

# PUBLICATIONS 2015 – March 2019

Centre for Urban Network Evolutions (UrbNet)



# Centre for Urban Network Evolutions (UrbNet), Aarhus University, School of Culture and Society

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Numerous publications that feature in this catalogue are the outcome of projects affiliated with UrbNet.



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# The Indian Ocean World

## Books and edited volumes

**Water and Society from Ancient Times to the Present: Resilience, Decline and Revival** (2018, Abingdon-New York).  
Sulas, F. & Pikirayi, I. (eds.)

**The Swahili World** (2017, London).  
Wynne-Jones, S. & LaViolette, A. (eds.)

**A Material Culture: Consumption and Materiality on the Coast of Precolonial East Africa** (2016, Oxford).  
Wynne-Jones, S.

**Theory in Africa, Africa in Theory: Locating Meaning in Archaeology** (2015, London).  
Wynne-Jones, S. & Fleisher, J. (eds.)



## Articles

**Archaeological investigations and field-school at Chenga and surroundings, Great Zimbabwe, July 2018: Interim report** (2019, Aarhus).  
Sulas, F. & Pikirayi, I.

**Settlement, landscape and narrative: What really happened in history**  
In *The Global Middle Ages, Past and Present Supplement 13* (2018, Oxford), ed. by Holmes, C. & Standen, N., 232-260.  
Leyser, C., Standen, N. & Wynne-Jones, S.

**Drivers and trajectories of land cover change in East Africa: Human and environmental interactions from 6000 years ago to present**  
In *Earth Science Reviews* 178 (2018), 322-378.  
Marchant, R., Richer, S., Boles, O., Capitani, C., Courtney-Mustaphi, C. J., Lane, P. J., Prendergast, M. E., Stump, D., De Cort, G., Kaplan, J. O., Phelps, L., Kay, A., Olago, D., Petek, N., Platts, P. J., Punwong, P., Widgren, M., Wynne-Jones, S. et al.

**Aksum: Environmental archaeology**  
In *Encyclopaedia of Global Archaeology* (2018, New York), ed. by Smith, C.  
Sulas, F.

**Traditions of water in the northern Horn of Africa**  
In *Water and Society from Ancient Times to the Present: Resilience, Decline and Revival* (2018, Abingdon-New York), ed. by Sulas, F. & Pikirayi, I., 155-175.  
Sulas, F.

**Water and society: Introduction**  
In *Water and Society from Ancient Times to the Present: Resilience, Decline and Revival* (2018, Abingdon-New York), ed. by Sulas, F. & Pikirayi, I., 1-14.  
Sulas, F. & Pikirayi, I.

**Archaeological fieldwork at Unguja Ukuu, Zanzibar, July 2017: Interim report** (2018, Aarhus).  
Wynne-Jones, S. & Sulas, F.





**Understanding the layout of early coastal settlement at Unguja Ukuu, Zanzibar**

In *Antiquity* 91:359 (2017), 1268-1284.  
Fitton, T. & Wynne-Jones, S.

**Expanding the research parameters of geoarchaeology: case studies from Aksum in Ethiopia and Haryana in India**

In *Archaeological and Anthropological Sciences* 9 (2017), 1613-1626.  
French, C., Sulas, F. & Petrie, C.

**The mosques of Son-go Mnara in their urban landscape**

In *Journal of Islamic Archaeology* 4:2 (2017), 163-188.  
Horton, M., Fleisher, J. & Wynne-Jones, S.

**Swahili worlds**

In *The Swahili World* (2017, London), ed. by Wynne-Jones, S. & LaViolette, A., 1-14.  
LaViolette, A. & Wynne-Jones, S.

**Soil geochemistry, phytoliths and artefacts from an early Swahili daub house, Unguja Ukuu, Zanzibar**



*Journal of Archaeological Science* 103 (2019), 32-45.

Sulas, F.  
Kristiansen, S. M. & Wynne-Jones, S.

DOI: 10.1016/j.jas.2019.01.010

This paper presents the results of bulk soil and chemical analyses, artefact distribution and phytolith analysis from the excavation of a daub house at the early medieval site of Unguja Ukuu (c. 7th–14th century CE), Zanzibar. Applying the combined multi-scalar sampling strategy with a multi-proxy analytical approach it was possible to define the layout of the daub structure, indoor/outdoor spaces and activity hot spots. Although macroscopic traces of past activities were almost completely obliterated, archaeological remains of earthen architecture and the use of space can be detected even in such complex tropical settings.

# The Indian Ocean World

## **Reconstructing Asian faunal introductions to eastern Africa from multi-proxy biomolecular and archaeological datasets**

In *PLoS One* 12:8 (2017), e0182565.  
Prendergast, M. E., Buckley, M., Crowther, A., Frantz, L., Eager, H., Lebrasseur, O., Hutterer, R., Hulme-Beaman, A., Neer, W. V., Douka, K., Veall, M., Morales, E. M. Q., Schuenemann, V. J., Reiter, E., Allen, R., Dimopoulos, E. A., Helm, R. M., Shipton, C., Mwebi, O., Denys, C., Horton, M., Wynne-Jones, S. et al.

## **Geoarchaeology of urban space in tropical island environments: Songo Mnara, Tanzania**

In *Journal of Archaeological Science* 77 (2017), 52-63.  
Sulas, F., Fleisher, J. & Wynne-Jones, S.

## **Kilwa Kisiwani and Songo Mnara**

In *The Swahili World* (2017, London), ed. by Wynne-Jones, S. & La-Violette, A., 253-259.  
Wynne-Jones, S.

## **The social composition of Swahili towns**

In *The Swahili World* (2017, London), ed. by Wynne-Jones, S. & La-Violette, A., 293-305.  
Wynne-Jones, S.

## **Coins and other currencies on the Swahili coast**

In *The Archaeology of Money* (2016, Leicester), ed. by Haselgrove, C. & Krmnicek, S., 115-136.  
Wynne-Jones, S. & Fleisher, J.

## **The multiple territories of Swahili urban landscapes**

In *World Archaeology* 48:3 (2016), 349-362.  
Wynne-Jones, S. & Fleisher, J.

## **When did the Swahili become maritime?**

In *American Anthropologist* 117:1 (2015), 100-115.  
Fleisher, J., Lane, P., LaViolette, A., Horton, M., Pollard, E., Morales, E. Q., Vernet, T., Christie, A. & Wynne-Jones, S.





**India in Africa:  
Trade goods and  
connections of the  
late first millennium**

In *Afriques: Débats, méthodes et terrains d'histoire* 6 (2015).

Hawkes, J. D. & Wynne-Jones, S.

**Biographies of practice and the negotiation of Swahili at nineteenth century Vumba**

In *Materializing Colonial Encounters: Archaeologies of African Experience* (2015, New York), ed. by Richard, F. G., 155-176.

Wynne-Jones, S.

**Problems with practice: Dynamic interpretation in African archaeology**

In *Theory in Africa, Africa in Theory: Locating Meaning in Archaeology* (2015, London), ed. by Wynne-Jones, S. & Fleisher, J., 55-71.

Wynne-Jones, S.

**Conservation, community archaeology and the archaeologist as mediator at Songo Mnara, Tanzania**

In *Journal of Field Archaeology* 40:1 (2015), 110-119.

Wynne-Jones, S. & Fleisher, J.

**Fifty years in the archaeology of the eastern African coast: A methodological history**

In *Archaeological Research in Africa* 50:4 (2015), 519-541.

Wynne-Jones, S. & Fleisher, J.

**Theory in Africa, Africa in Theory**

In *Theory in Africa, Africa in Theory: Locating Meaning in Archaeology* (2015, London), ed. by Wynne-Jones, S. & Fleisher, J., 3-18.

Wynne-Jones, S. & Fleisher, J.

See also page 9







# Urban Network Evolutions

Towards a  
high-definition  
archaeology

Edited by Rubina Raja  
& Soren M. Sindbæk



# Urban Network Evolutions: Towards a High-Definition Archaeology

For millenia, urban networks have shaped the development of human societies. Today, new archaeological approaches are unveiling the evolution of these networks in unprecedented detail.

*Urban Network Evolutions* reviews the new approaches to urban evolution as archaeology endeavours to characterise both the scale and pace of historical events and processes. Issuing from the work of the centre, the book compares the archaeology of urbanism from medieval northern Europe to the ancient Mediterranean and the Indian Ocean World.

The 40 contributors demonstrate how new techniques for refining archaeological dates, contexts and the provenance ascribed to material culture afford a new high-definition approach to the study of global and interregional dynamics. This opens up for far-reaching questions as to how and to what extent urban networks catalysed societal and environmental expansions and crises in the past.

2018

Aarhus, Aarhus University Press  
Rubina Raja & Søren M. Sindbæk (eds.)

## Contributions

### INTRODUCTION

**Urban network evolutions: Exploring dynamics and flows through evidence from urban contexts**  
Raja, R. & Sindbæk, S. M.

### ROME AND ITS CITIES

**A high-definition approach to the Forum of Caesar in Rome: Urban archaeology in a living city**  
Jacobsen, J. K. & Raja, R.

**Burial and birds in pre-urban Rome**  
Petersen, N. M.

**Caesar's Forum: Excavating Italian Iron Age**  
Saxkjær, S. G. & Mittica, G. P.

**The Archaic period on the Forum of Caesar: The urbanisation of early Rome**  
Petersen, N. S.

**A space for Caesar: The heart of Rome and urban development**  
Egelund, L.

**Caesars, shepherds and cities**  
Hass, T. A.

**Doliche and the exploration of Graeco-Roman urbanism in ancient Greater Syria**  
Blömer, M.

Continues —→

# Urban Network Evolutions (contributions)

**Public spaces and urban networks in the Roman Empire: Messene in the Peloponnese as an example of an approach**

Dickenson, C.

## **PALMYRA: THE URBAN DESERT**

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**Urbanizing the desert: Investigating the diversity of urban networks through the images of deceased Palmyrenes**

Raja, R.

**Behind the scenes: Cataloguing as a tool for exploring urban networks**

Bobou, O. & Thomsen, R. R.

**Producing funerary portraits: An urban tradition in the Syrian Desert**

Steding, J.

**The urbanization of Palmyra: The dynamics of the family cemeteries**

Krag, S.

## **JERASH: FROM ROMAN TO ISLAMIC CITY**

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**Urban networks and dynamics seen through urban peripheries: The case of Gerasa on the golden river**

Lichtenberger, A. & Raja, R.

**Mortar and plaster production in Jerash: Changing perspective from macro to micro**

Thomsen, K. D.

**Small change in big cities: Characterising the development of everyday coinage in Jerash**

Birch, T. & Orfanou, V.

