

# Economic Archaeology

Comparative approaches for determining economic performance in archaeological and historical research from Antiquity to the Middle Ages

A specialist course within the Doctoral School Program of Arts, Humanities and Law



*Ghent University, February-May 2019*

Organized by the Departments of Archaeology and Ancient History, within the Inter-university partnership SDEP

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## Topic

Economic archaeology is the study of the (diachronic) relationship between ancient populations and their (available) natural and cultural resources, as expressed principally through exploitation, production, distribution and consumption. Over the years, archaeologists and historians have become particularly interested in how ancient societies 'performed' economically – as determined by factors such as climate, geography, technology, demography and institutions – and how this 'performance' changed through time. To this purpose, scholars have developed a wide range of methodological and conceptual tools and new methods of investigation. This has turned economic archaeology into an increasingly interdisciplinary discipline, encompassing many specialized subfields such as paleobotany, zooarchaeology, bioarchaeology, geomorphology, climatology, demography and spatial analysis. At the same time, the application of modern economics to archaeology and history has resulted in a greater sophistication in (theoretical) thinking. This means that (doctoral) students need evermore and better guidance.

## Objectives

The principal aim of this course is to make PhD researchers in archaeology and history who work on Antiquity and the Middle Ages more familiar with the increasingly important

sub-discipline of economic archaeology. Through a series of seven thematic interactive seminars, they will gain insight into – and learn how to critically apply – a selective number of comparative concepts, methods and theories in this field that are of key relevance to their own research. In particular, by the end of this course, the participating doctoral students will have acquired foundational-level skills for scholarship in economic archaeology with regard to the following topics: demography and ancient economic performance (1); the vulnerability and resilience of complex societies under climate change (2); ancient landscape use and satellite remote sensing (3); agricultural productivity in past societies (4); the chaîne opératoire approach to the exploitation of natural resources (5); data analysis and pre-modern trade networks (6); and the socio-economic and spatial analysis of ancient urban space (7).

A second important aim of this specialist course is to allow the targeted PhD researchers to present, discuss and receive feedback on their work-in-progress from national and international peers. Through the involvement of members of the SDEP network, the active participation of UGent researchers at all levels (postdoctoral and faculty) with ample experience in economic archaeology and history, and the attendance of researchers from Brussels and Leuven, the course will promote

knowledge transfer and the building of an interdisciplinary network.

## Attendance & Practicalities

The targeted audience of this specialist course consists in the first place of early career doctoral researchers from the departments of Archaeology and History at Ghent University. The chronological and regional focus of the course is on the Mediterranean and North-western Europe in the classical, late antique and medieval period.

The course consists of a series of seven interactive seminars, each combining a lecture by an external specialist, a presentation by a doctoral researcher, and a discussion/feedback moment afterwards. Each seminar lasts for three hours.

Participating doctoral researchers are evaluated on the basis of three criteria: 100% attendance, their own presentation (max. one PhD talk per seminar), and active participation in the discussion.

As a theoretical and methodological background to the course, the participants will receive a kit of basic literature on economic archaeology at the start of the seminars. In addition, one week before each seminar, they are provided with lecture-specific literature to help facilitate the discussion. The invited speakers are also

expected to upload a pdf version of their PowerPoint before the seminar. All teaching material will be made available to the participants through a Dropbox folder.

Those who would like to include this course into their Doctoral Training Program are requested to register ASAP by email to [dimitri.vanlimbergen@ugent.be](mailto:dimitri.vanlimbergen@ugent.be) Registration is free of charge.

The seminar series is however open to all who want to deepen/share their knowledge on the principles, methods and theories of economic archaeology. Both UGent and non-Ghent researchers at all levels (PhD, postdoctoral, faculty) in a relevant discipline are welcome and encouraged to attend. Attendance is free, but for practical reasons non-Ghent participants are asked to RSVP to [dimitri.vanlimbergen@ugent.be](mailto:dimitri.vanlimbergen@ugent.be) prior to the start of each seminar.



## Program\*

- 13/02 **Søren Michael Sindbaek**  
(Aarhus University)  
Data analysis and pre-modern trade networks
- 13/03 **Thomas Currie**  
(University of Exeter)  
Agricultural productivity in past societies
- 27/03 **Paul Erdkamp**  
(Vrije Universiteit Brussel)  
Climate, complexity and the resilience of the Roman economy
- 25/04 **Martin Sterry**  
(Durham University)  
Ancient landscape use and satellite remote sensing
- 09/05 **Timothy Anderson**  
(Laboratoire Recherche Historique)  
The *chaîne opératoire* approach to the exploitation of natural resources
- 16/05 **Neville Morley**  
(University of Exeter)  
Demography and ancient economic performance
- 23/05 **Akkelies van Nes**  
(Western Norway University)  
The socio-economic and spatial analysis of ancient urban space

