



2023

UrbNet Annual Report

A Centre of Excellence funded by the Danish National Research Foundation
Hosted by Aarhus University



UrbNet

Mission Statement

Centre for Urban Network Evolutions (UrbNet) explores the archaeology and history of urban societies and their networks from the Ancient Mediterranean to medieval Northern Europe and to the Indian Ocean World.

We are an interdisciplinary research initiative, which integrates new methods from contextual cultural studies rooted in the humanities with the natural sciences.

Approaching urbanism as a network dynamic, we aim to develop a high-definition archaeology to determine how urban networks catalyzed societal and environmental expansions and crises in the past.

Annual Report 2023

Cover illustration: View of the fortlet and caravanserai at Khirbet al-Khalde (Jordan), July 2023. Without road stations like these urban centres could not be connected in Antiquity (Photo: Khirbet al-Khalde Archaeological Project).

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Greetings from the Director

In January a new king ascended the throne in Denmark, and for some time the whole of the Danish Kingdom contemplated the meaning of tradition and the power of legacy. These are concepts that are not exclusive to royalty. They also figure prominently in archaeological debates on past societies, and are widely regarded as driving factors in urban practices and urban transformation. This is where UrbNet's expertise is concentrated, and in the following I hope you will sense the presence of history as we take you back in time, to places and cities that, in many ways, laid the foundation of modern society as we know it.

Highlights in 2023

We opened 2023 on a strong foot, with the publication of *Northern Emporium Vol. 2: The Networks of Viking-Age Ribe*, which concludes UrbNet's large-scale excavation in Ribe – the earliest urban network in Scandinavia. Since 2017 the project Northern Emporium, directed by Søren M. Sindbæk (funded by the Carlsberg Foundation), has mapped in detail the evolution and dynamics of the Viking-age site, based on stratigraphic excavation and high-definition methods. The newly published volume thus traces the contours of one of the richest archaeological sites of the North Sea trading world, and its methodological significance for the field of archaeology cannot be overstated.

In 2023 UrbNet initiated a new archaeological field project in Jordan: *The Khirbet al-Khalde Archaeological Project*. Together with Emanuele E. Intagliata (formerly UrbNet, now University of Milan, Italy) and Craig Harvey (University of Alberta, Canada) I co-direct the project. In July we surveyed, together with our international team, an area in and around the fort and caravanserai of Khirbet al-Khalde in the Wadi Yitm, located along the region's central transportation network, Via Nova Traiana. By charting the chronological span of

the fort, we hope to gain an understanding of the economy and security in the region – including aspects of the Roman annexation of the Nabatean Kingdom and the Red Sea trade into Late Antiquity – and studying the site will fill an important gap in research on the Petra-Gaza route and long-distance trade in the ancient world.

In August the long-awaited Palmyrene Sarcophagi was published as the first comprehensive monograph on Roman-period sarcophagi from Palmyra, a material group unique for its treatment of the banquet motif in the ancient Graeco-Roman world. The two-volume work is authored by assistant professor Olympia Bobou and myself, and it covers both historiographical, chronological, locational, and iconographical questions related to Palmyra's funerary customs. The work includes an extensive catalogue and a series of appendixes of almost 800 sarcophagi from Palmyra.

The UrbNet-founded *Journal of Urban Archaeology* deserves a mention here as well. It is the first dedicated scholarly journal to recognize urban archaeology as a field in its own right, and since 2019 it has presented studies and debates on a wide range of topics, sites, regional foci, and time periods – all related to urban archaeology. The first eight volumes are available open access, and the ninth issue will appear in spring 2024. We could not have predicted how successful the journal would become, but we are equal parts proud and thankful that this contribution by the centre has secured – on an international scale – a heightened attention around this crucial research agenda. This – and all of the above – will no doubt be part of UrbNet's legacy.



People

We welcomed a number of new people in 2023 who immediately contributed new energy and skills to the projects that recruited them. All of them seamlessly became part of the larger UrbNet community, too, where they are active members of our vibrant and supportive research environment.

Pondering on UrbNet's almost nine years of successful recruitments, there are many considerations to be taken when offering employment to a candidate, and successful employments reflect a long-term cohesive strategy to fill the right positions with the right people at the right time. A candidate's academic skill set is but one factor; we also probe a person's interpersonal skills and collegiate spirit to assess whether there is a perceived match with the immediate project group and the wider UrbNet body. Likewise, welcoming new colleagues demands flexibility from everyone, in that the overall group dynamics will inevitably change. I am grateful that fortune has once again smiled on us – and I like to think that we have also been both clever in our selection processes and inclusive in our daily collaborate approach: our 2023 recruitments have proven successful. It is not something we take for granted, but something we work hard to create a framework for which increases our chances of getting it right.

We reached a milestone in our recruitment plans by filling the centre's second tenured associate professorship, which is embedded in the Department of Archaeology and Heritage Studies. The position was taken up by Sarah Croix, who has been part of UrbNet for many years as a researcher of Viking-age and early medieval urbanism and material culture in Scandinavia. I am delighted that Sarah will remain part of the centre in her new capacity, and I congratulate the department and the School of Culture and Society on having secured a competent young talent in a permanent position, who will no doubt be a valuable contribution to both the research environment and teaching staff.

We welcomed as a residential scholar and visiting professor Christopher H. Hallett (UC Berkeley), who arrived in October and will stay with us until June 2024. Hallett is a world-leading expert on Roman sculpture and Roman portraiture, and a seasoned field archaeologist who has worked extensively in Aphrodisias in Turkey. I am proud that UrbNet has gained sufficient traction internationally to attract high-profile researchers such as Hallett. We will be sure to make the most of his visit with us.

We also bid a handful of people farewell in 2023, and saw them transfer to new – often longer-term – positions. I take this opportunity to express my appreciation of all past UrbNetters and wish them the best of luck in their new endeavours. I am pleased that many of them are now valued partners and collaborators in various project constellations, and that the nature of their current work bears witness of their time at UrbNet. This is an acknowledgement of our commitment to educate the next generation of excellent researchers, and speaks volumes, too, about the centre's legacy in archaeology and beyond.

Acknowledgements

A favourite tradition of mine in connection with our annual report is the opportunity to thank people who, in one way or another, played a vital role in shaping UrbNet in the reported year. I offer special thanks to the Danish National Research Foundation for continuing to fund our research activities and granting us a platform from which we dare ask the big questions and dive deep into history looking for the answers. My thanks also go to the many other funding agencies – both public and private, national and international – who fund research projects under the UrbNet umbrella.

I am deeply appreciative of the strong bonds that we enjoy with individuals and institutions around the world who share our curiosity about urban archaeology, and who dedicate their time and resources towards collaborative explorations with UrbNet. It is a privilege to work with the most knowledgeable people in the world on these topics of shared interest, and on behalf of the entire centre, we honour your insight and deep commitment to our science.

Last but not least, I thank all of the UrbNetters, who on a daily basis put their best foot forward, engaging passionately in their own work and that of their peers; who actively strive to be good colleagues, creating an atmosphere of inclusion and solidarity; who act professionally and with integrity no matter the circumstances; and who in their individual ways contribute to making UrbNet the research endeavour I have been most proud of in my career.

Rubina Raja
Aarhus, March 2024

Staff

UrbNet Leadership



Rubina Raja

Professor, Centre Director
School of Culture and Society, Aarhus University

Rubina Raja's research focuses on urban societies and their manifestation in material and written culture, particularly in the Mediterranean and the Levant. She takes a special interest in regional and interregional development patterns from the Hellenistic to the early medieval period.



Søren M. Sindbæk

Professor, Deputy Director
School of Culture and Society, Aarhus University

Søren M. Sindbæk's research focuses on early urbanism and urban archaeology in Viking Age Scandinavia and early medieval Europe. He has a special interest in early medieval communication and social networks.

Associate Professors



Tom Brughmans

Associate Professor (embedding position 1)
School of Culture and Society, Aarhus University

Tom Brughmans's research interests include the study of Roman economic and urban phenomena, past social networks, and visual signalling systems. He performs much of his work by applying computational methods such as network science, agent-based simulation, and geographical information systems.



Sarah Croix

Associate Professor (embedding position 2)
School of Culture and Society, Aarhus University

Sarah Croix specializes in Viking-age archaeology in South Scandinavia and its broader historical, European context. She also focuses on urbanization and Christianization as social transformations, identities and social inequality, method development (3D methods), and archaeological fieldwork.

Assistant Professors and Postdocs



Olympia Bobou

Assistant Professor
School of Culture and Society, Aarhus University

Olympia Bobou specializes in ancient sculpture. Her main tasks include coordinating the work within the Palmyra projects and finalizing the vast catalogue of funerary sculptures.



María Coto-Sarmiento

Postdoc (MINERVA project, funded by the Independent Research Fund Denmark)
School of Culture and Society, Aarhus University

María Coto-Sarmiento is a computational archaeologist specialized in exploring cultural dynamics in past societies. She works to identify economic trends in Roman trade by combining applications of computational models and archaeological data.



Clara Filet

Postdoc (funded by the Fyssen Foundation)
School of Culture and Society, Aarhus University

Clara Filet is a specialist in the urbanisation and transport networks of Celtic Europe. Her research focuses on the development of urban networks and centrality between the Atlantic and Central Europe in the last centuries BCE.



Guido Furlan

Postdoc
School of Culture and Society, Aarhus University

Guido Furlan's research focuses on Roman archaeology and methodological issues concerning the study of ancient cities, including the dating of contexts and rubbish management.



Kirstine Haase

Postdoc
School of Culture and Society, Aarhus University

Kirstine Haase is a medieval archaeologist specializing in urban archaeology. She works on 3D-mapping of archaeological deposits in medieval cities based on existing archaeological and geological data, thus identifying potentials and threats to the existing sub-urban archaeological record.



Eduardo Napoleon Herrera Malatesta

Postdoc (Marie Skłodowska-Curie Postdoctoral Fellowship)
School of Culture and Society, Aarhus University

Eduardo Napoleon Herrera Malatesta focuses on developing a new framework methodology for landscape archaeology to better assess the inherent uncertainties contained in field data, particularly coming from non-systematic surveys, and its resulting models and visualizations.

PhD students



Matteo Mazzamurro

Postdoc (*Past Social Networks Project*, funded by the Carlsberg Foundation)
School of Culture and Society, Aarhus University

Matteo Mazzamurro's research focuses on developing quantitative approaches to manage various forms of uncertainty in archaeological and historical data sources. Additionally, he models long-term changes in the structure of historical social network.



Michael Neiß

Postdoc (*HABIT*, funded by the Swedish Research Council)
Lund University; partly stationed at School of Culture and Society, Aarhus University

Michael Neiß examines how the interplay of urbanization, religious change, and the serial production of pictorial art made Viking-age Scandinavia a part of Western Christendom.



Adam Pazout

Postdoc (*MINERVA*, funded by the Independent Research Fund Denmark)
School of Culture and Society, Aarhus University

Adam Pazout's research interests span Roman roads and army, Hellenistic and Roman fortifications, landscape archaeology, GIS and computational methods in archaeology, and a particular region of interest is the Levant and Israel. He is employed in the project *MINERVA* focusing on the Roman travel networks.



Alba Antía Rodríguez Nóvoa

Postdoc (Margarita Salas Postdoctoral Researcher)
Universidade de Santiago de Compostela

Alba Antía Rodríguez Nóvoa specializes in Late Iron-age and Roman pottery in north-western Iberia, as well as in Roman trade and economy in the Atlantic region. Her project explores the applications of computational archaeology to Roman trade.



Iza Romanowska

Postdoc (*Circular Economy*, funded by AIAS and the Carlsberg Foundation)
School of Culture and Society and AIAS, Aarhus University

Iza Romanowska is a complexity scientist working on the interface between social sciences and computer science. She specializes in agent-based modelling – a simulation technique used for various research questions, from mobility in prehistoric cities to large-scale economic interactions across the Roman Mediterranean.



Sine Grove Saxkjær

Postdoc
School of Culture and Society, Aarhus University

Sine Grove Saxkjær's research focus is the study of urban ethnicities and the relation between people and cities in ancient Latium during the first millennium BC, including the interaction between city formation, urbanization, and migration patterns, ethnogenesis, and cultural exchange.



Rowan Stanley English

PhD Student
School of Culture and Society, Aarhus University

Rowan Stanley English's research concerns the funerary archaeology of the North Sea in the fifth–seventh centuries AD. His project focuses on long-distance trade goods that appear in graves in this area.



Rhiannon Garth Jones

PhD Student
School of Culture and Society, Aarhus University

Rhiannon Garth Jones uses an interdisciplinary approach to analyse the many ways the 'Abbasid caliphs, from AD 754–861, deliberately and dynamically used 'Graeco-Roman' traditions to assert their political and religious authority.



Mette Lang

PhD Student
School of Culture and Society, Aarhus University

Mette Lang Jansen investigates the changing network dynamics of urban centres in the Roman Near East by focusing on the developments of the transport infrastructure in and around Palmyra and the Decapolis.



Derek James Parrott

PhD Student
School of Culture and Society, Aarhus University

Derek James Parrott specializes in Viking-age material culture. He studies the relationship between craftspeople and the early coastal emporia towns of Viking-age Scandinavia through the lens of ceramic nonferrous metalworking moulds from the town of Ribe.

Research Assistants



Cristina Boschetti

Research Assistant
School of Culture and Society, Aarhus University

Cristina Boschetti's work revolves around the economy and technology of glass from the Roman to the medieval period in Europe. She is also interested in the aspects of making mosaics, paintings, and jewellery.

Core Collaborators



Charlotte Brøhe Jensen

Research Assistant
School of Culture and Society, Aarhus University

Charlotte Brøhe Jensen works on the project "Byarkæologisk Atlas", which seeks to summarize the archaeological knowledge about the c. 76 medieval towns in current Denmark.



Lilian Dibbern

Research Assistant
School of Culture and Society, Aarhus University

Lilian Dibbern is interested in the movement and the development of urban centres in the Mediterranean during the Roman period. She supports and contributes to ongoing publication projects in UrbNet's Palmyra team.



Joan Campmany Jiménez

Research Assistant (*Circular Economy*, funded by the Carlsberg Foundation)
School of Culture and Society, Aarhus University

Joan Campmany Jiménez is a classical archaeologist, specializing in the archaeology of the Roman Economy and landscape archaeology. His work focuses on population change in ancient Palmyra.



Katarína Mokránová

Research Assistant
School of Culture and Society, Aarhus University

Katarína Mokránová specializes in the archaeology of the Roman Near East with a particular interest in the application of computational methods to study the past. Her research interests further lie in the study of ancient demography and economy.



Adam Pažout

Research Assistant (*Agent-Based Modelling in Archaeology*, funded by ERASMUS+)
School of Culture and Society, Aarhus University

Adam Pažout is part of a team developing and testing new teaching materials for Agent-Based Modelling targeting primarily archaeologists and historians. He co-organizes and teaches workshops using these new teaching materials.



Julia Steding

Research Assistant (*Archive Archaeology*, funded by the ALIPH Foundation)
School of Culture and Society, Aarhus University

Julia Steding supports the work on the material remains from Roman Palmyra and Harald Ingholt's archival material relating to the site.



Søren Munch Kristiansen

Associate Professor
Department of Geoscience, Aarhus University

Søren M. Kristiansen's work revolves around soils, and he works across a wide range of scientific and professional fields, including geoarchaeology, soil science, groundwater chemistry, medical geology, soil chemistry and geomorphology.



Peter H. Mikkelsen

Head of Department and Vice-Director
Department of Conservation and Natural Science, Moesgaard Museum

Peter H. Mikkelsen is an expert in archaeobotany, and his work focuses mainly on Iron Age and medieval agriculture and consumption.



Jesper Olsen

Associate Professor
Department of Physics and Astronomy, Aarhus University

Jesper Olsen's research focuses on radiocarbon and stable isotopes. He specializes in a number of statistical methods used in earth/archaeological sciences, including ¹⁴C analysis, and he is director of the Aarhus AMS Centre (AARAMS).