**River archaeology and urban resilience in Jerash**

Lichtenberger, A. & Raja, R.

**Urban networks seen through ceramics: Formal modelling approaches to pottery distribution in Jerash**

Romanowska, I, Brughmans, T., Lichtenberger, A. & Raja, R.

**Medieval Jerash: Investigating the pottery of a Middle Islamic hamlet in the Northwest Quarter**

Peterson, A.

**Travellers and early urban archaeology in the Levant: The case of Jerash**

Mortensen, E.

**Archaeoseismology in Jerash: Understanding urban dynamics through catastrophic events**

Jørgensen, C. S. L.

## **RIBE: GATEWAY TO THE VIKING AGE**

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**Northern Emporium: The archaeology of urban networks in Viking-Age Ribe**

Sindbæk, S. M.

**3D scanning as documentation and analytical tool: First field experiences at the Northern Emporium excavation project, Ribe**

Croix, S.

**Geoarchaeology and micromorphology at Ribe: A northern Emporium in high definition**

Wouters, B.



**Geoarchaeology of the early northern cities: Microscopic and geochemical investigations of urban spaces in Denmark**

Trant, P. L. K.

**Viking-Age metals and urbanisation: The case of Ribe in Denmark**

Orfanou, V. & Birch, T.

**A new calibration curve for improved radiocarbon dating of urban contexts**

Philippsen, B. & Schou, M. F.

**Missing links: Viking-Age silver rings and urban networks**

Hrnjic, M.

#### **THE MAKING OF MEDIEVAL URBANITY**

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**An urban way of life: How to approach the study of networks and practices in medieval Odense, Denmark**

Haase, K.

**Towards the making of a town: Urbanity as practice and way of life in medieval Copenhagen**

Dahlström, H.

**The chronology of two medieval cemeteries in central Copenhagen: Bayesian modelling and archaeological relative age information**

Olsen, J., Poulsen, B. & Dahlström, H.

**Trade, import and urban development: An archaeobotanical approach to economic change in medieval Denmark**

Hammers, N. M.

**Urbanisation and commercialisation on the periphery of medieval Europe**

Gundersen, O. E.

**High-definition urban fashion: Proteins reveal preferred resources for medieval leather shoes**

Brandt, L. Ø.

**Interdisciplinary methods in town archaeology**

Larsen, J. S.

**Gardening and food security in early southern-Scandinavian urbanism: Existing evidence and the need for a high-definition approach**

Kristiansen, S. M.

#### **SWAHILI EMPORIA: AFRICAN NETWORK CITIES**

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**Defining space in house contexts: Chemical mapping at Unguja Ukuu, Zanzibar**

Sulas, F. & Wynne-Jones, S.

**Iron production technologies and trade networks in Swahili East Africa**

Baužytė, E.

**Dating Kilwa Kisiwani: A thousand years of East African history in an urban stratigraphy**

Wynne-Jones, S., Horton, M., Fleisher, J. & Olsen, J.

#### **BETWEEN URBAN WORLDS**

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**Through the looking glass: Glass, high-definition archaeology and urban networks in the 8th century CE from north to south**

Raja, R. & Sindbæk, S. M.

# The Mediterranean **JERASH**

## Books and edited volumes

**Middle Islamic Jerash (9th Century – 15th Century): Archaeology and History of an Ayyubid-Mamluk Settlement**, *Jerash Papers* 3 (2018, Turnhout). Lichtenberger, A. & Raja, R. (eds.)

**The Archaeology and History of Jerash: 110 Years of Excavations**, *Jerash Papers* 1 (2018, Turnhout). Lichtenberger, A. & Raja, R. (eds.)

**Gerasa/Jerash: From the Urban Periphery** (2017, Aarhus; also available in Danish 2017, Aarhus). Lichtenberger, A. & Raja, R. (eds.) (see also p. 14)

## Articles

**18. Januar 749 n. Chr - Ein Erdbeben zerstört die Stadt Gerasa in Jordanien**  
In *Antike Welt* 1:9 (2019), 4.  
Lichtenberger, A. & Raja, R.

**Mapping Gerasa: A new and open data map of the site**  
In *Antiquity* 93:367 e7 (2019), 1-7.  
Lichtenberger, A., Raja, R. & Stott, D.

**New evidence for pottery chronology and dietary habits from a Middle Islamic hamlet in the Northwest Quarter of Jerash**  
In *Middle Islamic Jerash (9th Century – 15th Century): Archaeology and History of an Ayyubid-Mamluk Settlement*, *Jerash Papers* 3 (2018, Turnhout), ed. by Lichtenberger, A. & Raja, R., 159-190.  
Lichtenberger, A., Peterson, A. & Raja, R.

**A view of Gerasa/ Jerash from its urban periphery: The Northwest Quarter and its significance for the understanding of the urban development of Gerasa from the Roman to the Early Islamic period**  
In *The Archaeology and History of Jerash: 110 Years of Excavations*, *Jerash Papers* 1 (2018, Turnhout), ed. by Lichtenberger, A. & Raja, R., 143-166.  
Lichtenberger, A. & Raja, R.

**Jerash Northwest Quarter Project**  
In *Archaeology in Jordan Newsletter: 2016 and 2017 Seasons* (2018, Amman), ed. by Green, J. D. M., Porter, B. A. & Shelton, C. P., 29-30.  
Lichtenberger, A. & Raja, R.

**Middle Islamic Jerash through the lens of the *longue durée***  
In *Middle Islamic Jerash (9th Century – 15th Century): Archaeology and History of an Ayyubid-Mamluk Settlement*, *Jerash Papers* 3 (2018, Turnhout), ed. by Lichtenberger, A. & Raja, R., 5-36.  
Lichtenberger, A. & Raja, R.

**The archaeology and history of Jerash: 110 years of excavations: An introduction**  
In *The Archaeology and History of Jerash: 110 Years of Excavations*, *Jerash Papers* 1 (2018, Turnhout), ed. by Lichtenberger, A. & Raja, R., 1-6.  
Lichtenberger, A. & Raja, R.

# Mapping an ancient city with a century of remotely sensed data

## The Middle Islamic period in northern Jordan and its pottery: Ceramics in context

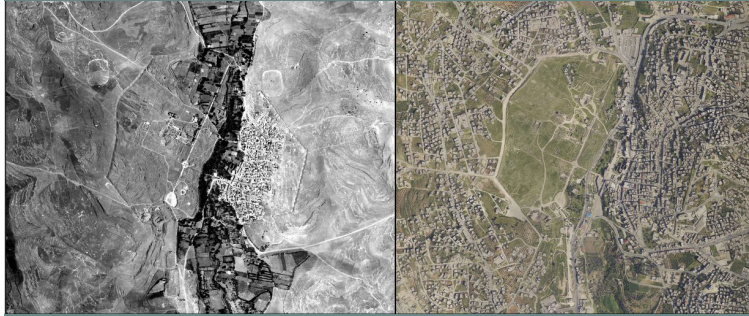
In *Middle Islamic Jerash (9th Century – 15th Century): Archaeology and History of an Ayyubid-Mamluk Settlement*, Jerash Papers 3 (2018, Turnhout), ed. by Lichtenberger, A. & Raja, R., 1-4.  
Lichtenberger, A. & Raja, R.

## The early research history of Jerash: A short outline

In *The Archaeology and History of Jerash: 110 Years of Excavation*, Jerash Papers 1 (2018, Turnhout), ed. by Lichtenberger, A. & Raja, R., 167-186.  
Mortensen, E.

## Interpreting Middle Islamic finds ‘out of context’: Evidence from the Jerash Northwest Quarter

In *Middle Islamic Jerash (9th Century – 15th Century): Archaeology and History of an Ayyubid-Mamluk Settlement*, Jerash Papers 3 (2018, Turnhout), ed. by Lichtenberger, A. & Raja, R., 191-212.  
Möller, H.



*Proceedings of the National Academy of Sciences of the United States of America (PNAS)* 115:24 (2018).

Stott, D.  
Kristiansen, S. M.  
Lichtenberger, A. &  
Raja, R.

DOI: [10.1073/pnas.1721509115](https://doi.org/10.1073/pnas.1721509115)

The rapidly growing global population places cultural heritage at great risk, and the encroachment of modern settlement on archaeological sites means that valuable information about how past societies worked and interacted with the environment is lost. In this paper, the application of multitemporal, multisensor data to map features and chart the impacts of urban encroachment on the ancient city of Jerash (in modern Jordan) is explored. This is done through aerial photography dating back to 1917 in combination with state-of-the-art airborne laser scanning.



# Geochemistry of Byzantine and Early Islamic glass from Jerash, Jordan: Typology, recycling, and provenance

*Geoarchaeology* 33:6 (2018), 623-640.

Barfod, G., Freestone, I., Lichtenberger, A., Raja, R. & Schwartzer, H.

DOI: 10.1002/gea.21684

Glass objects from Jerash with characteristic vessel forms (2nd century BCE to 8th century CE) were analysed for major and trace elements, and 16 samples for strontium isotopes. The analysis points to an efficient system for the collection of glass for recycling in Jerash during the latter part of the 1st millennium CE.

# Mosaicists at work: The organisation of mosaic production in Early Islamic Jerash

*Antiquity* 91:358 (2017), 998-1010.

Lichtenberger, A. & Raja, R.

DOI: 10.15184/aqy.2017.66

In the so-called 'House of the Tesserae', archaeologists discovered a trough for the storage of pieces to be used in the construction of mosaics. The find provides a unique insight into the practice of mosaic-laying during the Early Islamic Period.

## A commentary and analysis of two Ottoman tax records: Settlement history of Late Islamic Jerash

In *Middle Islamic Jerash (9th Century – 15th Century): Archaeology and History of an Ayyubid-Mamluk Settlement*, Jerash Papers 3 (2018, Turnhout), ed. by Lichtenberger, A. & Raja, R., 37-44.  
Peterson, A.

## Middle Islamic ceramics in context from the Northwest Quarter of Jerash

In *Middle Islamic Jerash (9th Century – 15th Century): Archaeology and History of an Ayyubid-Mamluk Settlement*, Jerash Papers 3 (2018, Turnhout), ed. by Lichtenberger, A. & Raja, R., 117-157.  
Peterson, A.

## A new inscribed amulet from Gerasa (Jerash)

In *Syria* 94 (2017), 297-306.  
Gordon, R., Lichtenberger, A. & Raja, R.





**City and wadi: Exploring the environs of Jerash**

In *Antiquity* 91:358 (2017), 1-6.  
Holdridge, G., Kristiansen, S. M., Lichtenberger A., Raja, R. & Simpson, I.

