Introduction: the McDonald Institute and Archaeology at Cambridge

GRAEME BARKER (Director) & JAMES BARRETT (Deputy Director)

The University of Cambridge has a world-class constellation of archaeological researchers, one of the largest and most active in the world. Cambridge archaeologists work across the entire humanities–science spectrum of the discipline’s methodologies; they undertake fieldwork in all parts of the world; and together they study the entirety of the human career from first beginnings millions of years ago to the archaeology of the 20th century. The range and importance of their work attract one of the largest archaeology graduate communities in the world.

The McDonald Institute for Archaeological Research, founded in 1990 through a generous bequest from Dr D.M. McDonald, has three major roles. We provide a supportive base for post-doctoral research fellows (early-career researchers) working in archaeology — over 30 in 2008–2009. We act as the research arm of the Department of Archaeology, the largest group of archaeology teaching staff at Cambridge. And we facilitate the research of Cambridge’s entire archaeological community through providing facilities for seminars, workshops and conferences, and grants for fieldwork and publication.

It has been an exceptionally successful and eventful year for the Institute. Highlights include the annual McDonald Lecture by Professor Ruth Whitehouse (The Materiality of Writing: Case Studies from 1st-millennium BC Italy) and the Biennial R.R. Inskeep Memorial Lecture by Professor Jürgen Richter (New Light on the Origin and Dispersal of Homo sapiens: Africa and Europe between 190,000 and 35,000 Years Ago). The McDonald Seminars and Garrod Lectures provided a regular diet of inspiration. Moreover, it was typical for there to be two or more research events a day — thanks to the energy of discussion groups ranging from PalMeso (for all things Palaeolithic and Mesolithic) to the growing Medieval Archaeology Group.

The large community of postgraduate students and early-career researchers contributed much momentum to this high level of activity.


‘Earthbound Plant’ (2002) by Antony Gormley was generously loaned by the Royal Academy of Art. Appropriately for archaeologists, it entailed the burial of a sculpture of the artist such that only the soles of the feet (and memory of the event) remained above ground, a few steps from the Courtyard Building.

This year’s report by the McDonald Institute marks a new initiative: as well as the descriptions of the projects and other activities that the Institute has funded, and of the work of the laboratories we share with the Department of Archaeology, we also include for the first time descriptions of the archaeological programmes of sister institutions — the Cambridge Archaeological Unit, the Institute of Continuing Education, the Faculty of Classics, the Fitzwilliam Museum, and the Museum of Archaeology and Anthropology — and reports on individual research projects by the archaeologists based in them. The goal of this enlarged report is to provide a service to Cambridge archaeologists and an introduction to our work for the world at large. We hope that Archaeology at Cambridge 2008–2009 conveys something of the excitement, richness and importance of that work. The study of the past has essential things to tell us. New knowledge is discovered, old mysteries are solved and the (sometimes fragile) foundations of the societies in which we live, and the worlds we have created, are illuminated.
It has been another successful year for all our graduates. We congratulate Dušan Borić (finishing his postdoc on the Leverhulme project ‘Changing Beliefs of the Human Body’), for his appointment to a lectureship at Cardiff, and Andrea Dolfini for his appointment to a lectureship at Newcastle. Early Career Fellowships go to Oliver Harris (finishing his postdoc on the Leverhulme body project) and Helen Farr (finishing her postdoc on underwater archaeology of Calabria). They take up their fellowships at Newcastle and Southampton respectively. Other fellowships have been won by Iain Morley (at Keble College, Oxford), Rebecca Farbstein (at the Courtauld Institute of Art in London) and Susanne Hakenbeck (at the University of Southampton).

2008–2009 was our first full academic year with our new colleagues from Ancient Near Eastern Studies, who have made a very full and active contribution to the range and depth of our teaching. We are still working on consolidating Cambridge’s extensive library resources in this field within the Haddon Library, and hope to complete that process over the coming year. Professor Nicholas Postgate’s research success has been acknowledged with a Leverhulme research fellowship, allowing us to employ Dr Nicole Brisch to teach the Assyriology component over the next three years in his stead. Nicole already has experience of some of the foremost world centres in her field, including Chicago and Berlin, and has a research interest in the deification of kings in early Mesopotamia. We are delighted to welcome her on board.

We have put a great deal of effort over the year into reorganizing and refreshing our MPhil programme, streamlining our existing provision within a common structure, and expanding that provision to incorporate new courses, to reflect our new strength in Ancient Near Eastern studies, and are now offering MPhils in Archaeology, Archaeological Research, Egyptology and Assyriology (see p. 14).

Finally, we record our warm congratulations to Dr Charles French, for his award of a prestigious Pilkington Teaching Prize. Through his drive, practical work has now become embedded across the Archaeology curriculum. His pioneering work in geoarchaeology and the microscopic study of sediment structures, has proved key in providing fundamental insights about our past, enthusing generations of students with excitement about archaeology in the field.
Archaeology at Cambridge 2008–2009

About us

The Classical Archaeology group (‘D Caucus’) in the Faculty of Classics had a good year with a variety of activities and events as well as reasons for celebration. Amongst these was the award to Professor Anthony Snodgrass, Emeritus Laurence Professor of Classical Archaeology, of an honorary degree of Doctor of Humane Letters by the University of Chicago, in recognition of the role he has played in transforming the field of Classical archaeology over the past four decades. Equally notable was the award to Dr Carrie Vout of one of the 2008 Philip Leverhulme Prizes awarded to outstanding young scholars who have made a substantial and recognized contribution to their particular field of study, are recognized at an international level, and whose future contributions are held to be of correspondingly high promise.

In the more usual round of events we held a successful and varied series of research seminars covering the full range of the subject. This series culminated in May with a half-day seminar in which the results of the first two years of the Portus Project (p. 38) were debated in depth by a group from the project team and invited scholars from elsewhere. This discussion made a strong contribution to developing our understanding of the site.

A wide variety of fieldwork projects continued through their various stages alongside the major fieldwork noted elsewhere in the annual report. Henry Hurst and Martin Millett worked on bringing their work respectively in Rome, the Tiber Valley and Yorkshire to publication whilst small-scale geophysics projects were initiated on rural sites in Suffolk (continuing our collaboration with Suffolk County Council) and an initial season of survey was undertaken on the Roman town of Isurium Brigantium (Aldborough) in Yorkshire.

The Museum of Classical Archaeology initiated a new series of monograph publications with the appearance of S. Owen & L. Preston (eds.), Inside the Greek City: Studies in Urbanism in the Greek World from the Bronze Age to the Hellenistic Period (Oxbow, 2009).

Finally, election of Professor Andrew Wallace-Hadrill, Director of the British School at Rome, to the Mastership of Sidney Sussex College was announced. Andrew will continue with his major Herculaneum Project when he arrives in Cambridge.

Faculty of Classics

MARTIN MILLETT

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The Museum of Archaeology and Anthropology (MAA)

ROBIN BOAST & CHRISTOPHER CHIPPINDALE

The Museum of Archaeology and Anthropology was the centre for archaeology, in particular prehistoric archaeology, in Cambridge from the beginning of the 20th century. Today the MAA continues to support teaching and research in the Department of Archaeology, the McDonald Institute for Archaeological Research and internationally. Archaeologists in Cambridge are in the unique position of having access to archaeological collections of outstanding depth and international scope for teaching and student research from the first year of Undergraduate study through to the PhD. All students in Archaeology use the extensive international teaching collections of the MAA throughout their course of study.

The MAA is also an international research institution with MAA staff supervising PhDs every year in Archaeology and other departments. MAA curatorial staff also teach in Archaeology, in other departments and at other universities. The MAA supports and participates in many international research projects, with over 100 international scholars using the MAA collections every year.

The museum has two curators who are responsible for the archaeological collections, teaching and research. Dr Robin Boast is the Deputy Director and Curator for World Archaeology, and Dr Christopher Chippindale is a Reader in Archaeology and Curator for British Archaeology. Dr Boast also coordinates Paper 4 for the MPhil in Museums: History, Theory and Practice. Both Dr Boast and Dr Chippindale teach for other departments in the University and internationally.

Dr Boast’s research is focused on the history and sociology of archaeological practice in a colonial and post-colonial context. Largely concerned with the neo-colonial politics of knowledge sovereignty, in particular in contemporary digital contexts, Dr Boast’s research spans collaborative research with the A:shiwi A:wan Museum and Heritage Centre in Zuni, New Mexico, UCLA and several other museums in the US on recontextualizing Zuni patrimony into Zuni local protocols (see p. 40), to playing a major role in a new EU-wide distributed archive of theatrical performance (ECLAP). Dr Boast is also a member of the Executive Advisory Committee of Collections Space (a Mellon-funded project for the development of an open-source museum documentation system).

Dr Chippindale’s research has spanned topics from the history of archaeology to the contemporary heritage politics of Stonehenge. However, his abiding expertise has been in rock-art studies. His current research is on the Prehistoric Picture Project: Making Ancient Rock-art Visible (see p. 40).

The MAA is currently raising funds for the complete redevelopment of its archaeological galleries. The funding will not only provide the MAA with a more accessible entrance on Tennis Court Road, but will include a complete redisplay of its archaeological collections. Whole new aspects of the collections will be displayed using innovative themes and approaches. In keeping with the principles of the MAA, the displays will be developed collaboratively with archaeologists and Source Community representatives.

New research initiatives at the MAA include African Heritage Studies, Digital Repositories and Post-Colonial Archaeological Collaborations, and Rock-art Studies.
The Fitzwilliam Museum

The Fitzwilliam Museum holds significant collections of archaeological material from Egypt, the Near East, Greece, the Roman world, India, Korea and China, as well as ancient and medieval coins from further afield. A major reinstallation of the Greek and Roman collections (due to open January 2010) is underpinned by an AHRC-funded research project undertaken in collaboration with colleagues in the Faculty of Classics. The project, led by Dr Lucilla Burn, the Keeper of Antiquities, includes research into ancient materials and technology, archaeological contexts, collections and conservation history (see http://www.fitzmuseum.cam.ac.uk/dept/ant/greeceandrome/projects/gr/index.html).

Three archaeological investigations are currently being undertaken by Fitzwilliam staff. Dr Adrian Popescu of the Department of Coins and Medals is co-director of the Noviodunum Archaeological Project, Romania (funded by the AHRC), with particular responsibility for the coins and other finds on this site, the most important Roman and Byzantine naval base and town flanking the River Danube, close to its delta. The fifth season took place from 18 July to 29 August 2009 (see http://www.ucl.ac.uk/archaeology/project/noviodunum/index.htm).

Dr Sally-Ann Ashton is Director of the North Karnak Survey (see p. 31). The third and final season (1–30 November 2008) revealed a number of hitherto unrecognized temples and chapels dating to the Third Intermediate Period. This study season also enabled the team to compare data from the surface and subsurface surveys with material from excavated contexts with a view to testing non-destructive methods of investigation at a multi-period site. The findings will be published in a monograph and on the project website (http://www.mcdonald.cam.ac.uk/projects/NKGWeb/Page/index.html). Funding came from the McDonald Institute for Archaeological Research.

Helen Strudwick is Field Director of the University of Cambridge Theban Tombs Project. This year work continued on the analysis of the results of excavations of the tomb of Sennefri (TT99), focusing on post-medieval and modern occupation levels at the site (see http://www.fitzmuseum.cam.ac.uk/tt99).

Dr Mark Blackburn and Dr Martin Allen maintain the Corpus of Early Medieval Coin Finds from the British Isles. The Department of Coins and Medals also hosts the Medieval European Coinage and Sylloge of Coins of the British Isles projects.

From 2 October 2008–4 January 2009 the Fitzwilliam was the only UK venue for the exhibition *From the Land of the Golden Fleece: Tomb Treasures of Ancient Georgia*, which focused on the intricate goldwork and other finds of the 5th to 1st centuries BC excavated by Georgian archaeologists at the site of Vani in ancient Colchis (see http://www.fitzmuseum.cam.ac.uk/gallery/goldenfleece/). A day-long symposium at the Museum on 15 November brought together scholars from Georgia and Britain to discuss aspects of the finds from Vani and ancient Colchis.

The Museum’s 33rd annual Glanville Lecture in Egyptology was given by Jaromir Malek on 23 May 2009, forming the culmination of a four-day international conference on Old Kingdom Art and Archaeology attended by more than 45 Egyptologists from around the world.
2008–2009 proved a productive year for the Unit. Despite the recession, it saw large-scale evaluation and excavation programmes for both motorway and quarry developments. Foremost amongst the latter was the massive excavation at the Over Narrows sub-site of Hanson’s Needingworth Quarry at Over, which coincides with the point that the River Great Ouse debouches into the fen. This saw the complete excavation of three Collared Urn-associated turf-built round barrows (one preceded by a Beaker flat cemetery). Equally significant were investigations along the c. 600 m length of two neighbouring sand ridges, as this provided a domestic context for these monuments. Dating from the Mesolithic through to the Iron Age, an array of settlement sites were excavated which included a dense later Bronze Age midden complex, unique evidence of Late Iron Age riverside ritual activity, and spade-cultivation plots recovered in conjunction with Beaker occupation.

Featuring within the Unit’s evaluation programmes was the c. 150 ha Northwest Cambridge Development intended for future University mixed-use expansion. Extending along the south side of Huntingdon Road (down to Madingly Road) from Stoney’s Road to the M11, the discovery of seven hitherto unknown Romano-British sites — two of them major and probably villa-related — clearly related to earlier quarry-derived cemetery findings within the area (including those at Girton College). Moreover, four later prehistoric sites were also identified (two Iron Age) which give insights concerning the source of the renowned Traveller’s Pit lithic material that was variously published by Mahr and Burkett.

With 2009 seeing the University’s 800th anniversary, it provided a moment of serendipity that the installation of a lift-shaft within the fourteenth-century Old Schools (the earliest core of the University’s offices and teaching facilities) resulted in a small, but nonetheless, striking excavation. Aside from exposing the massive footings of the building’s original frontage, it allowed for the investigation of the pre-Schools domestic properties. Indeed, the exposure of the c. AD 1209 ground surface at such an appropriate locale proved a source of considerable public interest.

Also marking the celebration of the University’s foundation, the Unit’s Graphic Officer, Andrew Hall, collaborated with the artist Issam Kourbaj to produce Cambridge Palimpsest. This four-layer puzzle-box illustrates the city’s historical sequence and has now been issued as a limited artist’s edition by Cambridge University Press.

This past year has seen the publication of the first volume in the Unit’s series, ‘New Archaeologies of the Cambridge Region’, Borderlands: the Archaeology of the Addenbrooke’s Environ, South Cambridge (C. Evans, D. Mackay & L. Webley). In addition, Evans and Appleby’s ‘Historiography and Fieldwork: Wyman Abbott’s Great Fengate Ring-ditch (a Lost Manuscript Found)’ appeared in The Proceedings of the Prehistoric Society (74), Cessford’s (et al.) report on a Middle Anglo-Saxon execution cemetery at Chesterton Lane, Cambridge featured in The Archaeological Journal (164), and Lucy (et al.) also published the rich seventh-century cemetery at Westfield Farm, Ely (Antiquaries Journal 89; Lucy is currently collaborating with Dr Catherine Hills on the final Spong Hill Cemetery volume).

The Over Narrows Excavations, 2008, looking north; notice the barrow mounds in the central foreground.
**Institute of Continuing Education (ICE)**

**SUSAN OOSTHUIZEN & GILLIAN CARR**

The Institute of Continuing Education offers part-time undergraduate and postgraduate University of Cambridge awards regionally, nationally and internationally across a range of subjects including Archaeology. The Institute is home to two archaeologists (both affiliated to the Department of Archaeology): Dr Susan Oosthuizen, University Senior Lecturer in Landscape History and Field Archaeology, and Dr Gillian Carr, University Lecturer in Archaeology.

The identity of Anglo-Saxon cultivators as revealed in the early medieval and medieval rural landscape forms the principal focus of Susan Oosthuizen’s work. Within this broad area, she specializes in the genesis of Anglo-Saxon and medieval field systems, medieval nucleated settlement and its origins, and medieval water management in the Cambridgeshire peat fens. Her most recent work (forthcoming) has been on continuity and discontinuity in the occupation of fields and pastures between AD 400 and 800, asking how much was inherited and how much new in emergent Anglo-Saxon identity. She also has papers forthcoming on the relationship between medieval canals and settlement in the peat fens, and on the relationship between settlement nucleation and the origins of open fields.

Gillian Carr works on occupation archaeology and heritage in WWII (see p. 35), with a particular emphasis on the occupation of the Channel Islands where she has recently completed fieldwork for her next book. The material culture produced by Channel Islanders interned in Germany during the German occupation of the islands between 1940 and 1945, also the subject of fieldwork, has provided a rich record for understanding the experience of deportation and internment.

Archaeology teaching is represented in two programme pathways: Archaeology, and Historic Environment (landscape and garden archaeology/history). Awards at first-, second- and third-year undergraduate levels complement the degree in the Department of Archaeology, many of whose staff contribute to teaching at the Institute. Courses provide students with a thorough grounding in the discipline as well as the opportunity to specialize. Students at all levels produce innovative and high-quality work in a research-based approach to assessment, some progressing to full-time study within the Department.