Stephanie Wynne-Jones

Professor
Department of Archaeology, University of York

Stephanie Wynne-Jones specializes in material culture and its relationship with practice. Her research focuses on craft and production for trade as well as daily life and the use of space at Songo Mnara where she uses scientific techniques to create a high-resolution picture of life in the town.

Administration



Christina A. Levisen

Centre Administrator
School of Culture and Society, Aarhus University

Christina A. Levisen heads the centre's administrative team and coordinates UrbNet's editorial processes. She is a linguist, and she has worked with centre administration in both Denmark and abroad.



Mie Egelund Lind

Assistant Centre Administrator
School of Culture and Society, Aarhus University

Mie Egelund Lind is a classical archaeologist. She works closely together with the centre administrator, managing the day-to-day operation of UrbNet and pushing the centre's editorial processes. She is also in charge of UrbNet's SoMe profiles.



Eva Mortensen

Research Administrator (*Circular Economy*, funded by the Carlsberg Foundation)
School of Culture and Society, Aarhus University

Eva Mortensen is a classical archaeologist. She is part of UrbNet's editorial team and acts as editorial assistant for the UrbNet-founded *Journal of Urban Archaeology*. She is also in charge of a range of communication initiatives at UrbNet.

Student Assistants

UrbNet

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Gry S. Petersen
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Professor Eivind Heldaas Seland
University of Bergen

Postdoc Trine A. Hass
University of Oxford

Professor Christopher Smith
University of St Andrews

Professor Maura K. Heyn
University of North Carolina - Greensboro

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Arizona State University

Researcher Jan Kindberg Jacobsen
The Danish Institute in Rome

Senior Research Associate Federica Sulas
University of Gothenburg

Assistant Professor Elizabeth A. Murphy
Florida State University

Research Assistant Professor Barbora Wouters
Free University of Brussels

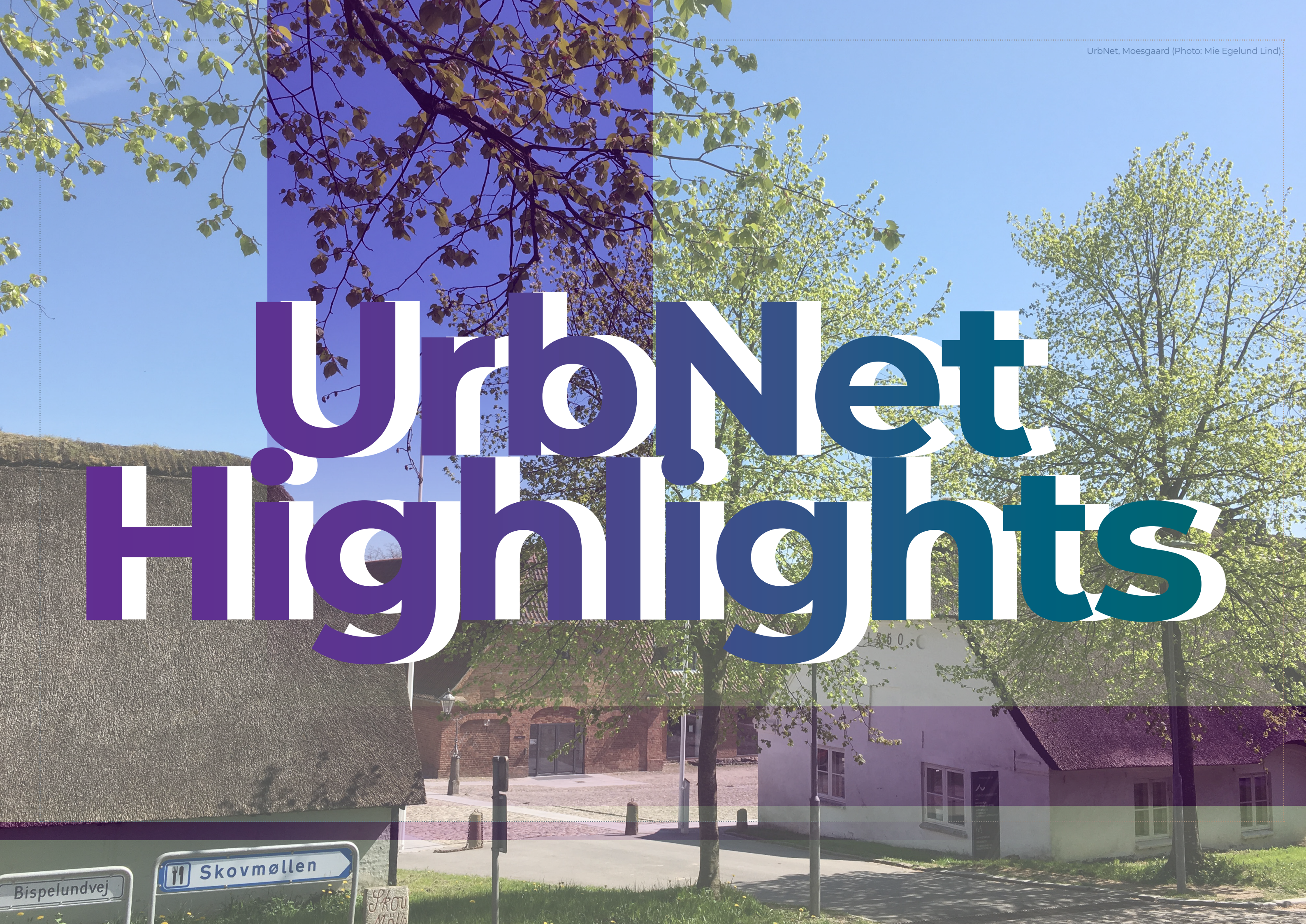
Professor Jörg Rüpke
Max-Weber-Kolleg, University of Erfurt

Director Jean-Baptiste Yon
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UrbNet, Moesgaard (Photo: Mie Egelund Lind).

UrbNet Highlights



The Northern Emporium Saga Completed

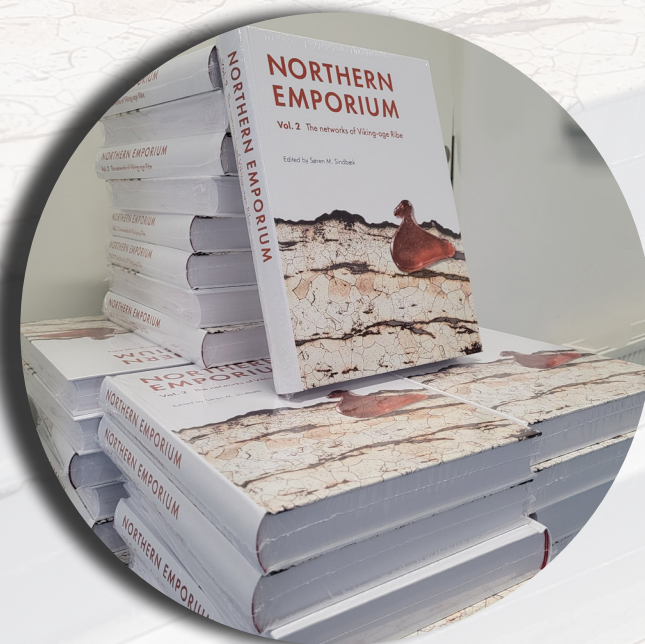
Project Northern Emporium Project
Director Søren M. Sindbæk
Funding The Carlsberg Foundation

In 2023 the Northern Emporium project launched the second and final volume of its massive final publications. Six years after commencing excavations in the heart of the early medieval emporium in Ribe, another of UrbNet's flagship projects has thus completed its analytical work and delivered a rich trove of research to urban archaeology. While the first volume, published 2022, traced the site history through Ribe's exceptionally detailed stratigraphy, the second volume is dedicated to the far-reaching networks of interactions, which are traced by the site's artefact finds.

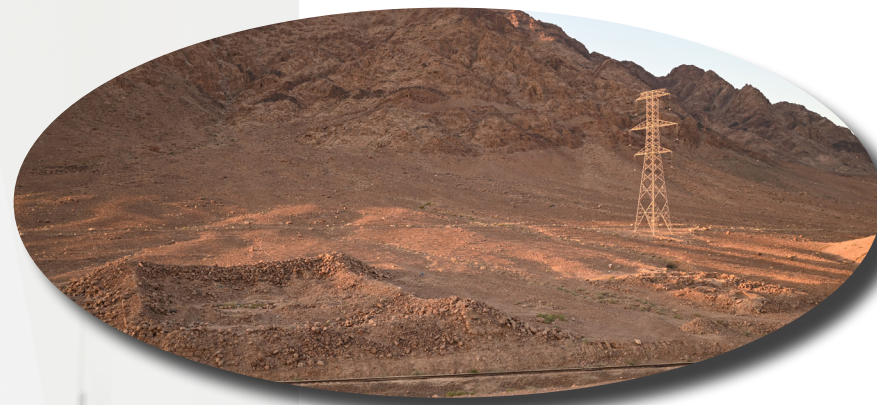
The twenty-two chapters of the volume, written by a large team of specialists, delves into the more than 100,000 finds of artefacts and craft-related debris, and to the results that have been obtained from the high-definition excavations and dating of their context.

What stands out in particular are the specialized workshops, which dotted the central street of this early North Sea trading site. The volume presents unprecedented insight into the making of beads from glass and amber, copper-alloy jewellery, or bone and antler combs, which arrived in Ribe or spread from there into large parts of Scandinavia and the North Sea world.

As a result of the site's groundbreaking radiocarbon chronology, published in 2022 in *Nature*, the development of Ribe's network can now be traced with these materials as proxies on a decadal scale through the eighth and ninth centuries. In this way, the results present a new benchmark, not only for the archaeology of Denmark's oldest urban community, but for the making of the Viking Age.



The publication of the second volume of the Northern Emporium project completes the final publication of another of UrbNet's flagship excavation projects (Photo: Søren Michael Sindbæk).



The fort and caravanserai, facing south-east
(Photo: Khirbet al-Khalde Archaeological Project).

Project Khirbet al-Khalde Archaeological Project
Directors Craig Harvey (University of Calgary), Emanuele E. Intagliata (University of Milan), and Rubina Raja (Aarhus University)
Funding The Carlsberg Foundation, the Augustinus Foundation and UrbNet

In July 2023, a survey campaign was conducted at Khirbet al-Khalde in the Wadi Yitm (Jordan). The military fort is located in the middle of the desert 30 km north of Aqaba. The new international collaborative project is jointly directed by Rubina Raja, UrbNet (Denmark), Craig Harvey, University of Alberta (Canada), and Emanuele E. Intagliata, University of Milan (Italy).

The main objectives of the project are (1) to develop an improved chronology for the site, (2) to investigate the site's resilience, (3) to investigate the role of trade, including long-distance (Red Sea) and regional trade, and (4) to provide a risk assessment to the site.

Until now, the fort remained understudied, despite the striking remains of the site's military fort, presumed caravanserai, and hydraulic infrastructure. The strategic location of the site has not been considered in studies of the region so far, and the site's history and archaeology have not been understood in sufficient detail in a longue durée perspective.

To unlock the potential of the site, a team of ten members surveyed 20 hectares. The survey covered the fort, the disposal area in front of the fort, the so-called caravanserai, the area between the two structures and the two watchtowers. Over the course of the campaign, more than

25,000 pottery sherds were collected. Other important finds were mortar pieces, sherds of glass, bone and shell fragments, coins, and a fragment of inscribed stone. Furthermore, a detailed architectural survey and a preservation assessment took place, as well as drone photography of the site and its surroundings. The damage assessment revealed quite heavy damage to the site over the years and numerous illicit excavations, especially in the area of the fort and caravanserai.

The site has never been studied in any great detail, nor has it been examined in a perspective that locates it within the wider framework of the transport network and economy of this part of the ancient world and its significance for wider trade networks through time and in a longue durée perspective. A set of publications of the results are already in the making.



An exterior wall to the west of the fort's entrance (Photo: Khirbet al-Khalde Archaeological Project).

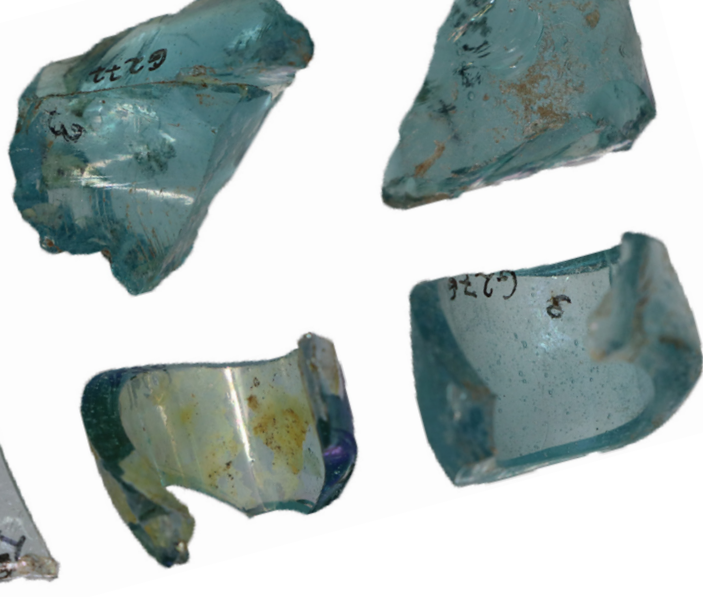
Journal of Urban Archaeology among the Top Archaeological Journals

Journal of urban archaeology has passed its fourth year in print with two remarkable volumes in 2023. In the spring, Roland Fletcher, Nam C. Kim, and Kirrily White were guest editors of a special issue (volume 7) on 'Anomalous Giants' – with thirteen paper dedicated to settlements, which have been discussed in recent research debates as 'large low-occupation-density settlements'. These were places characterized by lower densities not conventionally associated with urban settlements, yet also distinct from the much-discussed pattern of far larger 'low-density agrarian-based urbanism'. The thirteen papers discussed a global range of cases and set a powerful new agenda for a group of settlements that frequently challenge the concept of urbanism.

The fall volume, by JUA's regular editors, Rubina Raja and Søren M. Sindbæk, similarly set a conceptual agenda with a focus on 'Urban Heterogeneity'. Traditionally, the key dimensions for assessing early urban sites

and their evolution have been their size and density. This takes away focus from a third element, which has been crucial to sociological definitions of urbanism: social heterogeneity. The nine papers of the volume explored how we may reframe comparative archaeological studies of early urban societies to focus on the evolution of heterogeneity, and achieve robust comparisons in this respect between different places and societies.

With four years in publication, JUA can now register in academic ranking tables. In 2023, the non-profit ranking platform Exaly thus listed the journal as the 19th most widely cited out of 427 Archaeology journals. This means the journal is among the top 5% in the discipline of archaeology. This is an extraordinary achievement for a young periodical, and a testimony to the high quality of the content, and to UrbNet's wider impact at the edge of current conceptual development.