**Ausgrabungen im Nordwestviertel von Gerasa (Jordanien)**

In *Jahresbericht des Instituts für Archäologische Wissenschaften für das Akademische Jahr 2015-2016*, Bochum (2017), 85-90.  
Kalaitzoglou, G., Lichtenberger, A. & Raja, R.

**A newly excavated private house in Jerash: Reconsidering aspects of continuity and change in material culture from Late Antiquity to the Early Islamic period**

In *Antiquité Tardive* 24 (2017), 317-359.  
Lichtenberger, A., Raja, R., Eger, C., Kalaitzoglou, G. & Sørensen, A. H.

**Zeus Olympios, Hadrian and the Jews of Antiochia-on-the-Chrysorrhoas-formerly-called-Gerasa**

In *Festschrift for Graeme Clarke*, Studies in Mediterranean Archaeology (2017, Uppsala), ed. by Minchin, E. & Wade, J., 171-185.  
Raja, R.

**Christen, Juden und Soldaten im Gerasa des 6. Jahrhunderts**

In *Chiron* 46 (2016), 177-204.  
Haensch, R., Lichtenberger, A. & Raja, R.

**Ausgrabungen im Nordwestviertel von Gerasa (Jordanien)**

In *Jahresbericht des Instituts für Archäologische Wissenschaften für das Akademische Jahr 2014-2015*, Bochum (2016), 89-94.  
Kalaitzoglou, G., Lichtenberger, A. & Raja, R.

**An Umayyad period magical amulet from a domestic context in Jerash, Jordan**

In *Syria* 93 (2016), 369-386.  
Larsen, J. M., Lichtenberger, A., Raja, R. & Gordon, R. L.

**Jarash Northwest Quarter Project**

In *Archaeology in Jordan*, 2014 and 2015 seasons, ed. by Corbett, G. J., Keller, D. R., Porter, B. A. & Shelton, C. P., *American Journal of Archaeology* 120:4 (2016), 643.  
Lichtenberger, A. & Raja, R.

**Jerash in the Middle Islamic period: Connecting texts and archaeology through new evidence from the Northwest Quarter**

In *Zeitschrift des Deutschen Palästina-Vereins* 132:1 (2016), 63-81.  
Lichtenberger, A. & Raja, R.

**Living with and on the river-side: The example of Roman Antiochia-on-the-Chrysorrhoas-formerly-called-Gerasa**

In *Water of Life: Essays from a Symposium Held on the Occasion of Peder Mortensen's 80th Birthday*, Proceedings of the Danish Institute in Damascus 11 (2016, Copenhagen), ed. by Madsen J. K., Andersen, N. O. & Thuesen, I., 98-117.  
Lichtenberger, A. & Raja, R.



# Gerasa/Jerash: From the Urban Periphery

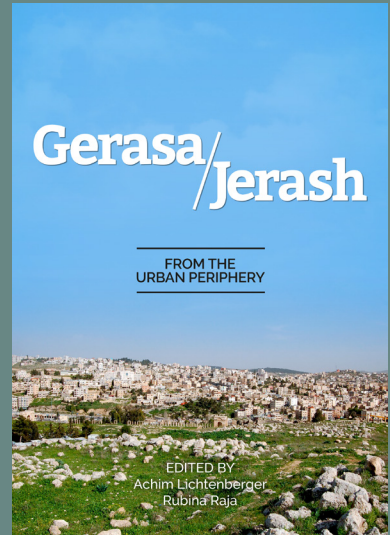
2017, Aarhus

Achim Lichtenberger & Rubina Raja (eds.)

A Danish version is also available:

*Gerasa/Jerash: Fra den Urbane Periferi*

Since 2011, the Danish-German Jerash Northwest Quarter Project has been investigating a peripheral area high up within the city walls in order to learn more about urban life on the periphery of the town. This book presents some of the rich and varied research activities undertaken by the team working in the Northwest Quarter. In so doing, it casts light on a variety of ways of inquiring into life in pre-modern societies.



**Urban archaeology and the understanding of the past: Antiochia on the Chysorrhoeas, also called Gerasa**

Lichtenberger, A. & Raja, R.

**A day on the dig**

Egelund, L. & Pedersen, M. N.

**Archive archaeology: Rediscovering Jerash in the digital archives**

Mortensen, E.

**Excavating Jerash: Archaeological aims, methods and techniques**

Kalaitzoglou, G.

**Mapping ancient Gerasa with remote sensing**

Stott, D. & Kristiansen, S. M.

**Modelling ancient Gerasa in three dimensions**

Alexaki, I.

**Reading the book of nature in Jerash: The soil archives**

Kristiansen, S. M., Holdridge, G. A. & Simpson, I. A.

**Ceramics in context: Interpreting life through pottery**

Möller, H.

**Medieval pottery from Jerash: The Middle Islamic settlement**

Peterson, A.

**Cooking up culture: Production traditions in Late Roman-Byzantine locally produced cooking ware**

Kristensen, S. B.

**Gerasa: Mortar matters**

Thomsen, K.

**Mosaics from the North-West Quarter of Jerash**

Wootton, W. T.

**Jerash Bowls: Fine tableware from Jerash**

Csitneki, D.

**Animal bones from the North-West Quarter**

Bangsgaard, P., Lichtenberger, A. & Raja, R.

**'Recycling, reuse and reduce': Glass in ancient Gerasa**

Barfod, G. H.

**Water management in the North-West Quarter of Gerasa/Jerash**

Lichtenberger, A. & Raja, R.

## **The Danish-German North-West Quarter Project at Jarash: Results from the 2011-2013 Seasons**

In *Studies in the History and Archaeology of Jordan XII*, *Transparent Borders* 7 (2016), 173-188.  
Lichtenberger, A. & Raja, R.

## **Revealing text in a complexly rolled silver scroll from Jerash with computed tomography and advanced imaging software**

In *Nature Scientific Reports* 5 (2015), 1-10.  
Barfod, G. H., Larsen, J. M., Lichtenberger, A. & Raja, R.

## **Ausgrabungen im Nordwestviertel von Gerasa (Jordanien)**

In *Jahresbericht des Instituts für Archäologische Wissenschaften für das Akademische Jahr 2013-2014*, Bochum (2015), 71-75.

Kalaitzoglou, G., Lichtenberger, A. & Raja, R.

## **Preliminary report of the fourth season of the Danish-German Jerash Northwest Quarter Project 2014**

In *Annual of the Department of Antiquities of Jordan* 59 (2015/2018), 11-43.  
Kalaitzoglou, G., Lichtenberger, A. & Raja, R.

## **Radiocarbon analysis of mortar from Roman and Byzantine water management installations in the Northwest Quarter of Jerash, Jordan**

In *Journal of Archaeological Science: Reports* 2 (2015), 114-127.

Lichtenberger, A., Lindroos, A., Raja, R. & Heinemeier, J.

## **A hoard of Byzantine and Arab-Byzantine coins from the excavations at Jerash. 6. Jerash 2014**

In *Numismatic Chronicle* 175 (2015), 299-308.

Lichtenberger, A. & Raja, R.





# The Mediterranean



## **An architectural block with altar-icography from the North-west Quarter of Jerash**

In *Levant* 47:1 (2015), 112-130.

Lichtenberger, A. & Raja, R.

## **Intentional cooking pot deposits in Late Roman Jerash (Northwest Quarter)**

In *Syria* 92 (2015), 309-328.

Lichtenberger, A. & Raja, R.

## **New archaeological research in the Northwest Quarter of Jerash and its implications for the urban development of Roman Gerasa**

In *American Journal of Archaeology* 119:4 (2015), 483-500.

Lichtenberger, A. & Raja, R.

## **The Danish-German Jarash Northwest Quarter Project 2014 preliminary registration report**

In *Annual of the Department of Antiquities of Jordan* 59 (2015/2018), 45-131.

Lichtenberger, A., Raja, R. & Sørensen, A. H.

## **The Danish-German Jerash North-West Quarter Project 2013: Preliminary field report**

In *Annual of the Department of Antiquities of Jordan* 58 (2014/2017), 11-37.

Kalaitzoglou, G., Lichtenberger, A. & Raja, R.

## **The Danish-German Jarash Northwest Quarter Project 2013: Preliminary registration report**

In *Annual of the Department of Antiquities of Jordan* 58 (2014/2017), 39-103.

Lichtenberger, A., Raja, R. & Sørensen, A. H.

## **Preliminary report of the second season of the Danish-German Jerash Northwest Quarter Project 2012**

In *Annual of the Department of Antiquities of Jordan* 57 (2013/2015), 57-79.

Kalaitzoglou, G., Lichtenberger, A. & Raja, R.

## **Preliminary registration report of the second season of the Danish-German Jerash Northwest Quarter Project 2012**

In *Annual of the Department of Antiquities of Jordan* 57 (2013/2015), 9-56.

Lichtenberger, A., Raja, R. & Sørensen, A. H.

## **Report of the geophysical prospection of the Northwest Quarter of Gerasa/ Jerash 2011**

In *Annual of the Department of Antiquities of Jordan* 56 (2012/2014), 79-90.

Kalaitzoglou, G., Kniess, R., Lichtenberger, A., Pilz, D. & Raja, R.

**See also page 8**

The ancient city of Gerasa (Jerash), located in Jordan, has a long history. First known as a Neolithic mega site, and later for its Roman period monuments, the settlement flourished throughout Late Antiquity and the Early Islamic period until it was hit by the devastating earthquake of 749 CE. Jerash only re-emerged into archaeological and historical sources in the later medieval period, and was not re-identified until the early 19th century. Since then, excavations within the city have revealed remarkable findings that provide an excellent showcase for the way in which this urban space evolved between the Hellenistic period and Islamic times.

This series provides a specialised forum through which the extraordinary site of Jerash can be presented to a wider audience, and its importance traced through historical and archaeological material from prehistoric up to modern times. Volumes published within the series are encouraged to cross disciplinary and chronological boundaries, to transcend traditional views, definitions and presumptions, and in doing so, to shed new light on our understanding of the ancient world.

