area becoming a zone of connectivity rather than of separation (Țentea 2016: 86; Whittaker 2004: 63–87). The Roman army had to control the Danube floodplain—stretching up to 30 kilometres in width—a flat corridor of swamps, marshes, rushes and lagoons with ever-changing ponds and rivulets, wood copses and solitary trees, floating reed islands and tall grasses interspersed with fluctuating, winding navigable channels with tricky water currents. River waters retained certain challenges to travel, but icy, wintry conditions transformed this landscape effectively into a wide plain which would have been considerably easier to negotiate. This floodplain became drier only later in the 20th century after the construction of a series of dams further upstream and after the extensive conversion to arable land all the way to the Danube Delta; it has been only more recently subject to EU-funded floodplain restoration plans as a green corridor for flood protection.² Nevertheless, its original extent may still be grasped from aerial photographic or satellite surveys and from early modern maps allowing us to better contextualize Roman efforts to control this landscape.³

¹ <https://whc.unesco.org/en/tentativelists/6446/> (Last accessed 26 June 2023).

² <https://climate-adapt.eea.europa.eu/metadata/case-studies/lower-danube-green-corridor-floodplain-restoration-for-flood-protection> (Last accessed 26 June 2023).

³ e.g. Captain T. Spratt's 1856–1857 survey of the Danube Delta which covers the entire Danube floodplain as far upstream as Hârșova, revised in 1865 and published in 1869 in the *Journal of the Society for Geography* in Berlin.

Though academic research in the area has been carried out since the 19th century, much work remains both in terms of the efforts to appropriately quantify the archaeological heritage of the *limes*, and the use of theories and interpretations for the available evidence. The most significant progress over the past decade or so has been in the efforts to better quantify the archaeology of the *limes*, with improved methods applied towards the identification of new sites and the clarification of site location, extent and structure. Much of these have ensued from a greater application of remote sensing prospection techniques, both geophysics and above-ground imagery, facilitated by international collaborations (e.g. at Novae, Troesmis, Noviodunum, Halmyris, etc.), from advances in technology making it more cost-friendly to smaller operators (e.g. drone platforms and sensors) and from unrestricted access to archival datasets (most notably high-resolution satellite imagery via Google Earth since the mid-2000s). Efforts have been further focused on the quantification of the Lower Danube *limes* in the context of both Bulgaria and Romania joining international efforts to prepare UNESCO nominations for their respective stretches of the Danube frontier, where the clear identification of *limes* components was a key part of the submission brief.

Despite these efforts, there are a number of issues that require substantial further attention. In terms of military installations, research has so far been focused on permanent fortifications (i.e. forts and fortresses) rather than temporary ones (camps), despite the latter allowing us a better understanding of the way in which Roman Empire expanded into the area, how the *limes* was built and the extent of Roman army incursions beyond the Danube itself. Moreover, while small and larger forts have been documented, with some size variation linked to developments in frontier strategy from the Early to the Late Empire, smaller installations (fortlets, towers) are less present; indeed, the lack of watchtowers is noted by the Romanian dossier as, if not for data bias, a potentially unique feature of this sector of the Roman *limes*.⁴ That the former may be true is not only indicated by the presence further upstream of at least two examples of fortlets/watchtowers at Oryahovo and Batin, but also by the identification of such sites in Dobrogea along roads further inland at Greci and Poiana (Oltean and Hanson 2015), which indicate clearly the army involvement in controlling inland communication leading to the *limes*.

Furthermore, while the UNESCO nominations include linear rampart systems associated with the *limes* structure, other aspects are severely under-represented, including infrastructure supporting logistics, supply and connectivity between sites as key requirements for the army to function as a system. Roads and harbour installations are currently virtually absent from protected status briefs and require further investigation to clarify their layout, state of integrity and relevance as part of the frontier system. New information on extensive stretches of fossilized ancient roads across Dobrogea from aerial photographs and high-resolution satellite imagery is now becoming increasingly available, though their Roman date/origin and precise connection with different sites is not always fully apparent and needs alternative approaches such as absolute dating and GIS spatial analysis modelling (Oltean and Lungescu In Press). In the future, such investigations may better reveal the extent to which sites further inland, away from the Danube, have played a significant role in the functioning of the *limes*, thus demonstrating their significance as part of this system.