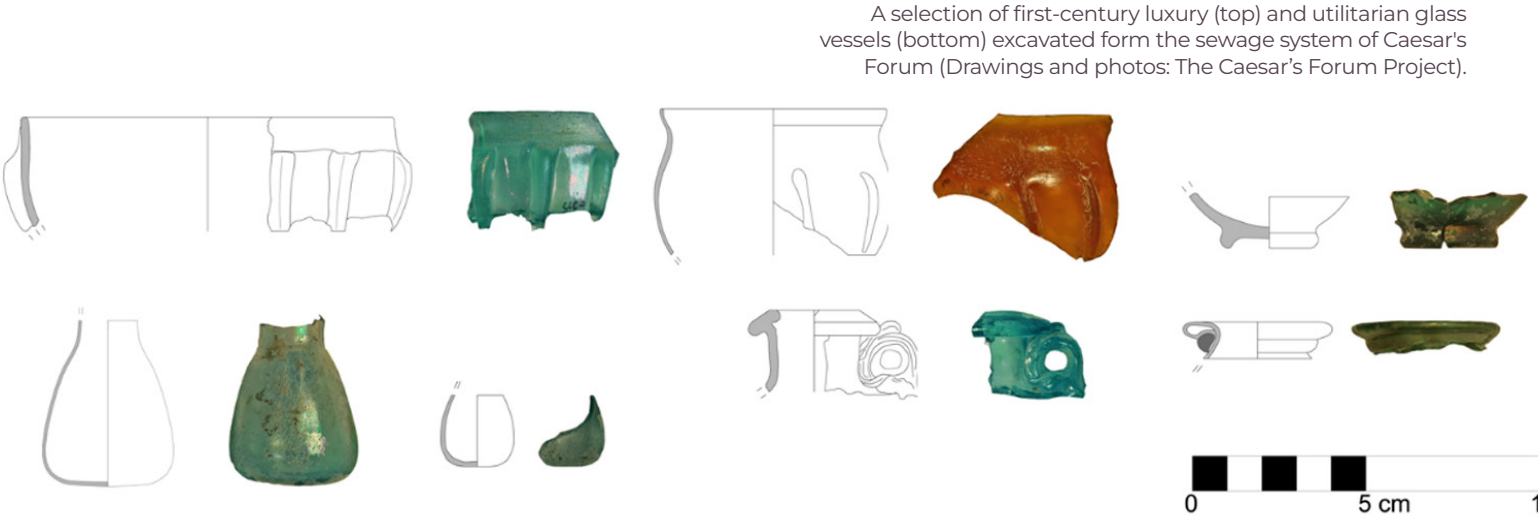
Glassworking waste excavated from the sewage system of Caesar's Forum (Photo: The Caesar's Forum Project).

Caesar's Forum Glass Study

Project	The Caesar's Forum Project
Directors	Rubina Raja, Jan K. Jacobsen and Claudio Parisi Presicce
Funding	The Carlsberg Foundation, Aarhus University Research Foundation, and UrbNet

The activity on glass from the Forum of Caesar was centred on the interdisciplinary study of a large assemblage of glass finds (c. 600 fragments) deposited around the 50 CE in the sewage system of the Caesar's Forum. This assemblage is the largest corpus of glass finds ever excavated in Rome from a well-dated first-century context. The interpretation of archaeological, technological, and chemical data (LA-ICP-MS analysis, performed at the institute IRAMAT-CEB, CNRS of Orléans, in collaboration with Dr. Nadine Schibille) on a selection of 150 samples (including vessels, indicators of production, window panes, mosaic tesserae, game counter, and indicators of production) produced for the first time a comprehensive reconstruction of glass economy in Rome, during the second half of the first century CE. The identification of glass-working waste demonstrated for the first time that glass was blown and recycled in early imperial Rome. During the first century CE, fresh glass was made in Egypt and Syro-

Palestine, and blocks of raw glass were shipped to the secondary workshops distributed across the empire. Unexpectedly, more than the half of the glass analysed turned out to be recycled. Glass recycling is traditionally interpreted as a coping strategy, which gained importance in periods of crisis when access to fresh glass was difficult. The new evidence from the Forum of Caesar proves that collection and recycling were intense also in periods of economic prosperity and at the centre of the empire. Glass recycling was integrated in an efficient system of urban waste disposal. For the outstanding quality of this research Cristina Boschetti was awarded of the prestigious Rakow Grant for Glass research from Corning Museum of Glass (USA) to publish a monograph on glass from the Forum of Caesar and of the annual travel grant of the British Association for the History of Glass (AHG), to present the results at the Spring Conference of the association (held in Oxford from 31 March to 1 April 2023).



A selection of first-century luxury (top) and utilitarian glass vessels (bottom) excavated from the sewage system of Caesar's Forum (Drawings and photos: The Caesar's Forum Project).



Inter-WW Archaeology in the Middle East

Project A Digital Archive Platform for Research on the Danish Inter-World War Archaeological Engagement in the Middle East

Director Rubina Raja

Funding The Carlsberg Foundation

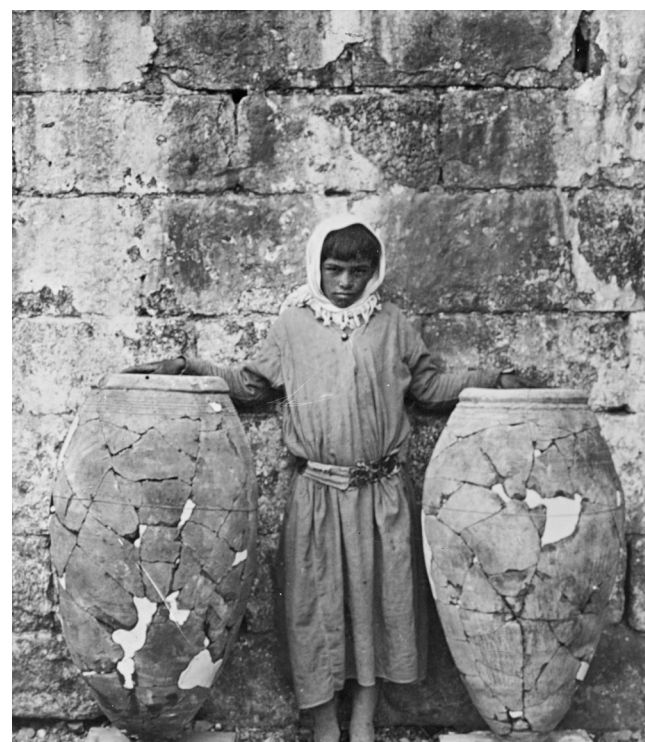
Centre Director, Professor Rubina Raja has received funding from the Carlsberg Foundation to develop a digital archive platform. This platform will host thousands of documents relating to the archaeological engagement in the Middle East in the period between WWI and WWII.

The increasingly critical situation in the Middle East underlines the importance of archival materials, which holds information about archaeological sites, their objects, structure, and history. The new project focuses on the Danish engagement in the Middle East in the Inter-World War period as well as in the years leading up to WWI. The Danish engagement during this period was often undertaken in collaboration with other nationals, not least since the region was under Mandate rule, and permissions to undertake archaeological work was granted by the respective Mandate authorities.

The project takes its point of departure in two specific archives, both located at Yale University. By studying these archives in tandem in their historiographical contexts, there is an immense potential for better understanding archaeological practices of that time, mapping research interests, as well as as personal, social, and political networks.

The history of two Danish foundations is of particular interest: the Carlsberg Foundation, which still supports archaeological research, and the today dissolved Rask-Ørsted Foundation. The latter played a significant role in the interwar period for Danish scholarship and archaeological research in the Middle East. The first documents about the potential

venture of the Rask-Ørsted Foundation gives insight into the Danish perception of the role of the smaller nations in the wake of WWI, nations that were not as damaged during the war as the larger nations. These documents reveal that a group of scholars and statemen believed Denmark should play a significant role in mediating between the nations in relation to the reinstitution and building up of new relations in academia, including initiating and leading field expeditions around the world together with international colleagues.



Young worker with finds from the Hama excavations, undated photo taken by Harald Ingholt (© Palmyra Portrait Project and Rubina Raja, courtesy of the Yale Babylonian collection, Yale University).

New Light on Northern Emporia

Project Director Northern Emporium Project
Søren M. Sindbæk

Funding The Carlsberg Foundation

Participants convened 27 October 2023 in Aarhus for the symposium *New Light on Emporia and Networks*, which marked the conclusion of the Northern Emporium project (Photo: Søren Michael Sindbæk).



On 26–27 October a sizable of the contemporary world of Viking-age archaeology convened in Aarhus for the symposium 'New Light on Emporia and Networks'. This event marked the conclusion of the Northern Emporium project at UrbNet, and at the same time it spurred the further exploration of the wealth of data and materials gathered through the efforts of the project.

Each speaker at the conference was tasked with addressing specific questions arising from the work with the excavations and materials from the early medieval emporium in Ribe, excavated, analysed, and published

by the Northern Emporium project at UrbNet during the years 2017–2023. The briefs ranged from the origin or distribution of particular, enigmatic artefacts to the formation and organization of trade networks in northern Eurasia during the early Middle Ages.

Just as the format of the symposium followed an unorthodox line, the proceedings from the event, due to be published in book form in 2024, adhere to an innovative formula. The symposium delegates have agreed to team up for a series of collective papers directed at the key questions that emerged from the deliberations at the meeting.

Reuse, Reduce, Recycle: The Three Rs in Archaeology and History

Project Circular Economy and Urban Sustainability in Antiquity
Director Rubina Raja
Funding The Carlsberg Foundation and the Augustinus Foundation

Research on circular economies has been central at UrbNet over the last few years. It has been pioneered within the project headed by Rubina Raja on circular economy and urban sustainability, adding new insight into the functioning of past economies. Gradually it has spilled over into junior researchers' work at UrbNet, since one of the centre's work packages is dedicated to this topic. The mother project has produced high-impact results in a set of international publications, among these the edited volume by Andrade, N. and R. Raja, *Exchange and Reuse in Roman Palmyra: Examining Economy and Circularity*. This volume pulls together evidence from

one specific site, studying the city's economy from different perspectives. It features new methodologies for determining the size of Palmyra's population and for understanding the nature of coins in local exchanges, offers reassessments of the Palmyrene institutions that underpinned economic exchange, examines how Palmyrenes used and reused materials, and considers the forms of exchange and reuse.

While the study on the reuse of building materials has a long history in archaeology, and improvements in archaeometric analyses pushed for more studies of glass and metal as recyclable products, other materials – and

agents involved in circular practices – have stayed largely invisible, and processes such as maintenance, remanufacturing, or curation are rarely addressed.

Economic circularity has also been studied through further interdisciplinary approaches and without a strict regional focus, allowing us to bridge different research areas of the centre. Circular practices have been studied through archaeological and historical sources, resulting in methodological considerations and case studies published from Palmyra and other sites from the Roman Empire and the early medieval period.

The article *Circular Economy in the Roman Period and the Early Middle Ages: Methods of Analysis for a Future Agenda* provides a solid overview of research conducted over the last few years, as well as a model of circular economic practices and detailed discussions of what research agendas and

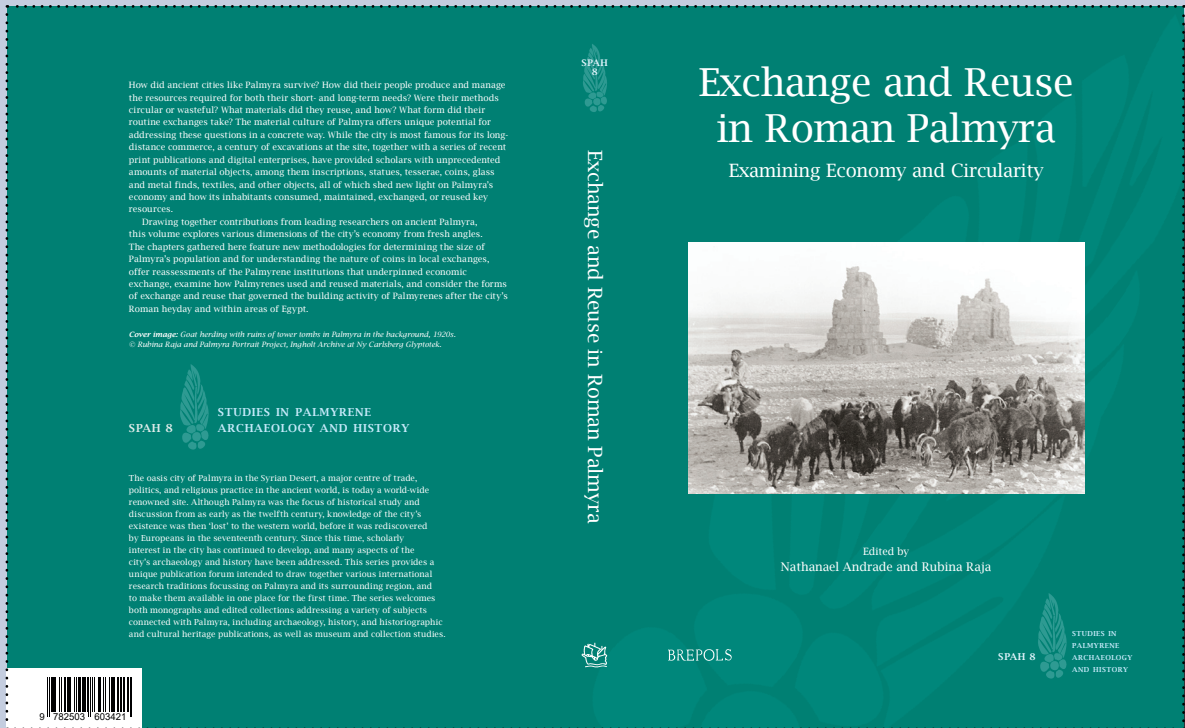
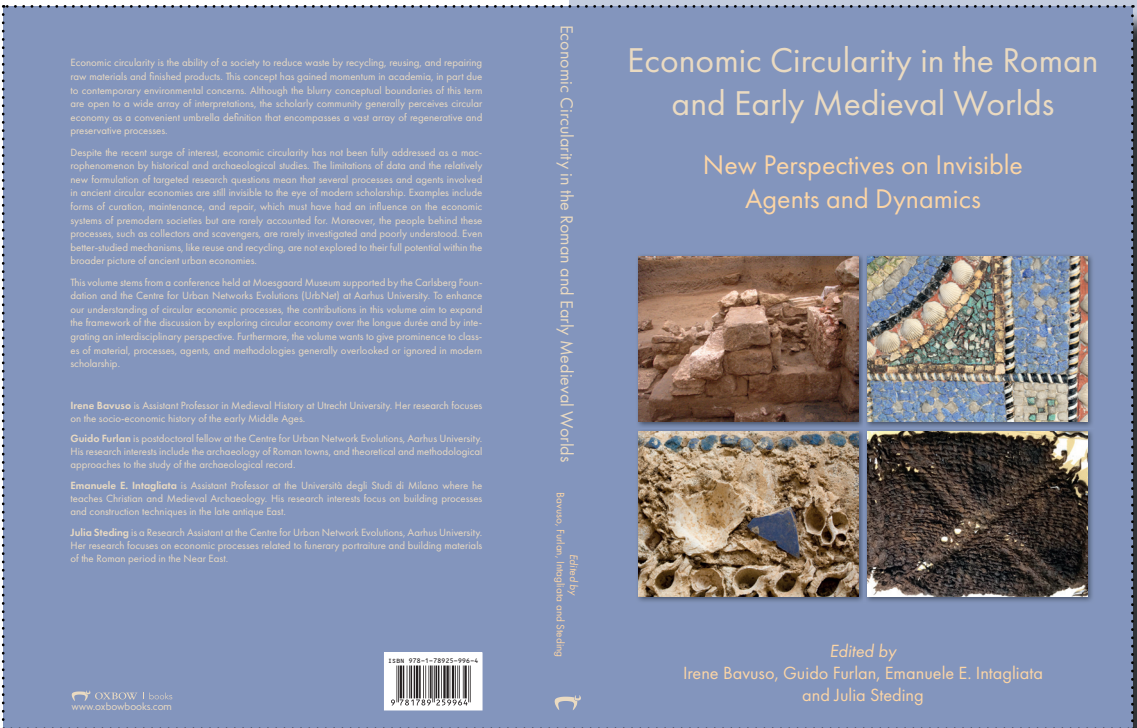
methodologies are needed to study circularity through archaeological and historical sources.

The proceedings from the conference *Invisible Circularity from the Roman Period to the Middle Ages* (held at Moesgaard Museum in 2022) was published in 2023, contributing to our understanding of circular economic practices in the past. The two volumes are important additions to scholarship. The conference proceedings broaden the discussion about circularity and economy to a larger region and a longer period. Contributors address agents of circular economies, such as junk dealers and scavengers, the reuse and recycling of glass, textiles, metal, stone, and jewellery, as well as methodological approaches to reuse, such as the perks and pitfalls of 3D scanning and provenance analyses.