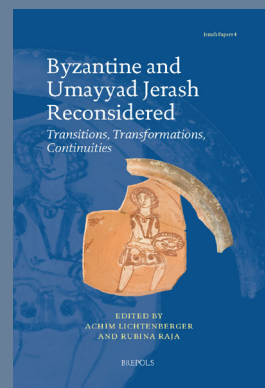
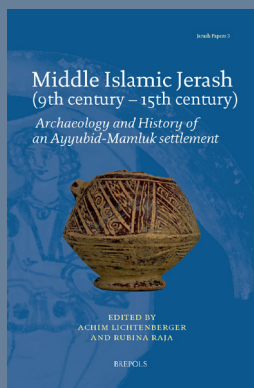
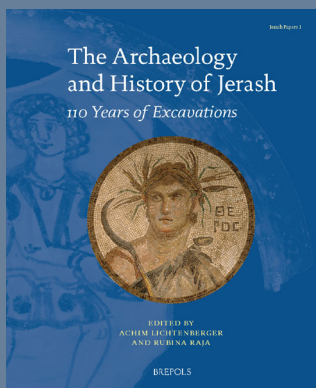
## Titles in the series

1. *The Archaeology and History of Jerash: 110 Years of Excavations* (2018), ed. by Lichtenberger, A. & Raja, R.
2. *On the Golden River: Gerasa through the Eyes of 19th and 20th Century Visitors*, 2 vols. (forthcoming), ed. by Lichtenberger, A. & Raja, R.
3. *Middle Islamic Jerash (9th Century – 15th Century): Archaeology and History of an Ayyubid-Mamluk Settlement* (2018), ed. by Lichtenberger, A. & Raja, R.
4. *Byzantine and Umayyad Jerash Reconsidered: Transitions, Transformations, Continuities* (forthcoming, 2019), ed. by Lichtenberger, A. & Raja, R.

General editors

Achim Lichtenberger & Rubina Raja

Turnhout, Brepols Publishers



**Books and  
edited volumes**

**Palmyra after Zenobia AD 273–750: An Archaeological and Historical Reappraisal** (2018, Oxford-Philadelphia).  
Intagliata, E. E.

**Funerary Representations of Palmyrene Women: From the First Century BC to the Third Century AD**, *Studies in Classical Archaeology* 3 (2018, Turnhout).  
Krag, S.

**Palmyra: Pearl of the Desert** (2017, Aarhus; also available in Danish 2017, Aarhus).  
Raja, R.  
(See also p. 20)

**Positions and Professions in Palmyra**, *Palmyrene Studies* 2 (2017, Copenhagen).  
Long, T. & Sørensen, A. H. (eds.)

**The World of Palmyra**, *Palmyrene Studies* 1 (2016, Copenhagen).  
Kropp, A. & Raja, R. (eds.)

**Harald Ingholt & Palmyra** (2015, Aarhus; also available in Danish 2015, Aarhus).  
Raja, R. & Sørensen, A. H.

**Articles**

**Family matters: Family constellations in Palmyrene funerary sculpture**  
*In Family lives: Aspects of life and death in ancient families*, *Acta Hyperborea* 15 (2019, Copenhagen), ed. by Johannsen, K. B. & Petersen, J. H., 245-270.  
Raja, R.

**The unpublished archival material from the Fonds d'Archives Paul Collart, University of Lausanne: Remarks on the numismatic record of the Sanctuary of Baalshamin**  
*In Rivista Italiana di Numismatica e Scienze Affini* 119 (2018), 15-30.  
Intagliata, E. E.

**Unveiling female hairstyles: Markers of age, social roles, and status in the funerary sculpture from Palmyra**  
*In Zeitschrift für Orient-Archäologie* 11 (2018), 242-277.  
Krag, S. & Raja, R.

**Compilation and digitisation of the Palmyrene corpus of funerary portraits**  
*In Antiquity* 92:365 (2018), 1-7.  
Raja, R.

**Palmyrene funerary portraits: Collection histories and current research**  
*In Palmyra: Mirage in the Desert*, The Metropolitan Museum of Art Symposia (2018, London-New Haven; also available in Arabic 2018, Cairo), ed. by Aruz, J., 100-109.  
Raja, R.

**Stacking aesthetics in the Syrian Desert: Displaying Palmyrene sculpture in the public and funerary sphere**  
*In Visual Histories of the Classical World: Essays in Honour of R. R. Smith*, *Studies in Classical Archaeology* 4 (2018, Turnhout), ed. by Draycott, C. M., Raja, R., Welch, K. & Wootton, W. T., 281-295.  
Raja, R.

**The matter of the Palmyrene 'modius': Remarks on the history of research into the terminology of the Palmyrene priestly hat**  
*In Religion in the Roman Empire* 2:4 (2018), 237-259.  
Raja, R.

**Producing Palmyrene funerary portraits**

In *Tijdschrift voor Mediterrane Archeologie* 59 (2018), 57.  
Steding, J.

**Changing identities, changing positions: Jewellery in Palmyrene female portraits**

In *Positions and Professions in Palmyra*, Palmyrene Studies 2 (2017, Copenhagen), ed. by Long, T. & Sørensen, A. H., 36-51.  
Krag, S.

**Familieportrætter fra Palmyra**

In *Sfinx* 40:4 (2017), 20-15.  
Krag, S.

**Women in Palmyrene rituals and religious practices**

In *Textiles and Cult in the Ancient Mediterranean*, Ancient Textiles Series 31 (2017, Oxford), ed. by Brøns, C. & Nosch, M., 230-239.  
Krag, S.

**Representations of women and children in Palmyrene banqueting reliefs and sarcophagus scenes**

In *Zeitschrift für Orient-Archäologie* 10 (2017), 196-227.  
Krag, S. & Raja, R.

# The Collection of Palmyrene Funerary Portraits in the Musei Vaticani: Notes and Observations



*Bollettino dei Monumenti Musei e Gallerie Pontificie Supplemento* 4, the Vatican State (2019).

Krag, S.  
Raja, R. &  
Yon, J.-B.

With an introduction by  
Amenta, A.

Since the late 19th century, Palmyrene funerary portraits have made their way into European and later American private collections. These portraits were early acknowledged as making up an important group of comparative material for studying representations of individuals stemming from Antiquity.

In the Musei Vaticani, an important collection of Palmyrene sculpture counting thirteen pieces is held. This collection for the largest part consists of a donation by Federico Zeri in 1999, who held ten of the objects. A few pieces were already in the collection of the museum before then. In the present study, these thirteen portraits are revisited, and new aspects of interest are highlighted. The study is based on the work done within the framework of the Palmyra Portrait Project.

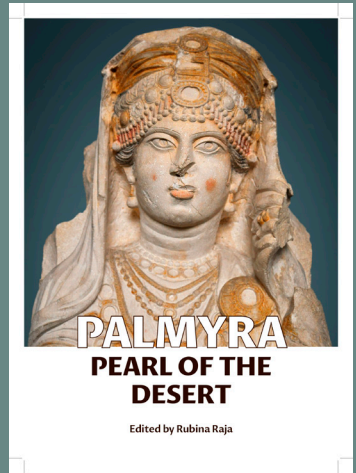


# Palmyra: Pearl of the Desert

2017, Aarhus  
Rubina Raja (ed.)

A Danish version is also available:  
*Palmyra: Ørkenens Perle*

The very significant research on Palmyra undertaken in the Nordic region since 2010 is reflected in nine contributions in this book – some by UrbNet centre members (below) and some by Nordic colleagues.



## **Palmyra: Pearl of the desert**

Raja, R.

## **Danish pioneers at Palmyra: Historiographic aspects of Danish scholarship on Palmyra**

Raja, R.

## **Palmyrene portraiture and illegal trade in art and antiquities**

Koustrup Høj, A. D.

## **Women in Palmyra**

Krag, S.

## **Children's portraits from Palmyra**

Ringsborg, S.

## **Priesthood in Palmyra: Public office or social status?**

Raja, R.

## **Palmyra's colourful past: Murals for the dead**

Sørensen, A. H.

## **A virtual market for illegal trade in cultural goods: Palmyra in Syria as an example**

In *Illicit Trade in Cultural Artefacts* (2017, Copenhagen), ed. by Nordic Council of Ministers, 31-33.  
Raja, R.



## **Between fashion phenomena and status symbols: Contextualising the wardrobe of the so-called 'former priests' of Palmyra**

In *Textiles and Cult in the Ancient Mediterranean*, Ancient Textiles Series 31 (2017, Oxford), ed. by Brøns, C. & Nosch, M., 209-229.  
Raja, R.

## **Networking beyond death: Priests and their family networks in Palmyra explored through the funerary sculpture**

In *Sineus of Empire: Networks in the Roman Near East and Beyond* (2017, Oxford), ed. by Teigen, H. F. & Seland, E. H., 121-136.  
Raja, R.

**Powerful images of the deceased: Palmyrene funerary portrait culture between local, Greek and Roman representations**

In *Bilder der Macht: Das griechische Porträt und seine Verwendung in der antiken Welt*, Morphomata 34 (2017, Paderborn), ed. by Boschung, D. & Queyrel, F., 319-348.  
Raja, R.

**Representations of the so-called ‘former priests’ in Palmyrene funerary art: A methodological contribution and commentary**

In *Topoi* 21:1 (2017), 51-81.  
Raja, R.

**To be or not to be depicted as a priest in Palmyra: A matter of representational spheres and societal values**

In *Positions and Professions in Palmyra*, Palmyrene Studies 2 (2017, Copenhagen), ed. by Long, T. & Sørensen, A. H., 115-130.  
Raja, R.

**‘You can leave your hat on’. Priestly representations from Palmyra: Between visual genre, religious importance and social status**

In *Beyond Priesthood: Religious Entrepreneurs and Innovators in the Roman Empire* (2017, Berlin), ed. by Gordon, R., Petridou, G. & Rüpke, J., 417-442.  
Raja, R.

**Females in group portraits in Palmyra**

In *The World of Palmyra*, Palmyrene Studies 1 (2016, Copenhagen), ed. by Kropp, A. & Raja, R., 180-193.  
Krag, S.

**The world of Palmyra in Copenhagen**

In *The World of Palmyra*, Palmyrene Studies 1 (2016, Copenhagen), ed. by Kropp, A. & Raja, R., 7-16.  
Kropp, A. & Raja, R.

**Danske pionerer i Palmyra: Den danske Palmyra-forskning i et historiografisk perspektiv**

In *Carlsbergfondets Årsskrift 2016: 140 års jubilæums årsskrift* (2016), 56-63.  
Raja, R.

**Illegal trade and export of cultural goods: The case of the Palmyrene funerary portraiture**

In *Fighting the Illegal Looting of Syria’s Cultural Heritage* (2016, Sofia), ed. by Chahin, D. & Lindblom, I., 11-12.  
Raja, R.

**In and out of contexts: Explaining religious complexity through the banqueting tesseræ from Palmyra**

In *Religion in the Roman Empire* 2:3 (2016), 340-371.  
Raja, R.

**Representations of priests in Palmyra: Methodological considerations on the meaning of representation of priesthood in the funerary sculpture from Roman period Palmyra**

In *Religion in the Roman Empire* 2:1 (2016), 125-146.  
Raja, R.