\* time and place is TBD

## Speakers

### **Søren Michael Sindbaek**



Prof. dr. Søren Sindbaek is a medieval archaeologist who specializes in Viking Age Scandinavia. His research focuses on cultural communication, exchange and social networks in Early Medieval Northern Europe, and on the application of network theory and analysis to archaeological problems. Søren has been Assistant Professor in Viking Studies at the University of Aarhus until 2009. From 2009 to 2012, he was a lecturer in the Department of Archaeology

at the University of York. Since 2012, he is a Professor in Archaeology at Aarhus University.

In his award-winning work, Søren Sindbaek has built up ample experience in the development of methods adapted from complex systems modelling and network analysis; this in particular to improve the ability of archaeology to analyze relational aspects of material culture and thus to explore issues of cross-cultural interaction in the past. Søren has published his work in over 80 journal papers and book chapters, often with considerable interdisciplinary impact. Between 2012 and 2014, he directed the ENTREPOT – Maritime Network Urbanism in Global Medieval Archaeology Project, funded by the Danish Council for Independent Research (DFF). He is currently involved in the Crafting Networks in Viking Towns project (funded by the British Academy), and is co-director of the Centre for Urban Networks Evolutions, a groundbreaking research initiative that explores the evolution of urbanism and urban networks from the Hellenistic Period to the Middle Ages based at Aarhus University.

### **Thomas Currie**

Prof. dr. Thomas Currie received his PhD in Evolutionary Anthropology from University College London. Since 2007, he has been a postdoctoral research fellow at the

universities of Tokyo (2009-2010) and London (2010-2013), and a lecturer in Cultural Evolution at the University of Exeter (2013-2018). Thomas is currently an Associate Professor in Cultural Evolution at the Centre for Ecology & Conservation Biosciences of the University of Exeter.



The research of Thomas Currie focuses on investigating human behavior and cultural diversity using evolutionary theory. He uses quantitative techniques to test competing hypotheses about how cultural traits and societies change over time, and to

understand what ecological and social factors drive the evolution of social and political organization. In a seminal 2015 article, in collaboration with archaeologists and historians, he outlined an innovative method for incorporating archaeological and historical data into crop yield models, which can be used to predict ancient carrying capacity (Currie et al. 2015., *Agricultural productivity in past societies, Cliodynamics* 6, pp. 24-56). Working versions of this method are being developed as we speak by cutting-edge research projects, such as the 'Seshat: Global History Databank'. Thomas has published widely (+35 papers) within the fields of Environmental Sciences, Evolutionary Anthropology and Human Behavioral Ecology.

### **Paul Erdkamp**

Prof. dr. Paul Erdkamp studied history at the University of Nijmegen, where he earned his doctoral degree in 1998. Immediately afterwards, he was appointed Research Fellow at Leiden University. Paul is currently a Professor of Ancient History at the Department of History at the Vrije Universiteit Brussel. He is also a member of the SDEP network. His research focuses on economic and military aspects of the Roman world, often in relation to food production, demography and climate.



Paul Erdkamp is author of *Hunger and the Sword: Warfare and Food Supply in Roman Republican Wars (264-30 BC)* (1998) and *The Grain Market in the Roman Empire* (2005), and editor of *The Roman Army and the Economy* (2002); *A companion to the Roman army* (2007), and *The Cambridge Companion to Ancient Rome* (2013). More recently, he edited *A Cultural History of Food in Antiquity* (2014) and co-edited *The Routledge Handbook of Diet and Nutrition in the Roman World* (2019). Paul's current research focus is on *Climate and Society in Ancient Worlds: Diversity in Collapse and Resilience*, with a conference scheduled in Brussels, May 22-24, 2019, co-organized with Koen Verboven and Joseph Manning.

### **Martin Sterry**

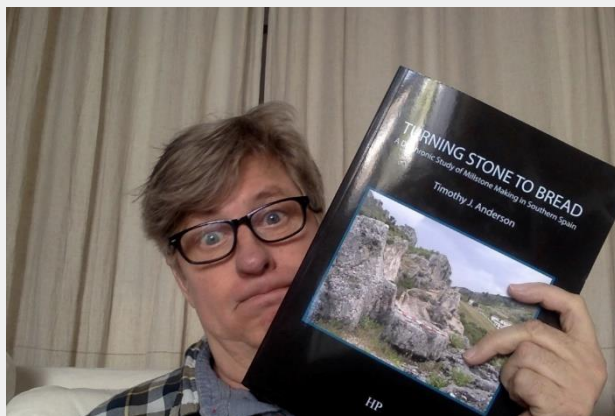
Dr. Martin Sterry was awarded his PhD on pre-Roman and Roman landscapes in central Italy by the University of Leicester in 2010. At Leicester, between 2010 and 2017, he was first a Research Associate for the 'Peopling the Desert' project (2010-2012), and then a postdoctoral Research Fellow for the ERC-funded 'Trans-Sahara' project (2012-2017). Since 2017, he is an Assistant Professor at Durham University, where he teaches Roman landscape archaeology and GIS. Martin is currently co-director of the 'Middle Draa' project in the Moroccan pre-desert area.