The high-impact research that has come out of this work package has demonstrated frontrunner status in this field worldwide.

Reading

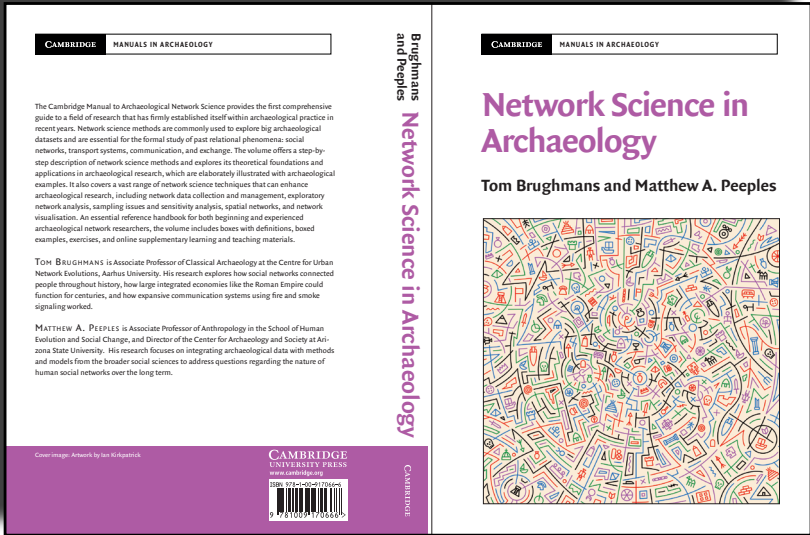
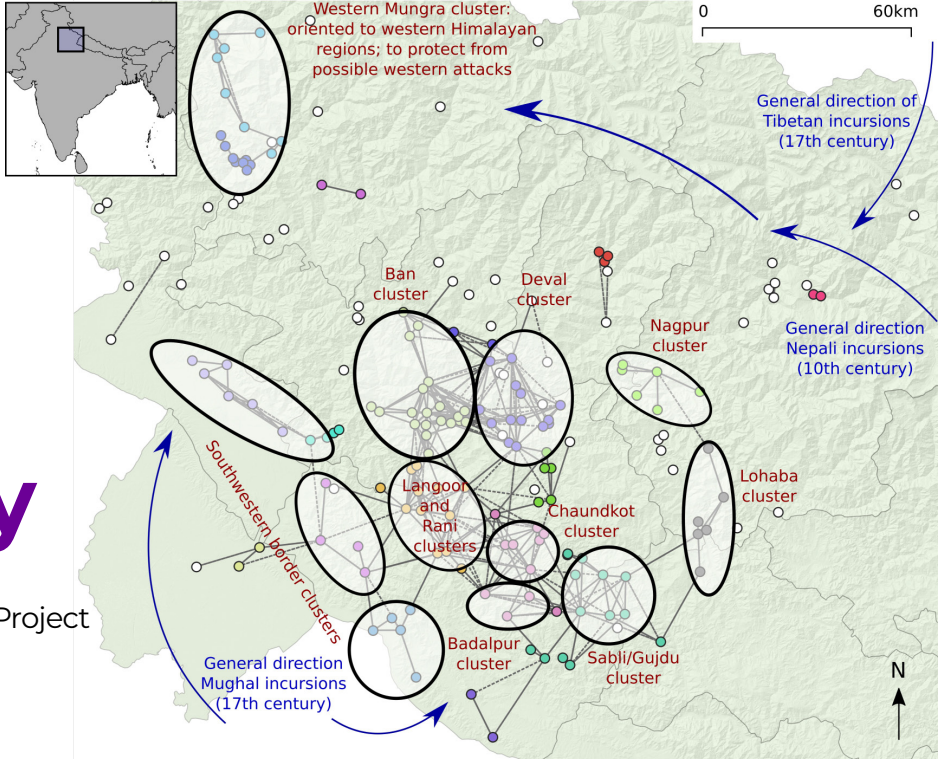
- Andrade, N. and R. Raja (eds). 2023. *Exchange and Reuse in Roman Palmyra: Examining Economy and Circularity*. Turnhout: Brepols.
- Bavuso, I., G. Furlan, E. E. Intagliata, and J. Steding. (eds). 2023. *Economic Circularity in the Roman and Early Medieval Worlds: New Perspectives on Invisible Agents and Dynamics*. Oxford: Oxbow.
- Bavuso, I., G. Furlan, E. E. Intagliata, and J. Steding (2023). 'Circular Economy in the Roman Period and the Early Middle Ages: Methods of Analysis for a Future Agenda', *Open Archaeology*, 9.1: 20220301.
- Furlan, G. 2023. 'Aspects of Circular Economy on an Urban and Inter-Urban Scale in the Roman Age: Towards a More Holistic Model', *Thiasos*, 12: 341–366.
- Furlan, G. and C. Andreatta. 2023. 'Waste Nothing: The Impact of Glass and Metal Recycling in Imperial Roman Towns', *European Journal of Archaeology*, 26.4: 1–19.



Example case study from the textbook, showing medieval forts in the Himalayas represented as nodes, connected by a line if one fort can be seen from another fort (© Rawat, Brughmans, Nautiyal and Chauniyal 2021 Antiquity, Fig. 10).

Network Science in Archaeology

Project The Past Social Networks Project
Director Tom Brughmans
Funding The Carlsberg Foundation



Example case study from the textbook, showing medieval forts in the Himalayas represented as nodes, connected by a line if one fort can be seen from another fort (© Rawat, Brughmans, Nautiyal and Chauniyal 2021 Antiquity, Fig. 10).

Network methods are now firmly established as tools of the trade in archaeological research, but educational materials were still missing. Tom Brughmans and his colleague Matt Peeples from Arizona State University have recently published the very first textbook dedicated to the topic. The book teaches the theory and practice of archaeological network research, and it is published in the reference series 'Cambridge Manuals in Archaeology' by Cambridge University Press.

Archaeologists use network methods to study diverse phenomena: how to get from one city to another over a road network, or how family relationships were structured in past communities. 'NetworkScienceinArchaeology' teaches how to perform this kind of research.

The book is very much concerned with doing archaeological network research on solid theoretical foundations. For this reason, it starts by explaining what network science is, what makes it different from other methodological and theoretical approaches, and how it fits within the typical archaeological research process. Moreover, the volume concludes by setting out diverse directions that reveal untapped potential for archaeological network research: environmental networks, cultural transmission, past economies, and social networks.

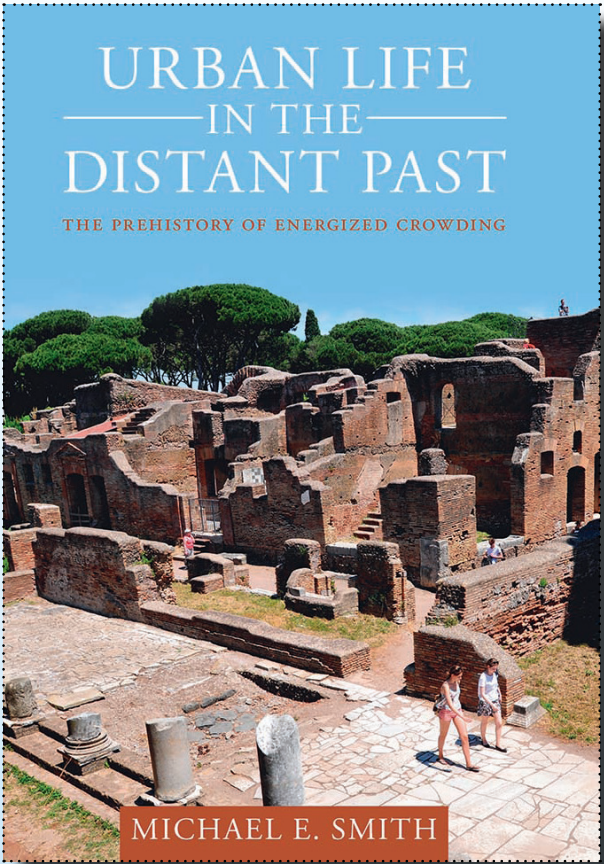
These two theory chapters sandwich more methodological chapters that teach archaeology students all they need to know to apply network research – from basic concepts including data formats and exploratory analysis, to more advanced topics including sensitivity analysis and spatial networks. All methods introduced are richly illustrated through a wide range of real archaeological case studies from world archaeology, such as visibility networks between medieval forts in the Himalayas, to ceramics similarity networks in the pre-Hispanic US Southwest. The volume significantly enhances the ability of the next generation of archaeologists to perform critical network research.

Urban Life in the Distant Past: The Prehistory of Energized Crowding

In 2023 former UrbNet Visiting Professor Mike E. Smith (Arizona State University) published the monograph *Urban Life in the Distant Past: The Prehistory of Energized Crowding*, which is based on the six-part lecture series he gave during his visit at UrbNet in spring 2018.

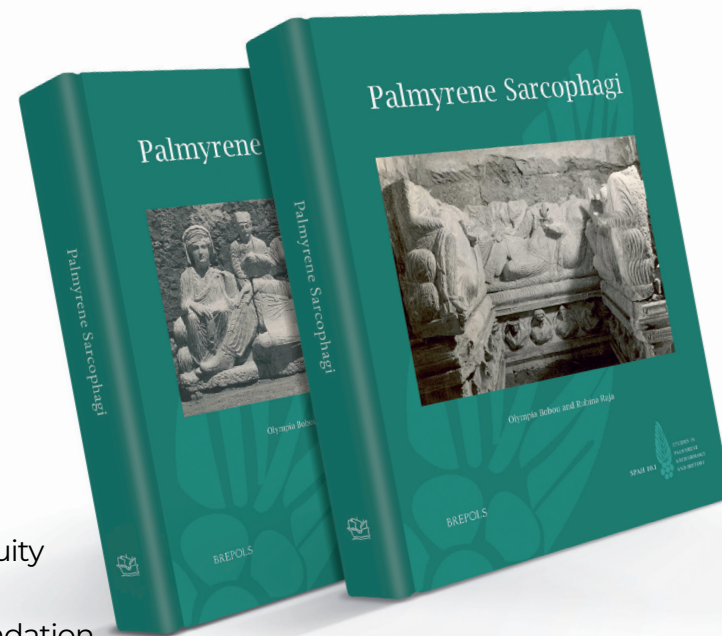
In this book, Michael Smith offers a comparative and interdisciplinary examination of ancient settlements and cities. Early cities varied considerably in their political and economic organization and dynamics. Smith introduces a coherent approach to urbanism that is transdisciplinary in scope, scientific in epistemology, and anchored in the urban literature of the social sciences. His new insight is 'energized crowding', a concept that captures the consequences of social interactions within the built environment resulting from increases in population size and density within settlements. Smith explores the implications of features such as empires, states, markets, households, and neighbourhoods for urban life and society through case studies from around the world. Direct influences on urban life – as mediated by energized crowding – are organized into institutional (top-down forces) and generative (bottom-up processes). Smith's volume analyses their similarities and differences with contemporary cities, and highlights the relevance of ancient cities for understanding urbanism and its challenges today.

The monograph is published in the UrbNet-founded series *Urban Archaeological Pasts* (Cambridge University Press), which is also expected to include monographs by other UrbNet visiting professors who have given lecture series at the centre.



Palmyrene Sarcophagi

Project Circular Economy and Urban Sustainability in Antiquity
Director Rubina Raja
Funding The Carlsberg Foundation and the Augustinus Foundation



The city of Palmyra has yielded the largest corpus of funerary portraits from any city in the Roman Empire, with the exception of Rome. Of these portraits, the ones found on sarcophagi form a special category, which has now been analysed as a group for the first time as a result of the work done over a decade within the Palmyra Portrait Project and UrbNet. The size of and multifigural compositions on the sarcophagi set them apart from other forms of funerary commemoration in the city, such as loculus reliefs that were used for closing off burial niches. Their creation furthermore coincided with the intense monumentalization of the city of Palmyra, and the construction of imposing public buildings and the colonnades lining the streets. As such, they cannot be separated from the urban development of Palmyra or the ways in which its increasingly wealthy elites and upper middle-class citizens chose to display themselves and use their wealth for the enrichment of their city and their own personal aggrandizement.

Palmyrene Sarcophagi is the first publication of all the known sarcophagi, sarcophagi fragments, and reliefs with the theme of the family banquet from Palmyra. This corpus of material includes over 700 objects in various states of preservation: from single heads to complete sarcophagi, located primarily in Syria, especially in the museums of Palmyra and Damascus, but also in major museums around the world (e.g. Istanbul Arkeoloji Müzeleri, Istanbul; Ny Carlsberg Glyptotek, Copenhagen; Louvre, Paris; British Museum, London; Metropolitan Museum of Art, New York; Bode Museum, Berlin),

university museums (e.g. Archaeological Museum of the American University of Beirut; Antikensammlung der Friedrich-Alexander Universität Erlangen), private collections, and the art market.

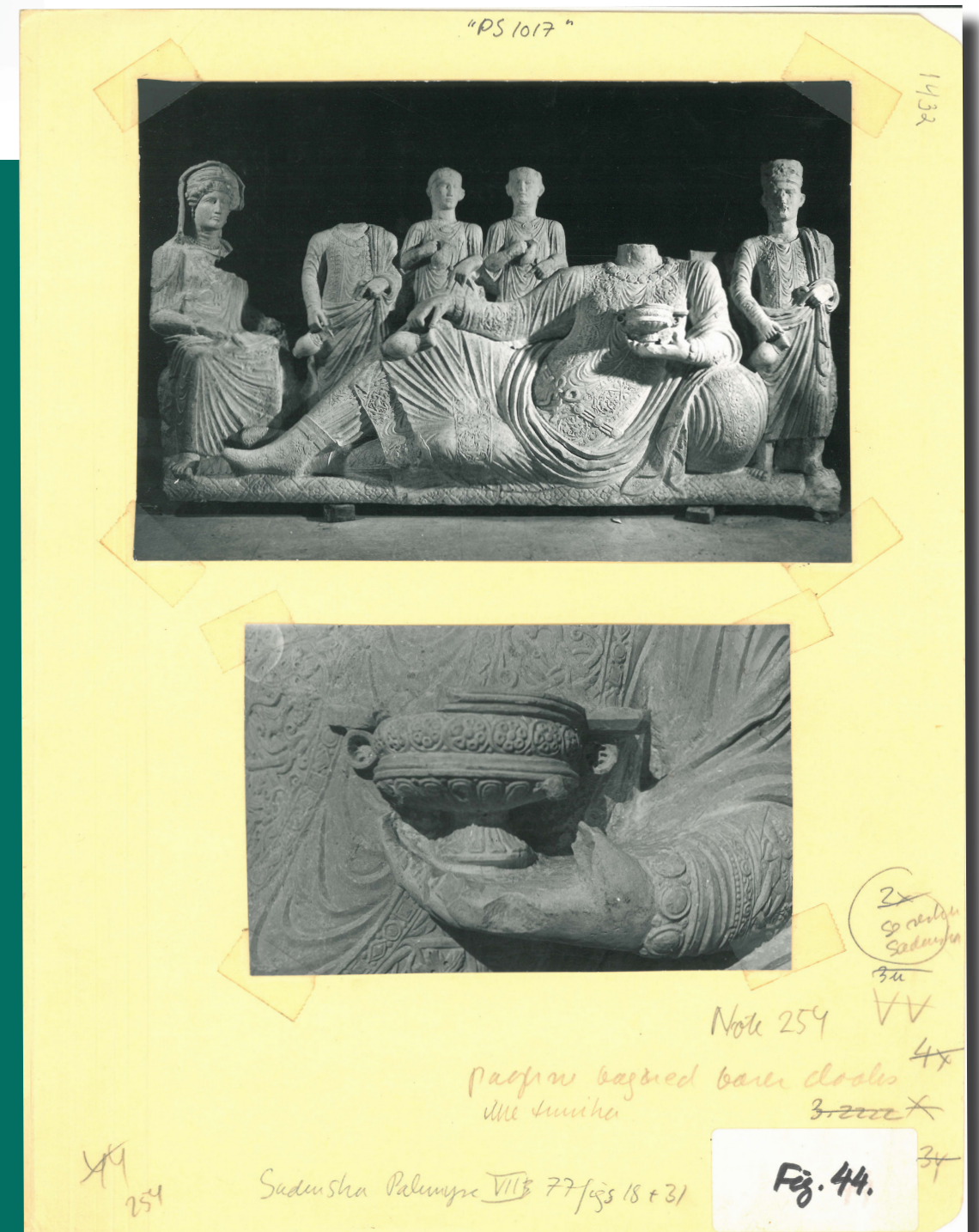
The sarcophagi from Palmyra can be separated into two big groups according to their typology: sarcophagi composed of a box and lid, like those seen in other areas of the Roman Empire, and reliefs carved in the shape of sarcophagi, a type that is extremely rare outside Palmyra (see, for example, the carved reliefs in tombs at Zeugma, or Doliche, both sites in modern Turkey, but close to Syria). Almost all of them have the same iconography: they show a family at a banquet on the lid, and a series of busts on the sarcophagus box, depicting members of the extended family. The family at the banquet almost always consists of a reclining man who takes up the centre and one side of the relief, a seated woman on the other side, and a series of standing children between them. Very rarely, there are two men reclining side by side on one side, or, even more seldom, a woman alone is depicted reclining at the banquet. Just as rare are the depictions of scenes of sacrifice or of caravans on the box.