# Representations of women and children in Palmyrene funerary *loculus* reliefs, *loculus stelae* and wall paintings

*Zeitschrift für Orient-Archäologie* 9 (2016), 134-178.

Krag, S. & Raja, R.

Palmyrene funerary *loculus* reliefs, *stelae* and wall paintings displaying representations of women with their children are presented and discussed in this article. Mothers with young and adult children appear in the funerary record from Palmyra in a variety of constellations, sometimes together with other family members.

# The ‘Beauty of Palmyra’ and Qasr Abjad (Palmyra): New discoveries in the archive of Harald Ingholt

*Journal of Roman Archaeology* 28:1 (2015), 439-450.

Raja, R. & Sørensen, A. H.

DOI: 10.1017/S1047759415002585

Going through Harald Ingholt’s detailed excavation diaries and the archive on Palmyrene funerary portraits he established (both held at the Ny Carlsberg Glyptotek in Copenhagen), it has been possible to recontextualise some of the portraits found in the 1920s – among others, the so-called ‘Beauty of Palmyra’.

## **The history and current situation of World Heritage Sites in Syria: The case of Palmyra**

In *Cultural Heritage at Risk* (2016, Stockholm), ed. by Almqvist, K. & Belfrage, L., 27-47.  
Raja, R.

## **Palmyrene tomb paintings in context**

In *The World of Palmyra*, Palmyrene Studies 1 (2016, Copenhagen), ed. by Kropp, A. & Raja, R., 103-117.  
Sørensen, A. H.

## **The secrets of the funerary buildings in Palmyra during the Roman period**

In *Revealing and Concealing in Antiquity: Textual and Archaeological Approaches to Secrecy*, Aarhus Studies in Mediterranean Antiquity 13 (2015, Aarhus), ed. by Mortensen, E. & Saxkjær, S. G., 105-118.  
Krag, S.

## **The Palmyra Portrait Project**

In *Proceedings of the XVIIIth International Congress of Classical Archaeology II: Centre and Periphery* (2015, Merida), ed. by Álvares, J. M., Nogales, T. & Rodà, I., 1223-1226.  
Kropp, A. & Raja, R.

## **Cultic dining and religious patterns in Palmyra: The case of the Palmyrene banqueting tesseræ**

In *Antike. Architektur. Geschichte: Festschrift für Inge Nielsen zum 65. Geburtstag* (2015, Hamburg), ed. by Faust, S., Seifert, M., and Ziemer, L., 181-200.  
Raja, R.

## **From studying portraits to documenting Syria's cultural heritage**

In *Harald Ingholt & Palmyra* (2015, Aarhus; also available in Danish 2015, Aarhus), by Raja, R. & A. H. Sørensen, 10-13.  
Raja, R.

## **Palmyrene funerary portraits in context: Portrait habit between local traditions and imperial trends**

In *Tradition: Transmission of Culture in the Ancient World*, Acta Hyperborea 14 (2015, Copenhagen), ed. by Fejfer, J., Moltesen, M. & Rathje, A., 329-361.  
Raja, R.

## **Palmyra Portræt Projektet: Fra kollektivt forskningsprojekt til internationalt knudepunkt**

In *Det Unge Akademis Årsskrift* (2015), 10-13.  
Raja, R.

## **Staging 'private' religion in Roman 'public' Palmyra: The role of the religious dining tickets (banqueting tesseræ)**

In *Public and Private in Ancient Mediterranean Law and Religion* (2015, Berlin), ed. by Ando, C. & Rüpke, J., 165-186.  
Raja, R.

See also page 8





# Palmyrenske Studier | Palmyrene Studies

The series Palmyrenske Studier (Palmyrene Studies) is hosted and published by the Royal Danish Academy of Sciences and Letters in Copenhagen, who also published the earliest Danish research on Palmyra in the 1890s, based on Johannes Elith Østrup's travel activities in the region, his mapping of parts of the Syrian Desert as well as his visit to Palmyra. Therefore, the series is seen as a continuation of this strong Danish tradition of exhibiting an interest in this important desert city in Syria.

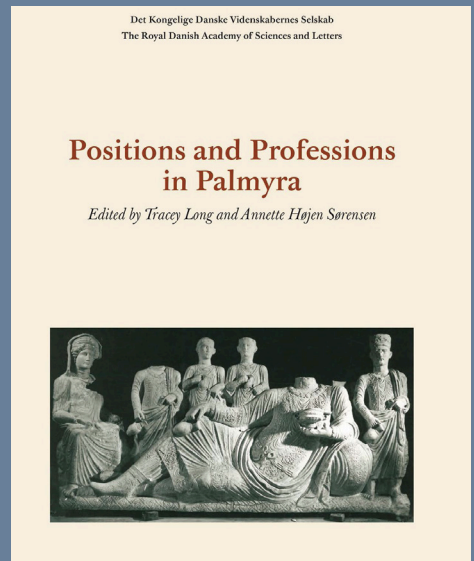
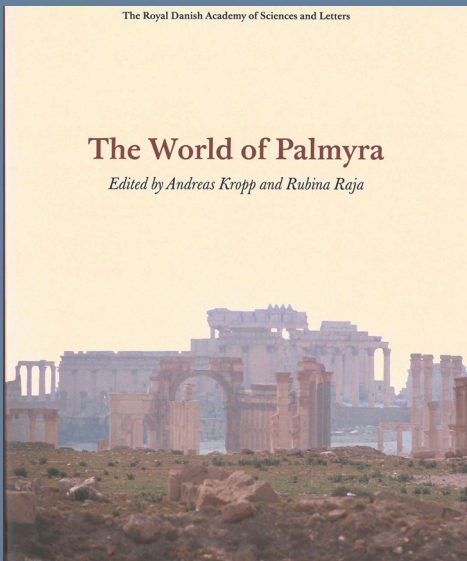
The series takes its name after Harald Ingholt's monograph published in 1955, entitled *Studier over Palmyrensk Skulptur*. This monograph remains a standard work on the Palmyrene funerary sculpture. The series hosts publications of the Palmyra Portrait Project, including conference proceedings.

## Titles in the series

1. *The World of Palmyra* (2016), ed. by Kropp, A. & Raja, R.
2. *Positions and Professions in Palmyra* (2017), ed. by Long, T. & Sørensen, A. H.
3. *Women, Children and the Family in Palmyra* (forthcoming, 2019), ed. by Krag, S. & Raja, R.

General editor  
Rubina Raja

Copenhagen, The Royal Danish Academy of Sciences and Letters



# Mediterranean Studies in Antiquity

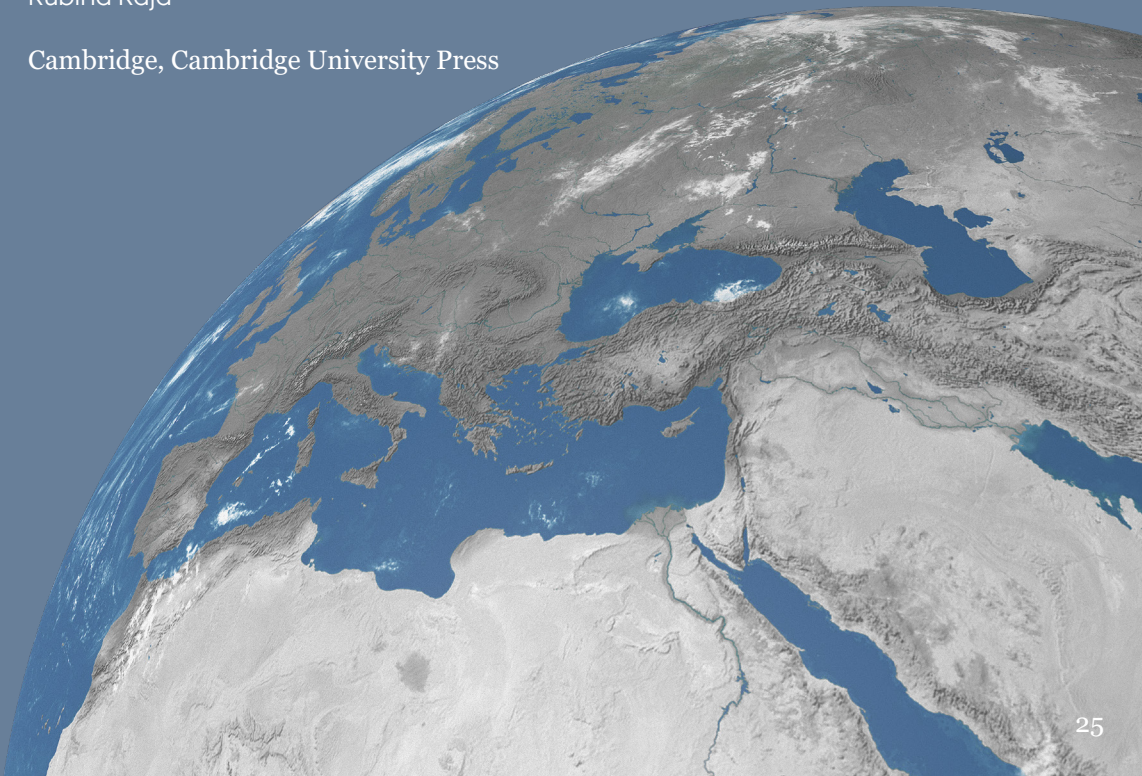
This series covers the disciplines embraced by Classics through a Mediterranean perspective using the Mediterranean as an analytical category in itself. In recent years, the Mediterranean has been conceptualised in the context of area studies, and it is therefore important to examine its reciprocal relations with areas lying beyond the Mediterranean. It would seek to transcend the concept of ‘the Mediterranean’ by viewing it from a broader perspective as well as not tying it into a single theoretical framework such as network analysis or cultural development. A Mediterranean perspective on Antiquity will allow scholars of Classics to go beyond the perspectives of the Greeks and Romans and to look at developments in a specific geographical space, namely the Mediterranean region. Such a focus would then allow comparative studies with other such spaces. The contextualisation of ancient cultures in terms of a broader Mediterranean perspective would offer the possibility of examining differentiated identity constructions in diverse contexts. Finally, a Mediterranean perspective on Antiquity offers the possibility of overcoming disciplinary boundaries, thereby offering productive new ways of approaching the subject of Classics.

## **Forthcoming titles in the series**

1. *Mediterranean Studies in Antiquity: Setting the Agenda* (forthcoming), ed. by Raja, R.
2. *Palmyra and the Mediterranean* (forthcoming), ed. by Raja, R.