**ICE students on field trips to the Hilton maze (left) and a Bronze Age barrow at Therfield (right).**
**Members**

- Dr Raymond Allchin  
  (Ancient India and Iran Trust)
- Dr Martin Allen  
  (Fitzwilliam Museum)
- Dr Sally-Ann Ashton  
  (Fitzwilliam Museum)
- Prof. Graeme Barker  
  (McDonald Institute for Archaeological Research)
- Dr James Barrett  
  (McDonald Institute for Archaeological Research)
- Dr Mark Blackburn  
  (Fitzwilliam Museum)
- Dr Robin Boast  
  (Museum of Archaeology and Anthropology)
- Dr Katherine Boyle  
  (McDonald Institute for Archaeological Research)
- Dr Rebecca Bridgeman  
  (Fitzwilliam Museum)
- Dr Judith Bunbury  
  (Department of Earth Sciences)
- Dr Lucilla Burn  
  (Fitzwilliam Museum)
- Dr Gillian Carr  
  (Institute of Continuing Education)
- Craig Cessford  
  (Cambridge Archaeological Unit)
- Dr Christopher Chippendale  
  (Museum of Archaeology and Anthropology)
- Dr Kate Cooper  
  (Fitzwilliam Museum/Faculty of Classics)
- Dr Elizabeth DeMarrais  
  (Department of Archaeology)
- Alison Dickens  
  (Cambridge Archaeological Unit)
- Christopher Evans  
  (Cambridge Archaeological Unit)
- Dr Charles French  
  (Department of Archaeology)
- David Gibson  
  (Cambridge Archaeological Unit)
- Dr Jason Hawkes  
  (Cambridge Archaeological Unit)
- Dr Catherine Hills  
  (Department of Archaeology)
- Henry Hurst  
  (Faculty of Classics)
- Dr Liliana Janik  
  (Department of Archaeology)
- Prof. Martin Jones  
  (Department of Archaeology)
- Mark Knight  
  (Cambridge Archaeological Unit)
- Dr Sheila Kohring  
  (Department of Archaeology)
- Dr Sam Lucy  
  (Cambridge Archaeological Unit)
- Dr Augusta McMahon  
  (Department of Archaeology)
- Prof. Paul Mellars  
  (Department of Archaeology)
- Prof. Martin Millett  
  (Faculty of Classics)
- Dr Preston Miracle  
  (Department of Archaeology)
- Dr Tamsin O’Connell  
  (Department of Archaeology)
- Dr Susan Oosthuizen  
  (Institute of Continuing Education)
- Prof. Robin Osbourne  
  (Faculty of Classics)
- Dr Cameron Petrie  
  (Department of Archaeology)
- Dr Adrian Popescu  
  (Fitzwilliam Museum)
- Prof. Nicholas Postgate  
  (Department of Archaeology)
- Dr Timothy Potts  
  (Fitzwilliam Museum)
- Dr Laura Preston  
  (Faculty of Classics)
- Dr Kate Pretty  
  (Homerton College)
- Prof. John Ray  
  (Department of Archaeology)
- Dr Jane Renfrew  
  (Lucy Cavendish College)
- Dr John Robb  
  (Department of Archaeology)
- Dr Colin Shell  
  (Department of Archaeology)
- Dr Marie Louise Stig Sørensen  
  (Department of Archaeology)
- Dr Kate Spence  
  (Department of Archaeology)
- Dr Nigel Spivey  
  (Faculty of Classics)
- Dr Simon Stoddart  
  (Department of Archaeology)
- Dr Simon Timberlake  
  (Cambridge Archaeological Unit)
- Prof. Tjeerd Van Andel  
  (Department of Earth Sciences)

**Senior McDonald Institute Fellows**

- Dr Robert Anderson  
  (McDonald Institute for Archaeological Research)
- Janine Bourriau  
  (McDonald Institute for Archaeological Research)
- Prof. Dilip Chakrabarti  
  (Department of Archaeology)
- Dr Harriet Crawford  
  (McDonald Institute for Archaeological Research)
- Prof. Robert Dewar  
  (McDonald Institute for Archaeological Research)
- Prof. Norman Hammond  
  (McDonald Institute for Archaeological Research)
- Prof. Barry Kemp  
  (McDonald Institute for Archaeological Research)
- Prof. Tony Legge  
  (McDonald Institute for Archaeological Research)
- Dr Joan Oates  
  (McDonald Institute for Archaeological Research)
- Prof. Colin Renfrew  
  (McDonald Institute for Archaeological Research)
- Prof. Anthony Snodgrass  
  (McDonald Institute for Archaeological Research)
McDonald Research Fellows

• Dr Jo Appleby (Research Fellow, Caius College)  
  Cremation and the Body in the British Bronze Age

• Dr Bettina Bader (Marie-Curie Fellow)  
  A Bridge to Canaan: Tell el-Daba (Egypt) in the Late Middle Kingdom, c. 1820–1720 BC

• Dr David Beresford-Jones (British Academy Research Fellow)  
  The Archaeology of the Lower Ica Valley

• Dr Dušan Borić (Research Associate)  
  Changing Beliefs of the Human Body

• Dr Mim Bower (Research Associate)  
  From Chariotry to Equestrian Pastoral Nomadism: the Evolving Role of the Horse

• Dr Michael Boyd (Stavros S. Niarchos Research Fellow)  
  Keros Project

• Dr Adam Brumm (McDonald Institute Fellowship - stipendary)  
  A Reassessment of Early Human Stone Technology from a Southeast Asian Perspective

• Dr Sandra Brunnegger (Research Fellow, St Edmunds College)  
  Latin America

• Dr Edward Cork (Independent Scholar)  
  Indus Civilization of Northwest India and Pakistan (c. 2500–1900 BC)

• Dr Ben Davenport (Research Associate)  
  CRIC Project

• Dr Helen Farr (Research Associate)  
  Exploring a Vanished Coastal Landscape in Holocene Southern Calabria

• Dr Lucy Farr (Research Associate)  
  TRANS-NAP: Cultural Transformations and Environmental Transitions in North African Prehistory

• Dr Helen Geake (Finds Adviser, Portable Antiquities Scheme)  
  Early Anglo-Saxon ‘Small-long’ Brooches

• Dr James Gerrard (Research Associate)  
  Crisis, What Crisis? Project

• Dr Susanne Hakenbeck (Research Fellow, Newnham College)  
  Ethnic Identities and Migration Processes in Medieval Bavaria: a Study of Stable Isotopes

• Dr Jennifer Harland (Research Fellow, Lucy Cavendish College)  
  Byzantine, Islamic and Near Eastern Silk Weaving

• Dr Ryan Rabett (Templeton Fellow and McDonald Institute Fellowship - stipendary)  
  Early Human Diversity: Behavioural Modernity in Inter-regional Perspective

• Dr Pamela Rose (American Research Center in Egypt)  
  The Amarna and Sesebi Projects

• Dr Krish Seetah (Research Associate)  
  From Chariotry to Equestrian Pastoral Nomadism: the Evolving Role of the Horse

• Dr Laurence Smith (Independent Scholar)  
  Suakin and the Red Sea Coast of Sudan

• Dr Pamela Jane Smith (Independent Scholar)  
  History of Archaeology

• Dr Rhiannon Stevens (Royal Society Dorothy Hodgkin Research Fellow)  
  The Response of Humans to Rapid Climate Change

• Dr Brian Stewart (Research Fellow, Homerton College)  
  The Middle Stone Age of the Lesotho Highlands

• Dr Martin Worthington (Research Fellow, St John's College)  
  Akkadian Language, Literature and Medicine
Visiting Scholars

- Dr Manuel Arroyo-Kalin (Durham University) Geoarchaeology in the Central Amazon
- Dr Andrea Balbo (IMF-CSIC) Geoarchaeology
- Dr Jose Antonio Barrera (University of Seville) Archaeological Geometric Survey
- Dr Alan Clapham (Worcester Archaeological Service) Archaeobotany
- Irina Demeetradze (Ilia Chavchavadze State University) Relationship Between People and Environment with Societies at Different Levels of Complexity
- Adolf Friðriksson (Institute of Archaeology, Iceland) Late Iron Age Burial Customs, Topography of Burial Sites
- Dr Francesa Fulminante (NIAS, Netherlands) Mediterranean State Formation: Origins of Rome and the Latins
- Dr Ruth Gross (Weizmann Institute of Science) Archaeological Soil Micromorphology
- Dr Rolf Gundlach (Egyptology, Johannes Gutenberg University) Egypt in the 14th Century BC/Amarna
- Prof. Valerie Hall (Queen’s University, Belfast) Palaeoecology
- Ken Hamilton (Norfolk Landscape Archaeology) Field Archaeology
- Dr Mark Jackson (University of Newcastle) Byzantine Archaeology; Kilise Yepe
- Prof. M. Nasim Khan (University of Peshawar) Aziz Dheri NWFP Pakistan
- Prof. Kenneth L. Kvaamme (University of Arkansas) GIS Archaeology and Archaeological Site Prediction
- Prof. Hyeong Woo Lee (Chonbuk National University, Korea) Lower Palaeolithic Material Culture
- Prof. José-Manuel Maillo-Fernandez (Open University, Madrid) Spanish Palaeolithic
- Dr Evi Margaritis (British School at Athens) Archaeobotany
- Dr Piers Mitchell (NHS Consultant) Health, Disease and Diet in Past Populations
- Dr Blaze O’Connor (University College Dublin) Prehistoric Rock Art
- Roger Palmer (Air Photo Services) Aerial Photography
- Dr Gillian Pyke (Independent Scholar) The Archaeology of Life and Belief in Christian Period Egypt
- Dr Ulla Rajala (Academy of Finland) Crustumerium, Italy
- Dr Katharina Rebay (University of Leicester) Tracing Networks Project
- Dr Christina Riggs (University of East Anglia) Funerary Art of Roman Egypt
- Dr Rob Scaife (Independent Scholar) Terminal Pleistocene and Holocene Occupations and Landscape Evolution
- Prof. Parans Singh (Banaras Hindu University, India) Northwest India between 2000 and 300 BCE
- Dr Ravindra Singh (Banaras Hindu University, India) Northwest India between 2000 and 300 BCE
- Dr Anna Stevens (Independent Scholar) Amarna Project
- Dr Sarah Tarlow (University of Leicester) Changing Beliefs of the Human Body
- Dr Aline Tenu (Independent Scholar) The Assyrian Empire — Historical and Archaeological Standpoints
- Dr Rakesh Tewari (UP State Archaeology Department, India) Northwest India between 2000 and 300 BCE
- Dr Marc Vander Linden (University of Leicester) Continental Background of Irish and British Prehistory
- Dr Tim Winter (University of Sydney) CRIC; Post-conflict Resolution and Construction
Postgraduate students

PhD Students
• Mila Simões de Abreu (Department of Archaeology)  
  Open-air Palaeolithic Rock Art in Southern Europe
• Craig Alexander (Department of Archaeology)  
  Neolithic Decisions — Central Mediterranean
• Charlotte Andrews (Department of Archaeology)  
  Local Communities and Cultural Heritage
• Julia Armstrong (Faculty of Classics)  
  East/West Interaction in the Iron Age Mediterranean
• Britt Baillie (Department of Archaeology)  
  Destruction and Post-conflict Reconstruction of War-damaged Religious Heritage
• Marina Baralle (Department of Archaeology)  
  Functional Analysis of the Ceramics at the Site of Borgata, Northwestern Argentina
• Viviana Bellifemine (Department of Archaeology)  
  Prehistoric Imperial Expansion in the Cuzco Valley: an Archaeological Mortuary Study
• Trisha Biers (Department of Archaeology)  
  The Bioarchaeology of Activity, Gender, and Labour: a Regional Analysis of Inka Period Burials from Lima, Peru
• Elizabeth C. Blake (Department of Archaeology)  
  Sound and Music in Prehistory: Lithoaoustics
• Monique Boddington (Department of Archaeology)  
  Epistemology and Archaeology
• Christina Bouthillier (Department of Archaeology)  
  Bronze and Iron Age Pottery of Kilise Tepe
• Philip Boyes (Faculty of Classics)  
  Phoenician Expansion and Identities in the LBA/EIA Transition
• Sophie Buchanan (Faculty of Classics)  
  Violence in Roman Art
• Michael Campana (Department of Archaeology)  
  Breeds and Breed Improvement in the Archaeological Record: a Genetic Approach
• Risa Carlson (Department of Archaeology)  
  The Early Settlement of Coastal Southeast Alaska
• Afroditic Chatzogliou (Department of Archaeology)  
  Heritage and the Built Environment
• Shu-Fang Cheng (Department of Archaeology)  
  Liao Dynasty: Cultural Exchange and Ethnic Fusion
• Franca Cole (Department of Archaeology)  
  Group-identity in Neolithic/Early Metal Age Island Southeast Asia
• Katherine Cooper-Leckie (Department of Archaeology)  
  The Movement of Swiss Prehistoric Artifacts to the UK in the Late 19th Century
• Belinda Crerar (Faculty of Classics)  
  Non-standard Burial Rites in Roman Britain
• Thomas Cutler (Department of Archaeology)  
  Neanderthal Landscapes in Britain
• Andrea Dolfini (Department of Archaeology)  
  Early Metallurgy and Social Complexity in Central Italy
• Paul Ewonus (Department of Archaeology)  
  Social Landscapes of the Southern Strait of Georgia, Pacific Northwest Coast
• Rebecca Farbstein (Department of Archaeology)  
  Pavlovian Portable Art: Socio-technical Process, Aesthetic Context
• Naomi Farrington (Department of Archaeology)  
  Role of Archaeologists in Conflict Situations — Israel/Palestine
• Rachel Fenton (Asian and Middle Eastern Studies)  
  Textile Production in 2nd-millennium BC Anatolia
• Lindsey Friedman (Department of Archaeology)  
  Jomon–Yayoi Transition: Isotopic Investigations into the Introduction of Wet-rice Agriculture in Western Japan
• Georg Gertleigner (Faculty of Classics)  
  Writing on Athenian Pottery
• Jennifer Goddard (Department of Archaeology)  
  Looting & Collecting Identity Values in Consumer Societies
• Claire Halley (Department of Archaeology)  
  Building Chaco: Architecture, Performance and Culture Formation
• Jamie Hampson (Department of Archaeology)  
  Rock Art Regionalism in West Texas and Southern Africa
• Kathleen Hawthorne (Faculty of Classics)  
  Balkan Pit Sanctuaries: Re-theorizing the Archaeology of Religion
• James Holloway (Department of Archaeology)  
  Medieval Burial Practice
• Duncan Howitt-Marshall (Department of Archaeology)  
  Maritime Connectivity and Social Identity in Southwest Cyprus
• Robyn Inglis (Department of Archaeology)  
  Human Occupation and Changing Environments at the Middle–Upper Palaeolithic Transition: Soil Micromorphology at the Haia Freah, Libya
• Alison Klevnäs (Department of Archaeology)  
  Grave-robbing in Early Medieval Scandinavia, Britain and Germany
• David Klinge (Department of Archaeology)  
  The Use of Skeletal Evidence to Understand the Transition from Roman to Anglo-Saxon Cambridgeshire and Bedfordshire
• Brigitta Kulcsárné-Berzsényi (Department of Archaeology)  
  Spatial Organisation of Plant Processing: Bronze Age Tell Settlement in Hungary
Postgraduate students (cont.)

• Salaam Al Kuntar (Department of Archaeology)
  Early 4th-millennium North Mesopotamia Societies

• Carla Lancelotti (Department of Archaeology)
  Fuel Utilization and the Indus Valley Bronze Age

• Hee Jin Lee (Department of Archaeology)
  Geoarchaeological Investigation of Korean Middle Bronze Age Settlement Sites

• Emma Lightfoot (Department of Archaeology)
  Isotopic Analysis of Archaeological Populations from Croatia Through Time

• Xinyi Liu (Department of Archaeology)
  A Multi-scalar Analysis of the Human Ecology of the Huanghe River Catchment during the Early and Middle Neolithic

• Patrizia Macri (Department of Archaeology)
  Enotrian–Hellenic Cultural Contact in Basilicata

• Katie McAfee (Faculty of Classics)
  Reassessing NeoClassicism

• Andrew McLaren (Department of Archaeology)
  Later Prehistoric Flintworking in East Anglia

• Ben Morris (Department of Archaeology)
  Repairing the Fabric of the City: Cultural Heritage After the Storm

• Giedre Motuzaite Matuzeviciute (Department of Archaeology)
  What were the Corridors of Influence upon the First Agricultural Communities in East Europe?

• Skylar Neil (Department of Archaeology)
  Physical and Ethnic Boundaries in Late Archaic Etruria

• Sayantani Neogi (Department of Archaeology)
  Lithic Assemblages and Forager Mobility in Pleistocene Southeast Asia

• Archondia Polyzouti (Department of Archaeology)
  The Display of Archaeology in Museums of Northern Greece

• Patrizia Macri (Department of Archaeology)
  The Display of Archaeology in Museums of Northern Greece

• Archondia Polyzouti (Department of Archaeology)
  The Display of Archaeology in Museums of Northern Greece

• Andrew McLaren (Department of Archaeology)
  The Display of Archaeology in Museums of Northern Greece

• Alex Pryor (Department of Archaeology)
  Climate Reconstruction using Oxygen Isotopes at Upper Palaeolithic Sites in Europe

• Elizabeth Raddatz (Department of Archaeology)
  Lithic Assemblages and Forager Mobility in Pleistocene Southeast Asia

• Gethin Rees (Department of Archaeology)
  The Display of Archaeology in Museums of Northern Greece

• Jane Sanford (Department of Archaeology)
  Reassessing NeoClassicism

• Mark Sapwell (Department of Archaeology)
  Reassessing NeoClassicism

• Nick Soderberg (Faculty of Classics)
  Architecture-based Analysis of the First Palaces of Minos on Crete

• Tim Sorensen (Department of Archaeology)
  Death in the Landscape: Cemeteries in Denmark

• Pia Spry-Marques (Department of Archaeology)
  Zooarchaeological Study of Prehistoric Korcula, Croatia

• Federica Sulas (Department of Archaeology)
  Environmental and Cultural Interplay in Highland Ethiopia: Geoarchaeology at Aksum

• Jakub Szamalek (Faculty of Classics)
  The Bosporan Kingdom, 500–100 BC: Archaeology and Cultural Interactions

• Shadia Taha (Department of Archaeology)
  Archaeological Heritage of Suakin on the Red Sea Coast
Postgraduate students (cont.)