⁴ <https://whc.unesco.org/en/tentativelists/6446/> (Last accessed 26 June 2023).

Finally, though the demographic and socio-cultural dimension of the Roman *limes* features prominently as part of the nomination criteria, few settlements are included in the UNESCO nominations. If so, they relate to Late Roman or Early Byzantine fortified settlements on the Bulgarian *limes* and to major towns, e.g. Ratiaria, Oescus, Novae and Silistra, where the extent of research over many decades is difficult to collate and often inaccessible to international audiences. This reflects the fact that, with few exceptions involving prospection via fieldwalking, geophysical and aerial drone surveys, and only exceptionally involving excavation, little effort has been directed towards clarifying the full extent and complexity of civilian settlement associated with military bases (Noviodunum, Troesmis, Novae, etc.). A future priority should be the expansion of research agendas to consider settlement within wider hinterlands in order to better assess the impact of frontier establishment onto pre-existing settlement and society. This will also lead to an improved understanding of the impact of the *limes*' cultural ecosystem on successive changes in customs and beliefs.

While considerable amounts of data are still to be collated by future research, qualitative changes in the way we analyse and interpret it should be increasingly prioritized. Digitization and digital technologies for data analysis and modelling, such as GIS, should not only help direct field-based research to redress existing gaps in our data, but also to address increasingly complex theories on *limes*-specific processes and enhanced dialogue with empirical and experimental approaches to support a better understanding of water-based communication, warfare, and of increasingly diverse expressions of control, power and identity within a global/local framework.

In terms of its future impact in the expected, AI-dominated future world, perhaps the most important recent approaches in *limes* archaeology in the Lower Danube sector has come from the revision of past interpretations from the perspective of current theoretical frameworks. The past two decades have seen consistent, though unevenly distributed rebuttals of historicist and nationalist trends in local archaeological interpretations (see more recently various individual contributions in Koranyi and Hanscam 2023). The slight tendency in polarization towards Romania is indicative of a higher inclusion of the topic in the research agenda there and should be followed by a similar trajectory elsewhere in order to avoid disproportionate interpretations on its effect on constructing the modern archaeological narratives along the entire Lower Danube *limes*. Further benefits could come from the reassessment of the existing narratives from a decolonized perspective, particularly given the longevity and diversity of Imperial projects in the area throughout time into the modern period.

The present volume does much to provide a start for several of the new research priorities highlighted above, through a range of studies that bring new perspectives to the quantification of the archaeological heritage of roads and temporary camps, or collation of complex evidence on the Lower Danube *limes*, and to new attempts and approaches to interpretation. But as a final point, I would suggest that a key priority in the archaeological research agenda of the Lower Danube *limes* should be the promotion of an increasingly gender-balanced discourse. Much like elsewhere (e.g. Breeze 2023; Jones and Ivleva Forthcoming), from early on female archaeologists on the Roman *limes* in Romania have had a markedly minority presence, traditionally participating as junior partners in research teams and dedicated to the study of material culture and monuments rather than as excavation leads. Few exceptions, such as Doina Benea or Ioana Bogdan-Cataniciu, have done so only more recently and at great cost to

their personal lives, but for less recognition than their male counterparts. These days, female archaeologists are increasingly present within the discipline, but have yet to have a higher input into positions allowing them to shape *limes* research agendas—as evidenced by the current gender distribution within the Romanian National *Limes* Programme.⁵ Nevertheless, embracing a gender-balanced approach would allow for traditional, testosterone-infused subjects and past priorities to receive a welcome diversification in perspective.