General editor  
Rubina Raja

Cambridge, Cambridge University Press



# The Mediterranean **DOLICHE**

## Book

**Doliche: An Ancient Town at the Crossroads of Civilizations: A Guide to the Ancient City Area and the Sanctuary of Jupiter Dolichenus** (2018, Gaziantep). Winter, E. & Blömer, M. (See also opposite page)

## Articles

**Wie Iuppiter Dolichenus das Römische Reich eroberte**  
In *Archäologie in Deutschland* 3 (2019), 14-49.  
Blömer, M. & Winter, E.

**Doliche – Iuppiter Dolichenus`un Vatani: Antik Kuzey Suriye`de Kent ve Kent Gelişimi Hakkında Yeni Araştırmalar**

In *Aktüel Arkeoloji* 2018:63 (2018), 10-13.  
Blömer, M., Çobanoğlu, D. & Winter, E.

**Doliche – Heimat des Iuppiter Dolichenus**

In *Antike Welt* 2018:3 (2018), 79-83.  
Blömer, M. & Winter, E.

**Der Gott im Blätterkelch: Ein neues Relief vom Dülük Baba Tepesi**

In *Vom eisenzeitlichen Heiligtum zum christlichen Kloster: Neue Forschungen auf dem Dülük Baba Tepesi*, Dolichener und Kommagenische Forschungen 9, Asia Minor Studien 84 (2017, Bonn), ed. by Winter, E., 87-99.  
Blömer, M.

**The cult of Iuppiter Dolichenus in the East**

In *Entangled Worlds: Religious Confluences between East and West in the Roman Empire. The Cult of Isis, Mithras, and Jupiter Dolichenus*, Orientalische Religionen in der Antike 22 (2017, Tübingen), ed. by Nagel, S., Quack, J. & Witschel, C., 96-112.  
Blömer, M.

**A new altar for the God Turmasgade from Dülük Baba Tepesi**

In *Vom eisenzeitlichen Heiligtum zum christlichen Kloster. Neue Forschungen auf dem Dülük Baba Tepesi*, Dolichener und Kommagenische Forschungen 9, Asia Minor Studien 84 (2017, Bonn), ed. by Winter, E., 101-123.  
Blömer, M. & Facella, M.





### **Doliche 2015**

In *Kazi Sonuçları*

*Toplantısı* 38:1 (2017),  
47-64.

Blömer, M., Çobanoğlu,  
D. & Winter, E.

### **Stadtgrabung in Doliche**

In *Antike Welt* 2016:1  
(2016), 5.

Blömer, M.

### **Doliche ve Dülük Baba Tepesi**

In *Aktüel Arkeoloji* 50  
(2016), 88-99.

Blömer, M., Çobanoğlu,  
D. & Winter E.

### **Doliche 2014**

In *Kazi Sonuçları*

*Toplantısı* 37:1 (2016),  
41-58.

Blömer, M., Çobanoğlu,  
D. & Winter, E.

### **Der Kult des Iuppi- ter Dolichenus und die Frage nach Kon- tinuität**

In *The Limits of*

*Change: Was ist der  
Wert der beständigen  
Dinge?* (2015, Berlin),

ed. by Picht, L., Sch-  
midt, K., Schmitz, G. &  
Wiggering, L., 103-122.  
Blömer, M.

**See also page 7**

# Doliche: An Ancient Town at the Crossroads of Civilizations

## A Guide to the Ancient City Area and the Sanctuary of Jupiter Dolichenus



2018, Gaziantep

Winter, E. &  
Blömer, M.

[https://pure.au.dk/portal/files/135144962/  
DOLICHE\\_2018\\_E\\_MAIL.pdf](https://pure.au.dk/portal/files/135144962/DOLICHE_2018_E_MAIL.pdf)  
(also in German and Turkish)

This is the third and extended open-access edition of a guide to the city of Doliche and the Sanctuary of Jupiter Dolichenus on Dülük Baba Tepesi. It has been produced in collaboration with the Gaziantep municipality. The book offers an up-to-date overview of the history and the monuments of the sites. In the new edition, special emphasis has been put on the results of the new excavations in the area of the ancient city. The authors present for the first time a newly discovered Early Christian basilica with splendid mosaics, a bath building of the Roman Imperial period and the remarkable find of 1400 seal impressions from the city archive.



## Edited volumes

### **Tæt på Etruskerne**

(2018, Copenhagen).  
Ahlén, A. S. S., Brøns, C.,  
Nielsen, M., Nørskov, V.,  
Petersen, N. & Rathje, A.  
(eds.)

### **Sa massaria: Ecologia storica dei sistemi di lavoro contadino in Sardegna, 2 vols.**

(2017, Rome).  
Serreli, G., Melis, R. T.,  
French, C. & Sulas, F.  
(eds.)

## Articles

### **Fragmenter af Roms historie: Det nye dansk-italienske Cæsars Forum-projekt**

In *Sfinx* 42.1 (2019),  
22-27.  
Jacobsen, J. K., Raja, R.  
& Saxkjær, S. G.

### **Kort om etruskerne**

In *Tæt på Etruskerne*,  
(2018, Copenhagen),  
ed. by Ahlén, A. S. S.,  
Brøns, C., Nielsen, M.,  
Nørskov, V., Petersen,  
N. & Rathje, A., 10-28.  
Ahlén, A. S. S., Brøns, C.,  
Nielsen, M., Nørskov, V.,  
Petersen, N. & Rathje, A.

### **Sepolcreto Ostiense bragt til live igen**

In *Sfinx* 41:3 (2018),  
14-19.  
Bargfeldt, N. & Mortensen, E.

### **8000 years of coastal changes on a western Mediterranean island: A multiproxy approach from the Posada plain of Sardinia**

In *Marine Geology* 403  
(2018), 93-108.  
Melis R. T., French C.,  
Marriner N., Montis F.,  
Serreli G., Sulas F. &  
Vacchi M.

### **Middelhavet og etruskernes fyrstebegravelse**

In *Tæt på Etruskerne*  
(2018, Copenhagen),  
ed. by Ahlén, A. S. S.,  
Brøns, C., Nielsen, M.,  
Nørskov, V., Petersen,  
N. & Rathje, A., 52-85.  
Petersen, N. M.



# & ITALY

## **Landscapes, archaeology and identity in Sardinia**

In *E pluribus unum: The Sardinian Identity-Making Profile from the Middle Ages to Modernity* (2018, Bern), ed. by Gallinari, L., 17-29.  
Sulas, F.

## **Evoluzione del paesaggio e insediamento nel bacino del Rio Posada: Indagini geoarcheologiche**

In *Sa massaria: Ecologia storica dei sistemi di lavoro contadino in Sardegna 1* (2017, Rome), ed. by Serreli, G., Melis, R. T., French, C. & Sulas, F., 81-114.  
French, C., Sulas, F., Melis, R. T., Di Rita, F., Montis, F., Radhouse, D., Taylor, S. & Serreli, G.

## **Tarquinius and the north: Considerations on some archaeological evidence of the 9th–3rd century BC**

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# The Mediterranean OTHER

## Edited volumes

**Transformationen paganer Religion in der Kaiserzeit: Rahmenbedingungen und Konzepte,** Religionsgeschichtliche Versuche und Vorarbeiten 72 (2018, Berlin). Blömer, B. & Eckhardt, B. (eds.)

**Visual Histories of the Classical World: Essays in Honour of R. R. R. Smith,** Studies in Classical Archaeology 4 (2018, Turnhout). Draycott, C. M., Raja, R., Welch, K. & Wootton, W. T. (eds.)

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**The Significance of Objects: Considerations on Agency and Context,** Religion in the Roman Empire 3:2 (2016, Tübingen). Raja, R. & Weiss, L. (eds.)

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**Religion in the making: The Lived Ancient Religion approach**

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**Zu Ikonographischen Austauschprozessen translokaler Kulte in der römischen Kaiserzeit**

In *Transformationen paganer Religion in der römischen Kaiserzeit: Rahmenbedingungen und Konzepte*, Religionsgeschichtliche Versuche und Vorarbeiten 72 (2018, Berlin), ed. by Blömer, M. & Eckhardt, B., 81-112.

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**Kommagene ve Kyrhestike`de Roma Dönemi Kaya Oda Mezarları**

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Blömer, M. & Çobanoğlu, D.

# Revival or reinvention? Local cults and their iconographies in Roman Syria

*Religion in the Roman Empire* 3 (2017), 344-365.

Blömer, M.

DOI: 10.1628/219944617X15014860816601

In many places of the Near East, images of local deities re-emerged in the late Hellenistic and Roman Period. In most instances, however, the divine iconography was not rooted in ancient local traditions, but mainly based on Greek models. Emphasis was put on the assurance of local identity, but at the same time a very standardised expression of locality evolved. The focus was on comprehensibility and competitiveness, but not necessarily on distinctiveness. The persistence of ancient Near Eastern iconography was very much the exception and requires special explanation.

## Complex sanctuaries of the Roman period

*A Companion to the Archaeology of Religion in the Ancient World* (2015, Malden-Oxford-Chichester), ed. by Raja, R. & Rüpke, J., 307-319.

Raja, R.

One of the most marked expressions of religious practice in the Roman period was the large number of sanctuaries which already existed and stayed in use, were remodelled or were constructed ex novo in the Roman period. Many of the sanctuary complexes had a huge impact on how the urban landscape was perceived. With different case studies from the Near East, aspects such as visibility, access and architectural layout are dealt with in this article.



# The Mediterranean

## **Transformationen paganer Religion in der Kaiserzeit: Pro- bleme und Perspek- tiven**

In *Transformationen  
paganer Religion in der  
Kaiserzeit: Rahmenbe-  
dingungen und Konzep-  
te*, Religionsgeschicht-  
liche Versuche und  
Vorarbeiten 72 (2018,  
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## **Apollo's children: Five statues from Delphi**

In *Visual Histories of  
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## **Jagten på antikkens bindemidler**

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## **Visual histories: Visual remains and histories of the clas- sical world. Papers in honour of R. R. R. Smith**

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## **Rome and the Tzani in Late Antiquity: A historical and ar- chaeological review**

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## **Heroes in Asia: Memorable heroes and their place in the cityscape**

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**Introduction:  
Coming to terms  
with ancient religion**

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**Antiochos I. von Kommagene und sein Grabmal auf dem Nemrud Dağı: Zu den Ergebnissen des International Nemrud Dağı Project**

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**Introduction: The diversity of classical archaeology**

In *The Diversity of Classical Archaeology*, Studies in Classical Archaeology 1 (2017, Turnhout), ed. by Lichtenberger, A. & Raja, R., 1-3.