- **Sean Taylor** *(Department of Archaeology)*  
  Geoarchaeology and Use of Space in the Early Bronze Age at Dhaskalio, Cyclades

- **Thea Sophia Thompson** *(Department of Archaeology)*  
  The Social Significance of Naturalistic Human Images in Medieval Scandinavia, c. AD 500–1200

- **Christos Tsirigiani** *(Department of Archaeology)*  
  Unravelling the Hidden Market of Illicit Antiquities

- **Johanna Tudeau** *(Asian and Middle Eastern Studies)*  
  Building in Mesopotamia

- **Irene Varsakis** *(Department of Archaeology)*  
  Archaeological Theory: Social Actions in the Neolithic

- **Isabelle Vella Gregory** *(Department of Archaeology)*  
  Embodying Power, Status and Identity in Nuragic Sardinia

- **Dacia Viejo Rose** *(Department of Archaeology)*  
  The Post-conflict Reconstruction of Cultural Heritage

- **Lacey Wallace** *(Faculty of Classics)*  
  An Archaeology of Early Roman London: Material Culture and Daily Life, AD 43–61

- **Kuenga Wangmo** *(Department of Archaeology)*  
  National Identity and the Dzong

- **Natalie White** *(Department of Archaeology)*  
  An Analysis of the Food Remains within Romano-British and Gallic Burials

- **Alice Whitmore** *(Department of Archaeology)*  
  Icelandic Assembly Places

- **Donna Yates** *(Department of Archaeology)*  
  Concepts of ‘Indigenous’ and ‘Nationalistic’ Archaeology

- **Yijie Zhuang** *(Department of Archaeology)*  
  Palaeoenvironmental Study on Landscapes in Northern China

**Mphil Students**

- **Amy Bahe** *(Department of Archaeology)*  
  Oracles and Prophecies in Ptolemaic Egypt

- **Kira Bonomo** *(Department of Archaeology)*  
  The Determination of Status at a Viking Age Site at the Brough of Deerness through Zooarchaeological Analysis

- **Fiona Breckinridge** *(Department of Archaeology)*  
  Vikings in Britain: British Natives or Scandinavian Settlers? A Study in the Trade of Eidsborg Schist as an Indicator of Viking Migration and Identity

- **Xuan Chen** *(Department of Archaeology)*  
  Heritage and Memory: a Case Study from the Hutong Area in Beijing

- **Claudio Corsi** *(Department of Archaeology)*  
  Tuscany Today and Ancient Etruria: Heritage Relations Between Now and Then

- **Matthew Dalton** *(Department of Archaeology)*  
  Geoarchaeological Approaches to Social Space in Prehistoric Western Cyprus

- **Katherine R. Frazier** *(Department of Archaeology)*  
  The Sacred and the Profane: Changing Attitudes Towards Monastic Space in Early Medieval Northern Britain

- **Jenni French** *(Department of Archaeology)*  
  Populating the Palaeolithic: a Palaeodemographic Analysis of the Middle–Upper Palaeolithic Transition in Southwest France and its Implications for Neanderthal Extinction Models

- **Katie Hall** *(Department of Archaeology)*  
  Geoarchaeological Characterization of a Viking Age Occupation Surface from the Brough of Deerness, Orkney

- **Mishy Harmann** *(Department of Archaeology)*  
  ‘No Oink Oink for Me’—The Early Israelites and the Pig

- **Erin McDonald** *(Department of Archaeology)*  
  Iron Age Population Density and Distribution at Danebury Hillfort and its Environments

- **Danika Parikh** *(Department of Archaeology)*  
  Society, Space and Material Culture: Analysis of Artefact Distribution at Mohenjo-daro

- **Suzanne Pilaar** *(Department of Archaeology)*  
  The Fauna of Vela Špelja on the Island of Lošinj, Croatia: Taphonomy, Ecology and Subsistence

- **Catalin Popa** *(Department of Archaeology)*  
  A New Framework for Approaching Dacian Identity: the Burial Contribution

- **Sandra Riego-Ruiz** *(Department of Archaeology)*  
  The Old Kingdom Ka Chapels at Dakhla Oasis

- **Ana Rosa Rodriguez Garcia** *(Department of Archaeology)*  
  Preserving Heritage amid Havoc: Learning from Recent Experiences in Afghanistan

- **James Walker** *(Department of Archaeology)*  
  Using Intraspecific Oxygen Isotope Values to Assess the Seasonality of Periwinkle Gathering from the Mesolithic Shell Middens of Oronsay, Scotland

- **Rosalind Wallduck** *(Department of Archaeology)*  
  Treatment of the Dead in the Mesolithic: Reconstructing Taphonomic Histories of Loose Human Bones from Pupčića and Vela Spila, Croatia

- **Youlin Wang** *(Department of Archaeology)*  
  The Politics of Heritage in Hong Kong: Transformation, Interpretation and Negotiation
**Master of Philosophy (MPhil) Degrees**

**MPhil in Archaeology**
The Department of Archaeology offers four MPhil degrees. Our emphasis at the MPhil level is research-led teaching, so that staff and students interact in lectures, seminars, and practicals with the aims of mastering the basics of theory and method, while at the same time engaging students as participants in ongoing research projects. Our MPhil courses allow flexibility in tailoring taught courses to a student's specific interests. Small student numbers facilitate regular contact between students and staff in seminars, while the McDonald Institute for Archaeological Research hosts a wide range of research seminars, discussion groups, and facilitates interaction within a diverse post-graduate and post-doctoral research environment.

We welcome applications for the MPhil degrees outlined below and described in detail on our web page (http://www.arch.cam.ac.uk/admissions/masters-mphil-archaeology/). Applications can be submitted from October through July for entry in the following academic year (which begins each year on 1 October). Early application (by mid-December) is encouraged, particularly if the applicant is applying for funding, as earlier deadlines will apply. Currently our MPhil courses run from 1 October–31 August, with the summer months (July and August) devoted to writing the dissertation, required of all MPhil students.

1. **Master of Philosophy (MPhil) in Archaeology**
   - Archaeological Heritage and Museums
   - Archaeological Science
   - Archaeology of the Americas
   - Egyptian Archaeology
   - European Prehistory
   - Medieval Archaeology
   - Mesopotamian Archaeology
   - Palaeolithic and Mesolithic Archaeology
   - South Asian Archaeology
   - MPhil in Archaeology (course option not initially specified)

2. **MPhil in Archaeological Research**

3. **MPhil in Egyptology**

4. **MPhil in Assyriology**

**MPhil in Classics**
The Faculty of Classics offers this self-contained course to give students the opportunity to undertake focused research under close supervision, and to acquire or develop skills and expertise relevant to their research interests. Students learn to formulate a realistic research proposal and prepare written work to a strict timetable, whilst broadening their appreciation of the principal issues that shape a given field, and encouraging them to develop insights which might form the basis of an original contribution to the debates in question.

Students may learn Greek and/or Latin to elementary level and acquire the basics of related ancient and modern languages relevant to their principal field of interest to a standard adequate for research purposes.

At weekly graduate seminars, students present their own work for discussion with senior and junior members of the Faculty. Where relevant, students provide teaching in a range of technical/specialist subjects central to research in a particular field, from which they can base some of their essay work, or opt to be examined formally on the knowledge acquired.

Admittance can be purely for an MPhil, with the option during the year of applying to continue with a PhD; to be admitted for a PhD, with the requirement that an MPhil is taken in the first year; or to be admitted for a PhD having opted to take an MPhil in the first year.

The primary focus must be on one of the following six subject areas, around which teaching in the Faculty of Classics is organized

(A) Literature
(B) Philosophy
(C) History
(D) Art and Archaeology
(E) Linguistics
(X) Interdisciplinary approaches to the ancient world

Information about assessment procedures and other details can be found at http://www.classics.cam.ac.uk/admissions/graduate_courses/mphil_in_classics/.
The Dorothy Garrod Isotope Laboratory had a productive and successful year, irrespective of its director being on maternity leave for most of that time! This is a great demonstration that after four years the research group has developed to the point where it can be self-sustaining.

Dr Rhiannon Stevens’ current research is focusing on using isotopic techniques to reconstruct past climate directly from hunted fauna at Palaeolithic archaeological sites. This method provides information on local climatic conditions at the time the site was occupied by early humans. Published this year is a study using a combination of carbon and nitrogen isotope analyses and radiocarbon dating which showed that the Upper Palaeolithic Magdalenian sites of Gönnersdorf and Andernach in Germany were in fact contemporaneous, rather than successive, as had been previously supposed. Rhiannon is also conducting several modern control studies on red deer and sheep in order to improve the resolution and understanding of isotopic methods and therefore improve palaeoclimate and palaeoecological reconstructions based on isotopic data. She has been on fieldwork to Moravia in the Czech Republic, together with Alex Pryor, to collect more samples from colleagues at the Budišov Museum. With Professor Julia Lee-Thorp, University of Bradford, she was awarded twenty radiocarbon dates for a project aimed at building an independent terrestrial palaeoclimate sequence for Oxygen Isotope Stage 3 in Britain.

Dr Susanne Hakenbeck continued with her work on gender-specific mobility in the early medieval period. She looked at long-range mobility patterns across Europe, using as a case study modified skulls that have been associated with the Huns. The distribution of women with modified skulls west of the Carpathian basin indicates directed movements of individuals, possibly in the context of an exogamous social structure. She has also been exploring evidence of mobility in late Roman and early medieval cemeteries in Bavaria, through a combined study of burial practice and diet, based on stable isotope analysis. Results show that there were significant differences in the diet of men and women, supporting the hypothesis of greater mobility among women. Furthermore, the isotopic evidence from dietary outliers is supported by ‘foreign’ grave goods and practices. The results are in press with American Journal of Physical Anthropology.

Dr Hakenbeck’s PhD thesis won the Publication Prize ‘Ottone d’Assia-Riccardo Francovich’ of the Society of Italian Medieval Archaeologists for the best work by a young researcher of medieval archaeology and it is currently being edited for publication by All’Insegna del Giglio for the winter of 2009. Sue has now left us for the Department of Archaeology at the University of Southampton, having obtained a prestigious Research Fellowship, and we wish her well in her new post.
Catherine Kneale continued her work with Dr Tamsin O’Connell on the Wellcome Trust-funded project studying the effect of dietary composition on human isotopic values. In collaboration with Dr Gunter Kuhnle and Prof. Sheila Bingham of the MRC Dunn Human Nutrition Unit, Cambridge, she has been analysing tissues from humans on known and controlled diets to obtain a better understanding of isotopic fractionation in humans.

Xinyi Liu has completed his doctoral research combining isotopic studies with archaeobotany to investigate early millet consumption in Inner Mongolia. Emma Lightfoot’s work on migration and subsistence changes in Iron Age to early medieval Croatia was given a boost with the award of nine radiocarbon dates by ORADS. Emphasizing the integration of the Garrod Isotope Laboratory within the framework of Cambridge archaeology, Emma edited a volume of the *Archaeological Review from Cambridge* with a strong slant towards archaeological scientific methods entitled ‘Movement, Mobility and Migration’ (see p. 49).

Alex Pryor continued his research on the impact of climatic change on human activity in the Central Europe Upper Palaeolithic through isotopic analysis of faunal remains, with fieldwork at Kostenki, Russia, as well as at Graeme Barker’s site of Haou Fteah in Libya. He collected samples from Moravia, Kostenki and Krakow in Poland. Lindsey Friedman was awarded a six-month doctoral fellowship by the Japan Foundation to conduct research at Kyushu University, Fukuoka, Japan. She spent the summer in Japan collecting human and animal bones for her research on the isotopic signals associated with the introduction of rice agriculture at the Jomon–Yayoi transition in Japan.

Laboratory members also attended and presented work at a wide variety of archaeological and isotopic conferences, including the International Symposium for Biomolecular Archaeology, TAG, the EAA, Food and Drink in Archaeology, the International Archaeobotany Symposium, the Palaeolithic–Mesolithic Conference at the British Museum, the Quaternary Research Association annual conference and the UK Archaeological Sciences conference, and helped to organize the ‘Vegetable Love: Edible Plants Between Nature and Culture’ conference at the Centre for Research in the Arts, Social Sciences and Humanities (CRASSH).

**STAFF**
- Dr Tamsin O’Connell (Laboratory Director)
- Dr Rhiannon Stevens (Royal Society Fellow)
- Dr Susanne Hakenbeck (Junior Research Fellow)
- Ms Catherine Kneale (Research Technician)

**PhD Research Students**
- Lindsey Friedman
- Emma Lightfoot
- Xinyi Liu
- Alex Pryor
Our group carries out research into archaeobotanical and related techniques around the world. This year we have worked close to home, in Cambridge City itself, and far afield, in Russia, China, South Asia and South America. Our projects range from the Palaeolithic through to contemporary ethnobotany. Below are some examples of that range. Other aspects of our work are described in the project pages, for example in the East–West Millet Project (p. 26), the Moravian Gate Project (p. 36) and the Portus Project (p. 38).

Archaeobotanist to the Cambridge Archaeological Unit, Anne de Vareilles works on ancient plant remains recovered from excavations across East Anglia. Most of the material analysed consists of charred seeds and fruits found in settlement sites. Exceptional assemblages of in situ stored crops have been recovered from Iron Age farmsteads and Romano-British settlements giving us important insights into past agricultural practices. Waterlogged biota are also common in the fen where preservation is often excellent, offering a wealth of information on local and regional climates, as well as land management and adaptation. Plant material sometimes also survives in funerary contexts and ritual monuments, such as the Bronze Age barrows at Over. There, a combination of charred and waterlogged biota reveals a unique description of how the monuments were maintained through the seasons, and what plants were used in ritual practices. Closer to home, the CAU have excavated many sites within Cambridge, perhaps the most important being Grand Arcade. Many thousands of plant remains were uncovered, including mineralized seeds and fruits from medieval cess pits which provide interesting information on diet between town and gown!

Further afield Carla Lancelotti is completing her PhD project on the Harappan fuel economy. Fuel is one of the most important resources for pre-industrial societies. Therefore our knowledge of fuel practices is pivotal to the understanding of how past complex societies developed and flourished. The Harappan Civilization is one of the greatest civilizations of the past and, at its apogee, reached a level of complexity in material culture and technological production that probably surpasses all other ancient civilizations. Combining archaeobotanical (wood charcoal and phytoliths) and geoarchaeological techniques (spherulites and geochemistry, Carla is working on the Harappan fuel economy.
trying to reconstruct fuel practices during the Mature Harappan phase (2500–1900 BC) at four different sites in northern India and Pakistan. Her approach investigates not only the use of fuel wood but also the implementation of alternative fuel sources like dung and crop-processing leftovers. The use of alternative fuels is critical in arid environments where the pressure on the scarce woodland vegetation could have destabilized an already fragile environment.

Although plants in some form are ubiquitous in the archaeological record, and in the actual lives of pre-industrial societies, they are much more rarely represented in visual depictions in prehistory. However, such images have been found in small numbers in the White Sea region of Karelia, where they are being examined by Liliana Janik. In all the Karelian rock art only four depictions of trees are known, among around 2500 carved images known from the White Sea region as a whole. Three of them have been interpreted as trees. In order to relate these images to their environmental context, Liliana has been making a full assessment of the flora growing on and around the rocks today.

STAFF
Prof. Martin Jones (Laboratory Director)
Dr Liliana Janik (Laboratory Manager)
Anne de Vareilles (Cambridge Archaeological Unit)

Post-doctoral Researchers
Dr David Beresford-Jones

PhD Research Students
Lindsey Friedman
Brigitta Kulcsárné-Berzsényi
Carla Lancelotti
Emma Lightfoot
Xinyi Liu
Giedre Motuzaite Matuzeviciute
Alex Pryor

Affiliated Researcher
Rachel Ballantyne (English Heritage)
The laboratory has continued working on a range of projects exploring human relationships through time with animals and plants, including horse, cattle, grapes, millet, barley and wheat. The laboratory’s technician, Paula Ware has moved on, and has been replaced by Josephine Richardson. We warmly thank Paula for her dedication and contribution and wish her well. Our principal projects are as follows.

**Horses and people**

Using population genetics of living horses, Mim Bower and her colleagues examine the changing relationship between humans and horses through prehistory to the present day. This year the group travelled within Ukraine, Azerbaijan and Kazakhstan, building an important collection of horse-hair samples. Spatial analysis of genetic data from both mitochondrial (Mim Bower) and nuclear DNA (Vera Warmuth) of living horses from the Eurasian continent allows them to map patterns of human-mediated interactions between horse populations. Our data not only show connections between the East and the West, but north–south movements as well. Ethnographic data (Natalia Vibla and Rebecca Cassidy, Goldsmiths College, London), will assist in the interpretation of these patterns, in the context of the long and complex history of the movement of horses across Eurasia.

Within this research strand Michael Campana is exploring the development of breeds and varieties focusing on historic specimens of thoroughbred and Icelandic horses as test subjects in order to develop models of human interaction with animals beyond domestication.

**Tracking crops across continents**

Harriet Hunt is leading the genetics work on broomcorn millet for the East–West Millet Project. This research addresses several key questions regarding the evolutionary and domestication history of one of the world’s oldest cultivated cereals. She is analysing the relationships between millet and related wild species through DNA sequence analysis and cytogenetic techniques, in collaboration with colleagues at the University of Leicester. At the core of the project is the question of where millet was domesticated during the Neolithic period and its subsequent routes of spread across Eurasia. We are investigating this question using geographic patterns in microsatellite markers, continuing our established collaboration with National Institute of Agricultural Botany. For related aspects of this research see the East–West Millet Project on page 26.

We are also using molecular genetics to analyse wheat and barley ‘landraces’ (traditional varieties historically associated with a particular locality) from...
Laboratories

throughout the Old World. We aim to elucidate geographical variations in the genetics of these cereals that may reflect early patterns of agricultural spread. Dr Diane Lister’s research has mainly used historical cereal specimens from herbarium collections, which are typically 100 years old. These specimens are an excellent source of relatively undamaged DNA and represent traditional landrace cultivars grown before the advent of modern farming practices. Research carried out during the ‘The Domestication of Europe’ project (NERC) on a photoperiod response gene in historic and modern European barley accessions across Europe has helped elucidate the role of environmental barriers in the transition to a farming society from a Mediterranean to a temperate climate. Diane is now focusing her research on the routes of spread of wheat and barley cultivation into East Asia, and, in particular, China. Modern and historic cereals will be analysed using a variety of genetic markers, and desiccated material from Chinese archaeological sites is being included.

Hugo Oliveira continued his PhD research, which involves the analysis of various genetic markers in tetraploid wheat landraces (durum, river and emmer) in the Iberian peninsula and North Africa. His research aims to identify other potential routes of agricultural spread into Europe, especially from North Africa. Hugo is mainly using modern landrace accessions, but is also incorporating some historic and archaeological tetraploid wheat accessions to give time depth to patterns seen in modern landraces.

