#### **LEVERHULME WORKSHOP: Material Culture as Evidence**

Department of Archaeology, University of Reading 4 June 2010

The purpose of this workshop is to bring together two broad constituencies of interest in material culture as evidence: archaeologists who have been thinking critically about evidential reasoning; and philosophers, science studies scholars, and practitioners in other fields who are grappling with the challenges of making effective use of material traces, artifacts, architecture as bearers of "facts" and (potential) repositories of evidence. Archaeologists have considerable expertise in handling such evidence, but have not been engaged in these wider debates in a systematic way; we believe there is much to be gained by examining, collectively and comparatively, how evidential reasoning is constructed and adjudicated across diverse fields.

This workshop is the culmination of a six-month program of seminars and reading group discussions about archaeological uses of evidence. These have been organized as part of a Leverhulme Trust-supported visit that brings Alison Wylie to the University of Reading, hosted by Bob Chapman and the Department of Archaeology.

We plan a full day of workshop meetings on Friday, June 4<sup>th</sup>, beginning at 9:00 am and running until 6:00 pm. The program is organized around four panels; presenters are asked to make brief 20-25 minute presentations on the focal theme of their panel, leaving substantial time for discussion. The program of panel topics and participants follows below.

#### Organizers:

Bob Chapman, Professor of Archaeology, University of Reading
Alison Wylie, Professor of Philosophy and Anthropology, University of Washington (Seattle); Leverhulme
Trust Visiting Professor in Archaeology, University of Reading

#### Sponsors and support:

We gratefully acknowledge the support provided for this workshop by the School of Human and Environmental Sciences and the Social Archaeology and Scientific Archaeology Research Groups of the Department of Archaeology. We also thank the Leverhulme Trust for funding the Visiting Professorship that has made it possible to develop the series of seminars and lectures that provide the foundation for this workshop.

#### **WORKSHOP PROGRAM: Material Culture as Evidence**

## FRIDAY, 4 June 2010

All sessions will be held in the Sorby Room, 1<sup>st</sup> Floor, Geosciences Building (next to the Department of Archaeology)

COFFEE/TEA: 9:00 in the Sorby Room

# 9:30 – 10:30: Introduction to the Workshop and the Reading Seminars on Evidential Reasoning in Archaeology

What are the main results? What principles of successful practice emerge from the joint consideration of methodological guidelines and theoretical accounts of research practice, on the one hand, and analysis of selected case studies on the other?

Participants: Bob Chapman, Alison Wylie

**COFFEE/TEA**: 10.30 - 11.00

#### 11:00 - 12:30: Retrospective on the UCL and LSE Leverhulme Evidence projects

How is evidence conceptualized, and what counts as compelling, cogent, authoritative evidential reasoning in a selection of the fields studied by these projects? Are there any lessons learned of practical import? Do these closely worked cases suggest strategies for improving research practice in the fields from which they are drawn? Are they travel-hardy: can lessons learned in one field be extended to others?

Participants:

- Hasok Chang (Science and Technology Studies, UCL): Evidence in the contexts of belief and action: the case of the composition of water
- Mary Morgan (History of Economics, LSE): The Inferential Scope of Facts
- William Twining (Faculty of Law, UCL): Marshalling evidence and constructing arguments in complex cases: a legal perspective

**LUNCH:** 12:30 – 2:00 in the Sorby Room (including a tour of the Department of Archaeology)

# 2:00-3:30: Evidential Reasoning in Archaeology

Do normative guidelines emerge in archaeological practice; in particular, are there key turning points in the formation of these norms, and exemplary (or disastrous) cases that throw them into sharp relief? Some more specific questions that informed the Reading evidence seminars include: To what extent do distinct craft traditions of field practice generate purpose-specific types of evidence? Can old evidence be brought to bear on new questions? How do new techniques of data recovery and analysis enter archaeology, and how do archaeologists assess the external resources (interpretive and theoretical, as well as technical and empirical) on which they necessarily rely?