Martin Sterry is an internationally renowned specialist in landscape archaeology, Geographical Information Science (GIS), and survey archaeology (especially remote sensing). Martin's many publications (+30 papers in specialized journals and book series) have a strong interdisciplinary focus, often exploring novel methodological and theoretical approaches for analyzing and visualizing 'big data' in landscape archaeology. Thematically, his work focuses on the relationships between agricultural intensification, expansion, and population demographics, in particular with regard to the impact of these relationships on urbanization and complex societies. Chronologically, his experience ranges from the Iron Age to the Middle Ages, while his personal fieldwork extends geographically from Britain to North Africa.

### **Timothy Anderson**

Dr. Timothy Justice Anderson received his PhD in History from the University of Grenoble Alpes in 2014. He is currently an independent researcher, connected to the Laboratoire de Recherche Historique. He is also a member of the 'Groupe Meule' in France, an interdisciplinary research group that brings archaeologists and geologists together for the study of ancient mills and milling techniques.



Timothy Anderson is a specialist in the history, archaeology and geology of mills and millstone quarries. His expertise ranges chronologically from the Protohistoric to the medieval period, and geographically covers Southwestern and Western Europe. He has co-directed fieldwork (excavations) in Switzerland and France. The publication of his doctoral thesis – entitled 'Turning stone to bread: a diachronic study of millstone making in Southern Spain – with Oxbow Books in 2016 was received with great critical appraisal. Since 2000, Timothy has published widely on the provenance and production of millstones, and on the multidisciplinary analysis of ancient quarries.

### **Neville Morley**

Prof. dr. Neville Morley received his PhD in Classics from the University of Cambridge. He was a temporary lecturer in Classics at the University of Wales (1994-1995) and then a fixed lecturer at the University of Bristol.

Since 2016, Neville is Professor in Classics and Ancient History at the University of Exeter. He is currently an Einstein Visiting Fellow at the Freie Universität in Berlin within a program on change and instability in the ancient world.



Neville Morley is the author of *Metropolis and Hinterland. The City of Rome and the Italian Economy (200 BC- AD 200)*, a controversial and impactful study on the impact of Rome on the Italian economy that has become a standard reference work in Roman economic history since its publication in 1996. Over the last twenty years, Neville has written or (co-edited) nine

books on topics such as Roman Imperialism (2010), trade in Classical Antiquity (2007), and more general on theoretical and methodological approaches to Ancient History (2004). Prof. Morley has published widely on Roman socio-economic history and archaeology, with over 50 papers on demography, migration, mobility, urbanization, ancient globalization, slavery, agriculture, trade and markets in various internationally renowned publications (e.g. *Journal of Roman Studies*, Brill publishers, Oxford University Press, Cambridge University Press). His current work focuses on a series of articles on Roman economic thought and the Roman agronomists, in which he seeks to develop a novel understanding of how Romans thought about socio-economic matters.



### Akkelies van Nes

Prof. dr. Akkelies van Nes is an acclaimed architect who has studied at the Oslo School of Architecture, the Bartlett School of Graduate Studies and University College London. She obtained her PhD in 2002 at the Norwegian University of Life Sciences. She is

currently a Professor in Land Use Planning in the Department of Civil Engineering at the University College Bergen, and a researcher at the Department of Urban Renewal and Management of the Delft University of Technology. She owns the firm Space Syntax Norway.



Akkelies van Nes specializes in studies on the relationship between road building and urban change, location patterns of shops in

built environments, studies on larger groups of cities and metropolises, configurable urban sustainability, and the development of spatial analyses tools. She has published over 100 journal articles, book chapters and conference papers, and she has co-edited four books. While the work of Akkelies is rooted in modern urban planning, she has successfully applied micro- and macro spatial configurative analyses (space syntax) to archaeology, and in particular to the Roman town of *Pompeii* in southern Italy (van Nes, A. 2014. Indicating street vitality in excavated towns. Spatial configurative analyses applied to Pompeii, in Polla, S. et al. (eds.), *Spatial Analysis and Social Spaces*, pp. 277-296).