STAFF
Prof. Martin Jones (Laboratory Director)
Dr Josephine Richardson (Technical Support)
Natalia Vibla (Research Assistant)

Post-doctoral Researchers
Dr Mim Bower
Dr Harriet Hunt
Dr Diane Lister

PhD Research Students
Michael Campana
Hugo Oliveira
Vera Warmuth

Hugo Oliveira harvesting a local variety of spelt wheat with a traditional ‘mesoria’ sickle in the mountains of Asturias, Spain.

Harriet Hunt analysing DNA from millet.
The McBurney Laboratory was very pleased to welcome several new graduate students and researchers this year, and congratulate others who were moving to new positions. Cristiano Nicosia joined the lab as a visiting PhD student from the University of Milan and contributed to seminars and practicals throughout the year. Sayantani Neogi began her doctorate on the site depositional histories of several Harappan urban sites in northwestern India in Udar Pradesh and Haryana provinces (British Council/UKIERI funded). Sean Taylor started his PhD on the analysis of the Early Bronze Age settlement site of Dhaskalio in the Cycladic islands of the Aegean, as well as an investigation of its island setting. Manuel Arroyo-Kalin, having obtained his doctorate last October (2008), has now moved on to a one-year Lectureship in Environmental Archaeology in the Department of Archaeology, University of Durham, and we wish him every success. We congratulate Federica Sulas on the submission of her PhD on the relationships of agriculture, population expansion and erosion in 1st-millennium BC/AD Aksum, Ethiopia. In addition, Clea Paine and her partner are to be congratulated on the birth of their son, James, in June!

_fieldwork_
Field and laboratory work has continued for a number of projects that were begun last year — namely at the Mesolithic–Neolithic settlement site of Vlašac in the Danube Gorges of Serbia with Dr Dušan Borić, at the later Bronze Age settlement and field-system site of Choenan in South Korea with Heejin Lee, in the Durrington Walls and Stonehenge area of the Salisbury Plain under Professor Mike Parker Pearson of Sheffield University and in southern Patagonia with Drs Arroyo-Kalin, Rob Scaife and Chilean colleagues. Reconnaissance fieldwork was also begun with Drs Preston Miracle, Vander Linden (Leicester) and Hopkinson (Leicester) and Tonko Rajkovaca on open-air Palaeolithic to Neolithic sites and landscapes in the Banjaluka area of Bosnia.

Fieldwork, with Professors Chris Scarre, Ian Bailiff and Dr Rob Scaife, has also continued for a second season on the island of Herm in the Channel Islands (funded by the AHRC). Here a Holocene landscape with numerous Neolithic chambered tombs is preserved across the whole northern third of the island, buried by later sand-dune systems. A combination of augering survey, test pitting and sample excavation has indicated that a loess-rich, stable woodland soil existed over a wide area of this island in Mesolithic–Early Neolithic times, but subsequent occupation and use of the island led to rapid denudation of this soil-vegetational complex, and in combination with rapid coastal change resulted in a long period of aggradation of wind-blown beach sand. This appears to have become stabilized, and ploughed, for a time during the Roman period, before returning to a stop/start sequence of dune aggradation/standstill with incipient soil formation throughout historic times through to the present day. This process has resulted
in substantial changes to the shape and topography of the northern end of the island of Herm.

New fieldwork has begun at Fell’s Cave in the Pali Aike National Park of southern Patagonia, Chile. Team members began sample excavation through the full deposit sequence at Fell’s Cave, and an augering survey of the associated Rio Chico valley floor has revealed a layer-cake of tephra and peat deposits which should provide a full sequence of the late glacial to early Holocene landscape and climatic change associated with some of the earliest known human activity in southern South America.

This summer saw the publication of the second Developing International Geoarchaeology Conference that was hosted by the laboratory in late April, 2007, as a Catena Special Issue (2009, 41, 1) entitled Developments in International Geoarchaeology.

Conference presentations
Numerous conference presentations have been given by various laboratory members. Highlights include Charles French and Robyn Inglis attending the Fourth International Geoarchaeology Conference in May 2009, at McMaster University in Hamilton, Ontario, giving papers on the Stonehenge landscape and Haua Fteah depositional sequence respectively. Heejin Lee gave a paper on the development of wet-rice farming in South Korea during the Bronze Age at the Quaternary Research Association Annual Meeting in January 2009, at University of Oxford.

Mary Ownby gave papers on the provenancing and trade implications of Egyptian Canaanite jars from Memphis at the Netherlands-Flemish Institute in Cairo, Egypt, in October 2008, at the February 2009 General Meeting of the Ceramic Petrology Group, Institute of Archaeology, University College London, and at the American Research Center in Egypt Annual Meeting, Dallas, in April 2009. A conference on the Functional Aspects of Egyptian Ceramics within their Archaeological Context was co-organized with Dr Bettina Bader and held in the McDonald Institute in July 2009.

Manuel Arroyo-Kalin was invited to speak at the 1st International Meeting on Amazonian Archaeology in Belem, Brasil, in September 2008, at the Sainsbury Research Unit, University of East Anglia in October 2008, at the Association of Social Anthropologists of the UK and Commonwealth annual meeting in Bristol in April 2009, and at the Société des Américanistes de Paris, Musée du Quai Branly, Paris in June 2009.

Dr Rob Scaife augering the mid-Holocene peat-filled channels in the Rio Chico valley of Pali Aike, southern Patagonia, with Fell’s Cave in the background.

STAFF
Dr Charles French (Laboratory Director)
Tonko Rajkovaca (Senior Research Technician)

Visiting PhD Research Student
Cristiano Nicosis (University of Milan)

PhD Research Students
Robyn Inglis
Heejin Lee
Sayantani Neogi
Ivy Owens
Mary Ownby
Clea Paine
Miranda Semple
Federica Sulas
Sean Taylor
Yijie Zhuang

MPhil Archaeological Science Students
Matthew Dalton
In 2008–2009, members of the Zooarchaeology Laboratory conducted faunal remains research in many diverse sites around the world.

Preston Miracle continued with ongoing projects in the Balkans, where in July he co-organized a workshop on ‘Prehistoric Landscapes across the Sava: the Future of Archaeological Heritage and Archaeological Science in Bosnia’ in Banjaluka, Bosnia-Herzegovina. This workshop brought together archaeologists from the UK (Cambridge and Leicester Universities), Bosnia-Herzegovina, and Croatia to discuss the current state of the discipline in Bosnia-Herzegovina and to promote and develop further collaborative projects. In Croatia he returned for a third season of work on faunal assemblages from the site of Vela Spila on Korčula Island (Croatia). His team from Cambridge this year included PhD student Pia Spry-Marques (Late Pleistocene Faunal Changes), MPhil student Rosalind Wallduck (Mesolithic Burial Practices), and recent Cambridge graduand Clare Rainsford. Results from this research are being presented in October 2009 at the Croatian Archaeological Association on the Island of Vis and will be published in 2010 in a new monograph about the site. He continued to study Mousterian faunal assemblages from Vindija and Veternica Caves, Croatia and, closer to home, he worked with Dušan Borić on the Leverhulme Research Programme ‘Changing Beliefs of the Human Body’.

Jessica Rippengal took part in her third season as faunal specialist with Access Cambridge Archaeology run by Dr Carenza Lewis (see p. 45).

Tony Legge (Leverhulme Senior Research Fellow) continued with the Tell Abu Hureyra project, and also did fieldwork with Professor Barry Kemp at Tell el Amarna (see p. 32). Ryan Rabett participated in another field season in Libya as part of the Cyrenaican Prehistory Project (Dir. G. Barker) (see p. 33), and in Vietnam he directed the Tràng An archaeological project (see p. 25). Krish Seetah is currently a Research Associate on the Leverhulme-funded project ‘The Spread of the Chariot across Central and East Asia during the 2nd and 1st millennia BC’ (see p. 26). He continues to develop the Geometric Morphometrics (GMM) technique as a mechanism for identifying and distinguishing horse populations from the shape of their teeth. Jo Appleby has begun a post-doctoral research project investigating the use of cremation in the British Bronze Age.

Congratulations to Natalie White, who submitted her PhD dissertation on ‘An Analysis of the Food Remains within Romano-British and Northern Gallic Burials. To What Extent Can They Reveal Aspects of Identity?’ this past year. She is currently working for Access Cambridge Archaeology.
Patrick Skinner (AHRC funded) is in his third year of research on human–cave bear interactions during the Pleistocene, with a focus on the Middle and Upper Palaeolithic periods (roughly 60–20 kya) in the Czech Republic. Paul Ewonus completed his third year of PhD research on prehistoric social landscapes of the southern Strait of Georgia region of the Pacific Northwest Coast. David Klingle completed his third year of PhD research on changes in human health between the Roman and Saxon periods in England. Christopher Stimpson (NERC funded) has completed the third year of research on the bird and bat bones of the Great Cave of Niah, Sarawak. Pia Spry-Marques (Domestic Research Studentship) is starting her second year of PhD research on Late Pleistocene faunas from the eastern Adriatic region (particular focus on Vela Spila, Croatia). Jane Sanford is starting her second year of PhD research on the impact of Hellenistic colonization on food practices and identities in Dalmatia.

We are very pleased to welcome two new PhD students to the Laboratory. Suzanne Pilaar (Gates Scholar) is starting a PhD on environmental seasonality and Late Palaeolithic–Early Mesolithic subsistence strategies in Istria, Croatia, after completing an MPhil in Archaeological Science in the Department in 2009. Rosalind Wallduck (Domestic Research Studentship) is starting a PhD on Mesolithic funerary practices after completing her MPhil in Archaeological Research in the Department in 2009.

**STAFF**

Dr Preston Miracle (Laboratory Director)
Jessica Rippengal (Zooarchaeology and Chief Technician)

**Post-doctoral Researchers**

Dr Jo Appleby  Prof. Tony Legge
Dr Katherine Boyle  Dr Iain Morley
Dr Helen Farr  Dr Ryan Rabett
Dr Jen Harland  Dr Krish Seetah

**PhD Research Students**

Paul Ewonus  Patrick Skinner
David Klingle  Pia Spry-Marques
Andy McLaren  Christopher Stimpson
Suzanne Pilaar  Rosalind Wallduck
Jane Sanford  Natalie White

**Paul Ewonus in the Grahame Clark Laboratory analysing bone from the Pacific Northwest Coast.**

Christopher Stimpson and Mr Noel Anak Laman (Sarawak Museum) during fieldwork in the West Mouth of the Great Cave of Niah, Sarawak, July 2008.
Research Highlights

This project, which has entered the third of its projected five years, examines how early human communities adapted to coastal inundation and environmental change at the end of the Pleistocene. Work continues in the principal cave site, Hang Boi, where the team is excavating a large shell midden. With the infrastructure now in place, excavation in November 2009 will also begin at the second cave site, Hang Trống. A radiocarbon date from here suggests that the sub-surface deposits date to about 13,000 years ago. Preliminary analysis by Natalie Ludgate (Open University) is also showing promising results from organic biomarkers within the sediments from both caves. We anticipate that this work, coupled with ongoing palynological studies (Chris Hunt, Queen’s University, Belfast) and a geoarchaeological programme (Mike Morley, Oxford Brookes University), will enable us to create a detailed picture of palaeoenvironmental change across the Pleistocene–Holocene transition, which can then be tied closely to the archaeology. A survey around the outer margin of the Tràng An massif will look for evidence of low-elevation sites to complement our upland record.

Funding for this year’s fieldwork has been provided by the DM McDonald Fund and through the McDonald Fellowship held by Ryan Rabett. The excavation team also extends sincere thanks Mr Nguyen Van Truong for providing all the logistical support the project team relies upon during its visits.

The Cultured Rainforest Project, Borneo
GRAEME BARKER (McDonald Institute)

The Cultured Rainforest Project, a team of archaeologists, anthropologists, and geographers from the Universities of Cambridge, Oxford, Leicester, Sussex, Belfast, and UNIMAS (Sarawak), is illuminating the history of human–landscape relationships in the Kelabit Highlands of Sarawak in Borneo. The area is occupied today by Penan hunter-gatherers and Kelabit rice farmers. A combination of archaeological and geographical techniques has revealed a 4000-year history of human activity in the forest. In 2009 excavations directed by Cambridge Research Fellow Dr Lindsay Lloyd-Smith revealed a substantial Metal Age settlement of a kind never found before in Borneo, radiocarbon dated to c. AD 300–500, and geophysical survey by Cambridge graduate Rose Ferraby revealed the post-holes and wall gullies of ancient longhouses. The project is helping the Kelabit and Penan demonstrate the antiquity of their settlement histories (a principal means by which they can resist the incursions of logging companies) by using modern satellite imagery and air photographs of the 1960s and 1940s to track systems of land use.

The Cultured Rainforest Project is funded principally by the Arts and Humanities Research Council, with further funding from the Association of Southeast Asian Studies UK, the Cambridge University Evans Fund, and the McDonald Institute for Archaeological Research.

Tràng An Archaeological Project, Vietnam
RYAN RABETT (McDonald Institute)

This project, which has entered the third of its projected five years, examines how early human communities adapted to coastal inundation and environmental change at the end of the Pleistocene. Work continues in the principal cave site, Hang Boi, where the team is excavating a large shell midden. With the infrastructure now in place, excavation in November 2009 will also begin at the second cave site, Hang Trống. A radiocarbon date from here suggests that the sub-surface deposits date to about 13,000 years ago. Preliminary analysis by Natalie Ludgate (Open University) is also showing promising results from organic biomarkers within the sediments from both caves. We anticipate that this work, coupled with ongoing palynological studies (Chris Hunt, Queen’s University, Belfast) and a geoarchaeological programme (Mike Morley, Oxford Brookes University), will enable us to create a detailed picture of palaeoenvironmental change across the Pleistocene–Holocene transition, which can then be tied closely to the archaeology. A survey around the outer margin of the Tràng An massif will look for evidence of low-elevation sites to complement our upland record.

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High-resolution Quickbird satellite imagery showing Kelabit farmers’ rice fields and swidden fields, areas of forest re-growth, and sago palm groves used by Penan hunter-gatherers.

Jo Appleby and David Marcus dry-sieving sediments at Hang Boi (2008).
Research Highlights

East–West Millet Project
MARTIN JONES (Department of Archaeology)

This project brings together field survey, geoarchaeology, archaeobotany, genetics and isotopic analysis to track the domestication, adaptation and spread of *Panicum miliaceum* across Eurasia. This year, Yijie Zhuang has done pioneering work on the soil stratigraphy around some of the most intriguing early millet sites, in Shandong Province, north China, and will now carry out, for the first time, micromorphological analyses on these sites. Xinyi Liu has joined an extensive survey with Chinese and American colleagues across the full length of Inner Mongolia, the region of millet’s early cultivation and also a major potential route for its westward spread. He has also brought his PhD thesis on archaeobotany and isotopic analysis to completion. Giedre Motuzaike Matuzeviciute is completing her PhD research into the earliest appearance of cereal cultivation in Ukraine, examining plant macrofossils and cereal impressions in pottery from Neolithic and Copper Age sites. She is also conducting a variety of experiments on variation in millet seed size, in order to set basic criteria for identification of archaeological millet specimens.

In a further strand of the project, Harriet Hunt, working with biochemists at the John Innes Centre, Norwich, has explored how human cultural choices have resulted in the selection of ‘sticky’ phenotypes in millet. Together with Tamsin O’Connell and Xinyi Liu, she is carrying out experiments on millet plants in the University Botanic Garden to explore how variation in millet phenotype may influence palaeodietary reconstruction (see p. 17). The East–West Millet Project has featured twice this year in *Science*.

The project is funded by the Wellcome Trust, the Leverhulme Trust, and studentships from the Gates Cambridge Trust, the Kwok Foundation, and NERC (Dorothy Hodgkin studentship).

From Chariotry to Equestrian Pastoral Nomadism
GRAEME BARKER (McDonald Institute)

This project is investigating the history of the horse, and horse cultures, in central and east Asia in the 2nd and 1st millennia BC. In the second year of the project, genetic studies of modern horse populations by Dr Mim Bower, in collaboration with Northwestern A and F University, Yangling, China, are showing multiple domestication events across Eurasia, with a number of separate introductions of wild mares into domestic herds. Horse populations from China played an important role in these processes. Her studies of ancient DNA in archaeological bones should help us to understand the history of horse movements across Eurasia. One question that Dr Marsha Levine is investigating from studies of entire horse skeletons excavated from ancient burial sites (often buried with chariots) is a possible northern route by which horses may have reached China in the 2nd millennium BC. Dr Krish Seetah has been assessing the potential of new methods of capturing 3D bone shape (geometric morphometrics) to investigate horse population histories using horse teeth from archaeological sites (see p. 23). Ancillary studies include PhD research by Vera Warmuth and Michael Campana, who are providing valuable insights into the complexity of horse-domestication histories compared with those of other domestic animals; reviews of the Russian ethnographic literature by Natalia Viba; and ethnographic fieldwork in Kazakhstan by anthropologist Dr Rebecca Cassidy (Goldsmiths College, London) studying the ethnography of present-day horse-keeping societies in Kazakhstan, societies undergoing profound transformations with globalization.

The project is funded principally by the Leverhulme Trust, with further funding from the Newton Trust, the McDonald Institute for Archaeological Research, and (Vera Warmuth) BBSRC.

The genetic group distributions of mitochondrial DNA (the DNA passed down the maternal line) in modern horse populations. The size of the circles corresponds to the number of animals analysed. Group F (orange) occurs more frequently in Chinese horse populations.
Rock Art of Northern Russia
LILIANA JANIK (Department of Archaeology)

Over the last four years this project has studied the rock art of northern Russia at the estuary of the Vig river, a tributary of the White Sea. This research is now nearing completion and preparation for publication has begun. The objectives of this year’s field season were to visit institutions that hold records from previous excavations and to obtain maps of the area from the Cartographic Institute, St Petersburg.