The motif of the banqueting family was also used in reliefs that adorned the exterior of the tower tombs of the city's elites, and reliefs that were placed inside underground tombs (hypogea) and temple/house tombs, and so it was a motif that dominated the funerary iconography of the city. Scholars in the past associated the banquet with the afterlife; however, it is more likely that the imagery was chosen because it emphasized family bonds

and the wealth and status of the individuals. Supporting this argument is the iconographic choice of richly embroidered and decorated garments inspired by Parthian costumes, the depiction of elaborate cups, whose originals were made out of precious metals or glass, and the representation of men as priests, testifying to their high status within Palmyrene society. This imagery sometimes reflected social reality, while in other occasions it was aspirational (as, for example, with freedmen who chose to be depicted in the banquet dressed in Parthian-inspired clothes). In all cases, however, the study of the sarcophagi as a group shows how elite

identity in Palmyra was constructed primarily through social roles and costly attributes.

This study is a major contribution both to classical archaeology and art history and will in turn contribute to a paradigm shift in how self-representations from the ancient world should be studied in the future, but it is also a major contribution to the study of past urban societies and their networks – the local societal and social networks of the Palmyrene across three hundred years – social networks, also a topic which stands at the core of UrbNets research agenda.



For the archive sheet: Sarcophagus from the Tomb of 'Alaînê, Ingholt Archive PS 1432
 (© Palmyra Portrait Project and Rubina Raja, courtesy of Ny Carlsberg Glyptotek).



Rubina Raja elected Corresponding Member of AIA

In January 2023 the Council of the Archaeological Institute of America (AIA) held their 144th meeting. At this meeting, Professor Rubina Raja was elected Corresponding Member of the Institute.

As stated on the AIA's webpage, "Corresponding Members of the AIA are distinguished scholars outside the United States and Canada who have attained acknowledged eminence in some branch of archaeology, or in the arts and sciences related thereto, including the fields of education, conservation and museums."

Potential members are nominated by their peers and then elected by a vote of the Council. Rubina Raja was unanimously approved by the AIA's Council after she had been nominated. The election also includes a lifetime membership of the AIA.

At present, the AIA has 137 Corresponding Members from 34 different countries.

Founded in 1879, the AIA is the oldest archaeological non-profit organization in North America. It has more than 200,000 members, and there are local societies connected to the AIA in the United States, Canada, and Europe. Both professional archaeologists, students and non-specialists interested in archaeology are among the many members of the Institute. The Institute organizes public lectures and trips to archaeological sites around the world, they award fellowships and grants to students and scholars, they publish the magazine *Archaeology*, they host an Annual Meeting every year, and much more.

ERC Starting Grant to former UrbNet postdoc Iza Romanowska



The project Drivers and Mechanisms of Long-term Urban Evolution and Resilience (THE MODEL CITY) focuses on long-term urban development and resilience. The rise and fall of cities in the face of disasters – whether natural, socio-political, or climatic – still puzzle researchers to this day. Why were some cities able to adapt to the challenges they faced, while others succumbed to the same pressures? And how can we tackle contemporary crises in light of historical data? These are some of the questions the project seeks to uncover.

By using cutting-edge computer technologies and modelling tools, Iza Romanowska aims to shed light on urban dynamics and the interaction between cities and their hinterlands, hoping to be able to harness valuable information that could be used in mitigating today's challenges.

'The Model City' is inspired by the work that Iza Romanowska carried out in collaboration with a research group at UrbNet within the framework of the project Circular Economy and Urban Sustainability in Antiquity (directed by Rubina Raja and funded by the Carlsberg Foundation and the Augustinus Foundation). The Circular Economy and Urban Sustainability in Antiquity project is one of the major spin-off projects to have come out of UrbNet's research in general and Rubina Raja's Palmyra-focused research since 2012. Between September 2020 and August 2023, Iza Romanowska was funded 50% by the Circular Economy project as a co-funded postdoc, with the other 50% coming from Aarhus Institute of Advanced Studies.

Two articles from the collaborative project are in the making, concerning the urban development of Palmyra in Syria.

Embedment Positions at UrbNet

Associate Professor Tom Brughmans (2020–)

My appointment has led to an exciting period of professional growth on all levels of collaboration, research, and teaching. It provided opportunities to collaborate in-house with gifted students, and colleagues who are leading experts in archaeology, history, and classics. The environment provided constant encouragement and opportunities to develop original ground-breaking research projects. This has in turn enabled me to develop research-driven educational courses in Archaeology and Classical Studies.

The Erasmus+ project Agent-Based Modelling for Archaeologists that I co-directed was a great example of this. My appointment enabled me to be co-PI in international research and development projects, and focus research efforts on developing much-needed resources. In the case of this project, we developed interactive open online tutorials to help archaeologists learn Agent-Based Modelling, a commonly used simulation technique. This development was only possible thanks to collaboration, not just internationally, but also with local students and researchers. The educational resources introduce what the approach entails, how to do it in practice, and how it can enhance archaeological research. We succeeded in bringing this message to a global audience through a series of online and in person workshops attracting hundreds of archaeologists at all career levels. But it has also enabled me to enhance Digital Humanities teaching at Aarhus University, by using these purpose-built resources to make strategic contributions in BA and MA courses in Classical Studies and Archaeology.



Particularly valuable was that all these collaboration, research and teaching efforts in combination have led since my appointment to a more firmly established subdiscipline of archaeological network research. The first textbook on the topic The Cambridge Manual of Network Science in Archaeology featured in this annual report is an excellent example of this. The field is now driven by a realization that some research questions about past human behaviour can only be answered by combining network methods and archaeological data. The community has formulated major research goals to guide the field, that will enhance our understanding of long-term change in human social networks. It has been enormously rewarding for me to have contributed to the crystallization of archaeological network research since my appointment, and I am excited about the future of the field.



I have been part of the UrbNet research community since its inception. In 2017, I became affiliated to the centre in connection with my research project 'The City of the Dead' (funded by the Ministry of Culture's Research Fund and the Beckett Foundation), which had sprung from previous collaboration with UrbNet's vice-director, Søren M. Sindbæk. As the project sought to disentangle the development of the

Associate Professor Sarah Croix (2024–)

urban community in early Ribe, drawing on multiple fields of expertise at Aarhus University and Museum West, it aligned closely with UrbNet's research agendas. In 2017 I joined the 'Northern Emporium' project, solidly anchored at UrbNet and pursuing the investigations of Ribe's networks throughout the early medieval world. Its high-definition approach is, and will remain, foundational for how I study the human past.

I have already tested the robustness and transferability of the approach in connection with an excavation project at a Viking-age manorial site in South Denmark, Erritsø. During three field campaigns conducted in collaboration with the Vejle Museums, we have gathered data and samples which are currently being analysed thanks to a grant from the Carlsberg Foundation, bringing new insights into social inequality in this time marked by political, economic, and cultural transformations.

In the upcoming years, I will continue addressing the question of how societies change by applying UrbNet's high-definition approaches to burial remains. The rich archaeological material from around the turn of the first millennium CE in Denmark can be used as an index for social transformations, enabling us to monitor them on a refined timescale.



High-definition archaeology in the making. Sarah Croix sampling for micromorphology during the Northern Emporium excavation, 2018 (Photo: Aarhus University/Museum West).

"[T]hanks to your pieces I'm thinking about cities in completely different ways."
– Dr Matthew Symonds, Editor, Current World Archaeology

Since 2022 Rubina Raja and Søren M. Sindbæk have written a bi-monthly culture comment in the magazine *Current World Archaeology* (CWA). In each issue they tackle a wide range of issues connected to ancient and modern urban societies, archaeology, history, and cultural heritage in a global perspective.

CWA enjoys a large international readership, and targets those who have a fascination for new archaeological excavations and discoveries around the world. Thus, the UrbNet column taps into the widespread desire to learn about past societies and ancient civilizations, and understand the implications of historical mysteries for our current way of life.



Rubina Raja &
Søren M Sindbæk on...





Rubina Raja &



ONE PERSON'S
TRASH IS ANOTHER
PERSON'S TREASURE

Something rotten in the state of Denmark' may be one of Shakespeare's most famous lines. This exclamation in *Hamlet* immediately draws our thoughts to smells and decomposing rubbish, even if only of the metaphorical kind. However, the whiff of decay we bring to the forefront here is rather more literal than the one Shakespeare had in mind. It is another kind of rot, namely that produced by kitchen middens. This kind of rot provides fascinating insights into the way that ancient people organised themselves in settlements, what they ate, and the stuff that tells us about the continuation or collapse of their societies – both in prehistoric and historic times. It is, in short, the kind of rot that gets most archaeologists excited, which is why it is As it happens, Shakespeare's statement was closer to the mark than he might have imagined: certainly, Copenhagen in the 1600s was a city brimming with rubbish. A statute in 1680 instructed the mayor's secretary to record how the inhabitants dealt with their waste, which tended simply to pile up in the streets. Shortly after that, a solution to the problem offered itself, when

Another unexpected resonance with Shakespeare's line is that Denmark is famous – among archaeologists at least – for being home to the first study of a prehistoric kitchen midden. The so-called Køkkenmøddingskommission ('the Kitchen Midden Commission') was constituted in 1848 by the Royal Museum for Nordic Antiquities – the predecessor of the present National Museum of Denmark. This commission produced important publications on prehistoric kitchen middens bordering a channel known as Limfjorden in northern Jutland, as well as on Djursland in eastern Jutland. A generation later, a more interdisciplinary team embarked on a sequel, duly named the Second Kitchen Midden Commission, which examined and mapped the middens by Limfjorden between 1893 and 1895. Close to 9,000 archaeological objects were excavated across 314m². Furthermore, more than 20,000 animal bones and over 550 charcoal samples were collected. These results were published in a weighty tome entitled *Afskildsyngelse fra Stenalderen i Danmark* ('Garbage Heaps from the Stone Age in Denmark'), which became a benchmark for archaeological method.

it was decided to fill in the medieval moats encircling the city. This was a disposal plan that even the little rubbish Copenhageners were willing to follow.

The outcome was brought to light a few years ago, when excavations for the Copenhagen City Metro cut the backfilled moats, and tons of household waste and rotten rags emerged from the deep. A chapter in the fascinating book *Archaeology of the Dead* details the deposits, buried in the brief period between 1675 and 1685 – a very short span of time in archaeological terms. The finds provide not only a sobering view of diet, health, and subsistence in the European Age of Absolutism, but a memento of posh and not-so-posh habits of dining, drinking, and smoking, as well as faded fashion fads recorded by more than 1,300 pieces of textile.

Issue 12



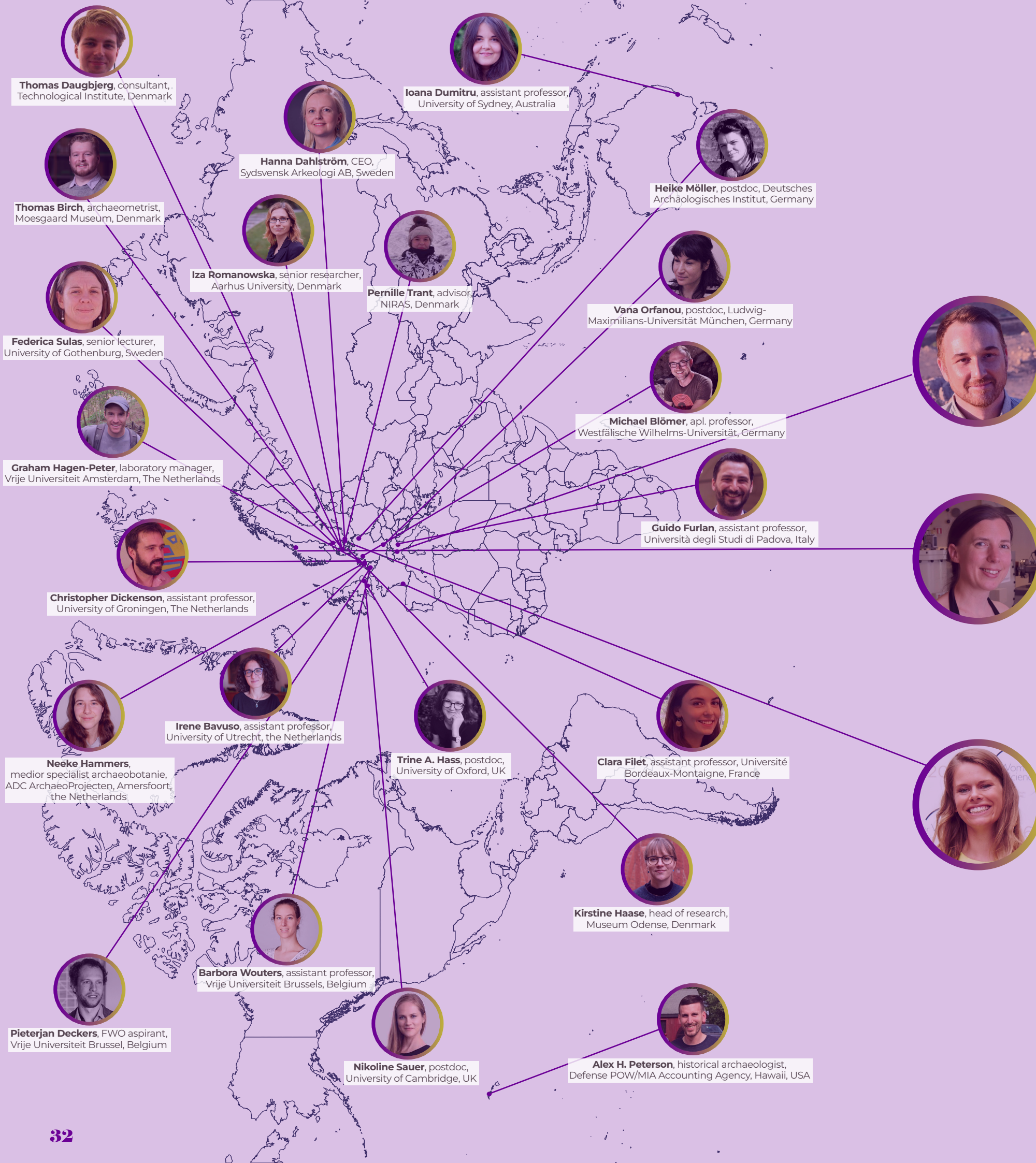
Issue 12



Subordinate



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Where Did They Go?