Participants:

- Roger Thomas (English Heritage): Some initial thoughts on archaeology, law and evidence
- Amy Bogaard (Oxford Institute of Archaeology): Inferring the nature of early farming in central Europe: a case study in using archaeobotanical evidence
- Shahina Farid (Institute of Archaeology, UCL): Multiple voices in archaeological interpretation at Çatalhöyük.

**COFFEE/TEA**: 3.30-4.00

# 4:00-6:00: Thinking with Material Things in STS and Multidisciplinary Perspective

What affinities are there between archaeological practice and the ways in which material culture figures as evidence in other disciplines and fields? Is there wisdom to be shared across fields? Are there prospects for fruitful collaboration; are there inter-field synergies to be explored?

Participants:

- Simona Valeriani (LSE): [architectural facts in STS perspective]: Writing historical narratives starting from material objects: richness and difficulties from the perspective of building archaeology
- Simon Werrett (University of Washington, visiting in Oxford): The substance of science: past and potential approaches to material culture in the History of Science
- Matthew Johnson (Southampton): Evaluating arguments in landscape archaeology

**WINE RECEPTION**: 6.00 in the atrium of the Department of Archaeology **DINNER**: 6:30 at the Sizzling Spice restaurant, Christchurch Green

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## Participants' Biographies

Amy Bogaard (amy.bogaard@arch.ox.ac.uk) is Lecturer in Archaeology at the University of Oxford. Her research centres on the nature of early farming practice and its implications for understanding the agricultural transition and its social consequences through the Neolithic and Bronze Age in Europe and western Asia. Her approach is based on archaeobotany – the analysis of macroscopic plant remains (grains/seeds, chaff etc.) from archaeological deposits – and her interests include the development of new methods, often involving observation of modern crop growing practices, for exploiting the interpretive potentials of this evidence, while also identifying its limitations. Selected publications include: Bogaard, A., et al. J. 2009. Private pantries and celebrated surplus: storing and sharing food at Neolithic Çatalhöyük. Antiquity 83: 649-668; Bogaard, A. 2005. 'Garden agriculture' and the nature of early farming in Europe and the Near East. World Archaeology 37(2): 177-196; Bogaard, A. 2004. Neolithic Farming in Central Europe. London: Routledge; Bogaard, A. et al. 2000. The scale and intensity of cultivation: evidence from weed ecology. In: C. Frederick and P. Halstead (eds) Landscape and Land Use in Postglacial Greece. Sheffield: Sheffield Academic Press, pp. 129-134.

Hasok Chang (h.chang@ucl.ac.uk) is Professor of Philosophy of Science in the Department of Science and Technology Studies at University College London, where he has been teaching since 1995. After his PhD work in the philosophy of quantum physics (Stanford University, 1993) he has turned his attention more to earlier periods of science, focusing on philosophical analyses of key episodes in physics and chemistry in the 18th and the 19<sup>th</sup> centuries. His publications include *Inventing Temperature: Measurement and Scientific Progress* (Oxford University Press, 2004), and *Is Water H2O? Evidence, Realism and Pluralism* (Springer, forthcoming). He led on the project "Evidence in the Natural Sciences" in the recent UCL evidence programme funded by the Leverhulme Trust and the ESRC.

Bob Chapman (r.w.chapman@reading.ac.uk) is Professor of Archaeology at the University of Reading. His research interests include archaeological theory, Mediterranean prehistory, the development of social inequality and the means by which this can be studied with archaeological data. He has pursued these interests in fieldwork projects in the Balearic Islands and southeast Spain, as well as in books such as *The Archaeology of Death* (CUP 1981), *Emerging Complexity* (CUP 1990) and *Archaeologies of Complexity* (2003). In recent years his research has focussed increasingly on the use of historical materialism as a basis for archaeological interpretation, especially in relation to inequality, exploitation and the development of property systems.