A new initiative of the 2009 field season was to photograph the rock-art compositions at night using artificial lighting. Since this region of Russia is at a relatively northern latitude, the excursion was planned for the autumn during the period of the new moon to take full advantage of the darker nights at that time of year. By adjusting the angle of the lights, details in the carvings could be enhanced and shadows deepened, giving a different effect from that seen in broad daylight. The result is an almost mysterious spectacle when only the illuminated images can be seen, giving the carved rocks a spiritual and magical power. The carvings seem to come to life. These photographs thus provide a new dimension to our experience of this 5000-year-old rock art as well as a new analytical tool for understanding the craftsmanship of prehistoric artists.

The project was funded by the McDonald Institute for Archaeological Research and the Cambridge University Travel Fund. For more information see Cambridge Archaeological Journal 17:3, 297–310, doi:10.1017/S0959774307000388.

Byzantine Textiles
ANNA MUTHESIUS (McDonald Institute)

Professor Muthesius is presently engaged with the close study of rare, fine and previously unknown, Imperial Ottoman silks in treasuries. Five preliminary studies, which centre on questions of the surviving Byzantine/Post Byzantine, Islamic, Ottoman, Asian and European textiles, have been published in her third volume of collected papers, Studies in Byzantine, Islamic and Near Eastern Silk Weaving. She is now working towards publication of The Silk Treasury of the Monastery of St Catherine’s, Mount Sinai. She was invited to present the plenary paper at the XLII Spring Symposium of Byzantine Studies Conference, which accompanied the major ‘Byzantium’ exhibition at the Royal Academy of Arts, London. Her paper, presently to be published, is entitled ‘Textiles as Text’ and deals with the exhibited textiles on the levels of ‘material objects’ as well as ‘objects of materiality’. The paper illustrates how different forms of power and of social relations were expressed through the medium of the Byzantine, Russian and other Eastern European textiles that were on display.

On the invitation of the Ministry of Culture, Athens, Professor Muthesius is preparing a series of object-centred technical/theoretical seminars and courses (using the textile collections of the Byzantine and Early Christian Museum and related institutions) for the training of archaeologists, museum keepers and university students across Greece.
Kilise Tepe, Southern Turkey

NICHOLAS POSTGATE (Department of Archaeology)

The Kilise Tepe project resumed its work in Cilicia in July and August, 2009, with 15 of the team from Cambridge, along with our Newcastle colleagues working on the Byzantine settlement. As last year we were concentrating on the time span 1300–700 BC, during which the Hittite Empire dissolved and horizons contracted. This time we recovered excellently stratified Late Bronze Age ceramic and environmental evidence and established the limits of the Level IIId public building. Exploration beneath the subsequent Stele Building revealed that it was sited in what had previously been an open area, emphasizing its character as a new departure.

In the Iron Age sounding south of the church we extended the excavation outwards and downwards, reaching the Late Bronze Age and creating a rare sequence through to the 7th or 8th century. The dating of these ‘Dark Age’ levels is critical (and difficult because the local ceramics are so poorly known), and we have more good material to supplement the C14 determinations already under way at the Oxford laboratory, including some prime archaeobotanical samples. One of these comes from a huge rectangular storage pit (about 35 cubic metres), which sheds interesting light on the nature of the later Iron Age settlement, but unfortunately has cut away the continuation of the post-hole structure found last year, whose full plan has to remain tantalizingly elusive.

Tell Brak, Syria

AUGUSTA McMAHON (Department of Archaeology)

The Brak project currently researches urban growth in northern Mesopotamia during the late 5th–early 4th millennia BC. Avenues of exploration encompass the elaboration of industrial production and the aftermath of early warfare. Three mass graves, containing hundreds of dead individuals, were the outcome of violent conflicts during 3800–3600 BC (see p. 2).

The project undertook a study season in the spring of 2009. Detailed analyses of ceramics and animal bones are nearing conclusion, while study of the human remains is now complete. The partial disarticulation of the mass grave skeletons indicates pre-burial exposure of at least several weeks. The stripping of bodies and lack of grave goods, combined with the disrespect implied by exposure, indicate that the dead are conceptually ‘other’, or enemies of those involved in the burials. A set of polished spatula-shaped tools fashioned from human femurs mirrors evidence of post-battle trophy-taking and cannibalism elsewhere.

In addition, a brief excavation resolved stratigraphic problems in an area of 2nd-millennium BC houses excavated during 2006–7. The houses offer a deep sequence belonging to the Old Babylonian and Mitanni Periods, eras of dramatic political change. As well as a window onto the effects of political change on domestic architecture and material culture, this area allows exploration of human adaptations to climate change. Regional climatic data imply an aridity trend across the 2nd millennium BC; more precise and localized data for the intensity and effect of this aridity on the Brak region and its inhabitants are a long-term objective.

The 2009 study season was funded by the McDonald Institute for Archaeological Research, Newham College and a private donation.

Jennifer Bates (second-year archaeologist) running the flotation programme.
Mamasani Archaeological Project, Tol-e Nurabad, Fars, Iran

Cameron Petrie (Department of Archaeology)

At present, it is not clear whether early farming was a new way of life adopted by the existing hunter-gatherer inhabitants of highland southwest Iran, or whether the first farmers were immigrants practising a traditional way of life in a new land. It is also unclear whether the dramatic socio-economic changes that marked the transition from the Neolithic to the Chalcolithic period were a result of migrations and cultural replacement, local developments, or more complex processes of cultural contact, interaction, the dispersal of innovation, and acculturation.

This past year the Mamasani Archaeological Project recommenced excavations at Tol-e Nurabad with two specific aims: 1) to understand the role that earlier populations may have played in the adoption of agriculture and ceramic technology; and 2) to understand the nature of the socio-economic transformations that accompanied the shift from the Neolithic to the Chalcolithic in highland Fars. The excavations revealed extensive architectural remains dating to the mid–late Neolithic, the first architecture and associated cultural deposits that span the Neolithic–Chalcolithic transition in Fars, and evidence for early Chalcolithic seal-use in highland Fars. When the excavation’s results are combined with data from regional site survey in the Dasht-e Nurabad and the neighbouring plains of Mamasani, the research will generate new primary data for understanding and interpreting the origins of the Neolithic, and the Neolithic–Chalcolithic transition in this area.

The project is funded by the McDonald Institute for Archaeological Research, the Australian Research Council, the British Institute for Persian Studies, the Isaac Newton Trust and the Wainwright Trust.

Excavations on the northwestern slope of Tol-e Nurabad, Iran, December 2008.

Cameron Petrie excavating a pit in Trench YA2 at Bhimwada Jodha (Masudpur VII), India.

Land, Water and Settlement in Haryana, India

Cameron Petrie (Department of Archaeology) & R.N. Singh (Banaras Hindu University, India)

In 2008/2009, the Land, Water and Settlement project (http://www.arch.cam.ac.uk/rivers/) continued its multi-disciplinary research into the palaeo-river systems, palaeoclimate, environment and archaeology of the plains of northwest India. The fieldwork carried out included the recovery of drill cores from the palaeochannels near the Harappan site of Kalibangan and the Rewasa playa, excavations at the sites of Masudpur I and VII, and an archaeological survey in the hinterland of the urban Harappan site of Rakhigarhi. Analysis of charcoal and phytoliths recovered from Alamgirpur in 2008 has been completed by Carla Lancelotti, and the analysis of the ceramic material from the site by Manisha Singh is ongoing. Samples have been taken from the Kalibangan and Rewasa cores for dating and analysis, samples from Alamgirpur have been submitted for NERC-supported AMS dating, and Yama Dixit has been awarded a Gates Scholarship to study Rewasa core material.

In addition to this fieldwork, students and scholars from India have visited the UK (M. Singh & V. Singh, January–April 2009; R.N. Singh, P.N. Singh & R. Tewari, June 2009), students and scholars from UK have visited India (C. Lancelotti, S. Neogi & D. Parikh, Feb–Aug 2009; C.A. Petrie, April–May, Aug 2009), and the project co-director, Dr R.N. Singh, was awarded a SMUTS visiting fellowship at Cambridge for 2009/2010. A project workshop was held in Cambridge (15 June 2009).

The project is funded by UK India Education Research Initiative, the McDonald Institute for Archaeological Research, the Isaac Newton Trust and the British Academy.
Archaeology of the Northeast Coast, Madagascar
ROBERT DEWAR (McDonald Institute)

Archaeological survey and test excavations continued in the September–October 2008 field season along the northeast coast of Madagascar, centred at the modern city of Iharana.

Before our work began in 2007, archaeological knowledge of this region was limited to a series of 15th- to 17th-century BC tombs in Iharana which when excavated were found to contain large numbers of ceramics imported from East and Southeast Asia. The Bay of Iharana is a secure anchorage, and the inference was that it was an important place of prehistoric Indian Ocean trade and early occupation. Yet there was no knowledge of any local prehistoric settlements.

Our task for the first two seasons of work was focused on finding habitation sites of any period, establishing a local chronology based upon a seriation of local and imported ceramics and developing a preliminary sketch of changes in the size and distribution of human occupations. At this point we have collected ceramics at more than 80 localities, conducted a series of test excavations, and established a ceramic-based chronology that spans at least the 9th to 20th centuries. The occupations range from ephemeral use of rockshelters to substantial communities (>20 ha). The next season of work, beginning in September 2009, will seek to refine our chronology, further clarify the changing settlement patterns and expand the region of survey.

This research is funded by the McDonald Institute for Archaeological Research, the British Institute for East Africa and the Institut de Civilisations, Université d’Antananarivo.

Middle Stone Age of the Lesotho Highlands
BRIAN A. STEWART (McDonald Institute)

This project aims to enhance our understanding of the adaptability of early modern humans by exploring Upper Pleistocene forager lifeways in highland Lesotho, southern Africa. The project’s second year saw excavations completed at Melikane rockshelter with a second field season there in April, and work begun at Sehonghong rockshelter with a five-week season during July and August. Bedrock was reached at Melikane at c. 2.6 m below the surface in one of the six square metres excavated. Although bone preservation continued to be poor throughout, charcoal remained intact and lithics became super-abundant. Chronometric, geoarchaeological, palaeoenvironmental, faunal and lithic typo-technological analyses of the Melikane material are currently underway. At Sehonghong we removed the backfill from Prof. Peter Mitchell’s 6 x 2 m trench and continued excavating from where he ceased in 1992 (just below MSA/LSA transitional levels). We were excited to find abundant preserved plant material in levels predating 30 ka before closing our 4 x 2 m unit for the season to focus on a pilot survey. In the next field season (July–August 2010) we hope to reach bedrock at Sehonghong and continue surveying both there and around Melikane.

The project is funded by generous grants from the McDonald Institute for Archaeological Research, the British Academy, the University of Cambridge Smuts Fund and the Prehistoric Society.

The beach, port and mangroves of the Baie d’Iharana, Madagascar.
Suakin Project
LAWRENCE SMITH (McDonald Institute) & MICHAEL MALLINSON

Work on the 15th- to early 20th-century port of Suakin continued on several sites. At Beit Khorshid Effendi, the harim courtyard and surrounding rooms were cleared, establishing the correct layout of these rooms. At the Governor’s Residence, excavation to investigate levels surviving the 1870s extension of the building revealed four phases, the earliest of medieval date, the first time such early layers have been found close to the present edge of the Town Island. A mosque attached to Beit ‘Osman Digna’, associated with Mahdist leader Osman Digna, was investigated. A trench in front of the house exhibited five phases of activity. Pottery, including Chinese porcelain, will contribute to a ceramic sequence for the local stretch of the coast. Survey in the Red Sea Hills was continued and numerous sites, comprising mainly dry-stone structures, were noted. Building conservation continued, with the propping and stabilization of the Shafa‘i Mosque. A company was established with the Minister of Culture, the State Governor and the ‘English Rose’ company to restore the Governor’s Residence as an eco-hotel.

The project was funded by the McDonald Institute for Archaeological Research, the Red Sea State and the Ministry of Culture, Sudan. Funds have been obtained from the Foreign and Commonwealth Office for the completion of the restoration of the Shafa‘i Mosque. The project was carried out under the Sudanese National Corporation for Antiquities and Museums and the Red Sea State.

North Karnak Survey and Egyptology in Prisons
SALLY-ANN ASHTON (Fitzwilliam Museum)

North Karnak
The third and final season of work at North Karnak revealed a number of hitherto unrecognized temples and chapels dating to the Third Intermediate Period. This study season also enabled the team to compare data from the surface and subsurface surveys with material from excavated contexts with a view to testing non-destructive methods of investigation at a multi-period site. The findings will be published in a monograph and will appear on the project website: http://www.mcdonald.cam.ac.uk/projects/NKSWeb/Page/Index.html.

Egyptology in prisons
Sally-Ann Ashton has had a two-year sabbatical from her post of Senior Assistant Keeper at the Fitzwilliam Museum to teach Egyptology and archaeology in prisons. A major part of this project was to investigate the impact of teaching an African-centred approach to Egyptology in a prison environment, the findings of which will be published in 2010. A number of resources have been developed for tutors and students, including a virtual version of the Fitzwilliam Museum’s Egyptian galleries, which will be available to wider community groups through the Museum’s website: http://www.fitzmuseum.cam.ac.uk/dept/ant/egypt/outreach/.

The North Karnak Survey was funded by the McDonald Institute for Archaeological Research. The Prisons Project was funded by the AHRC Knowledge Transfer Fellowship Scheme, The Heritage Lottery, The Getty Trust and the Lankelly Chase Trust.
The Ancient City of Amarna

BARRY KEMP (McDonald Institute)

The study of the large cemetery of Amarna’s people continued from last year, with a bigger team that allowed for a new part to be opened as well as a strip adjacent to previous work. The new area produced a wider range of objects, some originally of fine quality and also including roughly-made grave markers. The human remains became the focus for a bioarchaeology field school organized by the University of Arkansas. The indifferent health of the people and signs of harsh living conditions were again apparent, but with differences of incidence appearing in the two sectors.

Anna Stevens carried out her final season of survey and excavation at the Stone Village. Exploration of the surrounding desert slopes led to the discovery of a small cemetery of rock-cut tombs belonging to the village. It reinforces other evidence that suggests that this isolated settlement housed a community with a sense of permanence.

We resumed the programme of repairs to the North Palace, a building constructed of sun-dried mud bricks and first excavated in the 1920s. The locally recruited teams of builders added a few courses of newly-made bricks to the tops of walls, laid new brick floors where old ones were damaged and replaced missing thresholds with new limestone. We also attempted to bring back to its original appearance a bathroom, found well preserved in 1924 but since stripped of its features.

In conjunction with the Center for Advanced Spatial Technologies (CAST) of the University of Arkansas, a pilot geophysical survey took place over a part of the North City, using magnetometer and ground-penetrating radar.

The Amarna Project is funded by a range of sources channelled through the Amarna Trust, a charity registered in the UK. Web sites are www.amarnaproject.com and www.amarnatrust.com. The Stone Village project is supported by a British Academy grant.

Faunal Studies at Amarna

TONY J. LEGGE (McDonald Institute)

Faunal studies continued at Tell el Amarna in Middle Egypt, under the auspices of the Amarna Trust. Among the large sample of bones, those of the striped hyaena have now been identified from the ‘Workmen’s Village’ area. This hyaena appears quite commonly in ancient Egyptian art, shown being hunted, paraded as ceremonial offerings, or even under human restraint, being force fed. Do these images portray the preparation of hyaenas as food, or were these scenes purely imaginary? A close examination of the hyaena bones from Amarna shows that all carry numerous cut marks, each placed at the point where muscles are attached. It is now certain that the hyaenas were carefully butchered by meat stripping, with the probability that the species was indeed used for food, even if infrequently when compared with more familiar food animals.

There is also a developing mystery in relation to the pig bones from Amarna. Severe bone trauma has been noted on a number of bones from young domestic pigs, so these are not hunting wounds. Nine specimens have now been found which show multiple blows to the frontal bone of the cranium, and five limb bones with severe trauma. The oddity arises from the fact that these animals were allowed to survive until the traumas were healed, a process that would have required many weeks in some instances. A possible ritual motivation may underlie this, the pig being associated with the disloyal god Seth.

Right mandible of a hyaena.
Cyrenaican Prehistory, Libya
GRAEME BARKER (McDonald Institute)

The Cyrenaican Prehistory Project is re-excavating the famous Haua Fteah cave on the northern coast of the Gebel Akhdar (‘Green Mountain’) massif in Cyrenaica, northeast Libya. The cave was excavated by Cambridge archaeologist Charles McBurney in the 1950s, whose discoveries make it the most important prehistoric site in North Africa. By combining this excavation with geoarchaeological and archaeological survey across the Gebel Akhdar, the project hopes to establish a major regional case study of how climate, environment, and human behaviour have articulated in North Africa over the past 200,000 years. A large international and multi-disciplinary team is addressing two major research themes: when and how did Modern Humans reach North Africa? And when and how did farming begin here?

In the April 2009 field season the team excavated occupation deposits 10 metres below the present cave surface of ‘Pre-Aurignacian’ Middle Stone Age hunter-gatherers who camped in the Haua Fteah around 100,000 years ago, as well as occupation deposits 3 m down left by ‘Capsian’ Mesolithic hunter-gatherers 10,000–8000 years ago. We have found a few traces of domestic cereals and other domestic plants in the Capsian deposits and in a contemporary coastal cave, suggesting that these hunter-gatherers were trading with Neolithic farmers elsewhere in the eastern Mediterranean. In the landscape, we have found prehistoric hunter-gatherers’ camp-sites of different ages from the coast to the Sahara, documenting how the massif was a refuge for past populations in periods when the Sahara was uninhabitable.

The principal funding is from the European Research Council, with supplementary funding from the Society for Libyan Studies, the project’s sponsor.

Sesebi
KATE SPENCE (Department of Archaeology) & PAMELA ROSE (McDonald Institute)

A team from Cambridge returned to the site of Sesebi, an ancient Egyptian colonial town in north Sudan dating to the 14th century BC. Geologists Judith Bunbury and Graham Smith further investigated evidence for mining and quarrying identified in 2008 and prepared a geological map of the region. We have clear evidence for mineral extraction, with the most likely candidate for extraction being gold. We await the arrival of samples to confirm the presence of gold at the site.