Bibliography

- Breeze, D.J. 2011. *The Frontiers of Imperial Rome*. Barnsley: Pen and Sword Books.
- Breeze, D.J. 2023. Brenda Heywood and the Vallum of Hadrian's Wall. *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society*, Series 3, Volume 23.
- Jones, R.H. and T. Ivleva Forthcoming. Visible invisibles: women and Roman frontiers, in R. Witcher and E. Hanscam (eds) *Resistance and Reception: Critical Archaeologies of Iron Age and Roman Worlds*. Oxford: Archaeopress.
- Koranyi, J. and E. Hanscam 2023. *Digging Politics: The Ancient Past and Contested Present in East-Central Europe*. Berlin: De Gruyter. <https://doi.org/10.1515/9783110697445>
- Lemke, M. 2015. Towards a military geography of Moesia Inferior, in L. Vagalinski and N. Sharankov (eds) *Limes XXII. Proceedings of the XXIIInd International Congress of Roman Frontier Studies held in Ruse, Bulgaria (September 2012)*: 845–852. Sofia: NAIM-BAS.
- Oltean, I.A. and W.S. Hanson 2015. Defining the Roman limes in Romania: the contribution of aerial and satellite remote sensing, in L. Vagalinski and N. Sharankov (eds) *Limes XXII. Proceedings of the XXIIInd International Congress of Roman Frontier Studies held in Ruse, Bulgaria (September 2012)*: 889–899. Sofia: NAIM-BAS.
- Oltean, I.A. and D.C. Lungescu In Press. Roman connectivity, networking and mobility along the Lower Danube frontier: a GIS approach, in *Proceedings of the Roman Frontier Studies Congress Nijmegen, 2022*.
- Țentea, O. 2016. About the Roman frontier on the Lower Danube under Trajan, in A. Panaite, R. Carjan and C. Capita (eds) *Moesica et Christiana: Studies in Honour of Professor Alexandru Barnea*: 85–93. Brăila: Istros.
- Whittaker, C.R. 2004. *Rome and its Frontiers: The Dynamics of Empire*. London: Routledge.

⁵ <https://limesromania.ro/en/articole/about-the-project/the-team/> (Last accessed 26 June 2023).



Over the past few decades, there has been a significant amount of research on the Roman Lower Danube frontier by international teams focusing on individual forts or broader landscape survey work; collectively, this volume represents the best of this collaboration with the aim of elevating the Lower Danube within broader Roman frontier scholarship.

The Lower Danube, running between Singidunum (modern Belgrade) and Halmyris in the Danube Delta, was one of the most densely fortified regions of the Roman Empire. The region has long been a border zone, today forming part of the border between Serbia and Romania, and the majority of the border between Romania and Bulgaria. Despite its importance for understanding both Roman frontier policy and the relationship between ancient and modern borderscapes, the region has not yet made its full contribution to international Roman scholarship. Bridging the theoretical divide that exists between different regional research traditions, chapters in this volume focus on sites like Ratiaria, in modern north-western Bulgaria, while other contributors examine the complex landscape from a wider perspective oriented around roads, temporary camps, or early Christian sites. *The Roman Lower Danube Frontier* emphasises the importance of engaging with Roman frontier landscapes, particularly in regions such as East-Central Europe, where they remain part of a contemporary borderscape.

Emily Hanscam is a Researcher in Archaeology at Linnaeus University, Sweden, associated with the UNESCO Chair for Heritage Futures, the LNU Centre for Concurrences and LNU Digital Transformations. She earned a PhD in Archaeology from Durham University (2019), researching Roman frontiers, archaeology and nationalism in East-Central Europe. She was previously a Lecturer in Archaeology for the University of Amsterdam and Project Manager for Archaeology at Halmyris, an international volunteer excavation project in Romania. She is co-editor of *Digging Politics: The ancient past and contested present in East-Central Europe* (De Gruyter, 2023).

John Karavas is a graduate of the Universities of Oxford and Durham (PhD in Ancient History, 2001). His main areas of interest lie in the fields of Hellenistic and Roman History, Greek and Roman provincial archaeology (with a special interest in Roman frontiers) as well as ancient warfare. Over the years he has participated in many excavations in Serbia, Romania and Greece; between 2008–2020 he was the Director of Excavations at Halmyris, a Greek/Roman/Byzantine military and urban site on the Danube Delta in Romania. Since 2003, he has been a faculty member at the College Year in Athens Study Abroad Program (DIKEMES).