Shahina Farid (shahina.farid@ucl.ac.uk) is based at the Institute of Archaeology, University College London. She is Field Director and Project Coordinator of the Çatalhöyük Research Project and has worked on this Neolithic site in central Anatolia since 1995. After graduating from the University of Liverpool in Archaeology of the Eastern Mediterranean in 1986, Shahina worked as a professional field archaeologist, mostly in London based units, as well as spending seasons on projects in Turkey, Bahrain and the United Arab Emirates. Shahina has garnered a practical understanding of the complexities of archaeological interpretation from nearly 30 years experience working on and directing this wide range of international and multi period sites. She has been integral in developing the research agenda at Çatalhöyük, which is an internationally renowned model of data integration and multidisciplinary collaboration. Her recent publications include Meskell, L. C. Nakamura. R. King & S. Farid, 2008. 'Figured lifeworlds and depositional practices'. *Cambridge Archaeological Journal*; and S. Farid and team members 'The Excavation Process at Çatalhöyük' in I. Hodder (ed.) *Towards reflexive method in archaeology: the example at Çatalhöyük*.

**Matthew Johnson** (m.h.johnson@soton.ac.uk) is Professor of Archaeology and Deputy Head of the School of Humanities at the University of Southampton, where he was appointed in 2004 after 13 years at Durham University. Matthew's interests include archaeological theory, interdisciplinary approaches, historical archaeology, and the archaeology of England, Europe and the Atlantic world AD1200-1800, especially landscape and buildings. His previous books include *Archaeological Theory: An Introduction* (second edition, Wiley-Blackwell 2010), *Ideas of Landscape, Behind the Castle Gate* (Routledge, 2002), and *An Archaeology of Capitalism* (Blackwell, 1996). Matthew is currently doing fieldwork at Bodiam Castle, and planning a book provisionally entitled *How Archaeologists Think: About Wessex, For Example*.

Mary Morgan (m.morgan@lse.ac.uk) is a Fellow of the British Academy, Overseas Fellow of the Royal Dutch Academy of Arts and Sciences, and Professor of History and Philosophy of Economics at the London School of Economics and University of Amsterdam. She has published on a range of topics from statistics to experiments to narrative, and from nineteenth-century Social Darwinism to game theory in the Cold War. Her main books include *The History of Econometric Ideas* (1990) and *Models as Mediators* (1999 with Margaret Morrison), and her account of economic modelling is forthcoming in *The World in the Model. How Well Do Facts Travel?* (forthcoming with Peter Howlett) marks the conclusion of a major interdisciplinary team project on evidence in the sciences and humanities. She is currently "Re-thinking Case Studies Across the Social Sciences" as a British Academy-Wolfson Research Professor.

Roger Thomas (RogerM.Thomas@english-heritage.org.uk) is Head of Urban Archaeology at English Heritage (EH). He joined EH as an Assistant Inspector of Ancient Monuments in 1984, after studying archaeology at the universities of Southampton and Cambridge. He is a Visiting Lecturer at the Institute of Archaeology, University of Oxford. He also has a degree in Law from the Open University, and is a barrister of the Middle Temple. Roger's professional and research interests include British later prehistory, urban archaeology, landscape archaeology, archaeological heritage management and the legal aspects of archaeology and heritage. He is particularly interested in the relationship between heritage management and the academic study of the human past. Selected publications include: 'Drowning in data – publication and rescue archaeology in the 1990s', *Antiquity* 65 (1991), 822-28; 'English Heritage, characterisation and the urban historic environment', *Urban Morphology* 9 (2005), 128-30;'Heritage protection criteria: an analysis', *Journal of Planning and Environment Law*, July 2006, 956-63;

William Twining (wlt@wtwining.fsnet.co.uk) is Quain Professor of Jurisprudence Emeritus at University College London and Visiting Professor at the University of Miami School of Law. His works on evidence include *Theories of Evidence: Bentham and Wigmore* (Stanford U. P., 1986), *Analysis of Evidence* (2nd edn., 2005, with Terry Anderson, David Schum and Philip Dawid), *Rethinking Evidence* (2nd edn., 2006) and *How to Do Things With Rules* (5th edn., forthcoming 2010 with David Miers), the last three published by Cambridge University Press.