Pieter Collet prepared a topographical map of the town and its environs which suggests that the whole site had been levelled at the time of construction. Trial excavations conducted outside the northeast corner of the town revealed walls which appear to predate construction of the main town site and bear no spatial relationship to it. Ceramics found in the trial trenches predate the main town by a few generations and reused blocks found in the temple suggest that monumental construction also started before the reign of Akhenaten when foundation deposits suggest the site was founded.

Permission to work at Sesebi was granted by the National Corporation for Antiquities and Museums, in particular Director General Mr Hassan Hussein Idris, Mr el-Hassan Ahmed and Miss Abeer Rahman. Funding for the 2009 season was provided by the Egypt Exploration Society, the McDonald Institute for Archaeological Research and the Thomas Mulvey Fund.

View of the Sesebi plain from the north. The extraction of wadi deposits can be seen in extensive pitting at the base of the mountain.

Excavations in the Haua Fteah cave, Libya.
The Cambridge Keros Project

COLIN RENFREW & MICHAEL BOYD (McDonald Institute)

2009 was a period of intense study for the Cambridge Keros Project, which completed its excavation phase in 2008. In-field study of the pottery — which continued without break through the winter to completion in September 2009 — has clarified the ceramic phases of the excavation as well as the relationship between the two sites excavated — the ritual deposit of broken special material at Kavos and the settlement site at Dhaskalio. The latter can now be shown to have its *floruit* in the little-known final phase of the Cycladic Early Bronze Age, thus finally bringing this period to the forefront of research. Petrographical studies of the pottery and other material (such as the ubiquitous stone discs) is illuminating the wide contacts of the people of Dhaskalio, and environmental studies (led by Dr Evi Margaritis) have shown the use of the olive, most probably domesticated, at the site — the first clear confirmation at a stratified excavation of this key event in the emergence of Cycladic civilization.

Meanwhile work at the ritual deposit site of Kavos, opposite Dhaskalio, has clarified its chronology and confirmed the impression that the majority of the special materials deposited there were brought to the site in an already broken form and deposited in discrete episodes. The study of the 573 marble figurine fragments is of great importance since this is by far the largest number to have come from a stratified excavation. Many specialist studies are now complete, and the in-field study of material will be complete by the end of the year.

The Cambridge Keros Project is supported by the Institute for Aegean Prehistory, the Balzan Foundation, the McDonald Institute for Archaeological Research, the British Academy, the Society of Antiquaries of London, and the British School at Athens. The work of Dr Boyd, the Niarchos Research Fellow, is funded by the Stavros S. Niarchos Foundation.

Migration Period, Northwestern Europe

CATHERINE HILLS (Department of Archaeology)

This past year’s research on the migration period in northwestern Europe, has focused on early Anglo-Saxon burials and the transition from Roman Britain to Anglo-Saxon England.

In collaboration with Tamsin O’Connell, radiocarbon dates were obtained from two cemeteries near Dorchester on Thames. The results suggest that a Late Roman cemetery at Queenford Farm had continued in use into the sixth century AD. A series of dates for both this cemetery and the Anglo-Saxon cemetery at Bensfield, a short distance away, demonstrated that there was no substantial chronological overlap between the two.

Elsewhere, burials excavated in 1939 by Dorothy Garrod in Newnham College garden were re-examined and are now thought to have been Anglo-Saxon inhumations of 7th- to 9th-century date.

Catherine Hills and Sam Lucy have been working on the synthetic volume about Spong Hill Anglo-Saxon cremation cemetery in central Norfolk, the excavation of which was directed by Catherine Hills from 1975–1981 with reports published between 1976 and 1994. Spong Hill remains the largest such cemetery to have been excavated in its entirety in England, offering the best parallel to partly contemporary cemeteries in northern Germany.

*Dr Yiannis Maniatis of the National Centre for Research at Demokritos Laboratory in Athens (marble studies), Dr Michael Boyd and Professor Colin Renfrew in the workroom of the Naxos Museum examining a selection of the 573 figurine fragments recovered during the excavation. The joining fragments are seen on the right.*
Hunting Strategies during the Middle–Upper Palaeolithic Transition

ANA BELEN MARIN (Leverhulme Centre for Human Evolutionary Studies)

This project focuses on the Middle–Upper Palaeolithic transition and especially on the reasons behind the progressive replacement of Neanderthals by modern humans groups from the Near East to western Europe.

The aim of this research is to characterize changes in human-subsistence strategies, represented by the macromammal remains recovered at Palaeolithic sites, and to identify behavioural differences between the last Neanderthals and the first Homo sapiens. To date, several sites from Mount Carmel (Israel) have been thoroughly analysed. They are the well-known Tabun, Skhul and El Wad faunal assemblages, curated at the Natural History Museum.

A rigorous and up-to-date zooarchaeological methodology has been applied, including: species diversity and its relationship with climate and landscape; prey transport and site functionality as a function of skeletal profiles; catchment areas and human mobility; mortality profiles and their relationship with the type of access to carcasses; and spatial distribution of faunal remains as a result of settlement organization. In addition, a complete taphonomic analysis has been carried out, allowing an objective attribution of the bone accumulation to human groups or other biological agents. Examination of cut marks and bone-breakage patterns has also helped to reconstruct the butchering process and human use of carcasses.

The project is funded by a grant from The Basque Government (Spain).

Occupation Archaeology and Heritage in the Channel Islands

GILLIAN CARR (ICE)

Three main trips to the Channel Islands have taken place during my third year of fieldwork on this project. Themes explored this year include the annual commemoration of Holocaust Memorial Day in January; Liberation Day in May; and the neglect of the sites of slave and forced-labour camps in the islands. The final three-week stint of data collection in August also included recording oral testimony, visiting heritage sites and continuing to build a digital archive.

The fieldwork will result in two books. The first, which is underway, concerns the archaeology and 21st-century tangible and intangible heritage of the German Occupation, and how this has evolved over the last 70 years. Themes include the celebration of Liberation Day, the restoration of German bunkers, the memorialization of the Occupation, the neglect of the camp sites of forced and slave labour, and the role of collectors of Occupation material culture. The second book will explore the deportation to and internment in German civilian internment camps, during the Occupation, of 2200 Channel Islanders. This will be explored through the medium of the material culture they produced from the recycled contents of their Red Cross parcels.

The project is funded by the McDonald Institute for Archaeological Research and the Société Jersiaise.
Excavations at Sant’Imbenia, Sardinia

NIGEL SPIVEY (Faculty of Classics)

In July a Cambridge team, led by Nigel Spivey, and comprising students from Classics and Archaeology & Anthropology, joined forces with the University of Sassari to work at the site of Sant’Imbenia, on the coast of northwest Sardinia. A Bronze Age tower (nuraghe) stands there, and the nearby remains of a Roman villa are also still visible: but what happened during the intervening millennium? Our excavations are bringing to light a substantial Iron Age settlement, with evidence not only of sustained trading contacts with Phoenicians, Greeks and the Italian mainland, but also a substantial ‘proto-urban’ development of the villaggio nuragico around 800–700 B.C. A geophysical survey, conducted by Paul Johnson, suggests that this settlement may be far more extensive than previously imagined, with traces of habitation indicated as far as 100 metres north of the nuraghe; while exposing the ‘crests’ of hut-walls within the covered area of the site has revealed not only a number of communal drinking/eating/washing areas, but also a ‘mini-piazza.’ The programme of excavation and research continues to 2012, but already Sant’Imbenia promises to take its place in the history of early Mediterranean urbanism.

Funding for the 2009 season was provided by the McDonald Institute for Archaeological Research, the Faculty of Classics, the Bell Fund (Emmanuel College) and the Banco di Sardegna.

Moravian Gate Project

MARTIN JONES (Department of Archaeology)

This project aims to investigate how Upper Palaeolithic people of the Gravettian culture adapted to the cold northern open-steppic environments of central Europe. Gravettian sites yield evidence of figurative and non-figurative art, technological developments in lithic and organic tool industries, the increase in use of non-local raw materials, and the earliest development of ceramics and textiles. Our project has aimed to place these rich cultural data within an ecological and dietary context.

Rhiannon Steven’s research has focused on using oxygen, carbon and nitrogen isotopes of bones and teeth to investigate the response of humans to rapid climate change. Alex Pryor uses oxygen isotope analyses of animal teeth to investigate whether Upper Palaeolithic sites were occupied during cold or warm periods. His work also extends to Palaeolithic sites in Russia, including the Kostenki site cluster. Tamsin O’Connell’s palaeodietary research has called into question the previous dietary reconstruction that suggested freshwater fish were an important resource for the Dolni humans. David Beresford-Jones has been exploring the use of charcoals and other plant macrofossils to understand Palaeolithic people–plant relationships. Lenka Lisa’s research has focused on micromorphological evidence of loessic sediments which cover every Gravettian locality excavated within this project. Clea Paine uses soil thin-section analysis of loess, soils, and archaeological sediments to investigate the history of human occupation and climatic fluctuation at the sites of Dolní Věstonice and Predmosti.

The project is funded by the European Commission and the Royal Society.
**CRIC Project**

MARIE LOUISE STIG SØRENSEN (Department of Archaeology)

The highlight of the year for the CRIC Project (Identity and Conflict: Cultural Heritage and the Reconstruction of Identities after Conflict) was the annual meeting in Guernika/Gernika. The partners were able to explore both the wider landscape and the rebuilt townscape together, and also attended the various commemoration events taking place on the day of the bombing.

In response to the first phase of fieldwork and initial analyses, the most pertinent comparative themes are:

a. memorialization and commemorative events (events impact on the constructions of meanings including views about victimhood and rights);

b. monuments and symbols (these play important social roles in terms of cementing history into public spheres, making it important to understand how they ‘work’ and affect notions of ‘identifying with’ and ‘being part of’);

c. complex and contested places (i.e. sites where fights and discussions about meanings take place);

d. the role of the media, including fiction, paintings, newspapers and TV (media play central roles for how historical events and memories become shared and common properties, and their investigation will help to understand these processes and contribute to questions of authorships and authenticity);

e. the effect of time (the importance of time, both as a distancing factor and as a transformative one).

The CRIC project is funded by the EU under the FP7 programme; further details can be found on http://www.cric.arch.cam.ac.uk/index.php. CRIC open access visual database can be found on Cambridge University DSpace http://www.dspace.cam.ac.uk/handle/1810/214815.

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**Prehistoric Guernsey**

SHEILA KOHRING (Department of Archaeology)

This year saw the start of a new project called Encountering Representations: a Pilot Study from Prehistoric Guernsey, which runs in tandem with the Neolithic Land- and Seascapes in Guernsey, 5500–2500 BC project with colleagues at the University of Southampton, University of Liverpool and the British Museum. The project focuses on the methodologies for recording the human imagery on the island of Guernsey and providing archival data for the Guernsey Museum. It aims at gaining a better understanding of the production and life biographies of images, especially when the life history of the object has resulted in very different contextual settings. By linking this project with ongoing excavations, we can better contextualize the varied ways prehistoric peoples marked their island landscape. An initial presentation on the project, Encountering Bodies, was given at the 2008 TAG conference and a more general paper on representational technologies in Iberia — Stone, Bone and Clay — was presented at the 2008 EAA conference.

The project is funded by the McDonald Institute for Archaeological Research and the University of Southampton.
Portus Project  
MARTIN JONES (Department of Archaeology)

It has been a newsworthy year for this project which excavated at the Port of Imperial Rome (see p. 3): its newly exposed amphitheatre and associated statuary have been widely reported by international news media.

At least as important, however, are the organic-rich sediments uncovered both at the edge of the late Claudian harbour and within a range of nearby buildings, notably one of which was a communal latrine. These features may hold evidence for the inter-continental trade of goods that was the raison d'être of the port. Rachel Ballantyne and Evi Margaritis have been completing the archaeobotanical sampling strategy within the third and final fieldwork season, creating an archive of hundreds of macrofossil assemblages for intensive study during the next stage of the research programme. A preliminary survey has indicated widespread charred evidence for grain crops, as well as olives, grapes and figs. We are interested in exploring the sources and processing pathways for these principal resources, whilst also searching for evidence of less common exotics.

Palaeoenvironmental investigation has also continued, with soil micromorphology and mollusc sampling to help identify the relationships between past terrestrial features and the two harbours. We are further working closely with a team of marine geoarchaeologists from CNRS, Lyon, who are conducting analyses of deep cores from the early harbour sediments.

The project is funded by the AHRC between the Universities of Southampton and Cambridge, with the British School at Rome.

The Brough of Deerness and the Viking Age Diaspora  
JAMES BARRETT & JAMES GERRARD (McDonald Institute)  
MARY SAUNDERS (Orkney College Geophysics Unit)

The Brough of Deerness is a medieval settlement (of over 30 visible foundations and a church) on a sea stack fringed by 30 m cliffs in Orkney, Scotland. High-resolution GPS survey shows how densely packed with ruins the site is — confirming the likelihood of a substantial settlement in what is a very inhospitable location. Three houses have now been excavated along a line from the eastern to western edges of the stack. All are of Viking Age date and probably ended their use-life in the 11th–12th centuries. Intriguingly, two of the houses began as dwellings (complete with central hearths), but were remodelled and then never reoccupied as domestic spaces. The site may thus have changed in function from settlement to (predominately) unmanned refuge. Our fieldwork has also demonstrated that the Viking Age houses were built on an earlier settlement dating to the 6th to 9th centuries based on 14C and artefacts (including a rare fragment of vessel glass). The site is looking increasingly like a chiefly citadel of both Pictish and Viking Age date. It may be appropriate to envision it as a 'little Tintagel' and it must represent the milieu from which retinues could be recruited for the campaigns recorded in Irish and English sources. Ultimately this research may thus illuminate the settlement pattern and social organization underlying the Viking Age Scandinavian diaspora in the west (see http://www.mcdonald.cam.ac.uk/projects/Deerness/).

The fieldwork was sponsored by the Society of Antiquaries of Scotland, the Society of Antiquaries of London, the Orkney Islands Council, the Russell Trust, the Friends of St Ninians and the McDonald Institute for Archaeological Research.

Excavation of harbour-side buildings in progress at the Port of Rome.

Pendant with runic decoration.
Archaeology and Linguistics in the Andes
Paul Heggarty & David Beresford-Jones (McDonald Institute)

This past year featured a full-scale conference ('Languages and Societies in Ancient Peru: Towards an Interdisciplinary Perspective') co-organized with, and hosted in Peru by, Peter Kaulicke and Rodolfo Cerrón-Palomino, professors of archaeology and linguistics at the project’s partner institution, the PUCP in Lima. Speakers included authorities on Andean prehistory from archaeology and linguistics (among them Professors Adelaar, Burger, Dillehay, Isbell and Stanish), with a further input from genetics. Professor Colin Renfrew opened the conference, and was awarded an honorary doctorate by the PUCP.

The McDonald participants then gave a series of lectures at the PUCP’s postgraduate school of interdisciplinary Andean studies and elsewhere in Peru, as well as a two-day dissemination workshop on Andean linguistic prehistory to the Peruvian Education Ministry’s Quechua-language education programme in Cuzco. Ancillary activities included a reception by the British ambassador in Lima, and visits to the archaeological sites of Caral, Chavín, Sechín and the Cuzco region.

The project is funded by an award from the British Academy’s UK-Latin American Link Programme.

Languages and Origins in Europe
Colin Renfrew & Paul Heggarty (McDonald Institute)

This project keeps up the McDonald tradition of facilitating interdisciplinary research towards a more coherent, holistic view of prehistory, especially in how archaeology intersects with historical linguistics. Our primary case-study on Indo-European has collected extensive comparative data bases of dialectal diversity, much of it facing impending extinction, across some 150 regional language forms from the three major sub-families in Europe (see www.languagesandpeoples.com). Our network-type phylogenetic analyses suggest a new dialect continuum scenario also for early Indo-European, with implications for its divergence in prehistory.

As this project completes, it has spun off applications more widely beyond Europe. We have organized three symposia to bring together archaeologists, linguists, geneticists, historians and anthropologists of the Andean region (see this page). Two proceedings volumes, now near-finalized, will appear in 2010, co-edited by Heggarty and a specialist in Andean archaeology (Beresford-Jones) and history (Pearce) respectively. Branching out more widely still, Heggarty and Renfrew are now jointly preparing a comprehensive set of chapters on the linguistic and archaeological prehistory of each continent.

As well as at our own symposia, conferences papers and invited seminars have been delivered this year in Lima, Cuzco, Nijmegen, Leiden, UCL, Leipzig, Harvard, Santa Fe, Salt Lake City and Copenhagen.

The project is funded by the Leverhulme Trust.

NeighborNet computed from a matrix of distances in phonetics between traditional dialects in Germanic.
Recontextualizing Digital Objects
ROBIN BOAST (MAA)

This project is a three-year collaboration between Dr Boast of the Museum of Archaeology and Anthropology (University of Cambridge), the A:shiwi A:wan Museum and Heritage Center in New Mexico and UCLA. The aims of the research are to study how the Zuni community views its original cultural objects relative to the ways in which museums typically classify and represent them. They are to uncover and understand a new model of describing cultural objects according to the original indigenous voices of the culture that created them. The collaboration is centred around the objects excavated from the proto-historic village of Kechiba:wa in the 1920s by the then Director of the MAA, Louis Clarke, and by the Heye Foundation.

The first three years of this project have been funded by a grant from the National Science Foundation. Continuation funding has been obtained from the Institute of Museum and Library Studies in the US.

Prehistoric Picture Project: Making Ancient Rock-art Visible
FREDERICK BAKER & CHRISTOPHER CHIPPINDALE (MAA)

This is a new venture jointly with Fritz Lang Institute of Media and Technology, St Pölten University (Austria), and the Bauhaus University, Weimar (Germany). It had a first brief field season in the famous rock-art centre of Valcamonica, Alpine Italy, during September 2009. Its ambition is to make ancient rock-art visible in a way not done before: physically by new technology in photography, film and sound recording (this digital photograph by Hamish Park shows prehistoric figures pecked into open-air rock surfaces but so shallow they are barely visible under normal lighting); and intellectually by invigorating our cultural understanding not just with progressive academic research, but also through exploring the art with novel approaches in cinema, music and performance. The prospects are exciting!
DM McDonald Grants and Awards

The Institute supports field projects and other research initiatives of the University of Cambridge’s archaeologists through its annual grants from the DM McDonald Grants and Awards Fund. In 2009, grants totalling £125,300 were awarded to 35 projects ranging widely in time and space, many of which are highlighted in this report.