Mapping former employees who stayed in academia or took up Archaeology-related positions

Assistant Professor (Tenure-Track) Emanuele E. Intagliata

I was an assistant professor and postdoctoral fellow at UrbNet 2018–2021. In 2022 I became a tenure-track assistant professor in Mediaeval Archaeology at University of Milan. My employment at UrbNet was pivotal to developing the exciting research topics that I am currently exploring, including economic circularity and connectivity. The multi-disciplinary approach to archaeology is now at the core of my current projects. My time at UrbNet was fundamental in enriching my research portfolio and has decidedly impacted the way I do research and teach.

Head of Laboratory Bente Philippsen

I was a postdoc at UrbNet in 2017–2019, during which time I contributed to developing a refined radiocarbon calibration curve. I worked with the chronologies of Ribe (Denmark) and Jerash (Jordan). I now head the National Laboratory for Age Determination at the NTNU University Museum in Trondheim, which is Norway's national infrastructure for radiocarbon dating and dendrochronology. My time at UrbNet honed my skills for interdisciplinary cooperations and my sense for the importance of context for radiocarbon dating and age modelling. The fascination for early urban trade networks and maritime connections has followed me into my recent position where I cooperate with the 4OCEANS project and an exhibition about walrus trade in the early medieval period.

Associate Professor Luise Ø. Brandt

The research project I carried out at UrbNet (2015–2018) has resulted in at least eleven publications, and more importantly, research collaborations with and through UrbNet in those years have been fundamental to my two Novo Nordisk Foundation grants for citizen science on archaeological material as well as my DFF Sapere Aude grant on Viking-age fur, which build on research that was initiated in my years at UrbNet.

Events

Organization of Conferences and Workshops

Some of these events were co-organized with external partners, but for the purpose of this report, only the relevant UrbNet employee(s) is/are listed.

Session: "Current Trends in Archive Archaeology", conference: *Annual Meeting at Archaeological Institute of America*, New Orleans, Louisiana, USA, 6 January 2023, organized by Rubina Raja

Session: "Post Palmyra Portrait Project: Towards a Holistic Approach to Ancient Urban Societies", conference: *Annual Meeting at Archaeological Institute of America*, New Orleans, Louisiana, USA, 7 January 2023, organized by Olympia Bobou & Rubina Raja

Workshop: *The Past Social Networks Networking Event*, Aarhus University, Aarhus, Denmark, 12–13 January 2023, organized by Tom Brughmans

Conference: *The Archaeology of Urban Networking*, Università degli Studi di Milano, Milan, Italy, 27 March 2023, organized by Rubina Raja & Søren M. Sindbæk

Session: "Studying Uncertainties in Archaeology: A New Research Agenda", conference: *50th Computer Applications and Quantitative Methods in Archaeology Annual Conference*, University of Amsterdam, Amsterdam, Holland, 3–6 April, organized by Eduardo Herrera Malatesta & Tom Brughmans

Conference: *Catastrophes in Context: The Archaeology of Catastrophes from the 1st–8th centuries CE in the Mediterranean Region*, All Souls College, University of Oxford, Oxford, United Kingdom, 17–18 April 2023, organized by Rubina Raja

Conference: *Nordic Urban Archaeology (NUA23): Experiences and New Directions*, Copenhagen City Hall, Copenhagen, Denmark, 10–12 May, organized by Kirstine Haase

Workshop: *Complex Stratigraphies and High-Resolution Excavation: The Next Frontier*, Aarhus University, Aarhus, Denmark, 8–9 May 2023, organized by Rubina Raja, Søren M. Kristiansen & Søren M. Sindbæk

Session: "Working with Imperfection in Archaeology: Theoretical and Practical Approaches to Data Management", conference: *29th Annual Meeting of the European Association of Archaeologists (EAA)*, Belfast University, Belfast, Northern Ireland, 31 August 2023, organized by Eduardo Herrera Malatesta

Session: "Multiproxy Geoarchaeology to Understand Human-Environmental Interactions from Local to Global Changes", conference: *29th Annual Meeting of the European Association of Archaeologists (EAA)*, Belfast University, Belfast, Northern Ireland, 2 September 2023, organized by Søren M. Kristiansen

Session: "Modelling Theory in Computational Roman Archaeology", conference: *29th Annual Meeting of the European Association of Archaeologists (EAA)*, Belfast University, Belfast, Northern Ireland, 31 August 2023, organized by Tom Brughmans & María Coto-Sarmiento

Conference: *Preliminary Meeting for the Upcoming "Barcelona Past Networks Summer School"*, Facultat de Física, Universitat de Barcelona, Barcelona, Spain, 21–22 October 2023, organized by Matteo Mazzamurro

Conference: *Northern Emporium Concluding Symposium: New Light on Emporia and Networks*, DGI Huset & Maritza-salen, Aarhus, Denmark, 26–27 October 2023, organized by Sarah Croix & Søren M. Sindbæk

Workshop: *Ethics in Caribbean Archaeology: Past, Present, and Future*, Lorentz Center, University of Leiden, Leiden, Holland, 13–17 November, organized by Eduardo Herrera Malatesta

Seminar: *Medieval Badges: Visual Communication and Community Formation*, Aarhus University, Aarhus, Denmark, 15 November 2023, organized by Søren M. Sindbæk

Conference: *Turning the Page: Archaeological Archives and Entangled Cultural Knowledge*, The Royal Danish Academy of Sciences and Letters, Copenhagen, Denmark, 23–24 November 2023, organized by Olympia Bobou & Rubina Raja

Conference: *Invisible Economies in the Ancient World*, The Royal Danish Academy of Sciences and Letters, Copenhagen, Denmark, 18–19 December 2023, organized by Rubina Raja

Invited Talks

Some of these papers were co-authored/-presented with external partners, but for the purpose of this report, only the relevant UrbNet employee(s) is/are listed.

Rubina Raja, "Current Trends in Archive Archaeology: Session Introduction", conference: *Annual Meeting at Archaeological Institute of America*, session: Current Trends in Archive Archaeology, New Orleans, Louisiana, USA, 6 January 2023.

Rubina Raja, "Post Palmyra Portrait Project: Session Introduction", conference: *Annual Meeting at Archaeological Institute of America*, session: Post Palmyra Portrait Project: Towards a Holistic Approach to Ancient Urban Societies, New Orleans, Louisiana, USA, 7 January 2023.

Rubina Raja, "Reconsidering Palmyra's History: The Ingholt Archive since the Palmyra Portrait Project", conference: *Annual Meeting at Archaeological Institute of America*, session: Post Palmyra Portrait Project: Towards a Holistic Approach to Ancient Urban Societies, New Orleans, Louisiana, USA, 7 January 2023.

Rubina Raja, "Beyond Palmyra: After the Palmyra Portrait Project", conference: *Annual Meeting at Archaeological Institute of America*, session: Post Palmyra Portrait Project: Towards a Holistic Approach to Ancient Urban Societies, New Orleans, Louisiana, USA, 7 January 2023.

Derek Parrott, "All Roads lead to Ribe: Tracing Oval Brooch Models from Viking Age Ribe through Ceramic Casting Moulds", University of Bergen, Bergen, Norway, 24 January 2023.

Søren M. Sindbæk, "Bead Workshops in Eighth-century CE Ribe: Technology, Provenance, and Chronology", conference: *Secondary Glass Productions in the Early Middle Ages*, CNRS Orléans, Orléans, France, 26 January 2023.

Rogier van der Heijden, "Constructing the Past. Imperial Temporality and Civic Identity in Roman Sardis and Gerasa", Centre for Urban Network Evolutions (UrbNet), Aarhus, Denmark, 10 February 2023.

Rubina Raja, "New Results from The Danish-Italian Excavations of Caesar's Forum", seminar: *Roman Discussion Forum*, Institute of Archaeology, University of Oxford, Oxford, United Kingdom, 15 February 2023.

Rubina Raja, "Palmyra: Urban Culture in the Syrian Desert", All Souls College, Oxford, United Kingdom, 23 February 2023.

Søren M. Sindbæk, "Porten til Vikingetiden: Ribe og den Tidlige Søfart i Nordsøen", Vikingskibsmuseet, Roskilde, Denmark, 2 March 2023.

Rubina Raja, "Epigraphy in Palmyra: A short Overview of 3000 Plus Inscriptions from the 1st Century CE to the Late 3rd Century CE", conference: *Long Epigraphic Friday*, Princeton, New Jersey, USA, 4 March 2023.

Cristina Boschetti, "Recycler le Verre, un Étude entre Archéologie et Chimie", seminar: *MA-student Seminar*, Muséum national d'histoire naturelle, Paris, France, 9 March 2023.

Rubina Raja, "Palmyre, Cité Grecque? Greek Imports and other Influences in (Roman?) Palmyra", seminar: *Greek Archaeology Group & Prehistoric and Early Greece Graduate Seminar*, University of Oxford, Oxford, United Kingdom, 9 March 2023.

Kirstine Haase, "Kampen for det Rene Vand: Vandforsyning og Social Praksis i Middelalderbyen Odense", seminar: *Infrastruktur i Middelalderbyen*, Museum Odense, Odense, Denmark, 13 March 2023.

Rubina Raja, "Palmyra Undone: Reconstructing Knowledge through Archaeology and Legacy Data", Lecture: *9th Annual Rumble Fund Lecture*, King's College, London, United Kingdom, 14 March 2023.

Rowan S. English, "Road and Transport Networks", seminar: *UrbNet Brown Bag Seminars*, Aarhus University, Aarhus, Denmark, 14 March 2023.

María Coto-Sarmiento, "Decoding the Past: Using Computational Methods to Explore Cultural Dynamics", seminar: *UrbNet Brown Bag Seminars*, Aarhus University, Aarhus, Denmark, 21 March 2023.

Rubina Raja, "Tiny Evidence from a Big city: The Social and Religious Implications of the Palmyrene Banqueting Tesseræ", Princeton University, Princeton, New Jersey, USA, 21 March 2023.

Tom Brughmans, "Exploring Regional Patterns of Production and Consumption in Roman Germania through Quantitative Amphora Data Analysis", conference: *The Archaeology of Urban Networking*, Università degli Studi di Milano, Milan, Italy, 27 March 2023.

Søren M. Sindbæk, "Settling the Difference: Approaches to Urban Heterogeneity", conference: *The Archaeology of Urban Networking*, Università degli Studi di Milano, Milan, Italy, 27 March 2023.

Sine Grove Saxkjær, "Money Talks: Roman Women on Late Republican Coinage", conference: *The Archaeology of Urban Networking*, Università degli Studi di Milano, Milan, Italy, 27 March 2023.

Rubina Raja, "Urban Network Evolutions and Archaeology: UrbNet and its Results", conference: *The Archaeology of Urban Networking*, Università degli Studi di Milano, Milan, Italy, 27 March 2023.

Rowan S. English, "Long Distance Trade in 5th and 6th Century Northern Europe: Materials and Connections", conference: *The Archaeology of Urban Networking*, Università degli Studi di Milano, Milan, Italy, 27 March 2023.

Olympia Bobou, "How Do You Solve a Problem like Palmyra? Archives and Contexts", conference: *The Archaeology of Urban Networking*, Università degli Studi di Milano, Milan, Italy, 27 March 2023.

Kirstine Haase, "Urban Landscapes: 3D Modelling of Urban Stratigraphy", conference: *The Archaeology of Urban Networking*, Università degli Studi di Milano, Milan, Italy, 27 March 2023.

Derek Parrott, "All Roads Lead to Ribe? Berdal-Type Brooches in Western Norway", conference: *The Archaeology of Urban Networking*, Università degli Studi di Milano, Milan, Italy, 27 March 2023.

Rubina Raja, "Jordskælv, Arkæologi og Kulturarv", *Faglig Frokost*, Aarhus University, Aarhus, Denmark, 30 March 2023.

Izabela A. Romanowska, Olympia Bobou & Rubina Raja, "The Long Roots of Medieval Palmyra: Water Management from the Roman to the Medieval Islamic Period", conference: *Water and the Urban/Rural Nexus in the Medieval Islamic World: Modelling Linkages between Urban Populations, Agricultural Hinterlands and Water Supply*, Nijmegen, The Netherlands, 30 March 2023.

Rubina Raja, "Inscribed Funerary Culture in Palmyra", workshop: *Inscribing Funerary Space(s)*, Universität Hamburg, Hamburg, Germany, 31 March 2023.

Cristina Boschetti, "Patterns of Glass Recycling and Supply in Rome: New Results from the Forum of Caesar (First-sixteenth Century CE)", conference: *Everything Old is New Again: Recycling and Reuse in Ancient and Historical Glass*, University of Oxford, Oxford, United Kingdom, 31 March 2023.

Cristina Boschetti, "Glittering Waste: Glass from the Landfill of the Sarno Baths in Pompeii", conference: *New Reflections on Old Glass*, Virtual, 31 March 2023.

Eduardo Herrera Malatesta, "Rethinking Point Pattern Analysis: Dealing with Archaeological Uncertainties in Non-Systematic Regional Survey Data", seminar: *Materials, Culture and Heritage Seminar*, Centre for Urban Network Evolutions (UrbNet), Aarhus, Denmark, 31 March 2023.

Eduardo Herrera Malatesta, "Ambiguous Landscapes: Quantifying Uncertainty in Non-Systematic Regional Survey Data. Studying Uncertainties in Archaeology", conference: *50th Computer Applications and Quantitative Methods in Archaeology Annual Conference, session: Studying Uncertainties in Archaeology: A New Research Agenda*, University of Amsterdam, Amsterdam, The Netherlands, 3 April 2023.

María Coto-Sarmiento, "Modelling Cooperation under Climate Constraints in the Paleolithic of Kazakhstan", conference: *50th Computer Applications and Quantitative Methods in Archaeology Annual Conference*, University of Amsterdam, Amsterdam, The Netherlands, 6 April 2023.

Olympia Bobou, "Communal Hopes for the Future", workshop: *Constructing and Performing Hope in the Premodern World*, Tampere University, Tampere, Finland, 13 April 2023.

Rubina Raja, "Catastrophes in Context: Welcome and Introduction", conference: *Catastrophes in Context: The Archaeology of Catastrophes from the 1st–8th centuries CE in the Mediterranean Region*, All Souls College, Oxford, United Kingdom, 17 April 2023.

Rubina Raja, "How to Track the Impact of a Catastrophe and an Urban Society's Resilience: Archaeological "Big Data" and the Historical Record of Palmyra", conference: *Catastrophes in Context: The Archaeology of Catastrophes from the 1st–8th centuries CE in the Mediterranean Region*, All Souls College, Oxford, United Kingdom, 18 April 2023.

Søren M. Sindbæk, "Kvinden med Sværdet: Et Amulet-Værksted fra Ribe og Vikingetidens Kult", Det Antikvariske Selskab, Ribe, Denmark, 20 April 2023.

Sarah Croix, "Porous Identities: Gender-Less Graves at Viking-Age Galgedil, Denmark", conference: *Gendering the Nordic Past: Dialogues between Past and Present*, Museum of Cultural History, Oslo, Norway, 27 April 2023.

Derek Parrott, "Many Ways to Scan a Beast: Using 3D Modeling to Bring New Life to Viking Age Casting Moulds", seminar: *Annual DNRF Meeting*, Centre for Urban Network Evolutions (UrbNet), Aarhus, Denmark, 28 April 2023.

Tom Brughmans, "Networking with the Romans: Simulating Ancient Economies", conference: *Aulas Abertas GEAAR*, Universidad de Vigo, Vigo, Spain, 2 May 2023.

Rubina Raja, "Dining with the Deities: Religious Banqueting and Social Interaction in Roman Palmyra", seminar: *Visiting Fellows Colloquium*, All Souls College, Oxford, United Kingdom, 2 May 2023.

Derek Parrott, "All Roads Lead to Ribe: Tracking a Berdal-Style Brooch through Time and Space using 3D Modeling", conference: *40th Interdisciplinary Viking Symposium*, University of Southern Denmark, Odense, Denmark, 3 May 2023.