Simona Verleriani (s.valeriani@lse.ac.uk) graduated in Architecture at the University of Genoa (Italy) where she specialised in the History of Architecture with a thesis in Building Archaeology (MA 1997). She then earned her PhD in Berlin (Germany, 2006) where she was member of the "Graduiertenkolleg Kunstwissenschaft, Bauforschung und Denkmalpflege". In 2005 she joined the How Well Do Facts Travel? project at LSE. Since 2009 she has been a member of the team working at LSE on the project Useful and Reliable Knowledge in Global Histories of Material Progress in the East and the West (URKEW, financed by the European Research Council). In this context she is analysing the way in which scientific and technical knowledge were accumulated and transmitted in Late Medieval and Early Modern Europe and how the two spheres interacted. In 2006 she published the book *Kirchendächer in Rom. Zimmermannskunst und Kirchenbau von der Spätantike bis zur Barockzeiti* (Michael Imhof Verlag, Petersberg).

Simon Werrett (werrett@u.washington.edu) is an associate professor in the Department of History at the University of Washington, Seattle and an organizer of the university's Science Studies Network. Previously he was a fellow of the Max Planck Institute for the History of Science in Berlin, and the Getty Research Institute, Los Angeles. His work explores historical and geographical relationships between the sciences and the arts in Europe and Russia, principally in the early modern period. His first monograph Fireworks: Pyrotechnic Arts and Sciences in European History was recently published by the University of Chicago Press. Other work includes the history of rocketry in Britain, India, and China; the use of fireworks and scientific instruments as a form of political spectacle on European voyages of exploration; and the history of relations between artisans and academic professors in eighteenth-century Russia. Current research explores the history of recycling in science and medicine, and the diverse economies of recycling arts, techniques, and skills that have featured in households, workshops, factories, laboratories and hospitals in Europe and North America since the seventeenth century. Other recent publications include: 'William Congreve's Rational Rockets,' Notes & Records of the Royal Society, 63 (2009): 35-56; 'Enlightenment in Russian Hands: The Inventions and Identity of Ivan Kulibin in Eighteenth-Century St. Petersburg, History of Technology, 29 (Nov. 2009): 161-80; Explosive Affinities: Pyrotechny, Knowledge, and the Sciences in Early Modern Europe, in Making Knowledge in Early Modern Europe: Practices, Objects, and Texts, 1400 - 1800, Benjamin Schmidt and Pamela H. Smith, eds. (Chicago: University of Chicago Press, 2008), pp. 68-89.

**Alison Wylie** (m.a.wylie@reading.ac.uk) **is** Professor of Philosophy and Anthropology at the University of Washington. She is a philosopher of social science who works on epistemological questions raised by archaeological practice and by feminist research in the social sciences. In *Thinking from Things: Essays in the* 

Philosophy of Archaeology (2002) she develops an analysis of the role of background knowledge and strategies of triangulation in stabilizing evidential claims. She is centrally interested in understanding how challenges to ideals of objectivity can be met when it is acknowledged that contextual values play an ineliminable role in the research process. Her publications include edited volumes and journal special issues such as A More Social Epistemology (Perspectives on Science 2008), Value-free Science? (OUP 2007, with Kincaid and Dupré), Doing Archaeology as a Feminist (Archaeological Method and Theory 2007, with Conkey), Epistemic Diversity and Dissent (Episteme 2006), and Feminist Science Studies (Hypatia 2004); as well as essays that appear in The Ethics of Cultural Appropriation (2009), Agnatology (2008), The Handbook of Feminist Research (2007), Science and other Cultures (2003).