- Dr Bettina Bader
  Egyptian Ceramics Conference
- Dr Andrea Balbo
  Alimini Lakes Project
- Dr Dušan Borić
  Lepenski Vir Culture
- Janine Bourriau
  Pottery from Saqqara
- Dr Marcus Brittain
  Memory and Archaeological Landscapes in Mursiland, Ethiopia
- Dr Gillian Carr
  Occupation Archaeology
- Christopher Evans
  The Archaeology of Ciudade Velha, Cape Verde
- Christopher Evans
  Nepal
- Dr Helen Farr
  Woaton Quarr, Isle of Wight
- Dr Charles French
  Human Occupations and Landscape Evolution in the Pali Aike Region, Southern Patagonia, Chile
- Dr Helen Geake
  Early Anglo-Saxon ‘small-long’ Brooches
- Dr Oliver Harris
  Ardnamurchan Transitions Project
- Dr Michael Haslam
  Hominin Faunal Exploitation in Late Pleistocene India
- Dr Liliana Janik
  Rock Art of Northern Russia
- Dr Sheila Kohring
  Prehistoric Guernsey
- Dr Lindsay Lloyd-Smith
  GIS Modelling in a Rainforest Environment
- Dr Sam Lucy
  Anglo-Saxon Cemeteries in and around Cambridge
- Dr John MacGinnis
  Ziyaret Tepe 2009 Study Season
- Dr Augusta McMahon
  Tell Brak 2009 Study Season
- Dr Michael Petraglia
  Stone Tool Assemblages from Gibraltar
- Dr Cameron Petrie
  Ancient Iran and its Neighbours
- Dr Cameron Petrie
  Collapse of Harappan Urbanism Conference
- Dr Nicholas Postgate
  Excavations at Kilise Tepe
- Dr Ryan Rabett
  Tràng An Project (Ninh Binh Province, Vietnam)
- Prof. Colin Renfrew
  Keros Project 2009 Study Season
- Dr John Robb
  Sant’Aniceto Excavations
- Dr Krish Seetah
  Horse Population Diversity Based on Dental Morphology
- Dr Laurence Smith
  Suakin Project
- Dr Pamela Jane Smith
  The ‘Mitochondrial Eve’: Histories of DNA and Archaeogenetics Research Oral-histories Event
- Dr Kate Spence
  Contextualizing the Temple-town of Sesebi
- Dr Nigel Spivey
  Sant’Imbenia Excavations
- Dr Brian Stewart
  Middle Stone Age of the Lesotho Highlands, Southern Africa
- Dr Simon Stoddart
  Civita di Grotte di Castro
- Dr Simon Stoddart
  Straddling the Divide Conference
- Dr Simon Timberlake
  Ancient Mining Evidence near Kongsberg, Southern Norway
- Ardnamurchan
  Ardnamurchan Transitions Project
- Isle of Wight
  Wootton Quarr
- Channel Islands
- Cambridge
- Grotte di Castro
- Sant’Imbenia
- Alimini Lakes
- Keros
- Ziyaret Tepe
- Tell Brak
- Fars
- Nepal
- Harappa
- India
- Sarawak
- Pali Aike
- Cape Verde
- Lesotho
- Mursiland
- Kongsberg
- Karelia
- Projects awarded a DM McDonald grant in 2008–2009.
External Research Grants

- Dr Bettina Bader & Prof. Graeme Barker
  Bridge to Canaan: Tell El-Daba (Egypt) (European Research Council)

- Prof. Graeme Barker
  The Cultured Rainforest: Long-term Human Ecological History in the Highlands of Borneo (AHRC)

- Prof. Graeme Barker
  Past and Present Cultural Landscapes and Cultural Context in the Highlands of Borneo (ASEASUK)

- Prof. Graeme Barker
  The Cyrenaica Prehistory Project: Renewed Fieldwork at the Hausa Fresh (Society for Libyan Studies/Leakey Foundation)

- Prof. Graeme Barker
  Cultural Transformations and Environmental Transitions in North Africa (European Commission)

- Prof. Graeme Barker
  From Chiroptory to Equestrian Pastoral Nomadism (Levehulme Trust)

- Dr James Barrett
  Investigating the Origins of Commercial Sea Fishing in Medieval Europe (Levehulme Trust)

- Dr James Barrett, Prof. Martin Millett & Prof. John Hatcher
  Crisis, What Crisis? Collapses and Dark Ages in Comparative Perspective (Mellon Foundation)

- Dr James Barrett
  Deerness: the Brough Excavation (Orkney Islands Council, Society of Antiquaries of Scotland, and the Russell Trust)

- Dr James Barrett
  Ancient DNA, Cad and the Origins of Commercial Trade in Medieval Europe (Levehulme Trust, University of Hull)

- Dr Alison Blyth
  A New Approach to Detecting Past Climate Change and its Impact on Terrestrial Ecosystems (Isaac Newton Trust)

- Dr Janine Bouriau
  Pottery from the Anubieion at Saqqara (Seven Pillars of Wisdom Trust)

- Dr Mim Bower
  Characterizing Genetic Variation in the Thoroughbred Horse (Royal Veterinary College)

- Dr Mim Bower
  Ethnography of Isolated Populations of Horse Herders in Central and East Asia (Isaac Newton Trust)

- Dr Elizabeth DeMarrais
  Political Development in the Calchaquí Valley, Argentina (British Academy)

- Dr Charles French
  Island of the Dead? The Burend Neolithic Landscape of Herrn (Channel Islands) (AHRC/Durham University)

- Dr Helen Geake
  Early Anglo-Saxon ‘Small-long’ Brooches (Headley Trust)

- Dr Helen Geake
  Finds Advisor: Medieval and Modern Artefacts (Portable Antiquities Scheme)

- Dr Susanne Hakenbeck
  Ethnic Identities and Migration Processes in Early Medieval Bavaria (British Academy)

- Dr Paul Heggarty
  Archaeology and Linguistics in the Andes (British Academy)

- Dr Lilliana Janik
  Representing Movement in Northern Russia Prehistoric Rock Art (British Academy)

- Prof. Martin Jones & Dr Tamsin O’Connell
  Changing Levels of Protein Intake (Wellcome Trust)

- Prof. Martin Jones & Dr Harriet Hunt
  Modelling Agricultural Origins (Wellcome Trust)

- Prof. Martin Jones & Dr Diane Lister
  Origins and Spread of Agriculture in the Southwest Mediterranean Region (European Commission)

- Prof. Martin Jones
  A Survey of Historic Wheat and Barley Specimens in Major Chinese Herbarium Collections: a Potential Genetic Resource for Phyllogeographical Studies (British Academy)

- Prof. Martin Jones
  Agricultural Origins in Southwest Asia: the Pace of Transition (NERC)

- Dr John MacGinnis
  Ziyyet Tepe (Kreitman Foundation)

- Prof. Paul Mellars
  Demography of Early Hom sapiens Populations in Europe (British Academy)

- Prof. Martin Millett & Dr Emanuele Vaccaro
  First-millennium AD Patterns of Settlement and Economic Change in Tuscany and Sicily (European Commission)

- Dr Cameron Petrie
  In the District of Pushkalavati (British Academy)

- Dr Cameron Petrie
  UKIERI Standard — From the Collapse of Harappan Urbanism (British Council India)

- Dr Cameron Petrie
  The Cultural and Geographical Transformation of Northwest India (Isaac Newton Trust)

- Dr Cameron Petrie
  Socio-economic, Political Transformations in the Marnasni District of Fars between 6000–3000 BC (British Institute for Persian Studies)

- Dr Cameron Petrie
  Visiting Fellowship for M.N. Khan: the Sacred and the Secular in Ancient Gandhara (British Academy)

- Dr Cameron Petrie
  Conference - Ancient Iran and its Neighbours: Local Developments and Long-range Interactions in the 4th millennium BC (British Institute for Persian Studies)

- Dr Cameron Petrie
  Banni Archaeological Project Publications (British Museum)

- Prof. Nicholas Postgate
  Kilise Tepe (British Academy, Institute for Aegean Prehistory & Isaac Newton Trust)

- Prof. Nicholas Postgate
  MRF: the History and Archaeology of Government in the Ancient Near East (Levehulme Trust)

- Dr Ryan Rabett
  Tràng An Project (ASEASUK)

- Dr Ulla Rajala
  Romanization of a Faliscan Town — Nepi and its Hinterland (British Academy)

- Prof. Colin Renfrew
  Languages and Origins in Europe (Levehulme Trust)

- Prof. Colin Renfrew
  Keros Project (Stavros S. Niarchos Foundation)

- Prof. Colin Renfrew
  Keros and the International Spirit of the Cycladic Early Bronze Age (British Academy)

- Dr John Robb
  Changing Beliefs of the Human Body (Levehulme Trust)

- Dr John Robb & Dr Helen Farr
  Exploring a Vanished Coastal Landscape in Holocene Southern Cantabria (AHRC)

- Dr John Robb & Dr MaryAnne Tafuri
  Food and Society in Mediterranean Prehistory (European Commission)

- Dr Krishe Seetah
  Exploiting the Star of the Indian Ocean: Understanding Colonialism Through Diet in Post-medieval Mauritius (British Academy)

- Dr Krishe Seetah
  Slaves, Overseas Workers and Colonialism: the Bittersweet Past of Mauritius (British Academy)

- Dr Marie Louise Stig Sørensen
  Identity and Conflict, Cultural Heritage and the Reconstruction of Identities after Conflict (European Commission)

- Dr Marie Louise Stig Sørensen
  The Landscape of the Body (AHRC)

- Dr Marie Louise Stig Sørensen
  Forging Identities: the Mobility of Culture in Bronze Age Europe (European Commission)

- Dr Kate Spence
  Conference: Africa’s Fragile Heritage and Future Challenges (British Academy)

- Dr Anna Stevens
  The Amarna Stone Village Project (British Academy & Seven Pillars of Wisdom Trust)

- Dr Rhiannon Stevens
  Cultural Innovation in the Palaeoarchaic (Royal Society)

- Dr Brian Stewart
  The Middle Stone Age of the Lesotho Highlands, South Africa (British Academy)
**MacDonald Annual Lecture**
- **19 November** The 20th MacDonald Lecture
- **RUTH WHITEHOUSE** - The Materiality of Writing: Case Studies from First-millennium BC Italy

**R.R. Inskeep Memorial Lecture**
- **19 May** PROFESSOR JÜRGEN RICHTER (University of Cologne) - New Light on the Origin and Dispersal of Homo sapiens: Africa and Europe between 190,000 and 35,000 Years Ago

**MacDonald Institute Seminars**
- **22 October** CAMERON PETRE - Land, Water and Settlement: Environmental Constraints and Human Responses in Northwest India between 2000 and 300 BC
- **29 October** HARREY HUNT - Some Like it Sticky: Molecular Evidence for 2000-year-old Genetic Engineering in Millet
- **4 November** PETER BOUGUIC - People of the Longhouses: Neolithic Societies of the Fifth Millennium BC in Central Poland
- **5 November** CARENZA LEWIS - Reconstructing Settlement Histories — a New Approach to the Historic Period in Eastern England
- **12 November** AUGUSTA MACMAHON - Death and the City: Recent Work at Tell Brak, Syria
- **26 November** JOHN ROBB - Sant’Aniceto and the Bronze Age of Calabria
- **3 December** GRAEME BARKER & LINDSAY LLOYD-SMITH - Midway through the AHRC ‘Cultured Rainforest’ Project (Sarawak, Borneo): Some Reflections on Progress
- **28 January** OSCAR AULDRED (University of Iceland) - Tephra and Turf: a Study on Viking Age–Medieval Boundaries in Northeast Iceland
- **4 February** GILLIAN CARR - Occupation Archaeology: a Case Study from the Channel Islands
- **11 February** BRIAN STEWART - Digging the High Life: New Excavations at Melikane Rockshelter, Lesotho
- **18 February** NORMAN HAMMOND - Middle Preclassic Maya Economy and Society at Cuello, Belize
- **25 February** SIMON STODDART - The Lismore Project: Experiences of an Island Community through Time
- **4 March** JAMES BARRETT - The Brough of Deerness, Orkney: Power and Ideology in Viking Age Scotland
- **6 May** JEAN-LUC HOULE (University of Pittsburgh) - Monuments, Settlements and Subsistence in Bronze Age Mongolia
- **11 May** ISRAEL FENCKELSTEIN (Tel Aviv University) - Megiddo in the Late Bronze and Iron Ages: New Insights and their Historical Implications
- **13 May** MARK JACKSON - Byzantine Rural Settlement at Kilise Tepe, Turkey

**Garrod Research Seminars — Department of Archaeology**
- **27 May** DUŠAN BORIĆ - The Earliest Dated Metallurgy in Europe: New Radiometric Evidence for the Vinča Culture in the Central Balkans
- **3 June** CATHERINE HILLS - Skeletons in the Garden: an Unpublished Excavation by Dorothy Garrod
- **7 September** PROFESSOR WANG CHANGSHU with DING YAOYU HU & YIMIN WANG (Chinese Academy of Science) - New Perspectives of Bioarchaeology in China

**Conferences and Workshops**
- **3 November** Personal/Oral Histories of Human Origins Research: Meave Leakey (Kenya); Leslie Aiello (Wenner-Gren Foundation of NYC); Chris Stringer (Natural History Museum), Rob Foley (LCHES), David Pilbeam (Harvard) and Adam Kuper
- **11–13 December** CRASSH Conference - Culture Wars: Heritage and Armed Conflict in the 21st Century
- **14 March** History of Archaeology Research Network Workshop
- **27–9 March** The Material Body Workshop
- **18 April** 10th Cambridge Heritage Seminar: The Future of Historic Cities — Challenges, Contradictions, Continuities (www.arch.cam.ac.uk/heritage-seminar/chs09/)
- **15 June** Land, Water and Settlement (http://www.arch.cam.ac.uk/rivers/)
- **26–8 June** Ancient Iran and its Neighbours — Local Developments and Long-range Interactions in the Fourth Millennium BC (http://www.arch.cam.ac.uk/iran-conference/).
- **24–5 July** Functional Aspects of Egyptian Ceramics within their Archaeological Context
- **11–13 September** The Body Histories
Loan of ‘Earthbound Plant’ by Antony Gormley

The Royal Academy of Art has very generously loaned the installation work ‘Earthbound Plant’ (2002) by Antony Gormley to the McDonald Institute for Archaeological Research. In line with many of Gormley’s other works, this is a life-size human figure, cast from his own body. The work was installed in the archway area by the Institute in Spring 2009, where it is buried in the ground upside down with only the soles of the feet exposed at ground level in the paving. A formal launch took place at 12 noon on 29 April when Antony Gormley gave a brief talk which was followed by a wine reception at the Institute.

Over the last 25 years Antony Gormley has revitalized the human image in sculpture through a radical investigation of the body as a place of memory and transformation, using his own body as subject, tool and material. He says of Plant:

“You have this very condensed foundation, or root: another body made in iron. There is something about this to do with magnetism, and something to do with a journey and the mind/body relationship.

We’ve put it in a spot where people will have to walk on it and keep it shiny: a still print in a moving world. For me this work is very exciting. I was shocked to find that I had this idea fifteen years ago and now we’ve made it. It seems to me wonderful. Like all good installations there is a sense in which something has found a place where it can mean something relevant. This work has a vertical axis to do with light and darkness, with the sky and earth, on a road that goes between here and there, somewhere and nowhere. A kind of compass. A lodestone. Where people can stand for a moment and think about where they fit in this world.’

Prehistory Day

As part of Cambridge University’s Festival of Ideas, members of the McDonald Institute for Archaeological Research and the Department of Archaeology organized a ‘Prehistory Day’ at the Cambridge Archaeological Unit to raise public awareness of, and interest in, archaeology.

The event was enjoyed by visitors of all ages:
- they honed their hunting skills by learning to use a spear thrower;
- saw flint knappers at work;
- learnt about the different ways used to preserve animal skins;
- watched a deer being skinned with a flint knife;
- discovered ways of eating and cooking without supermarkets and microwaves;
- explored a purpose-built cave to see how prehistoric artists created the illusion of movement, created their own rock art, and were tattooed with the ritual design of their choice;
- made their own pots and fired them in a bonfire;
- marvelled at a demonstration of smelting metal from ore;
- wove hurdles from coppiced hazel wood;
- tortured their friends with their attempts to play ancient musical instruments;
- and dug for their own finds in a sandpit.

The event proved highly enjoyable for both attendees and demonstrators.
During 2008–2009 Dr Carenza Lewis continued to direct Access Cambridge Archaeology (ACA), supported by Catherine Ranson (ACA) and Jessica Ripplengal (Department of Archaeology). Natalie White joined ACA in January as programme coordinator and Katie Johnson (BA, Cambridge), Sean Taylor (MPhil, Cambridge) and David Klingle (MPhil, Cambridge) provided regular help with student assessment and office support. Numerous graduate and undergraduate students were also involved as volunteers during fieldwork.

New funding from HEFCE, English Heritage and the University of Cambridge have allowed ACA’s activities to continue and expand in 2008–2009. More than 600 secondary school pupils took part in hands-on archaeological activities either in the field or in the University for between one and five days, and hundreds of members of the public have been involved either in digging within their local communities or helping arrange for others to do so. The Higher Education Field Academy (HEFA) programme continued to be ACA’s main area of activity, with more than 450 14- to 15-year-olds taking part in research excavations within currently occupied rural settlements (CORS). ACA also ran community excavations in several villages, with test-pit excavations in Cottenham and Willingham carried out by members of the public as part of celebrations of the University’s 800th anniversary. Eight new settlements were drawn into the CORS programme in 2008–2009, bringing the total number of inhabited settlements whose historic development is being reconstructed by archaeological test pitting to 29, with a total of 668 pits excavated.

New activities have been developed under ACA’s ‘Discovery Days’ programme, with this now including day courses for gifted and talented teenagers focused on the archaeological study of human and animal remains. Nearly 150 students attended these in 2008–2009. The ACA website has been re-vamped and summaries of the test-pit excavations carried out in each of the settlements are now available.