Rubina Raja, "Religious Banquets in (Graeco-Roman?) Palmyra: Dining as Expression of Local Traditions or Cultural Affinities with the Graeco-Roman World", seminar: *Greek History Seminar*, All Souls College, Oxford, United Kingdom, 3 May 2023.

Rubina Raja, Søren M. Kristiansen & Søren M. Sindbæk, "Welcome to UrbNet and Introduction to the Workshop", workshop: *Complex Stratigraphies*, Centre for Urban Network Evolutions (UrbNet), Aarhus, Denmark, 8 May 2023.

Sarah Croix, "Northern Emporium Excavations in Ribe: Experiences and Reflections", workshop: *Complex Stratigraphies*, Centre for Urban Network Evolutions (UrbNet), Aarhus, Denmark, 8 May 2023.

Sine Grove Saxkjær, "7 Vidundere: Verdens Første Kulturkanon", Senioruniversitetet AOF Horsens-Hedensted, Megascopie Biograferne, Horsens, Denmark, 9 May 2023.

Kirstine Haase, "What is the state of Urban Archaeology in Denmark", conference: *Nordic Urban Archaeology Conference (NUA23): Experiences and New Directions*, Copenhagen City Hall, Copenhagen, Denmark, 10 May 2023.

Sarah Croix, "Seeing with Other Eyes: How Technologies and the Natural Sciences are Changing the Stratigraphic Interface", conference: *Nordic Urban Archaeology Conference (NUA23): Experiences and New Directions*, Copenhagen City Hall, Copenhagen, Denmark, 11 May 2023.

Søren M. Sindbæk, "New Ways for Urban Archaeology?", conference: *Nordic Urban Archaeology Conference (NUA23): Experiences and New Directions*, Copenhagen City Museum, Copenhagen, Denmark, 11 May 2023.

Rubina Raja, "Entangled Urban History Beyond Rome post AD 500: Narratives from Gerasa on the Gold River", seminar: *After Rome and Further East Seminar*, Trinity College, Dublin, Ireland, 18 May 2023.

Søren M. Sindbæk, "Archaeology of the Ancient Near East – and Aarhus", conference: *13th International Congress on the Archaeology of the Ancient Near East (ICAANE)*, Copenhagen University, Copenhagen, Denmark, 22 May 2023.

Søren M. Sindbæk, "Sustainable Cities: The editor's Pick. A view From the Pages Journal of Urban Archaeology", conference: *Varieties of Urbanism, Settlement Dynamics and Climate Change*, University of Edinburgh, Edinburgh, Scotland, 2 June 2023.

Eduardo Herrera Malatesta, "Organizing Scientific Events: Tips and Tricks for Students and Researchers", *PhD Seminar*, Aarhus University, Aarhus, Denmark, 5 June 2023.

María Coto-Sarmiento, "Survival in the Face of Adversity: Exploring Human Cooperation in the Paleolithic of Kazakhstan through Agent-Based Model", Computational and Digital Archaeology Laboratory (CDAL), University of Cambridge, Cambridge, United Kingdom, 12 June 2023.

Olympia Bobou & Rubina Raja, "Women and Children and their Clothing Styles in Sacred Space: The Case of Palmyra", workshop: *Inside Out II: Gender and Ageing Agency in Urban and Non-urban Religious Spaces in Antiquity: New Considerations and Further Research Perspectives*, Hamburg, Germany, 23 June 2023.

Søren M. Sindbæk, "Connected Ideas or Tangled Thoughts? Social Networks in Viking and Medieval Studies", conference: *16th Interdisciplinary Aarhus Students Symposium on Viking and Medieval Scandinavian Subjects*, Aarhus University, Aarhus, Denmark, 24 August 2023.

María Coto-Sarmiento & Tom Brughmans, "Market Competition in a Frontier Region: Exploring Economic Trends in Germania During the Roman Empire through Simulations Experiments", conference: *29th European Association of Archaeologists (EAA) Annual Meeting*, session: Modelling Theory in Computational Roman Archaeology, Belfast, Northern Ireland, 30 August 2023.

Eduardo Herrera Malatesta, "Beyond Uncertainty: Best Practices for Exploring and Modelling Uncertainties in Regional Archaeological Datasets", conference: *29th European Association of Archaeologists (EAA) Annual Meeting*, session: Working with Imperfection in Archaeology: Theoretical and Practical Approaches to Data Management, Belfast, Northern Ireland, 31 August 2023.

Kirstine Haase, "Urban Landscapes: Reconstructing Past Processes of Landscape Transformation Through 3D Modelling", conference: *29th European Association of Archaeologists (EAA) Annual Meeting*, session: Weaving Big Data for the Digital Middle Ages, Belfast, Northern Ireland, 1 September 2023.

Søren M. Kristiansen, "Mapping Past Integrated Water Systems: Multiscalar Approaches to Great Zimbabwe's Urban Landscape", conference: *29th European Association of Archaeologists (EAA) Annual Meeting*, session: Multiproxy Geoarchaeology to Understand Human-Environmental Interactions from Local to Global Changes, Belfast, Northern Ireland, 2 September 2023.

Matteo Mazzamurro, "R-Workshop: Basics of Network Analysis and Visualisation", conference: *The Connected Past*, University of Helsinki, Helsinki, Finland, 12-13 September 2023.

Sarah Croix, "The Last Campaign at Erritsø", seminar: *Back from the Field Seminar*, Aarhus University, Aarhus, Denmark, 13 September 2023.

María Coto-Sarmiento & Tom Brughmans, "Exploring Economic Trends in Germania During the Roman Empire through Agent-Based Model", Aarhus University, Aarhus, Denmark, 21 September 2023.

Søren M. Sindbæk, "Aggersborg som Verdensarv", *UNESCO Designation Event*, Aggersborg World Heritage Center, Aggersborg, Denmark, 30 September 2023.

Kirstine Haase, "Albani Kirke og den Tidligere By: Del II", public lecture series, Museum Odense, Odense, Denmark, 10 October 2023.

Søren M. Sindbæk, "The Northern Emporium Project in Ribe: Excavating and Analyzing a Viking Age Town and its Networks", seminar: *Werburgh Street Area Masterplan Archaeology*, Dublin City Council, Dublin, Ireland, 12 October 2023.

María Coto-Sarmiento, "A Prehistoric Dilemma: Exploring Cooperation Dynamics in the Paleolithic of Kazakhstan Using Agent-Based Model", conference: *Computer Applications and Quantitative Methods in Archaeology (CAA)*, Virtual, 13 October 2023.

Derek Parrott, "Shining a Blue Light: Tracking the Northern Emporium Berdal Brooch Mould Assemblage through 3D Scanning", conference: *Northern Emporium Concluding Symposium: New Light on Emporia and Networks*, DGI Huset, Aarhus, Denmark, 26 October 2023.

Søren M. Sindbæk, "Welcome and Introduction", conference: *Northern Emporium Concluding Symposium: New Light on Emporia and Networks*, DGI Huset, Aarhus, Denmark, 26 October 2023.

Rubina Raja, "Out of the Desert and into a Global Perspective: Palmyra in a Longue Durée Perspective (1st cent. BC to 8th cent. AD)", seminar: *The 2023/24 Prichett Lecture*, University of California, Berkeley, USA, 6 November 2023.

Rubina Raja, "Caesar's Forum in a New Light: The Danish-Italian Excavations on Caesar's Forum, 2017-2023", seminar: *The 2023/24 Prichett Lecture*, University of California, Berkeley, USA, 7 November 2023.

Eduardo Herrera Malatesta, "Caribbean Digital Archaeology: Ethical Challenges and Best Practices", workshop: *Ethics in Caribbean Archaeology: Past, Present, and Future*, Lorentz Center, University of Leiden, Leiden, The Netherlands, 15 November.

Rubina Raja, "Death by Data?: Or What Has a Decade of Research on Palmyrene Funerary Sculpture Taught Us About the Ancient World?", conference: *American Schools of Overseas Research – Annual Meeting 2023*, Chicago, Illinois, USA, 15 November 2023.

Rubina Raja, "The Khirbet al-Khalde Archaeological Project: Initial Results from the Inaugural 2023 Survey Season", conference: *American Schools of Overseas Research – Annual Meeting 2023*, Chicago, Illinois, USA, 18 November 2023.

Matteo Mazzamurro, "Networking with the Romans: Exploring Ancient Connectivity through Inscriptions and Roads", The University of Copenhagen, Copenhagen, Denmark, 23 November 2023.

Olympia Bobou & Rubina Raja, "Archival Palimpsests: Researching the Development of the Ingholt Archive", conference: *Turning the Page: Archaeological Archives and Entangled Cultural Knowledge*, The Royal Danish Academy of Sciences and Letters, Copenhagen, Denmark, 23 November 2023.

Olympia Bobou & Rubina Raja, "Introduction: Turning the Page: Archaeological Archives and Entangled Cultural Knowledge", conference: *Turning the Page: Archaeological Archives and Entangled Cultural Knowledge*, The Royal Danish Academy of Sciences and Letters, Copenhagen, Denmark, 23 November 2023.

Rubina Raja, "In the Field and through the Archives: Exploring the First American-British Campaign in the Decapolis City Gerasa in 1928", conference: *Turning the Page: Archaeological Archives and Entangled Cultural Knowledge*, Royal Danish Academy of Sciences and Letters, Copenhagen, Denmark, 23 November 2023.

Sarah Croix, "The Walking Dead", conference: *Urbnet Christmas Seminar*, Centre for Urban Network Evolutions (UrbNet), Aarhus, Denmark, 1 December 2023.

María Coto-Sarmiento, "On the Pessimistic Side: Is the Fediverse a Viable Alternative to X for Spanish Researchers?", conference: *ArcheoFOSS*, session: *Archeo.social: Archaeology in the Fediverse and the Future of Scholarly Social Media*, University of Turin, Turin, Italy, 12 December 2023.

Rubina Raja, "Beyond Funerary Portrait Habits: Funerary Portraits from Palmyra and their Implications for Understanding Funerary Culture in Roman Syria and Egypt", conference: *Material Culture in Late Antique Egypt and Syria: Contacts, Influence and Disparities*, Nijmegen, The Netherlands, 15 December 2023.

Rubina Raja, "Invisible Economies: The Multilayered Economies of Antiquity", conference: *Invisible Economies in the Ancient World*, Copenhagen, Denmark, 18 December 2023.

Rubina Raja, "It's My Party (and I Will Organize it, as I Want to): Thinking Through Economies of Religion in Roman Palmyra", conference: *Invisible Economies in the Ancient World*, Copenhagen, Denmark, 19 December 2023.

PhD Courses

The Aftermath of Urban Crises, Aarhus University, 12 June 2023, organized by Olympia Bobou, Guido Furlan, Kirstine Haase & Sine Saxkjær

Archaeology and the Third Dimension: Visualizing, Analyzing, Modelling, 28 November 2023, organized by Kirstine Haase

The annual UrbNet retreat, 28–29 February 2024, Hindsgavl Slot, Denmark (Photos: Christina Song Levisen; Lilian Dibbern)..



Public Outreach

Søren M. Sindbæk, Brutal Massacre Sheds Light on Migration during Viking Age, *Science*, 5 January 2023.

Søren M. Kristiansen, Mysterium i forladt middelalderby er løst med hjælp fra dansk forsker, *Videnskab.dk*, 11 January 2023.

Rubina Raja, Jordskælv i Tyrkiet og Syrien og de fremtidige implikationer for landenes kulturarv, *DR: P1 kulturen*, 13 February 2023.

Rubina Raja, En blodig mønt under hammeren, *Kristeligt Dagblad*, 21 February 2023.

Rhiannon G. Jones, Manchester City and al-Mayidi ibn Zahir: The Power and Prestige of Emirati Poetry and Sport, *NYU's Library of Arabic Literature Blog*, 3 March 2023.

Rubina Raja & Cristina Boschetti, Ancient 'Urine Flasks' for Smelling (and Tasting) Pee Uncovered in Trash Dump at Caesar's Forum in Rome, *LiveScience.com*, 1 May 2023.

Rubina Raja & Cristina Boschetti, Urine flasks — For Smelling and Tasting Pee — Found in 400-Year-Old Dump in Italy, *Miami Herald*, 1 May 2023.

Rubina Raja & Cristina Boschetti, Ancient Hospital Site Reveals Urine Flasks for Drinking and Diagnosis, *GVS*, 1 May 2023.

Rubina Raja & Cristina Boschetti, Ancient 'Urine Flasks' for Smelling (and Tasting) Pee Uncovered in Trash Dump at Caesar's Forum in Rome, *Verve Times*, 1 May 2023.

Rubina Raja & Cristina Boschetti, D'anciennes «flacons d'urine» pour sentir (et goûter) l'urine découvertes dans une décharge au forum de César à Rome, *Crumpe*, 1 May 2023.

Rubina Raja & Cristina Boschetti, 'Urine Flasks' for Drinking, Diagnosing Discovered at Ancient Hospital Site, *New York Post*, 1 May 2023.

Rubina Raja & Cristina Boschetti, Urine Flasks — For Smelling and Tasting Pee — Found in 400-Year-Old Dump in Italy, *The Wichita Eagle*, 1 May 2023.

Rubina Raja & Cristina Boschetti, 500-Year-Old 'Urine Flasks' Discovered at a Medical Dump Within the Forum of Caesar in Rome, *The Science Times*, 2 May 2023.

Rowan English, Enigmatic Anglo-Saxon Ivory Rings Discovered in Elite Burials Came from African Elephants 4,000 Miles Away, *LiveScience.com*, 29 June 2023.

Rubina Raja, På tidsrejse gennem sand og jord – Rubina Raja, arkæolog, om at grave efter festinvitationer og stenportrætter for at forstå antikkens bysamfund, *Videnskab fra vilde hjerner*, 8 August 2023.

Rhiannon G. Jones, History in the Making: Material Reuse Lessons from the Past, *Materials World Magazine*, 14 August 2023.

Rubina Raja, Jordskælv i Marokko og dets indflydelse på landets kulturarv, *DR: P1 kulturen*, 12 September 2023.

Søren M. Sindbæk, Vikingetidens ringborge tvinger os til at genoverveje de populære fortællinger om fortiden, *Videnskab.dk*, 20 September 2023.

Petra Heřmáňková, Falling Behind: Postdocs in their Thirties Tire of putting Life on Hold, *Nature*, 24 October 2023.

The mosque and the courtyard of the Khan Rustam Pasha caravansary, which was used as dig house by Harald Ingholt and his team in Hama. Watercolour by Ejnar Fugmann, 1930s.