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**Grouping together in lived ancient religion: Individual interacting and the formation of groups**

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**Artemistemplet i Ephesos**

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**Narratives and shared memories of heroes in the Aphrodisian cityscape**

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**Contextualizing the sacred in the Hellenistic and Roman Near East: Religious identities in local, regional, and imperial settings – A quest for new lines of enquiry**

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**Going individual: Roman-period portraiture in classical archaeology**

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## **Keramik und Glas aus dem Areal der Friedhofskirche**

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## **The significance of objects: Considerations on agency and context**

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## **Chimtou, Tunesien: Die Arbeiten der Jahre 2014 und 2015**

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## **Appropriating religion: Methodological issues in testing the 'Lived Ancient Religion' approach**

In *Religion in the Roman Empire* 1 (2015), 11-19.  
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## **Archaeology of religion, material religion and the ancient world**

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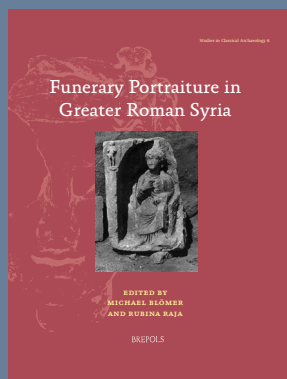
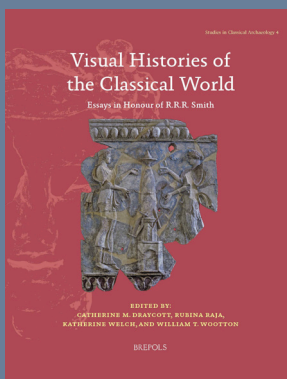
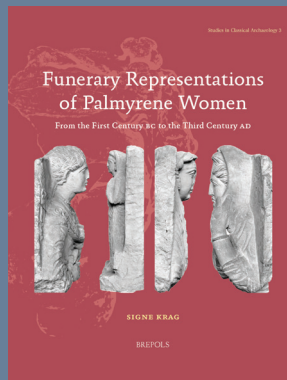
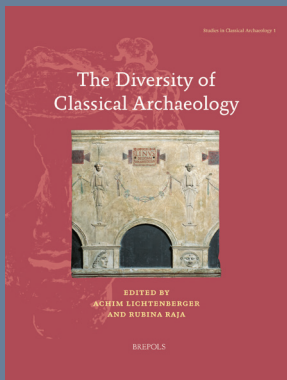


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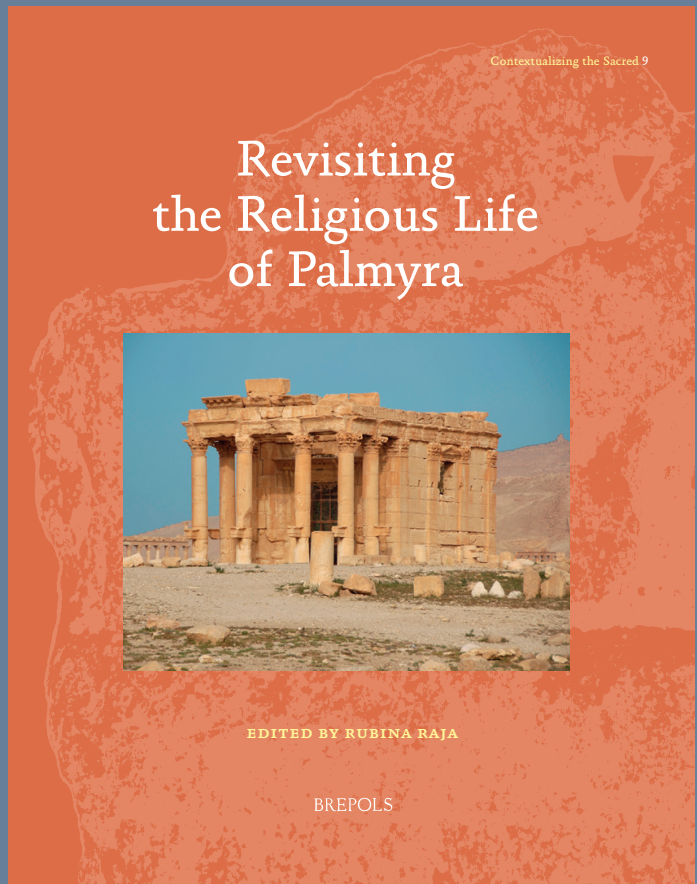


# Contextualizing the Sacred

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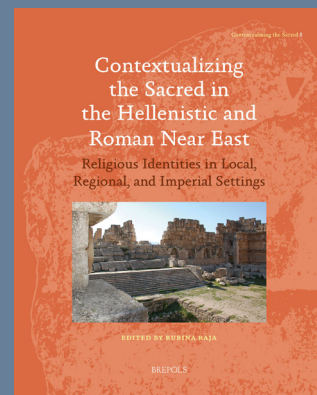
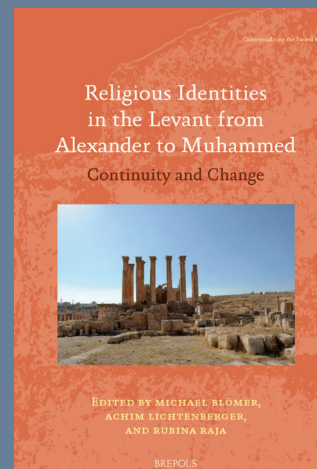
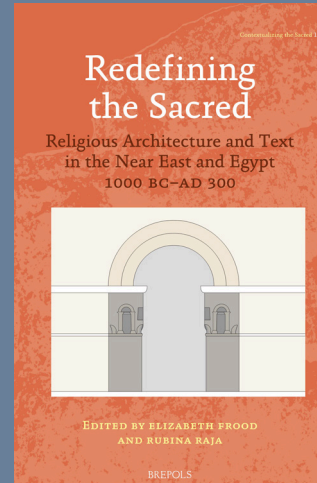


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# Northern Europe



## Books and edited volumes

**Danmarks Byer i Middelalderen** (2016, Aarhus).

Kristensen, H. K. & Poulsen, B.

**Et Fælles Hav: Skagerrak og Kattegat i Vikingetiden** (2015, Copenhagen).

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**Shape as a measure of weapon standardisation: From metric to geometric morphometric analysis of the Iron Age ‘Havor’ lance from southern Scandinavia**

In *Journal of Archaeological Science* 101 (2019), 34-51.

Birch, T. & Martínón-Torres, M.

**La ville portuaire de Ribe: L’archéologie en « haute résolution »**

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**Kamme og kam-mageri i middelalderens Odense: Nye resultater fra udgravningerne ved Thomas B. Thriges Gade**

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Hansen, J., Haase, K. & Brandt, L. Ø.

**Eight new Late Pleistocene-Early Holocene AMS dates from the south-eastern Baltic**

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**Between sea and river: Water in medieval Scandinavian towns**

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**Widespread erosion on high plateaus during recent glaciations in Scandinavia**

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**Standardised manufacture of Iron Age weaponry from southern Scandinavia: Constructing and provenancing the Havor Lance**

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In *The fortified Viking Age: 36th Interdisciplinary Viking Symposium* (2018, Odense), ed. by Hansen, J. & Bruus, M., 60-68.

Christensen, J., Holm, N., Schultz, M. K., Sindbæk, S. M. & Ulriksen, J.

**Cultural convergence in a maritime context: Language and material culture as parallel phenomena in the early-Medieval southern North Sea region**

In *Frisians and Their North Sea Neighbours: From the Fifth Century to the Viking Age* (2018, Woodbridge), ed. by Hines, J. & IJssennagger N. L., 173-192.

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**Ribe, het noordelijke emporium: Twee Vlamingen op rooftocht in Denemarken?**

In *Ex Situ: Tijdschrift voor Vlaamse Archeologie* 19 (2018), 40-44  
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**Direct evidence of a large northern European Roman period martial event and postbattle corpse manipulation**

In *Proceedings of the National Academy of Sciences* 115:23 (2018), 5920-5925.  
Holst, M. K., Heinemeier, J., Hertz, E., Jensen, P., Løvschal, M., Møllerup, L., Odgaard, B. V., Olsen, J., Sørensen, N. E. & Kristiansen, S. M.

# The réseau opératoire of urbanization: Craft collaborations and organization in an early medieval workshop in Ribe, Denmark



*Cambridge Archaeological Journal* (2019), 345-364.

Croix, S.  
Neiß, M. & Sindbæk, S. M.

DOI: 10.1017/S0959774318000525

This paper proposes that the organisation of crafts may be a key catalyst in the emergence of urban communities. This is argued through a reassessment of finds from a non-ferrous metal workshop from the 8th century excavated in Ribe, Denmark. 3D laser scans are analysed in order to classify previously unidentified mould fragments, which show that the workshop produced a range of metal parts for composite products like wooden chests, belts and horse harnesses. Such production required an operational network, or *réseau opératoire*, to combine the necessary skills and expertise of several artisanal specialisations. The need for collaboration between specialised craftspeople would have been a decisive incentive for the formation of permanent communities of an urban character. These observations point to a neglected bottom-up driver for the development of early urbanisation.



# From a port for traders to a town of merchants: Exploring the topography, activities and dynamics of early medieval Copenhagen



*Danish Journal of Archaeology* 7:1 (2018),  
69-116.

Dahlström, H.  
Poulsen, B. &  
Olsen, J.

DOI: 10.1080/21662282.2018.1464619

Copenhagen's earliest history has long been shrouded in uncertainties. This is mainly due to insufficient source material. Basic questions – how old is the town, how did it originate, and where was the oldest settlement situated? – are still under discussion, as are questions regarding specific features of the early medieval town. Using archaeological results from recent major excavations, combined with Bayesian modelling of new  $^{14}\text{C}$  dates from the two early cemeteries of Sankt Clemens and Rådhuspladsen, older archaeological information and the medieval written sources on Copenhagen are revisited to form a new interpretation of the early development of the town. The article explores the people, activities and networks that lie behind the outstanding development from the small early settlement of the 11th century to the flourishing merchant town of the 13th century.

## **Making silent bones speak: The analysis of orphaned osseous tools illustrated with Mesolithic stray finds**

In *Archaeologia Baltica* 25 (2018), 53-70.

Ivanovaite, L., Bjørnevad, M., Philippsen, B., Hoggard, C., Eng-hild, J. J., Scavenius, C., Vasiliauskaite, A., Dručkuvienė, G., Jensen, P., Maring, R., Dodd, J., Serwatka, K. & Riede, F.

## **Fortidens landskab set fra oven**

In *Geoviden* 2 (2018),  
6-10.

Kristiansen, S. M., Christiansen, A. V., Odgaard, B. V., Stott, D., Henriksen, P. S. & Ljungberg, T.