### Science Day (14 March 2009)

Members of the McDonald Institute for Archaeological Research and the Department of Archaeology organized displays and activities to show the visiting public what archaeology is all about.

Both children and adults participated enthusiastically:
- they made Neolithic farmers and raced them with their livestock across a map of Europe;
- learned how to identify differences between wild and domesticated plants;
- dug for bones in a model cave;
- looked at potsherds through a microscope to discover how the pots were made;
- were shown how to tell the sex and age of an individual based on skeletal evidence;
- and were taught what our bones our made of and what exactly is in a jelly bean.

The event was very well attended and enjoyed by all.

### National Festival of Archaeology

- **22 July** THEA THOMPSON - Erik the Red Didn’t Wear a Horned Helmet: Viking Dress and Adornment
- **23 July** RACHEL HAND - Quills, Beads and Buttons in North America
- **24 July** CHLOE DUCKWORTH - Beads from the Beck Collection: Science and Secrets of the Earliest Glass
- **25 July** CHRISTOPHER CAPPINDALE - Tattooing: an Ancient and Modern Craft

The event was very well attended and enjoyed by all.
**Discussion Groups**

The African Archaeology Group (AAG) was set up in 2008 to revive the African Seminar previously established by Dr John Alexander. Its aims are to discuss current research programs and results of Cambridge archaeologists working in Africa, to hold seminars by Africanist speakers, to bridge University departments and research bodies interested in Africa’s past, and to maintain the tradition of Cambridge’s long-standing involvement in African archaeology.

**Contact:** Kate Spence (kes1004@cam.ac.uk); Laurence Smith (ls101@cam.ac.uk); Federica Sulas (fs286@cam.ac.uk); Shadia Taha (st446@cam.ac.uk).

The Archaeological Field Club (AFC) provides a range of lectures, site trips and other events to broaden the knowledge of, and further enthuse, those with an interest in archaeology.

**Contact:** AFC President, Rachel Crellin (rjc74@cam.ac.uk).

The Cambridge Americas Archaeology Group is open to anyone interested in archaeological and anthropological research projects throughout the Americas. Presentations are given by research students, post-docs, visiting scholars and lecturers from the UK and overseas institutions. Meetings are usually held Monday afternoons in the McDonald Seminar Room. A trip to the pub tends to follow for lively, informal discussions. All are welcome!

**Contact:** President, Trisha Biers (tmb40@cam.ac.uk).

The Egyptian World Seminar Series, supported by the Mulvey Fund, continues to present recent research and discussions regarding Egyptology. It attracts speakers from around Britain and the EU who cover all aspects of Egyptology as anthropology, archaeology, philology and museum studies.

**Contact:** Katharina Zinn (katharina.zinn2004@yahoo.de).

The Garrod Research Seminars represent the Department of Archaeology’s main series of invited scholarly lectures. Each year they relate to a specific theme. For 2008/9 they centred around ‘technology’, a topic encompassing early hominin cognitive abilities to the spread of metalworking technologies across Eurasia. Invited lecturers in the series drew on case studies from Iron Age Britain, Punic Sardinia and historic period Guyana.

**Contact:** Shenila Kohring (sek34@cam.ac.uk).

The George Pitt-Rivers Lunchtime Seminars are generally given by researchers based in or around the University of Cambridge. They are primarily aimed at researchers working in the archaeobotany, genetics, and isotope laboratories in the McDonald Institute, but cover a wide range of topics.

**Contact:** Alex Pryor (ajep2@cam.ac.uk); Hugo Oliveira (hiro22@cam.ac.uk).

The Graduate Seminar Series organized by the Archaeology Graduate Society (AGS), gives graduate students the opportunity to present their original research in a relaxed and supportive atmosphere.

**Contact:** AGS Seminar Officer, Robyn Inglis (rhi20@cam.ac.uk).

The Grahame Clark Laboratory group showcases zooarchaeological and osteoarchaeological studies undertaken in the Institute.

**Contact:** Krish Seethah (ks354@cam.ac.uk).

The Heritage Research Group is made up of graduate students, academics, heritage practitioners and other interested parties. In addition to helping organize the annual Cambridge Heritage Seminar (a successful international conference) the main focus of the Heritage Research Group is its seminar series. The seminars aim to bring together researchers from diverse disciplinary backgrounds, whose projects cover a wide range of topics within the broad field of heritage.

**Contact:** Gillian Carr (gc20@hermes.ac.uk); Shadia Taha (st446@cam.ac.uk) or Naomi Farrington (nnf21@cam.ac.uk).

The Later European Prehistory Group welcomes everyone interested in the European Neolithic, Bronze and Iron Ages. The group provides an informal and friendly setting for the exchange of ideas, dissemination of research results and the discussion of current topics of interest. Professionals, students and academics are invited to contribute.

**Contact:** Jo Appleby (jepw3@cam.ac.uk).

The Medieval Archaeology Group meets twice a term to discuss recent research on historical archaeology from the fifth to eleventh centuries.

**Contact:** James Barrett (jhb41@cam.ac.uk).

The PalMeso Discussion Group for all things Palaeolithic–Mesolithic has continued to attract guest speakers from all around Britain, as well as providing a forum for Cambridge MPhil and PhD students to present the results of their own research in a relaxed atmosphere.

**Contact:** Robyn Inglis (rhi20@cam.ac.uk); Alex Pryor (ajep2@cam.ac.uk).

**Archaeology Graduate Society (AGS)**

AGS is happy to report a successful second year. Founded in early 2008, the Society aims to help archaeology postgraduates to meet and mingle in both academic and social settings. The core of this has been the establishment of a weekly postgraduate social hour where discussion is fostered by a relaxed atmosphere.

At the start of Michaelmas term the AGS hosted a wine reception at Trinity College to welcome new graduate students and give them the opportunity to meet those of us who have been around for a little while. In honour of Darwin’s 200th birthday, the AGS took a much-needed fieldtrip to London to visit the Natural History Museum. In June we raised money for breast cancer research through participation in the Run for Life. Perhaps our most notable accomplishment has been the organization of the 2008/2009 Graduate Seminar Series which served as a showcase of graduate research and accomplishment in the department. We think that the Archaeology Graduate Society has done quite a lot to break down disciplinary barriers and improve communication among archaeology graduate students. We hope to see the AGS thrive in the future.
2008–2009 was a very healthy year for the Cambridge Archaeological Journal. I write as the final issue of Volume 19 (October 2009) is going to press. It has been a year marked by rising submissions (we have had more manuscripts cross our transom than ever before). It has been marked by a truly seamless editorial process from an outstanding team of Liz Farmar, Dora Kemp and Katherine Boyle; we are getting reviews back to authors and manuscripts turned around faster than ever before. Our speed of review process and acceptance rate are on a par with other major archaeological journals (as recently reported in the SAA Newsletter). In many cases, we have continued to develop our editorial style of working with authors, particularly young scholars, to help promising manuscripts develop and see the light of day.

But above all, 2008–2009 has been marked by the publication of a great range of exciting archaeology. As Editor, I would not single out particular pieces as ‘favourites’, and the lists of ‘most-read-articles’ and ‘most-cited-articles’ which you can access on the CAJ page at http://journals.cambridge.org/action/displayJournal?jid=CAJ sometimes make surprising reading. But, in addition to about 20 book reviews per issue, the last two years have seen articles ranging across the theoretical spectrum from palaeoanthropology to post-processualism. Major strands of CAJ continue — the evolution of mind, Egypt and the Near East, art — but there is a lot of New World and Asian material, an increasing amount of historical and contemporary archaeology, and some pieces which are downright experimental — the ribbon here goes to Bailey et al.’s account of excavating an archaeology unit’s scrapped Transit van! One theme which continues is an interest in major issues and ideas, not only in the articles but also in special features on time and change, neuroarchaeology, and — forthcoming in October 2009 — animism and the archaeology of alternative ontologies.

Journal format
In consultation with Cambridge University Press, we decided not to go to four issues a year (we had been entertaining this possibility following the success of the three-yearly-issues format and rising submission rates). The principal reason was that this expansion would have come with a price increase, and we and CUP both felt that this was not a strategic move in a climate dominated everywhere by financial cuts and severe pressure on library budgets. However, we had to balance this with the fact that we are receiving more manuscripts, many of which merit publication, and it is important to get accepted work into print without undue delay. The solution was to waive our traditional limit of 128 pages per issue. Hence Volume 18 (2008) ran to 446 pages, and Volume 19 (2009) is set to run slightly longer. Although this entails slightly higher production costs, overall, this is highly positive; it allows us to publish more high-quality archaeology and to get it out speedier.

Digitization: all of CAJ is now online
A major milestone recently achieved has been the digitization of the first 10 years of CAJ. Prior to this, only volumes since 2000 were available online; now readers subscribing to Cambridge Journals Online can get all CAJ content from our first issue in 1990 to the latest issue via the Internet. This was completed via a major effort from Cambridge University Press in collaboration with CAJ’s Production Editor Dora Kemp. As more and more scholars access journals electronically, this is a major service both to readers and to the authors who published with us in our first ten years.

Vol. 18, No. 3, October 2008
• Behavioural Complexity in Eurasian Neanderthal Populations by Michelle C. Lamley et al.
• The Manipulation of Social and Physical Identity in the Pre-Pottery Neolithic by Alexandra Fletcher et al.
• Evidence of Periodicity in Ancient Egyptian Calendars of Lucky and Unlucky Days by Sebastian Poreczki et al.
• The Visual Dynamics of Upper Palaeolithic Cave Art by Derek Hodgson
• Making Pots and Potters in the Bronze Age Maros Villages of Kiszombor-Új-Élet and Klárafalva-Hajdova by Katalin Miklósi

SPECIAL SECTION: Steps to a ‘Neuroarchaeology’ of Mind, part 1
• Introduction by Lambros Malafouros & Colin Renfrew
• From Individual Neurons to Social Brains by Matt Groves & Fiona Coward
• Beads for a Plastic Mind by Lambros Malafouros
• The Brain as a Cultural Artefact by Steven Mithen & Lawrence Parsons

REVIEWS

Vol. 19, No. 1, February 2009
• Transit, Transition: Excavating J641 VUJ by Greg Bailey et al.
• Funerals As Feasts: Why Are They So Important? by Brian Hayden
• Revisiting the Individual in Prehistory by Jonathan T. Thomas et al.

SPECIAL SECTION: Steps to a ‘Neuroarchaeology’ of Mind, part 2
• Höhlenstein-Stadel and the Evolution of Human Conceptual Thought by Thomas Wynn et al.
• Making Tools and Making Sense by Detrich Stover & Therese Chartrand
• Can the Archaeology of Manual Specialization Tell Us Anything About Language Evolution? A Survey of the State of Play by James Steele & Natalie Osborne

REVIEWS

Vol. 19, No. 2, June 2009
• A Splendid Predicament: Young Men in Classic Maya Society by Stephen Houston
• Autism, the Integrations of ‘Difference’ and the Origins of Modern Human Behaviour by Penny Spries
• Non-discursive Knowledge and the Construction of Identity by Sandy Buckín & Joanna Sofer
• Colonial Engagements in the Global Mediterranean Iron Age by Tanya Hoons
• Ritual Behaviour and the Origins of Modern Cognition by Matt J. Rossano
McDonald Institute Monographs

The McDonald Institute is committed to publishing new perspectives and ground-breaking research in the field of archaeology and are proud to publish academic monographs of the highest quality across a range of subjects, ranging from excavation reports to conference proceedings and the history of linguistics. All our books are written or edited by leading academics and are highly valued as key reference sources in their field.

**Grounding Knowledge/Walking Land: Archaeological Research and Ethnohistorical Identity in Central Nepal, by Christopher Evans, with Judith Pettigrew, Yarjung Kromchai Tamu & Mark Turin**

This volume documents almost a decade of ground-breaking investigations within the Annapurna highlands of Nepal. Including survey recording of fort and settlement sites, from the outset the project’s focus was the extraordinary ruins of Kohla Sombre the ancestral settlement of the Tamu-mai (Gurung) community, who hosted and instigated the fieldwork programme. It concluded with holding a great shamans’ meeting in Pokhara at which their historical ‘oral texts’ were presented. Narrating the long migration of the Tamu-mai into the region, the present volume includes the full translation of one of these oral epics, the Lēmakō Rōh Pye. The project represents a unique collaboration between archaeologists, anthropologists and a shaman. It encompasses the diverse voices of both its immediate participants and the local community. Fulsome in its presentation of the archaeological data and rich in ethnographic source-material, not only is this book crucial for Himalayan culture studies generally, but also relevant for any concerned with the construction and context of the past in the present, and the active forging of ethnohistorical identities.


**Mortuary Customs in Prehistoric Malta: Excavations at the Brocchtorff Circle at Xaghra (1987–94), edited by Caroline Malone, Simon Stoddart, Anthony Bonanno and David Trump**

Amongst the earliest stone architecture in the world, the Neolithic temples and hypogeae of Malta testify to a sophisticated island culture. Explored in the early twentieth century, the subterranean burial temple, the Hal Saflieni Hypogeum, was cleared of its burials and artefacts without detailed record. Late in the twentieth century, excavation at Xaghra on Gozo rediscovered a second cave cemetery that provides a unique comparison through the investigation of a substantial portion of the buried site using modern scientific techniques. This revealed one of the largest prehistoric burial assemblages of human remains yet discovered in the Mediterranean, amounting to some 220,000 bones, together with a rich assemblage of animal bone, figurative sculpture, symbolic artefacts and architectural remains. The detailed factual and interpretative report on this site, supported by fresh scientific data on raw materials, landsnails and environment, isotopes, radiometric dating and statistical analysis, is placed in the broader framework of the domestic and ritual landscape of the Maltese Islands. The result is one of the most comprehensive studies of the incipient complexity of this mature, agricultural, but non-urban, island society so far published.


**The Cognitive Life of Things: Recasting the Boundaries of the Mind**

What does material culture do for the mind? How is human thought built into and executed through things? It has now been widely recognized that, in ways that we have yet fully to understand, material culture shapes the manner in which people act, perceive and think. The understanding of the cognitive efficacy of past and present material culture becomes one of the most challenging research topics not simply for the archaeology and anthropology of human cognition but for the general field of the cognitive and social sciences. This volume, through a series of innovative theoretical papers and empirical case studies ranging from prehistory to the present, attempts to develop such a cross-disciplinary understanding and to offer some future directions of research. The main objective is to readdress the balance of the cognitive equation as presently conceived by bringing materiality into the cognitive fold. But how do we integrate material culture into existing theories of human cognition? How do we best approach the diachronic influence and evocative potential of things in the development of human intelligence? Contributors argue, from different disciplinary perspectives, for the need to expand the boundaries of mind beyond the individual in order to accommodate broader cognitive phenomena that include interactions among people, artefacts, space and time.

The Archaeological Review from Cambridge (ARC) is a 26-year-old journal edited by postgraduate research students in the Department of Archaeology and affiliated departments. ARC launched two successful issues this past academic year. Our November issue, Movement, Mobility and Migration edited by Emma Lightfoot, offers a solid collection of papers themed around human movement and migration in the past. It presents insightful commentary on the challenges of migration studies and investigates the methodologies by which such movements can be researched and understood. Our most recent issue, Invention and Reinvention: Perceptions and Archaeological Practice edited by Tera C. Pruitt and Donna Yates, offers a unique collection of papers on the theme of perception and self-aware practice in archaeology. This issue challenges assumptions and methods used in archaeological practice, and it presents a diverse array of case studies which both ground and stimulate archaeological theory. The ARC is also pleased to announce the themes of our next two issues this upcoming year: in November, Engagement and Response in Human–Environment Interactions, edited by Robyn Inglis and Alex Pryor, will address human societies in climatic and environmental contexts; and in April, Violence and Conflict in the Material Record, edited by Belinda Crerar and Skylar Neil, will discuss themes of material culture of conflict. More information on material culture of conflict. More information of our next two issues this upcoming year: in

Members’/Fellows’ Publications

JO APPLEBY

BETTINA BADER
2008 (with C. Doumet-Serhal, I. Forstner-Müller & K. Kopetzky). The Egyptian jars from Sidon in their Egyptian context — some fresh evidence. Archaeology and History in Lebanon 29 (Spring 2009), 79–83.

GRAEME BARKER

JAMES BARRETT


2008 Kultura Lepenskog vira u svetu novih istraživanja [Lepenski Vir Culture in the light of new research]. Glasnik Srpskog arheološkog društva 24, 9–44.


Gillian Carr 2009 Archaeology that matters. British Archaeology 104 (Jan/Feb), 18–22.


Christopher Evans (cont.)

Lucy Farr

Charles French

James Gerrard

Susanne Hakenbeck

Norman Hammond

Jason Hawkes

Paul Heggarty

Catherine Hills

Jessica Hughes

Harriet Hunt

Liliana Janik

Martin Jones


PRESTON MARICLE 2008 (with S. Forenbaher & P. Rajic Šikanjić). Lončarija iz Vele peći kod Vranje (Istra) [Pottery from Vela cave near Vranja (Istria)]. Histra archaeologica 37, 5–46.


CARMEN PETCHE 2008 (with P. Magee & M.N. Khan). Emulation at the edge of empire: the adoption of non-local vessel forms in the NWFP, Pakistan during the mid-late 1st millennium BC. Gandharan Studies 2, 1–16.


2009 (with A. Askari Chaverdi & H. Taylor).


2008 Animal bones from an industrial quarter at Malbork, Poland: towards an ecology of a castle built in Prussia by the Teutonic Order. Crusades 8, 191–213.


Cameroon Petrie (cont.) Early village settlements on the Persian Gulf littoral: revisiting Tel-e-Pir and the Gahedral Valley. Iran 46, 21–42.


Postgraduate Students’ Publications (cont.)

JAMIE HAMPSH (cont.)


DAVID KURDIG 2008 Understanding age, stature and nutrition in Cambridgeshire and Bedfordshire during the Roman and Early Anglo-Saxon periods (AD 43–700). Archaeological Review from Cambridge 23(2), 99–123.


ALEX PRYOR 2008 Following the fat: food and mobility in the European Upper Palaeolithic 45,000 to 18,000 years ago. Archaeological Review from Cambridge 23(2), 161–79.


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