Visitors and Collaborators

Andreu Monforte-Barberan Universitat Autònoma de Barcelona 11–18 January 2023	Malte Vogl Max Planck Institute for the History of Science 12–13 January 2023	Ruth Ahnert Queen Mary University of London 12–13 January 2023
Albert Diaz-Guillera University of Barcelona 12–13 January 2023	Mark de Pauw KU Leuven 12–13 January 2023	Scott Weingart National Endowment for the Humanities 12–13 January 2023
Aline Deicke Akademie der Wissenschaften und der Literatur, Mainz 12–13 January 2023	Marten Düring University of Luxembourg 12–13 January 2023	Sebastien de Valériola Université Libre de Bruxelles 12–13 January 2023
Bernardo Sousa Buarque Max Planck Institute for the History of Science 12–13 January 2023	Matt Peeples Arizona State University 12–13 January 2023	Sergi Lozano University of Barcelona 12–13 January 2023
David Zbiral Masaryk University 12–13 January 2023	Matteo Mazzamurro University of Warwick 12–13 January 2023	Tim Evans Imperial College London 12–13 January
Ingeborg van Vugt University of Utrecht 12–13 January 2023	Michele Coscia IT University of Copenhagen 12–13 January 2023	Yanne Broux KU Leuven 12–13 January 2023
Kristoffer Nielbo Aarhus University 12–13 January 2023	Per Møldrup-Dalum Aarhus University 12–13 January 2023	Miriam Kühn Staatlichen Museen zu Berlin 6–8 February 2023
Luce Prignano University of Barcelona 12–13 January 2023	Peter Bjerregaard Vahlstrup Aarhus University 12–13 January 2023	Vladimir Stissi University of Amsterdam 7 February 2023
	Petra Hermankova Aarhus University 12–13 January 2023	Rogier van der Heijden University of Freiburg 6–13 February 2023

Katharina Zerzeropulos University of Cologne 13 April – 30 June 2023	Amelia Stieglitz Durham University 17–18 April 2023	Edyta Marzec British School at Athens 17–18 April 2023
Brandon McDonald University of Basel 16–19 April 2023	Anya Biletsky University of Oxford 17–18 April 2023	Elvin Akbulut Dağlier Independent scholar 17–18 April 2023
Damian Robinson University of Oxford 16–19 April 2023	Andrew McNey University of Oxford 17–18 April 2023	Erica Rowan University of London 17–18 April 2023
Jordan Pickett University of Georgia 16–19 April 2023	Andrew Wilson University of Oxford 17–18 April 2023	Errikos Maniotis Masaryk University 17–18 April 2023
Lacey Wallace University of Lincoln 16–19 April 2023	Arietta Papaconstantinou University of Reading 17–18 April 2023	Fanny Bessard University of Oxford 17–18 April 2023
Michael A. Anderson San Francisco State University 16–19 April 2023	Bahargül Ataş Atatürk University 17–18 April 2023	Fion Bradbury Independent Scholar 17–18 April 2023
Steven Tuck Miami University 16–19 April 2023	Candace Rice Brown University 17–18 April 2023	Francesco Piccirilli University of Bern 17–18 April 2023
Tyler Franconi Brown University 16–19 April 2023	Cary Martin UCL 17–18 April 2023	George Green University of Oxford 17–18 April 2023
Aleksandra Mistireki University of Bern 17–18 April 2023	Catherine Keane Koç University 17–18 April 2023	Girolamo Fernando De Simone Independent Researcher 17–18 April 2023
Alexander Chiu Smit University of Oxford 17–18 April 2023	Chloe Clarke-Davison University of Oxford 17–18 April 2023	Haggai Olshanetsky University of Basel 17–18 April 2023
Alexandra Bivolaru University of Venice 17–18 April 2023	Christina Videbech University of Bergen 17–18 April 2023	Haoyue Zhao University of Oxford 17–18 April 2023
Alison Pollard University of Oxford 17–18 April 2023	David Pyle University of Oxford 17–18 April 2023	Hazel Dodge Trinity College Dublin 17–18 April 2023

Honor Cargill-Martin University of Oxford 17–18 April 2023	Laura Berry University of Oxford 17–18 April 2023	Peregrine Horden University of Oxford 17–18 April 2023	Timothy Smith University of Oxford 17–18 April 2023	Martin Hansen Aarhus University 8–9 May 2023	Axel Christophersen NTNU University Museum 26–27 October 2023
Ine Jacobs University Oxford 17–18 April 2023	Laura Jones University of Oxford 17–18 April 2023	Rachel Singer Georgetown University 17–18 April 2023	Ulla Lehrtonen University of Oxford 17–18 April 2023	Mikkel Winther Pedersen University of Copenhagen 8–9 May 2023	Bente Majchczack Christian-Albrechts- Universität zu Kiel 26–27 October 2023
Isabelle Demaneuf University of Oxford 17–18 April 2023	Linda Hulin University of Oxford 17–18 April 2023	Rachele Fregonese Lion Television 17–18 April 2023	Kresimir Matijevic Europa-Universität Flensburg 28–29 April 2023	Ruth Johnson Dublin City Council 8–9 May 2023	Birgit Maixner Norwegian University of Science and Technology 26–27 October 2023
Isabella Jäger University of Oxford 17–18 April 2023	Małgorzata Kajzer Polish Academy of Sciences 17–18 April 2023	Rory McInnes-Gibbons Durham university 17–18 April 2023	Ann Sølvia Selmarsdóttir Purkhús National Museeum, Faroe Islands 8–9 May 2023	Tim Kinnaird University of St. Andrews 8–9 May 2023	Charlotte Hedenstierna- Jonsson Uppsala University 26–27 October 2023
James Hua University of Oxford 17–18 April 2023	Marcella Boglione Universität Bern 17–18 April 2023	Sara Baldin University of Basel 17–18 April 2023	Anna Katarina Tjellén Moesgaard Museum 8–9 May 2023	Wojciech Filipowiak Institute of Archaeology and Ethnology of the Polish Academy of Sciences 8–9 May 2023	Channa Cohen Stuart Gemeente Wijk bij Duurstede 26–27 October 2023
Joel Bellviure University of Oxford 17–18 April 2023	Maria Stamatopoulou University of Oxford 17–18 April 2023	Selin Gür University of Bern 17–18 April 2023	Cristiano Nicosia Università degli Studi di Padova 8–9 May 2023	Rebecka Maehring University of Princeton 4–22 September 2023	Chris Loveluck University of Nottingham 26–27 October 2023
John Hanson University of Oxford 17–18 April 2023	Maria Theodora Tzeli University of Oxford 17–18 April 2023	Serra Somersan University of Oxford 17–18 April 2023	Cristina Boschetti Independent scholar 8–9 May 2023	David van Oeveren Utrecht University 4 September – 8 December 2023	Christoph Keller LVR- Amt für Bodendenkmalpflege im Rheinland 26–27 October 2023
Juan Manuel Martín Casado University of Málaga 17–18 April 2023	Marie Theres Witmann University of Oxford 17–18 April 2023	Stephanie West University of Oxford 17–18 April 2023	David Jennings York Archaeological Trust 8–9 May 2023	Katia Schörle Centre National de la Recherche Scientifique 26 September – 12 October 2023	Claus Feveile Museum of Southwest Jutland 26–27 October 2023
Kai Wang Anyang Normal University 17–18 April 2023	Matthew Jacobson University of Reading 17–18 April 2023	Steve Ulrich Independent Scholar 17–18 April 2023	Federica Sulas Cambridge University 8–9 May 2023	Andreas Hennius Uppland Museum 26–27 October 2023	Dagfinn Skre Museum of Cultural History, Oslo 26–27 October 2023
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Inés Leroy Centre de recherche d'archéologie nationale, Université catholique de Louvain 26–27 October 2023	Maria Knudsen Museum of Southwest Jutland 26–27 October 2023	Unn Pedersen University of Oslo 26–27 October 2023	Jan S. Østergaard Ny Carlsberg Glyptotek 23–24 November 2023	Morag Kersel DePaul University 23–24 November 2023	Matthew Cobb University of Wales Trinity Saint David 18–19 December 2023
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Jens Ulriksen Museum Southeast Denmark 26–27 October 2023	Mateusz Bogucki Instytut Archeologii i Etnologii PAN AI 26–27 October 2023	Eduard Tampu Aalto University 25 September – 8 November 2023	Kostas Paschalidis National Archaeological Museum, Athens 23–24 November 2023	Oliver Gilkes Independent 23–24 November 2023	Michael Decker University of South Florida 18–19 December 2023
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Lara Fabian (Albert-Ludwigs-Universität Freiburg) during her paper 'Cultural Capital at the Crossroads: Economic Networks in the Post-Achaemenid South Caucasus' (Photo: Mette Lang).

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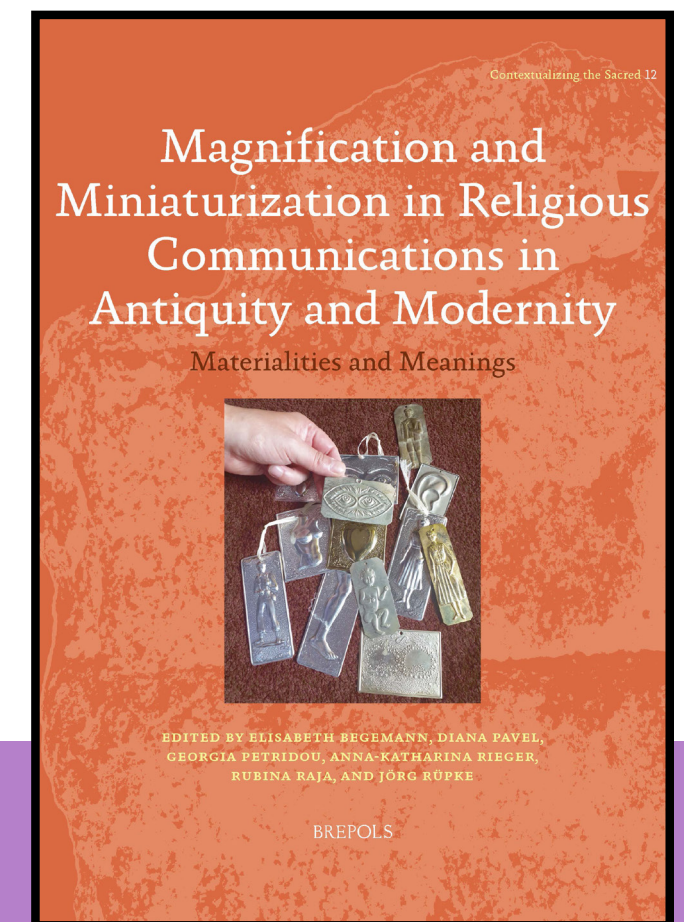
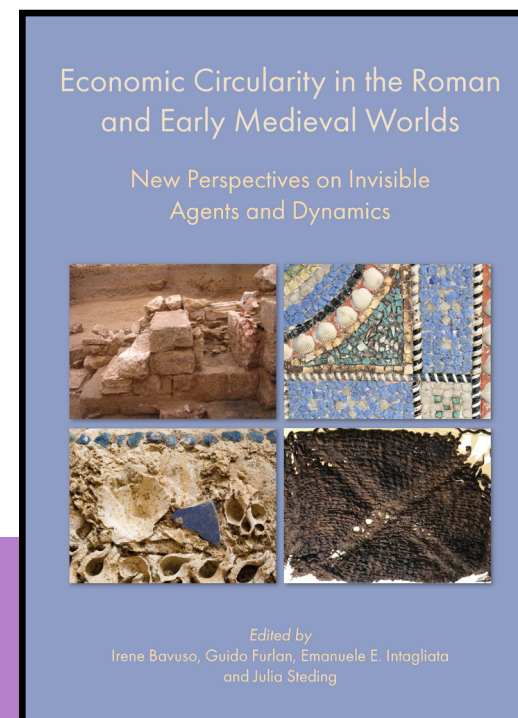
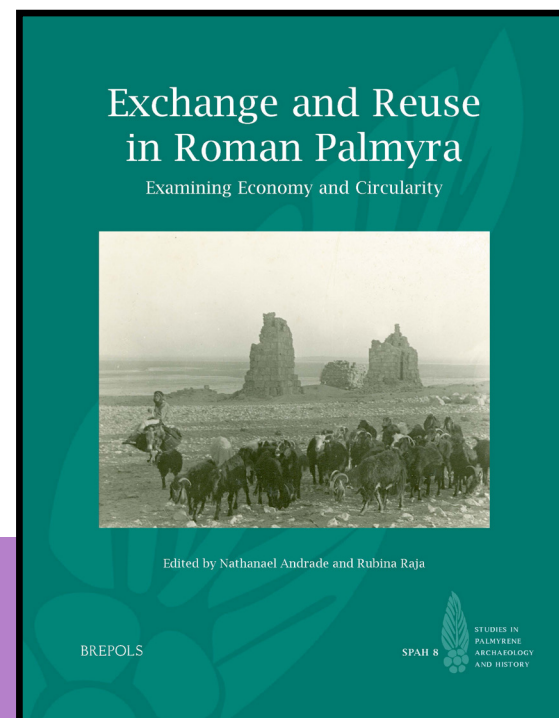
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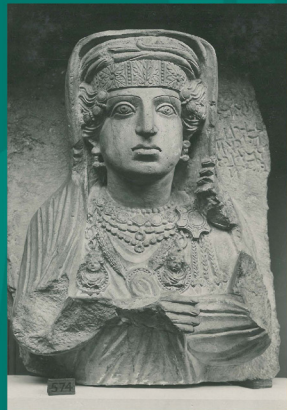
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Odds and Ends

Unusual Elements in Palmyrene Iconography



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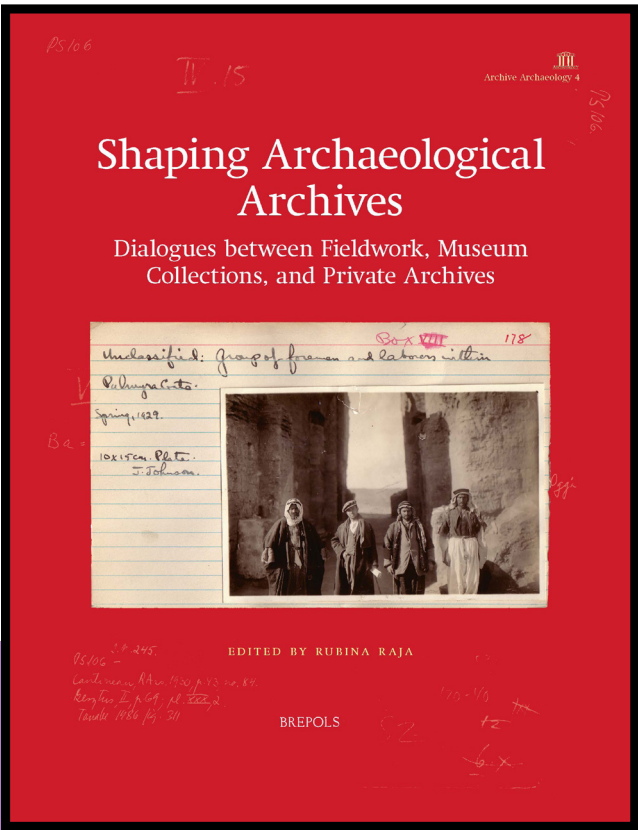
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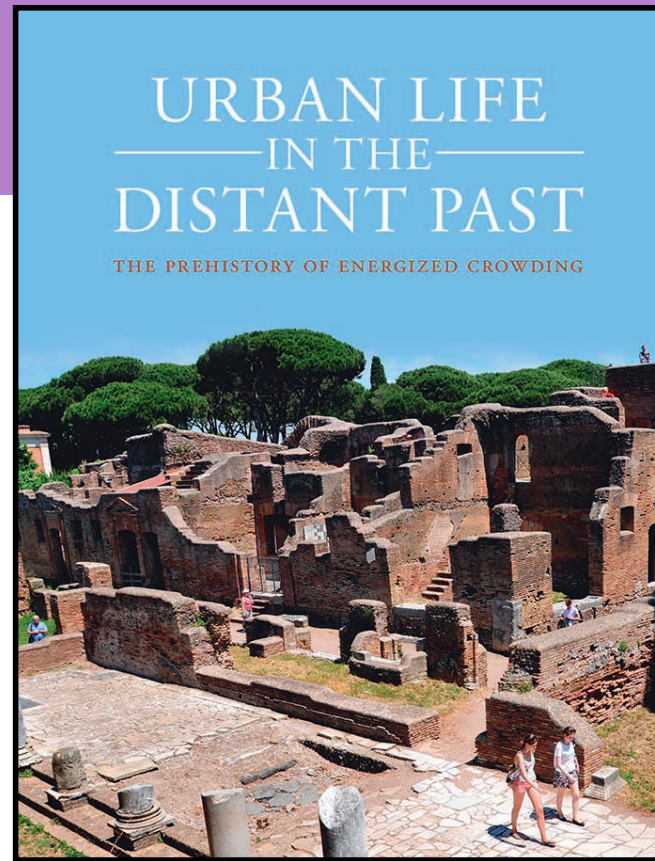
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UrbNet retreat in Milan, Italy, March 2023 (Photos: Eva Mortensen).





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Back cover

3D model of an early Viking-age oval brooch from Nørre Vosborg, northern Jutland, made using a blue-light scanner. Likely produced at Ribe in the early 9th century. Object scanned by Derek Parrott, courtesy of the National Museum of Denmark.

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