## **What is the carbon origin of early-wood?**

In *Radiocarbon* 60:5 (2018), 1457-1464.

Kudsk, S. G. K., Olsen, J., Nielsen, L. N., Fogtmann-Schulz, A., Knudsen, M. F. & Karoff, C.

## **From oysters to cockles at Hjarnø Sund: Environmental and subsistence changes at a Danish Mesolithic site**

In *Radiocarbon* 60:5 (2018), 1507-1520.

Larsen, J. S., Philippsen, B., Skriver, C., Astrup, P. M., Borup, P., & Mannino, M.

## Northern Europe

### **Diet and radiocarbon dating of Tollund Man: New analyses of an Iron Age bog body from Denmark**

In *Radiocarbon* 50:5 (2018), 1533-1545.  
Nielsen, N. M., Philippsen, B., Kanstrup, M. & Olsen, J.

### **Reservoir effects in a Stone Age fjord on Lolland, Denmark**

In *Radiocarbon* 60:2 (2018), 1-13  
Phillipsen, B.

### **A northern Emporium: Unearthing the beginning of the Viking-age in Ribe**

In *Current World Archaeology* 90 (2018), 16-22.  
Sindbæk, S. M.

### **Kæm, kam!**

In *Skalk* 2018:1 (2018), 16.  
Sindbæk, S. M. & Imer, L. M.

### **Ancient DNA from latrines in northern Europe and the Middle East (500 BC–1700 AD) reveals past parasites and diet**

In *PLoS ONE* 13:4 (2018).

Søe, M. J., Nejsum, P., Seersholm, F. V., Fredensborg, B. L., Habraken, R., Haase, K., Hald, M. M., Simonsen, R., Højlund, F., Blanke, L., Merkyte, I., Willerslew, E. & Kapel, C. M. O.



# Northern Europe

## **Fire conditions and source materials recorded in scoria from an intentional fire at Store Tovstrup Iron Age house, Central Jutland, Denmark**

In *Journal of Archaeological Science: Reports* 21 (2018), 702-711.  
Thy, P., Barfod, G. H., Christensen, L. B. & Hansen, A. S.

## **Vitrified and ferruginous remains**

In *Thwing, East Yorkshire: Excavation and Survey of a Romano-British Rural Settlement* (2017, York), ed. by Ferraby, R., 203-220.  
Birch, T.

## **Den femte ringborg**

In *Skalk* 2017:2 (2017), 18-25.  
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## **Uddannelsesudgravning ved Rosen Allé, Ribe, 2014-2016**

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**Nye artsbestemmelser af skind fra jernalderen: Forhistoriske proteiner fra skindkapper fundet i danske moser**

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**Borgring: En nyopdaget vikingeborg ved Køge**

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**Helhest og himmelhund: Dyrebegravelser på Ribes ældste gravplads**

In *Skalk* 2016:4 (2016), 3-9.

Sindbæk, S. M. & Croix, S.

# Species identification using ZooMS, with reference to the exploitation of animal resources in the medieval town of Odense



*Danish Journal of Archaeology* 7:2 (2018), 139-153

Brandt, L. Ø.  
Haase K. &  
Collins, M. J.

DOI: 10.1080/21662282.2018.1468154

ZooMS (Zooarchaeology by Mass Spectrometry) is increasingly being used as a method for species identification of archaeological and historical remains. In this article, an overview of the method and a demonstration of the value of ZooMS are presented via a case study of 20 samples from 12th to 14th century layers in the Danish medieval town of Odense.

Through the identification of a gaming piece as walrus tusk the analysis demonstrated the long distance trade networks of Odense and the pursuit of some inhabitants for luxury products and high living standards. Conversely, the species identification of combs showed that the medieval comb maker would use the resources immediately available to him to create an affordable everyday object rather than rely on imported antler.



## Northern Europe



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Sindbæk, S. M.

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# 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 contextual cultural studies rooted in the humanities with new methods from the natural sciences.

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



# Miscellaneous

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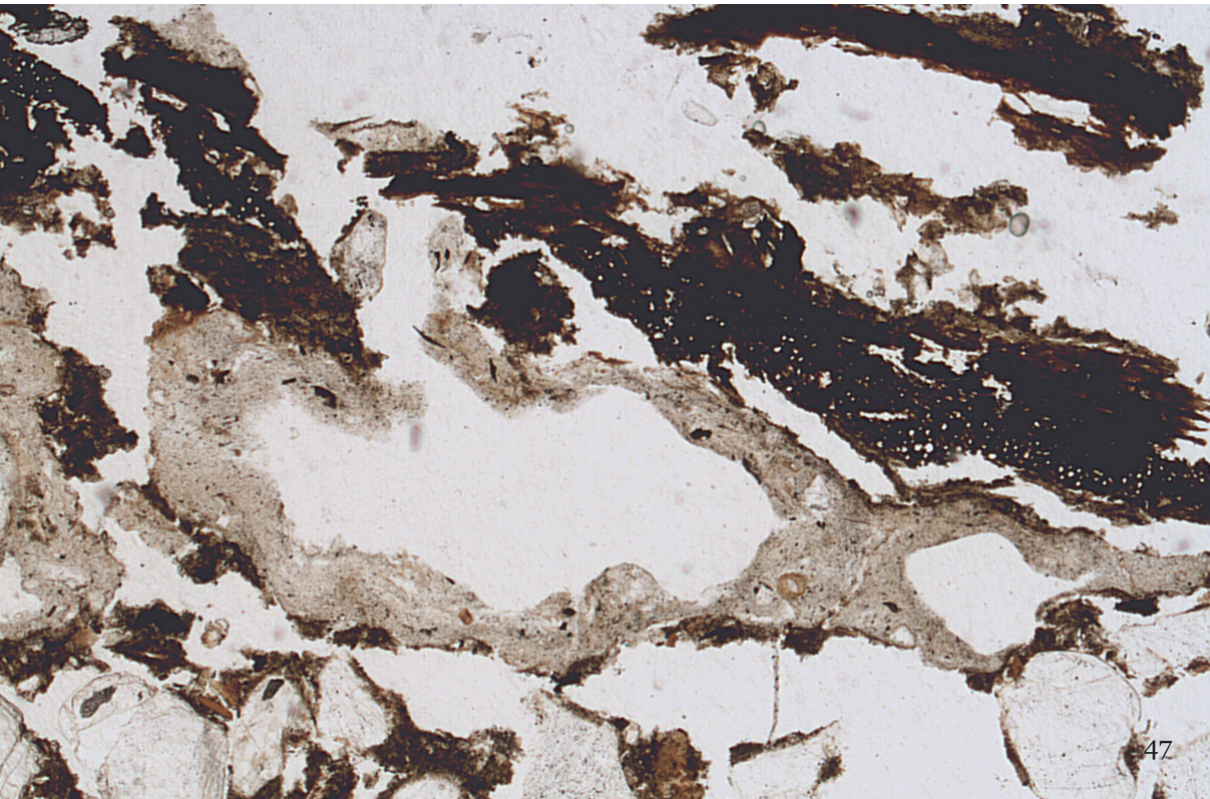
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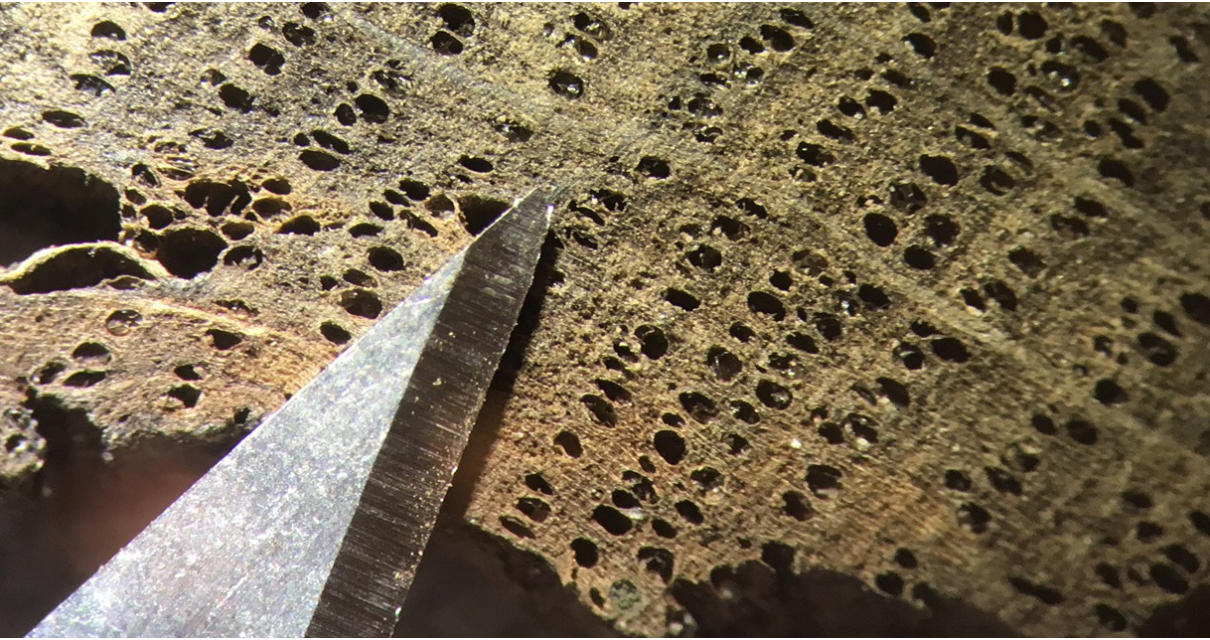
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*Die Produktion von Ferrum Noricum am Hüttenberger Erzberg: Die Ergebnisse der interdisziplinären Forschungen auf der Fundstelle Sendlach/Eisner in der Jahren 2006-2009*, Austria Antiqua 6 (2017, Vienna), ed. by Cech, B., 455-474.

Birch, T.

DOI: 10.1628/219944617X15014860816601

A metallographic and chemical study of one of thirteen metal objects found at the site of Altbergbau and provisionally described as Roman mining tools. This represents one of the first metallographic studies of a Roman mining tool.

## Characterization of archaeological metal remains in micromorphological thin sections using $\mu$ XRF elemental mapping

*Geoarchaeology* 32 (2017), 311-318.

Wouters, B., Makarona, C., Nys, K. & Claeys, P.

DOI: 10.1002/gea.21591

The article investigates whether it is possible to acquire  $\mu$ XRF elemental data directly from cover-slipped thin sections. An array of heavier elements (metals) can indeed be detected, which is useful for archaeological metal fragment identification.

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